Evaluation of submitted evidence on the health effects (harms and benefits) of alcohol consumption

NHMRC Clinical Trials Centre (CTC)

The University of Sydney

The NHMRC Clinical Trials Centre (CTC), herein referred to as the CTC, is a not-for-profit, academic research organisation that coordinates and conducts investigator-initiated trials, involving researchers from Australia and internationally. The CTC upholds a core commitment to integrity and transparency in clinical trials research, including publication of our research independent of funder influence. The National Health and Medical Research Council (NHMRC) provided initial funding to establish the CTC and we participate in competitive grant processes (NHMRC's and others) to secure funding for our continuing research activities, which includes tenders for government projects such as systematic reviews and technical writing of health and medical information.

A team within the NHMRC, that is separate from the grants management area of NHMRC, is responsible for developing evidence-based clinical and public health guidelines and advice. It is this section of NHMRC that advertised for tenders from panellists of the NHMRC Health Evidence Panel to undertake this evaluation. The CTC participated in a transparent panel procurement process to win this contract to evaluate the evidence as documented in this report.

Declarations of Interests of the CTC authors

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Introduction

In March 2015, the Council of the National Health and Medical Research Council (NHMRC) recommended that the *Australian Guidelines to Reduce Health Risks from Drinking Alcohol 2009* (the 2009 Alcohol Guidelines be updated. An independent Evidence Evaluation Report has been undertaken to update the evidence on the health effects of alcohol consumption to assist in the update of these guidelines.

To complement this evaluation, a public call for submissions of evidence was undertaken by the Office of NHMRC (ONHMRC) between 25 November 2016 and 13 January 2017. The aim of this public call was to facilitate the identification of relevant studies/gaps in the evidence, and to identify issues of concern for the public/stakeholders. The information from the evidence submitted by the public would be considered by the Alcohol Working Committee (AWC) and ONHMRC in the revision of the 2009 Alcohol Guidelines.

The CTC was contracted to collate and present a broad review of the evidence submitted by the public call. The evidence presented in this report is an annotation of the evidence submitted by the public. In addition, as part of the scope of the contract, the report does not evaluate the reliability or the quality of the evidence being described. Therefore, the findings reported within this report need to be considered with caution.

Objective

The objective of this report was to collate and annotate the evidence submitted by the public.

Methodology

ONHMRC provided the CTC with an Excel spreadsheet of references received from the public call. The CTC assessed the references using the following process:

1. Removing the duplicate references in the list of submitted evidence.
2. Retrieving and reviewing all references by downloading the full-text article (if available).
3. Screening the submitted evidence using the following eligibility criteria:
    a. Published after 1 January 2007.
    b. Based on scientific research (i.e. data that have been systematically collected and reviewed.)
    c. Publically available and published in English.
    d. Available as full-text article in peer-reviewed journal.
    e. Reports on changes to one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
4. If the submitted evidence was not a research study or a systematic review of research (e.g. an opinion piece, personal story, medical record, raw data, narrative review, case series or case report), it was not considered further.

5. Collating the references into a table and documenting whether or not the evidence met the eligibility criteria.
6. Recording the reason why a reference did not meeting the eligibility criteria (this information can be found in Appendix 2).
7. Recording the following information for all of the references that met the eligibility criteria (this information can be found in Appendix 1):
    a. Study design
    b. NHMRC level of evidence (Table 1)*
    c. Study participants
    d. Exposure(s) e.g. categories of alcohol consumption
    e. Outcomes assessed
    f. Article authors' main conclusions

Table 1 NHMRC Evidence Hierarchy: designations of 'levels of evidence' according to type of research question

Level	Intervention	Aetiology
I	A systematic review of level II studies	A systematic review of level II studies
II	A randomised controlled trial	A prospective cohort study
III-1	A pseudorandomised controlled trial (i.e. alternate allocation or some other method)	All or none
III-2	A comparative study with concurrent controls: ▪ Non-randomised, experimental trial ▪ Cohort study ▪ Case-control study ▪ Interrupted time series with a control group	A retrospective cohort study
III_3	A comparative study without concurrent controls: ▪ Historical control study ▪ Two or more single arm study ▪ Interrupted time series without a parallel control group	A case-control study
IV	Case series with either post-test or pre-test/post-test outcomes	A cross-sectional study or case series

For the purpose of this Report, the information for each eligible article has been summarised in tabular format and can be viewed in Appendix 1**.** The studies within each table have first been grouped by outcome, followed by the NHMRC's Hierarchy of Evidence and then in alphabetical order. This approach has been taken to provide a broad overview of the number of particular study designs covered per outcome.

The eligible studies have not undergone any formal assessment for risk of bias or overall quality of evidence. Therefore the findings briefly reported need to be considered with caution.

* Additional levels of evidence were also assigned as follows:
A systematic review of both cohort and case-control studies would be classified as Level II
A systematic review of only case-control studies would be classified as Level III-3
A systematic review of cross-sectional studies would be classified as Level IV
A nested case-control study would be classified as III-3
As stated in the NHMRC evidence hierarchy, a systematic review review would only be assigned a level of evidence as high as the studies it contains, except where those studies are of level II evidence.

Results

ONHMRC received 1851 references from the public. After removing 453 duplicate references, 1398 references were screened against the eligibility criteria. Of these, 394 met the eligibility criteria for further consideration.

Of the 895 references that did not fulfil the eligibility criteria:

- 356 were published prior to January 2007.
- 353 did not report on changes to one or more health outcomes at different levels of exposure (frequency or amount of alcohol).
- 132 did not describe a research study or a systematic review of research (primary studies).
- 34 were not available as a full-text article in a peer-reviewed journal
- 12 were not studies in humans.
- 5 were published in a language other than English.
- 2 were not publically available or unable to be located

In addition, 109 had already been considered as part of the independent evidence evaluation report to update the 2009 Alcohol Guidelines.

A summary of the numbers of submitted references screened using the eligibility criteria can be found below in Figure 1.

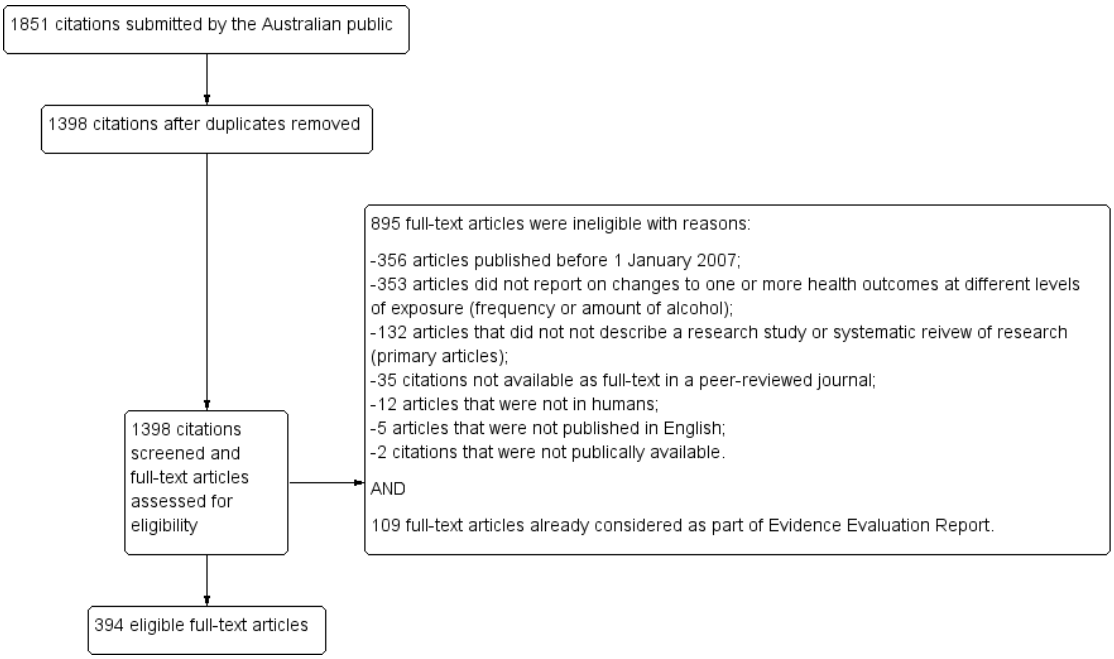

Figure 1 Flowchart of the references screened against the eligibility criteria.

There were 394 studies that met the eligibility criteria. Each study was allocated a level of evidence for further consideration and was grouped under broad health outcomes. Some of

the articles reported multiple outcomes and they were grouped only once under a single outcome.

Of the eligible full-text articles, the most frequent to least frequent outcomes of interest submitted by the public were:

1. Cancer – 170 articles
2. Cardiovascular conditions – 65 articles
3. Cognitive health – 33 articles
4. All-cause mortality – 31 articles
5. Diabetes – 24 articles
6. Skin conditions – 15 articles
7. Child behavior/development/health – 16 articles
8. Obesity /Weight gain – 8 articles
9. Dental health – 7 articles
10. Other outcomes – 7 articles
11. Perinatal health – 6 articles
12. Fractures/Falls/Bone mineral density– 4 articles
13. Metabolic syndrome– 4 articles
14. Breastfeeding – 2 articles
15. Liver disease/Pancreatitis – 2 articles

Below is a very broad summary of the levels of evidence and types of outcomes. Due to the heterogeneity of specific outcomes and exposure comparisons, a broad-brush approach has been taken whereby the main findings reported by each study author has been provided and categorised by outcome. Based on the scope of this report, the potential risk of bias in the conduct and reporting of each study and the quality of the evidence overall for each outcome was not appraised. Therefore the information presented in Appendix 1 needs to be considered with caution as a formal assessment of the reliability of the results and quality has not been undertaken.

Each reference assessed as not being eligible and the reason for not being eligible can be found in Appendix 2**.** Note that the systematic reviews that had been already considered in the independent Evidence Evaluation Report have been included in this table as well.

All-cause mortality

Some of these studies also included cause-specific mortality. One study reported mortality and morbidity from myocardial infarction, stroke, diabetes, and cancer only.

Of the 31 eligible full-text articles on all-cause mortality, the types of evidence submitted were:

- 1 systematic review of cohort studies (Level II)
- 28 prospective cohort studies (Level II)
- 2 retrospective cohort studies (Level III-2)

Most studies indicated an increased mortality with high alcohol intake. Please see Table 2 for more details.

Cancer

Of the 170 eligible full-text articles on cancer, the types of evidence submitted were:

- 4 systematic reviews of cohort studies (Level I)
- 88 prospective cohort studies (Level II)
- 10 systematic reviews of cohort and case-control studies (Level II)
- 3 retrospective cohort studies (Level III-2)
- 7 systematic reviews of case-control or case-cohort studies (Level III-3)
- 56 case-control studies (Level III-3)
- 2 cross-sectional studies (Level IV)

All incident cancer or mortality

Eight studies reported on all cancer incidence or mortality:

- 7 prospective cohort studies (Level II)
- 1 cross-sectional study (Level IV)

Two studies found that alcohol consumption increased cancer mortality. Generally, six studies found that the risk of incident cancer was increased with alcohol consumption. Please see Table 3 for details.

Groups of certain cancer

Eight studies reported on a group of certain cancers:

- 4 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level III-2)
- 2 case-control studies (Level III-3)
- 1 cross-sectional study (Level IV)

All studies found that heavy alcohol consumption was associated with an increased risk of certain cancers. Please see Table 4 for details.

Breast cancer

Thirty-two studies looked at breast cancer:

- 19 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level III-2)
- 1 systematic review of case cohort studies (Level III-3)
- 11 case-control studies (Level III-3)

The majority of studies found that breast cancer risk was associated with alcohol consumption. Two studies found an increased risk of breast cancer mortality. One study found no association with male breast cancer. Please see Table 5 for more details, particularly regarding the risk of various subgroups of breast cancer.

Colorectal cancer

Seventeen studies reported on colorectal cancer:

- 3 systematic reviews of cohort studies (Level I)
- 2 systematic review of cohort and case-control studies (Level II)
- 5 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level III-2)
- 6 case-control studies (Level III-3)

Eight studies found an increased risk of colorectal cancer associated with alcohol consumption. Four studies found a J-shaped association between alcohol consumption and the risk of colorectal cancer. A J-shaped curve represents the dose effect from alcohol - wherein at a low dose, the effect may be beneficial while as the dose increases, the effect is harmful. It is called a J curve because this is what the dose-effect looks like when the data are plotted on a graph. Two found that mortality from colorectal cancer was increased with alcohol consumption and another found a J-shaped association. Two studies found no increase of risk associated with alcohol; one of these studies was carried out in older women. Please see Table 6 for more details.

Endometrial cancer

Seven studies reported on endometrial cancer:

- 5 prospective cohort studies (Level II)
- 2 case-control studies (Level III-3)

Four studies found no association between alcohol consumption and risk of endometrial cancer. Two found an inverse association at various levels of alcohol consumption and one found an increased risk in post-menopausal women. Please see Table 7 for more details.

Liver cancers

Three studies reported on liver cancer:

- 1 systematic review of cohort and case-control studies (Level II)
- 1 prospective cohort study (Level II)
- 1 case-control study (Level III-3)

All studies found that alcohol consumption increases the risk of liver cancers. Please see Table 8 for more details.

Haematologic cancers

Eighteen studies reported on haematologic cancers

- 12 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level III-2)
- 1 systematic review of case-control studies (Level III-3)
- 4 case-control studies (Level III-3)

Twelve studies reported either a reduced risk of haematologic cancers or no clear association with alcohol consumption. Please see Table 9 for more details.

Oesophageal cancer

Seven studies reported on oesophageal cancer:

- 2 prospective cohort studies (Level II)
- 1 systematic review of case-control studies (Level III-3)
- 4 case-control studies (Level III-3)

Six studies found that alcohol consumption was associated with an increased risk of oesophageal cancer. One study found that survival from oesophageal cancer was reduced with alcohol consumption. Please see Table 10 for more details.

Ovarian cancer

Five studies reported on ovarian cancer:

- 1 prospective cohort study (Level II)
- 4 case-control studies (Level III-3)

The studies found no association between alcohol consumption and ovarian cancer. Please see Table 11 for more details.

Pancreatic cancer

Ten studies looked at pancreatic cancer:

- 1 systematic review of cohort studies (Level I)
- 4 prospective cohort studies (Level II)
- 1 systematic review of case-control studies (Level III-3)
- 4 case-control studies (Level III-3)

All studies found an association between increasing alcohol consumption and risk of pancreatic cancer. Please see Table 12 for more details.

Prostate cancer

Nine studies reported on prostate cancer:

- 1 systematic review of cohort studies (Level I)
- 5 prospective cohort studies (Level II)
- 3 case-control studies (Level III-3)

All studies found an increased risk with high alcohol consumption. Please see Table 13 for more details.

Renal cell carcinoma

Three studies reported on this outcome:

- 2 prospective cohort studies (Level II)
- 1 case-control study (Level III-3)

All studies found a reduced risk associated with alcohol consumption. Please see Table 13 for more details

Skin cancer (non-melanoma)

Six studies reported on this outcome:

- 5 prospective cohort studies (Level II)
- 1 case-control study (Level III-3)

Three found an increased risk with alcohol consumption and three found no association. Please seeTable 15 for more details.

Melanoma

Three studies reported on melanoma:

- 1 prospective cohort study (Level II)
- 1 systematic review of case-control studies (Level III-3)
- 1 case-control study (Level III-3)

One study reported an increased risk, one study reported a weak positive association between alcohol consumption and risk of melanoma and one study reported no association. Please seeTable 16 for more details.

Lung cancer

Two prospective cohort studies (Level II) reported on this outcome and did not find an association. Please see Table 17 for more details.

Small intestine cancer

Two studies reported on small intestine cancer:

- 1 systematic review of cohort and case-control studies (Level II)
- 1 prospective cohort study (Level II)

Both studies suggested an increased risk of small intestine cancer with alcohol consumption. Please see Table 18 for more details.

Stomach cancer

Three studies looked at stomach cancer:

- 1 systematic review of cohort and case-control studies (Level II)
- 1 prospective cohort study (Level II)
- 1 case-control study (Level III-3)

All studies found an increased risk of stomach cancer with alcohol consumption. Please see Table 19 for more details.

Thyroid cancer

Six studies reported on this outcome:

- 1 systematic review of cohort and case-control studies (Level II)
- 4 prospective cohort study (Level II)
- 1 case-control study (Level III-3)

Four studies found a reduced risk for all thyroid cancers, one study reported no association and one study reported an increased risk for differentiated thyroid cancer. Please see Table 20 for more details.

Upper aerodigestive tract cancers

Eight studies reported on this outcome:

- 2 systematic reviews of cohort and case-control studies (Level II)
- 3 prospective cohort studies (Level II)
- 3 case-control studies (Level III-3)

Six studies reported an increased risk of upper aerodigestive tract cancers with alcohol consumption. One study reported a reduced risk and another study reported no significant association between cancer risk and alcohol consumption. Please see Table 21 for more details.

Cancers of the larynx, pharynx, and oral cavity

Seven studies reported on these cancers:

- 1 systematic review of cohort and case-control studies (Level II)
- 2 systematic review of case-control studies (Level III-3)
- 4 case-control studies (Level III-3)

All studies found a higher risk with alcohol consumption. Please see Table 22 for details.

Head and neck cancers

Four studies reported on this outcome:

- 2 prospective cohort studies (Level II)
- 2 case-control studies (Level III-3)

All studies reported an increased risk of head and neck cancers with alcohol consumption. Please see Table 23 for details.

Other cancers

Three studies reported on other cancers:

- 2 prospective cohort studies (Level II)
- 1 case-control study (Level III-3)

One prospective cohort study reported on glioma and found no association with alcohol consumption. One prospective cohort study reported an elevated risk of gallbladder cancer with alcohol consumption. One case-control study reported on bladder cancer and found an increased risk with alcohol consumption. Please see Table 24 for details.

Cardiovascular conditions

Of the 65 eligible full-text articles on cardiovascular-related conditions, the types of evidence submitted were:

- 3 systematic reviews of cohort studies (Level I)
- 1 randomised controlled trial (Level II – "Intervention")
- 1 systematic review cohort and case-control studies (level II)
- 50 prospective cohort studies (Level II)
- 2 retrospective cohort studies (Level III-2)
- 4 case-control studies (Level III-3)
- 4 cross-sectional studies (Level IV)

Cardiovascular disease and/or mortality

Seven studies reported on this outcome:

- 1 systematic review of cohort studies (Level I)
- 5 prospective cohort studies (Level II)
- 1 case-control study (Level III-3)

The majority of studies found an increased risk with higher alcohol consumption and mixed results for lower consumption. Please see Table 25 for details.

Cardiovascular events and/or mortality

Ten studies reported on these outcomes:

- 9 prospective cohort studies (Level II)
- 1 case-control study (Level III-3)

Eight studies found a reduced risk with moderate alcohol consumption while one study found no association between alcohol consumption and venous thromboembolism. Please see Table 26 for details.

Coronary artery disease

Eight studies reported on this outcome:

- 7 prospective cohort studies (Level II)
- 1 cross-sectional study (level IV)

Most studies found a reduced risk with moderate alcohol consumption. Please see Table 27 for details.

Heart Failure

Two prospective cohort studies (level II) reported on this outcome and found a reduced risk with moderate alcohol consumption. Please see Table 28 for details.

Atrial fibrillation

Six studies reported on this outcome:

- 5 prospective cohort studies (level II)
- 1 case-control study (Level III-3)

Five studies found that increasing consumption of alcohol was associated with an increasing risk of atrial fibrillation. One study found that alcohol intake is positively associated with atrial flutter in younger patients but did not find any significant association in patients with atrial fibrillation. Please see Table 28 for details

Hypertension

Eight studies reported on this outcome:

- 2 systematic reviews of cohort studies (Level I)
- 1 randomised controlled trial (Level II – "Intervention")
- 3 prospective cohort studies (Level II)
- 2 cross-sectional study (level IV)

The majority of studies found an increased risk with increasing alcohol consumption. Please see Table 30 for details.

Stroke

Twenty-three studies reported on stroke:

- 1 systematic review of cohort and case-control studies (Level II)
- 19 prospective cohort studies (Level II)
- 2 retrospective cohort studies (Level III-2)
- 1 case-control study (Level III-3)

Most studies found that heavy drinking was associated with an increased risk of stroke. Please see Table 31 for details.

Cardiovascular risk factors

One cross-sectional study (level IV) reported that on cardiovascular risk factors and found that alcohol consumption was associated with a worsening of total, LDL cholesterol levels and systolic blood pressure in older men but healthier HDL cholesterol, fibrinogen and insulin levels. Please see Table 32 for details.

Metabolic syndrome

Four studies reported this outcome:

- 1 systematic review of cohort studies (Level I)
- 1 review of cross-sectional studies (level IV)
- 2 cross-sectional studies (level IV)

The studies generally found that lower alcohol consumption was associated with a reduced risk of metabolic syndrome and heavy consumption was associated with an increased risk. Please see Table 33 for details.

Diabetes

Of the 24 eligible full-text articles on diabetes, the types of evidence submitted were:

- 2 systematic reviews of cohort studies (Level II)
- 3 randomised controlled trials (Level II – "Intervention")
- 13 prospective cohort studies (Level II)
- 4 case-control studies (Level III-3)
- 2 cross-sectional studies (Level IV)

Diabetes

Four studies reported on diabetes:

- 3 prospective cohort studies (Level II)
- 1 cross-sectional study (Level IV)

The studies found that alcohol consumption increased the risk of diabetes. Please see Table 34 for details.

Type 2 diabetes

Eighteen studies reported on diabetes:

- 2 systematic reviews of cohort studies (Level I)
- 3 randomised controlled trials (Level II – "Intervention")
- 9 prospective cohort studies (Level II)
- 3 case-control studies (Level III-3)
- 1 cross-sectional study (Level IV)

The results were mixed but eight studies found a reduced risk with light-moderate alcohol consumption, at least in some groups of participants. Please see Table 35 for more details.

Pre-diabetes

Two studies looked at this outcome:

- 1 prospective cohort study (Level II)
- 1 cross-sectional study (Level IV)

The two studies reported a J-shaped association (one only in women). Please see Table 36 for more details.

Obesity/Weight gain

Of the 8 eligible full-text articles on obesity, the types of evidence submitted were:

- 1 systematic review of cohort, cross-sectional, and interventional studies (Level II)
- 1 randomised controlled trial (Level II – "Intervention")
- 5 prospective cohort studies (Level II)
- 1 cross-sectional studies (Level IV)

The majority of studies found that alcohol consumption was associated with weight gain or being overweight. Please seeTable 37 for more details.

Cognitive health

Of the 33 eligible full-text articles on cognitive outcomes, the types of evidence submitted were:

- 1 randomised controlled trial (Level II – "Intervention")
- 24 prospective cohort studies (Level II)
- 1 retrospective cohort studies (Level III-2)
- 1 case-control study (Level III-3)
- 6 cross-sectional studies (Level IV)

Cognitive function/decline

Twenty-five studies reported on cognitive function/decline:

- 1 randomised controlled trials (Level II – "Intervention")
- 17 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level III-2)
- 6 cross-sectional studies (Level IV)

The findings from these studies were mixed and not conducive to a broad summary. Please seeTable 38 for more details.

Dementia

Eight studies reported on cognitive function/decline:

- 7 prospective cohort studies (Level II)
- 1 case-control study (Level III-3)

Again, the findings were mixed, with two studies finding an increased risk with alcohol consumption, one finding no association, two suggesting a J-shaped association and three studies reporting a protective effect from alcohol. Please see Table 39 for more details.

Skin conditions

Of the 15 eligible full-text articles on skin conditions such as eczema, the types of evidence submitted were:

- 4 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level III-2)
- 2 systematic reviews of case-control studies or case-control cohorts (Level III-3)
- 3 case-control studies (Level III-3)
- 5 cross-sectional studies (Level IV)

Please see Table 43 for more details.

Eczema/Contact sensitization

Four studies reported on these outcomes:

- 1 prospective cohort study (Level II)
- 3 cross-sectional studies (Level IV)

Two studies reported conflicting results for contact sensitization, one study reported less prevalence of hand eczema with high alcohol intake in men, and another no association between hand eczema and alcohol consumption. Please see Table 40 for more details.

Psoriasis

Six studies reported on psoriasis:

- 1 prospective cohort studies (Level II)
- 1 retrospective cohort study (Level II)
- 2 systematic reviews of case-control studies (Level III-3)
- 1 case-control study (Level III-3)
- 1 cross-sectional studies (Level IV)

All studies found an association between alcohol consumption and psoriasis. Please see Table 41 for more details.

Rosacea

Three studies reported on psoriasis:

- 1 prospective cohort study (Level II)
- 2 case-control studies (Level III-3)

One study reported a correlation between alcohol consumption and rosacea, another reported no association, and the final one reported a slight increase in risk. Please see Table 42 for more details.

Other outcomes

One prospective cohort (level II) reported an increased risk of psoriatic arthritis with excessive alcohol intake. One cross-sectional study (level IV) reported that alcohol consumption was associated with lower photodamage scores. Please see Table 42 for more details.

Perinatal health

Of the 6 eligible full-text articles on prenatal and fetal conditions, the types of evidence submitted were:

- 4 prospective cohort studies (Level II)
- 1 systematic review of studies of unclear design (Level II)
- 1 systematic review of case control studies (Level III-3)

Please see Table 44 for more details.

Maternal health

One systematic review (level II)[2] and one prospective cohort study (Level II) found that paternal alcohol consumption was associated with maternal alcohol consumption and other outcomes.

Fetal health

Three prospective cohort studies (Level II) reported on fetal health outcomes: one study did not report adverse effects of light-to-moderate maternal drinking on fetal growth; one found heavy and binge drinking patterns was associated with an increased risk of preterm birth; and another found heavy prenatal alcohol exposure was associated with birth defects.

Both

A systematic review of case-control studies (level III-3) found most of the included studies showed an increased risk of poor fetal and perinatal outcomes, including spontaneous miscarriage and preterm labour.

Breastfeeding

Two studies reporting on drinking while breast feeding:

- 1 prospective cohort study (Level II)
- 1 cross-sectional study (level IV)

One found that drinking >2 standard drinks per day was associated with shorter breastfeeding duration, and the other that drinking while breastfeeding was related to children who weighed less and had lower intelligence scores. Please see Table 45 for more details.

[2] it was unclear what study design the included studies were, so it was arbitrarily allocated to level II.

Child behavior/development/health

Of the 16 eligible full-text articles on child health, the types of evidence submitted were:

- 1 systematic reviews of cohort studies (Level I)
- 2 systematic reviews of cohort and case-control studies (Level II)
- 8 prospective cohort studies (Level II)
- 1 systematic review of case-control studies (Level III-3)
- 1 case-control study (Level III-3)
- 3 cross-sectional studies (Level IV)

Prenatal alcohol exposure was associated with impairments in childhood behavior and development in most studies. A single study found a U-shaped association between paternal alcohol consumption and childhood cancer and brain tumours. Another single study found that maternal alcohol consumption was not associated with eczema in their children. Please see Table 46 for more details.

Dental health

Of the 7 eligible full-text articles on dental health, the types of evidence submitted were:

- 4 prospective cohort studies (Level II)
- 1 systematic review of cross-sectional studies (IV)
- 2 cross-sectional studies (Level IV)

Periodontitis

Five studies reported this outcome:

- 3 prospective cohort studies (Level II)
- 1 systematic review of cross-sectional studies (Level IV)
- 1 cross-sectional study (Level IV)

All studies reported an association between alcohol consumption and increased risk of periodontitis. Please see Table 47 for more details.

Other dental conditions

Two studies reported on other dental outcomes:

- 1 prospective cohort study (Level II)
- 1 cross-sectional study (Level IV)

One found no association with periodontal disease but reported that high alcohol consumption was associated with more dental caries. Alcohol consumption was not found to be associated with tooth loss in the other study. Please see Table 48 for more details.

Liver disease/Pancreatitis

Of the 2 eligible full-text articles on liver disease or pancreatitis, the types of evidence submitted were:

- 1 prospective cohort study (Level II)
- 1 systematic review of case-control studies (Level III-3)

One study reported that moderate alcohol intake reduced the risk of pancreatitis. The other study found that moderate alcohol intake reduced the risk of non-alcoholic fatty liver disease. Please see Table 49 for more details.

Fractures/Falls/Bone mineral density

Four studies reported on these outcomes:

- 1 systematic review of cohort, case-control, and cross-sectional studies (Level II)
- 1 prospective cohort study (Level II)
- 1 retrospective cohort study (Level II)
- 1 cross-sectional study (Level IV)

Excessive alcohol consumption was associated with falls in two studies, hip fractures in one study, with the severity of facial fractures in another. Please see Table 50 for more details.

Other outcomes

Seven studies reported on various outcomes:

- 1 systematic review of cohort studies (Level I)
- 1 randomised controlled trials (Level II – "Intervention")
- 3 prospective cohort studies (Level II)
- 2 cross-sectional studies (Level IV)

Please see Table 51 for more details.

One study found that moderate red wine consumption has beneficial effects on haematological parameters, including red cell aggregation, haematocrit/whole blood viscosity, and red cell deformity. One study found that high alcohol consumption was associated with an increase in early age-related macular degeneration. Two studies found moderate alcohol consumption was associated with increased well-being. Two studies found mixed results with regards to brain structure. One study found binge drinking in late adolescence was associated with an increased risk of subsequent depression.

Discussion

The purpose of this report was to collate the evidence submitted by the public. In sum, there were 394 eligible references submitted by the public. Given the volume and breadth of the evidence submitted, the information from each study was grouped into broad outcomes and the main findings described by the study authors have been provided. The collation of studies under each health outcome would be viewed as imperfect with some references potentially part of multiple health conditions.

The most common outcomes of interest submitted by the public were on cancer and cardiovascular conditions.

The findings presented in this report need to be considered cautiously. As previously stated, for each eligible reference, the information extracted was an abridged copy of the authors' main conclusions. There has been no formal assessment undertaken by the CTC on the conduct and reporting of the study (and therefore reliability) or the quality of the evidence of each reference. Given these concerns, it was not seen as appropriate to fully synthesise the conclusions from each study for each health condition given the high variability in the types of evidence submitted, and the heterogeneous nature of the types of alcohol exposure reported and definitions of outcomes across the eligible studies.

Appendix 1

Tables of eligible references

Summary of each eligible reference grouped into broad outcomes with the study type and level of evidence, participants and exposures, the actual outcomes assessed, and the authors' main conclusions.

All cause-mortality

These studies could also include cause-specific mortality. One study reported mortality and morbidity from myocardial infarction, stroke, diabetes, and cancer only.

Table 2 All cause-mortality

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Park, J. E., Choi, T. Y., Ryu, Y. and Cho, S. I. The relationship between mild alcohol consumption and mortality in Koreans: a systematic review and meta-analysis	Systematic review	II	16 studies of prospective cohort studies and nested case-control	None, light, moderate, heavy drinking	All-cause, cancer-related, and cardiovascular mortality	This study did not provide evidence for the beneficial effects of mild drinking on all-cause, cancer-related, and cardiovascular mortality. Given the small number of studies included, larger prospective studies of the Korean population with more consistent criteria regarding mild drinking are needed.
Bergmann MM; Rehm J; Klipstein-Grobusch K; Boeing H; Schütze M; Drogan D; et al (2013) The association of pattern of lifetime alcohol use and cause of death in the European prospective investigation into cancer and nutrition (EPIC) study	Prospective cohort	II	111 953 men and 268 442 women from eight countries participating in the European Prospective Investigation into Cancer and Nutrition (EPIC)	Lifetime pattern of drinking: never, former (light-moderate, heavy), lifetime (Light, Below rec. limit, Light to moderate, Occasionally heavy, Heavy)	Cause of death	Limiting alcohol use throughout life is associated with a lower risk of death, largely due to cardiovascular disease but also other causes.
Bobak M; Malyutina S; Horvat P; Pajak A; Tamosiunas A; Kubinova R; Simonova G; et al. (2016). Alcohol, drinking pattern and all-cause, cardiovascular and alcohol-related mortality in Eastern Europe.	Prospective cohort	II	36,106 men and women aged 45–69 years from the Health, Alcohol and Psychosocial factors In Eastern Europe (HAPIEE) study	Alcohol intake (g/day), Frequency (per week/month), Drinking pattern, Binge drinking	All-cause, cardiovascular and alcohol-related mortality	Abstainers had 30–50 % increased mortality risk compared to light-to-moderate drinkers. Men who were heavy drinkers had a higher risk of coronary heart disease (CHD) and alcohol-related causes (ARC). Women who were heavy drinkers had higher risks of cardiovascular disease, CHD and ARD. Binge drinking increased ARD mortality in men only. Mortality was associated with high average

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						alcohol intake but not binge drinking, except for ARD in men.
Brügger-Andersen T, Pönitz V, Snapinn S, Dickstein K, OPTIMAAL study group. Moderate alcohol consumption is associated with reduced long-term cardiovascular risk in patients following a complicated acute myocardial infarction	Prospective cohort	II	5477 patients from 7 Western European countries with heart failure and/or evidence of left ventricular dysfunction following MI	Alcohol consumption prior to MI: non-users, moderate users (1–7 drinks/week) and heavy users (> 7 drinks/week)	All-cause mortality and CV-mortality	Our results demonstrate a strong positive association between moderate alcohol use and survival in a cohort of patients following complicated MI. Both heavy drinkers and abstainers had poorer prognosis.
Ferrari, P., Licaj, I., Muller, D.C. et al. Lifetime alcohol use and overall and cause-specific mortality in the European Prospective Investigation into Cancer and nutrition (EPIC) study	Prospective cohort	II	380 395 men and women in the European Prospective Investigation into Cancer and nutrition (EPIC).	Lifetime drinkers (g/day): Never drinkers, 0.1–4.9, 5–14.9, 15–29.9, 30–59.9, >60; Wine consumers; Beer consumers	Overall and cause-specific mortality	Lifetime alcohol intake was significantly associated with overall and ARC-specific (alcohol-related cancers) mortality. In men, positive associations were observed for violent deaths and injuries, while CVD and CHD deaths were not associated with alcohol use among drinkers.
Ford ES; Zhao G; Tsai K; Li C. (2011) Low-risk lifestyle behaviours and all-cause mortality: Findings from the National Health and Nutrition Examination Survey III Mortality Study	Prospective cohort	II	16958 participants aged 17 years and older in the National Health and Nutrition Examination Survey III Mortality Study from 1988 to 2006	Moderate users vs abstainers/heavy users	All-cause mortality, cancer, major cardiovascular disease	All-cause mortality reduced, cancer not significantly different, major cardiovascular disease reduced
Freiberg MS; Chang YF; Kraemer KL; Robinson JG; Adams-Campbell LL; Kuller LL. (2009) Alcohol consumption, hypertension, and total mortality among women	Prospective cohort	II	10,576 black and 105,610 white postmenopausal women from the Women's Health Initiative (WHI), without a history of cancer or cardiovascular disease,	Alcohol consumption: Lifetime abstainer, Past drinker, <1 drink/month, <1 drink/week, 1 to <7 drinks/week, 7+ drinks/week.	Total mortality	Moderate drinking is associated with a lower risk of total mortality among Caucasian women. Current drinking is associated with a lower risk of total mortality among Caucasians, regardless of hypertensive status, and hypertensive but not nonhypertensive African-American women.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Fuller TD. (2011) Moderate alcohol consumption and the risk of mortality	Prospective cohort	II	131,731 sample adults interviewed as part of the National Health Interview Survey (NHIS) in 1997 through 2000	Alcohol Consumption Category: Lifetime abstainer, Near abstainer, Former drinker, Infrequent moderate drinker, Occasional moderate drinker, Frequent moderate drinker, Infrequent heavy drinker, Occasional heavy drinker, Frequent Heavy drinker.	All-cause mortality and coronary heart disease mortality	Those who consume a moderate amount of alcohol have lower all-cause mortality and CHD mortality
Gea A; Bes Rastrollo M; Toledo E; Garcia Lopez M; Beunza JJ; Estruch R; Martinez Gonzalez MA. (2014). Mediterranean alcohol-drinking pattern and mortality in the SUN (Seguimiento Universidad de Navarra) Project: a prospective cohort study	Prospective cohort	II	18 394 Spanish participants up to 12 years	Mediterranean alcohol-drinking pattern (score out of 9): Abstainers, Low (0–2), Moderate–low (3–4), Moderate–high (5–6), High (7–9)	Mortality	In conclusion, better adherence to an overall healthy alcohol-drinking pattern was associated with reduced mortality when compared with abstention or departure from this pattern.
Goulden R; Phil M. (2016). Moderate alcohol consumption is not associated with reduced all-cause mortality	Prospective cohort	II	24,029 US adults aged more than 50 years from the Health and Retirement Study	Regular Alcohol Consumption (Drinks/Wk): Nondrinker, Occasional Drinker, <7, 7-<14, 14-<21, 21	All-cause mortality	Moderate alcohol consumption is not associated with reduced all-cause mortality in older adults.
Hange, D., Sigurdsson, J. A., Bjorkelund, C., Sundh, V. and Bengtsson, C. A 32-year longitudinal study of alcohol consumption in Swedish women: Reduced risk of myocardial infarction but increased risk of cancer	Prospective cohort	II	1462 Swedish women aged 38 to 60 years	Frequency levels: 0 -Never. 1- Earlier, but not during the last 10 years. 2 -Earlier, but not during the last year. 3 - Monthly. 4- Weekly. 5 -Several times a week. 6 - Daily Based on these levels: "Never" included levels 0, 1 and 2. "Sometimes" included levels 3 and 4. "regularly" included levels 5 and 6	Mortality and morbidity from myocardial infarction, stroke, diabetes, and cancer	Women with moderate consumption of beer had a reduced risk of developing myocardial infarction. High spirits consumption was associated with increased risk of cancer mortality.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Holahan CJ; Schutte KK; Brennan PL; Holahan CK; Moos BS; Moos RH. (2010) Late-life alcohol consumption and 20-year mortality.	Prospective cohort	II	1,824 individuals between the ages of 55 and 65	(1) abstainer (0 g); (2) light, defined as consuming up to le ss than1drink⁄d (consuming more than 0 g but less than 14 g⁄d); (3) moderate, defined as consuming between 1 to less than 3 drinks per day(14 g to <42 g ⁄d); and (4) heavy, defined as drinking 3 or moredrinks per day (42 g⁄d or more).	20-year mortality	Findings are consistent with an interpretation that the survival effect for moderate drinking compared to abstention among older adults reflects 2 processes. First, the effect of confounding factors associated with alcohol abstention is considerable. However, even after taking account of traditional and nontraditional covariates, moderate alcohol consumption continued to show a beneficial effect in predicting mortality risk.
Howie EK; Sui X; Lee DC; Hooker SP; Hébert JR; Blair SN. (2011) Alcohol consumption and risk of all-cause and cardiovascular disease mortality in men	Prospective cohort	II	31,367 men	Nondrinkers, , quartile 1 (1–3 drinks/week), quartile 2 (4–6 drinks/week), quartile 3 (7–13 drinks/week), and quartile 4 (≥14 drinks/week)	All-Cause and Cardiovascular Disease (CVD) Mortality	The relationship between risk of all-cause mortality with alcohol consumption appeared to evince a flattened J-shaped curve pattern. However, the risk reductions were significant only at the lowest levels of alcohol consumption. In this sample, 32% of all deaths were attributed to CVD, similar to the nationwide estimates. There was a 29% and 25% reduction in risk for CVD mortality in the first and second quartiles of alcohol consumption, respectively.
Inoue et al. (2012) Impact of alcohol intake on total mortality and mortality from major causes in Japan: a pooled analysis of six large scale cohort studies	Prospective cohort	II	309 082 Japanese participants	non-drinkers (never- and ex-drinker), occasional drinkers (<once/week), and regular drinkers (at least once/week: <23 g/day, 23- <46 g/day, 46 - <69 g/day, 69 - <92 g/day, ≥92 g/day for men; and <23 g/day, 23 - <46 g/day, ≥46g/day for women).	Total mortality and mortality from major causes	There was a J- or U-shaped association for the risk of total and major causes of mortality in men, and the risk of total and heart disease mortality in women. Compared with non-drinkers, there was a significantly lower risk for total mortality at an alcohol consumption level of <69 g/day, cancer mortality at <46 g/day, heart disease mortality at <69 g/day and cerebrovascular disease mortality at <46 g/day in men, and for total mortality at <23 g/day in women.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Jayasekara H; MacInnis R; Hodge AM; Hopper JL; Giles GG; Room R; English DR. (2015). Alcohol consumption for different periods in life, intake pattern over time and all-cause mortality	Prospective cohort	II	Melbourne Collaborative Cohort Study (MCCS) (n=41,514)	abstainer; 0-19 g/d; 20-39 g/d; 40+ g/d	All-cause mortality	Findings support a reduced mortality risk associated with low-dose drinking but also highlight a higher mortality risk for consistent heavy drinking from a young age.
Klatsky, A.L. and N. Udaltsova, Alcohol drinking and total mortality risk	Prospective cohort	II	Kaiser Permanente Study (n=2,618,523)	Never; ex-drinker; occasional; <1 drink/day; 1-2 drink/day; 3-5 drinks/day; 6+ drinks/day	Total mortality	Relation of alcohol drinking to total mortality is J-shaped, with reduced risk (mainly because of less cardiovascular disease) for lighter drinkers and increased risk for persons reporting more than 3 drinks per day.
Knott CS; Coombs N; Stamatakis E; Biddulph JP. (2015). All-cause mortality and the case for age specific alcohol consumption guidelines: pooled analyses of up to 10 population based cohorts	Prospective cohort	II	Health Survey for England (sample of non-institutionalised general population resident in England)	weekly consumption; consumption on heaviest day	All-cause mortality	Beneficial associations between low intensity alcohol consumption and all-cause mortality may in part be attributable to inappropriate selection of a referent group and weak adjustment for confounders.
Lee SJ; Sudore RL; Williams BA; Lindquist K; Chen HL; Covinsky KE. (2009) Functional limitations, socioeconomic status, and all-cause mortality in moderate alcohol drinkers	Prospective cohort	II	12519 from the Health and Retirement Study (HRS), a nationally representative study of U.S. adults aged 55 and older.	Number of Alcoholic Drinks Consumed: Nondrinker, <1/Week, <1/Day, 1/Day, 2/Day, ≥3/Day	All-Cause Mortality	Moderate drinkers have better risk factor profiles than non-drinkers, including higher SES and fewer functional limitations. Although these factors explain much of the survival advantage associated with moderate alcohol use, moderate drinkers maintain their survival advantage even after adjustment for these factors.
Licaj I; Sandin S; Skeie G; Adami HO; Roswall N; Weiderpass E. (2016) Alcohol consumption over time and mortality in the Swedish Women's Lifestyle and Health cohort.	Prospective cohort	II	48 249 women at baseline (33 404 at follow-up) in the prospective Swedish Women's Lifestyle and Health cohort, age 30–49 years	Alcohol intake (g/day): 0, 0.1-1.4, 1.5-4.9, 10.0-14.9, 15+	Mortality (cancer, IHD, CV, overall)	In conclusion, in a cohort of young women, light alcohol consumption was protective for cardiovascular and ischaemic heart disease mortality but not for cancer and overall mortality.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
McCaul KA; Almeida OP; Hankey GJ; Jamrozik K; Byles JE; Flicker L. (2010) Alcohol use and mortality in older men and women.	Prospective cohort	II	Men aged 65–79 years at baseline (n = 11 727) and women aged 70–75 years (n = 12 432)	Quantity: 1–2, 3-4, 5-8, 9+ drinks/day Frequency: 1-2, 3-4, 5-6, 7 days/week	All-cause and cause-specific mortality	In people over the age of 65 years, alcohol intake of four standard drinks per day for men and two standard drinks per day for women was associated with lower mortality risk. For men, the risk was reduced further if accompanied with 1 or 2 alcohol-free days per week
Midlov P; Calling S; Memon AA; Sundquist J; Sundquist K; Johansson SE. (2016). Women's health in the Lund area (WHILA) - alcohol consumption and all-cause mortality among women - a 17 year follow-up study	Prospective cohort	II	6916 women aged 50–59 years	– 0 g Women who did not drink any alcohol in an ordinary week – 0.1-11.9 g alcohol per day. – ≥12 g alcohol per day.	All-cause mortality	There was a clear J-shaped relation between the amount of alcohol consumption and all-cause mortality even after controlling for sociodemography, lifestyle factors and diseases such as diabetes and previous ischemic heart disease. The observed protective effect of light drinking (1–12 grams/day) could thus not be attributed to any of these known confounders.
P. Ferrari, I. Licaj, D.C. Muller, P. Kragh Andersen, M. Johansson, H. et al. Lifetime alcohol use and overall and cause-specific mortality in the European Prospective Investigation into Cancer and nutrition (EPIC) study.	Prospective cohort	II	380 395 men and women, free of cancer, diabetes, heart attack or stroke at enrolment, followed up for 12.6 years on average.	Never drinkers, 0.1–4.9 g/day, 5–14.9 g/day, 15–29.9 g/day, 30–59.9g/day, >60 g/day	Overall and cause-specific mortality	In this large European cohort, alcohol use was positively associated with overall mortality, ARC and violent death and injuries, but marginally to CVD/CHD. Absolute risks of death observed in EPIC suggest that alcohol is an important determinant of total mortality.
Pai JK; Mukamal KJ; Rimm EB. (2012) Long-term alcohol consumption in relation to all-cause and cardiovascular mortality among survivors of myocardial infarction: the Health Professionals Follow-up Study.	Prospective cohort	II	1818 men who had survived a first myocardial infarction (MI)	None, 0.1-9.9 g/day, 10-29.9 g/day, ≥30 g/day	All-cause and cardiovascular mortality	Long-term moderate alcohol consumption is inversely associated with all-cause and cardiovascular mortality among men who survived a first MI. This U-shaped association may be strongest among individuals with less impaired cardiac function after MI and should be examined further

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Perreault K, Bauman A, Johnson N, Britton A, Rangul V, Stamatakis E. Does physical activity moderate the association between alcohol drinking and all-cause, cancer and cardiovascular diseases mortality? A pooled analysis of eight British population cohorts	Prospective cohort	II	36 370 men and women aged 40 years and over	A relatively common heavy wine consumption [31], this study, however, also allowed to evaluate the risk of RCC in heavy drinkers. We found that risks continued to decrease even above eight drinks of alcoholic beverages per day (i.e. >100 g/day	All-cause mortality, cancer mortality and cardiovascular diseases (CVDs) mortality.	We found a direct association between alcohol consumption and cancer mortality risk starting from drinking within guidelines (HR (95% CI) hazardous drinking: 1.40 (1.11 to 1.78)). Stratified analyses showed that the association between alcohol intake and mortality risk was attenuated (all-cause) or nearly nullified (cancer) among individuals who met the PA recommendations (HR (95% CI)).
Plunk AD; Syed Mohammed H; Cavazos Rehg P; Bierut LJ; Grucza RA. (2014). Alcohol consumption, heavy drinking, and mortality: rethinking the j-shaped curve	Prospective cohort	II	128 203 individuals	• Past-year abstainer status (had consumed 12+ drinks in lifetime, but none in past year) • Heavy drinking days (number of days in which 5+ drinks were consumed) • Non-heavy drinking days (total number of drinking days minus heavy drinking days)	Mortality	Any heavy drinking likely elevates mortality risk, and substantial health benefits could be realized by reducing heavy drinking occasions or limiting overall drinking. Heavy and non-heavy drinking frequency are valid targets for clinical screening and could be helpful in assessing risk and promoting less harmful drinking behavior.
Shuval K; Barlow CE; Chartier KG; Gabriel KP. (2012) Cardiorespiratory fitness, alcohol, and mortality in men: the Cooper Center longitudinal study	Prospective cohort	II	29,402 men who came to the Cooper Clinic (Dallas, TX) for a preventive medicine visit from 1973 to 2006.	Alcohol consumption: non-drinker; light drinker (3 drinks per week); (2) moderate drinker (3–14 drinks per week); heavy drinker (14 drinks per week).	All-cause mortality and cardiovascular disease mortality	A significant curvilinear relationship was found (p = 0.01) between alcohol intake and all-cause mortality (but not CVD mortality). Alcohol consumption did not significantly modify the association between fitness and mortality in this large cohort of men.
Simons L. (2014) Alcohol intake and survival in Australian seniors: the Dubbo Study	Prospective cohort	II	2805 non-institutionalised citizens 60+ years of age born before 1930	Alcohol intake: nil, low (men 1–14 drinks/week, women 1–7 drinks/week), moderate (men 15–24 drinks/week, women 8–14 drinks/week) and heavy (men 25+ drinks/week, women 15+ drinks/week).	All-cause mortality	All-cause mortality was related to quantity of alcohol intake in the familiar "U" shaped relationship, being 20% and 28% reduced in the low and moderate intake categories respectively, compared with nil intake. This relationship was similar in men and women, and with intake of beer or wine/spirits. Any alcohol intake added 12 months survival time in men and women over the follow-up period. Alcohol intake in the low to moderate range appeared to offer protection against the onset of

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						dementia.
Smyth A, Teo KK, Rangarajan S, O'Donnell M, Zhang X, Rana P, et al; PURE Investigators. Alcohol consumption and cardiovascular disease, cancer, injury, admission to hospital, and mortality: a prospective cohort study.	Prospective cohort	II	Information from 12 countries participating in the Prospective Urban Rural Epidemiological (PURE) study, a prospective cohort study of individuals (n=114 970) aged 35–70 years.	Alcohol consumption: never drinkers, former drinking, current drinking (low intake >0 to <7 drinks; moderate 7-14 [women], 7-21 [men]; high intake >14 [women], >21 [men]; heavy episodic drinking >5 drinks in one episode at least once per month)	Mortality, cardiovascular disease, myocardial infarction, stroke, cancer, injury, admission to hospital, composite	Current drinking was reported by 36 030 (31%) individuals, and was associated with reduced myocardial infarction (hazard ratio [HR] 0·76 [95% CI 0·63–0·93]), but increased alcohol-related cancers (HR 1·51 [1·22–1·89]) and injury (HR 1·29 [1·04–1·61]). High intake was associated with increased mortality (HR 1·31 [1·04–1·66]).
Yang, L., Zhou, M., Sherliker, P., Cai, Y., Peto, R., Wang, L., et al. Alcohol drinking and overall and cause-specific mortality in China: nationally representative prospective study of 220,000 men with 15 years of follow-up	Prospective cohort	II	220,000 men aged 40–79 years from 45 areas in China	Non-drinkers <140, 140–279, 280–419, 420–699, ≥700 g/week	Overall and cause-specific mortality	Among Chinese men aged 40–79 years, regular alcohol drinking was associated with a small but definite excess risk of overall mortality, especially among smokers.
Lloyd B, Barratt MJ, Ferris J, Best D, Lubman DI. Factors influencing mortality among alcohol and drug treatment clients in Victoria, Australia: The role of demographic and substance use characteristics	Retrospective cohort	III-2	18,686 clients engaged in at least one course of alcohol and drug treatment over a 12-month period were included	Alcohol use	Mortality	After adjustment for client characteristics, alcohol treatment clients experienced a significantly higher rate of death compared with other clients.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Rostron B. (2012) Alcohol consumption and mortality risks in the USA.	Retrospective cohort	III-2	237,859 adults aged 18 years and over	'never drinker' (<12 drinks in life), 'former drinker' (0 drinks during last year), 'infrequent drinker' (<12 drinks in any year), 'light drinker' (1 drink per drinking day), 'moderate drinker' (2 drinks) and 'heavy drinker' (3+ drinks).	All-cause Mortality	US light to moderate drinkers may have reduced mortality risks, but some portion of their previously observed lower mortality may be due to factors other than alcohol consumption such as medical care and social integration, particularly among women. Alcohol consumption among former and heavy drinkers appears to have increased their mortality risks.

Cancer

All incident cancer or mortality

Table 3 All incident cancer or mortality

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Allen N. E., Beral V., Casabonne D., Kan S. W., Reeves G. K., Brown A. et al. Moderate alcohol intake and cancer incidence in women.	Prospective cohort study	II	Middle-aged women who attended breast cancer screening clinics in the UK	Categorised into 5 groups: (1) 0 (2) less than or equal to 2, (3) 3-6, (4) 7-14, or (5) greater than or equal to 15 drinks per week	Cancer (21 site-specific)	Low to moderate alcohol consumption in women increases the risk of certain cancers. For every additional drink regularly consumed per day, the increase in incidence up to age 75 years per 1000 for women in developed countries is estimated to be about 11 for breast cancer, 1 for cancers of the oral cavity and pharynx, 1 for cancer of the rectum, and 0.7 each for cancers of the esophagus, larynx and liver, giving a total excess of about 15 cancers per 1000 women up to age 75.
Breslow RA, Chen CM, Graubard BI, Mukamal KJ. Prospective study of alcohol consumption quantity and frequency and cancer-specific mortality in the US population	Prospective cohort	II	323,354 subjects from the National Health Interview Survey	Never Drinker, Former Drinker, Lifetime Infrequent Drinker, Current Drinker (light, moderate, heavier). MB: In women, light drinking was defined as 3 drinks per week, moderate drinking as >3–7 drinks per week, and heavier drinking as >7 drinks per week; in men, the corresponding ranges were 3 drinks per week, >3–14 drinks per week, and >14 drinks per week.	All cancer	Among current alcohol drinkers, for all-site cancer mortality, higher-quantity drinking (3 drinks on drinking days vs. 1 drink on drinking days) was associated with increased risk among men; higher-frequency drinking (3 days/week vs. <1 day/week) was associated with increased risk among women. Lung cancer mortality results were similar, but among never smokers, results were null. For colorectal cancer mortality, higher-quantity drinking was associated with increased risk among women. Higher-frequency drinking was associated with increased risk of prostate cancer and tended to be associated with increased risk of breast cancer.
Cao Y, Willett WC, Rimm EB, Stampfer MJ, Giovannucci EL. Light to moderate intake of alcohol, drinking patterns, and risk of	Prospective cohort	II	88 084 women and 47 881 men	Non-drinkers, 0.1-4.9, 5-14.9, 15-29.9, 30-44.9, ≥45 g/day	Total cancer, alcohol related cancer, and other cancer	Light to moderate drinking is associated with minimally increased risk of overall cancer. For men who have never smoked, risk of alcohol related cancers is not appreciably increased for light and moderate drinking (up to two drinks per day). However,

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
cancer: results from two prospective US cohort studies						for women who have never smoked, risk of alcohol related cancers (mainly breast cancer) increases even within the range of up to one alcoholic drink a day.
Everatt, R., Tamosiunas, A., Virviciute, D., Kuzmickiene, I. and Reklaitiene, R. Consumption of alcohol and risk of cancer among men: a 30 year cohort study in Lithuania	Prospective cohort	II	7,150 men in Lithuania	Non-drinkers, A few times per year, 1–4 times per month, 2–7 times per week	All cancer sites; Alcohol-related (Upper aerodigestive tract Colon and rectum Liver); Other cancer site	About 13 % of total, 35% of upper aero-digestive tract, 22 % of alcohol-related and 10 % of other cancer cases were due to alcohol consumption in this cohort of men.
Schutze, M., Boeing, H., Pischon, T., Rehm, J., Kehoe, T., Gmel, Get al. Alcohol attributable burden of incidence of cancer in eight European countries based on results from prospective cohort study	Prospective cohort	II	109 118 men and 254 870 women, mainly aged 37-70 participating in the European Prospective Investigation into Cancer and Nutrition (EPIC) study.	Lifetime consumers and former uses vs never consumers	Cancer incidence and attributable fraction	In western Europe, an important proportion of cases of cancer can be attributable to alcohol consumption, especially consumption higher than the recommended upper limits.
Shen, C., Schooling, C. M., Chan, W. M., Xu, L., Lee, S. Y. and Lam, T. H. Alcohol intake and death from cancer in a prospective Chinese elderly cohort study in Hong Kong	Prospective cohort	II	66 820 Chinese aged ≥65 years enrolled from July 1998 to December 2001 at all the 18 Elderly Health Centres of the Hong Kong Government Department of Health, and followed till 30 May 2012.	Alcohol intake: Never, Social (<1/week), Weekly social, Moderate (men ≤3 units/day; women ≤2 units/day; 1 unit =10g ethanol), High (regular drinking > 'moderate'), Ex-drinker	Cancer mortality (all)	In a non-Western setting, no association of moderate alcohol use with death from cancer was found. Occasional social drinking (<1/week) was associated with a lower risk of cancer.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Toriola AT, Kurl S, Dyba T, Laukkanen JA, Kauhanen J. The impact of alcohol consumption on the risk of cancer among men: a 20-year follow-up study from Finland. Eur J Cancer	Prospective cohort	II	Prospective population-based cohort study of 2627 men from Eastern Finland who had no history of cancer at baseline. There were 515 incident cancer cases accrued over 52,540 person years during the 20 years of follow-up.	Alcohol consumption per week (g/w). < 1.3 vs 1.3–17.2 vs 17.3–48.8 vs 48.9–115.3 vs > 115.3 g/week.	All cancer cases	We observed a linear relationship between alcohol consumption and cancer. Men within the highest quintile of alcohol consumption (>115 g/week) had a 42% increased risk of total cancer compared with those within the lowest quintile (relative risk (RR) 1.42, 95% confidence interval (CI) 1.07–1.88; P trend = 0.03) after adjusting for age, smoking, total energy intake and cardio-respiratory fitness. About 6.7% of the cancer cases in this cohort were due to alcohol consumption.
Nelson, D. E., Jarman, D. W., Rehm, J., Greenfield, T. K., Rey, G., Kerr, W. C., Miller, P., Shield, K. D., Ye, Y. and Naimi, T. S. Alcohol-attributable cancer deaths and years of potential life lost in the United States	Cross-sectional	IV	432,145 US participants	>0 to 20 Grams/Day, >20 to 40 Grams/Day >40 Grams/Day	Cancer deaths	Alcohol remains a major contributor to cancer mortality and years of potential life lost. Higher consumption increases risk but there is no safe threshold for alcohol and cancer risk.

Groups of certain cancers

Table 4 Groups certain of cancers

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Klatsky AL, Li Y, Nicole Tran H, Baer D, Udaltsova N, Armstrong MA, Friedman GD. Alcohol intake, beverage choice, and cancer: a cohort study in a large Kaiser permanente population	Prospective cohort	II	Multiethnic cohort (n=124,193)	Ex-drinker; <1 drink/day; 1-2 drink/day; 3+ drinks/day	Various cancers	Heavy alcohol drinking is related to increased risk of some cancer types but not others. Because of probable confounding, the role of light-to-moderate drinking remains unclear

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Klatsky AL, Udaltsova N, Li Y, Baer D, Nicole Tran H, Friedman GD. Moderate alcohol intake and cancer: the role of underreporting. Cancer Causes Control	Prospective cohort	II	Multi-ethnic cohort of 127,176 persons free of cancer	Never drank; Ex-drinker; <1 drink/day; 1-2 drink/day; >3 drinks/day	Various cancers	The apparent increased risk of cancer among light–moderate drinkers may be substantially due to underreporting of intake.
Land SR, Liu Q, Wickerham DL, Costantino JP, Ganz PA. Cigarette smoking, physical activity, and alcohol consumption as predictors of cancer incidence among women at high risk of breast cancer in the NSABP P-1 tria	Prospective cohort	II	13,388 women with estimated 5-year breast cancer risk greater than 1.66% or a history of lobular carcinoma in situ	Alcohol consumption: none, 1 drink/day, >1 drink/day, unknown	Cancer: colon, endometrial, breast, lung	Endometrial cancer was not significantly different among alcohol consumption groups. The risk of colon cancer was significantly different, with lower risk for women who drank in moderation versus non-drinkers. Women who drank more heavily did not have an increased risk of colon cancer.
Perm J. 2015 Spring;19(2):28-34. Klatsky AL, Li Y, Nicole Tran H, Baer D, Udaltsova N, Armstrong MA, Friedman GD. Alcohol intake, beverage choice, and cancer: a cohort study in a large Kaiser Permanente population.	Prospective cohort	II	124,193 persons	Given the wide range of alcohol drinking in Italy, including	Several types of cancers	Heavy alcohol drinking is related to increased risk of some cancer types but not others. Because of probable confounding, the role of light-to-moderate drinking remains unclear.
Tabuchi, T., Ozaki, K., Ioka, A. and Miyashiro, I. Joint and independent effect of alcohol and tobacco use on the risk of subsequent cancer incidence among cancer survivors: A cohort study using cancer registries	Retrospective cohort	III-2	27,762 eligible cancer survivors living in Osaka and aged 20–79 years at the time of diagnosis who were diagnosed between 1985 and 2007 were investigated for subsequent metachronous primary cancer until the end of 2008, using hospital-based and population-based cancer registries.	Never drinker (referent), former drinker, current light drinker, current heavy drinker (>46g per day), current drinker (unknown amount)	Subsequent metachronous primary cancer	Former and current heavy drinkers had an increased incidence rate ratio 1.25 (1.06–1.47) and 1.39 (1.15–1.67) respectively, compared to never drinkers. Current light drinker and current drinker (unknown amount) did not have a significant increase in IRR.
Benedetti A, Parent ME, Siemiatycki J. Lifetime consumption of alcoholic beverages and risk of 13 types of cancer in men: results from a case-control study in Montreal	Case-control	III-3	Men with oesophagus (n = 78), stomach (n = 215), colon (n = 427), rectum (n = 239), liver (n = 28), pancreas (n = 83), lung (n = 700), melanoma (n = 107), prostate (n = 374), bladder (n = 425), kidney (n = 156), Hodgkin's	Total alcohol (drinks/week): never, 1-6, 7+; drink-years	Various cancers	Our results support the hypothesis that moderate and high alcohol intake levels over the lifetime might increase cancer risk at several sites.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
			lymphoma (n = 42), and non-Hodgkin's lymphoma (n = 190), in comparison to population controls (n = 507)			
de Menezes RF, Bergmann A, de Aguiar SS, Thuler LC. Alcohol consumption and the risk of cancer in Brazil: A study involving 203,506 cancer patients	Case-control	III-3	203,506 individuals (110,550 women and 92,956 men), with an average age of 59 years.	nondrinker, current alcohol consumption	Most frequent cancers	A statistically significant association was found between alcohol consumption and increased risk of cancers of the respiratory and digestive systems, prostate, and female breast. The association between alcohol consumption and cancers of the urinary tract, male genital organs, and other neoplasias was not statistically significant. Consumption of alcoholic beverages increased the risk of developing cancer of the nasal cavity, pyriform sinus, oral cavity, oropharynx, nasopharynx, larynx, hypopharynx, lung, esophagus, stomach, liver, pancreas, breast, prostate, colon and rectum, and anus and anal canal.
Praud, D., Rota, M., Rehm, J., Shield, K., Zatonski, W., Hashibe, M., La Vecchia, C. and Boffetta, P. Cancer incidence and mortality attributable to alcohol consumption	Cross-sectional	IV	7,427,148 individuals	Lifetime abstainers, light: ≤12.5 g/day, moderate: >12.5–≤50.0 g/day, heavy: >50.0 g/day.	Cancer (Oral cavity and pharynx, Esophagus SCC, Colon and rectum, Liver, Gallbladder, Pancreas, Larynx, Breast)	Almost 6% of cancers worldwide could be attributed to alcohol; the percentage varied by region, however, from 7% in the Western Pacific region down to 4% in the Americas resulting from drinking alcohol.

Breast cancer

Table 5 Breast cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Chen WY, Rosner B, Hankinson SE, Colditz GA, Willett WC. Moderate alcohol consumption during adult life, drinking patterns, and breast cancer risk	Prospective cohort	II	105,986 women	0, 0.1-4.9, 5-9.9, 10-19.9, ≥ 20 g/day	Breast cancer	Low levels of alcohol consumption were associated with a small increase in breast cancer risk, with the most consistent measure being cumulative alcohol intake throughout adult life. Alcohol intake both earlier and later in adult life was independently associated with risk.
Dam MK, Hvidtfeldt UA, Tjønneland A, Overvad K, Grønbæk M, Tolstrup JS. Five year change in alcohol intake and risk of breast cancer and coronary heart disease among postmenopausal women: prospective cohort study	Prospective cohort	II	21,523 postmenopausal women	<1, 1-6, 7-13, 14 -20, 21 - 27, ≥28 drinks/week (1 drink=12 g pure alcohol)	Breast cancer and coronary heart disease	In this study of postmenopausal women over a five year period, results support the hypotheses that alcohol intake is associated with increased risk of breast cancer and decreased risk of coronary heart disease.
Fagherazzi, G., Vilier, A., Boutron-Ruault, M. C., Mesrine, S. and Clavel-Chapelon, F. Alcohol consumption and breast cancer risk subtypes in the E3N-EPIC cohort	Prospective cohort	II	66 481 women from the French E3N-EPIC cohort	Alcohol (1 drink = 10 g of ethanol): Non-alcohol-consume, < 0.5 drinks/day, 0.5–1 drinks/day, 1–2 drinks/day, ≥2 drinks/day	Breast cancer	No association was found between high alcohol consumption, whatever its type, and increase in breast cancer risk in the premenopausal period. During the postmenopausal period, a linear association between total alcohol consumption and breast cancer risk was found (P < 0.0001),
Falk RT, Maas P, Schairer C, Chatterjee N, Mabie JE, Cunningham C, Buys SS, Isaacs C, Ziegler RG. Alcohol and risk of breast cancer in postmenopausal women: an analysis of etiological heterogeneity by multiple tumor characteristics	Prospective cohort	II	Women aged 55–74 years were recruited at 10 US screening centers between 1993 and 2001 in the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial (PLCO)	Alcohol Consumption: Never, Former, Current	Breast cancer subtypes	Consuming 7 or more drinks per week versus never drinkers was significantly associated with estrogen receptor–positive (ER+) cancer, progesterone receptor–positive (PR+) cancer, ER+/PR+ cancer,and for mixed ductal/lobular cancer.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Hirko KA, Chen WY, Willett WC, Rosner BA, Hankinson SE, Beck AH, Tamimi RM, Eliassen AH. Alcohol consumption and risk of breast cancer by molecular subtype: Prospective analysis of the nurses' health study after 26 years of follow-up.	Prospective cohort	II	105,972 women in the prospective Nurses' Health Study	0, 0.1–4.9, 5.0–9.9, 10.0–19.9, 20+ g/day	Breast cancer by molecular subtype	Alcohol consumption was associated with increased risk of luminal A and HER2-type breast cancer, but not significantly associated with other subtypes. Given that estrogen receptors are expressed in luminal A but not in HER2-type tumors, our findings suggest that other mechanisms may play a role in the association between alcohol and breast cancer.
Holm, M., Olsen, A., Christensen, J., Kroman, N. T., Bidstrup, P. E., Johansen, C., Overvad, K. and Tjonneland, A. Pre-diagnostic alcohol consumption and breast cancer recurrence and mortality: results from a prospective cohort with a wide range of variation in alcohol intake	Prospective cohort	II	29,875 women born in Denmark, aged 50–64 years	Abstainer, 0< unit/d ≤1, 1< unit/d ≤2, 2< unit/d (One unit: 10 grams of ethanol)	Breast cancer recurrence and mortality	Results for breast cancer specific mortality were also suggestive of a higher risk but were not statistically significant. In addition to being a risk factor for breast cancer, a high pre-diagnostic alcohol intake also seems to have an effect on the course of the disease. We could not relate the finding to a specific tumor presentation.
Horn-Ross PL, Canchola AJ, Bernstein L, Clarke CA, Lacey JV Jr, Neuhausen SL, Reynolds P, Ursin G. Alcohol consumption and breast cancer risk among postmenopausal women following the cessation of hormone therapy use: the California Teachers Study	Prospective cohort	II	40,680 eligible postmenopausal California women	None, <20, ≥20 g/day	Breast cancer	Following the cessation of hormone therapy (HT) use, alcohol consumption is not significantly associated with breast cancer risk, although a non-significant increased risk was observed among women who never used HT
Hvidtfeldt UA, Tjønneland A, Keiding N, Lange T, Andersen I, Sørensen TI, Prescott E, Hansen ÅM, Grønbæk M, Bojesen SE, Diderichsen F, Rod NH. Risk of breast cancer in relation to	Prospective cohort	II	30,789 women ages 50+ years	<1 drinks/week, 1-6 drinks/week, 7+ drinks/week	Breast cancer	These analyses suggest an increased risk of breast cancer associated with hormone therapy use—a risk that may be particularly strong among women consuming alcohol.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
combined effects of hormone therapy, body mass index, and alcohol use, by hormone-receptor status						
Jayasekara, H., MacInnis, R. J., Hodge, A. M., Room, R., Milne, R. L., Hopper, J. L., Giles, G. G. and English, D. R. Is breast cancer risk associated with alcohol intake before first full-term pregnancy	Prospective cohort	II	Melbourne Collaborative Cohort Study (MCCS) (n=41,514)	Abstainer; 0-19 g/d; 20-39 g/d; 40+ g/d	Breast cancer before first full-term pregnancy	Limiting alcohol intake before the first pregnancy might reduce women's risk of breast cancer.
Jung, S., Wang, M., Anderson, K., Baglietto, L., Bergkvist, L., Bernstein, L., et al. (2015). Alcohol consumption and breast cancer risk by estrogen receptor status: In a pooled analysis of 20 studies.	Prospective cohort	II	20 pooled prospective cohort studies (Pooling Project of Prospective Studies of Diet and Cancer) (n=089 273 women)	Non-drinkers; 0-15 g/d; 15-30 g/d; 30+ g/d	Breast cancer	Alcohol consumption was positively associated with risk of both ER+ and ER- breast cancer, even among women with high folate intake.
Li CI, Chlebowski RT, Freiberg M, Johnson KC, Kuller L, Lane D, Lessin L, O'Sullivan MJ, Wactawski-Wende J, Yasmeen S, Prentice R. Alcohol consumption and risk of postmenopausal breast cancer by subtype: the women's health initiative observational study.	Prospective cohort	II	87 724 women in the Women's Health Initiative Observational Study prospective cohort from 1993 through 1998	Never drinkers (n = 279) Former drinkers, Current drinkers <7 drinks per week, Current drinkers ≥7 drinks per week.	Postmenopausal Breast Cancer	Alcohol use may be more strongly associated with risk of hormone-sensitive breast cancers than hormone insensitive subtypes, suggesting distinct etiologic pathways for these two breast cancer subtypes.
Liu Y, Colditz GA, Rosner B, Berkey CS, Collins LC, Schnitt SJ, Connolly JL, Chen WY, Willett WC, Tamimi RM. Alcohol intake between menarche and first pregnancy: a prospective study of breast cancer risk.	Prospective cohort	II	91 005 parous women in the Nurses' Health Study II who had no cancer history	Cumulative average alcohol intake, (g/day): 0, 0.1–4.9, 5.0–14.9, ≥15.0	Breast cancer	Alcohol consumption before first pregnancy was consistently associated with increased risks of proliferative benign breast disease and breast cancer.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Nitta J, Nojima M, Ohnishi H, Mori M, Wakai K, Suzuki S, Fujino Y, Lin Y, Tamakoshi K, Tamakoshi A. Weight Gain and Alcohol Drinking Associations with Breast Cancer Risk in Japanese Postmenopausal Women - Results from the Japan Collaborative Cohort (JACC) Study.	Prospective cohort	II	38,610 (9,367 premenopausal, and 29,243 postmenopausal) women	0.1-4.9 g/day, 5.0-14.9 g/day, ≥15.0 g/day	Breast cancer	Higher weight gain in adulthood and larger amounts of ethanol intake were significantly associated with increased risk of BC in Japanese postmenopausal women. None of the investigated factors were significantly associated with BC risk in Japanese premenopausal women.
Park JY, Mitrou PN, Dahm CC, Luben RN, Wareham NJ, Khaw KT, Rodwell SA. Baseline alcohol consumption, type of alcoholic beverage and risk of colorectal cancer in the European Prospective Investigation into Cancer and Nutrition-Norfolk study	Prospective cohort	II	215,000 adults aged 45-75 years	Non-drinkers (0 g/day), 0.1-4.9 g/day, 5-9.9 g/ day, 10-14.9 g/day, 15-29.9 g/day, and ≥30 g/day.	Breast cancer	This prospective study supports previous findings that light to moderate alcohol consumption increases breast cancer risk, demonstrates this association in several ethnic groups besides whites, independent of ER/PR status.
Park SY, Kolonel LN, Lim U, White KK, Henderson BE, Wilkens LR. Alcohol consumption and breast cancer risk among women from five ethnic groups with light to moderate intakes: the Multiethnic Cohort Study	Prospective cohort	II	215,000 adults aged 45 to 75 years, residents of Hawaii and California	Never or hardly ever, to 4 or more times a day	Breast cancer	Higher alcohol consumption was associated with increased risk of breast cancer: compared to non-drinkers, HRs were 1.23 (95% CI: 1.06–1.42), 1.21 (95% CI: 1.00–1.45), 1.12 (95% CI: 0.95–1.31) and 1.53 (95% CI: 1.32–1.77) for 5–9.9, 10–14.9, 15–29.9 and 30 g/day of alcohol, respectively. The positive association was seen in African American, Japanese American, Latino and white, but not in Native Hawaiian women, and in those with tumors that were both positive and negative for estrogen and progesterone receptors (ER/PR). This prospective study supports previous findings that light to moderate alcohol

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						consumption increases breast cancer risk, and demonstrates this association in several ethnic groups besides whites, independent of ER/PR status.
Romieu I, Scoccianti C, Chajès V, de Batlle J, Biessy C, Dossus L, et al. Alcohol intake and breast cancer in the European prospective investigation into cancer and nutrition	Prospective cohort	II	334,850 women, aged 35–70 years	Non-drinkers, 0.1–5, 5.1–15, 15.1–30, >30 g/day	Breast cancer	Our results confirm the association between alcohol intake and both hormone receptor positive and hormone receptor negative breast tumors, suggesting that timing of exposure to alcohol drinking may affect the risk. Therefore, women should be advised to control their alcohol consumption.
Shin A, Sandin S, Lof M, Margolis KL, Kim K, Couto E, Adami HO, Weiderpass E. Alcohol consumption, body mass index and breast cancer risk by hormone receptor status: Women' Lifestyle and Health Study.	Prospective cohort	II	45,233 women enrolled in the Swedish Women's Lifestyle and Health study between 1991 and 1992.	Alcohol intake (g/day): 0, 0.1–5, 5.1–15, >15.	Breast cancer	Overall, we found no statistically significant association between alcohol intake and breast cancer risk after adjustment for confounding, with an estimated relative risk (RR) of 1.01 (95 % CI: 0.98–1.04) for an increment in alcohol consumption of 5 g/day. A statistically significant elevated breast cancer risk associated with higher alcohol consumption was found only among women with BMI ≤25 (RR 1.03, 95 % CI 1.0–1.05 per 5 g/day increase).
Suzuki R, Iwasaki M, Inoue M, Sasazuki S, Sawada N, Yamaji T, Shimazu T, Tsugane S; Japan Public Health	Prospective cohort	II	The population was all Japanese residents aged 40–69 years enrolled with the residential registries of areas served by 11	Alcohol consumption (never drinkers, almost never, 1–3 days per	Incident breast cancer	Compared with never-drinkers, regular alcohol drinkers (>150 g of ethanol/week) had a higher risk of the development of breast

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Center-Based Prospective Study Group. Alcohol consumption-associated breast cancer incidence and potential effect modifiers: the Japan Public Health Center-based Prospective Study			public health centers.	month, 1–2 days per week, 3– 4 days per week, 5–6 days per week and daily)		cancer; the multivariable-adjusted RRs were 1.75 (95% CI 5 1.16–2.65; p trend= 0.035) for overall, 1.78 (95% CI 51.09–2.90) for premenopausal and 1.21 (95% CI 5 0.53–2.75) for postmenopausal women. Excessive alcohol intake was associated with an increase in the risk of breast cancer in this population. There was no statistical evidence for effect modification.
Vrieling, A., Buck, K., Heinz, J., Obi, N., Benner, A., Flesch-Janys, D. and Chang-Claude, J. Pre-diagnostic alcohol consumption and postmenopausal breast cancer survival: a prospective patient cohort study	Prospective cohort	II	2,522 postmenopausal breast cancer patients aged 50–74 years	<0.5 g/day, ≥0.5–<6.0, ≥6.0–<12.0, ≥12.0 g/day	Breast cancer mortality	Our findings show that consumption of alcohol before diagnosis is non-linearly associated with increased breast cancer-specific mortality but may be associated with decreased risk of mortality due to other causes.
Weaver AM, McCann SE, Nie J, Edge SB, Nochajski TH, Russell M, Trevisan M, Freudenheim JL. Alcohol intake over the life course and breast cancer survival in Western New York exposures and breast cancer (WEB) study: quantity and intensity of intake	Retrospective cohort	III-2	1097 women with breast cancer	Number of drinks per drinking day in the following categories: 0 (abstainer), 1 drink or less, 2–3 drinks, and 4 or more drinks.	Breast cancer	Premenopausal breast cancer survival was not associated with drinking intensity. We observed no associations between drinking status or total volume of alcohol intake and breast cancer or all-cause mortality. High-intensity alcohol consumption may be associated with decreased survival in postmenopausal women with breast cancer. Low-intensity alcohol consumption between menarche and first birth may be inversely associated with all-cause and breast cancer mortality; this period may be critical for development of and survival from breast cancer. Intensity of alcohol intake may be a more important factor than absolute volume of intake on survival in women with breast cancer.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ali AM, Schmidt MK, Bolla MK, Wang Q, Gago-Dominguez M, Castelao JE, et al. Alcohol consumption and survival after a breast cancer diagnosis: a literature-based meta-analysis and collaborative analysis of data for 29,239 cases	Systematic review of case cohorts	III-3	Participants previously diagnosed with breast cancer and general population	Moderate drinkers vs non drinkers	Breast cancer	"There was little evidence that pre- or post-diagnosis alcohol consumption is associated with breast cancer–specific mortality for women with ER-positive disease. There was weak evidence that moderate post-diagnosis alcohol intake is associated with a small reduction in breast cancer–specific mortality in ER-negative disease."
Beasley JM, Coronado GD, Livaudais J, Angeles-Llerenas A, Ortega-Olvera C, Romieu I, Lazcano-Ponce E, Torres-Mejía G. Alcohol and risk of breast cancer in Mexican women	Case-control	III-3	1000 incident breast cancer cases aged 35–69 and 1074 controls	Never vs ever drinkers	Breast cancer	Our findings support emerging evidence that any alcohol intake increases risk of breast cancer.
Bessaoud F, Daurès JP. Patterns of alcohol (especially wine) consumption and breast cancer risk: a case-control study among a population in Southern France	Case-control (nested)	III-3	437 cases of breast cancer, newly diagnosed in the period 2002–2004, and 922 residence- and age-matched controls.	Alcohol intake (g/d): 0, 0-5, 5-10, 10-15, >15	Breast cancer	No association between the pattern of total alcohol consumption and breast cancer was found
Brown LM, Gridley G, Wu AH, Falk RT, Hauptmann M, Kolonel LN, West DW, Nomura AM, Pike MC, Hoover RN, Ziegler RG. Low level alcohol intake, cigarette smoking and risk of breast cancer in Asian-American women.	Case-control	III-3	597 incident cases of breast cancer of Chinese, Japanese, and Filipino ethnicity living in San Francisco–Oakland, Los Angeles, and Oahu, Hawaii, and 966 population controls	Drank alcohol (never, ever); drinks per week (0, <1, 1-2.5, 2.51-6.99, 7-13.99, ≥14); Grams alcohol/day (0, <1, 1-4.99, 5-9.99, 10-19.99, ≥20)	Breast cancer	These data suggest that low alcohol intake is not related to increased breast cancer risk in Asian-American women.
Chandran, U., Zirpoli, G., Ciupak, G., McCann, S. E., Gong, Z., Pawlish, K., Lin, Y., Demissie, K., Ambrosone, C. B. and Bandera, E. V. Does alcohol increase breast cancer risk in African-American women? Findings	Case-control	III-3	803 cases and 889 controls	Non-drinker Drinker <14 g per week 14 to <28 g per week ≥28 g per week	Breast cancer in African American (AA) women	Breast cancer risk associated with recent alcohol consumption was not apparent in AA women, while early age drinking seemed to decrease risk. This is the first investigation on recent and lifetime drinking in subgroups and drinking during different age periods in AA women.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
from a case-control study						If findings are replicated, racial differences in biological pathways involving alcohol and its metabolites should be explored.
Cook, M. B., Guenel, P., Gapstur, S. M., van den Brandt, P. A., Michels, K. B., Casagrande, J. T., et al. Tobacco and alcohol in relation to male breast cancer: an analysis of the male breast cancer pooling project consortium	Case-control	III-3	2,378 cases and 51,959 controls	Alcohol consumption (g/day): 0 >0– ≤5.73 >5.73– ≤21.65 >21.65	Male breast cancer	In this analysis of the Male Breast Cancer Pooling Project, we found little evidence that tobacco and alcohol exposures were associated with risk of male breast cancer.
Gago-Dominguez M, Castelao JE, Gude F, Fernandez MP, Aguado-Barrera ME, Ponte SM, Redondo CM, Castelo ME, Dominguez AN, Garzón VM, Carracedo A, Martínez ME. Alcohol and breast cancer tumor subtypes in a Spanish Cohort	Case-control	III-3	Cases (n = 1766) and controls (n = 833).	Alcohol frequency: 0 drinks/week, 1–7 drinks/week, >7 drinks/week	Breast cancer	Our findings indicate that breast cancer risk increased with increasing alcohol intakes for three out of the four major subtypes of breast cancer. The association was similar for hormonal receptor positive breast cancer, i.e., luminal A and luminal B breast cancer, and for TNBC. The association seemed to be slightly more pronounced for lobular than ductal breast cancers. No differences were detected by grade.
Islam, T., Ito, H., Sueta, A., Hosono, S., Hirose, K., Watanabe, M., Iwata, H., Tajima, K., Tanaka, H. and Matsuo, K. Alcohol and dietary folate intake and the risk of breast cancer: a case-control study in Japan	Case-control	III-3	1754 Japanese women with breast cancer and 3508 noncancer controls	Nondrinker, 1 to <5, 5 to <23, and ≥23 g/day.	Breast cancer	Our study indicates that alcohol consumption increased the risk of breast cancer in a Japanese population and that dietary folate intake is protective for it.
Qian, F., Ogundiran, T., Hou, N., Ndom, P., Gakwaya, A., Jombwe, J., Morhason-Bello, I., Adebamowo, C., Ademola, A.,	Case-control	III-3	2,138 women with invasive breast cancer and 2,589 controls in Nigeria, Cameroon, and Uganda	Duration of alcohol drinking was grouped into four categories: never drank,	Breast cancer	We found a positive relationship between alcohol consumption and breast cancer risk, suggesting that this modifiable risk factor should be addressed in

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ojengbede, O., Olopade, O. I. and Huo, D. Alcohol consumption and breast cancer risk among women in three sub-Saharan African countries				1–9, 10–19, and >20 years. Average amount of alcohol consumed daily was also grouped into four categories: never drank, 0.1–4.9, 5.0–9.9, and >10.0 grams. Age at first drink had five categories: never drank, <18, 19–24, 25–29, and >30 years. Life-time alcohol consumption was also categorized into five groups: never drank, 0.1–29.9, 30.0–79.9, 80.0–159.9, and >160.0 gram-years.		breast cancer prevention programs in Africa.
Strumylaite L, Sharp SJ, Kregzdyte R, Poskiene L, Bogusevicius A, Pranys D. The Association of Low-To-Moderate Alcohol Consumption with Breast Cancer Subtypes Defined by Hormone Receptor Status.	Case-control	III-3	585 cases and 1,170 controls.	Alcohol consumption: never, once per two months, 1–3 times a month, once a week, 2–3 times a week, 4–6 times a week, every day.	Breast cancer	Low-to-moderate alcohol intake is associated with the risk of estrogen receptor-positive breast cancer with the strongest association in postmenopausal women. The odds ratio of breast cancer was 1.75 (95% confidence interval [CI]: 1.21–2.53) in women who consumed 5 drinks/week, and 3.13 (95% CI: 1.81–5.43) in women who consumed >5 drinks/week, both compared with non-drinkers for 10 years. The association of alcohol intake with estrogen receptor positive breast cancer was stronger than with estrogen receptor-

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						negative: the odds ratio per 1 category increase was 2.05 (95% CI: 1.49–2.82) and 1.29 (95% CI: 0.85–1.94) (P-heterogeneity = 0.07).
Williams LA, Olshan AF, Tse CK, Bell ME, Troester MA. Alcohol intake and invasive breast cancer risk by molecular subtype and race in the Carolina Breast Cancer Study	Case-control	III-3	1,795 cases, 1,558 controls	Never drinker, >0–≤2 drinks/week, >2–≤7, >7 drinks/week	Invasive breast cancer risk	Drinking more than 7 alcoholic beverages per week increased invasive breast cancer risk among white and African American women, with significant increases only among African American women. Genetic or environmental factors that differ by race may mediate the alcohol-breast cancer risk association.
Wu, A. H., Vigen, C., Razavi, P., Tseng, C. C. and Stancyzk, F. Z Alcohol and breast cancer risk among Asian-American women in Los Angeles County	Case-control	III-3	2,229 Asian Americans diagnosed with incident breast cancer and 2,002 matched control women	No alcohol, > 0 to ≤ 5.0 g/day, > 5 to ≤ 10, >10 g/day	Breast cancer	Breast cancer risk increased with increasing alcohol intake among US-born Asian Americans. Regular lifetime alcohol intake is a significant breast cancer risk factor in US-born Asian Americans and Japanese Americans.

Colorectal cancer

Table 6 Colorectal cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Cai, S., Li, Y., Ding, Y., Chen, K. and Jin, M. Alcohol drinking and the risk of colorectal cancer death: a meta-analysis	Systematic review	I	Nine cohort studies exploring the association between CRC mortality and alcohol drinking	Non/occasional drinkers were considered the reference category. Alcohol drinkers were further classified into light (≤1 drink/day, equivalent to ≤12.5 g/day of ethanol), moderate (2–3 drinks/day, equivalent to 12.6–49.9 g/day of ethanol), and heavy (≥4 drinks/day, equivalent to≥50 g/day of ethanol) drinkers.	Colorectal cancer (CRC) mortality	The dose–response analysis showed a J-shaped relationship between alcohol consumption and CRC mortality. The present meta-analysis provides the evidence for an association between heavy alcohol drinking (≥50 g/day of ethanol) and CRC mortality
Gong J, Hutter CM, Newcomb PA, Ulrich CM, Bien SA, Campbell PT, Baron JA, et al; CCFR and GECCO.. Genome-Wide Interaction Analyses between Genetic Variants and Alcohol Consumption and Smoking for Risk of Colorectal Cancer	Systematic review	I	14 studies from the Colon Cancer Family Registry and the Genetics and Epidemiology of Colorectal Cancer Consortium	Non-/occasional drinkers (<1g/day); light-to-moderate drinkers (1-28g/day); and heavy drinkers (>28g/day)	Colorectal cancer	Compared to non-/occasional drinking light to moderate alcohol consumption was associated with a lower risk of colorectal cancer among individuals with two of the genotypes but not the other.
Wang, Y. M., Zhou, Q. Y., Zhu, J. Z., Zhu, K. F., Yu, C. H. and Li, Y. M. : Systematic Review with Meta-Analysis: Alcohol Consumption and Risk of Colorectal Serrated Polyp	Systematic review	I	10 observational studies	Non/occasional drinkers, light, moderate, heavy drinkers	Colorectal serrated polyp	This is the first meta-analysis that demonstrated the relationship between moderate and heavy alcohol consumption and increasing risks of colorectal SP
Ben, Q., Wang, L., Liu, J., Qian, A., Wang, Q. and Yuan, Y Alcohol drinking and the risk of colorectal adenoma: a dose-response meta-analysis	Systematic review	II	30 studies	Dose–response meta-analyses of alcohol intake (25 g/day)	Colorectal cancer	Increased alcohol consumption is associated with an increased risk of CRA for both men and women and for adenoma in the colon, but not in the rectum.
Zhang, C. and Zhong, M. : Consumption of beer and colorectal cancer incidence: a meta-analysis of observational studies	Systematic review (meta-analysis)	II	Twelve case–control and nine cohort studies	Non-/occasional drinkers, light drinkers, moderate drinkers, heavy drinkers	Colorectal cancer (CRC)	The results from this meta-analysis suggest that heavy (C2 drinks/day) beer drinking may be associated with increased CRC risk.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Cho E, Lee JE, Rimm EB, Fuchs CS, Giovannucci EL. Alcohol consumption and the risk of colon cancer by family history of colorectal cancer	Prospective cohort	II	121,700 female registered nurses aged 30–55 years	None 0.1 to <5 g/d, 5.0 to <10 g/d,10 to <15 g/d, 15 to <30 g/d, ≥30 g/d	Colorectal cancer	Reducing alcohol consumption may decrease the incidence of colon cancer, especially among those with a family history of colorectal cancer.
Dashti SG, Buchanan DD, Jayasekara H, Ait Ouakrim D, Clendenning M, Rosty C, Winship IM, Macrae FA, Giles GG, Parry S, Casey G, Haile RW, Gallinger S, Le Marchand L, Thibodeau SN, Lindor NM, Newcomb PA, Potter JD, Baron JA, Hopper JL, Jenkins MA, Win AK. Alcohol Consumption and the Risk of Colorectal Cancer in Mismatch Repair Gene Mutation Carriers	Prospective cohort	II	1,925 MMR gene mutations carriers	Abstainer, >0–14 g/day, >14– ≤28 g/day, >28g/day	Colorectal cancer	Although these data suggested that alcohol consumption in MMR carriers was associated with increased colorectal cancer risk, there was no evidence of a dose-response, and not all types of alcohol consumption were associated with increased risk.
Jayasekara H, MacInnis RJ, Williamson EJ, Hodge AM, Clendenning M, Rosty C, Walters R, Room R, Southey MC, Jenkins MA, Milne RL, Hopper JL, Giles GG, Buchanan DD, English DR. Lifetime alcohol intake is associated with an increased risk of KRAS+ and BRAF-/KRAS- but not BRAF+ colorectal cancer.	Prospective cohort	II	Melbourne Collaborative Cohort Study (MCCS) (n=41,514)	Abstainer; 0-19 g/d; 20-39 g/d; 40+ g/d	Colorectal cancer	Limiting alcohol intake from a young age might reduce colorectal cancer originating via the traditional adenoma-carcinoma pathway.
Razzak AA, Oxentenko AS, Vierkant RA, Tillmans LS, Wang AH, Weisenberger DJ, Laird PW, Lynch CF, Anderson KE, French AJ, Haile RW, Harnack LJ, Slager SL, Smyrk TC, Thibodeau SN, Cerhan JR, Limburg PJ. Alcohol intake and colorectal cancer risk by molecularly defined subtypes in a prospective study of	Prospective cohort	II	Women's Health Study (IWHS; n = 41,836). Subjects were 55–69 years at baseline	never or less than once per month; 1–3 per month; 1 per week; 2–4 per week; 5–6 per week; 1 per day; 2–3 per day; 4–5 per day; 6+ per day.	Colorectal cancer (CRC)	These data do not support an adverse effect from alcohol intake on CRC risk, overall or by specific molecularly-defined subtypes, among older women.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
older women.						
Walter, V., Jansen, L., Ulrich, A., Roth, W., Blaker, H., Chang-Claude, J., Hoffmeister, M. and Brenner, H. Alcohol consumption and survival of colorectal cancer patients: a population-based study from Germany	Prospective cohort	II	3146 patients with a first, histologically confirmed diagnosis of CRC.	Abstainers, light drinkers, moderate drinkers, heavy drinkers	Colorectal cancer (CRC) prognosis	Prediagnostic alcohol abstaining and heavy drinking were associated with poorer survival after a CRC diagnosis than light drinking. The protective effects of light consumption might be restricted to wine, and associations might differ according to age and presence of diabetes mellitus.
Araujo, R. F., Jr., Lira, G. A., Guedes, H. G., Cardoso, M. A., Cavalcante, F. J., Araujo, A. L., Ramos, C. C. and de Araujo, A. A. Lifestyle and family history influence cancer prognosis in Brazilian individuals	Retrospective cohort study	III-2	Cases of colorectal cancer in a Brazilian Hospital	Alcoholism: yes or no	Death from colorectal cancer	"Alcohol consumption significantly increased the chance of dying ($p < 0.023$) from colorectal cancer; this increased risk of death was approximately 71%, compared to 52.2% of the non-alcoholics."
Bongaerts BW, de Goeij AF, Wouters KA, van Engeland M, Gottschalk RW, Van Schooten FJ, et al. Alcohol consumption, alcohol dehydrogenase 1C (ADH1C) genotype, and risk of colorectal cancer in the Netherlands Cohort Study on diet and cancer.	Case-control	III-3	594 cases and 11,992 controls	Abstainers, <30.0, ≥30.0 g/day	Colorectal cancer	Alcohol consumption were associated with an increased risk of CRC
Boyle T, Fritschi L, Tabatabaei SM, Ringwald K, Heyworth JS. Smoking, alcohol, diabetes, obesity, socioeconomic status, and the risk of colorectal cancer in a population-based case-control study	Case-control	III-3	918 cases and 1,021 controls	Alcohol intake 10 years ago: <1 standard drink/week, 1–7 standard drinks/week, 7–21 standard drinks/week, 21+ standard drinks/week (also beer, spirits, wine consumption)	Colorectal cancer	The exposures alcohol, smoking, and diabetes were associated with an increased risk of colorectal cancer.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Crockett SD, Long MD, Dellon ES, Martin CF, Galanko JA, Sandler RS. Inverse relationship between moderate alcohol intake and rectal cancer: analysis of the North Carolina Colon Cancer Study.	Case-control	III-3	1033 cases and 1011 controls	No alcohol Moderate (0 and 14 g/day) Heavy (14 g/day)	Distal colorectal cancer	In this study, moderate alcohol intake (especially wine) was inversely associated with distal colorectal cancer.
Ferrari P, McKay JD, Jenab M, Brennan P, Canzian F, Vogel U, et al. Alcohol dehydrogenase and aldehyde dehydrogenase gene polymorphisms, alcohol intake and the risk of colorectal cancer in the European Prospective Investigation into Cancer and Nutrition study	Case-control (nested)	III-3	1269 cases matched to 2107 controls within the European Prospective Investigation into Cancer and Nutrition (EPIC)	Alcohol intake (g per day) were <5, 5–25, ≥25 in women, and <10, 10–50, and ≥50 in men, referring to study subjects' intake during the 12 months preceding dietary questionnaire administration	Colorectal cancer risk	Heavy alcohol intake was more strongly associated with CRC risk among carriers of the rs1573496(C) allele compared with wild-type subjects with low alcohol consumption (P interaction =0.07).
Kontou N, Psaltopoulou T, Soupos N, Polychronopoulos E, Xinopoulos D, Linos A, Panagiotakos D. Alcohol consumption and colorectal cancer in a Mediterranean population: a case-control study	Case-control study	III-3	250 patients with colorectal cancer; 250 controls	<12 g/day; 12-35 g/d; 36-48 g/d; >48 g/d	Colorectal cancer	The association between quantity of alcohol consumed and the presence of colorectal cancer followed a J-shaped curve.
Park JY, Dahm CC, Keogh RH, Mitrou PN, Cairns BJ, Greenwood DC, Spencer EA, Fentiman IS, Shipley MJ, Brunner EJ, Cade JE, Burley VJ, Mishra GD, Kuh D, Stephen AM, White IR, Luben RN, Mulligan AA, Khaw KT, Rodwell SA. Alcohol intake and risk of colorectal cancer: results from the UK Dietary Cohort Consortium	Case-control	III-3	579 CRC cases and 1996 matched controls	The lightest category of drinkers (>0 – <5 g per day) as a reference group: 0 (non-drinkers), >0–<5, 5–<15, 15–<30, 30–<45, ≥45g per day.	Colorectal cancer (CRC)	We found no significantly increased risk of CRC up to 30 g per day of alcohol intake.

Endometrial cancer

Table 7 Endometrial cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Fedirko V, Jenab M, Rinaldi S, Biessy C, Allen NE, Dossus L, et al. Alcohol drinking and endometrial cancer risk in the European Prospective Investigation into Cancer and Nutrition (EPIC) study	Prospective cohort	II	301,051 women in the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort	Baseline alcohol consumption (g/d): Non-drinkers, 0.1-6, 6.1-12, 12.1-24, 24.1-36, >36	Endometrial cancer	Our findings suggest no association between alcohol intake and endometrial cancer risk.
Friberg E, Wolk A. Long-term alcohol consumption and risk of endometrial cancer incidence: a prospective cohort study	Prospective cohort	II	Data from the prospective population-based Swedish Mammography Cohort including 61,226 women	Alcohol consumption (g/day): Non-drinkers, <3.4, 3.4-9.9, ≥10.0	Endometrial cancer	In conclusion, our results suggest that low alcohol consumption (up to one drink per day) is unlikely to substantially influence risk of endometrial cancer.
Je Y, De Vivo I, Giovannucci E. Long-term alcohol intake and risk of endometrial cancer in the Nurses' Health Study, 1980-2010	Prospective cohort	II	Nurses' Health Study (NHS) (n=121 700 female registered nurses)	Non-drinkers; 0.1-4.9 g/d; 5.0-14.9 g/d; 15-29.9 g/d; >=30 g/d	Endometrial cancer	Inverse association between light alcohol intake (half drink per day) in the long term and endometrial cancer risk, but above that level no significant association was found
Setiawan VW, Monroe KR, Goodman MT, Kolonel LN, Pike MC, Henderson BE. Alcohol consumption and endometrial cancer risk: the multiethnic cohort	Prospective cohort	II	The Multiethnic Cohort is a prospective cohort of more than 215,000 men and women, aged 45 to 75 years, enrolled between 1993 and 1996.	Alcohol intake was categorized into 4 categories: non-drinkers (0 g/day), <1 drink/day (>0 to < 12 g/day), 1 to <2 drinks/day (12 to <24 g/day) and 2 drinks/day (24 g/day).	Endometrial cancer	Our results suggest that only alcohol consumption equivalent to 2 or more drinks per day increases risk of endometrial cancer in postmenopausal women.
Yang HP, Gierach GL, Danforth KN, Sherman ME, Park Y, Wentzensen N, Hollenbeck A, Schatzkin A, Brinton LA. Alcohol and endometrial cancer risk in the NIH-AARP diet and health study	Prospective cohort	II	114,414 US women enrolled in the NIH-AARP Diet and Health Study	Non-drinkers, > 0-< 12 grams of alcohol/day, 12- < 24 grams/day, ≥ 24 grams/day	Endometrial cancer	Our results do not support that alcohol is a strong contributor to endometrial cancer risk, but slight risk increases may prevail among some users or for selected tumor characteristics
Friedenreich, C.M, T.P. Speidel, H.K. Neilson, A.R. Langley, K.S. Courneya, A.M. Magliocco and L.S. Cook. Case-control study of lifetime	Case-control	III-3	514 incident endometrial cancer cases and 962 frequency age-matched controls	Various: mean daily intake, by tertiles, type of drinker	Endometrial cancer	This study provides epidemiologic evidence for an inverse association between relatively modest lifetime average alcohol consumption

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
alcohol consumption and endometrial cancer risk.						(approximately 1/4 to 1/2 drink/day) and endometrial cancer risk.
Hosono S, Matsuo K, Kajiyama H, Hirose K, Suzuki T, Hiraki A, Kawase T, Kidokoro K, Nakanishi T, Hamajima N, Kikkawa F, Tajima K, Tanaka H. Reduced risk of endometrial cancer from alcohol drinking in Japanese	Case-control	III-3	148 histologically diagnosed incident endometrial cancer cases and 1468 matched non-cancer controls.	Alcohol amount: non-drinkers, and weekly ethanol intake of 1–24, 25 –175, and >175 g/week Alcohol frequency: non-drinker, <1 day/week, 1–2 days/week, 3–4 days/week, and 5 or more days per week.	Endometrial cancer	"These results suggest the presence of an inverse association between alcohol drinking and endometrial cancer risk among Japanese women, and that this association is evident among those without flushing. Further investigation of these findings is warranted. "

Liver cancer

Table 8 Liver cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Tanaka K, Tsuji I, Wakai K, Nagata C, Mizoue T, Inoue M, Tsugane S; Research Group for the Development and Evaluation of Cancer Prevention Strategies in Japan. Alcohol drinking and liver cancer risk: an evaluation based on a systematic review of epidemiologic evidence among the Japanese population	Systematic review (22 cohort and 24 case-control studies)	II	22 cohort and 24 case-control studies on alcohol drinking and liver cancer among Japanese populations.	Alcohol consumption (various doses)	Liver cancer incidence/mortality	We conclude that there is 'convincing' evidence that alcohol drinking increases the risk of primary liver cancer among the Japanese population.
Shimazu T, Sasazuki S, Wakai K, Tamakoshi A, Tsuji I, Sugawara Y, Matsuo K, Nagata C, Mizoue T, Tanaka K, Inoue M, Tsugane S; Research Group for the Development and Evaluation of Cancer Prevention Strategies in Japan. Alcohol drinking and primary liver cancer: a pooled analysis of four Japanese cohort	Prospective cohort (pooled from 4 cohort studies)	II	Data from 4 population-based prospective cohort studies encompassing 174,719 participants (89,863 men and 84,856 women).	Alcohol intake: Non-drinkers; Occasional drinkers (<once/week); Current drinkers (alcohol intake (g/day) - 0.1–22.9, 23.0–45.9, 46.0–68.9, 69.0–91.9, ≥92.0)	Liver cancer incidence	HRs (95% CI) for alcohol intakes of 0.1–22.9, 23.0–45.9, 46.0–68.9, 69.0–91.9 and 92.0 g/day, as compared to occasional drinkers, were 0.88 (0.57–1.36), 1.06 (0.70–1.62), 1.07 (0.69–1.66), 1.76 (1.08–2.87) and 1.66 (0.98–2.82), respectively (p for trend 5 0.015). In women, we observed a significantly

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
studies.						increased risk among those who drank 23.0 g/day, as compared to occasional drinkers (HR: 3.60; 95% CI: 1.22–10.66).
Zhou, Y. M., Zhang, X. F., Wu, L. P., Sui, C. J. and Yang, J. M. Risk factors for combined hepatocellular-cholangiocarcinoma: a hospital-based case-control study	Case-control	III-3	126 patients with combined hepatocellular-cholangiocarcinoma and 4:1 matched healthy controls without cancer undergoing routine health examinations at the same hospital	Alcohol consumption per day (g/d). Heavy consumption ≥80g/d. Life time alcohol intake.	Combined hepatocellular-cholangiocarcinoma	In conclusion, our results suggest that HBV infection and heavy alcohol consumption may be risk factors for CHC in China. Heavy alcohol consumption (OR = 2.186, 95%CI: 1.070-4.466)

Haematologic cancers

Table 9 Haematologic cancers

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Chang ET, Clarke CA, Canchola AJ, Lu Y, Wang SS, Ursin G, West DW, Bernstein L, Horn-Ross PL. Alcohol consumption over time and risk of lymphoid malignancies in the California Teachers Study cohort.	Prospective cohort	II	102,721 women in California	Consistent non-drinker Former alcohol drinker Current drinker, g/day: 0.1–<5 5–<10 10–<20 ≥20	Lymphoid neoplasm	Risk of all types of B-cell NHL combined or multiple myeloma was not associated with self-reported past consumption of alcohol, beer, wine, or liquor at ages 18–22 years, at ages 30–35 years, or during the year before baseline. NHL subtypes were inconsistently associated with alcohol intake. However, women who were former alcohol drinkers at baseline were at elevated risk of overall B-cell NHL and follicular lymphoma. The higher risk among former drinkers emphasizes the importance of classifying both current and past alcohol

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						consumption and suggests that factors related to quitting drinking, rather than alcohol itself, may increase B-cell NHL risk.
Gapstur SM, Diver WR, McCullough ML, Teras LR, Thun MJ, Patel AV. Alcohol intake and the incidence of non-hodgkin lymphoid neoplasms in the cancer prevention study II nutrition cohort	Prospective cohort	II	The Cancer Prevention Study II Nutrition Cohort, a prospective study of US men and women aged 50–74 years.	Alcohol Intake (Drinks per Day): Non-drinker, Former drinker, <1, 1-2, >2	Non-Hodgkin's lymphoma (NHL)	In this prospective study, current heavy alcohol intake was associated with a reduced risk of NHL.
Geyer SM, Morton LM, Habermann TM, Allmer C, Davis S, Cozen W, Severson RK, et al. Smoking, alcohol use, obesity, and overall survival from non-Hodgkin lymphoma: a population-based study	Prospective cohort	II	1286 patients enrolled through population-based registries in the United States from 1998 through 2000	Alcohol use: None, ≤43.1 g/wk, >43.1 g/wk	Survival	NHL patients who smoked, consumed alcohol, or were obese before diagnosis were found to have a poorer overall and lymphoma specific survival.
Han X, Zheng T, Foss FM, Ma S, Holford TR, Boyle P, Leaderer B, Zhao P, Dai M, Zhang Y. Alcohol consumption and non-Hodgkin lymphoma survival	Prospective cohort	II	575 female NHL incident cases	Never drinker Initiation age <=21 Initiation age > 21 Intensity <=132 g/month Intensity > 132 g/month Duration <=30 years Duration >30 years Lifetime consumption <=34.49 kg Lifetime consumption >34.49 kg	Non-Hodgkin lymphoma (NHL) survival	Our results suggest a moderate relationship between pre-diagnostic alcohol consumption and NHL survival, particularly for diffuse large B-cell lymphoma.
Heinen, M. M., Verhage, B. A., Schouten, L. J., Goldbohm, R. A., Schouten, H. C. and van den Brandt, P. A. Alcohol consumption and risk of lymphoid and myeloid neoplasms:	Prospective cohort	II	120,852 individuals in the Netherlands	Abstainers, 0.1–<5, 5–<15, 15–<30, ≥30 g/day	Lymphoid and myeloid neoplasms	Our study did not show an inverse association between alcohol consumption and lymphoid neoplasms as previously reported. Also, no inverse association was observed with myeloid neoplasms. If any association between alcohol consumption

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
results of the Netherlands cohort study						and lymphoid neoplasms exists, our study suggests an increased risk rather than a decreased risk.
Ji J, Sundquist J, Sundquist K. Alcohol consumption has a protective effect against hematological malignancies: a population-based study in Sweden including 420,489 individuals with alcohol use disorders	Prospective cohort	II	General population (Swedish registries)	Alcohol use disorder: yes/no	Hematological malignancies	Alcohol consumption has a protective effect against hematological malignancies. People with AUDs had low risks for developing specific types of malignancies. The lowest risk (0.51) was for leukemia, followed by myeloma (0.52), non-Hodgkin lymphoma (0.65), and Hodgkin disease (0.71).
Kanda J, Matsuo K, Inoue M, Iwasaki M, Sawada N, Shimazu T, Yamaji T, Sasazuki S, Tsugane S; Japan Public Health Center-based Prospective Study Group. Association of alcohol intake with the risk of malignant lymphoma and plasma cell myeloma in Japanese: a population-based cohort study (Japan Public Health Center-based Prospective Study).	Prospective cohort	II	Japan Public Health Center–based Prospective Study (n=95,520)	Ethanol intake (1-149 g/wk; 150-299 g/wk; >300 g/wk)	Malignant lymphoma and plasma cell myeloma	Alcohol had an inverse association with the risk of lymphoid neoplasms, particularly the risk of NHL, among a Japanese population.
Klatsky AL, Li Y, Baer D, Armstrong MA, Udaltsova N, Friedman GD. Alcohol consumption and risk of hematologic malignancies	Prospective cohort	II	Members of a comprehensive prepaid health care program in the San Francisco Bay Area (n=126,293)	Never drank; Ex-drinker; <1 drink/day; 1-2 drink/day; >3 drinks/day	Hematologic malignancies	Alcohol drinking is associated with slightly lower risk of HM, due largely to inverse relations to lymphocytic and myelocytic leukemia.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Kroll ME, Murphy F, Pirie K, Reeves GK, Green J, Beral V; Million Women Study Collaborators. Alcohol drinking, tobacco smoking and subtypes of haematological malignancy in the UK Million Women Study. Br J Cancer	Prospective cohort	II	Million Women Study (n=1 319 121)	Non-drinkers; 0.5-1 drinks/wk; 3-7 drinks/wk; 7+ drinks/wk	Hematologic malignancies	Among predominantly moderate alcohol drinkers, higher intake was associated with lower risk of lymphoid malignancies, in particular diffuse large B-cell lymphoma (relative risk 0.85 per 10 g alcohol per day (95% confidence interval 0.75–0.96)), follicular lymphoma (0.86 (0.76–0.98)) and plasma cell neoplasms (0.86 (0.77–0.96)).in women.
Lim U, Morton LM, Subar AF, Baris D, Stolzenberg-Solomon R, Leitzmann M, et al. Alcohol, smoking, and body size in relation to incident Hodgkin's and non-Hodgkin's lymphoma risk	Prospective cohort	II	285,079 men and 188,905 women aged 50–71 years	Alcohol (drinks/week): None, 0.1–7, >7.	Hodgkin's and non-Hodgkin's lymphoma	Compared with nondrinkers, alcohol consumers had a lower risk for non-Hodgkin's lymphoma overall.
Lim U, Morton LM, Subar AF, Baris D, Stolzenberg-Solomon R, Leitzmann M, Kipnis V, Mouw T, Carroll L, Schatzkin A, Hartge P. Alcohol, smoking, and body size in relation to incident Hodgkin's and non-Hodgkin's lymphoma risk	Prospective cohort	II	285,079 men and 188,905 women aged 50–71 years	Alcohol (drinks/week): None, 0.1–7, >7.	Hodgkin's and non-Hodgkin's lymphoma	Compared with non-drinkers, alcohol consumers had a lower risk for non-Hodgkin's lymphoma overall.
Talamini R, Polesel J, Spina M, Chimienti E, Serraino D, Zucchetto A, Zanet E, Franceschi S, Tirelli U. The impact of tobacco smoking and alcohol drinking on survival of	Prospective cohort	II	268 subjects with incident histologically-confirmed NHL, admitted as inpatients to the Division of Medical Oncology, between 1983 and 2002.	Alcohol per day (drinks/day): <2, 2-3, ≥4	Non-Hodgkin's lymphoma survival	Patients who drunk ≥4 drinks/day showed 1.69-fold higher probability of death (95% CI: 1.04–2.76) in comparison to drinkers of < 2 drinks/day (5-year survival: 47and 67%, respectively).

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
patients with non-Hodgkin lymphoma						
Troy JD, Hartge P, Weissfeld JL, Oken MM, Colditz GA, Mechanic LE, Morton LM. Associations between anthropometry, cigarette smoking, alcohol consumption, and non-Hodgkin lymphoma in the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial. Am J Epidemiol	Retrospective cohort	III-2	Cohort of 142,982 from 154,910 men and women aged 55–74 years with no prior history of the cancers under study were enrolled during 1993–2001 at 10 centers around the United States in a RCT designed to evaluate the impact of cancer screening on mortality	Total alcohol consumption per week. Non-drinkers; light drinkers (2.9-141.8g/w = referent); 11.9–37.3g/w; 37.4–123.9g/w; >123.9g/w	All non-hodgkin's lymphoma, diffuse large B-cell lymphoma, follicular lymphoma, chronic and small lymphocytic leukemia, plasma cell neoplasms	These data does not support a causal association between alcohol and NHL.
Andreotti, G., Birmann, B., De Roos, A. J., Spinelli, J., Cozen, W., Camp, N. J., A pooled analysis of alcohol consumption and risk of multiple myeloma in the international multiple myeloma consortium	Systematic review	III-3	Case-control studies of patients with histologically confirmed primary diagnosis of multiple myeloma and population/hospital controls	Cumulative intake of alcohol and former drinkers	Multiple myeloma	"Our study is, to our knowledge, the largest of its kind to date, and our findings suggest that alcohol consumption may be associated with reduced risk of MM"
Casey R, Piazzon-Fevre K, Raverdy N, Forzy ML, Tretare B, Carli PM, Maynadié M. Case-control study of lymphoid neoplasm in three French areas: description, alcohol and tobacco consumption	Case-control	III-3	298 cases and 276 controls	Drinker: No, Yes Drinking status: Former drinker, Current drinker Drinking duration (years): ≤ 33, > 33 Age at first drink (years): ≤20, > 20 Daily intake (g/day): ≤20, > 20 Lifetime intake (kg): ≤206, > 206	Lymphoid neoplasm	Overall alcohol intake did not incur any risk increase for non-Hodgkin's lymphoma. Wine consumption marginally increased the risk of follicular lymphoma [odds ratio = 2.19 (0.83–5.80)], with a higher risk for drinkers who started before the age of 20 years [odds ratio = 4.04 (1.19–13.76)] and for drinkers who consumed more than 19 g of alcohol per day [odds ratio = 4.37 (1.04–18.45)].
Gorini G, Stagnaro E,	Case-control	III-3	649 leukemia cases and 1771	Ethanol from total alcohol/wine/beer/liquor	Leukaemia - ALL, CLL, AML, CML,	Our study did not show a clear association

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Fontana V, Miligi L, Ramazzotti V, Nanni O, Rodella S, Tumino R, Crosignani P, Vindigni C, Fontana A, Vineis P, Costantini AS. Alcohol consumption and risk of leukemia: A multicenter case-control study			controls	intake, grams per day: various	OAL	between alcohol intake and leukemia risk
Kanda J, Matsuo K, Kawase T, Suzuki T, Ichinohe T, Seto M, Morishima Y, Tajima K, Tanaka H. Association of alcohol intake and smoking with malignant lymphoma risk in Japanese: a hospital-based case-control study at Aichi Cancer Center	Case-control study	III-3	Subjects enrolled inHospital-based Epidemiological Research Program at Aichi Cancer Center Hospital (n=782)	Never; occasional; frequent moderate; frequent heavy	Malignant lymphoma	Alcohol had an inverse association with malignant lymphoma risk across all malignant lymphoma subtypes in our Japanese subjects
Monnereau A, Orsi L, Troussard X, Berthou C, Fenaux P, Soubeyran P, Marit G, Huguet F, Milpied N, Leporrier M, Hemon D, Clavel J. Cigarette smoking, alcohol drinking, and risk of lymphoid neoplasms: results of a French case-control study	Case-control	III-3	824 cases and 752 hospital controls aged 18-75 y	0-3.7 drinks/week, 3.7-10, 10-21, >21 drinks/week	Non-Hodgkin's or Hodgkin's lymphoma, multiple myeloma, or lymphoproliferative syndrome	The negative relationship between alcohol consumption and Hodgkin's and NHL, also previously reported, needs further investigations.

Oesophageal cancer

Table 10 Oesophageal cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Huang, Q., Luo, K., Yang, H., Wen, J., Zhang, S., Li, J., Ela Bella, A., Liu, Q., Yang, F., Zheng, Y., Hu, R., Chen, J. and Fu, J Impact of alcohol consumption on survival in patients with esophageal carcinoma: a large cohort with long-term follow-up	Prospective cohort	II	2151 Chinese patients, receiving surgical resection from January 1997 to December 2008	neverdrinkers, light drinkers (0–0.99 drinks per day), moderate drinkers (1–2.99 drinks per day), or heavy drinkers (≥3 drinks per day)	Esophageal cancer survival	The current study revealed that the survival is shortened, of those patients who consume alcohol before diagnosis of esophageal squamous cell carcinoma, which are not attributable to differences in stage, smoking status, and gender. Alcohol control should be emphasized to reduce mortality of esophageal carcinoma, and further outcome studies should include alcohol as a potential prognosticator.
Steevens J, Schouten LJ, Goldbohm RA, van den Brandt PA. Alcohol consumption, cigarette smoking and risk of subtypes of oesophageal and gastric cancer: a prospective cohort study.	Prospective cohort	II	120 852 participants who completed a baseline questionnaire on diet and other cancer risk factors in 1986.	Alcohol consumption (g/day): abstainer, >0 to <5, 5 to <15, 15 to <30, ≥30	Oesophageal squamous cell carcinoma (OSCC), oesophageal adenocarcinoma (OAC), gastric cardia adenocarcinoma (GCA) and gastric non-cardia adenocarcinoma (GNCA).	This prospective study found alcohol consumption to be associated with increased risk of only oesophageal squamous cell carcinoma
Lubin JH, Cook MB, Pandeya N, et al (2012). The importance of exposure rate on odds ratios by cigarette smoking and alcohol consumption for esophageal adenocarcinoma and squamous cell carcinoma in the barret´s esophagus and esophageal adenocarcinoma consortium	Systematic review	III-3	12 case-control studies	Alcohol consumption: never drinkers, 5 drinks/day or less, 10 drinks/day or less	Esophageal adenocarcinoma, esophagogastric junctional adenocarcinoma and esophageal squamous cell carcinoma	For esophageal adenocarcinoma and esophagogastric junctional adenocarcinoma, ORs with drink-years exhibited inverse associations in <5 drinks/day consumers and no association in heavier consumers. For esophageal squamous cell carcinoma, ORs with drink-years increased, with trends strengthening with greater drinks/day.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Chen J, Zhang N, Wakai T, Wei L, He Y, Kumagai N, Kitsu K, Wang S, Akazawa K. Effect of the interaction between the amount and duration of alcohol consumption and tobacco smoking on the risk of esophageal cancer: A case-control study	Case-control	III-3	835 pairs of cases and controls	Duration of tobacco smoking (years): 0 <20 20 to <30 ≥30 Amount of tobacco smoking (cigarettes/day): 0 <10 10 to <20 ≥20	Esophageal cancer	This study confirmed the significance of the interaction between alcohol consumption and tobacco smoking in esophageal cancer. This interaction between amount and duration is an accurate indicator for estimating the risk of esophageal cancer attributable to alcohol consumption and tobacco smoking. These findings suggest that decreasing the number of young and middle-aged drinkers and smokers will reduce the incidence of esophageal cancer.
Ganesh B, Talole SD, Dikshit R. Tobacco, alcohol and tea drinking as risk factors for esophageal cancer: A case-control study from Mumbai, India	Case-control	III-3	442 cases of esophageal cancer and 1628 hospital controls	Alcohol drinking: Non-drinkers, 1–10 years, 11–20 years, More than 20 years	Esophageal cancer	The results indicated a 1.8-fold excess risk for alcohol drinkers. There was a clear dose–response relationship.
J. Vioque, X. Barber, F. Bolumar, M. Porta, M. Santibáñez, M.G. de la Hera, E. Moreno-Osset and PANESOES Study Group. Esophageal cancer risk by type of alcohol drinking and smoking: a case-control study in Spain	Case-control	III-3	Cases with histologically confirmed esophageal cancer (n=202); controls (n=455).	Never; 1-24 g/d; 25-74 g/d; >=75 g/d	Esophageal cancer	The risk of EC, and particularly the squamous cell type, is strongly associated with alcohol drinking. The consumption of any combination of hard liquors seems to be harmful whereas a low consumption of only wine may not.
Pandeya N. G. Williams, A.C. Green, P.M. Webb, D.C. Whiteman and Australian Cancer Study. Alcohol consumption and the risks of adenocarcinoma and squamous cell carcinoma of the esophagus	Case-control	III-3	Patients with esophageal adenocarcinoma (n=365) or esophagogastric junction adenocarcinoma (n=426) or esophageal squamous cell carcinoma (n=303) with controls sampled from a population register (n=1580).	Never drinkers, less than 10g/wk, 10– 69.9 g/wk, 70–209.9 g/wk, 210– 419.9 g/wk, and 420 g/wk or greater.	Esophageal cancer	Alcohol intake above the recommended US dietary guidelines significantly increases the risk of esophageal squamous cell carcinoma, but not esophageal adenocarcinoma or esophagogastric junction adenocarcinoma.

Ovarian cancer

Table 11 Ovarian cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Tworoger SS, Gertig DM, Gates MA, Hecht JL, Hankinson SE. Caffeine, alcohol, smoking, and the risk of incident epithelial ovarian cancer	Prospective cohort	II	Nurses' Health Study cohort of women. Total of 20,228 included in the alcohol analysis. 507 cases of ovarian cancer identified between 1908 and June 2004.	Daily alcohol intake (g/day). Never (<0.1g/d) vs 0.1-4.9g/d vs 5.0-14.9g/day vs 15+g/d	Ovarian cancer	Alcohol intake was not associated with risk RR = 1.05 (0.83–1.33) for 0.1-4.9 vs never; 0.99 (0.75–1.30) for 5.0-14.9; 0.99 (0.72–1.36) for 15+ vs never; P for trend = 0.91
Cook LS, Leung AC, Swenerton K, Gallagher RP, Magliocco A, Steed H, Koebel M, Nation J, Eshragh S, Brooks-Wilson A, Le ND. Adult lifetime alcohol consumption and invasive epithelial ovarian cancer risk in a population-based case-control study	Case-control	III-3	1144 invasive epithelial ovarian cancer cases and 2513 controls	Consumption of ≥12 drinks of wine in any year: No, <12 drinks, all alcohol Yes, by average drinking frequency: 1–2 times per month; >2 times per month; Unknown Yes, by intake score: <=2.00; 2.01–7.00; 7.01–11.00; 1.01–20.00; >20.00	Invasive epithelial ovarian cancer	For the moderate consumption in this study, higher levels of wine consumption were generally associated with risk reductions; reductions may be stronger for red wine. Our results suggest that alcohol consumption that is guideline concordant will not increase epithelial ovarian cancer risk.
Harris HR, Cramer DW, Vitonis AF, DePari M, Terry KL. Folate, vitamin B(6), vitamin B(12) , methionine and alcohol intake in relation to ovarian cancer risk	Case-control	III-3	1910 women with ovarian cancer and 1989 controls	Alcohol 0, 0.1–2.2, 2.3–8.2, ≥ 8.3 g/day	Ovarian cancer	Our results suggested a decreased risk with alcohol intake that may be limited to women with lower intake of folate, though confounding by socioeconomic status cannot be ruled out.
Kelemen, E.V. Bandera, K.L. Terry, M.A. Rossing, L.A. Brinton, J.A. Doherty, et al; Australian Ovarian Cancer Study Group and Australian Cancer Study (Ovarian Cancer); Ovarian Cancer Association Consortium. Recent alcohol consumption and risk of incident ovarian carcinoma: a pooled analysis of 5,342 cases and 10,358 controls from the Ovarian Cancer	Case-control study	III-3	Pooled data from 12 case-control studies in the Ovarian Cancer Association Consortium (5,342 OC cases, 1,455 borderline tumors and 10,358 controls)	None; up to 1 drink; 1-2 drinks; 2-3 drinks; >3 drinks per day	Ovarian carcinoma	No evidence that recent moderate alcohol drinking is associated with increased risk for overall OC, or that variation in risk is associated strongly with specific histologic types

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Association Consortium						
L.E. Kelemen, E.V. Bandera, K.L. Terry, M.A. Rossing, L.A. Brinton, J.A. Doherty, et al; Australian Ovarian Cancer Study Group and Australian Cancer Study (Ovarian Cancer); Ovarian Cancer Association Consortium. Recent alcohol consumption and risk of incident ovarian carcinoma: a pooled analysis of 5,342 cases and 10,358 controls from the Ovarian Cancer Association Consortium	Case-control study	III-3	5,342 cases and 10,358 controls	None, up to 1 drink/day, 1-2 drinks/d, 2-3 drinks/d, >3 drinks/day	Ovarian carcinoma (OC)	We found no evidence that recent moderate alcohol drinking is associated with increased risk for overall OC, or that variation in risk is associated strongly with specific histologic types. Understanding modifiable causes of these elusive and deadly cancers remains a priority for the research community.

Pancreatic cancer

Table 12 Pancreatic cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Genkinger JM, Spiegelman D, Anderson KE, Bergkvist L, Bernstein L, van den Brandt PA, English DR, Freudenheim JL, Fuchs CS, Giles GG, Giovannucci E, Hankinson SE, Horn-Ross PL, Leitzmann M, Männistö S, Marshall JR, McCullough ML, Miller AB, Reding DJ, Robien K, Rohan TE, Schatzkin A, Stevens VL, Stolzenberg-Solomon RZ, Verhage BA, Wolk A, Ziegler RG, Smith-Warner SA.	Systematic review (Meta-analysis)	I	Pooled analysis of the primary data from 14 prospective cohort studies.	Categories of alcohol intake (grams/d): 0, 0.1-4.9, 5-14.9, 15-29.9, ≥30	Pancreatic cancer	Our findings are consistent with a modest increase in risk of pancreatic cancer with consumption of 30 or more grams of alcohol per day.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Alcohol intake and pancreatic cancer risk: a pooled analysis of fourteen cohort studies						
Anderson, M. A., Zolotarevsky, E., Cooper, K. L., Sherman, S., Shats, O., Whitcomb, D. C et al. Alcohol and tobacco lower the age of presentation in sporadic pancreatic cancer in a dose-dependent manner: a multicenter study	Prospective cohort study	II	Participants who had a tissue-based diagnosis of pancreatic cancer or a family history of pancreatic cancer	Mild (<13 g/day), moderate (>13-39 gm/day) or heavy (> 39 g/day)	Age of presentation of pancreatic cancer	"Alcohol and tobacco use are associated with a dose-related increased risk for earlier age of onset of PancCa. Although beer drinkers develop pancreatic cancer at an earlier age than non-drinkers, alcohol type did not have a significant effect after controlling for alcohol dose."
Gapstur SM, Jacobs EJ, Deka A, McCullough ML, Patel AV, Thun MJ. Association of alcohol intake with pancreatic cancer mortality in never smokers	Prospective cohort	II	Cancer Prevention Study II, a prospective study of 1 030 467 US adults 30 years and older.	Alcohol Intake (Drinks per Day): Non-drinker, Occasional, 1, 2, 3, ≥4	Pancreatic cancer mortality	These results strengthen the evidence that alcohol consumption, specifically liquor consumption of 3 or more drinks per day, increases pancreatic cancer mortality independent of smoking.
Heinen MM, Verhage BA, Ambergen TA, Goldbohm RA, van den Brandt PA. Alcohol consumption and risk of pancreatic cancer in the Netherlands cohort study	Prospective cohort	II	120,852 individuals in the Netherlands	Abstainers, 0.1–<5, 5–<15, 15–<30, ≥30 g/day	Pancreatic cancer	We found no association between low-to-moderate alcohol intake and risk of pancreatic cancer. We did, however, find a significantly increased risk for consumers of a high level of ethanol (30 g/day).
Jiao L, Silverman DT, Schairer C, Thiébaut AC, Hollenbeck AR, Leitzmann MF, Schatzkin A, Stolzenberg-Solomon RZ. Alcohol use and risk of pancreatic cancer: the NIH-AARP Diet and Health Study	Prospective cohort	II	NIH-AARP Diet and Health Study (n=567,169)	None; 0-1; 1-3; >3 drinks per day	Pancreatic cancer	Moderately increased pancreatic cancer risk with heavy alcohol use, particularly liquor; however, residual confounding by cigarette smoking cannot be completely excluded.
Lucenteforte E, La Vecchia C, Silverman D, Petersen GM, Bracci PM, Ji BT, et al. Alcohol consumption and pancreatic cancer:	Systematic review	III-3	10 case–control studies (5585 cases and 11 827 controls)	Drinks per day: 0 to <1 (referent), ≥6	Pancreatic cancer	Compared with abstainers and occasional drinkers (<1 drink per day), we observed no association for light-to-

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
a pooled analysis in the International Pancreatic Cancer Case-Control Consortium (PanC4).						moderate alcohol consumption (≤4 drinks per day) and pancreatic cancer risk; however, associations were above unity for higher consumption levels (OR = 1.6, 95% CI:l 1.2–2.2 for subjects drinking ≥9 drinks per day).
Gupta S, Wang F, Holly EA, Bracci PM. Risk of pancreatic cancer by alcohol dose, duration, and pattern of consumption, including binge drinking: a population-based study.	Case-control	III-3	532 cases and 1,701 controls	Alcohol consumption: never or <1 drink/month; lifetime/past 20 yrs (drinks/week); decades with >21/>35 drinks/week	Pancreatic cancer	Results from our detailed analyses provide support for heavy alcohol consumption (including binge drinking) as a risk factor for pancreatic cancer in men.
Michaud DS, Vrieling A, Jiao L, Mendelsohn JB, Steplowski E, Lynch SM, et al. Alcohol intake and pancreatic cancer: a pooled analysis from the pancreatic cancer cohort consortium (PanScan	Case-control	III-3	1,530 pancreatic cancer cases and 1,530 controls	Non-drinker, >0 to <5, 5 to < 15, 15 to < 30, ≥30 g/day	Pancreatic Cancer	We observed no significant overall association between total alcohol (ethanol) intake and pancreatic cancer risk
Rahman F, Cotterchio M, Cleary SP, Gallinger S. Association between alcohol consumption and pancreatic cancer risk: a case-control study	Case-control	III-3	345 pancreas cancer cases and 1,285 frequency-matched controls	0 –< 1 drink/week reference category, 1–3 drinks/week, 4–20 drinks/week, and ≥ 21 drinks/week	Pancreatic Cancer	While alcohol was not significantly associated with pancreatic cancer risk, smoking status modified this relationship such that among current smokers, alcohol intake was associated with a greater than two-fold increased risk of pancreatic cancer. The results should be interpreted with caution due to small sample sizes within subgroups and correction for multiple comparisons should be considered. These findings should be replicated in larger studies where more precise estimates of risk can be obtained.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Talamini R, Polesel J, Gallus S, Dal Maso L, Zucchetto A, Negri E, Bosetti C, Lucenteforte E, Boz G, Franceschi S, Serraino D, La Vecchia C. Tobacco smoking, alcohol consumption and pancreatic cancer risk: a case-control study in Italy	Case-control	III-3	Cases were 326 patients (median age 63 years) with incident pancreatic cancer admitted to major general hospitals. Controls were 652 patients (median age 63 years) with acute non-neoplastic conditions admitted to the same hospital network of cases.	Drinks per week (<7, 7-13, 14-20, 21-34, ≥35)	Pancreatic cancer	Alcohol consumption was associated to increased pancreatic cancer risk, but Ors were significant only among heavy drinkers (ORs: 2.03 and 3.42 for 21–34 and ≥35 drinks/week, respectively).

Prostate cancer

Table 13 Prostate cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Fowke JH, McLerran DF, Gupta PC, He J, Shu XO, Ramadas K, et al. Associations of body mass index, smoking, and alcohol consumption with prostate cancer mortality in the Asia Cohort Consortium	Systematic review (Meta-analysis)	I	18 prospective cohort studies	Level of Alcohol Consumption: None, 1–155 g/week (Referent), ≥156 g/week.	Prostate cancer mortality	All cohorts in the Asia Cohort Consortium, prostate cancer mortality was not significantly associated with obesity, ever smoking or heavy alcohol intake.
Chao, C, R. Haque, S.K. Van Den Eeden, B.J. Caan, K.Y. Poon and V.P. Quinn. Red wine consumption and risk of prostate cancer: the California men's health study	Prospective cohort	II	84,170 men ages 45 to 69 years	Non-drinker <1 drink/wk ≥1 drink/wk but <1 drink/d ≥1 drink/d	Prostate cancer	The lack of association for red wine intake was consistently observed when we restricted the analyses to those with and without a history of PSA screening. In addition, we also did not observe any association with prostate cancer for beer, white wine, liquor or combined alcoholic beverage intake (HR for combined alcoholic beverage intake of 5 drinks/day 5 1.16 (0.83–1.63). Neither

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						red wine nor total alcohol consumption were associated with prostate cancer risk in this population of moderate drinkers.
Dickerman BA, Markt SC, Koskenvuo M, Pukkala E, Mucci LA, Kaprio J. Alcohol intake, drinking patterns, and prostate cancer risk and mortality: a 30-year prospective cohort study of Finnish twins.	Prospective cohort	II	11,372 Finnish twins	Abstainer, light drinker 0.01–3 drinks/week, moderate drinker 3.01–14 drinks/week, heavy drinker 14.01+ drinks/week	Prostate cancer	Heavy regular alcohol consumption and binge drinking patterns may be associated with increased prostate cancer risk, while abstinence may be associated with increased risk of prostate cancer-specific mortality compared to light alcohol consumption.
Gong, Z., Kristal, A. R., Schenk, J. M., Tangen, C. M., Goodman, P. J. and Thompson, I. M. : Alcohol consumption, finasteride, and prostate cancer risk: results from the Prostate Cancer Prevention Trial	Prospective cohort	II	2129 participants in the Prostate Cancer Prevention Trial	Total Alcohol Intake: 0 g/d, 0.1-14.9 g/d, 15-49.9 g/d, ≥50 g/d,	High grade prostate cancer	Heavy, daily drinking increased the risk of high-grade prostate cancer. Heavy drinking made finasteride ineffective for reducing prostate cancer risk.
S. Rohrmann, J. Linseisen, T.J. Key, M.K. Jensen, K. Overvad, N.F. Johnsen, A. et al. Alcohol consumption and the risk for prostate cancer in the European Prospective Investigation into Cancer and Nutrition	Prospective cohort	II	142,607 male participants from the European Prospective Investigation into Cancer and Nutrition	Alcohol consumption (g/day): 0, 0.1-4.9, 5-14.9, 15-29.9, 30-59.9, ≥60	Prostate cancer	Our results indicate no association between the consumption of alcohol and prostate cancer in this cohort of European men.
Sawada N, Inoue M, Iwasaki M, Sasazuki S, Yamaji T, Shimazu T, Tsugane S. Alcohol and smoking and subsequent risk of prostate cancer in Japanese men: the Japan Public Health Center-based prospective study.	Prospective cohort	II	65,803 men from the Japan Public Health Center-based prospective study	Alcohol consumption: Non-drinkers, Occasional (1–3 times/month), 0–150, 150–300, >300 g/week	Prostate cancer	Alcohol consumption was dose-dependently associated with advanced prostate cancer [non-drinkers: reference, 0–150 g/week: HR = 1.23, 95%CI:0.83–1.82; 150–300 g/week: HR = 1.51, 95% CI:1.04–2.19; 300 g/week: HR=1.41, 95% CI:0.97–2.05, p for trend = 0.02].

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Demoury C, Karakiewicz P, Parent ME. Association between lifetime alcohol consumption and prostate cancer risk: A case-control study in Montreal, Canada	Case-control	III-3	1933 cases and 1994 controls in Montreal, Canada	Never drank alcohol, 16 drink-years, 16–45 drink-years, 45-101 drink-years, >101 drink-years	Prostate cancer	Findings add to the accumulating evidence that high alcohol consumption increases the risk of high-grade prostate cancer. This association largely reflected beer intake in our population, and was strengthened when taking into account prostate cancer screening history.
McGregor, S. E., Courneya, K. S., Kopciuk, K. A., Tosevski, C. and Friedenreich, C. M. Case-control study of lifetime alcohol intake and prostate cancer risk	Case-control	III-3	947 cases with stage T2 and higher prostate cancer, 1,039 controls	Lifetime drinking: Never drinking 0–3,668 drinks, >3,668–8,725 drinks, >8,725–19,489, > 19,489 drinks	Prostate cancer	Results support the evidence for an increased risk of prostate cancer from lifetime alcohol consumption.
Zuccolo, L., Lewis, S. J., Donovan, J. L., Hamdy, F. C., Neal, D. E. and Smith, G. D Alcohol consumption and PSA-detected prostate cancer risk--a case-control nested in the ProtecT study. 2013	Case-control (nested)	III-3	2,400 PSA detected prostate cancer cases and 12,700 controls matched on age and general practice. Nested in PSA-testing phase of RCT for prostate cancer treatment (ProtecT).	Binge drinking vs drinking most days. Non-drinker vs special occasions only vs. 0.1-9.8 units per week vs 9.9-19.7 units per week vs 19.8-112 units per week.	PSA level; Prostate cancer (total, localised, advanced, low- and high-grade)	We found evidence of lower PSA (RGM 0.98, 95% CI: 0.98–0.99) and decreased risk of low Gleason-grade (RRR 0.96; 95%CI 0.93–0.99) but increased risk of high-grade prostate cancer (RRR 1.04; 95%CI 0.99–1.08;p difference=0.004) per 10 units/week increase in alcohol consumption, not explained by current BMI, blood pressure, comorbidities, or reverse causation.

Renal cell carcinoma

Table 14 Renal cell carcinoma

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Karami, S., Daugherty, S. E. and Purdue, M. P A prospective study of alcohol consumption and renal cell carcinoma risk	Prospective cohort	II	Analysis within the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial	None; 1-1.75 g/d; 1.75-9.75 g/d; >9.75 g/d	Renal cell carcinoma	Alcohol consumption is associated with reduced RCC risk, regardless of sex or alcoholic beverage type.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
			(n=107,998)			
Lew JQ, Chow WH, Hollenbeck AR, Schatzkin A, Park Y. Alcohol consumption and risk of renal cell cancer: the NIH-AARP diet and health study	Prospective cohort	II	49 2187 participants aged 50–71 years (1814 cases of renal cell carcinoma in the NIH-AARP Diet and Health Study	Alcohol (g per day): 0, >0 to <5, 5 to <15, 15 to <30, 30+	Renal cell carcinoma	Alcohol consumption was inversely associated with RCC in a dose–response manner.
Pelucchi C, Galeone C, Montella M, Polesel J, Crispo A, Talamini R, Negri E, Ramazzotti V, Grimaldi M, Franceschi S, La Vecchia C. Alcohol consumption and renal cell cancer risk in two Italian case-control studies	Case-control	III-3	1115 cases and 2582 controls	Non-drinkers, <3 drinks per day, ≥3 drinks per day	Renal cell cancer	This pooled analysis found an inverse association between alcohol drinking and RCC. Risks continued to decrease even above eight drinks per day (i.e. >100 g/day) of alcohol intake, with no apparent levelling in risk.

Skin cancer (non-melanoma)

Table 15 Skin cancer (non-melanoma)

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ansems TM, van der Pols JC, Hughes MC, Ibiebele T, Marks GC, Green AC. Alcohol intake and risk of skin cancer: a prospective study.	Prospective cohort study	II	Sample of adults in Queensland	Never to > 4 times per day	Basal cell and squamous cell carcinoma of the skin	"There are no associations between first occurrence of skin cancers and alcoholic beverage consumption. People with a history of skin cancer who consume above-average quantities of sherry or port may be at a raised risk of SCC, although replication of these findings in different study populations is needed to confirm this possible role of specific alcoholic beverages in secondary keratinocytic skin cancer risk."
Jensen A, Birch-Johansen F, Olesen AB, Christensen J, Tjønneland A, Kjær SK. Intake of alcohol may modify the risk for non-melanoma skin	Prospective cohort	II	Prospective Diet, Cancer and Health cohort (n=7,054)	0-10 g/d; 11-30 g/d; 31-50 g/d; >50 g/d	Basal cell carcinoma (BCC) and squamous cell carcinoma (SCC)	No convincing associations were found between total alcohol intake and risk for SCC. Alcohol intake may increase the risk for BCC, depending on

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
cancer: results of a large Danish prospective cohort study.						beverage type.
Kubo JT, Henderson MT, Desai M, Wactawski-Wende J, Stefanick ML, Tang JY. Alcohol consumption and risk of melanoma and non-melanoma skin cancer in the Women's Health Initiative.	Prospective cohort	II	Postmenopausal women: Women's Health Initiative (WHI) cohort (n=59,575)	Non-drinker; Past drinker; <1 drink/month; <1 drink/week; 1-7 drinks/week; 7+ drinks/week	Non-melanoma skin cancer	Higher current alcohol consumption, higher lifetime alcohol consumption, and a preference for white wine or liquor were associated with increased hazard of MM and risk of NMSC.
Siiskonen S, Han J, Li T, Cho E, Nijsten T, Qureshi A. Alcohol Intake is Associated with Increased Risk of Squamous Cell Carcinoma of the Skin: Three US Prospective Cohort Studies	Prospective cohort (pooled from 3 cohort studies)	II	The Nurses' Health Study (NHS) is a prospective cohort study in which 121,700 married, registered, female nurses of 30-55 years old were enrolled in 1976. The Nurses' Health Study II (NHS II) was established in 1989 when 116,686 female nurses 25-42 years old were enrolled. The Health Professionals' Follow-up Study (HPFS) was established in 1986 with 51,529 men 40-75 years employed in a health profession.	Alcohol consumption (1 drink = 12.8g): 1-3 per month, 1 per week, 2-4 per week and ≥5 per week.	Squamous Cell Carcinoma of the Skin	Alcohol intake was associated with an elevated risk of cSCC. Among alcoholic beverages, white wine was associated with cSCC.
Wu S, Li WQ, Qureshi AA, Cho E. Alcohol consumption and risk of cutaneous basal cell carcinoma in women and men: 3 prospective cohort studies.	Prospective cohort	II	167,765 women in the NHS (Nurses' Health Study) (1984-2010) and NHS II (1991-2011) and 43,697 men in the Health Professionals Follow-Up Study (1986-2010).	None, 10.0–19.9 g/day, >30.0 g/day	Basal cell carcinoma	Alcohol consumption is associated with increased risk of cutaneous BCC in both women and men.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Zhang, Y., Ferrucci, L. M., Cartmel, B., Molinaro, A. M., Leffell, D. J., Bale, A. E. and Mayne, S. T Alcohol intake and early-onset basal cell carcinoma in a case-control study	Case-control	III-3	Basal cell carcinoma (BCC) cases (n=380) and controls with benign skin conditions (n=390) under age 40	No regular alcohol consumption, below median, above median alcohol consumption	Early-onset BCC	Overall, we did not observe any clear association between lifetime alcohol intake and early-onset BCC.

Melanoma

Table 16 Melanoma

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Rivera A, Nan H, Li T, Qureshi A, Cho E. Alcohol intake and risk of incident melanoma: A pooled analysis of three prospective studies in the United States	Prospective cohort	II	73,545 participants in the NHS, 88,380 in the NHS II, and 48,327 in the HPFS were included	Non-drinkers, 0.1–4.9, 5.0–9.9, 10.0–19.9, > 20.0 g/day	Invasive melanoma	Alcohol intake was associated with a modest increase in the risk of melanoma, particularly in UV-protected sites.
Miura K, Zens MS, Peart T, Holly EA, Berwick M, Gallagher RP, Mack TM, Elwood JM, Karagas MR, Green AC. Alcohol consumption and risk of melanoma among women: pooled analysis of eight case-control studies	Systematic review of case-control	III-3	Women 1886 cases and 2113 controls	None, 0.5 to <3.5, 3.5 to <6.8, 6.8 to <14.4, 14.4 to 127.3 g/day	Melanoma	Our findings from eight case–control studies in women showed a weak positive association between ever consuming alcohol and melanoma occurrence, which was similar across types of alcohol. However, our results did not show increasing risk with increasing alcohol consumption in pre- or post-menopausal women and irrespective of anatomic site or histologic subtype of the lesion, or presence of nevi.
Fortes C, Mastroeni S, Melchi F, Pilla MA, Antonelli G, Camaioni D, Alotto M, Pasquini P. A protective effect of the Mediterranean diet for cutaneous melanoma	Case-control	III-3	304 incident cases of cutaneous melanoma and 305 controls	Wine, exclusive wine, liquorous wine, beer, spirits: Low (less than weekly), Medium (weekly), High (daily and more)	Cutaneous melanoma	No association was found for alcohol consumption

Lung cancer

Table 17 Lung cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Chao C., J.M. Slezak, B.J. Caan and V.P. Quinn. Alcoholic beverage intake and risk of lung cancer: the California Men's Health Study.	Prospective cohort	II	84,170 men ages 45 to 69 years	Non-drinker <1 drink/wk ≥1 drink/wk but <1 drink/d ≥1 drink/d	Lung cancer	Moderate red wine consumption was inversely associated with lung cancer risk after adjusting for confounders. Our results should not be extrapolated to heavy alcohol consumption.
Shimazu T, Inoue M, Sasazuki S, Iwasaki M, Kurahashi N, Yamaji T, Tsugane S; Japan Public Health Center-based Prospective Study Group. Alcohol and risk of lung cancer among Japanese men: data from a large-scale population-based cohort study, the JPHC study	Prospective cohort	II	46,347 Japanese men aged 40–69 years with no history of cancer at baseline in 1990–1994.	Alcohol intake: Non-drinkers; Occasional drinkers; Current drinkers (alcohol intake (g/week) - 1–149, 150–299, 300–449, ≥450)	Lung cancer	Among this population with a large variation in alcohol consumption, alcohol consumption was not an independent risk factor for lung cancer except for current smokers.

Small intestine cancer

Table 18 Small intestine cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Bennett, C. M., Coleman, H. G., Veal, P. G., Cantwell, M. M., Lau, C. C. and Murray, L. J. Lifestyle factors and small intestine adenocarcinoma risk: A systematic review and meta-analysis	Systematic review	II	4 case–control studies and one cohort study	Highest versus lowest category of alcohol intake	Small intestine adenocarcinoma	Alcohol may be associated with an increased risk of small intestine adenocarcinoma
Boffetta P, Hazelton WD, Chen Y, Sinha R, Inoue M, Gao YT, Koh WP, Shu XO, Grant EJ, Tsuji I, Nishino Y, You SL, Yoo KY, Yuan JM, Kim J, Tsugane S, Yang G, Wang R, Xiang YB, Ozasa K, Nagai M, Kakizaki M, Chen CJ, Park SK, Shin A, Ahsan H, Qu CX, Lee JE, Thornquist M, Rolland B, Feng Z, Zheng W, Potter JD. Body mass, tobacco smoking, alcohol drinking and risk of cancer of the small intestine—a pooled analysis of over 500,000 subjects in the Asia Cohort Consortium	Prospective cohort	II	Pooling of data from 12 cohort studies from mainland China, Japan, Korea, Singapore, and Taiwan	Never drinkers, ever drinkers	Small intestine cancer	An etiologic role of alcohol drinking was suggested.

Stomach cancer

Table 19 Stomach cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Tong, G. X., Liang, H., Chai, J., Cheng, J., Feng, R., Chen, P. L., Geng, Q. Q., Shen, X. R. and Wang, D. B. Association of risk of gastric cancer and consumption of tobacco, alcohol and tea in the Chinese population	Systematic review	II	Cohort or case-control (6 cohort; 54 case-control, ≥100 GC cases) study investigating the relationships between GC and behavioral factors that include	Drinkers vs non-drinkers	Gastric cancer	Our review showed that alcohol drinking was associated with 1.57-fold risk of gastric cancer (95%CI: 1.41-1.76). I2=83.4%. the risk of GC increased sharply as the dose of alcohol drinking rose from 0 to 30 g/day; then the OR kept stable as the dose of alcohol drinking

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
			tobacco smoking, alcohol or tea consumption			increased from 30 to 60 g/day; and when the dose became higher than 60 g/day, the OR began to increase again though at a much lower velocity. All the associations of GC with tobacco smoking, alcohol consumption, and tea drinking tested with statistical non-linearity.
Everatt R, Tamosiunas A, Kuzmickiene I, Virviciute D, Radisauskas R, Reklaitiene R, Milinaviciene E. Alcohol consumption and risk of gastric cancer: a cohort study of men in Kaunas, Lithuania, with up to 30 years follow-up	Prospective cohort	II	7,150 men in Lithuania	Non-drinkers, A few times per year, 1–4 times per month, 2–7 times per week	Gastric cancer	This study supports a link between alcohol consumption (primarily from ethanol) and the development of gastric cancer in the Lithuanian population.
Ma SH, Jung W, Weiderpass E, Jang J, Hwang Y, Ahn C, Ko KP, Chang SH, Shin HR, Yoo KY, Park SK. Impact of alcohol drinking on gastric cancer development according to Helicobacter pylori infection status	Case-control	III-3	949 case–cohort participants	Frequency of consumption was used to categorise the drinkers as non-drinker, drinking o4 times per week, drinking 4–6 times per week, and drinking ≥7 times per week. Participants who drank ≥7 times per week were defined as heavy drinkers.	Gastric cancer	Heavy and binge alcohol consumption is an important risk factor related to an increasing incidence of gastric cancer in a population not infected by H. pylori.

Thyroid cancer

Table 20 Thyroid cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Hong SH, Myung SK, Kim H; Korean Meta-Analysis (KORMA) Study Group. Alcohol intake and risk of thyroid cancer: A meta-analysis of observational studies	Systematic reviews (cohort and case-controls)	II	Thyroid cancer patients and participants without thyroid cancer	Highest vs lowest alcohol use	Thyroid cancer	"The current meta-analysis of observational studies found that, unlike most of other types of cancer, alcohol intake decreased the risk of thyroid cancer"
Kabat GC, Kim MY, Wactawski-Wende J, Rohan TE. Smoking and alcohol consumption in relation to risk of thyroid cancer in postmenopausal women.	Prospective cohort	II	Posmenopausal women: Women's Health Initiative cohort (n=161,808)	Alcohol frequency (none; <1; 1-7; >7 drinks per week Alcohol quantity (none; 0-1 g/d; 1-4 g/d; >4 g/d	Thyroid cancer	Current smoking and having higher pack-years of exposure are associated with a modestly reduced risk of thyroid cancer, whereas alcohol consumption does not appear to affect risk
Kitahara CM, Linet MS, Beane Freeman LE, Check DP, Church TR, Park Y, Purdue MP, Schairer C, Berrington de González A. Cigarette smoking, alcohol intake, and thyroid cancer risk: a pooled analysis of five prospective studies in the United States	Prospective cohort	II	Five U.S.-based prospective cohorts from the National Cancer Institute combined into one aggregate dataset (384,433 men and 361,664 women)	None; 0-1 drinks/wk; 107 drinks/wk; 7+ drinks/wk	Thyroid cancer	Both cigarette smoking and alcohol consumption are associated with reduced risks of papillary thyroid cancer and, possibly, follicular thyroid cancer.
Meinhold CL, Park Y, Stolzenberg-Solomon RZ, Hollenbeck AR, Schatzkin A, Berrington de Gonzalez A. Alcohol intake and risk of thyroid cancer in the NIH-AARP Diet and Health Study	Prospective cohort	II	490,159 US participants aged 50 to 71 years	None, <1 per week, 1 – 6 per week, 1 – ≥2 per day	Thyroid cancer	These results suggest a potential protective role for alcohol consumption in thyroid cancer.
Sen A, Tsilidis KK, Allen NE, Rinaldi S, Appleby PN, Almquist M, et al. Baseline and lifetime alcohol consumption and risk of differentiated thyroid carcinoma in the EPIC study	Prospective cohort	II	Approximately half a million participants, 70% of which are women, mostly aged 35–70 years and recruited between 1992 and 2000 in 23 centres in 10 European countries	Alcohol intake at baseline and average lifetime intake (g/day): Non-consumers, 0.1–4.9, 5.0–14.9, ≥15.	Differentiated thyroid carcinoma	Our study provides some support to the hypothesis that moderate alcohol consumption may be associated with a lower risk of papillary and follicular thyroid carcinomas.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Hwang Y, Lee KE, Weiderpass E, Park YJ, Chai YJ, Kwon H, Park do J, Cho B, Choi HC, Kang D, Park SK. Acute High-Dose and Chronic Lifetime Exposure to Alcohol Consumption and Differentiated Thyroid Cancer: T-CALOS Korea	Case-control	III-3	2,258 DTC patients (449 men and 1,809 women) and 22,580 healthy participants (4,490 men and 18,090 women)	Quantity: neverdrinkers, 0–25 g, 26–50 g, 51–100 g, 101–150 g, and 151 g or more) consumed on a single occasion. Drinking duration: 0–10 years, 11–20 years, 21–30 years, 31–40 years, and 41+ years. Binge drinking was defined as excessive alcohol consumption on a single occasion (5 drinks for men and 4 drinks for women), with a standard drink equal to 14 g of alcohol.	Differentiated Thyroid Cancer (DTC)	The findings of this study suggest that the threshold effects of acute high-dose alcohol consumption and long-term alcohol consumption are linked to an increased risk of DTC.

Upper aerodigestive tract cancer

Table 21 Upper aerodigestive tract cancer

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ansary-Moghaddam A, Huxley RR, Lam TH, Woodward M. The risk of upper aero digestive tract cancer associated with smoking, with and without concurrent alcohol consumption	Systematic review	II	Cohort, case-control and nested case control studies of patients with oesphageal, laryngeal or oropharyngeal cases, and controls	Drinker versus never/almost never drinker	Upper aerodigestive tract cancer	"Individuals who both smoked and consumed alcohol had double the risk of upper aerodigestive tract cancer in comparison with those who only smoked: the relative risk was 6.93 (95% confidence interval. 4.99–9.62) for the former and 2.56 (95% confidence interval, 2.20–2.97) for the latter (P < 0.001)."
Li, Y., Mao, Y., Zhang, Y., Cai, S., Chen, G., Ding, Y., et al. (2014). Alcohol drinking and upper aerodigestive tract cancer mortality: A systematic review and meta-analysis.	Systematic review and meta-analysis	II	1 case–control, 1 nested case-control, 7 cohort studies with 2976 cancer deaths	Non/occasional, light ≤12.5 g/day of ethanol (61 drink/day), moderate as 12.6–49.9 g/day (2–3 drinks/day), and heavy as ≥50 g/day (≥4 drinks/day).	Upper aerodigestive tract cancer mortality	This study provides evidence of a positive association between alcohol drinking and upper aerodigestive tract cancer mortality, especially when alcohol consumption reaching moderate-to-heavy level
Jayasekara H, MacInnis RJ, Hodge AM, Hopper JL, Giles GG, Room R, English	Prospective cohort	II	Melbourne Collaborative Cohort Study (MCCS)	Abstainer; 0-19 g/d; 20-39 g/d; 40+ g/d	Upper aero-digestive tract cancer	Limiting alcohol intake from early adult-hood may reduce UADT cancer risk

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
DR. Lifetime alcohol consumption and upper aero-digestive tract cancer risk in the Melbourne Collaborative Cohort Study.			(n=41,514)			
Jung, S. H., Gombojav, B., Park, E. C., Nam, C. M., Ohrr, H. and Won, J. U. Population based study of the association between binge drinking and mortality from cancer of oropharynx and esophagus in Korean men: the Kangwha cohort study	Prospective cohort	II	Participants in Kangwha County Cancer Registry (n=9,378)	Non-drinkers; non-binge drinkers; binge drinkers	Oropharyngeal and esophageal cancer	The frequency of heavy binge drinking and not just the volume of alcohol intake may increase the risk of mortality from upper digestive tract cancer, particularly esophageal cancer in Korean men.
Weikert C, Dietrich T, Boeing H, Bergmann MM, Boutron-Ruault MC, Clavel-Chapelon F, et al. Lifetime and baseline alcohol intake and risk of cancer of the upper aero-digestive tract in the European Prospective Investigation into Cancer and Nutrition (EPIC) study	Prospective cohort	II	521,457 subjects (70% women, 30%men) mostly aged from 35 to 70 years	Never-drinker, former drinker, 0.1–6.0 (reference), 6.1–18.0, 18.1–30.0, >30.1–60.0 g/day. In men, the highest category was furtherdivided into 30.1–60.0, 60–96.0 and >96.0 g/day	Upper aero-digestive tract cancer	We observed a stronger association between alcohol intake at lifetime and risk of SCC in women compared to men (p for interaction 5 0.045). The strong dose-response relation for lifetime alcohol use underscores that alcohol is an important risk factor of SCC of the upper aero-digestive tract throughout life.
Canova C, Richiardi L, Merletti F, Pentenero M, Gervasio C, Tanturri G, Garzino-Demo P, Pecorari G, Talamini R, Barzan L, Sulfaro S, Franchini G, Muzzolini C, Bordin S, Pugliese GN, Macrì E, Simonato L. Alcohol, tobacco and genetic susceptibility in relation to cancers of the upper aerodigestive tract in northern Italy.	Case-control	III-3	500 cases and 500 controls	Alcohol drinking frequency: <1 drink/day 1-2 drinks/day 3-4 drinks/day 5+ drinks/day Duration of alcohol drinking: Never 1-19 years 20-29 years 30-39 years 40+ years	Upper aerodigestive tract (UADT) cancers	The present case-control study concerning avoidable risk factors confirmed the importance of tobacco smoking and alcohol drinking as the main risk factors for UADT cancers in northern Italy.
Samoli E, Lagiou A, Nikolopoulos E, Lagogiannis G, Barbouni A, Lefantzis D, Trichopoulos D, Brennan P, Lagiou P. Mediterranean diet and upper aerodigestive	Case-control	III-3	Cases (n = 239) Controls (n = 194)	Non- or light drinkers, moderate drinkers, heavy drinkers: For males - <10, 10–49.99 and 50+ g/d; For females - <5, 5–24·99 and 25+ g/d	Upper aerodigestive tract cancer i.e. cancers of the oral cavity and oropharynx, larynx and oesophagus	After mutual adjustment, no individual dietary component of this diet was significantly associated with this risk

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
tract cancer: the Greek segment of the Alcohol-Related Cancers and Genetic Susceptibility in Europe study						
Znaor A, Brennan P, Gajalakshmi V, Mathew A, Shanta V, Varghese C, et al. Independent and combined effects of tobacco smoking, chewing and alcohol drinking on the risk of oral, pharyngeal and esophageal cancers in Indian men	Case-control	III-3	1,563 oral, 636 pharyngeal and 566 esophageal male patients were compared with 1,711 male disease controls from the 2 centers and 1,927 male healthy hospital visitors.	Ever vs never drinkers. Never, former and current smokers. Betel nut chewing with vs without tobacco.	Oral, pharyngeal and esophageal cancers	The OR of oral cancers for alcohol drinking in never smokers and never chewers was 2.56 (95%CI 1.42–4.64) and that of esophageal cancers was 3.41 (95%CI 1.46 –7.99).

Cancers of the larynx, pharynx, and oral cavity

Table 22 Cancers of the larynx, pharynx, and oral cavity

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Goldstein BY, Chang SC, Hashibe M, La Vecchia C, Zhang ZF. Alcohol consumption and cancers of the oral cavity and pharynx from 1988 to 2009: an update	Systematic review	II	12 cohort and 44 case-control studies	Various	Cancers of the oral cavity and pharynx	Alcohol consumption is strongly associated with an increase in the risk of oral and pharyngeal cancers.
Ahmad K. A., Jarl J., Gavriilidis G., Gerdtham U. G. Alcohol drinking cessation and the risk of laryngeal and pharyngeal cancers: a systematic review and meta-analysis	Systematic Review of case-control studies	III-3	Details not provided. Presumably, patients with laryngeal and pharyngeal cancers, and health individuals	Categories of drinking cessation (ie years since drinking cessation) and current drinkers	Laryngeal and pharyngeal cancers	"Although a long time period is required to completely eliminate the alcohol-related elevated risk of laryngeal and pharyngeal cancers, a substantial risk reduction can be seen in the short term (5–10 years), and drinking cessation should therefore be encouraged to reduce the incidence of these cancers."
Lubin JH, Purdue M, Kelsey K, Zhang ZF, Winn D, Wei Q, et al. Total exposure and	Systematic review	III-3	15 case-control studies	Alcohol consumption: never drinkers, 5 drinks/day or less, 10 drinks/day or less	Cancers of the larynx, pharynx, and oral cavity	Excess OR/drink-year estimates increased through 10 drinks/day, suggesting that greater

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
exposure rate effects for alcohol and smoking and risk of head and neck cancer: a pooled analysis of case-control studies						drinks/day for a shorter duration was more deleterious than fewer drinks/day for a longer duration. Above 10 drinks/day, data were limited.
Asakage T, Yokoyama A, Haneda T, Yamazaki M, Muto M, Yokoyama T, et al. Genetic polymorphisms of alcohol and aldehyde dehydrogenases, and drinking, smoking and diet in Japanese men with oral and pharyngeal squamous cell carcinoma.	Case-control	III-3	Japanese men with oral and pharyngeal squamous cell carcinoma and cancer-free Japanese men	ALDH2, ADH1B and ADH1C and alcohol consumption divided into never, 1-3 days/month, 1-2 days/week, 3-4 days/week and > 5 days/week	Cancer, hypopharygeal cancer, oral/pharnygeal cancer	"Among moderate-to-heavy drinkers, men with the less-active ADH1B 1/ 1 had a significantly higher risk of the cancers overall, of hypopharyngeal cancer, and of oral/oropharyngeal cancer (OR ¼ 5.56, 7.21 and 4.24, respectively). In view of the linkage disequilibrium between ADH1B and ADH1C, the ADH1C genotype does not significantly affect cancer risk."
D'Souza G, Kreimer AR, Viscidi R, et al. Case-control study of human papillomavirus and oropharyngeal cancer.	Case-control	III-3	100 patients with newly diagnosed oropharyngeal cancer and 200 control patients without cancer	Current or former use: no, yes No. of drinks/wk during past 12 months: <28; ≥28 Consumption of ≥15 drinks/wk: 0 yr; 1–14 yr; ≥15 yr	Oropharyngeal cancer in patients with human papillomavirus (HPV)	Tobacco and alcohol use increased the association with oropharyngeal cancer primarily among subjects without exposure to HPV-16. Oral HPV infection is strongly associated with oropharyngeal cancer among subjects with or without the established risk factors of tobacco and alcohol use
Ferreira Antunes JL, Toporcov TN, Biazevic MG, Boing AF, Scully C, Petti S. Joint and independent effects of alcohol drinking and tobacco smoking on oral cancer: a large case-control study	Case-control	III-3	1144 cases and 1661 controls	Drinking status: Never drinker, Ever drinker, level-1 drinker ≤862 gram-years; level-2 drinker >862 gram-years.	Oral cancer	Drinking was not independently associated with oral cancer
Radoï L, Paget-Bailly S, Cyr D, Papadopoulos A, Guida F, Schmaus A, Cénée S, Menvielle G, Carton M, Lapôtre-Ledoux B, Delafosse P, Stücker I, Luce D. Tobacco smoking,	Case-control	III-3	772 oral cavity cancer cases and 3555 controls	Never drinkers, < 0.6 glasses/day, 0.6–2.0 glasses/day, 2.1–4.5 glasses/day, > 4.5 glasses/day	Oral cavity cancer	Tobacco smoking increased the risk of oral cavity cancer even for smaller quantities and durations whereas alcohol drinking increased this risk only in heavy drinkers who

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
alcohol drinking and risk of oral cavity cancer by subsite: results of a French population-based case-control study, the ICARE study						were also ever smokers.

Head and neck cancers

Table 23 Head and neck cancers

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Hashibe M, Hunt J, Wei M, Buys S, Gren L, Lee YC. Tobacco, alcohol, body mass index, physical activity, and the risk of head and neck cancer in the prostate, lung, colorectal, and ovarian (PLCO) cohort.	Prospective cohort	II	101,182 individuals	Nondrinker, <1 drink/day, 1–1.9 drinks/d, 2–3.9 drinks/d, ≥4 drinks/d	Head and neck cancers	Our results support the previous INHANCE consortium results that tobacco and alcohol account for the majority of head and neck cancer cases in the United States, but at a lower proportion than in Europe or Latin America.
Maasland DH, van den Brandt PA, Kremer B, Goldbohm RA, Schouten LJ. Alcohol consumption, cigarette smoking and the risk of subtypes of head-neck cancer: results from the Netherlands Cohort Study	Prospective cohort	II	120,852 participants	Abstainers, >0 to <5 g/day, 5 to <15, 15 to <30, ≥30 g/day	Head-neck cancer (HNC) subtypes, i.e. oral cavity cancer (OCC), oro-/hypopharyngeal cancer (OHPC), and laryngeal cancer (LC)	Alcohol consumption and cigarette smoking were independently associated with risk of HNC overall, with a positive, multiplicative interaction. The strength of these associations differed among HNC-subtypes: OCC was most strongly associated with alcohol consumption but most weakly with cigarette smoking, whereas LC was not statistically significantly associated with alcohol consumption.
Boccia S, Cadoni G, Sayed-Tabatabaei FA, Volante M, Arzani D, De Lauretis A, Cattel C, Almadori G, van Duijn CM, Paludetti G, Ricciardi G. CYP1A1, CYP2E1, GSTM1, GSTT1, EPHX1 exons 3 and 4, and NAT2 polymorphisms,	Case-control	III-3	210 cases and 245 hospital controls	Alcohol consumption: 0–6 g/day, 7–18 g/day, 19–30 g/day, >30 g/day	Squamous cell carcinoma of the head and neck	SCCHN risk was associated with high-levels of alcohol intake [OR = 3.50 (95%CI: 1.93–6.35) and OR = 6.47 (95%CI: 2.92–14.35) for 19–30 g/day and >30 g/day,

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
smoking, consumption of alcohol and fruit and vegetables and risk of head and neck cancer.						
Hashibe M, Brennan P, Benhamou S, Castellsague X, Chen C, Curado MP, et al. Alcohol drinking in never users of tobacco,cigarette smoking in never drinkers, and the risk of head and neck cancer: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium	Case-control	III-3	10,244 head and neck cancer case subjects and 15,227 control subjects	Non-drinker, <1 drink/day, 1–2 drinks/d, 2–4 drinks/d, ≥5 drinks/d	Head and neck cancers	Among never users of tobacco, alcohol consumption was associated with an increased risk of head and neck cancer only when alcohol was consumed at high frequency (OR for three or more drinks per day versus never drinking = 2.04, 95% CI = 1.29 to 3.21). The association with high-frequency alcohol intake was limited to cancers of the oropharynx or hypopharynx and larynx.

Other cancers

Table 24 Other cancers

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Bladder cancer						
Zaitsu M, Nakamura F, Toyokawa S, Tonooka A, Takeuchi T, Homma Y, Kobayashi Y. Risk of Alcohol Consumption in Bladder Cancer: Case-Control Study from a Nationwide Inpatient Database in Japan.	Case-control	III-3	739 cases of bladder cancer diagnosed between 2005 (when the database was established) and 2014 and 7,196 controls matched by sex, age, hospital, and admission period	Never drinkers > 0 to ≤ 15 g/day, > 15 to ≤ 30 g/day, > 30g/day	Bladder cancer	The risk of bladder cancer was significantly higher in ever drinkers than in never drinkers (odds ratio, 1.33; 95% confidence interval, 1.06 to 1.66). Furthermore, the risk threshold for alcohol consumption was more than 15 g of alcohol intake per day (one, 180-mL cup equivalent to 6 ounces of Japanese sake

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						containing 23 grams of alcohol). Among Japanese, alcohol consumption may be an independent risk factor for bladder cancer, with a lower risk threshold.
Brain cancer						
Braganza, M. Z., Rajaraman, P., Park, Y., Inskip, P. D., Freedman, N. D., Hollenbeck, A. R., de Gonzalez, A. B. and Kitahara, C. M. Cigarette smoking, alcohol intake, and risk of glioma in the NIH-AARP Diet and Health Study	Prospective cohort	II	477 095 US men and women ages 50–71 years in the National Institutes of Health-AARP Diet and Health Study	Alcohol intake: None, <1 Drink per day, 1–2 Drinks per day, >2 Drinks per day	Glioma	Smoking and alcohol drinking do not appear to increase the risk of glioma.
Gallbladder cancer						
Yagyu K, Kikuchi S, Obata Y, Lin Y, Ishibashi T, Kurosawa M, Inaba Y, Tamakoshi A; JACC Study Group. Cigarette smoking, alcohol drinking and the risk of gallbladder cancer death: a prospective cohort study in Japan	Prospective cohort	II	113,496 participants (65,740 women) aged 40–89 years	The daily quantity of alcohol was divided into 4 categories by separate numerical values: 0–5.9 g,6.0–11.9 g, 12.0–23.9 g, 24.0 g or more per day among females; and 0–23.9 g, 24.0–47.9 g, 48.0–71.9 g, or 72 g or more per day among males, respectively.	Gallbladder cancer	Drinking may pose an elevated risk of gallbladder cancer among men, but that seems to be less true among women.

Cardiovascular conditions

Cardiovascular disease &/or mortality

Table 25 Cardiovascular disease &/or mortality

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Huang C, Zhan J, Liu YJ, Li DJ, Wang SQ, He QQ. Association between alcohol consumption and risk of cardiovascular disease and all-cause mortality in patients with hypertension: a meta-analysis of prospective cohort studies.	Systematic review	I	9 relevant studies (11 cohorts), were included in this meta-analysis, with a total number of 394,840 participants with hypertension	No alcohol, 10 g/d, 20 g/d, 30 g/d	Cardiovascular Disease (CVD) and All-Cause Mortality	Findings of this meta-analysis suggest that low-to-moderate alcohol consumption was inversely significantly associated with the risk of CVD and ACM in patients with hypertension
Djoussé L, Lee IM, Buring JE, Gaziano JM. Alcohol consumption and risk of cardiovascular disease and death in women: potential mediating mechanisms	Prospective cohort	II	26,399 women	Nondrinkers, 0-4.9, 5.0-14.9, 15.0-29.9, ≥ 30.0 g/day	Cardiovascular disease (CVD) and mortality	These data suggest that alcohol effects on lipids and insulin sensitivity may account for a large proportion of the lower risk of CVD/mortality observed with moderate drinking under the assumption that the alcohol-CVD association is causal.
Higashiyama A, Okamura T, Watanabe M, Kokubo Y, Wakabayashi I, Okayama A, Miyamoto Y. Alcohol consumption and cardiovascular disease incidence in men with and without hypertension: the Suita study.	Prospective cohort	II	2336 Japanese men who were free from CVD	Neverdrinkers, Light (≤2.0 drinks per day), Moderate (>2.0 and ≤4.0 drinks per day), Heavy (≤4.0 drinks per day)	Cardiovascular disease (CVD)	The hazard ratios (HR) for CVD and its subtypes were higher in hypertensives than those in non-hypertensives; in hypertensives without medication for hypertension, the relationship between alcohol consumption and the risks for CVD and CAD was U-shaped, with the highest and most significant increase in never-drinkers. The risk for total stroke was the highest in heavy-drinkers, which was significant. In non-hypertensives, there was no evident increase or decrease in the HRs for CVD and its subtypes in drinkers. Accordingly, controlling blood pressure is important to prevent CVD. In hypertensives, heavy drinking should be avoided to prevent CVD, although light-to-moderate drinking could be protective for CAD. Furthermore, in non-hypertensives, drinkers may need to continuously monitor their blood pressure.
Jones SB, Loehr L, Avery CL, Gottesman RF, Wruck L, Shahar E,	Prospective cohort	II	Population-based cohort, 45-64 years	Lifetime abstainer; <=3; 4-17; 18 + drinks	Atherosclerosis	Light-to-moderate alcohol consumption at midlife was not associated with reduced

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Rosamond WD. Midlife alcohol consumption and the risk of stroke in the Atherosclerosis risk in Communities Study			(n=15792)	per week		stroke risk compared with abstention over 20 years of follow-up in the Atherosclerosis Risk in Communities study. Heavier consumption increased the risk for both outcomes as did moderate intake for intracerebral hemorrhage.
Mukamal, K.J., et al., Alcohol consumption and lower extremity arterial disease among older adults: the cardiovascular health study	Prospective cohort	II	5,888 men and women aged 65 years or older	None, former, <1 drink weekly, 1–6 drinks weekly, 7–13 drinks weekly, and 14 drinks weekly	Lower-extremity arterial disease (LEAD	Consumption of 1–13 alcoholic drinks per week was associated with lower risk of hospitalized LEAD in this population of older adults, with a similar trend for risk of decline in ABI over time, but heavier drinking was not associated with lower risk.
Streppel MT; Ocké MC; Boshuizen HC; Kok FJ; Kromhout D. (2009) Long-term wine consumption is related to cardiovascular mortality and life expectancy independently of moderate alcohol intake: the Zutphen Study	Prospective cohort	II	Cohort of 1373 men born between 1900 and 1920 and examined repeatedly between 1960 and 2000.	Alcohol consumption: 0, >0–20 and >20 g/day.	Cardiovascular and all-cause mortality	Long-term light alcohol intake lowered cardiovascular and all-cause mortality risk and increased life expectancy. Long-term light alcohol intake, that is (20 g per day, compared with no alcohol, was strongly and inversely associated with cerebrovascular (HR 0.43, 95% CI 0.26 to 0.70), total cardiovascular (HR 0.70, 95% CI 0.55 to 0.89) and all-cause mortality (HR 0.75, 95% CI 0.63 to 0.91).
Drogan D, Sheldrick AJ, Schutze M, Knuppel S, Andersohn F, di Giuseppe R, Herrmann B, Willich SN, Garbe E, Bergmann MM, et al. Alcohol consumption, genetic variants in alcohol deydrogenases, and risk of cardiovascular diseases: a prospective study and meta-analysis	Case-control	III-3	controls (n = 2175) and cases of myocardial infarction (MI; n = 230) or stroke (n = 208)	Non-drinker, 0 to 6 g/d (0 to 0.5 drink/d), 6 to 12 g/d (0.5 to 1 drink/d), 12 to 24 g/d (1 to 2 drinks/d), 24 to 60 g/d (2 to 5 drinks/d), 60 g/d (5 drinks/d)	Cardiovascular diseases (CVD)	Compared to individuals who drank 0 to 6 g alcohol/d, we observed a reduced risk of MI among females consuming 12 g alcohol/d (HR = 0.31; 95% CI: 0.10–0.97) and among males consuming 24 to 60 g/d (HR = 0.57; 95% CI: 0.33–0.98) or 60 g alcohol/d (HR = 0.30; 95% CI: 0.12–0.78). Stroke risk was not significantly related to alcohol consumption 6 g/d, but we observed an increased risk of stroke in men reporting no alcohol consumption.

Table 26 Cardiovascular events &/or mortality

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Beulens JW, Algra A, Soedamah-Muthu SS, Visseren FL, Grobbee DE, van der Graaf Y; SMART Study Group. Alcohol consumption and risk of recurrent cardiovascular events and mortality in patients with clinically manifest vascular disease and diabetes mellitus: the Second Manifestations of ARTerial (SMART) disease study	Prospective cohort	II	5447 with clinically manifest vascular disease or diabetes from the SMART study	Alcohol consumption (glasses/week): 0, Former drinkers, 0–1, 11–20, ≥21	Recurrent cardiovascular events and mortality	Moderate alcohol consumption (1–2 drinks/day) is not only associated with a reduced risk of vascular and all-cause death in a high risk patients with clinical manifestations of vascular disease, but also with reduced risks of non-fatal events like CHD, stroke and possibly amputations.
Blomster JI, Zoungas S, Chalmers J, Li Q, Chow CK, Woodward M, Mancia G, Poulter N, Williams B, Harrap S, Neal B, Patel A, Hillis GS. The relationship between alcohol consumption and vascular complications and mortality in individuals with type 2 diabetes	Prospective cohort	II	11,140 participants from the Action in Diabetes and Vascular Disease: Preterax and Diamicron Modified-Release Controlled Evaluation (ADVANCE) study	Abstinent, Moderate alcohol use, Heavy alcohol use (Royal College of Physicians' criteria)	Cardiovascular events, microvascular events, all-cause mortality	In patients with type 2 diabetes, moderate alcohol use, particularly wine consumption, is associated with reduced risks of cardiovascular events and all-cause mortality.
Friesema IH, Zwietering PJ, Veenstra MY, Knottnerus JA, Garretsen HF, Kester AD, Lemmens PH.The effect of alcohol intake on cardiovascular disease and mortality disappeared after	Prospective cohort	II	31000 men and women aged 45 to 70 years registered in 34 general practices were followed over the period July 1996 to June 2001	Alcohol intake: never drinkers; former drinkers; drinkers of <1 glass/wk; drinkers of 1 to 6.9 glasses/wk; drinkers of 7 to 14.9 glasses/wk; drinkers of 15 to 28 glasses/wk; and drinkers of >28 glasses/wk	Cardiovascular events and all-cause mortality	Current drinking was associated with lower risks of cardiovascular events (women) and all-cause mortality (men and women) compared with never drinkers. The relationships were strongest for alcohol intake measured with the Weekly

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
taking lifetime drinking and covariates into account						Recall. Lifetime alcohol intake and alcohol intake in the distant past did not seem to be related to all-cause mortality or cardiovascular events.
Gisbertz SS, Derksen WJ, de Kleijn DP, Vink A, Bots ML, de Vries JP, Moll FL, Pasterkamp G. The effect of alcohol on atherosclerotic plaque composition and cardiovascular events in patients with arterial occlusive disease.	Prospective cohort	II	917 patients who had femoral (n =224) and carotid (n= 693) endarterectomies followed for 3 yrs	None, 1-10 U/w, >10 U/wk.	Major cardiovascular events (Cardiovascular death, Cerebrovascular death, Myocardial infarction, CABG, Coronary angioplasty, Stroke)	This study shows an inverse relationship between alcohol use and major cardiovascular events after endarterectomy for lower extremity arterial occlusive disease, accompanied by a more stable plaque phenotype. however, no such relationship could be observed for patients with cerebrovascular disease
Hansen-Krone, I.J., Brækkan, S.K., Enga, K.F., Wilsgaard, T., Hansen, J.B. (2011) Alcohol consumption, types of alcoholic beverages and risk of venous thromboembolism - the Tromsø Study	Prospective cohort	II	26,662 subjects, aged 25–97 years	Teetotaler, <1, 1–2, 3–6, ≥7 units/week	Venous thromboembolism (VTE)	There was no association between total alcohol consumption and VTE. However, the risk estimates for VTE by different types of alcoholic beverages pointed in opposite directions. Liquor consumption and binge drinking was associated with increased risk of VTE, respectively, whereas wine consumption was associated with reduced risk of VTE.
Levantesi, G., Marfisi, R., Mozaffarian, D., Franzosi, M.G., Maggioni, A., Nicolosi, G.L., Schweiger, C., Silletta, M., Tavazzi, L., Tognoni, G.,	Prospective cohort	II	11,248 Italian patients with recent MI enrolled in the GISSI-Prevenzione Trial.	Daily wine consumption: Never/Almost Never, ≤0.5 L, >0.5 L	Cardiovascular events (CVE) and total mortality after myocardial infarction	Among patients with established heart disease, moderate consumption of wine seems to be associated with lower incidence of CVE and total mortality as compared with non-

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Marchioli, R. (2011) Wine consumption and risk of cardiovascular events after myocardial infarction: Results from the GISSI-Prevenzione trial.						drinkers.
Lindschou Hansen J, Tolstrup JS, Jensen MK, Grønbæk M, Tjønneland A, Schmidt EB, Overvad K. Alcohol intake and risk of acute coronary syndrome and mortality in men and women with and without hypertension	Prospective cohort	II	57,053 men and women, aged 50–64, who participated in the Danish Diet, Cancer and Health study	Alcohol Intake (drinks per week): <1 1–6, 7–13, 14–20, 21–27/21+, 28+	Risk of acute coronary syndrome and mortality	Alcohol intake was associated with a lower risk of ACS among participants both with and without hypertension and there was no evidence of interaction between alcohol intake and hypertension. Those who drank moderately had a lower mortality than abstainers and those who drank heavily; and for all levels of alcohol intake, participants with hypertension had a higher risk than participants with normal blood pressure.
Mukamal, K.J., Chen, C.M., Rao, S.R., Breslow, R.A. (2010) Alcohol consumption and cardiovascular mortality among U.S. adults, 1987 to 2002	Prospective cohort	II	245,207 US participants	Current abstainers were categorized as never drinkers (<12 drinks in one's lifetime), lifetime infrequent drinkers (>12 in one's lifetime, <12 drinks in any previous year), and former drinkers (>12 in one's lifetime, >12 drinks in a previous year). Current drinkers were categorized as light (current use of ≤3 drinks per week), moderate (current use of >3–7 drinks per week for women and >3–14	Cardiovascular mortality	Light and moderate alcohol consumption were inversely associated with CVD mortality, even when compared with lifetime abstainers, but consumption above recommended limits was not.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
				drinks per week for men), and heavy (current use of >7 drinks per week for women and >14 drinks per week for men).		
Ruidavets, J.-B., Ducimetièere, P., Evans, A., Montaye, M., Haas, B., Bingham, A., Yarnell, J., Amouyel, P., Arveiler, D., Kee, F., Bongard, V., Ferrières, J. (2010) Patterns of alcohol consumption and ischaemic heart disease in culturally divergent countries: the Prospective Epidemiological Study of Myocardial Infarction (PRIME).	Prospective cohort	II	9778 men aged 50-59	Non-drinkers, 1-24 g/day, 25-49 g/day, 50-74 g/day, ≥75 g/day	Incident myocardial infarction and coronary death ("hard" coronary events), and incident angina pectoris.	Regular and moderate alcohol intake throughout the week, the typical pattern in middle aged men in France, is associated with a low risk of ischaemic heart disease, whereas the binge drinking pattern more prevalent in Belfast confers a higher risk.
Schroder, H., et al., Myocardial infarction and alcohol consumption: a population-based case-control study.	Case-control	III-3	Male patients aged 25 to 74 years with first myocardial infarction (MI) were recruited in the same region as the healthy male controls	Alcoholic beverage consumption during the preceding week (g/day): 0, >0 ≤20, >20 ≤30, >30.	Non-fatal myocardial infarction	Total alcohol consumption up to 30 g per day, adjusted for lifestyle and cardiovascular risk factors, was inversely associated (Odds ratio 0.14; 95% confidence interval 0.06-0.36) with the risk of non-fatal MI. Drinking up to 20 g of alcohol through wine, beer and spirits significantly decreased the adjusted risk of MI.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						Higher alcohol intake did not substantially reduce the risk. A preference for spirits was correlated with a significantly increased risk of non-fatal MI (P < 0.05).

Coronary artery disease

Table 27 Coronary artery disease

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Britton KA, Gaziano JM, Sesso HD, Djoussé L. Relation of alcohol consumption and coronary heart disease in hypertensive male physicians (from the Physicians' Health Study).	Prospective cohort	II	5,164 hypertensive male physicians in the Physicians' Health Study	Alcohol Consumption (drinks/week): <1, 1-4, 5-7, >8	Coronary heart disease (CHD)	In conclusion, our data demonstrated an inverse relation between moderate alcohol consumption and CHD in hypertensive men.
Dai J, Mukamal KJ, Krasnow RE, Swan GE, Reed T. Higher usual alcohol consumption was associated with a lower 41-y mortality risk from coronary artery disease in men independent of genetic and common environmental factors: the prospective	Prospective cohort	II	843 male twins (396 pairs and 51 unpaired twins) aged 42–55 y	Non-drinkers, 1.42- 4.86 g/day, 5.14-4.15 g/day, 14.2 - 23.9 g/d, 24.2- 106.5 g/d	Coronary artery disease (CAD) mortality	Higher usual alcohol consumption is associated with lower CAD mortality risk, independent of germline and early life environment and adulthood experience shared among twins, supporting a possible causal role of alcohol consumption in lowering CAD death risk.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
NHLBI Twin Study						
Hvidtfeldt UA, Tolstrup JS, Jakobsen MU, Heitmann BL, Gronbaek M, 'Reilly E, et al. Alcohol intake and risk of coronary heart disease in younger, middle-aged, and older adults.	Prospective cohort	II	192,067 women and 74,919 men free of cardiovascular diseases, diabetes, and cancers at baseline.	Abstainers, 0.1-4.9, 5.0-29.9, 30.0-59.9, >60 g/day	Coronary heart disease (CHD)	Alcohol is also associated with a decreased risk of CHD in younger adults; however, the absolute risk was small compared with middle-aged and older adults.
Pedersen JØ, Heitmann BL, Schnohr P, Grønbaek M. The combined influence of leisure-time physical activity and weekly alcohol intake on fatal ischaemic heart disease and all-cause mortality	Prospective cohort	II	11,914 Danes aged 20 years or older and without pre-existing IHD.	non-drinkers, below one drink per week (none); moderate drinkers, one to 14 drinks per week (moderate); and heavy drinkers, 15 or more drinks per week (high).	Ischaemic heart disease (IHD)	Leisure-time physical activity and a moderate weekly alcohol intake are both important to lower the risk of fatal IHD and all-cause mortality.
Skov-Ettrup LS, Eliasen M, Ekholm O, Grønbæk M, Tolstrup JS. Binge drinking, drinking frequency, and risk of ischaemic heart disease: a population-based cohort study	Prospective cohort	II	26,786 men and women who participated in the Danish National Cohort Study in 1994, 2000, and 2005	Alcohol consumption: non-drinkers; days per week (1-2, 3-4, 5-6, 7); units per week (0, 1-6, 7-13, 14-21, 22+); binge pattern (≥5 drinks on any day), non-binge pattern (<5 drinks on any day).	Ischaemic heart disease, all-cause mortality	Among light-to-moderate alcohol drinkers, binge drinking was not associated with risk of IHD and all-cause mortality. Overall, drinking frequency did not appear to be an important determinant of the risk of IHD and all-cause mortality.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Snow WM, Murray R, Ekuma O, Tyas SL, Barnes GE. Alcohol use and cardiovascular health outcomes: a comparison across age and gender in the Winnipeg Health and Drinking Survey Cohort.	Prospective cohort	II	1,154 participants (580 men and 574 women) aged 18–64 in Winnipeg, Manitoba, Canada (1990–91)	Alcohol consumption per day: "Usual drinking" - For men, the tertiles of ethanol were 0.65–5.77 g ('light'), 5.78–18.1 g ('moderate') and>18.1 g ('heavy') per day. For women, the corresponding tertiles were 0.65–2.92 g ('light'), 2.93–9.15 g ('moderate') and>9.15 g ('heavy')per day; "Heavy episodic drinking" - frequency per month of consuming eight or more drinks per sitting (frequency of HED was considered a continuous variable in the models for women, and as a dichotomous variable [any HED versus no mention of HED] for men).	Coronary heart disease and hypertension	Reduced risk of CVD was associated with usual consumption, whereas an increased risk was associated with HED. Among male usual drinkers, cardio-protection was afforded only to middle and older age groups. The benefits of regular consumption were seen only in the youngest age group among women. The heaviest usual consumption category was associated with a decreased risk of CVD in men. Heavy episodic drinking increased the risk of coronary heart disease in middle-aged men and was marginally significant in middle-aged women. Risk of hypertension was elevated in older men with heavy episodic drinking.
Volcik, K., et al., Interaction effects of high-density lipoprotein metabolism gene variation and alcohol consumption on coronary heart disease risk: The atherosclerosis risk in communities study	Prospective cohort	II	15,792 individuals, ages 45–64 years	Non-drinker, Light (~1 drink/day), moderate (~2 drinks/day), heavy (>2 drinks/day)	CHD risk (by HDL metabolism-alcohol interaction)	Results from the current study suggest that interaction effects between alcohol consumption and HDL cholesterol metabolism gene variation influence the risk of incident CHD in black men. Additional studies are warranted to confirm these findings.
Chagas P, Mazocco L, Piccoli JD,	Cross-sectional	IV	363 adults undergoing coronary	Non-drinkers, moderate drinkers (up	Coronary artery disease severity	In our study we observed a J curve pattern, showing

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ardenghi TM, Badimon L, Caramori PR, Pellanda L, Gomes I, Schwanke CH. Association of alcohol consumption with coronary artery disease severity			angiography	to 15 g/day of ethanol for women and 30 g/day for men) and heavy drinkers (beyond the moderate dose).		association with lower CAD severity in moderate drinkers when compared to both non-drinkers and heavy drinkers.

Heart Failure

Table 28 Heart Failure

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Dorans, K.S., et al., Alcohol and incident heart failure among middle-aged and elderly men: The cohort of Swedish men	Prospective cohort	II	33,760 men 45–79 years old with no HF, diabetes mellitus or myocardial infarction at baseline	Never drinker, <0.5, ≥0.5, 1–<7, 7-<14, 14–<21, ≥21	Heart Failure	In this cohort of Swedish men, there was a U-shaped relationship between alcohol consumption and HF incidence, with a nadir at light-to-moderate intake. Heavy intake did not appear protective.
Goncalves, A., et al., Alcohol consumption and risk of heart failure: The Atherosclerosis Risk in Communities Study	Prospective cohort	II	14 629 participants of the Atherosclerosis Risk in Communities (ARIC) study	Drinks/week: Former drinkers, Abstainers, <7, ≥7–14, ≥14–21, ≥21.	Heart failure (HF)	In the community, alcohol consumption of up to 7 drinks/week at early-middle age is associated with lower risk for future HF, with a similar but less definite association in women than in men.

Atrial Fibrillation

Table 29 Atrial Fibrillation

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ariansen I, Reims HM, Gjesdal K, Olsen MH, Ibsen H, Devereux RB, Okin PM, Kjeldsen SE, Dahlöf B, Wachtell K. Impact of alcohol habits and smoking on the risk of new-onset atrial fibrillation in hypertensive patients with ECG left ventricular hypertrophy: the LIFE study	Prospective cohort	II	Hypertensive patients with electrocardiogram documented left ventricular hypertrophy (LVH) randomised to losartan or atenolol	None, 1-4, 5-7, 8-10 or > 10 standard drinks of alcohol per week	Atrial fibrillation	"Up to 10 drinks of alcohol per week appears to be safe with respect to the risk for AF in hypertensive patients with LVH. Our data suggest that alcohol intake above this level may be marginally deleterious, while no effect of smoking on risk of AF was detected in hypertensive patients with LVH. "
Conen D, Tedrow UB, Cook NR, Moorthy MV, Buring JE, Albert CM. Alcohol consumption and risk of incident atrial fibrillation in women	Prospective cohort	II	34 715 initially healthy women	No Alcohol <1 Drink/d 1-2 Drinks/d ≥2 Drinks/d	Atrial Fibrillation	Among healthy middle-aged women, consumption of up to 2 alcoholic beverages per day was not associated with an increased risk of incident atrial fibrillation. Heavier consumption of 2 or more drinks per day, however, was associated with a small but statistically significant increased risk of atrial fibrillation.
Liang Y, Mente A, Yusuf S, Gao P, Sleight P, Zhu J, Fagard R, Lonn E, Teo KK; ONTARGET and TRANSCEND Investigators. Alcohol consumption and the risk of incident atrial fibrillation among people with cardiovascular disease	Prospective cohort	II	30 433 adults ≥55yrs with CVD or diabetes with end-organ damage who participated in 2 large antihypertensive drug treatment trials and who had no atrial fibrillation at baseline	Alcohol consumption defined by to median cut-off values for low, moderate and high intake based on guidelines used in various countries, and we defined binge drinking as more than 5 drinks a day	Atrial fibrillation	Moderate to high alcohol intake was associated with an increased incidence of atrial fibrillation among people aged 55 or older with cardiovascular disease or diabetes. Among moderate drinkers, the effect of binge drinking on the risk of atrial fibrillation was similar to that of habitual heavy drinking.
Sano F, Ohira T, Kitamura A, Imano H, Cui R, Kiyama M, Okada T, Yamagishi K, Sankai T, Tanigawa T, Kario	Prospective cohort	II	8,602 Japanese men and women aged 30–80	Alcohol consumption (ethanol g/day): Never, Past, Light (<23), Light-moderate (23–46), Moderate (46–69),	Atrial fibrillation	A higher incidence of AF was observed among participants with an ethanol intake >69 g/day, compared with never-drinkers.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
K, Iso H. Heavy alcohol consumption and risk of atrial fibrillation.				Heavy (>69)		
Tolstrup JS, Wium-Andersen MK, Ørsted DD, Nordestgaard BG. Alcohol consumption and risk of atrial fibrillation: Observational and genetic estimates of association	Prospective cohort	II	A total of 88,782 men and women from the Copenhagen City Heart Study 1991–1994 and 2001–2003 and the Copenhagen General Population Study 2003–2010.	Drinks per week: <1. 1-6, 7-13, 14-20, 21-27, 28-34, 35+ (one drink = 12g alcohol)	Atrial fibrillation. Alcohol metabolizing gene (ADH1B/ADH1C) variants.	Observational alcohol consumption was associated with a higher risk of atrial fibrillation in men. In women, only a high alcohol intake (28+ drinks/week) was associated with a higher risk. Participants with a high cardiovascular risk were no more sensitive towards alcohol than those at low risk. Genetic analysis did not support a causal relationship of linear association between alcohol intake and atrial fibrillation.
Marcus GM, Smith LM, Whiteman D, Tseng ZH, Badhwar N, Lee BK, Lee RJ, Scheinman MM, Olgin JE. Alcohol intake is significantly associated with atrial flutter in patients under 60 years of age and a shorter right atrial effective refractory period.	Case-control	III-3	195 cases, 186 controls	Drinks frequency: <1–2/month, >1–2/month,<1–2/week, >1–2/week, <1–2/day, 1–2/day, >2/day	Atrial fibrillation (AF), atrial flutter (AFL)	Alcohol intake is positively associated with AFL in younger patients. Neither AF subjects of any age nor AFL subjects > 60 years of age exhibited significant associations with alcohol after multivariable adjustment.

Table 30 Hypertension

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Chen L; Smith GD; Harbord RM; Lewis SJ. (2008). Alcohol intake and blood pressure: a systematic review implementing a Mendelian randomization approach	Systematic review	I	9 studies	Various (continuous data 0 to 40 g/day alcohol consumption)	Hypertension	Alcohol intake may increase blood pressure to a much greater extent, even among moderate drinkers, than previously thought. Large-scale replication studies are required to confirm this finding and to improve the precision of our estimates.
Taylor B, Irving HM, Baliunas D, Roerecke M, Patra J, Mohapatra S, et al: Alcohol and hypertension: gender differences in dose-response relationships determined through systematic review and meta-analysis.	Systematic review (meta-analysis)	I	12 cohort studies from USA, Japan or Korea; 4 of women only; 4 men only; 4 mixed; age range 20-64y; cases 29-13,357	Alcohol consumption per day (g/day)	Hypertension	A linear dose–response relationship with a relative risk of 1.57 at 50 g pure alcohol per day and 2.47 at 100 g per day was seen for men. Among women, the meta-analysis indicated a more modest protective effect than reported previously: a significant protective effect was reported for consumption at or below about 5 g per day, after which a linear dose–response relationship was found with a relative risk of 1.81 at50 g per day and of 2.81 at an average daily consumption of 100 g pure alcohol per day. Among men, Asian populations had higher risks than non-Asian populations. The risk for hypertension increases linearly

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						with alcohol consumption, so limiting alcohol intake should be advised for both men and women.
Gepner Y, Henkin Y, Schwarzfuchs D, Golan R, Durst R, Shelef I, Harman-Boehm I, Spitzen S, Witkow S, Novack L, Friger M, Tangi-Rosental O, Sefarty D, Bril N, Rein M, Cohen N, Chassidim Y, Sarusi B, Wolak T, Stampfer MJ, Rudich A, Shai I. Differential effect of initiating moderate red wine consumption on 24-h blood pressure by alcohol dehydrogenase genotypes: randomized trial in Type 2 diabetes.	Randomised controlled trial	Level II – "Intervention"	Fifty-four type 2 diabetes, alcohol abstainers	150 ml/dinner dry red wine or mineral water	24hr blood pressure at 6 months	Initiating moderate red wine consumption at dinner among type 2 diabetes patients does not have a discernible effect on mean 24-h BP. Yet, a modest temporal BP reduction could be documented.
Halanych JH, Safford MM, Kertesz SG, Pletcher MJ, Kim YI, Person SD, Lewis CE, Kiefe CI. Alcohol consumption in young adults and incident hypertension: 20-year follow-up from the Coronary Artery Risk Development in Young Adults Study	Prospective cohort	II	Participants (n =4,711) were from the Coronary Artery Risk Development in Young Adults Study cohort	never drinkers (had never drunk alco-hol at baseline), former drinkers (no alcohol in previous year but had drunk in the past), light drinkers (<7 drinks/week for men and <4 drinks/week for women), moderate drinkers (7–14 drinks/week for men and 4–7 drinks/week for women), and at-risk drinkers (>14 drinks/week for men and >7 drinks/week for women).	Hypertension	Adjustment using Cox proportional hazard models revealed no association between baseline alcohol consumption and incident hypertension, except among European-American women in whom any current alcohol consumption was associated with lower risk of incident hypertension. The lack of association between alcohol and hypertension in the majority of this socioeconomically

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						diverse cohort is not definitive.
Núñez-Córdoba JM, Martínez-González MA, Bes-Rastrollo M, Toledo E, Beunza JJ, Alonso A. Alcohol consumption and the incidence of hypertension in a Mediterranean cohort: the SUN study	Prospective cohort	II	9963 Spanish men and women initially without hypertension.	0 0.1-0.5 >0.5 drinks/day (a standard drink was defined as any drink that contains about 13.7 g of pure alcohol).	Hypertension	In this Mediterranean population, the consumption of beer or spirits, but not wine, was associated with a higher risk of developing hypertension. However, the weekly pattern of alcohol consumption did not have a significant impact on the risk of hypertension.
Sesso HD, Cook NR, Buring JE, Manson JE, Gaziano JM. Alcohol consumption and the risk of hypertension in women and men	Prospective cohort	II	28 848 women from the Women's Health Study and 13 455 men from the Physicians' Health Study	Alcohol intake: Rarely or Never, 1 to 3 per Month, 1 per Week, 2 to 4 per Week, 5 to 6 per Week, 1 per Day.	Hypertension	Light-to-moderate alcohol consumption decreased hypertension risk in women and increased risk in men. The threshold above which alcohol became deleterious for hypertension risk emerged at 4 drinks per day in women versus a moderate level of 1 drink per day in men.
Hong SW, Linton JA, Shim JY, Lee HR, Kang HT. Association of alcohol consumption pattern with risk of hypertension in Korean adults based on the 2010-2012 KNHANES	Cross-sectional	IV	15,052 participants (7054 men and 7998 women)	The cut-off points for AUDIT score were categorized into three groups: low-risk drinkers, 0-7; intermediate-risk drinkers, 8-14; and high-risk drinkers, ≥15 points	Hypertension	"Age-adjusted hypertension prevalence was 30.8, 40.9, and 45.3% in men, and 24.6, 27.0, and 32.3% in women in the low-, intermediate-, and high-risk drinking group, respectively. Compared to the low-risk drinking group, the prevalence ratio (95% confidence interval [CI]) for hypertension was

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						1.664 (1.433-1.933) and 2.070 (1.772 - 2.418) for men and 1.012 (0.774-1.323) and 1.650 (1.080-2.522) for women in the intermediate- and high-risk drinking group, respectively, after adjusting for age and other confounding factors. In conclusion, our study suggests high-risk drinking appears to be associated with a higher risk of hyper-tension in men and women."
Wakabayashi I. Light-to-moderate alcohol intake reduces lipid accumulation product and attenuates its relation to hypertension	Cross-sectional	IV	Japanese men aged 35–60 years (n = 21,572)	Non-drinkers, light (<22 g ethanol per day), moderate (⩾ 22 and<44 g ethanol per day) and heavy (⩾ 44 g ethanol per day) drinkers	Hypertension, Lipid accumulation product (LAP)	The results suggest that light-to-moderate alcohol drinking reduces LAP level in patients with hypertension and attenuates the relation of LAP to hypertension.

Stroke

Table 31 Stroke

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Jayadeep Patra, Benjamin Taylor, Hyacinth Irving, Michael Roerecke, Dolly Baliunas, Satya Mohapatra and Jürgen Rehm Alcohol consumption and the risk of morbidity and mortality for different stroke types - a systematic review and meta-analysis	Systematic review (Meta-analysis of cohort and case-control studies)	II	Patients with stroke	Number of standard drinks per day	Stroke	Heavy alcohol consumption increases the relative risk of any stroke while light or moderate alcohol consumption may be protective against ischemic stroke

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Bazzano LA, Gu D, Reynolds K, Wu X, Chen CS, Duan X, Chen J, Wildman RP, Klag MJ, He J. Alcohol consumption and risk for stroke among Chinese men	Prospective cohort	II	64,338 Chinese men aged 40 years	Weekly drinks: none, 1-6, 7-20, 21-34, >35	Stroke	These results suggest that heavy alcohol drinking may increase the risk for stroke in Chinese men
Chiuve SE, Rexrode KM, Spiegelman D, et al. Primary prevention of stroke by healthy lifestyle	Prospective cohort	II	43 685 men and 71 243 women	Alcohol, g/d: 0 0.1–4.9 5–14.9 15–29.9 ≥30	Stroke	Individuals with a low-risk lifestyle (not smoking, exercising daily, consuming a prudent diet [including moderate alcohol], and having a healthy weight during midlife) had a significantly lower risk of stroke than individuals without a low-risk lifestyle.
Djoussé L, Himali JJ, Beiser A, Kelly-Hayes M, Wolf PA. Apolipoprotein e, alcohol consumption, and risk of ischemic stroke: the Framingham Heart Study revisited	Prospective cohort	II	5,209 participants, aged 28 to 62 (7,676 person-observations)	Current drinkers with non-drinkers	Ischemic stroke	Comparing current drinkers with non-drinkers, multivariable adjusted hazard ratio (95% CI) for ischemic stroke were 0.50 (0.24–1.07) in the absence of E4 allele and 0.70 (0.24–2.05) in the presence of E4 allele (p for interaction 0.64) for subjects aged <65 years. Similarly, we did not observe a statistically significant interaction between E4 allele and alcohol consumption on the risk of stroke among people 65 years and older (p for interaction 0.17). Alcohol consumption was positively associated with HDL cholesterol independent of E4 allele and age.
Higashiyama A, Wakabayashi I, Ono Y, Watanabe M, Kokubo Y, Okayama A, Miyamoto Y, Okamura T. Association with serum gamma-glutamyltransferase levels and alcohol consumption on stroke and coronary artery disease: the Suita study	Prospective cohort	II	2336 men (excluding exdrinkers) who were free from cardiovascular disease	Never drinkers, Light (2.0 Drinks/Day), Moderate (2.0 and 4.0 Drinks/Day), Heavy (4.0 Drinks/Day)	Stroke and Coronary Artery Disease	In men with above serum gamma-glutamyltransferase (GGT) median, alcohol drinking even with light-to-moderate consumption could be a risk factor for ischemic stroke

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Ikehara S, Iso H, Toyoshima H, Date C, Yamamoto A, Kikuchi S, et al: Alcohol consumption and mortality from stroke and coronary heart disease among Japanese men and women: the Japan collaborative cohort study.	Prospective cohort	II	34,776 men and 48,906 women aged 40 to 79 years	Nondrinkers, Ex-Drinkers, Ethanol Intake, g/day: 0.1–22.9, 23.0 –45.9, 46.0 –68.9, ≥69.0	Stroke and coronary heart disease	Heavy alcohol consumption is associated with increased mortality from total stroke, particularly hemorrhagic stroke, and total cardiovascular disease for men, and from coronary heart disease for women, whereas light-to-moderate drinking may be associated with reduced mortality from cardiovascular disease for both sexes.
Ikehara S, Iso H, Toyoshima H, Date C, Yamamoto A, Kikuchi S, Kondo T, Watanabe Y, Koizumi A, Wada Y, Inaba Y, Tamakoshi A, Japan Collaborative Cohort Study Group. Alcohol consumption and mortality from stroke and coronary heart disease among Japanese men and women: the Japan collaborative cohort study.	Prospective cohort	II	47,100 women aged 40–69 years	nondrinker, occassional drinker, 1–74, 75–149, 150–299, ≥300 g ethanol/wk	Stroke and coronary heart disease	Light drinking (<150 g ethanol/week) was not associated with risk of ischemic stroke. There was also no association between alcohol consumption and risk of coronary heart disease. . Heavy drinking was associated with increased risk of hemorrhagic and ischemic strokes among Japanese women.
Ikehara S, Iso H, Yamagishi K, Kokubo Y, Saito I, Yatsuya H, Inoue M, Tsugane S, Group JS. Alcohol consumption and risk of stroke and coronary heart disease among Japanese women: the Japan Public Health Center-based prospective study	Prospective cohort	II	47,100 women aged 40-69 years in Japan	1.5 drinks for 1-2 days/week, 3.5 for 3-4 days/week, 5.5 for 5-6 days/week, 7.0 for every day; or 0.5 for 1-3 days/month, 1.5 for 1-2 days/week, 3.5 for 3-4 days/week, 5.5 for 5-6 days/week, 7.0 for every day	Strokes and coronary heart disease	"In the exposure-updated analysis, the positive association between heavy drinking and risks of total stroke, hemorrhagic stroke and intraparenchymal hemorrhage became more evident. Light drinking (b150 g ethanol/week) was not associated with risk of ischemic stroke. There was also no association between alcohol consumption and risk of coronary heart disease."
Ikehara S, Iso H, Yamagishi K, Yamamoto S, Inoue M, Tsugane S, et al: Alcohol consumption, social support, and risk of stroke and coronary heart disease among Japanese men: the JPHC Study	Prospective cohort	II	19,356 men aged 40 to 69 years	Never, past, occasional, 1 to 149, 150 to 299, 300 to 449, or ≥450 g ethanol/ wk.	Stroke and Coronary Heart Disease	Light-to-moderate alcohol consumption was associated with reduced risks of coronary heart disease and total cardiovascular disease, while heavy alcohol consumption was associated with increased risk of total stroke, in particular hemorrhagic

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						stroke.
Jimenez M, Chiuve SE, Glynn RJ, Stampfer MJ, Camargo CA, Jr, Willett WC, Manson JE, Rexrode KM. Alcohol consumption and risk of stroke in women	Prospective cohort	II	Nurses' Health Study (n=121 700 female registered nurses)	None; 0-5; 5-15; 15-30; 30-45 g/d	Stroke	Light-to-moderate alcohol consumption was associated with a lower risk of total stroke. In this population of women with modest alcohol consumption, an elevated risk of total stroke related to alcohol was not observed.
Kadlecová P, Andel R, Mikulík R, Handing EP, Pedersen NL. Alcohol consumption at midlife and risk of stroke during 43 years of follow-up: cohort and twin analyses	Prospective cohort	II	Old cohort of the Swedish Twin Registry (born 1886-1925), responding to questionnaire in 1960/61	None; very light (<0.5 drink); light (0.5-1 drink); moderate (1-2 drinks); heavy (>2 drinks)	Stroke	Stroke-risk associated with heavy drinking (>2 drinks/d) in midlife seems to predominate over well-known risk factors, until the age of ≈75 years and may shorten time to stroke by 5 years.
Laura Sundell, Veikko Salomaa, Erkki Vartiainen, Kari Poikolainen, Tiina Laatikainen Increased Stroke Risk Is Related to a Binge Drinking Habit	Prospective cohort	II	15 965 Finnish men and women age 25 to 64 years	Binge Drinking Pattern vs No Binge Drinking Pattern	Stroke	This study found that a pattern of binge drinking is an independent risk factor for all strokes and ischemic stroke.
Lu M, Ye W, Adami HO, Weiderpass E. Stroke incidence in women under 60 years of age related to alcohol intake and smoking habit	Prospective cohort	II	45,449 Swedish women aged 30–50 years free of stroke and heart diseases at enrolment in 1991 and 1992.	Alcohol intake: 0 g/week, 0.1–19.9 g/week, 20–69.9 g/week, ≥70 g/week.	Stroke	Light to moderate alcohol intake, regardless of type of alcoholic beverage, reduces risk of stroke among women under 60 years of age, in particular those women who were never smokers.
Monik Jimenez, Stephanie E. Chiuve, Robert J. Glynn, Meir J. Stampfer, Carlos A. Camargo, Walter C. Willett, JoAnn E. Manson, Kathryn M. Rexrode Alcohol Consumption and Risk of Stroke in Women	Prospective cohort	II	83,578 female participants of the Nurses' Health Study who were free of diagnosed cardiovascular disease and cancer at baseline	0, >0–4.9, 5–14.9, 15–29.9, 30–45 g/day	Stroke	Light-to-moderate alcohol consumption was associated with a lower risk of total stroke. In this population of women with modest alcohol consumption, an elevated risk of total stroke related to alcohol was not observed.
Pavla Kadlecová, Ross Andel, Robert Mikulík, Elizabeth P. Handing, Nancy L. Pedersen Alcohol Consumption at Midlife and Risk of Stroke During 43 Years of Follow-Up Cohort and Twin Analyses	Prospective cohort	II	11 644 individuals aged ≤60 years	None, Very light (<0.5 drink), Light (0.5–1 drink), Moderate (1–2 drinks), Heavy (>2 drinks)	Stroke	Stroke-risk associated with heavy drinking (>2 drinks/d) in midlife seems to predominate over well-known risk factors, hypertension and diabetes, until the age of ≈75 years and may shorten time to stroke by 5 years above and beyond covariates and genetic/early-life factors. Alcohol consumption

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						should be considered an age-varying risk factor for stroke.
Rantakömi SH, Kurl S, Sivenius J, Kauhanen J, Laukkanen JA. The frequency of alcohol consumption is associated with the stroke mortality.	Prospective cohort	II	2609 men with no history of stroke at baseline	Alcohol consumption, times/week: 0, <0.5, 0.5–2.5, >2.5	Stroke mortality	This study shows a strong association between the frequency of alcohol consumption and stroke mortality, independent of total amount of alcohol consumption. The risk of stroke death was the highest among men who consumed alcohol >2.5times per week
Rist PM, Berger K, Buring JE, Kase CS, Gaziano JM, Kurth T. Alcohol consumption and functional outcome after stroke in men	Prospective cohort	II	21,862 men enrolled in the Physicians' Health Study	<1 drink/wk, 1 drink/wk, 2 to 4 drinks/wk, 5 to 6 drinks/wk, and >/=1 drink/d	Functional outcome after stroke	Our data do not show strong associations between alcohol consumption and functional outcome after stroke. Modest beneficial associations exist with low alcohol consumption.
Sandvei MS, Romundstad PR, Muller TB, Vatten L, Vik A. Risk factors for aneurysmal subarachnoid hemorrhage in a prospective population study: the HUNT study in Norway	Prospective cohort	II	74 845 residents aged 20 years in Nord-Trøndelag County, Norway	Abstinent, Not last 14 days (Reference), 1–4 times, 5 times or too much	Aneurysmal Subarachnoid Hemorrhage	People who reported total abstinence were at reduced risk (HR, 0.3; 95%CI, 0.1 to 0.7) compared with the reference group (no alcohol during the last 14 days but not totally abstinent).
Sturgeon JD, Folsom AR, Longstreth WT, Jr, Shahar E, Rosamond WD, Cushman M. Risk factors for intracerebral hemorrhage in a pooled prospective study.	Prospective cohort (pooled from 2 cohort studies)	II	The ARIC cohort was recruited in 1987 to 1989 and involves 15 792 men and women, aged 45 to 64 years at baseline, sampled from 4 US communities. The CHS cohort was recruited in 1989 to 1993 and involves 5888 men and women, aged 65 or over at baseline, sampled from 4 US communities.	Alcohol intake (oz/week): <1 ounce/week, 1–20 ounces/week, 21–40 ounces/week, 41 ounces/week	Intracerebral hemorrhage	Sex, smoking, alcohol intake, body mass index, waist-to-hip ratio, waist circumference, and diabetes were not related to ICH.
Zhang Y, Tuomilehto J, Jousilahti P, Wang Y, Antikainen R, Hu G. Lifestyle factors on the risks of ischemic and hemorrhagic stroke	Prospective cohort	II	36 686 Finnish participants who were 25 to 74 years old	Alcohol consumption was categorized into 4 groups: none, 1 to 34, 35 to 209, and 210 or more grams per week in men,	Stroke incidence	Healthy lifestyle factors are associated with a lower risk of stroke, and there is a graded inverse association between the number of healthy lifestyle indicators and the risks of

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
				and none, 1 to 34, 35 to 139, and 140 or more grams per week in women		total, ischemic, and hemorrhagic stroke.
Fekete K, Szatmári S, Szőcs I, Szekeres C, Szász J, Mihálka L, Smolanka V, Kardos L, Csiba L, Bereczki D. Prestroke alcohol consumption and smoking are not associated with stroke severity, disability at discharge, and case fatality	Retrospective cohort	III-2	1049 patients are recorded in the Mures–Uzhgorod–Debrecen study database (603 men).	Alcohol consumers, nonconsumers/light drinkers, unknown	Stroke severity and fatality at 30 days and 1yr	Alcohol consumption did not have a significant influence on stroke severity and on short- and long-term outcome.
Mostofsky E, Burger MR, Schlaug G, Mukamal KJ, Rosamond WD, Mittleman MA. Alcohol and acute ischemic stroke onset: the stroke onset study.	Retrospective cohort	III-2	390 patients (209 men, 181 women), median 3 days after stroke.	Non-drinkers, drank alcohol in the prior year: 1 serving of alcohol per day, drinking at least once per week, and drinking at least once per month. Hours since last drink	Stroke	In conclusion, we found that the risk of ischemic stroke was transiently elevated for 2 hours after drinking as little as 1 serving of alcohol. The risk rapidly returned to baseline and was modestly lower by 24 hours. When examined in the context of long-term studies of alcohol consumption, the net clinical impact on ischemic stroke risk appears to depend on the frequency and quantity of alcohol consumption.
Martin J O'Donnell, Denis Xavier, Lisheng Liu, Hongye Zhang, Siu Lim Chin,et al. Risk factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case-control study	Case-control	III-3	3000 cases and 3000 controls	Alcohol intake was categorised into never or former drinker, moderate drinker (1–30 drinks per month), drinker of more than 30 drinks per month, or binge drinker (>5 drinks per day at least once per month)	Ischaemic stroke, intracerebral haemorrhagic stroke	A history of alcohol intake of 1–30 drinks per month was associated with a reduced risk of ischaemic stroke, whereas consumption of more than 30 drinks per month or binge drinking were associated with increased risk compared with never or former alcohol intake. For intracerebral haemorrhagic stroke, risk increased with alcohol intake.

Table 32 Cardiovascular risk factors

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Perissinotto E, Buja A, Maggi S, Enzi G, Manzato E, Scafato E, Mastrangelo G, Frigo AC, Coin A, Crepaldi G, Sergi G, ILSA Working Group. Alcohol consumption and cardiovascular risk factors in older lifelong wine drinkers: the Italian Longitudinal Study on Aging	Cross-sectional	IV	1896 Italian men aged 65 to 84 years	This uniquely large national investigation from a southern European population found an inverse association between alcohol drinking and RCC. Thus, this study confirmed the results of a recent pooled analysis of cohort studies [7].	Cardiovascular risk factors	We found alcohol consumption in older age associated with healthier hematological values of fibrinogen, HDL cholesterol, Apo A-I lipoprotein and insulin, but it was also associated with a worse hematological picture of total, LDL cholesterol levels, and systolic pressure. Our results indicated in elderly moderate wine drinkers a noticeably safe metabolic, inflammatory and glycaemic profile that might balance higher blood pressure, leading to a net benefit.

Metabolic syndrome

Table 33 Metabolic syndrome

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Sun, K., et al., Alcohol consumption and risk of metabolic syndrome: a meta-analysis of prospective studies	Systematic review (meta-analysis)	I	Six prospective cohort studies involving 28,862 participants with 3305 cases of metabolic syndrome were included in the meta-analysis.	Alcohol consumption was categorized into 6 groups: nondrinker: 0 g/d, very light drinker: 0.1-5 g/d, light drinker: 5.1-10 g/d, moderate drinker: 10.1-20 g/d, moderate-heavy drinker: 20.1-35 g/d, heavy drinker: >35 g/d	Metabolic syndrome	Compared with nondrinker, very light drinker was associated with decreased risk of metabolic syndrome [pooled relative risk (RR) 0.86, 95% CI: 0.75-0.99, fixed-effect model] while heavy drinker was associated with increased risk of metabolic syndrome (pooled RR 1.84, 95% CI: 1.34-2.52, fixed-effect model).
Alkerwi A; Boutsen M; Vaillant M; Barre J; Lair ML; Albert A; et al. (2009). Alcohol consumption and the prevalence of metabolic syndrome: a meta-analysis of observational studies	Review of cross-sectional studies	IV	Healthy individuals	Abstainers, responsible drinking (range provided), hazardous drinking (range provided), harmful drinking (range provided)	Metabolic syndrome	"Responsible alcohol intake" appears to be associated with a reduced prevalence of metabolic syndrome. Favorable metabolic effect seemed to be restricted to alcohol consumption of less than 20 g/day among women, and of less than 40 g/day among men. These findings support the actual recommendations regarding alcohol consumption among apparently healthy people.
Athyros VG, Liberopoulos EN, Mikhailidis DP, Papageorgiou AA, Ganotakis ES, Tziomalos K, Kakafika AI, Karagiannis A, Lambropoulos S, Elisaf M. Association of drinking pattern and alcohol beverage type with the prevalence of metabolic syndrome, diabetes, coronary heart disease, stroke, and peripheral arterial disease in a Mediterranean cohort	Cross-sectional study	IV	Adults in a Mediterranean cohort	Never, occasional, mild, moderate or heavy drinkers	Metabolic syndrome, type 2 diabetes mellitus, coronary heart disease, stroke, peripheral arterial disease and cardiovascular disease	"Alcohol intake was positively related with body weight, high-density lipoprotein cholesterol levels, and hyper-tension. Moderate alcohol consumption is associated with a lower prevalence of the MetS, DM, PAD, CHD, and overall CVD but not stroke compared with no alcohol use in a Mediterranean population. Heavy drinking was associated with an increase in the prevalence of all of these disease states. Advice on alcohol consumption should probably mainly aim at reducing heavy drinking."

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Wakabayashi I. Association between alcohol intake and metabolic syndrome in patients with hypertension.	Cross-sectional	IV	3938 Japanese males with hypertension, aged 35 to 79 years	non-drinkers, light (<22 g ethanol per day), moderate (⩾ 22 and<44 g ethanol per day) and heavy (⩾ 44 g ethanol per day) drinkers	Metabolic syndrome in patients with hypertension	The results suggest that alcohol drinking is associated with a lower risk of metabolic syndrome in patients with hypertension.

Diabetes

Diabetes

Table 34 Diabetes

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Liang W, Chikritzhs T. Alcohol consumption during adolescence and risk of diabetes in young adulthood.	Prospective cohort	II	2,850 participants (46% male) from the National Longitudinal Study of Adolescent Health	Alcohol consumption: Lifetime abstainer, Current abstainer reference, 3–7 days/week, <5 drinks/occasion, 3–7 days/week, 5+ drinks/occasion, 2–8 days/month, <5 drinks/occasion, 2–8 days/month, 5+ drinks/occasion, 1–12 days/year, <5 drinks/occasion, 1–12 days/year, 5+ drinks/occasion.	Diabetes	Heavy alcohol use (at levels reaching 5 or more drinks, 3–7 days/week) during adolescence may increase the risk of diabetes in young adulthood.
Mozaffarian D, Kamineni A, Carnethon M, Djousse L, Mukamal KJ, Siscovick D. Lifestyle risk factors and new-onset diabetes mellitus in older adults: the cardiovascular health study	Prospective cohort	II	4883 men and women 65 years or older	None <1 drink per week 1–2 drinks per week 3–7 drinks per week >1–2 drinks per day >2 drinks per day	Diabetes	Participants whose physical activity level and dietary, smoking, and alcohol habits were all in the low-risk group had an 82% lower incidence of diabetes (relative risk, 0.18; 95% confidence interval, 0.06–0.56) compared with all other participants

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Teratani T, Morimoto H, Sakata K, Oishi M, Tanaka K, Nakada S, Nogawa K, Suwazono Y. Dose-response relationship between tobacco or alcohol consumption and the development of diabetes mellitus in Japanese male workers	Prospective cohort	II	An 8-year prospective cohort study was conducted in 8423 male workers who received annual health check-ups between 2002 and 2010 at a Japanese steel company.	Weekly alcohol consumption (abstainer, 1-76g, 77-153g, 154-307g, ≥308g)	HbAlc ≥6.1% or taking any anti-diabetic medication.	We observed a significant, negative dose–response relationship between alcohol consumption and the development of diabetes mellitus. (77–153 g/week, HR0.87 (0.65, 1.17); HR 154–307 g/week, HR 0.73 [95% CI, 0.55–0.97]; ≥308 g/week, HR 0.75 [95% CI, 0.57–0.98]).
Harjutsalo V, Feodoroff M, Forsblom C, Groop PH, FinnDiane Study Group. Patients with Type 1 diabetes consuming alcoholic spirits have an increased risk of microvascular complications	Cross-sectional	IV	3608 patients with Type 1 diabetes	Men (lifelong abstainers 0 g/week, light consumers 0–83.9 g/week, moderate consumers 84–287.9 g/week, heavy con-sumers ≥ 288 g/week) and women (lifelong abstainers 0 g/week, light consumers 0–59.9 g/week, moderate consumers 60–191.9 g/week, heavy consumers ≥ 192 g/week).	Microvascular complications	Alcoholic spirit drinkers carry a higher risk of nephropathy and severe retinopathy compared with wine drinkers. Lifelong abstainers and former users of alcohol have a higher risk of nephropathy and severe retinopathy compared with light consumers.

Type 2 diabetes

Table 35 Type 2 diabetes

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Pietraszek, A., Gregersen, S. & Hermansen, K. (2010) Alcohol and type 2 diabetes. A review	Systematic review	I	3 meta-analyses, 15 cohort studies, 7 RCTs	various daily alcohol intake levels	Type 2 diabetes	There seems to be a J- or U-shaped association between alcohol consumption and the incidence of type 2 diabetes. Thus light to moderate alcohol consumption seems to reduce the risk of type 2 diabetes by 30%, while heavy drinkers have the same or higher risk than total abstainers.
Seike N, Noda M, Kadowaki T. Alcohol consumption and risk of type 2 diabetes mellitus in Japanese: a systematic review	Systematic review	I	7 prospective cohort studies in Japanese adults	Alcohol intake: various measures	Type 2 diabetes	For a large number of Japanese men who have relatively low BMI, alcohol intake is an established risk factor for diabetes.
Crandall JP, Polsky S, Howard AA, Perreault L, Bray GA, Barrett-Connor E, Brown-Friday J, Whittington T, Foo S, Ma Y, Edelstein SL; Diabetes Prevention Program Research Group. Alcohol consumption and diabetes risk in the Diabetes Prevention Program	Randomised controlled trial	Level II – "Intervention"	Participants (n = 3175) had impaired glucose tolerance (2-h glucose: 7.8–11.1 mmol/L), elevated fasting glucose (5.3–7.0 mmol/L), and a body mass index (in kg/m2) ≥24.	None, <1 drink/wk, 1–6 drinks/wk, ≥1drink/d	Type 2 diabetes	Despite overall low rates of alcohol consumption, there was a reduced risk of incident diabetes in those who reported modest daily alcohol intake and were assigned to metformin or lifestyle modification. Moderate daily alcohol intake is associated with lower insulin secretion—an effect that warrants further investigation.
Gepner Y, Golan R, Harman-Boehm I, Henkin Y, Schwarzfuchs D, Shelef I, Durst R, et al. Effects of initiating moderate alcohol Intake on cardiometabolic risk in adults with type 2 diabetes: A 2-year randomized, controlled trial	Randomised controlled trial	Level II – "Intervention"	224 alcohol-abstaining adults with well-controlled type 2 diabetes mellitus (T2DM).	150 mL of mineral water, white wine, or red wine with dinner for 2 years.	Lipid and glycemic control profiles, blood pressure, liver biomarkers, medication use, symptoms, and quality of life.	This long-term RCT suggests that initiating moderate wine intake, especially red wine, among well-controlled diabetics as part of a healthy diet is apparently safe and modestly decreases cardiometabolic risk.
Shai, I., et al., Glycemic effects of moderate alcohol intake among patients with type 2 diabetes: a multicenter,	Randomised controlled trial	Level II – "Intervention"	109 patients (41-74 years old) with established type 2 diabetes who abstained from alcohol	150 ml wine (13 g alcohol) or non-alcoholic diet beer (control) each day during a 3-month	Fasting plasma glucose	Among patients with type 2 diabetes who had previously abstained from alcohol, initiation of moderate daily alcohol consumption reduced FPG but not postprandial

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
randomized, clinical intervention trial				multicenter trial		glucose.
Fagherazzi G, Vilier A, Lajous M, Boutron-Ruault MC, Balkau B, Clavel-Chapelon F, Bonnet F. Wine consumption throughout life is inversely associated with type 2 diabetes risk, but only in overweight individuals: results from a large female French cohort study	Prospective cohort	II	66,485 women from the French prospective E3N-EPIC cohort	Wine consumption (1 drink = 150 mL): Non-alcohol consumer, <0.5 drinks/day, 0.5–1 drink/day, 1–2 drinks/day, ≥2 drinks/day	Type 2 diabetes (T2D)	Women who started to drink wine early in life (around age 10–15 years) were at a significantly lower risk than lifetime abstainers. In our study, wine drinking was inversely associated with T2D risk but only in overweight women.
Heianza Y, Arase Y, Saito K, Tsuji H, Fujihara K, Hsieh SD, Kodama S, Shimano H, Yamada N, Hara S, Sone H. Role of alcohol drinking pattern in type 2 diabetes in Japanese men: the Toranomon Hospital Health Management Center Study 11 (TOPICS 11)	Prospective cohort	II	1650 Japanese men without diabetes	Lifetime abstainers, Past drinkers, Alcohol consumption (g ethanol/wk): 8–54, 55–98, 99–160, 161–229, 230–287, 288–748	Type 2 diabetes	Among current drinkers, a drinking pattern of ,1 drink per occasion regularly over 6 times within a week was associated with the lowest risk of developing diabetes. Usual quantity per drinking occasion was a more important determinant than was weekly drinking frequency in the association between alcohol consumption and risk of diabetes in Japanese men.
Imamura F, Lichtenstein AH, Dallal GE, Meigs JB, Jacques PF. Confounding by dietary patterns of the inverse association between alcohol consumption and type 2 diabetes risk	Prospective cohort	II	2,879 healthy adults	none, 0.1–1.0, 1.1–3.4, 3.5–8.9, >9.0 drinks/week	Type 2 diabetes	The data suggest that alcohol intake, not dietary patterns associated with alcohol intake, is responsible for the observed inverse association with type 2 diabetes mellitus risk
Joosten MM, Grobbee DE, van der A DL, Verschuren WM, Hendriks HF, Beulens JW. Combined effect of alcohol consumption and lifestyle behaviors on risk of type 2 diabetes	Prospective cohort	II	Dutch cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC) cohorts (n=40,011)	None; 0-5 g/d; 5-15 g/d; >15g/d	Type 2 diabetes	In subjects already at lower risk of type 2 diabetes on the basis of multiple low-risk lifestyle behaviors, moderate alcohol consumption was associated with about 40% lower risk compared with abstention.
Ley SH, Sun Q, Jimenez MC, Rexrode KM,	Prospective cohort	II	Diabetes-free female participants in	Alcohol consumption (0, 0.1–4.9, 5–14.9	Type 2 diabetes	Fetuin-A and insulin explain a significant proportion of the

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Manson JE, Jensen MK, Rimm EB, Hu FB. Association between alcohol consumption and plasma fetuin-A and its contribution to incident type 2 diabetes in women.			the Nurses' Health Study (n =1,331)	and ≥15 g/day).		association between alcohol consumption and incident type 2 diabetes.
Marques-Vidal P, Vollenweider P, Waeber G. Alcohol consumption and incidence of type 2 diabetes	Prospective cohort	II	4765 participants	0, 1-13, 14-27, and ≥ 28 drinks/week.	Type 2 diabetes (T2DM)	Moderate-high alcohol consumption is associated with a lower risk of T2DM but not of T2DM+ impaired fasting glucose (IFG).
Mekary RA, Rimm EB, Giovannucci E, et al. Joint association of glycemic load and alcohol intake with type 2 diabetes incidence in women	Prospective cohort	II	Participants from the Nurses' Health Study who were free of T2D, cardiovascular disease, or cancer (n = 81,827) at baseline	0 to <5, 5 to <15, 15+ (g/day)	Type 2 diabetes	Our findings suggest that a higher alcohol intake (≥15 g/d) attenuates the positive association between glycemic load and T2D incidence
Rasouli B, Ahlbom A, Andersson T, Grill V, Midthjell K, Olsson L, Carlsson S. Alcohol consumption is associated with reduced risk of Type 2 diabetes and autoimmune diabetes in adults: results from the Nord-Trøndelag health study	Prospective cohort	II	90 296 individuals, free of diabetes at baseline	Abstainers, < 1, 1–4, 5–10 and > 10 times in the last 14 days	Type 2 diabetes and autoimmune diabetes	Moderate alcohol consumption associates with reduced risk of both Type 2 diabetes and autoimmune diabetes. A protective effect of alcohol intake may be limited to men. High alcohol consumption does not seem to carry an increased risk of diabetes.
Shi L, Shu XO, Li H, Cai H, Liu Q, Zheng W, Xiang YB, Villegas R. Physical activity, smoking, and alcohol consumption in association with incidence of type 2 diabetes among middle-aged and elderly Chinese men	Prospective cohort	II	51 464 Chinese men aged 40–74 years free of T2DM, coronary heart disease (CHD), and stroke	Alcohol intake (1 drink = 1 unit =4-ounce glass of wine, one 12-ounce can of beer, or one ounce of liquor): non-drinkers, occasional or light drinkers (<1 drink/day), moderate drinkers (1.0–2.99 drinks/day), and heavy drinkers (≥3 drinks/day).	Type 2 diabetes	Physical activity and moderate alcohol intake are inversely associated with T2DM risk

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Beulens JW, Rimm EB, Hu FB, Hendriks HF, Mukamal KJ. Alcohol consumption, mediating biomarkers and risk of type 2 diabetes among middle-aged women	Case-control (nested)	III-3	705 women with incident diabetes and 787 matched control subjects	Alcohol consumption (g/day): did not consume alcohol, 0–12.5 g/day, 12.5–25 g/day, 25–37.5 g/day, 37.5–50 g/day, 50–62.5 g/day, 62.5–75 g/day, 100 g/day.	Type 2 diabetes	Alcohol consumption was associated with a decreased risk of diabetes
Rasouli B, Andersson T, Carlsson PO, Dorkhan M, Grill V, Groop L, Martinell M, Tuomi T, Carlsson S. Alcohol and the risk for latent autoimmune diabetes in adults: results based on Swedish ESTRID study	Case-control	III-3	250 incident cases, 1012 randomly selected controls aged ≥35	non-drinkers, and consumers of 0.01–4.9, 5–14.9, 15–24.9, and R25 g alcohol/day	Latent autoimmune diabetes in adults (LADA)	Our findings indicate that alcohol intake may reduce the risk of type 2 diabetes and type 2-like LADA, but has no beneficial effects on diabetes-related autoimmunity.
Rohwer RD, Liu S, You NC, Buring JE, Manson JE, Song Y. Interrelationship between alcohol intake and endogenous sex-steroid hormones on diabetes risk in postmenopausal women	Case-control	III-3	718 postmenopausal women	rarely/never, 1-3 drinks/month, 1-6 drinks/week, 1+ drinks/day	Type 2 diabetes (T2D)	Baseline concentrations of estradiol, with or without SHBG, might influence the alcohol-T2D association in postmenopausal women
Metcalf PA, Scragg RK, Jackson R. Light to moderate alcohol consumption is protective for type 2 diabetes mellitus in normal weight and overweight individuals but not the obese	Cross-sectional	IV	5,512 Maori, Pacific Island, and European workers (3,992 men, 1520 women) aged 40 years and above	Nondrinker, <5, < 20, ≥20 g/day	Type 2 diabetes	Alcohol consumption was protective against diagnosis of T2DM in normal and overweight individuals but not in the obese.

Pre-diabetes

Table 36 Pre-diabetes

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Cullmann M, Hilding A, Östenson CG. Alcohol consumption	Prospective cohort	II	• from the 2227 men and 3205 women with	Alcohol consumption (g/day):	Pre-diabetes and type 2 diabetes	High alcohol consumption increases the risk of abnormal glucose regulation

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
and risk of pre-diabetes and type 2 diabetes development in a Swedish population			normal glucose tolerance (NGT) at baseline the development of pre-diabetes or Type 2 diabetes at follow-up was studied in 2070 men and 3058 women • from the 2383 men and 3329 women with either normal glucose tolerance or pre-diabetes at baseline the development of Type 2 diabetes at follow-up was studied in 2217men and 3176 women	Abstainers Occasional (0.01–6.79) Low (6.80–13.01) Medium (13.02–22.13) High (≥22.14)		in men. In women the associations are more complex: decreased risk with low or medium intake and increased risk with high alcohol intake.
Suebsamran P, Choenchoopon H, Rojanasaksothorn S, Loiha S, Chamnan P. Association between alcohol consumption and pre-diabetes among 383,442 Thai population aged 15 years and older in Ubon Ratchathani: Analytical Cross-Sectional Study	Cross-sectional	IV	83,442 men and women participating in the Health Checks Ubon Ratchathani (HCUR) project in 2007.	Alcohol consumption was categorized into six groups: never, occasionally, 1-2 times/month, 1-2 times/week, 3-4 times/week and every day.	Pre-diabetes	Alcohol consumption was independently associated with the risk of pre-diabetes in a possibly dose response fashion (adjusted odds ratio (ORadj of 1.80, 95% CI 1.53-2.11, p<0.001 and 1.47, 95% CI 1.28-1.68, p<0.001) for those who drank every day and 3-4 times a week, as compared to no consumption). Mild-moderate alcohol (1-2 times/month) consumption appeared to be related with a decreased risk (ORadj = 0.89, 95% CI, 0.82-0.97, p = 0.006).

Obesity/Weight gain

Table 37 Obesity/Weight gain

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Sayon-Orea C, Martinez-Gonzalez MA, Bes-Rastrollo M. Alcohol consumption and body weight: a systematic review	Systematic review	II	14 cross-sectional, 13 prospective cohort, and 4 intervention trials looking at the effects of alcohol consumption on body weight.	Various	Body weight	The overall results do not conclusively confirm a positive association between alcohol consumption and weight gain; however, positive findings between alcohol intake and weight gain have been reported, mainly from studies with data on higher levels of drinking.
Addolorato G, Leggio L, Ojetti V, Capristo E, Gasbarrini G, Gasbarrini A. Effects of short-term moderate alcohol administration on oxidative stress and nutritional status in healthy males	Randomised controlled trial	Level II – "Intervention"	Healthy individuals	Randomised to receive either beer, wine, spirit or control (abstinence)	Plasma malodaldeide (MDA) levels, body weight, BMI, fat mass	"...controls did not present significant changes in the assessed parameters, while a significant increase of malondyaldeide (MDA) and a significant decrease of reduced-glutathione and E-vitamin in group A, B and C and of ATP in group C were observed. Fat mass (FM) increased slightly in group A and B and decreased in group C. Ethanol decreased antioxidant parameters and increased lipoperoxidation parameters. However some of these changes appeared attenuated when ethanol was consumed in beer or wine. Finally, short-term moderate ethanol intake appeared to influence the FM, although it was not able to significantly affect nutritional or body composition."
Chakraborty S. Analysis of NHANES 1999-2002 data reveals noteworthy association of alcohol consumption with obesity	Prospective cohort	II	9,193 individuals	Frequency of alcohol consumption in the past 12 months (in days): None; 1-15 days; 16-30 days; 31-45 days; ≥46 days. Average number of alcoholic drinks/day in the past 12 months:	Obesity	Frequent or heavy alcohol consumption is associated with greater odds of being obese.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
				Up to 3 drinks/day; >3 drinks/day. No. of days of binge drinking in past 12 months: 0; 1-90 days; 91-180 days; 81-365 days		
Lourenço S, Oliveira A, Lopes C. The effect of current and lifetime alcohol consumption on overall and central obesity	Prospective cohort	II	Participants were randomly selected from the non-institutionalized Porto inhabitants, aged ≥18 years (EPIPorto Study: 1999-2003)	Current and lifetime consumption (g/day): men - 0, 0.1-15.0, 15.1-30.0, 30.1-60.0, >60.0; women - 0, 0.1-15.0, 15.1-30.0, >30.0	Overall and central obesity	Independently of social and behavioural features, current and lifetime alcohol consumption were positively associated with overall and central obesity, in both women and men.
Pajari M, Pietiläinen KH, Kaprio J, Rose RJ, Saarni SE. The effect of alcohol consumption on later obesity in early adulthood--a population-based longitudinal study	Prospective cohort	II	5563 Finnish twins born in 1975–1979	Frequency of alcohol use: never, once per year or less, three to four times per year, about once per couple of months, about once per month, twice per month, once per week, twice per week and daily. Binge drinking: never, less than monthly, about one to two times a month and weekly or more often	Obesity	These results from a population-based study with a large set of confounding variables suggest that alcohol use during adolescence has at most a minor effect on weight gain or development of abdominal obesity from adolescence to young adulthood.
Sayon-Orea C, Bes-Rastrollo M, Nuñez-Cordoba JM, Basterra-Gortari FJ, Beunza JJ, Martinez-Gonzalez MA. Type of alcoholic beverage and incidence of overweight/obesity in a Mediterranean cohort: the SUN project	Prospective cohort	II	9318 adults without previous chronic disease	Drinks per week: 0, <1, 1–<2, 2–<7, ≥7.	Weight change	Beer and spirits consumption (7 drinks/wk) was associated with a +119 g/y (95%CI: +27 to +212) higher average yearly weight gain. It was also associated with a higher risk of developing overweight/obesity compared with non-drinkers. No association between wine consumption and yearly weight change or the risk of developing overweight/obesity was

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
						apparent.
Wang L, Lee IM, Manson JE, Buring JE, Sesso HD. Alcohol consumption, weight gain, and risk of becoming overweight in middle-aged and older women	Prospective cohort	II	19,220 US women aged ≥39 years	non-drinker, >0 - <5, 5-<15, 15-<30, ≥30 g/day	Weight gain	Compared with non-drinkers, initially normal-weight women that consumed light-to-moderate amount of alcohol experienced smaller weight gain and lower risk of becoming overweight and/or obese during 12.9 years of follow-up.
Wakabayashi I. Age-dependent inverse association between alcohol consumption and obesity in Japanese men	Cross-sectional	IV	20–70 years old Japanese men, (n = 36,121)	non-drinkers, light (<22 g ethanol per day), moderate (⩾ 22 and<44 g ethanol per day) and heavy (⩾ 44 g ethanol per day) drinkers	Obesity	The results suggest that alcohol consumption is associated with lower risk of obesity in Japanese men and this association is more prominent in younger men than in older men.

Cognitive health

Cognitive function/decline

Table 38 Cognitive function/decline

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Scholey A, Benson S, Stough C, Stockley C. Effects of resveratrol and alcohol on mood and cognitive function in older individuals	Randomised controlled trial	Level II – "Intervention"	16 volunteers (mean age 70.44 years)	Tested on two occasions, once following 100 ml red wine; once following the same beverage but enriched with 200 mg resveratrol.	Cognitive Demand Battery comprising Serial Threes, Serial Sevens, a Rapid Visual Information Processing task and ratings of mental fatigue	Compared with red wine alone, resveratrol-enriched wine was associated with significantly enhanced Serial Sevens performance. Conversely red wine alone resulted in better performance during Serial Threes.
Beydoun MA, Gamaldo AA, Beydoun HA, Tanaka T, Tucker KL, Talegawkar SA, Ferrucci L, Zonderman AB. Caffeine and alcohol intakes and overall nutrient adequacy are associated with longitudinal cognitive performance among U.S. adults	Prospective cohort	II	3047 participants in the Baltimore Longitudinal Study of Aging	Alcohol consumption: 14 to 28 g/d, >28 g/d	Cognitive performance	Alcohol intake was associated with slower improvement on letter fluency and global cognition among those aged <70 y at baseline. Conversely, alcohol intake was associated with better attention and working memory performance, particularly among men and individuals ≥70 y at baseline. Some nonlinear associations were found, with moderate alcohol consumption only showing a beneficial effect on baseline working memory, specifically when compared with lower intakes. Longitudinal associations indicated that alcohol has potentially deleterious effects over time with lower intake being a better choice than moderate intake.
Byeon, H., et al., Association of alcohol drinking with verbal and visuospatial memory impairment in older adults: Clinical Research Center for Dementia of South Korea (CREDOS) study	Prospective cohort	II	1,572, aged 60 years, in the hospital-based registry of the Clinical Research Center for Dementia of South Korea	Abstainer, past drinker, moderate drinker (≤drinks/week and ≤3/day), heavy drinker (>moderate) [Drink=14g alcohol]	Verbal and visuospatial memory	Those who consumed alcohol moderately, compared with abstainers, had a lower odds of verbal memory impairment. Visuospatial memory, however, was not significantly associated with alcohol consumption.
Davis BJ, Vidal JS, Garcia M, Aspelund T, van Buchem MA, Jonsdottir MK,	Prospective cohort	II	3,363 men and women	Female current drinkers were classified as very light (<1 drink per week); light-	Cognitive function	Among women and not men, adjusting for demographic and cardiovascular risk factors, current drinkers had significantly higher global

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Sigurdsson S, Harris TB, Gudnason V, Launer LJ. The alcohol paradox: light-to-moderate alcohol consumption, cognitive function, and brain volume				to-moderate (1–7 drinks per week; and heavy (>7 drinks per week). Current male drinkers were categorized as very light (<1 drink per week), light (1–7 drinks per week), moderate (7–14 drinks per week), and heavy drinkers (>14 drinks per week).		cognitive function (GCF) scores than abstainers and former drinkers ($p < .0001$); and GCF was associated with amount consumed. Total brain volume (TBV) was not associated with drinking status or amount consumed in men or women. GCF and TBV did significantly differ in their associations across alcohol categories (p interaction < .001). Within categories of alcohol intake, GCF and TBV were positively associated.
Downer B, Jiang Y, Zanjani F, Fardo D. Effects of Alcohol Consumption on Cognition and Regional Brain Volumes Among Older Adults	Prospective cohort	II	664 patients	(1) abstainer, 0 drinks per week; (2) light, 1 to 6 drinks per week; (3) moderate, 7 to 14 drinks per week; and (4) heavy, 15 to 34 drinks per week	Cognitive function	The results from multiple linear regression models indicate that late life, but not midlife, alcohol consumption status is associated with episodic memory and hippocampal volume. Compared to late life abstainers, moderate consumers had larger hippocampal volume, and light consumers had higher episodic memory. The differences in episodic memory according to late life alcohol consumption status were no longer significant when hippocampal volume was included in the regression model. The findings from this study provide new evidence that hippocampal volume may contribute to the observed differences in episodic memory among older adults and late life alcohol consumption status.
Gross AL, Rebok GW, Ford DE, Chu AY, Gallo JJ, Liang KY, Meoni LA, Shihab HM, Wang NY, Klag MJ. Alcohol consumption and domain-specific cognitive function in older adults: longitudinal data from the Johns	Prospective cohort	II	1,216 men and 121 women who graduated from The Johns Hopkins Medical School between 1948 and 1964	Daily/almost daily, 3–4×/wk, 1–2x/wk, 2×/month or less,	Cognitive scores	Results suggest that higher alcohol consumption in midlife may impair some components of executive function in late life.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Hopkins Precursors Study						
Hagger-Johnson G, Sabia S, Brunner EJ, Shipley M, Bobak M, Marmot M, Kivimaki M, Singh-Manoux A. Combined impact of smoking and heavy alcohol use on cognitive decline in early old age: Whitehall II prospective cohort study	Prospective cohort	II	6473 adults (72% men), mean age 55.76 years	Non-drinkers, 1–14 units/week for women and 1–21 for men, >14 for women and >21 for men	Cognitive decline	Individuals who were smokers who drank alcohol heavily had a 36% faster cognitive decline, equivalent to an age effect of 2 extra years over 10-year follow-up, compared with individuals who were non-smoking moderate drinkers.
Hoang TD, Byers AL, Barnes DE, Yaffe K. Alcohol consumption patterns and cognitive impairment in older women.	Prospective cohort	II	1309 women ≥ 65 years old	Non-drinker, light: >0 to <3, drinks per week, moderate: ≥ 3 to ≤ 7 drinks per week, and heavy drinkers, women who consumed > 7 drinks per week, and possible binge drinking was estimated as reporting consumption of >4 drinks on one occasion	Cognitive function	Women in their 9th and 10th decade of life who decrease alcohol use may be at risk of cognitive impairment.
Hogenkamp PS, Benedict C, Sjögren P, Kilander L, Lind L, Schiöth HB. Late-life alcohol consumption and cognitive function in elderly men	Prospective cohort	II	Initial cohort of 50-year-old men (n=2,322), 1,221 men were restudied 20 years later	0, 1, 2, >3 drinks/day	Cognitive function	Despite cross-sectional associations with performance in a test of executive functioning, moderate intake of alcohol was not linked to differences in cognitive performance between ages 70 and 77 in the present study. Thus, our findings do not support the view that daily moderate alcohol consumption is a recommendable strategy to slow cognitive aging in elderly populations.
Kesse-Guyot E, Andreeva VA, Jeandel C, Ferry M, Touvier M, Hercberg S, Galan P. Alcohol consumption in midlife and	Prospective cohort	II	SU.VI.MAX study (n=12,741 French adults)	Alcohol consumption in midlife: Abstainers; low to moderate drinkers (<=3 drinks/day); heavy drinkers	Cognitive performance	In men, heavy but not extreme drinking was associated with higher global cognitive scores. Given the known harmful effects of alcohol even in low doses regarding risk of cancer, the study does not provide a basis for modifying current

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
cognitive performance assessed 13 years later in the SU.VI.MAX 2 cohort.				(>3 drinks/day)		public health messages.
Kim S, Kim Y, Park SM. Association between alcohol drinking behaviour and cognitive function: results from a nationwide longitudinal study of South Korea	Prospective cohort	II	Korean Longitudinal Study of Aging (KLoSA) (n=5157)	No alcohol drinking; past alcohol drinking; non-problematic alcohol drinking; problematic alcohol drinking	Behaviour and cognitive function	Those with problematic alcohol drinking behaviour could be at an increased risk of cognitive impairment/decline.
Kumari M, Holmes MV, Dale CE, Hubacek JA, Palmer TM, Pikhart H, Peasey A, Britton A, Horvat P, Kubinova R, Malyutina S, Pajak A, Tamosiunas A, Shankar A, Singh-Manoux A, Voevoda M, Kivimaki M, Hingorani AD, Marmot MG, Casas JP, Bobak M. Alcohol consumption and cognitive performance: a Mendelian randomization study.	Prospective cohort	II	Six large epidemiological cohorts combined (n>34 000)	0, >0–<5, ≥5–<10, ≥10–<15, ≥15–<20, ≥20 British units/week	Cognitive performance	No strong evidence of a causal association between alcohol consumption and cognitive ability.
Moussa MN, Simpson SL, Mayhugh RE, Grata ME, Burdette JH, Porrino LJ, Laurienti PJ. Long-term moderate alcohol consumption does not exacerbate age-related cognitive decline in	Prospective cohort	II	63 individuals, of these individuals 22 were younger adults (24–35 years old) and 41 were older adults (65–80 years old).	Light alcohol consumption was defined to be 1–8 drinks per month and did not exceed two drinks per week. Moderate alcohol consump- tion was defined as 7–21 drinks per week and did not exceed three	Cognitive decline	The focus of the study was then limited to light and moderate older drinkers, and whether or not long-term moderate alcohol consumption exacerbated age-related cognitive decline. No evidence was found to support the idea that long-term moderate alcohol consumption in older adults exacerbates age-related cognitive decline.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
healthy, community-dwelling older adults				drinks per day.		
Nooyens AC, Bueno-de-Mesquita HB, van Gelder BM, van Boxtel MP, Verschuren WM. Consumption of alcoholic beverages and cognitive decline at middle age: the Doetinchem Cohort Study	Prospective cohort	II	2613 men and women of the Doetinchem Cohort Study, aged 43–70 years at baseline	non-drinker, 0 to 2 glasses/day, >2 glasses/day	Cognitive decline	Moderate red wine consumption was associated with less decline in cognitive function in middle- aged men and women.
Sabia, S., et al., Alcohol consumption and cognitive decline in early old age.	Prospective cohort	II	5,054 men and 2,099 women from the Whitehall II cohort study	10-y abstainers, Alcohol cessation, Occasional drinkers, mean alcohol consumption over past 10y (men: 0.1–19.9, 20–35.9, 36–112g/day; women: 0.1–9.9, 10–18.9, 19–66g/day)	Global cognitive score, Executive function, Memory	In men, there were no differences in cognitive decline among alcohol abstainers, quitters, and light or moderate alcohol drinkers. In women, compared with those drinking 0.1 to 9.9 g/d of alcohol, 10-year abstainers showed faster decline in the global cognitive score and executive function. Excessive alcohol consumption in men (≥36 g/d) was associated with faster cognitive decline compared with light to moderate alcohol consumption.
Stott DJ, Falconer A, Kerr GD, Murray HM, Trompet S, Westendorp RG, Buckley B, de Craen AJ, Sattar N, Ford I. Does low to moderate alcohol intake protect against cognitive decline in older people	Prospective cohort	II	5,804 people (3,000 women) aged 70 to 82 and randomized to pravastatin or placebo in the Prospective Study of Pravastatin in the Elderly at Risk.	Alcohol consumption (U/week): Women - Non-drinkers, low intake (1-3U/week), moderate intake (>3U/week); Men - Non-drinker, low intake (1-7U/week), moderate intake (>7U/week)	Cognitive performance	Drinking low to moderate amounts of alcohol may delay age-associated cognitive decline in older women (including slowing deterioration in global cognitive function), but these apparent benefits were not clearly seen in older men.
Townsend MK, Devore E, Kang JH, Grodstein F. The relation between moderate alcohol consumption and	Prospective cohort	II	From 1995 to 2001, cognitive function was assessed in 1698 women aged 71–80 years with type	Alcohol consumed per day. None vs 1.0-9.9g/d vs 10.0-30.0g/day	Cognition	Among women with type 2 diabetes, moderate alcohol was associated with better initial cognition, but not reduced rates of cognitive decline. Thus, we found no clear and consistent cognitive

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
cognitive function in older women with type 2 diabetes			2 diabetes in the Nurses' Health Study.			benefits of moderate alcohol in diabetes.
Zanjani F, Downer BG, Kruger TM, Willis SL, Schaie KW. Alcohol effects on cognitive change in middle-aged and older adults	Prospective cohort	II	571adults aged 45+	Abstainers, moderate, at-risk drinking	Cognitive changes	In this study, consuming alcohol is indicative of cognitive stability. Future research needs to design studies that can make concrete recommendations about the relationship between drinking status and cognition.
Almeida OP, Hankey GJ, Yeap BB, Golledge J, Flicker L. Alcohol consumption and cognitive impairment in older men: a mendelian randomization study	Retrospective cohort study	III-2	Community-dwelling older men living in the metropolitan region of Perth	Nondrinker, irregular, < 15 drinks/week, 15-27 drinks/week, 28-34 drinks/week, > 35 drinks per week	Cognitive impairment	"Alcohol consumption, including heavy regular drinking and abuse, is not a direct cause of cognitive impairment in later life. Our results are consistent with the possibility, but do not prove, that regular moderate drinking decreases the risk of cognitive impairment in older men."
Hoffman L, Nixon SJ. Alcohol doesn't always compromise cognitive function: Exploring moderate doses in young adults	Cross-sectional	IV	94 participants aged 25–35 years	Breath alcohol concentration of 0 mg/dl (placebo), 40 mg/dl (low), or 65 mg/dl (moderate)	Cognitive function	Consistent with our previous studies, these data suggest that low and moderate doses of alcohol may not compromise cognitive ability in non–problem drinkers under certain task conditions.
Horvat P, Richards M, Kubinova R, Pajak A, Malyutina S, Shishkin S, Pikhart H, Peasey A, Marmot MG, Singh-Manoux A, Bobak M. Alcohol consumption, drinking patterns, and cognitive function in older Eastern European adults.	Cross-sectional	IV	14,575 participants, aged 47 to 78 years	Drinking frequency in the past year was categorized as follows: never, 1 monthly, 1–3 times monthly, 1–4 times weekly, and 5+ times weekly. Categories of average daily alcohol intake, using lower cutoffs in women: nondrinkers (0 g/d), light (≤5/10 g/d), moderate (5–20/10–40 g/d), and heavy drinkers (≥20/40 g/d). Third, binge drinking was	Cognitive function	Regular and episodic heavy drinking were not consistently associated with cognitive function. Worse cognition in participants who stopped drinking during follow-up suggests that inclusion of less healthy ex-drinkers may partly explain poorer cognition in non-drinkers.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
				defined as consuming ≥60 and 100 g of ethanol in women and men in one episode at least monthly		
Lopes MA, Furtado EF, Ferrioli E, Litvoc J, Bottino CM. Prevalence of alcohol-related problems in an elderly population and their association with cognitive impairment and dementia	Cross-sectional	IV	1,145 individuals aged 60 years or older in Ribeirao Preto, Brazil.	Mild–moderate alcohol use (CAGE <2), no alcohol use	Cognitive and functional impairment and dementia	Our findings suggest that alcohol use does not have a linear relationship with cognitive decline. A significant association between alcohol-related problems and cognitive dysfunction was found only in females. ‘‘Heavy alcohol use’’ was associated with higher cognitive and functional impairment and dementia rates compared to ‘‘mild–moderate alcohol use". ‘‘Mild–moderate alcohol use’’ had a tendency of association with lower cognitive and functional impairment and dementia rates when compared to ‘‘no alcohol use’’.
Mayhugh RE, Moussa MN, Simpson SL, Lyday RG, Burdette JH, Porrino LJ, Laurienti PJ. Moderate-heavy alcohol consumption lifestyle in older adults is associated with altered central executive network community structure during cognitive ta	Cross-sectional	IV	41 older adults (65–80 years) 22 young adults (24–35 years)	light (< 2 drinks/week and ≥1 drink/month, n = 20) or moderate-heavy (7–21 drinks/week, non-bingers, n = 21)	Cognitive function: Central Executive Network (CEN), and Default Mode Network (DMN) connectivity	The older adults had significantly lower whole brain connectivity (global efficiency) and lower regional connectivity (community structure) in the CEN during task and in the DMN at rest. Moderate-heavy older drinkers did not exhibit whole brain connectivity differences compared to the low drinkers. However, decreased CEN connectivity was observed during the task. There were no differences in the DMN connectivity between drinking groups. Taken together, a lifestyle including moderate-heavy alcohol consumption may be associated with further decreases in brain network connectivity within task-related networks in older adults.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Reas ET, Laughlin GA, Kritz-Silverstein D, Barrett-Connor E, McEvoy LK. Moderate, regular alcohol consumption is associated with higher cognitive function in older community-dwelling adults	Cross-sectional	IV	1624 individuals aged 51-99 years	Never drinker, Former drinker, light to moderate drinkers (average of less than one drink per day for women and less than two drinks per day for men; referred to hereafter as moderate drinkers), heavy drinkers (average of one to less than three drinks per day for women, two to less than four drinks per day for men; and excessive drinkers (average of three or more drinks per day for women, four or more drinks per day for men)	Cognitive function	In several cognitive domains, moderate, regular alcohol intake was associated with better cognitive function relative to not drinking or drinking less frequently. This suggests that beneficial cognitive effects of alcohol intake may be achieved with low levels of drinking that are unlikely to be associated with adverse effects in an aging population.
Woods AJ, Porges EC, Bryant VE, Seider T, Gongvatana A, Kahler CW, de la Monte S, Monti PM, Cohen RA. Current heavy alcohol consumption is associated with greater cognitive impairment in older adult	Cross-sectional	IV	66 participants	None, moderate,heavy alcohol consumption	Neurocognitive function	These data suggest that while heavy current alcohol consumption is associated with significant impairment in a number of neurocognitive domains, history of alcohol dependence, even in the absence of heavy current alcohol use, is associated with lasting negative consequences for neurocognitive function.

Dementia

Table 39 Dementia

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Handing EP, Andel R, Kadlecova P, Gatz M, Pedersen NL. Midlife Alcohol Consumption and Risk of Dementia Over 43 Years of Follow-Up: A Population-Based Study From the Swedish Twin Registry	Prospective cohort	II	12,326 members of the population-based Swedish Twin Registry	None (0), Light (>0 to ≤5), Moderate (>5 to ≤12), Heavy (>12 to ≤24), Very Heavy (>24 g/day)	Dementia	Averaging more than 12 grams of alcohol per day may increase risk of dementia. Alcohol from spirits appears particularly important for the increased dementia risk. Genetic and/or familial factors do not explain these associations. Alcohol use reduction may be a useful population-wide intervention strategy.
Langballe EM, Ask H, Holmen J, Stordal E, Saltvedt I, Selbæk G, Fikseaunet A, Bergh S, Nafstad P, Tambs K. Alcohol consumption and risk of dementia up to 27 years later in a large, population-based sample: the HUNT study, Norway	Prospective cohort	II	40,435 individuals in the Nord-Trøndelag Health Study	Alcohol consumption last 14 days: Abstainers; Drinking 0 times, not abstainers; Drinking 5 or more times; Unknown	Dementia	When adjusting for other factors associated with dementia, frequent alcohol drinking, but not abstaining from alcohol, is associated with increased dementia risk compared to drinking alcohol infrequently.
Mehlig K, Skoog I, Guo X, Schutze M, Gustafson D, Waern M, Ostling S, Bjorkelund C, Lissner L. Alcoholic beverages and incidence of dementia: 34-year follow-up of the prospective population study of women in goteborg	Prospective cohort	II	1,462 women aged 38–60 years	Never, Earlier but not during the last 10 years, Earlier but not during the last year, Monthly, Weekly, Several times a week, Daily	Dementia	In summary, the fact that we do not observe a significant association between total intake of alcoholic beverages and dementia may be a consequence of the opposing trends of wine and spirits described in this article
Ormstad H, Rosness TA, Bergem AL, Bjertness E, Strand BH; GENIDEM-Group. Alcohol consumption in	Prospective cohort	II	25,635 participants aged between 60 and 80 years at the time of examination from the Cohort	Alcohol use: Several times/week, Once/week, 2–3 times/month, Once, or <once/month, Abstainer	Dementia related death	These findings suggest that the risk of dementia related death is significantly higher among elderly abstainers than among those who drink alcohol.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
the elderly and risk of dementia related death—a Norwegian prospective study with a 17-year follow-up			of Norway (CONOR).			
Weyerer S, Schäufele M, Wiese B, Maier W, Tebarth F, van den Bussche H, Pentzek M, Bickel H, Luppa M, Riedel-Heller SG; German AgeCoDe Study group (German Study on Ageing, Cognition and Dementia in Primary Care Patients). Current alcohol consumption and its relationship to incident dementia: results from a 3-year follow-up study among primary care attenders aged 75 years and older	Prospective cohort	II	3,202 subjects (aged 75+ years) free of dementia at baseline	Abstinent, 1-9g, 10-19g, 20-29g, 30-39g, 40+g	Dementia	In agreement with meta-analyses that include younger age groups, our study suggests that light-to-moderate alcohol consumption is inversely related to incident dementia, also among individuals aged 75 years and older.
Xu G, Liu X, Yin Q, Zhu W, Zhang R, Fan X. Alcohol consumption and transition of mild cognitive impairment to dementia	Prospective cohort	II	176 patients with mild cognitive impairment (MCI)	Abstainers, light–moderate drinkers (≤2 drinks/day), as heavy drinkers (>2 drinks/day)	Risk of dementia	A J-shaped relationship may exist between alcohol consumption and cognitive decline in MCI patients. Light–moderate alcohol drinking may be associated with decreased risks for dementia in elderly patients with MCI.
Zhou S, Zhou R, Zhong T, Li R, Tan J, Zhou H. Association of smoking and alcohol drinking with dementia risk among elderly men in China. 2014	Prospective cohort	II	3170 men 60 years of age and older from one Chinese city were followed up annually for 7 years from July 2004 to June 2011	Daily drinking, weekly drinking, monthly drinking, and occasional drinking.	Diagnosis of any dementia	Daily drinking was related to increased risk of Alzheimer's disease (OR= 2.25, 95% CI 1.43-3.97) and vascular dementia (HR= 3.42, 95% CI 1.18-4.51) after 7 years follow-up.
Takahashi PY, Caldwell CR, Targonski PV. Effect of alcohol and tobacco use	Case-control	III-3	205 cases of vascular dementia were identified through	Ever, current, ever alcohol use	Vascular dementia	Current alcohol use appears to have protective effects against the development of vascular dementia: OR=0.48 (95% confidence interval: 0.31–

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
on vascular dementia: a matched case control study			medical record abstraction and were matched to 205 controls			0.74). The effects are more pronounced in subjects under age 80. Previous alcohol use was not protective.

Skin conditions

Hand eczema/Contact Sensitisation

Table 40 Hand eczema/Contact Sensitisation

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Hand eczema						
Anveden Berglind I, Alderling M, Meding B, Life-style factors and hand eczema.	Cross-sectional study	IV	Individuals aged 18 to 64 years in Stockholm	High (intake of more than 35 g for men and 25 g per day for women) and low alcohol	Hand eczema	"Men who reported high alcohol intake reported hand eczema less often, prevalence proportion ratio 0.958 (95% CI 0.930 to 0.987)"
Thyssen JP, Linneberg A, Menné T, Nielsen NH, Johansen JD, The effect of tobacco smoking and alcohol consumption on the prevalence of self-reported hand eczema: a cross-sectional population-based study.	Cross-sectional	IV	A random sample of 7931 subjects aged 18–69 years old from Copenhagen.	Alcohol consumption weekly (0, 1–7, 8–14, ≥ 15 g)	Self-reported hand eczema	Alcohol consumption was not associated with hand eczema.
Contact sensitisation						
Thyssen JP, Nielsen NH, Linneberg A, The association between alcohol consumption and contact sensitization in Danish adults: the Glostrup Allergy Study.	Prospective cohort	II	In 1990, self-reported consumption of alcohol and patch testing results were assessed in 1112 subjects, aged 15–69 years, participating in a population based cross-sectional study in Glostrup, Denmark. In 1998, they were invited to a follow-up and 734 were re-examined.	Drinks per week (0, 1-7, 8-14, ≥15)	Incidence of contact sensitisation.	Among women, individuals who reported no consumption of alcohol were more likely to develop contact sensitization (adjusted OR 2.12, 95% CI: 0.98–0.61) during the 8-year follow-up period. A positive trend test among women was detected (P = 0.045). A possible association could not be evaluated among men as the number of incident positive patch test reactions was too low.
Thyssen JP, Johansen JD, Menné T, Nielsen NH, Linneberg A.	Cross-sectional	IV	A random sample of 7931 subjects	Alcohol consumption weekly (0, 1–7, 8–14, ≥ 15	Contact sensitisation	This study confirmed that smoking is associated with nickel sensitization, but rejected an association with alcohol consumption.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Effect of tobacco smoking and alcohol consumption on the prevalence of nickel sensitization and contact sensitization.			aged 18–69 years old from Copenhagen.	g)		

Psoriasis

Table 41 Psoriasis

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Qureshi AA, Dominguez PL, Choi HK, Han J, Curhan G. Alcohol intake and risk of incident psoriasis in US women: a prospective study.	Prospective cohort	II	116,671 US women aged 27 to 44 years	none, 1 to 4 g per week, 5 to 9 g per week, 10 to14 g per week, 15 to 29 g per week, and 30 g or more per week	Psoriasis	Non-light beer intake is associated with an increased risk of developing psoriasis among women. Other alcoholic beverages did not increase the risk of psoriasis in this study.
Gerdes S, Zahl VA, Weichenthal M, Mrowietz U. Smoking and alcohol intake in severely affected patients with psoriasis in Germany	Retrospective cohort	III-2	1,203 patients with severe psoriasis	Excessive drinkers, defined as more than 1 drink/day on a regular basis; normal drinkers, defined as less than or equal to 1 drink/day; did not drink at all.	Severity of psoriasis	Smoking and alcohol intake are independently associated with severe forms of psoriasis. Disease severity is correlated with smoking in both genders as well as with alcohol intake in female patients.
Zhu KJ, Zhu CY, Fan YM. Alcohol consumption and psoriatic risk: a meta-analysis of case-control studies. 2012	Systematic review (meta-analysis of case-control studies)	III-3	N=15 case-control studies.	Non-drinkers; drinkers; drinkers of 1–20 drinks/ month; and 20 drinks /month or more	Psoriasis	The overall OR of psoriasis for drinking persons compared to those with non-drinking was 1.531 (95% confidence interval [CI] = 1.164–2.014, P = 0.002) and the association remains statistically significant across a number of stratified analyses in European descent subgroup (OR = 1.432, 95% CI = 1.085–1.889, P = 0.011).
Brenaut E, Horreau C, Pouplard C, Barnetche T, Paul C, Richard MA, Joly P, Le Maître	Systematic review	III-3	28 studies (16 case-control, 1 cohort, 2 cross-sectional, 9	Various	Psoriasis	Alcohol consumption seems to be greater in psoriasis patients than in the general population. However, there is not enough evidence to establish whether alcohol consumption is indeed a risk factor for psoriasis.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
M, Aractingi S, Aubin F, Cribier B, Jullien D, Ortonne JP, Misery L Alcohol consumption and psoriasis: a systematic literature review			not reported)			
Jankovic S, Raznatovic M, Marinkovic J, Jankovic J, Maksimovic N. Risk factors for psoriasis: A case-control study.	Case-control	III-3	cases: psoriatic outpatients (n=110); 200 controls	Alcohol consumption no/yes	Psoriasis	Alcohol consumption is a risk factor for psoriasis.
Bø K, Thoresen M, Dalgard F, Smokers report more psoriasis, but not atopic dermatitis or hand eczema: results from a Norwegian population survey among adults.	Cross-sectional	IV	18,747 adults in Oslo.	4–7 times per week, 1–3 times per week, Sometimes last year up to 2–3 times per month, Not last year/never	Psoriasis, atopic dermatitis or hand eczema	Reporting drinking alcohol 4–7 times per week was crudely associated with reporting psoriasis in men, but not in the adjusted model.

Rosacea

Table 42 Rosacea

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Aldrich N, Gerstenblith M, Fu P, Tuttle MS, Varma P, Gotow E, Cooper KD, Mann M, Popkin DL, Genetic vs Environmental Factors That Correlate With Rosacea: A Cohort-Based Survey of Twins	Prospective cohort study	II	Twins with or without risk of developing rosacea	Alcohol history	Rosacea	"A higher National Rosacea Society (NRS) score was also significantly associated with the following factors: age (r = 0.38; P < .001) and lifetime UV radiation exposure (r = 0.26; P < .001). These associations remained after use of propensity score matching to adjust for multicollinearity. Other correlated variables included body mass index (r = 0.21; P < .001), smoking (r = 0.10; P < .02), alcohol consumption (r = 0.11; P = .01), cardiovascular comorbidity (r =0.17;P < .001), and skin cancer comorbidity (r = 0.19; P < .001)."
Abram K, Silm H, Maaroos HI, Oona M, Risk factors associated with	Case-control study	III-3	Patients with rosacea or healthy controls	Alcohol intake: never, < 1 time per month, 1-3	Family history, photos of different subytpes of	"There were no statistically significant differences either in gender, Helicobacter pylori serostatus, caffeine intake, alcohol consumption, occupational environment, or education

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
rosacea.				times every month, weekend use, 1-2 times every week, frequent use, 3 or more times per week	rosaces, Helicobacter plyori diagnosis, presence of frequent flushing episodes	level between rosacea patients and controls"
Spoendlin J, Voegel JJ, Jick SS, Meier CR, A study on the epidemiology of rosacea in the U.K.	Case-control	III-3	Using the U.K.-based General Practi e Research Database, patients with an incident diagnosis of rosacea between 1995 and 2009 were identified and matched them (1 : 1) to rosacea-free control patients.	Alcohol consumption (0, 1–4, 5–9,10–14, 15–24 or 25+ units per week, or unknown)	Rosacea	Alcohol consumption was associated with a marginal risk increase.

Other outcomes

Table 43 Other

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Psoriatic Arthritis						
Wu S, Cho E, Li WQ, Han J, Qureshi AA, Alcohol intake and risk of incident psoriatic arthritis in women	Prospective cohort	II	82,672 US women	None, 0.1–14.9 g/d,15.0–29.9 g/d, ≥30.0 g/d	Psoriatic Arthritis	Excessive alcohol intake was associated with an increased risk of incident Psoriatic Arthritis in a cohort of US women.
Skin damage						
Martires KJ, Fu P, Polster AM, Cooper KD, Baron ED, Factors that affect skin aging: a cohort-based survey on twins.	Cross-sectional	IV	130 twins	"no drinking"; 1, "drinking 1 day"; 3, "drinking 3 to 5 days"; 4, "drinking 6 to 9 days"; 5, "drinking 10 to 19 days"; 6, "drinking 20 to 29 days"; and 7, "drinking all 30 days	Skin damage	Alcohol consumption was significantly associated with lower photodamage scores (P=.003).

Table 44 Perinatal health

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Maternal health						
Fathers' Role in Alcohol-Exposed Pregnancies Systematic Review of Human Studies Nhanda McBride, PhD, Sophia Johnson PhD	Systematic review	II	11 studies (type unclear)	Paternal alcohol consumption (various)	Maternal alcohol consumption, social facilitation of maternal consumption, sperm health, fetal/infant health	Studies included in the review (11 studies, N=41,062) provide evidence that paternal alcohol consumption during preconception or during pregnancy has an impact on maternal health and alcohol consumption during pregnancy, fetal outcomes, and infant health outcomes.
Bakhireva L, Wilsnack S, Kristjanson A, et al. Paternal drinking, intimate relationship quality, and alcohol consumption in pregnant Ukrainian women. J Stud Alcohol Drugs. 2011;72(4):536–544.	Prospective cohort study	II	166 pregnant women	Risky-to-moderate drinkers or light drinkers/abstainers	Relationship satisfaction, paternal drinking	"Heavy paternal drinking was significantly associated with both continuing maternal drinking in the most recent 2 weeks (adjusted odds ratio [OR] = 34.1; 95% CI [5.9, 195.8]) and being a risky drinker only around conception (adjusted OR = 27.0; 95% CI [5.0, 147.7]). In addition, women who consumed alcohol during pregnancy had lower mean scores for satisfaction with partners' relationship and ability to discuss problems ($p < .05$) compared with light drinkers/abstainers."
Fetal health						
Bakker, R., Pluimgraaff, L. E., Steegers, E. A., Raat, H., Tiemeier, H., Hofman, A., & Jaddoe, V. W. (2010). Associations of light and moderate maternal alcohol consumption with fetal growth characteristics in different periods of	Prospective cohort	II	7333 pregnant women	No alcohol No consumption, Alcohol consumption until the pregnancy was known, Continued alcohol consumption	Fetal growth	Light-to-moderate maternal alcohol consumption during pregnancy does not adversely affect fetal growth characteristics.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
pregnancy: the Generation R Study						
O'Leary C, Nassar N, Kurinczuk JJ, Bower C. The effect of maternal alcohol consumption on fetal growth and preterm birth	Prospective cohort	II	Nonindigenous women who had delivered a singleton infant (n = 4719) in 1995–1997.	Alcohol consumption before and during pregnancy: Abstinent, Low, Moderate, Binge (≤two times per week), Heavy	Fetal growth and preterm birth	Alcohol intake at higher levels, particularly heavy and binge drinking patterns, is associated with increased risk of preterm birth
O'Leary CM, Nassar N, Kurinczuk JJ, de Klerk N, Geelhoed E, Elliott EJ, Bower C. Prenatal alcohol exposure and risk of birth defects	Prospective cohort	II	Randomly selected, population-based birth cohort of infants born to non-Indigenous women in Western Australia between 1995 and 1997 (n = 4714)	Low (1–2 standard drinks/occasion and <7 per week), moderate (3–4 standard drinks/occasion and no more than 7 per week), binge drinking (50+ g per occasion) less frequently than weekly (occasional binge drinking), and heavy drinking (>7 standard drinks per week, including binge drinking weekly or more frequently). One standard drink in Australia is equal to 10 g of alcohol.	Alcohol-related birth defects	A fourfold increased risk of birth defects classified as alcohol-related birth defects was observed after heavy prenatal alcohol exposure in the first trimester. There was no association between low or moderate PAE and birth defects.
Both						
Odendaal H, Steyn D, Elliott A, Burd L. Combined effects of cigarette smoking and alcohol on perinatal outcomes.	Systematic review (13 case-control studies looking at both smoking and drinking)	III-3	Pregnant women and their children	Various	Fetal and perinatal risks	Most studies showed an increased risk of poor fetal and perinatal outcomes

Breastfeeding

Table 45 Breastfeeding duration/Child development

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Giglia RC, Binns CW, Alfonso HS, Scott JA, Oddy WH. The effect of alcohol intake on breastfeeding duration in Australian women	Prospective cohort	II	587 women from the second Perth Infant Feeding Study (PIFSII)	No drinking, drinking	Breastfeeding duration	Consuming alcohol in excess of two standard drinks per day during lactation was found to be independently associated with shorter breastfeeding duration.
May PA, Hasken JM, Blankenship J, Marais AS, Joubert B, Cloete M, de Vries MM, Barnard R, Botha I, Roux S, Doms C, Gossage JP, Kalberg WO, Buckley D, Robinson LK, Adnams CM, Manning MA, Parry CD, Hoyme HE, Tabachnick B, Seedat S. Breastfeeding and maternal alcohol use: Prevalence and effects on child outcomes and fetal alcohol spectrum disorders	Cross-sectional	IV	Mothers (n=1047) who breastfed for an average of 19.9 months.	Breastfed for at least 12 months with alcohol: yes/no	Child development	Children of mothers who drank postpartum and breastfed were significantly lighter, had lower verbal IQ scores, and more anomalies in comparisons controlling for prenatal alcohol exposure and final fetal alcohol spectrum disorders diagnosis. Alcohol use during the period of breastfeeding was found to significantly compromise a child's development.

Child behavior/development/health

Table 46 Child behaviour/development/health

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Tsang TW, Lucas BR, Carmichael Olson H, Pinto RZ, Elliott EJ. Prenatal Alcohol Exposure, FASD, and Child Behavior: A Meta-analysis.	Systematic review (meta-analysis of cohort studies)	I	Children/young people aged ≤18y with FASD or prenatal alcohol exposure.	Prenatal alcohol exposure (low/moderate/high PAE, occassional/light/moderate/heavy drinking) vs none	Achenbach System of Empirically Based Assessment (ASEBA)	Meta-analysis reveals that FASD and PAE are associated with problematic behavior in many, but not all domains. Pooled results demonstrated higher problem scores in children with PAE (P > .05).
Flak AL, Su S, Bertrand J, Denny CH, Kesmodel US, Cogswell ME. The association of mild, moderate, and binge prenatal alcohol exposure	Systematic review of case-control or cohort studies	II	Children	Maternal consumption - Mild (up to 3 drinks/week), mild-to-moderate (up to 6 drinks/week), moderate (up to 6 drinks/week including some individuals who consumed at least 3 drinks per week, heavy (more than 6 drinks per week)	Academic performance, attention, behaviour, cognition, language skills, memory, and visual and	"Our findings support previous findings suggesting the detrimental effects of prenatal binge drinking on child cognition. Prenatal alcohol exposure at

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
and child neuropsychological outcomes: a meta-analysis, Alcohol Clin Exp Res. 2014;38(1):214-26.					motor development	levels less than daily drinking might be detrimentally associated with child behavior. The results of this review highlight the importance of abstaining from binge drinking during pregnancy and provide evidence that there is no known safe amount of alcohol to consume while pregnant."
Lucas BR, Latimer J, Pinto RZ, Ferreira ML, Doney R, Lau M, Jones T, Dries D, Elliott EJ. Gross motor deficits in children prenatally exposed to alcohol: a meta-analysis	Systematic review	II	14 cohort or case-control studies	Fetal alcohol spectrum disorder and prenatal alcohol exposure to alcohol	Gross motor function	The meta-analysis pooled results (n = 10) revealed a significant association between a diagnosis of fetal alcohol spectrum disorder or moderate to heavy prenatal alcohol exposure and gross motor impairment (odds ratio: 2.9; 95%CI: 2.1–4.0). Gross motor deficits were found in balance, coordination, and ball skills
Carson CG, Halkjaer LB, Jensen SM, Bisgaard H. Alcohol intake in pregnancy increases the child's risk of atopic dermatitis. the COPSAC prospective birth cohort study of a high risk population.	Prospective cohort	II	411 children born to mothers with a history of asthma	Nondrinkers, drinking during pregnancy: 1st trimester: range 1–7, median: 1, mean: 1.55, interquartile range: 1–2; 2nd trimester: range 1–7, median: 1, mean: 1.44, interquartile range: 1–2; 3rd trimester: range 1–7, median: 1, mean: 1.51, interquartile range: 1–2	Atopic dermatitis	Alcohol intake by pregnant women with a history of asthma, is significantly associated with an increased risk for the child for developing atopic dermatitis during the first 7 years of life.
Kelly, Y., Sacker, A., Gray, R., Wolke, D., Kelly, J., & Quigley, M. (2009). Light drinking during pregnancy: still no risk for socioemotional	Prospective cohort	II	Nationally representative prospective UK Millennium Cohort Study (N=11 513)	Drinking during pregnancy: Never; not in pregnancy; light; moderate; heavy/binge	Socioemotional difficulties or cognitive deficits at 5 years of age	At age 5 years cohort members born to mothers who drank up to 1-2 drinks per week or per occasion during pregnancy were not at increased risk of clinically relevant behavioural

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
difficulties or cognitive deficits at 5 years of age?						difficulties or cognitive deficits compared with children of mothers in the not-in-pregnancy group.
Kesmodel US, Bertrand J, Støvring H, et al. the Lifestyle During Pregnancy Study Group. The effect of different alcohol drinking patterns in early to mid pregnancy on the child's intelligence, attention and executive function	Prospective cohort	II	Lifestyle During Pregnancy Study (LDPS) Cohort (n=101 042)	Drinking during pregnancy (drinks per week): 0; 1-4; 5-8; 9+	Child's intelligence, attention, and executive function	As no safe level of drinking during pregnancy has been established, the most conservative advice for women is not to drink alcohol during pregnancy. However, the present study suggests that small volumes consumed occasionally may not present serious concern.
O'Leary C, Zubrick S, Taylor C, Dixon G, Bower C. Prenatal alcohol exposure and language delay in two-year old children: The importance of dose and timing on risk.	Prospective cohort	II	Western Australian children born in 1995–1996 whose mothers had agreed to participate in a longitudinal study on health-related behaviors and who had completed the 2-year questionnaire (N = 1739).	Prenatal alcohol exposure: none, low (20 g of alcohol per occasion, with a frequency of less than weekly up to 6 days/week), moderate (10 g to 50 g per occasion, with a frequency ranging from less than weekly up to daily consumption), heavy (20 g to 50 g per occasion, with a frequency ranging from 1 day/week to daily consumption) and binge (50 g per occasion with a frequency ranging from less than weekly up to 2 days/week)	Language delay	This study did not detect an association between low levels of prenatal alcohol exposure and language delay when compared with women who abstained from alcohol during pregnancy. A non-significant threefold increase in the likelihood of language delay was seen in children whose mothers binged during late pregnancy.
O'Leary CM, Nassar N, Zubrick S, Kurinczuck J, Stanley F, Bower C. Evidence of a complex association between dose, pattern and timing of prenatal alcohol exposure and child behaviour problems	Prospective cohort	II	n=1327 of all non-Aboriginal women giving birth to a live infant in WA between 1995 and 1997	1st trimester and late pregnancy drinking: Abstinent, Low (<7 standard drinks, AND, on any one day, no more than 1–2 standard drinks [10–20 grams per occasion]), Moderate (70 g/week, ≥50 g or more per occasion, ≥five standard drinks), Heavy (drinking more than moderate levels)	Child behaviour	Prenatal alcohol exposure at moderate and higher levels increased the odds of child behaviour problems with the dose, pattern and timing of exposure affecting the type of behaviour problems expressed.
O'Leary CM, Taylor C, Zubrick SR, Kurinczuk JJ, Bower C. Prenatal Alcohol Exposure	Prospective cohort	II	Randomly selected, population-based birth cohort of	Low (1–2 standard drinks/occasion and <7 per week), moderate (3–4 standard drinks/occasion and no more than 7 per week), binge drinking	Achievement of national benchmarks in school numeracy,	Children were twice as likely not to achieve the benchmark for reading after heavy

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
and Educational Achievement in Children Aged 8-9 Years			infants born to non-Indigenous women in Western Australia between 1995 and 1997 (n = 4714)	(50+ g per occasion) less frequently than weekly (occasional binge drinking), and heavy drinking (>7 standard drinks per week, including binge drinking weekly or more frequently). One standard drink in Australia is equal to 10 g of alcohol.	reading, spelling, and writing tests and nonattendance for the tests	prenatal alcohol exposure during the first trimester (aOR 2.26; 95% CI 1.10–4.65) and for writing when exposed to occasional binge drinking in late pregnancy (aOR 2.35; 95% CI 1.04–5.43). Low-moderate prenatal alcohol exposure was not associated with academic underachievement.
Sayal, K., Draper, E. S., Fraser, R., Barrow, M., Davey Smith, G., & Gray, R. (2013). Light drinking in pregnancy and mid-childhood mental health and learning outcomes	Prospective cohort	II	12 286 (93%) mothers from the Avon Longitudinal Study of Parents and Children (ALSPAC) cohort	None, <1 glass/week, ≥1 glass/week (1 glass = 8g alcohol)	Child mental health and academic outcomes	Light drinking in pregnancy does not appear to be associated with clinically important adverse effects for mental health and academic outcomes at the age of 11 years.
Shaheen SO, Rutterford C, Zuccolo L, Ring SM, Davey Smith G, Holloway JW, Henderson AJ, Prenatal alcohol exposure and childhood atopic disease: a Mendelian randomization approach.	Prospective cohort	II	14,541 predominantly white pregnant women resident in the Bristol area of the United Kingdom during 1990 to 1992.	Maternal alcohol dehydrogenase (ADH)1B genotype (rs1229984). Alcohol consumption during pregnancy (never, <1 unit, 1-6 units, ≥7 units; binge drinking).	Childhood asthma, hayfever and atopic outcomes	We have found no evidence to suggest that prenatal alcohol exposure increases the risk of asthma or atopy in childhood.
Simões HO, Zanchetta S, Furtado EF. What we know of the central auditory disorders in children exposed to alcohol during pregnancy? Systematic review	Systematic review	III-3	4 cross-sectional/case-control studies and 2 cross-sectional studies including children, adolescents, and young adults with a history of fetal alcohol exposure	Fetal alcohol exposure vs no exposure	Central auditory nervous system impairment	Children and young adults exposed to alcohol in utero present central auditory nervous system (CANS) impairment signs, but no influence of the different FAS/FASD subtypes on these losses was identified.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Milne E, Greenop KR, Scott RJ, de Klerk NH, Bower C, Ashton LJ, et al. Parental alcohol consumption and risk of childhood acute lymphoblastic leukemia and brain tumors. Cancer Causes Control. 2013;24(2):391-402.	Case-control	III-3	388 controls and 302 cases	Maternal and paternal alcohol consumption in the 12 months before pregnancy: no alcohol, >0–2 days/week, >2–4 days/week, >4–7 days/week, >7 days/week	Childhood malignancy and brain tumours	For both cancers, we observed U-shaped associations with paternal alcohol consumption in the year before the pregnancy. Our findings suggest that men, as well as women, should limit their alcohol intake when planning a pregnancy
Apfelbacher CJ, Diepgen TL, Schmitt J. Determinants of eczema: population-based cross-sectional study in Germany.	Cross-sectional study	IV	Children and adolescents (0-17 years) in Berlin	Maternal alcohol consumption during pregnancy: yes or no	Perinatal problems, physician-diagnosed hay fever/allergic conjunctivitis, asthma and ADHD	"Other lifestyle (alcohol con-sumption during pregnancy) and environmental factors (mould on the walls, pets, origin from East/West Germany) were not significantly related to eczema."
Lucas BR, Latimer J, Doney R, Watkins RE, Tsang TW, Hawkes G, Fitzpatrick JP, Oscar J, Carter M, Elliott EJ. Gross motor performance in children prenatally exposed to alcohol and living in remote Australia	Cross-sectional	IV	108 children with mean age 8 years 9.1 months born in 2002 or 2003 living in the Fitzroy Valley during 2010 to 2011	Prenatal alcohol exposure ('low risk' (0–3), 'risky' (4–5), and 'high risk' (≥6) levels) or fetal alcohol spectrum disorders	Gross motor performance	A higher than expected proportion of children with FASD had gross motor scores that indicated impairment and need for therapy
Lucas BR, Latimer J, Fitzpatrick JP, Doney R, Watkins RE, Tsang TW, Jirikowic T, Carmichael Olson H, Oscar J, Carter M, Elliott EJ. Soft neurological signs and prenatal alcohol exposure: a population-based study in remote Australia	Cross-sectional	IV	108 children with mean age 8 years 9.1 months born in 2002 or 2003 living in the Fitzroy Valley during 2010 to 2011	Prenatal alcohol exposure ('low risk' (0–3), 'risky' (4–5), and 'high risk' (≥6) levels) or fetal alcohol spectrum disorders	Soft neurological signs'	Soft neurological signs were more common in children with prenatal alcohol exposure or fetal alcohol spectrum disorders

Dental health

Periodontitis

Table 47 Periodontitis

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Jun-Beom Park,* Kyungdo Han,† Yong-Gyu Park,† and Youngkyung Ko*Association between alcohol consumption and Periodontal Disease: The 2008 ato 2010 Korea National Health and Nutrition Examination Survey.	Prospective cohort	II	Korea National Health and Nutrition Examination Survey (KNHANES) (n=20,229)	Non-drinker; light-to-moderate drinker; heavy drinker	Periodontal treatment needed yes/no	Men with higher alcohol intake were more likely to have a higher prevalence of treatment needs regardless of their age, socioeconomic factors, systemic conditions (including diabetes, hypertension, and metabolic syndrome), and number of times of tooth brushing per day in multivariable adjusted models. By contrast, in women, alcohol intake was not independently associated with periodontal treatment needs.
Kongstad J, Hvidtfeldt UA, Grønbaek M, Jontell M, Stoltze K, Holmstrup P. Amount and type of alcohol and periodontitis in the Copenhagen City Heart Study	Prospective cohort	II	Adults participating in the Copenhagen City Heart Study (CCHS) (n=2,951)	<1; 1-6;7-13;14-20; 21+ drinks per week	Periodontitis	Higher alcohol consumption, particularly intake of wine, is inversely associated with CAL in men. Such an association is not found in women.
Nishida N, Tanaka M, Sekine S, Takeshita T, Nakayama K, Morimoto K, et al. Association of ALDH2 genotypes with periodontitis progression.	Prospective cohort	II	183 (164 males and 19 females); mean (± SD) age at baseline was 38.6 (± 10.4) yrs.	< 33.0 g/day, ≥ 33.0 g/day	Periodontitis progression	These results suggested that alcohol consumption as well as alcohol sensitivity may be a risk factor for periodontitis progression.
Amaral CS, Vettore MV, Lea˜o A. The relationship of alcohol dependence and alcohol consumption with periodontitis: A systematic review	Systematic review	II	Cross-sectional studies & longitudinal studies Adults	Any level of alcohol consumption compared to another level or none	Dental disease and /or clinical parameters (peridontitis, periodontal probing depths and clinical attachment level	"Alcohol consumption can be considered a risk indicator for periodontitis. Longitudinal studies on the association of alcohol dependence and alcohol consumption with periodontitis are needed to confirm the association or not."
Amaral CS, Luiz RR, Lea˜o AT. The relationship between alcohol dependence and periodontal disease	Cross-sectional study	IV	Men from a hospital in Rio de Janeiro	Alcoholic (for a mean of 25.83 +/- 10.53 years) and non-alcoholic men	Periodontal clinical parameters including clinical attachment level (CAL), probing depth (PD)	"A significant linear relationship was found between alcohol dependence and mean CAL (P < 0.013) and mean PD (P < 0.001)."

Other dental conditions

Table 48 Other dental conditions

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Jansson L. Association between alcohol consumption and dental health	Prospective cohort	II	Patients undergoing odontological investigation	0-1; 1-2; 2-3; 3-4; 4-5; >5 centilitres pure alcohol consumption per day	Number of remaining teeth, dental restorations, caries and periodontal conditions	"The observations do not support any association between alcohol consumption and periodontal disease. However, individuals with high alcohol consumption had significantly more teeth with decayed surfaces and apical lesions indicating that lifestyle-related factors may influence dental health."
Hanioka, T., Ojima, M., Tanaka, K. & Aoyama, H. (2007) Association of total tooth loss with smoking, drinking alcohol and nutrition in elderly Japanese: analysis of national database.	Cross-sectional	IV	5457 subjects (2134 males and 3323 females) aged 20+ years	Never, former, current drinker	Total tooth loss	Total tooth loss was a rare phenomenon (<2%) in age groups of <60 years. According to the multiple logistic regression analysis involving 2200 subjects aged 60 years or older, significant variables were age, current smokers and vitamin C intake in males, and age and current smokers in females. The variable for current drinkers was significant in females but the odds ratio was <1.0. No significant relationship was detected with respect to former smoker s and drinkers, body mass index, vitamin E intake and blood glucose level.

Liver disease/Pancreatitis

Table 49 Liver disease/Pancreatitis

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Setiawan, V.W., et al., Prospective Study of Alcohol Drinking, Smoking, and Pancreatitis: The Multiethnic Cohort	Prospective cohort	II	The Multiethnic Cohort is a prospective cohort of more than 215,000 men and women, aged 45 to 75 years, enrolled between 1993 and 1996.	Alcohol intake (g/day): men – non-drinkers, <24, 24 to 48, >48 g/ day; women - nondrinkers, <12, 12 to <24, ≥24 g/day.	Pancreatitis - gallstone-related acute, non-gallstone-related acute, recurrent acute/chronic	Moderate alcohol intake is protective against all types of pancreatitis in women and against recurrent acute/chronic pancreatitis in men.
Sookoian, S., Castaño, G. O., & Pirola, C. J. (2013). Modest alcohol consumption decreases the risk of non-alcoholic fatty liver disease: A meta-analysis of 43 175 individuals	Systematic review (meta-analysis)	III-3	9 studies for non-alcoholic fatty liver disease and 3 studies for non-alcoholic steatohepatitis. NB: unclear study type. In total, 43 175 adult individuals (30 791 non-drinkers and 12 384 modest drinkers) for non-alcoholic fatty liver disease and	Non-drinkers (0 g/day of alcohol) vs modest drinkers (<40 g/day of alcohol)	Non-alcoholic fatty liver disease and non-alcoholic steatohepatitis	Modest alcohol consumption is associated with a significant protective effect of about 31% on the risk of having NAFLD (OR 0.688, 95% CI 0.646% to 0.733%, p<10−8) and random models (OR 0.684, 95% CI 0.580% to 0.806%, p<10−5). Modest alcohol consumption was associated with an average protective effect of about 50% on the risk of developing an advanced disease stage (OR 0.501, 95% CI 0.340% to 0.740%, p<0.0005).

Fractures/Falls/Bone mineral density

Table 50 Falls/fractures/BMD

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Fini, M., et al., Role of obesity , alcohol and smoking on bone health	Systematic review	II	2 meta-analyses, 4 prospective cohort, 2 case-control and 2 cross-sectional studies	Various	Spine/hip/any fracture, falls, Bone mineral density	Moderate alcohol consumption may have a protective effect, whereas excessive consumption is an important risk factor.
Sommer, I., et al., Alcohol consumption and bone mineral density in elderly women	Prospective cohort	II	300 elderly women (mean age 67.8y) from the population-based Kuopio Osteoporosis Risk Factor and Prevention – Fracture Prevention Study	Alcohol consumption 91 drink = 1 bottle of beer/cider, a glass of wine or one portion of spirits/strong alcohol): <1 drink/week, 1-3 drinks/week, >3 drinks/week	Bone mineral density	The results suggest that low to moderate alcohol intake may exert protective effects on bone health in elderly women. Women drinking .3 alcoholic drinks/week had significantly higher BMD than abstainers, 12?0% at the femoral neck and 9?2% at the lumbar spine. Results based on the lifestyle questionnaire showed higher BMD values for all alcohol-consuming women at the femoral neck and for women drinking 1–3 alcoholic beverages/week at the lumbar spine, compared with non-users
Tait R, French D, Burns R, Byles J & Anstey K. Alcohol, Hospital Admissions and Falls in Older Adults: A longitudinal Evaluation.	Retrospective cohort	III-2	16,785 people aged 65 years or older at baseline from five Australian cohort studies.	Drinks per day (drink = 10g alcohol): abstinent, >0-2 (referent), >2-4, >4 drinks per day	Hospital admission, falls	Among women, all alcohol groups had greater odds of admission than low-risk users; among men, only the abstinent group had increased odds. For both genders, the unadjusted model showed that abstainers had increased odds of falling.
O'Meara C, Witherspoon R, Hapangama N, Hyam DM. Alcohol and interpersonal violence may increase the severity of facial fractures	Cross-sectional	IV	255 patients who presented to the Canberra Hospital (Australian Capital Territory, Australia) for assessment of oral and maxillofacial (OMF) trauma	Alcohol vs no alcohol	Surgical intervention, severity of facial fracture	We have shown that the consumption of alcohol increased the severity of facial fractures and also increased the relative risk of requiring an operation when compared with common causes that did not involve alcohol.

Other outcomes

Table 51 Other outcomes

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Haematological						
Toth A, Sandor B, Papp J, Rabai M, Botor D, Horvath Z, Kenyeres P, Juricskay I, Toth K, Czopf L. Moderate red wine consumption improves hemorheological parameters in healthy volunteers	Randomised controlled trial	II	Thirty-nine healthy, non-smoking male volunteers between 18–40 years	2 dl of red wine each day at dinner for 3 weeks vs water each day at dinner for 3 weeks	Hematocrit, plasma and whole blood viscosity, red blood cell aggregation and deformability and Hct/WBV ratio	Our results show that moderate red wine consumption has beneficial effects on hemorheological parameters which may contribute to the French-paradox.
Macular Degeneration						
Chong EW, Kreis AJ, Wong TY, Simpson JA, Guymer RH. Alcohol consumption and the risk of age-related Macular degeneration: A systematic review and Meta-Analysis	Systematic review	I	5 cohort studies included 136,946 people	Various levels of alcohol consumption	Age-Related Macular Degeneration	Heavy alcohol consumption (more than three standard drinks per day) is associated with an increased risk of early AMD. Although this association seems to be independent of smoking, residual confounding effects from smoking cannot be excluded completely.
General well-being						
Powers J & Young A. Longitudinal analysis of alcohol consumption and health of middle-aged women in Australia	Prospective cohort	II	13 585 randomly selected 45–50-year-old women	Non-drinkers ('I never drink alcohol'), occasional drinkers ('I drink rarely or less than once a week'), moderate drinkers (from 1 to 14drinks per week) and heavy drinkers (more than 14drinks per week)	General Health subscale of the SF-36	Consistent moderate drinkers had the best health even after adjustment for having a chronic condition, depression and life-style factors. Poorer health was associated with decreased alcohol intake among occasional and moderate drinkers.
Sun Q; Townsend MK; Okereke OI; Rimm EB; Hu FB; Stampfer MJ; Grodstein F. (2011) Alcohol consumption at midlife and successful ageing in women: A prospective cohort analysis in the Nurses' Health Study.	Prospective cohort	II	13,894 study participants from the Nurses' Health study who survived to age 70 or older	Alcohol intake levels: 0 g/d, ≤5.0 g/d, 5.1–15.0 g/d, 15.1–30.0 g/d, and 30.1–45.0 g/d	Successful ageing (see paper for definition)	Light-to-moderate alcohol consumption at midlife was associated with modestly increased odds of successful ageing. These data suggest that regular, moderate consumption of alcohol at midlife may be related to a modest increase in overall health status among women who survive to older ages.

References provided by NHMRC based on public consultation process	Study type	NHMRC evidence hierarchy	Participants	Exposure(s)	Outcomes assessed	Authors' main conclusions
Depressive symptoms						
Powers J, Duffy L, Burns L & Loxton Binge drinking and subsequent depressive symptoms in young women in Australia	Prospective cohort	II	8,197 women	Very infrequent, fluctuating infrequent, frequent, very frequent, or extremely frequent binge drinkers	Depressive symptoms	A pattern of increasing extremely frequent binge drinking during late adolescence appears to increase the risk of subsequent depressive symptoms in both the short-term (1–6 years later) and long-term (10–15 years later).
Brain structure						
Sachdev PS, Chen X, Wen W, Anstey KJ. Light to moderate alcohol use is associated with increased cortical gray matter in middle-aged men: a voxel-based morphometric study	Cross-sectional	IV	383 adults (men=211) aged 60–64 years, randomly selected form the larger PATH Through Life study	Drinks per week	Brain morphometry	Our results showed a dose-related, sexually dimorphic impact of alcohol on brain tissue volumes independent of cerebrovascular risk factors. These findings are consistent with an inverse-U association between alcohol use and brain morphometry, while suggesting an increased vulnerability of white matter to alcohol-related brain damage.
Gu Y, Scarmeas N, Short EE, Luchsinger JA, De Carli C, Stern Y, Manly JJ, et al. Alcohol intake and brain structure in a multiethnic elderly cohort.	Cross-sectional	IV	589 multi-ethnic community residents of New York aged >65yrs	Total alcohol intake: None, Light-to-moderate	Brain structure	Our study suggests that among older adults in the community, light-to-moderate alcohol intake, in particular wine, is associated with larger total brain volume

Appendix 2

References assessed as not being eligible

This list also includes the studies that had already been considered for the independent Evidence Evaluation report.

References provided by NHMRC based on public consultation process	Response
(NIAAA), N.I.o.A.A.a.A., Beyond Hangovers. Understanding Alcohol's Impact On Your Health.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
(NIAAA), NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM, Beyond Hangovers. Understanding Alcohol's Impact On Your Health. 2010	Not available as full-text in a peer-reviewed journal. This is a health report for the public.
A review of the relationship between alcohol and oral cancer J. Reidy*, E. McHugh, L.F.A. Stassen	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
A review of the relationship between alcohol and oral cancer J. Reidy*, E. McHugh, L.F.A. Stassen. Surgeon. 2011 Oct;9(5):278-83.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Adair, T., Hoy, D., Dettrick, Z. and Lopez, A. D Trends in oral, pharyngeal and oesophageal cancer mortality in Australia: the comparative importance of tobacco, alcohol and other risk factors	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Agarwal DP. Cardioprotective effects of light-moderate consumption of alcohol: a review of putative mechanisms.	Published before 1 January 2007. This article was published in 2002.
AIHW 2011. 2010 National Drug Strategy Household Survey report. Drug statistics series no. 25. Cat. no. PHE 145. Canberra: AIHW.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Ainamo J, Barmes D, Beagrie G, Cutress T, Martin J, Sardo-Infirri J. Development of the World Health Organization (WHO) community periodontal index of treatment needs (CPITN).	Published before 1 January 2007. This article was published in 1982.
Ainamo, J. & Bay, I. (1975) Problems and proposals for recording gingivitis and plaque.	Published before 1 January 2007. This article was published in 1975.
Albandar, J. M. (2002) Global risk factors and risk indicators for periodontal diseases	Published before 1 January 2007. This article was published in 2002.
Alcohol drinking. IARC Monogr Eval Carcinog Risks Hum; IARC Working Group; Lyon	Already considered at full-text stage for the Evidence Evaluation Report
Alcohol in our lives: Curbing the harm - A Report on the review of the Regulatory Framework for the sale and Supply of Liquor [Internet].	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Alcohol involved maxillofacial fractures Kai Lee, James Olsen, Jiandong Sun and Arun Chandu.	Not publically available
Allan J, Clifford A, Ball P, Alston M, Meister P. 'You're less complete if you haven't got a can in your hand': Alcohol consumption and related harmful effects in rural Australia: The role and influence of cultural capital.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Al-Roomi K, Heller RF, Holland T. The importance of hypertension in the aetiology of infarctive and haemorrgahic stroke: the Lower Hunter Stroke Study	Published before 1 January 2007. This article was published in 1992.
Alsamarrai, A., Das, S. L., Windsor, J. A. and Petrov, M. S. Factors that affect risk for pancreatic disease in the general population: a systematic review and meta-analysis of prospective cohort studies	Already considered at full-text stage for the Evidence Evaluation Report. Excluded at full-text review as a more recent and comprehensive systematic review selected
Altobelli E, Petrocelli R, Maccarone M, Altomare G, Argenziano G, Giannetti A, Peserico A, Vena GA, Tiberti S, Chimenti S, Peris K. Risk factors of hypertension, diabetes and obesity in Italian psoriasis patients: a survey on socio-demographic characteristics, smoking habits and alcohol consumption.	Not publically available
Alvi A, Doherty T, Lewen G. Facial fractures and concomitant injuries in trauma patients.	Published before 1 January 2007. This article was published in 2003.
Andersen, A., Due, P., Holstein, B. E. et al . (2003) Tracking drinking behaviour from age 15–19 years.	Published before 1 January 2007. This article was published in 2003.

References provided by NHMRC based on public consultation process	Response
Anderson P, Chisholm D, Fuhr D: Reducing the harm done by alcohol: Evidence for effectiveness and cost-effectiveness.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Andreasson, S. Chikritzhs, T., Dangardt, F., Holder, H., Naimi, T., & Stockwell, T (2016 in press). Positive health effects of moderate alcohol consumption: a critical analysis of research. *Swedish Medical Journal. Läkartidningen. 2016;113:DUWS*	Not in English
Anne Magnus, BEc, BEd, DipEpidBiostat, Dominique Cadilhac, RN, PhD, MPH, BN, Lauren Sheppard, MPH, BBSc, Toby Cumming, PhD, Dora Pearce, PhD, MIT, GDipEpid, BAppSc, and Rob Carter, PhD, GDipEpi&PopHealth, MA, BA Econs The Economic Gains of Achieving Reduced Alcohol Consumption Targets for Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Annual Update of Key Results 2013/14: New Zealand Health Survey [Internet]. Wellington: Ministry of Health; 2014 Dec 11.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Anstey KJ, Mack HA, Cherbuin N. Alcohol consumption as a risk factor for dementia and cognitive decline: meta-analysis of prospective studies	Already considered for the Evidence Evaluation Report. This is an included systematic review for Question 2
Araujo, M. W., Dermen, K., Connors, G. & Ciancio, S. (2004) Oral and dental health among inpatients in treatment for alcohol use disorders: a pilot study	Published before 1 January 2007. This article was published in 2004.
Armitage GC, Van Dyke TE. Position paper: periodontal diseases of children and adolescents.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece
Armstrong R, Waters E, Dobbins M, et al. Knowledge translation strategies for facilitating evidence-informed public health decision making among managers and policy-makers (Protocol).	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Arranz, S., Chiva-Blanch, G., Valderas-Martínez, P., Medina-Remón, A., Lamuela-Raventós, R.M., Estruch, R. (2012) Wine, beer, alcohol and polyphenols on cardiovascular disease and cancer.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Association, A.H. Alcohol and Heart Health	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Bureau of Statistics. Alcohol Consumption in Australia: A Snapshot, 2007-08.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Government Department of Health. Technical Report No 3, Preventing alcohol–related harm in Australia: a window of opportunity (including addendum for October 2008 to June 2009) [Internet]. Canberra: Commonwealth of Australia; 2009	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Guidelines for the Diagnosis of Fetal Alcohol Spectrum Disorder 2016	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Guidelines to Reduce Health Risks from Drinking Alcohol [Internet]. Canberra: National Health and Medical Research Council; 2009 Feb.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Institute of Health and Welfare. 2007 National Drug Strategy Household Survey: Detailed findings.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Institute of Health and Welfare. 2010 National Drug Strategy Household Survey report	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Australian Institute of Health and Welfare. National Drug Strategy Household Survey report, July 2011. Canberra: AIHW; 2010.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Avogaro, A., et al., Acute alcohol consumption improves insulin action without affecting insulin secretion in type 2 diabetic subjects	Published before 1 January 2007.
Baan R, Straif K, Grosse Y, Secretan B, El Ghissassi F, Bouvard V, et al. Carcinogenicity of alcoholic beverages	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Monograph working group synopsis of evidence.

References provided by NHMRC based on public consultation process	Response
Baba S, Ozawa H, Sakai Y, Terao A, Konishi M, Tatara K. Heart disease deaths in a Japanese urban area evaluated by clinical and police records	Published before 1 January 2007. This article was published in 1994
Babor T., Caetano R., Casswell S., Edwards G., Giesbrecht N., Graham K. et al. Alcohol: No Ordinary Commodity—Research and Public Policy	Submitted evidence that does not describe a research study or systematic review of research (primary studies).
Babor, T, et al. Alcohol: No Ordinary Commodity.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). A narrative summary.
Babor, T., Caetano, R., Casswell, S. et al . (2003) Alcohol: No Ordinary Commodity	Published before 1 January 2007.
Bagnardi V, Rota M, Botteri E, Tramacere I, Islami F, Fedirko V, Scotti L, Jenab M, Turati F, Pasquali E, Pelucchi C, Galeone C, Bellocco R, Negri E, Corrao G, Boffetta P, La Vecchia C. Alcohol consumption and site-specific cancer risk: a comprehensive dose-response meta-analysis	Already considered for the Evidence Evaluation Report and included for specific outcomes (e.g. mouth, pharnyx and larynx cancer)
Bagnardi V, Rota M, Botteri E, Tramacere I, Islami F, Fedirko V, Scotti L, Jenab M, Turati F, Pasquali E, Pelucchi C, Bellocco R, Negri E, Corrao G, Rehm J, Boffetta P, La Vecchia C. Light alcohol drinking and cancer: a meta-analysis	Already considered for the Evidence Evaluation Report and excluded a full-text review. There were quality concerns therefore WCRF report used instead
Bagnardi V, Zatonski W, Scotti L, La Vecchia C, Corrao G: Does drinking pattern modify the effect of alcohol on the risk of coronary heart disease? Evidence from a meta-analysis	Already considered. Excluded at full-text review. A more recent and comprehensive systematic review selected
Balance North East. Alcohol can increase the risk of seven types of cancer	Not available as full-text in a peer-reviewed journal
Baliunas DO, Taylor BJ, Irving H, Roerecke M, Patra J, Mohapatra S, Rehm J. Alcohol as a risk factor for type 2 diabetes: A systematic review and meta-analysis.	Already considered. Excluded at full-text review. Review superceded by a more recent systematic review that also mets minimum criteria for inclusion
Ballard HS. Alcohol-associated pancytopenia with hypocellular bone marrow	Published before 1 January 2007.. This paper was published in 1980
Ballard HS. Hematological complications of alcoholism.	Published before 1 January 2007. This paper was published in 1997
Bandura A. Social foundations of thought and action: A social cognitive theory.	Published before 1 January 2007. This paper was published in 1999
Bantle AE, Thomas W, Bantle JP. Metabolic effects of alcohol in the form of wine in persons with type 2 diabetes mellitus	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Blood markers.
Barnes SL, Singletary KW, Frey R. Ethanol and acetaldehyde enhance benzo[a]pyrene-DNA adduct formation in human mammary epithelial cells.	Published before 1 January 2007. This paper was published in 2000
Baron AE, Franceschi S, Barra S, Talamini R, La Vecchia C. A comparison of the joint effects of alcohol and smoking on the risk of cancer across sites in the upper aerodigestive tract.	Published before 1 January 2007.. This paper was published in 1993
Bauer F, Beulens JW, van der A DL, et al. Dietary patterns and the risk of type 2 diabetes in overweight and obese individuals	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Beaglehole R, Jackson R. Alcohol, cardiovascular diseases and all causes of death: a review of the epidemiological evidence	Published before 1 January 2007. This paper was published in 1992
Begg CB, Mazumdar M: Operating characteristics of a rank correlation test for publication bias.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Bell JC, Raynes-Greenow C, Turner RM, Bower C, Nassar N, O'Leary CM. Maternal Alcohol Consumption during Pregnancy and the Risk of Orofacial Clefts in Infants: a Systematic Review and Meta-Analysis	Already considered for Evidence Evaluation Report. Excluded at full-text review. Did not meet the minimum standards for inclusion
Bendsen, N.T., Christensen, R., Bartels, E.M., et al. (2013) Is beer consumption related to measures of abdominal and general obesity? A systematic review and meta-analysis	Already considered for the Evidence Evaluation Report. Excluded at full-text review. Did not meet the minimum standards for inclusion
Benguigui C, Bongard V, Ruidavets JB, et al. Metabolic syndrome, insulin resistance, and periodontitis: A crosssectional study in a middle-aged French population	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Benhamou S, Tuimala J, Bouchardy C, Dayer P, Sarasin A, Hirvonen A. DNA repair gene XRCC2 and XRCC3 polymorphisms and susceptibility to cancers of the upper aerodigestive tract.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).

References provided by NHMRC based on public consultation process	Response
Beral V., Banks E., Reeves G. Evidence from randomised trials on the long-term effects of hormone replacement therapy	Published before 1 January 2007. Article was published in 2002.
Berger K, Ajani UA, Kase CS, Gaziano JM, Buring JE, Glynn RJ, Hennekens CH. Light-to-moderate alcohol consumption and risk of stroke among U.S. male physicians	Published before 1 January 2007. This paper was published in 1999
Bergman, H. & Ka¨llme´n, H. (2002) Alcohol use among Swedes and a psychometric evaluation on the alcohol use disorders identification test.	Published before 1 January 2007.
Bergstrom J. Tobacco smoking and chronic destructive periodontal disease	Published before 1 January 2007. Article published in 2004.
Bernstein ML. Oral mucosal white lesions associated with excessive use of Listerine mouthwash. Report of two cases	Published before 1 January 2007. Article published in 1978.
Bertrand J, Floyd R, Weber M et al. Fetal Alcohol Syndrome: Guidelines for referral and diagnosis.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Guideline.
Beulens JW, Patel A, Vingerling JR, et al. Effects of blood pressure lowering and intensive glucose control on the incidence and progression of retinopathy in patients with type 2 diabetes mellitus: a randomised controlled trial	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Beulens JW, van der Schouw YT, Moons KG, Boshuizen HC, van der A DL, Groenwold RH. Estimating the mediating effect of different biomarkers on the relation of alcohol consumption with the risk of type 2 diabetes.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Biomarker.
Beulens JWJ, Van Beers RM, Stolk RP, Schaafsma G, Hendriks HFJ. Effect of moderate alcohol consumption on adipokines and insulin sensitivity in lean and overweight men: a diet intervention study.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Not a health outcome.
Beulens, J.W., et al., Moderate alcohol consumption and lipoprotein-associated phospholipase A2 activity	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Biomarker.
Blot WJ, McLaughlin JK, Winn DM, et al. Smoking and drinking in relation to oral and pharyngeal cancer	Published before 1 January 2007. Paper published in 1988
Blot WJ, Winn DM, Fraumeni JF, Jr. Oral cancer and mouthwash.	Published before 1 January 2007. Paper published in 1983.
Blot WJ. Alcohol and Cancer. Cancer Res 1992;52:2119s-23s.	Published before 1 January 2007.
Boffetta P, Hashibe M. Alcohol and cancer	Published before 1 January 2007. Paper published in 2006
Bolanowski SJ, Gescheider GA, Sutton SV. Relationship between oral pain and ethanol concentration in mouthrinses	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Bonaccio M; Di Castelnuovo A; Costanzo S; Persichillo M; De Curtis A; Donati MB; et al. (2015). Adherence to the traditional Mediterranean diet and mortality in subjects with diabetes. Prospective results from the MOLI-SANI study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Bongaerts BW, van den Brandt PA, Goldbohm RA, de Goeij AF, Weijenberg MP. Alcohol consumption, type of alcoholic beverage and risk of colorectal cancer at specific subsites	Already considered in the Evidence Evaluation Report. This study was included in a systematic review by Zhang 2015a. Zhang's ystematic review was excluded due to not conforming to the PEO of the overview
Boniface S., Kneale J., Shelton N. Drinking pattern is more strongly associated with under-reporting of alcohol consumption than socio-demographic factors: evidence from a mixed-methods study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Bonnet, F., Disse, E., Laville, M., Mari, A., Hojlund, K., Anderwald, C. H., et al. (2012). Moderate alcohol consumption is associated with improved insulin sensitivity, reduced basal insulin secretion rate and lower fasting glucagon concentration in healthy women	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Borges G, Cherpitel C, Rosovsky H. Male drinking and violence-related injury in the emergency room.	Published before 1 January 2007. Paper published in 1998
Bosetti C, Gallus S, Trichopoulou A, et al. Influence of the Mediterranean diet on the risk of cancers of the upper aerodigestive tract	Published before 1 January 2007. Paper published in 2003
Bowden, J. Delfabbro, P., Room, R., Miller, C. and Wilson, C. (2014). Alcohol consumption and the NHMRC guidelines	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Guidelines.

References provided by NHMRC based on public consultation process	Response
Bower C, Elliott EJ 2016, on behalf of the Steering Group. Report to the Australian Government Department of Health: "Australian Guide to the diagnosis of Fetal Alcohol Spectrum Disorder (FASD)".	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Report.
Bower CI, Lester-Smith D, Elliott EJ. Congenital anomalies--why bother?	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Editorial.
Bowring, A., Gold, J., Dietze, P., Gouillou, M., van Gemert, C. and Hellard, M. (2012). Know your limits: Awareness of the 2009 Australian alcohol guidelines among young people	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Boyle P, Autier P, Bartelink H, Baselga J, Boffetta P, Burn J, et al. European Code Against Cancer and scientific justification: third version (2003	Published before 1 January 2007.
Bracci, V. Benavente and J.J. Turner.Medical history, lifestyle, family history, and occupational risk factors for marginal zone lymphoma: the InterLymph Non-Hodgkin Lymphoma Subtypes Project.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Brain, K., Parker, H. and Carnwath, T. (2000) Drinking with design: young drinkers as psychoactive consumers	Published before 1 January 2007.
Brand-Miller JC, Fatima K, Middlemiss C, Bare M, Liu V, Atkinson F, et al. Effect of alcoholic beverages on postprandial glycemia and insulinemia in lean, young, healthy adults	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Breckenridge J, Salter M and Shaw E. Use and abuse: Understanding the intersections of child abuse, drug use and mental health. Adults Surviving Child Abuse and the Centre for Gender Related Violence Studies 2010. University of New South Wales, Sydney.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Briasoulis, A., Agarwal, V., & Messerli, F. H. (2012). Alcohol Consumption and the Risk of Hypertension in Men and Women: A Systematic Review and Meta-Analysis.	Already considered for the Evidence Evaluation Report and reviewed at full-text. This is an included systematic review for question 2
Brien SE, Ronksley PE, Turner BJ, Mukamal KJ, Ghali WA. Effect of alcohol consumption on biological markers associated with risk of coronary heart disease: systematic review and meta-analysis of interventional studies	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Brooks PJ, Theruvathu JA. DNA adducts from acetaldehyde: implications for alcohol-related carcinogenesis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Brooks PJ. DNA damage, DNA repair, and alcohol toxicity--a review.	Published before 1 January 2007. Published in 1997
Brown K. Association between alcohol sports sponsorship and consumption: A systematic review.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Brown LA, Cook RT, Jerrells TR, Kolls JK, Nagy LE, Szabo G, et al. Acute and chronic alcohol abuse modulate immunity	Published before 1 January 2007. Published in 2006
Brunner C, Davies NM, Martin RM, Eeles R, Easton D, Kote-Jarai Z, Al Olama AA, Benlloch S, Muir K, Giles G, Wiklund F, Gronberg H, Haiman CA, Schleutker J, Nordestgaard BG, Travis RC, Neal D, Donovan J, Hamdy FC, Pashayan N, Khaw KT, Stanford JL, Blot WJ, Thibodeau S, Maier C, Kibel AS, Cybulski C, Cannon-Albright L, Brenner H, Park J, Kaneva R, Batra J, Teixeira MR, Pandha H; PRACTICAL Consortium, Zuccolo L. Alcohol consumption and prostate cancer incidence and progression: A Mendelian randomisation study	Already considered for the Evidence Evaluation Report and reviewed at full-text. This review is included under the Mendelian randomisation section
Buchanan J, Colquhoun A, Friedlander L, et al. Maxillofacial fractures at Waikato Hospital, New Zealand: 1989 to 2000	Published before 1 January 2007. Published in 2005
Bundeszentrale f¨ur gesundheitliche Aufkl¨arung (BZgA). (2001) Die Drogenaffinit¨at Jugendlicher in der Bundesrepublik Deutschland 2001 [Drug affinity of young people in Germany	Not in English
Bundeszentrale f¨ur gesundheitliche Aufkl¨arung (BZgA). (2005) Entwicklung des Alkoholkonsums bei Jugendlichen unter besonderer Ber¨ucksichtigung der onsumgewohnheiten von Alkopops [Trends in alcohol consumption of young people: The role of alcopops	Not in English
Burden M, Jacobson S, Jacobson J. Relation of prenatal alcohol exposure to cognitive processing speed and efficiency in childhood.	Published before 1 January 2007. Published in 2005

References provided by NHMRC based on public consultation process	Response
Burgoyne, W. (2006). What have we learned: Key Canadian FASD Awareness Campaigns. Public Health Agency of Canada.	Published before 1 January 2007.
Burns L, Black E, Powers JR, Loxton D, Elliott E, Shakeshaft A, Dunlop A. Geographic and maternal characteristics associated with alcohol use in pregnancy	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Burns L, Breen C, Bower C, C OL, Elliott EJ. Counting fetal alcohol spectrum disorder in Australia: the evidence and the challenges	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Bushnell CD. Review, oestrogen and stroke in women: assessment of risk	Published before 1 January 2007. Published in 2005
Butt P, Beimess D, Gilksman L, Paradis C, Stockwell T. Alcohol and Health in Canada: A summary of evidence and guidelines for low risk drinking. Ottawa: Canadian Centre on Stubstance Abuse. 2011.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Guideline.
C. Chao, Q. Li, F. Zhang and E. White. Alcohol consumption and risk of lung cancer in the VITamins And Lifestyle Study	Not available as full-text in a peer-reviewed journal
Caicoya M, Rodriguez T, Corrales C, Cuello R, Lasheras C: Alcohol and stroke. A community case control study in Astrurias, Spain	Published before 1 January 2007. (1999)
Callaghan RC, Sanches M, Gatley JM. Impacts of the minimum legal drinking age legislation on in-patient morbidity in Canada, 1997-2007: a regression-discontinuity approach.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Callinan, S. and Room, S. (2012). Alcohol consumption during pregnancy: Results from the 2010 National Drug Strategy Household Survey	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Camargo CA: Moderate alcohol consumption and stroke: the epidemiologic evidence	Published before 1 January 2007. (1989)
Campisi G, Margiotta V. Oral mucosal lesions and risk habits among men in an Italian study population	Published before 1 January 2007. (2001)
Can, A., Dogan, E., Bayoglu, I. V., Tatli, A. M., Besiroglu, M., Kocer, M., Dulger, A. C., Uyeturk, U., Kivrak, D., Orakci, Z., Bal, O., Kacan, T., Olmez, S., Turan, N., Ozbay, M. F. and Alacacioglu, A. Multicenter epidemiologic study on hepatocellular carcinoma in Turkey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Caplan LR, Hier DB, Cruz ID. Cerebral embolism in the Michael Reese Stroke Registry	Published before 1 January 2007 (1983)
Caputo C, Wood E, Jabbour L. Impact of fetal alcohol exposure on body systems: A systematic review.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Carretero Pelaez MA, Esparza Gomez GC, Figuero RE, Cerero LR. Alcohol-containing mouthwashes and oral cancer. Critical analysis of literature	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Carretero Pelaez MA, Esparza Gomez GC, Figuero RE, Cerero LR. Are alcohol containing mouthwashes safe?	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Cashman KD. Calcium intake, calcium bioavailability and bone health	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Cassidy TM, Giglia RC. Psychosocial and cultural interventions for reducing alcohol consumption during lactation (Protocol).	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Cassiman D, Vannoote J, Roelandts R, Libbrecht L, Roskams T, Van den Oord J, Fevery J, Garmyn M, Nevens F. Porphyria cutanea tarda and liver disease. A retrospective analysis of 17 cases from a single centre and review of the literature	Not available as full-text in a peer-reviewed journal
Castellsague X, Quintana MJ, Martinez MC, et al. The role of type of tobacco and type of alcoholic beverage in oral carcinogenesis	Published before 1 January 2007. (2004)
Castilla, J., Barrio, G., Belza, M. J. et al . (1999) Drug and alcohol consumption and sexual risk behaviour among young adults Results from a national survey	Published before 1 January 2007. (1999)
Castro GD, de Castro CR, Maciel ME, Fanelli SL, de Ferreyra EC, Gomez MI, et al. Ethanol-induced oxidative stress and acetaldehyde formation in rat mammary tissue: potential factors	Not in humans

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involved in alcohol drinking promotion of breast cancer	
Catterson, P., Hilton, S. andWhite, M. (1997) Young people, alcohol, and designer drinks. Conventional drinks are a much greater threat to health than designer drinks	Published before 1 January 2007. (1997)
Chang G, McNamara T, Orav E et al. Brief intervention for prenatal alcohol use: A randomized trial	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Chang G. Screening for alcohol and drug use during pregnancy, Obstet Gynecol Clin North Am. 2014;41(2):205-12.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Chapple IL, Genco R; Working group 2 of joint EFP/ AAP workshop. Diabetes and periodontal diseases: Consensus report of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Chassin, L., Pitts, S. and Prost, J. (2002) Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: predictors of substance abuse outcomes	Published before 1 January 2007. (2002)
Chen L. , L. Gallicchio, K. Boyd-Lindsley, X.G. Tao, K.A. Robinson, T.K. Lam, J.G. Herman, L.E. Caulfield, E. Guallar and A.J. Alberg. Alcohol consumption and the risk of nasopharyngeal carcinoma: a systematic review	Already considered for the Evidence Evaluation Report and included at full-text review. It was excluded from the main results due to the search date listed as from 2006
Cheng SH, Shih CC, Lee IH, Hou YW, Chen KC, Chen KT, et al. A study on the sleep quality of incoming university students.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Chikritzhs T, Catalano P, Pascal R and Henrickson N. Predicting alcohol-related harms from licensed outlet density: a feasibility study [Internet]	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Chikritzhs T., Fillmore K., Stockwell T. A healthy dose of scepticism: four good reasons to think again about protective effects of alcohol on coronary heart disease.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Chikritzhs. T., Naimi, T., Stockwell, T. & Liang, W. (2014) Mendelian randomization meta-analysis sheds doubt on protective effects of “moderate” alcohol consumption on coronary heart disease. Evidence Based Medicine. doi:10.1136/ebmed-2014-110086.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Chikritzhs. T., Stockwell, T., Naimi, T., Andreasson, S., Dangardt, F., & Liang, W. (2015) Has the leaning tower of presumed health benefits from “moderate” alcohol use finally collapsed? Addiction 110(5):726-727. DOI:10.1111/add.12828	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Choi JY, Ha HS, Kwon HS, et al. Characteristics of metabolically obese, normal-weight women differ by menopause status: The Fourth Korea National Health and Nutrition Examination Survey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Chou, S. P. and Pickering, R. P. (1992) Early onset of drinking as a risk factor for lifetime alcohol-related problems	Published before 1 January 2007. (1992)
Chrostek L, Jelski W, Szmitkowski M, Puchalski Z. Gender-related differences in hepatic activity of alcohol dehydrogenase isoenzymes and aldehyde dehydrogenase in humans.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Chuang, S. C., Lee, Y. C., Wu, G. J., Straif, K. and Hashibe, M. Alcohol consumption and liver cancer risk: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it did not meet the minimum criteria for inclusion in the overview
Chun YH, Kim HR, Han K, Park YG, Song HJ, Na KS. Total cholesterol and lipoprotein composition are associated with dry eye disease in Korean women	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Chung J, Liu C, Smith DE, Seitz HK, Russell RM, Wang XD. Restoration of retinoic acid concentration suppresses ethanolenhanced c-Jun expression and hepatocyte proliferation in rat liver.	Not in humans
Chung W, Lim S, Lee S. Why is high-risk drinking more prevalent among men than women? Evidence from South Korea.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol

References provided by NHMRC based on public consultation process	Response
	consumption)
Ciancio S. Alcohol in mouthrinse: lack of association with cancer.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Clarck LT, Friedman HS. Hypertension associated with alcohol withdrawal: assessment of mechanisms and complications	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Clarke, N. G. & Hirsch, R. S. (1995) Personal risk factors for generalized periodontitis	Published before 1 January 2007. (1995)
Claydon C, Webb K, Jefferson A, Garcia J. National Drug Strategy Household Survey detailed report 2013 [Internet	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Clemens S, Matthews S, Young AF & Powers J. Alcohol consumption of Australian women: Results from the Australian Longitudinal Study on Women's Health	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Cole P, Rodu B, Mathisen A. Alcohol-containing mouthwash and oropharyngeal cancer: a review of the epidemiology.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Colvin L, Payne J, Parsons D, Kurinczuk JJ, Bower C. Alcohol consumption during pregnancy in non-indigenous West Australian women	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Connor J, Casswell S. Alcohol-related harm to others in New Zealand: evidence of the burden and gaps in knowledge	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Connor, J. (2016) Alcohol consumption as a cause of cancer. Addiction, doi: 10.1111/add.13477.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Connor, J., Kydd, R., Shield, K. and Rehm, J. The burden of disease and injury attributable to alcohol in New Zealanders under 80 years of age: marked disparities by ethnicity and sex	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Copeland, L. B., Krall, E. A., Brown, L. J., Garcia, R. I. & Streckfus, C. F. (2004) Predictors of tooth loss in two US adult populations.	Published before 1 January 2007. (1995)
Cornerlia Metzner and Ludwig, Kraus The impact of alcopops on adolescent drinking: A Literature Review.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Corrao G, Bagnardi V, Zambon A, Arico S: Exploring the dose-response relationship between alcohol consumption and the risk of several alcohol-related conditions: a meta-analysis	Published before 1 January 2007. (1999)
Corrao G, Bagnardi V, Zambon A, La Vecchia C: A meta-analysis of alcohol consumption and the risk of 15 diseases	Published before 1 January 2007. (2004)
Corrao G, Rubbiati L, Bagnardi V, Zambon A, Poikolainen K. Alcohol and coronary heart disease: a meta-analysis.	Published before 1 January 2007. (2000)
Costanzo et al. (2011) Wine, beer or spirit drinking in relation to fatal and non-fatal cardiovascular events: a meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Costanzo S, Di Castelnuovo A, Donati MB, Iacoviello L, de Gaetano G. (2010) Cardiovascular and overall mortality risk in relation to alcohol consumption in patients with cardiovascular disease	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Costanzo S; Di Castelnuovo A; Benedetta Donati M; Iacoviello L; de Gaetano G. (2011). Alcohol consumption in relation to vascular and total mortality in patients with diabetes, hypertension or history of cardiovascular disease: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report. This paper was excluded from the main analysis because it only searched one database, did not describe the types of studies included, did not include any risk of bias assessments of the included studies and did not note or adjust for confounders
Costanzo, S. Di Castelnuovo, A., Donati, M.B., Iacoviello, L., de Gaetano, G. (2010) Alcohol consumption and mortality in patients with cardiovascular disease	Already considered at full-text stage. Excluded due to incorrect exposure from Question 2

References provided by NHMRC based on public consultation process	Response
Council E. Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.	Published before 1 January 2007. (1967)
Covell, K. (1992) The appeal of image advertisements: age, gender, and product differences	Published before 1 January 2007. (1992)
Crawford, A. and Allsop, D. T. (1996) Designer drinks and drunkenness among schoolchildren. Study left several questions unanswered.	Published before 1 January 2007. (1996)
Critique 143: A Mendelian randomization assessment of alcohol and cardiovascular disease	Already considered at full-text stage for the Evidence Evaluation Report and in the Mendelian randomisation section.
Crossland, D. and Potier de la Morandiere, K. (2001) Alcopops are not responsible for acute paediatric attendances with alcohol intoxication.	Published before 1 January 2007. (2001)
Crous-Bou M, Rennert G, Cuadras D, Salazar R, Cordero D, Saltz Rennert H, Lejbkowicz F, Kopelovich L, Monroe Lipkin S, Bernard Gruber S, Moreno V. Polymorphisms in alcohol metabolism genes ADH1B and ALDH2, alcohol consumption and colorectal cancer	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Cui Y, Morgenstern H, Greenland S, et al. Polymorphism of Xeroderma Pigmentosum group G and the risk of lung cancer and squamous cell carcinomas of the oropharynx, larynx and esophagus	Published before 1 January 2007. (2006)
Cybulski, C., Lubinski, J., Huzarski, T., Lynch, H. T., Randall, S. A., Neuhausen, S. L., Senter, L., Friedman, S., Ainsworth, P., Singer, C., Foulkes, W. D., Narod, S. A., Sun, P. and Kotsopoulos, J. Prospective evaluation of alcohol consumption and the risk of breast cancer in BRCA1 and BRCA2 mutation carriers	Not available as full-text in a peer-reviewed journal
Czeizel AE, Czeizel B, Vereczkey A. The participation of prospective fathers in preconception care. Clinical medicine insights Reproductive health. 2013;7(Journal Article):1.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Dale CH. Effect of alcoholism on hemostasis	Published before 1 January 2007 (1980)
Damstro¨m Thakker, K. (1998) An overview of health risks and benefits of alcohol consumption.	Published before 1 January 2007 (1998)
Dantas AM, Mohn CE, Burdet B, et al. Ethanol consumption enhances periodontal inflammatory markers in rats.	Not in humans
Date C, Fukui M, Yamamoto A, Wakai K, Ozeki A, Motohashi Y, Adachi C, Okamoto N, Kurosawa M, Tokudome Y, Kurisu Y, Watanabe Y, Ozasa K, Nakagawa S, Tokui N, Yoshimura T, Tamakoshi A; JACC Study Group. Reproducibility and validity of a self-administered food frequency questionnaire used in the JACC study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Davies MJ, Baer DJ, Judd JT, Brown ED, Campbell WS, Taylor PR. Effects of moderate alcohol intake on fasting insulin and glucose concentrations and insulin sensitivity in postmenopausal women: a randomized controlled trial.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Day GL, Blot WJ, Shore RE, McLaughlin JK, Austin DF, Greenberg RS, et al. Second cancers following oral and pharyngeal cancers: role of tobacco and alcohol.	Published before 1 January 2007 (1994)
de Menezes RF, Bergmann A, Thuler LC. Alcohol consumption and risk of cancer: a systematic literature review	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it does not meet minimum inclusion criteria.
Dearden J, Payne J. Alcohol and homicide in Australia	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Demakis JG, Rahimtoola SH, Sutton GC, Gunnar RM. The natural course of alcoholic cardiomyopathy	Published before 1 January 2007 (1974)
Dennis J, Ghadirian P, Little J, Lubinski J, Gronwald J, Kim-Sing C, Foulkes W, Moller P, Lynch HT, Neuhausen SL, Domchek S, Armel S, Isaacs C, Tung N, Sweet K, Ainsworth P, Sun P, Krewski D, Narod S; Hereditary Breast Cancer Clinical Study Group. Alcohol consumption and the risk of breast cancer among BRCA1 and BRCA2 mutation carriers	Published before 1 January 2007 (2010)
Deutsche Bundesregierung. (2005) Bericht der Bundesregierung ¨uber die Auswirkungen des Alkopopsteuergesetzes auf den Alkoholkonsum	Published before 1 January 2007 (2005)

References provided by NHMRC based on public consultation process	Response
von Jugendlichen unter 18 Jahren sowie die Marktentwicklung von Alkopops und vergleichbaren Getr¨anken [Report of the Federal Government on the effects of alcopop taxes on alcohol consumption of young people under 18 years as well as the market develoment of alcopops and comparable beverages]	
Dietrich T, Reichart PA, Scheifele C. Clinical risk factors of oral leukoplakia in a representative sample of the US population	Published before 1 January 2007 (2004)
Dikshit RP, Boffetta P, Bouchardy C, Merletti F, Crosignani P, Cuchi T, et al. Risk factors for the development of second primary tumors among men after laryngeal and hypopharyngeal carcinoma.	Published before 1 January 2007 (2005)
Dill PL, Wells-Parker E, Soderstrom CA. The Emergency Care Setting for Screening and Intervention for Alcohol Use Problems Among Injured and High-Risk Drivers: A Review.	Published before 1 January 2007 (2004)
DJ Collins, HM Lapsley. The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05	Published before 1 January 2007 (2004/5)
Djoussé L, Ellison R, Beiser A, Scaramucci A, D'Agostino R, Wolf P: Alcohol consumption and risk of ischemic stroke: the Framingham study	Published before 1 January 2007 (2002)
Djousse L; Gaziano JM. (2008). Alcohol consumption and heart failure: a systematic review. Current Atherosclerosis Reports	Already considered at full-text review. Excluded as it was not categorised as a systematic review
Donahue RP, Abbott RD, Reed DM, Yano K. Alcohol and hemorrhagic stroke	Published before 1 January 2007 (1986)
Donahue RP, Abbott RD, Reed DM, Yano K. Alcohol and hemorrhagic stroke: The Honolulu Heart Program	Published before 1 January 2007 (1986)
Donato, F., Monarca, S., Chiesa, R. et al . (1995) Patterns and covariates of alcohol drinking among high school students in 10 towns in Italy: a cross-sectional study	Published before 1 January 2007 (1995)
Doney R, Lucas BR, Jirikowic T, Tsang TW, Watkins RE, Sauer K, Howat P, Latimer J, Fitzpatrick JP, Oscar J, Carter M, Elliott EJ. Graphomotor skills in children with prenatal alcohol exposure and Fetal Alcohol Spectrum Disorder: A population-based study in remote Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Doney R, Lucas BR, Jones T, Howat P, Sauer K, Elliott EJ. Fine motor skills in children with prenatal alcohol exposure or fetal alcohol spectrum disorder	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Doney R, Lucas BR, Watkins RE, Tsang TW, Sauer K, Howat P, Latimer J, Fitzpatrick JP, Oscar J, Carter M, Elliott EJ. Visual-motor integration, visual perception and fine motor coordination in a population of children with high levels of Fetal Alcohol Spectrum Disorder.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Dong YJ, Peng TK, Yin SJ. Expression and activities of class IV alcohol dehydrogenase and class III aldehyde dehydrogenase in human mouth	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Droste DW, Iliescu C, Vaillant M, Gantenbein M, De Bremaeker N, Lieunard C, Velez T, Meyer M, Guth T, Kuemmerle A, Gilson G, Chioti A. A daily glass of red wine associated with lifestyle changes independently improves blood lipids in patients with carotid arteriosclerosis: results from a randomized controlled trial	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Druesne-Pecollo N, Keita Y, Touvier M, Chan DS, Norat T, Hercberg S, Latino-Martel P. Alcohol drinking and second primary cancer risk in patients with upper aerodigestive tract cancers: a systematic review and meta-analysis of observational studies	Already considered for the Evidence Evaluation Report at full-text stage. Included in main data extraction but excluded from main findings in the overview due to not meeting the additional systematic review criteria
Du X, Squier CA, Kremer MJ, Wertz PW. Penetration of N-nitrosonornicotine (NNN) across oral mucosa in the presence of ethanol and nicotine.	Published before 1 January 2007 (2000)
Dudley A, Reibel T, Bower C, Fitzpatrick JP. (2015). Commissioned Report to the National Disability Insurance Agency. Critical Review of the Literature: Fetal Alcohol Spectrum Disorders, Telethon Kids Institute, Subiaco, Western Australia	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Duffy J, Alanko T. Self-reported consumption measures in sample surveys: a simulation study af alcohol consumption	Published before 1 January 2007 (1992)

References provided by NHMRC based on public consultation process	Response
Ebrahim S, Luman E, Floyd R, Murphy C, Bennett E, Boyle C. Alcohol consumption by pregnant women in the United States during 1988-1995.	Published before 1 January 2007 (2002)
Edenberg HJ. The genetics of alcohol metabolism: role of alcohol dehydrogenase and aldehyde dehydrogenase variants.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Egeberg A, Fowler JF Jr, Gislason GH, Thyssen JP, Nationwide Assessment of Cause-Specific Mortality in Patients with Rosacea: A Cohort Study in Denmark	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Egger M, Davey Smith G, Schneider M, Minder C. Bias in meta-analysis detected by a simple, graphical test	Published before 1 January 2007 (1998)
Egger M., Schneider M., Davey S. G. Spurious precision? Meta-analysis of observational studies	Published before 1 January 2007 (1998)
Ekuni D, Yamamoto T, Koyama R, Tsuneishi M, Naito K, Tobe K. Relationship between body mass index and periodontitis in young Japanese adults	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Elahi A, Zheng Z, Park J, Eyring K, McCaffrey T, Lazarus P. The human OGG1 DNA repair enzyme and its association with orolaryngeal cancer risk	Published before 1 January 2007 (1998)
Eliasson, S. & Bergstro¨m, J. (1997) Minimum periodontal bone loss in dentally-aware adults. A 10-year prospective study.	Published before 1 January 2007 (1997)
Elkholm O: Influence of the recall period on self-reported alcohol intake	Published before 1 January 2007 (2004)
Elliott E, Bower C, Payne J et al. Fetal alcohol syndrome in Australia.	Not available as full-text in a peer-reviewed journal
Elliott E, Latimer J, Fitzpatrick J, Oscar J, Carter M. There's hope in the valley	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece.
Elliott EJ, Andersson E. The Social and Economic Costs of Fetal Alcohol Spectrum Disorder. (Invited Book Chapter). In: Prenatal Alcohol Consumption: FASD Prevention, diagnosis and Early Intervention. (	Not available as full-text in a peer-reviewed journal
Elliott EJ, Bower C. Alcohol and pregnancy: the pivotal role of the obstetrician	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Elliott EJ, Latimer J, on behalf of the Lililwan Project Team. Submission to The House of Representatives Standing Committee on Indigenous Affairs. Inquiry into the harmful use of alcohol in Aboriginal and Torres Strait Islander communities.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Elliott EJ, Latimer J, on behalf of the Lililwan Project Team. Submission to the Legislative Assembly of the Northern Territory Select Committee on Action to Prevent Foetal Alcohol Spectrum Disorder	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Elliott EJ, Latimer J, Oscar J, Fitzpatrick J, Carter M. The Lililwan Collaboration: Inquiry into Fetal Alcohol Spectrum Disorders (FASD). Submission to the House of Representatives Standing Committee on Social Policy and Legal Affairs	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Elliott EJ, Oscar J, Fitzpatrick J, Latimer J, Carter M, The Lililwan Collaboration. Inquiry into Fetal Alcohol Spectrum Disorders (FASD). Preliminary Submission to The House Standing Committee on Social Policy and Legal Affairs.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Elliott EJ, Payne J, Morris A, Haan E, Bower C. Fetal Alcohol Syndrome: a prospective national surveillance study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Elliott EJ. (Eds: Jonsson E, Salmon A, Clarren S, Moffatt J). Alcohol in Australia and the Prevention of FASD: the A's have it! In: FASD Prevention in different countries. Preventing Harm from Alcohol Use during Pregnancy. The Case of Fetal Alcohol spectrum Disorder (FASD).	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Elliott EJ. Australia plays 'catch-up' with Fetal Alcool Spectrum Disorders (Commentary).	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece.

References provided by NHMRC based on public consultation process	Response
Elliott EJ. FactCheck Q&A: does Australia have some of the highest rates per capita of fetal alcohol syndrome in the world	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece.
Elliott EJ. Fetal Alcohol Spectrum Disorders. BMJ Best Practice	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Elliott EJ. Fetal Alcohol Spectrum Disorders. BMJ Best Practice	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Elliott EJ. Fetal Alcohol Spectrum Disroders: Australian Perspectives. Part V, International perspectives, Chapter 23. Fetal Alcohol Spectrum Disorders: Interdisciplinary perspectives	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Elliott EJ. International overview: the challenges in addressing fetal alcohol spectrum disorders. Part I, Introduction, Chapter 2. Fetal Alcohol Spectrum Disoders. Interdisciplinary perspectives.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Elliott EJ. Young offenders must be screened for fetal alcohol spectrum disorders before sentencing.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece.
Elmore JG, Horwitz RI. Oral cancer and mouthwash use: evaluationof the epidemiologic evidence	Published before 1 January 2007. (1995)
Elzay RP. Local effect of alcohol in combination with DMBA on hamster cheek pouch	Published before 1 January 2007. (1996)
Emberson JR, Shaper AG, Wannamethee SG, Morris RW, Whincup PH. Alcohol intake in middle age and risk of cardiovascular disease and mortality: accounting for intake variation over time	Published before 1 January 2007. (2005)
English D, Holman C, Milne E, Winter M, Hulse G, Codde G, et al: The quantification of drug caused morbidity and mortality in Australia.	Published before 1 January 2007. (1995)
Englund Ogge, L., et al., Alcohol consumption in relation to metabolic regulation, inflammation, and adiponectin in 64-year-old Caucasian women: a population-based study with a focus on impaired glucose regulation	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Esper LH, Furtado EF. Identifying maternal risk factors associated with Fetal Alcohol Spectrum Disorders: a systematic review.	Already considered at full-text stage for the Evidence Evaluation Report. The reference was excluded due to reporting of outcomes not relevant to this overview
Ezzati M, Lopez A, Rodgers A, Murray CJL: Comparative quantification of health risks. Global and regional burden of disease attributable to selected major risk factors	Published before 1 January 2007 (2004)
Fahey, P. P., Mallitt, K. A., Astell-Burt, T., Stone, G. and Whiteman, D. C. Impact of pre-diagnosis behavior on risk of death from esophageal cancer: a systematic review and meta-analysis	Already considered at full-text stage. Excluded due to being a review of systematic reviews
Fan, J. H., Wang, J. B., Jiang, Y., Xiang, W., Liang, H., Wei, W. Q., Qiao, Y. L. and Boffetta, P. Attributable causes of liver cancer mortality and incidence in china	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fedirko, V., Tramacere, I., Bagnardi, V., Rota, M., Scotti, L., Islami, F., Negri, E., Straif, K., Romieu, I., La Vecchia, C., Boffetta, P., & Jenab, M. (2011). Alcohol drinking and colorectal cancer risk: An overall and dose–response meta-analysis of published studie	Already considered at full-text stage. Included in main data extraction but excluded from being the main reported systematic review in the overview due to not meeting the additional systematic review criteria
Feigin VL, Lawes CMM, Bennett DA, Barker-Collo SL, Parag V: Worldwide stroke incidence and early case fatality reported in 56 population-based studies: a systematic review	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Feigin VL, Rinkel GJE, Lawes CMM, Algra A, Bennett DA, Gijn JV, et al: Risk factors for subarachnoid hemorrhage: an updated systematic review of epidemiological studies	Published before 1 January 2007. (2005)
Fergusson, D. M., Horwood, L. J. and Lynskey, M. T. (1995) The prevalence and risk factors associated with abusive or hazardous alcohol consumption in 16-year-olds.	Published before 1 January 2007.
Ferlay, J.; Bray, F.; Pisani, P.; Parkin, DM. GLOBOCAN 2002: Cancer Incidence, Mortality and Prevalence Worldwide,	Published before 1 January 2007.
Fernemark H, Jaredsson C, Bunjaku B, Rosenqvist U, Nystrom FH, Guldbrand H. A randomized cross-over trial of the postprandial effects of	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol

References provided by NHMRC based on public consultation process	Response
three different diets in patients with type 2 diabetes	consumption)
Figuero-Ruiz E, Careterro-Pelaez MA, Cerezo-Lapiedra R, Esparza-Gomez G, Moreno-Lopez LA. Effects of the consumption of alcohol in the oral cavity: relationship with oral cancer.	Published before 1 January 2007. (2004)
Fillmore, K.M., et al., Moderate alcohol use and reduced mortality risk: systematic error in prospective studies and new hypotheses	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Commentary.
Fink R, Hutton R. Changes in the blood platelets of alcoholics during alcohol withdrawal	Published before 1 January 2007. (1983)
Fitzgerald, M. A. & Mulford, H. A. (1987) Selfreport validity issues	Published before 1 January 2007.
Fitzpatrick JP and Oscar J, Carter M, Elliott EJ, Latimer J, Wright E, Boulton J. The Marulu Strategy 2008–2012: Overcoming Fetal Alcohol Spectrum Disorders (FASD) in the Fitzroy Valley	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Report.
Fitzpatrick JP, and Pestell C. Report to the Australian Government Royal Commission into the Protection and Detention of children in the Northern Territory	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Report.
Fitzpatrick JP, Daube M. Submission to the Legislative Assembly of the Northern Territory Inquiry into Foetal Alcohol Spectrum Disorder	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Submission.
Fitzpatrick JP, Elliott EJ, Latimer J, Carter M, Oscar J, Ferreira M, Olson HC, Lucas B, Doney R, Salter C, Peadon E, Hawkes G, Hand M. The Lililwan Project: study protocol for a population-based active case ascertainment study of the prevalence of fetal alcohol spectrum disorders (FASD) in remote Australian Aboriginal communities.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fitzpatrick JP, Garnett SP, Halim J, Cowell CT, Elliott EJ, Latimer J, Carter M, Oscar J, Boulton J. Growth faltering in children of the Kimberley: effects of alcohol restriction.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fitzpatrick JP, Latimer J, Carmichael Olson H, Carter M, Oscar J, Lucas BR, Doney R, Salter C, Try J, Hawkes G, Fitzpatrick E, Hand M, Watkins R, Tsang TW, Bower C, Ferreira M, Boulton J, Elliott EJ. Neurodevelopmental outcomes and Fetal Alcohol Spectrum Disorders (FASD) in remote Australian Aboriginal children: The Lililwan Project	Not available as full-text in a peer-reviewed journal. Conference abstract.
Fitzpatrick JP, Latimer J, Carter M, Oscar J, Ferreira ML, Carmichael Olson H, Lucas BR, Doney R, Salter C, Try J, Hawkes G, Fitzpatrick E, Hand M, Watkins RE, Martiniuk AL, Bower C, Boulton J, Elliott EJ. Prevalence of fetal alcohol syndrome in a population-based sample of children living in remote Australia: the Lililwan Project	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fitzpatrick JP, Latimer J, Ferreira M, Martiniuk AL, Peadon E, Carter M, Oscar J, Carter E, Kefford M, Shandley R, Yungabun H, Elliott EJ. Development of a reliable questionnaire to assist in the diagnosis of Fetal Alcohol Spectrum Disorders (FASD).	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fitzpatrick JP, Latimer J, Ferreira ML, Carter M, Oscar J, Martiniuk AL, Watkins RE, Elliott EJ. Prevalence and patterns of alcohol use in pregnancy in remote Western Australian communities: The Lililwan Project.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fitzpatrick JP. Foreward	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Foreward.
Fitzpatrick JP. From Community Crisis to Community Control in the Fitzroy Valley. The Marulu FASD Strategy: Making FASD history in remote Aboriginal Australian communities.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Report.
Fitzpatrick JP. Primary Health Networks Healthpathways: FASD Practice guidelines.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Guideline.
Fitzpatrick JP. Telethon Kids Institute Submission to the Australian Government Inquiry into the harmful use of alcohol in Aboriginal and Torres Strait Islander Communities.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Submission.
Fitzpatrick, JP, Pestell, C. Neuropsychological Aspects of Prevention and Intervention for Fetal Alcohol Spectrum Disorders in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)

References provided by NHMRC based on public consultation process	Response
Floyd RL, O'Connor MJ, Sokol RJ, Bertrand J, Cordero JF. Recognition and prevention of fetal alcohol syndrome, Obstet Gynecol. 2005;106(5 Pt 1):1059-64.	Published before 1 January 2007.
Forney, P. D., Forney, M. A. and Ripley, W. K. (1998) Profile of an adolescent problem drinker	Published before 1 January 2007.
Forsyth, A. J. (2001) A design for strife: Alcopops, licit drug—familiar scare story.	Published before 1 January 2007.
Foundation for Alcohol Research and Education (2013). Annual Alcohol Poll 2013: Attitudes and Behaviours.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
France K, Donovan R, Bower C, Elliott E, Payne J, DAntoine H, Bartu AE. Messages that increase women's intentions to abstain from alcohol during pregnancy: results from quantitative testing of advertising concepts	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
France K, Henley N, Payne J, D'Antoine H, Bartu A, O'Leary C, Elliott E, Bower C. Health professionals addressing alcohol use with pregnant women in Western Australia: barriers and strategies for communication	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
France KE, Donovan R, Henley N, Bower C, Elliott EJ, Payne JM, D'Antoine H, Bartu A. Promoting Abstinence From Alcohol During Pregnancy: Implications From Formative Research. Substance Use & Misuse	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
France KE, Donovan RJ, Bower C, Elliott EJ, Payne JM, D'Antoine H, Bartu AE. Messages that increase women's intentions to abstain from alcohol during pregnancy: results from quantitative testing of advertising concepts.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
France KE, Donovan RJ, Henley N, Bower C, Elliott EJ, Payne JM, D'Antoine H, Bartu AE. Promoting abstinence from alcohol during pregnancy: implications from formative research	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Franceschi S, Bidoli E, Baron AE, et al. Nutrition and cancer of the oral cavity and pharynx in north-east Italy	Published before 1 January 2007. (1991)
Franceschi S, Talamini R, Barra S, et al. Smoking and drinking in relation to cancers of the oral cavity, pharynx, larynx, and esophagus in northern Italy.	Published before 1 January 2007. (1990)
Fransquet P, Hutchinson D, Olsson C, Wilson J, Allsop S, Najman J, Elliott E, Mattick R, Saffery R, Ryan J. On behalf of the Triple B Consortium. Perinatal maternal alcohol consumption and methylation of the dopamine receptor DRD4 in the offspring: the Triple B study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Frederiksen H, Mortensen A, Schrøder M, Frandsen H, Bysted A, Knuthsen P, et al. Effect of red wine and red grape extract on blood lipids, haemostatic factors, and other risk factors for cardiovascular disease.	Published before 1 January 2007. (1995)
Frey KA, Engle R, Noble B. Preconception healthcare: what do men know and believe? Journal of Men's Health. 2012;9(1):25-35.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Frezza M, di Padova C, Pozzato G, Terpin M, Baraona E, Lieber CS. High blood alcohol levels in women. The role of decreased gastric alcohol dehydrogenase activity and first-pass metabolism.	Published before 1 January 2007. (1990)
Friberg E, Orsini N, Mantzoros CS, Wolk A. Alcohol intake and endometrial cancer risk: a meta-analysis of prospective studies	Already considered at full-text stage for the Evidence Evaluation Report. Included at full-text for Question 2 but excluded in main analysis due to another systematic review (Zhou) that met all screening criteria
Friedlander AH, Marder SR, Pisegna JR, Yagiela JA. Alcohol abuse and dependence: psychopathology, medical management and dental implications	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Fuchs CS, Stampfer MJ, Colditz GA, Giovannucci EL, Manson JE, Kawachi I, et al. Alcohol consumption and mortality among women	Published before 1 January 2007. (1995)
Furuta M, Ekuni D, Irie K, Azuma T, Tomofuji T, Ogura T, et al. Sex differences in gingivitis relate to interaction of oral health behaviors in young people	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gagari E, Kabani S. Adverse effects of mouthwash use.A review	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)

References provided by NHMRC based on public consultation process	Response
Galán I, Valencia-Martín JL, Guallar-Castillón P, Rodríguez-Artalejo F. Alcohol drinking patterns and biomarkers of coronary risk in the Spanish population	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Biomarkers.
Galeone, C., Malerba, S., Rota, M., Bagnardi, V., Negri, E., Scotti, L., Bellocco, R., Corrao, G., Boffetta, P., La Vecchia, C. and Pelucchi, C. A meta-analysis of alcohol consumption and the risk of brain tumours	Already considered for the Evidence Evaluation Report at full-text stage. The systematic review was conducted by the same team as the included systematic review on brain cancer - the review by Bagnardi 2015. The Bagnardi 2015 review was chosen as part of the main results instead of Galeone because it included analysis across the 3 levels of alcohol consumption and had an up to date search
Gao C, Ogeil, R, Lloyd B. Alcohol's burden of disease in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gao, Y., Huang, Y. B., Liu, X. O., Chen, C., Dai, H. J., Song, F. J., Wang, J., Chen, K. X. and Wang, Y. G. Tea consumption, alcohol drinking and physical activity associations with breast cancer risk among Chinese females: a systematic review and meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report. Excluded due to being the wrong population
García-Lavandeira JA, Ruano-Ravina A, Barros-Dios JM. Alcohol consumption and lung cancer risk in never smokers	Already considered at screening stage. Excluded because paper explored the effects of specific beverage types which is incongruent to the PEO for this overview
Garcia-Pola Vallejo MJ, Martinez Diaz-Canel AI, Garcia Martin JM, Gonzalez Garcia M. Risk factors for oral soft tissue lesions in an adult Spanish population	Published before 1 January 2007.
Gardener S, Gu Y, Rainey-Smith SR, Keogh JB, Clifton PM, Mathieson SL, Taddei K, Mondal A, Ward VK, Scarmeas N, Barnes M, Ellis KA, Head R, Masters CL, Ames D, Macaulay SL, Rowe CC, Szoeke C, Martins RN; AIBL Research Group. Adherence to a Mediterranean diet and Alzheimer's disease risk in an Australian population Trans Psychiatry	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gardener SL, Rainey-Smith SR, Barnes MB, Sohrabi HR, Weinborn M, Lim YY, Harrington K, Taddei K, Gu Y, Rembach A, Szoeke C, Ellis KA, Masters CL, Macaulay SL, Rowe CC, Ames D, Keogh JB, Scarmeas N, Martins RN. Dietary patterns and cognitive decline in an Australian study of ageing	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gaziano JM, Buring JE, Breslow JL, Goldhaber SZ, Rosner B, VanDenburgh M,et al.Moderate alcohol intake, increased levels of high-density lipoprotein and its subfractions, and decreased risk ofmyocardial infarction.	Published before 1 January 2007.
Gee V, Hu QM, Ernstzen A. Perinatal statistics in Western Australia, 2005.	Published before 1 January 2007.
Genco, R. J. (1996) Current view of risk factors for periodontal diseases	Published before 1 January 2007.
George, S. Alcohol and cardiovascular risk.	Not available as full-text in a peer-reviewed journal
Giacosa A; Barale R; Bavaresco L; Faliva MA; Gerbi V; La Vecchia C; Negri E; Opizzi A; Perna S; Pezzotti M; Rondanelli M. (2016). Mediterranean way of drinking and longevity	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review.
Giglia R. Commentary: Alcohol and Breastfeeding, and the Australian Breastfeeding Association.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Commentary.
Giglia RC, Binns CW. Alcohol, pregnancy and breastfeeding; a comparison of the 1995 and 2001 National Health Survey data	Published before 1 January 2007.
Giglia RC. Alcohol and lactation: An updated systematic review	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review.
Giglia RC. Alcohol consumption for breastfeeding women: Where to for policy makers?	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Policy.
Gill JS, Shipley MJ, Tsementzis SA, Hornby RS, Gill SK, Hitchcock ER, Beevers DG. Alcohol consumption -a risk factor for hemorrhagic and non-hemorrhagic stroke 1990	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
Gingival condition and toothbrushing behavior after alcohol consumption Mizutani S, Ekuni D, Tomofuji T, Yamane M, Azuma T, Iwasaki Y, Morita M.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Ginsburg ES, Mello NK, Mendelson JH, Barbieri RL, Teoh SK, Rothman M, et al. Effects of alcohol ingestion on estrogens in postmenopausal women.	Published before 1 January 2007.
Giovannucci E, Colditz G, Stampfer MJ, Rimm EB, Litin L, Sampson L, et al. The assessment of alcohol consumption by a simple selfadministered questionnaire	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Glenewinkel, F., Iffland, R. and Grellner, W. (1998) Designerdrinks und Modegetr¨anke [Designer drinks and fashionable beverages]	Published before 1 January 2007.
Global status report on alcohol and health [Internet]. Switzerland: World Health Organization	Submitted evidence that does not describe a research study or systematic review of research (primary studies). WHO Report; not a peer-reviewed journal
Global strategy to reduce harmful use of alcohol [Internet]. Switzerland: World Health Organization; 2010	Submitted evidence that does not describe a research study or systematic review of research (primary studies). WHO Report; not a peer-reviewed journal
Glovannucci, E., Colditz, G., Stampfer, M. J., Rimm, E. B., Litin, L., Sampson, L. & Willett, W. C. (1991) The assessment of alcohol consumption by a simple self-administered questionnaire.	Published before 1 January 2007.
Gmel G, Rehm J: Measuring alcohol consumption	Published before 1 January 2007.
Gmel, G. and Rehm, J. (2004) Measuring alcohol consumption	Published before 1 January 2007.
Gmel, G., Heeb, J. and Rehm, J. (2001) Is frequency of drinking an indicator of problem drinking? A psychometric analysis of a modified version of the alcohol use disorders identification test in Switzerland.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gogas H, Trakatelli M, Dessypris N, Terzidis A, Katsambas A, Chrousos GP, Petridou ET. Melanoma risk in association with serum leptin levels and lifestyle parameters: a case-control study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Goldberg RJ, Burchfield CM, Reed DM, Wergowske G, Chiu D: A prospective study of the health effects of alcohol consumption in middle-aged and elderly men: the Honolulu Heart Program	Published before 1 January 2007.
Goldstein LB, Adams R. Primary prevention of ischemic stroke: guidelines from the American Heart Association/American Stroke Association Stroke Council	Published before 1 January 2007.
Goler NC et al. Early start: a cost beneficial perinatal substance abuse program. Obstet Gynecol 2012; 119 (1): 102-110.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gordon T, Kannel WB. Drinking habits and cardiovascular disease: the Framingham Study. 1983	Published before 1 January 2007.
Gorelick P, Rodin MB, Langenberg P, Hier DB, Costigan J: Weekly alcohol consumption, cigarette smoking, and the risk of ischemic stroke: results of a case-control study at three urban medical centers in Chicago, Illinois 1989	Published before 1 January 2007.
Gorini G, Stagnaro E, Fontana V, Miligi L, Ramazzotti V, Amadori D, Rodella S, Tumino R, Crosignani P, Vindigni C, Fontana A, Vineis P, Seniori Costantini A. Alcohol consumption and risk of Hodgkin's lymphoma and multiple myeloma: a multicentre case-control study	Published before 1 January 2007.
Gou, Y. J., Xie, D. X., Yang, K. H., Liu, Y. L., Zhang, J. H., Li, B. and He, X. D. Alcohol Consumption and Breast Cancer Survival: A Meta- analysis of Cohort Studies	Already considered at full-text screen. The review was excluded because it reported the wrong outcome for this overview
Govindarajulu US, Malloy EJ, Ganguli B, Spiegelman D, Eisen EA. The comparison of alternative smoothing methods for fitting non-linear exposure-response relationships with Cox models in a simulation study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Grant, B. F. and Dawson, D. A. (1997) Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: results from the National Longitudinal Alcohol Epidemiologic Survey.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Grant, J. D., Scherrer, J. F., Lynskey, M. T. et al . (2006) Adolescent alcohol use is a risk factor for adult alcohol and drug dependence:	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol

References provided by NHMRC based on public consultation process	Response
evidence from a twin design	consumption)
Gray R. Low-to-moderate alcohol consumption during pregnancy and child development--moving beyond observational studies	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Commentary.
Greene JC, Vermillion JR. The simplified oral hygiene index.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Greene, J. & Vermillion, J. R. (1964) The simplified oral hygiene index.	Published before 1 January 2007.
Greenland S, Finkle WD. A critical look at methods for handling missing covariates in epidemiologic regression analyses.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Greenspond AJ, Schaal SF. The 'holiday heart': electrophysiologic studies of alcohol effects in alcoholics.	Published before 1 January 2007.
Greenstein G. The role of bleeding upon probing in the diagnosis of periodontal disease. A literature review	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Griffiths, M. and Sutherland, I. (1998) Adolescent gambling anddrug use	Published before 1 January 2007.
Gronbaek. M., Stroger, U., Strunge, H., Moller, L., Graff, V. and Iversen, L. (2001). Impact of a 10-year nation-wide alcohol campaign on knowledge of sensible drinking limits in Denmark.	Published before 1 January 2007.
Gruber, E., DiClemente, R. J., Anderson, M. M. et al . (1996) Early drinking onset and its association with alcohol use and problem behaviour in late adolescence.	Published before 1 January 2007.
Gruchow HW, Hoffmann RG, Anderson AJ. Effects of drinking patterns on the relationship between alcohol and coronary occlusion 1982	Published before 1 January 2007.
Guerin, S., Laplanche, A., Dunant, A. and Hill, C. Alcohol-attributable mortality in France	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Guha N, Boffetta P, Wunsch Filho V, Eluf Neto J, Shangina O, Zaridze D, et al. Oral health and risk of squamous cell carcinoma of the head and neck and esophagus: results of two multicentric case-control studies	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Gulliver SB, Kamholz BW, Helstrom AW. Smoking cessation and alcohol abstinence: What do the data tell us? (2006)	Published before 1 January 2007.
Guo R, Ren J. Alcohol and acetaldehyde in public health: from marvel to menace.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review.
Guria J, Jones W, Leung J, Mara K. Alcohol in New Zealand road trauma (2003)	Published before 1 January 2007.
Gutjahr E, Gmel G, Rehm J: The relation between average alcohol consumption and disease: an overview. (2001)	Published before 1 January 2007.
Haastrup MB, Pottegård A, Damkier P. Alcohol and breastfeeding	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Hackshaw-McGeagh LE, Penfold CM, Walsh E, Donovan JL, Hamdy FC, Neal DE, Jeffreys M, Martin RM, Lane JA; ProtecT Study Group. Physical activity, alcohol consumption, BMI and smoking status before and after prostate cancer diagnosis in the ProtecT trial: opportunities for lifestyle modification	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Hall and Partners Open Mind (2016). Women Want to Know project evaluation	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Hansagi H, Romelsjö A, Gerhardsson de Verdier M, Andréasson S, Leifman A: Alcohol consumption and stroke mortality. 20-year follow-up of 15,077 men and women	Published before 1 January 2007 (1995)
Hansel B, Thomas F, Pannier B, Bean K, Kontush A, Chapman MJ, Guize L, Bruckert E. Relationship between alcohol intake, health and social status and cardiovascular risk factors in the Urban Paris-Ile-de-France	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)

References provided by NHMRC based on public consultation process	Response
Cohort: is the cardioprotective action of alcohol a myth?	
Harada S. Classification of alcohol metabolizing enzymes and polymorphisms– specificity in Japanese	Published before 1 January 2007 (2001)
Harper C. The neurotoxicity of alcohol. Human & Experimental Toxicology	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Hart CL, Smith GD, Hole DJ, Hawthorne VM: Alcohol consumption and mortality from all causes, coronary heart disease, and stroke: results from a prospective cohort study of Scottish men with 21 years of follow up [comments].	Published before 1 January 2007 (1999)
Harwood DG, Kalechstein A, Barker WW, Strauman S, St George-Hyslop P, Iglesias C, Loewenstein D, Duara R. The effect of alcohol and tobacco consumption, and apolipoprotein E genotype, on the age of onset in Alzheimer's disease	Not available as full-text in a peer-reviewed journal
Hashibe M, Boffetta P, Zaridze D, Shangina O, Szeszenia- Dabrowska N, Mates D, et al. Evidence for an important role of alcohol- and aldehyde-metabolizing genes in cancers of the upper aerodigestive tract	Published before 1 January 2007 (2006)
Hashibe M, Brennan P, Chuang SC, Boccia S, Castellsague X, Chen C, Curado MP, Dal Maso L, Daudt AW, Fabianova E, Fernandez L, Wünsch-Filho V, Franceschi S, Hayes RB, Herrero R, Kelsey K, Koifman S, La Vecchia C, Lazarus P, Levi F, Lence JJ, Mates D, Matos E, Menezes A, McClean MD, Muscat J, Eluf-Neto J, Olshan AF, Purdue M, Rudnai P, Schwartz SM, Smith E, Sturgis EM, Szeszenia-Dabrowska N, Talamini R, Wei Q, Winn DM, Shangina O, Pilarska A, Zhang ZF, Ferro G, Berthiller J, Boffetta P. Interaction between tobacco and alcohol use and the risk of head and neck cancer: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Hatchard T, Smith AM, Halchuk RE, Longo CA, Fried PA, Hogan MJ, Cameron I. Effects of low-level alcohol use on cognitive interference: an fMRI study in young adults.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Haustein, S. (2003) Werbung als Verf˙uhrerin? Beeinflusst Werbung den Alkoholkonsum von Kindern und Jugendlichen? [Advertisement and seduction: Does advertisement affect alcohol consumption of children and young people?].	Published before 1 January 2007 (2003)
Havard A, Shakeshaft AP, Conigrave KM. Prevalence and characteristics of patients with risky alcohol consumption presenting to emergency departments in rural Australia.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Haycock P. Fetal alcohol spectrum disorders: the epigenetic perspective. Biol Reprod. 2009;81(4):607–617.	Not available as full-text in a peer-reviewed journal
Hayes LG. Aboriginal women, alcohol and the road to fetal alcohol spectrum disorder	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece
Hayes RB, Bravo-Otero E, Kleinman DV, et al. Tobacco and alcohol use and oral cancer in Puerto Rico.	Published before 1 January 2007 (1999)
Health Technology Analysts Pty Ltd. Fetal Alcohol Spectrum Disorder: exploratory analysis of different prevention strategies in Australia and New Zealand. Canberra: Report for Food Standards Australia New Zealand; 2010.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Heather, N. (2012). Drinking guidelines are essential in combatting alcohol-related harm: Comments on the new Australian and Canadian guidelines.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece
Heeb JL, Gmel G: Measuring alcohol consumption: a comparison of graduated frequency, quantity frequency and weekly recall diary methods in a general population survey.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Heeb, J. L. and Gmel, G. (2005) Measuring alcohol consumption: a comparison of graduated frequency, quantity frequency, and weekly recall diary methods in a general population survey.	Published before 1 January 2007 (2005)
Heermans EH. Booze and blood: the effects of acute and chronic alcohol abuse on the hematopoietic system.	Published before 1 January 2007 (1998)

References provided by NHMRC based on public consultation process	Response
Heffernan M, Mather KA, Xu J, Assareh AA, Kochan NA, Reppermund S, Draper B, Trollor JN, Sachdev P, Brodaty H. Alcohol consumption and incident dementia: Evidence from the Sydney Memory and Ageing Study	Not available as full-text in a peer-reviewed journal
Heidemann C, Sun Q, van Dam RM, Meigs JB, Zhang C, Tworoger SS, et al. Total and high-molecular-weight adiponectin and resistin in relation to the risk for type 2 diabetes in women	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Heikkinen, N., Niskanen, E., Könönen, M., Tolmunen, T., Kekkonen, V., Kivimäki, P., Tanila, H., Laukkanen, E., and Vanninen, R. (2016) Alcohol consumption during adolescence is associated with reduced grey matter volumes. Addiction, doi: 10.1111/add.13697.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Heinzl H, Kaider A. Gaining more flexibility in Cox proportional hazards regression models with cubic spline functions	Published before 1 January 2007 (1997)
Henderson J, Gray R, Brocklehurst P. Systematic review of effects of low-moderate prenatal alcohol exposure on pregnancy outcome, BJOG. 2007;114(3):243-52.	Already considered at full-text stage for the Evidence Evaluation Report. Excluded because searches are up to 2005 which is outside the timeline for this overview
Hennekens C. H., Buring J. E., Manson . J. E., Stampfer M., Rosner B., Cook N. R. et al. Lack of effect of long-term supplementation with beta carotene on the incidence of malignant neoplasms and cardiovascular disease	Published before 1 January 2007 (1996)
Henrich JB, Horwitz RI: Evidence against the association between alcohol use and ischemic stroke risk.	Published before 1 January 2007 (1989)
Henriksen T, Hjollund N, Jensen T, Bonde J, Andersson A, Kolstad H, et al. Alcohol consumption at the time of conception and spontaneous abortion. American Journal of Epidemiology. 2004;160(7):661-7.	Published before 1 January 2007 (2004)
Hermens DF, Lagopoulos J, Tobias-Webb J, et al. Pathways to alcoholinduced brain impairment in young people: a review	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Herrero R, Castellsague X, Pawlita M, et al. Human papillomavirus and oral cancer: the International Agency for Research on Cancer multicenter study	Published before 1 January 2007 (2003)
Hibell, B., Andersson, B., Bjarnasson, T. et al . (2004) The ESPAD Report 2003—Alcohol and other Drug Use Among Students in 35 European Countries.	Published before 1 January 2007 (2004)
Higgins JP, Thompson SG, Deeks JJ, Altman DG: Measuring inconsistency in meta-analyses	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Higgins JP, Thompson SG. Quantifying heterogeneity in a meta-analysis.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Hill A. B. The environment and disease: association or causation?	Published before 1 January 2007 (1965)
Hill, K. G., White, H. R., Chung, I.-J. et al . (2000) Early adult outcomes of adolescent binge drinking: person- and variablecentered analyses of binge drinking trajectories	Published before 1 January 2007 (2000)
Hillbom M, Haapaniemi H, Juvela S, Palomaki H, Numminen H, Kaste M. Recent alcohol consumption, cigarette smoking and cerebral infarction in young adults	Published before 1 January 2007 (1995)
Hillbom M, Kaste M, Rasi V. Can ethanol intoxication affect hemocoagulation to increase the risk of brain infarction in young adults?	Published before 1 January 2007 (1983)
Hillbom M, Kaste M. Does ethanol intoxication promote brain infarction in young adults?	Published before 1 January 2007 (1981)
Hillbom M, Numminen H, Juvela S. Recent heavy drinking and embolic stroke	Published before 1 January 2007 (1999)
Hindle I, Downer MC, Moles DR, Speight PM. Is alcohol responsible for more intra-oral cancer?	Published before 1 January 2007 (2000)
Hingson, R., Heeren, T. and Zakocs, R. (2001) Age of drinking onset and involvement in physical fights after drinking.	Published before 1 January 2007 (2001)
Hingson, R., Heeren, T., Jamanka, A. et al . (2000) Age of drinking onset and unintentional injury involvement after drinking	Published before 1 January 2007 (2000)

References provided by NHMRC based on public consultation process	Response
Hiraki A, Matsuo K, Wakai K, Suzuki T, Hasegawa 29. Y, Tajima K. Gene-gene and gene-environment interactions between alcohol drinking habit and polymorphisms in alcohol-metabolizing enzyme genes and the risk of head and neck cancer in Japan.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Holland., K. McCallum, K. and Walton, A. (2016). 'I'm not clear on what the risk is': women's reflective negotiations of the uncertainty about alcohol during pregnancy	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Holman D. The value of intervention research in health promotion. Presented at the Western Australian Health Promotion Foundation	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Holmes M. V., Dale C. E., Zuccolo L., Silverwood R. J., Guo Y., Ye Z. et al. Association between alcohol and cardiovascular disease: Mendelian randomisation analysis based on individual participant data	Already considered at full-text stage for the Evidence Evaluation Report. Included as part of the Mendelian Randomisation section
Homann N, Jousimies-Somer H, Jokelainen K, Heine R, Salaspuro M. High acetaldehyde levels in saliva after ethanol onsumption: methodological aspects and pathogenetic implications	Published before 1 January 2007 (1997)
Homann N, Karkkainen P, Koivisto T, Nosova T, Jokelainen K, Salaspuro M. Effects of acetaldehyde on cell regeneration and differentiation of the upper gastrointestinal tract mucosa.	Published before 1 January 2007 (1997)
Homann N, Seitz HK. Alcohol's Effect on the Development and Progression of Cancer	Published before 1 January 2007 (2000)
Homann N, Tillonen J, Meurman JH, Rintamaki H, Lindqvist C, Rautio M, et al. Increased salivary acetaldehyde levels in heavy drinkers and smokers: a microbiological approach to oral cavity cancer	Published before 1 January 2007 (2000)
Homann N, Tillonen J, Rintama¨ ki H, Salaspuro M, Lindqvist C, Meurman JH. Poor dental status increases acetaldehye production fromethanol in slaiva: a possible link to increased oral cancer among heavy drinkers	Published before 1 January 2007 (2001)
Hong H, Kim EK, Lee JS. Effects of calcium intake, milk and dairy product intake, and blood vitamin D level on osteoporosis risk in Korean adults: Analysis of the 2008 and 2009 Korea National Health and Nutrition Examination Survey.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Horizon Research. (2011). National alcohol harm reduction strategy: Qualitative evaluation of resources.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Hornecker E, Muuss T, Ehrenreich H, Mausberg RF. A pilot study on the oral conditions of severely alcohol addicted persons.	Published before 1 January 2007 (2003)
Hosomi N, Nava T, Ohkita H, et al. Predictors of intracerebral hemorrhage severity and its outcome in Japanese stroke patients.	Not available as full-text in a peer-reviewed journal
Howard SJ, Gordon R, Jones SC. Australian alcohol policy 2001–2013 and implications for public health.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Howie NM, Trigkas TK, Cruchley AT, et al. Short-term exposure to alcohol increases the permeability of human oral mucosa	Published before 1 January 2007 (2001)
Hsu TC, Furlong C, Spitz MR. Ethyl alcohol as a cocarcinogen with special reference to the aerodigestive tract: a cytogenetic study	Published before 1 January 2007 (1991)
Hu FB, Stampfer MJ, Rimm E, Ascherio A, Rosner BA, Spiegelman D, et al. Dietary fat and coronary heart disease: A comparison of approaches for adjusting for total energy intake and modeling repeated dietary measurements.	Published before 1 January 2007 (1999)
Huang, W.J., X. Zhang, and W.W. Chen, Association between alcohol and Alzheimer's disease	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Hughes, K., MacKintosh, A. M., Hastings, G. et al . (1997) Young people, alcohol, and designer drinks: a quantitative and qualitative study.	Published before 1 January 2007 (1997)
Hugoson, A. & Laurell, L. (2000) A prospective longitudinal study on periodontal bone height changes in a Swedish population	Published before 1 January 2007 (2000)

References provided by NHMRC based on public consultation process	Response
Husein-Elahmed H, Aneiros-Fernandez J, Gutierrez-Salmerón MT, Botella-Lopez M, Aneiros-Cachaza J, Naranjo-Sintes R. Alcohol intake and risk of aggressive histological basal cell carcinoma: a case-control study.	Not available as full-text in a peer-reviewed journal
Husemoen LL, Jørgensen T, Borch-Johnsen K, Hansen T, Pedersen O, Linneberg A. The association of alcohol and alcohol metabolizing gene variants with diabetes and coronary heart disease risk factors in a white population.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Hutchison IL, Magennis P, Shepherd JP, Brown AE. The BAOMS United Kingdom survey of facial injuries part 1: aetiology and the association with alcohol consumption	Published before 1 January 2007 (1998)
IARC Monogr Eval Carcinog Risks Hum. 2007.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 96 Alcohol consumption and ethyl carbamate	Already considered at full-text stage for the Evidence Evaluation Report. As mentioned in the Report, "The monographs were not considered for inclusion in the overview as the methodology underpinning them is not reported in sufficient detail. Although IARC undertakes systematic reviews, the details of these are not publically available and the monographs are a reflection of the views of the expert working group based on their appraisal of the underlying reviews"
IARC Monographs. Re-evaluation of some organic chemicals, hydrazine and hydrogen peroxide. Proceedings of the IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. Lyon, France, 17–24 February 1998	Published before 1 January 2007 (1998)
IARC. Fruits and Vegetables	Published before 1 January 2007 (2003)
Ilomaki J, Jokanovic N, Tan EC, Lonnroos E. Alcohol consumption, dementia and cognitive decline: An overview of systematic reviews	Not available as full-text in a peer-reviewed journal
Imhof A, Plamper I, Maier S, Trischler G, Koenig W. Effect of drinking on adiponectin in healthy men and women: a randomized intervention study of water, ethanol, red wine, and beer with or without alcohol	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Ingersoll KS. Reducing alcohol-exposed pregnancy risk in college women: Initial outcomes of a clinical trial of a motivational intervention.	Published before 1 January 2007 (2005)
International Agency for Research on Cancer (IARC) A Review of Human Carcinogens: Personal Habits and Indoor Combustions.	Already considered at full-text stage for the Evidence Evaluation Report. As mentioned in the Report, "The monographs were not considered for inclusion in the overview as the methodology underpinning them is not reported in sufficient detail. Although IARC undertakes systematic reviews, the details of these are not publically available and the monographs are a reflection of the views of the expert working group based on their appraisal of the underlying reviews"
International Alliance for Responsible Drinking. International Guidelines on Drinking and Pregnancy	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
International Center for Alcohol Policies. International Drinking Guidelines. 2010	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
International Center for Alcohol Policy (ICAP): What is a "standard drink"?.	Published before 1 January 2007 (1999)
Ishikawa H, Ishikawa T, Yamamoto H, Fukao A, Yokoyama K. Genotoxic effects of alcohol in human peripheral lymphocytes	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Islami F, Tramacere I, Rotta M, et al (2010). Alcohol drinking and laryngeal cancer: overall and dose-risk relation. A systematic review and meta-analysis	Already considered at full-text review fpr the Evidence Evaluation Report. Included in full-text but not included as the main review due to being superceded by Bagnardi 2015 and

References provided by NHMRC based on public consultation process	Response
	only searching one database
Islami F; Fedirko V; Tramacere I; Bagnardi V; Jenab M; Scotti L; Rota M; et al. (2011). Alcohol drinking and esophageal squamous cell carcinoma with focus on light-drinkers and never-smokers: a systematic review and meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report. Part of included studies list for Q2
Iso H, Baba S, Mannami T, Sasaki S, Okada K, Konishi M, Tsugane S; JPHC Study Group. Alcohol consumption and risk of stroke among middle-age men: the JPHC Study Cohort	Published before 1 January 2007 (2004)
Iso H, Jacobs DR Jr, Goldman L. Accuracy of death certificate diagnosis of intracranial hemorrhage and nonhemorrhagic stroke	Published before 1 January 2007 (1990)
Iso H, Kitamura A, Shimamoto T, Sankai T, Naito Y, Sato S, Kiyama M, Iida M, Komachi Y. Alcohol intake and the risk of cardiovascular disease in middle-aged Japanese men	Published before 1 January 2007 (1998)
Iwashita M, Matsushita Y, Sasaki J, Arakawa K, Kono S, Kyushu Lipid Intervention Study Group Relation of serum total cholesterol and other factors to risk of cerebral infarction in Japanese men with hypercholesterolemia	Published before 1 January 2007 (2005)
Jackson R., Broad J., Connor J., Wells S. Alcohol and ischaemic heart disease: probably no free lunch	Published before 1 January 2007 (2005)
Jackson VA, Sesso HD, Buring JE, Gaziano JM: Alcohol consumption and mortality in men with preexisting cerebrovascular disease	Published before 1 January 2007 (2003)
Jakobsen ML, Larsen JR, Glümer C, Juel K, Ekholm O, Vilsbøll T, Becker U, Fink-Jensen A. Alcohol consumption among patients with diabetes: a survey-based cross-sectional study of Danish adults with diabetes	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Jamerson P, Wulser M, Kimler B. Neurobehavioural effects in rat pups whose sires were exposed to alcohol. Brain Res Dev Brain Res.2004;149:103–111.	Published before 1 January 2007 (2004)
Jamrozik K, Broadhurst RJ, Anderson CS, Stewart-Wynne EG: The role of lifestyle factors in the etiology of stroke: a population-based case-control study in Perth, Western Australia	Published before 1 January 2007 (1994)
Jang H, Jang WM, Park JH, Oh J, Oh MK, Hwang SH, Kim YI, Lee JS. Alcohol consumption and the risk of type 2 diabetes mellitus: effect modification by hypercholesterolemia: the Third Korea National Health and Nutrition Examination Survey (2005)	Published before 1 January 2007 (2005)
Jansson, L. & Lavstedt, S. (2002) Influence of smoking on marginal bone loss and tooth loss – a prospective study over 20 years.	Published before 1 January 2007 (2002)
Jansson, L., Lavstedt, S. & Zimmerman, M. (2002) Marginal bone loss and tooth loss in a sample from the County of Stockholm – a longitudinal study over 20 years	Published before 1 January 2007 (2002)
Jarl J, Gerdtham UG. Time pattern of reduction in risk of oesophageal cancer following alcohol cessation--a meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jarl J, Heckley G, Brummer J, Gerdtham UG. Time characteristics of the effect of alcohol cessation on the risk of stomach cancer--a meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jayasekara H, Ferris J, Matthews S, Livingston M, Lloyd B. Trends in alcohol-attributable morbidity and mortality for Victoria, Australia from 2000/01 to 2009/10.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jayasekara H; English DR; Room R; MacInnis RJ. (2014). Alcohol consumption over time and risk of death: a systematic review and meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report. The systematic review is still included but not part of the main results due to Stockwell 2016 having an up to date search and meeting the minimum inclusion criteria for systematic reviews
Jayasekara, H., MacInnis, R. J., Room, R. and English, D. R. Long-Term Alcohol Consumption and Breast, Upper Aero-Digestive Tract and Colorectal Cancer Risk: A Systematic Review and Meta-Analysis	Already considered at full-text stage for the Evidence Evaluation Report. The systematic review is still included but not part of the main results due to being superceded by the WCRF report
Jayasekara, H., MacInnis, R.J., Room, R., English, D.R. (2016) Long-term alcohol consumption and breast, upper aero-digestive tract and colorectal	Already considered at full-text stage for the Evidence Evaluation Report and an included systematic review for

References provided by NHMRC based on public consultation process	Response
cancer risk: A systematic review and meta-analysis	question 2. The results of this systematic review were superceded by the WRCF review that met the miminum criteria for the overview
Jayasekara, H., MacInnis, R.J., Room, R., English, D.R. (2016) Long-term alcohol consumption and breast, upper aero-digestive tract and colorectal cancer risk: A systematic review and meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report and an included systematic review for question 2. The results of this systematic review were superceded by the WRCF review that met the miminum criteria for the overview
Jeon JY, Ko SH, Kwon HS, et al; Taskforce Team of Diabetes Fact Sheet of the Korean Diabetes Association. Prevalence of diabetes and prediabetes according to fasting plasma glucose and HbA1c	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jernigan D, Noel J, Landon J, Thornton N, Lobstein T. Alcohol marketing and youth alcohol consumption: A systematic review of longitudinal studies published since 2008	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jessor, R. (1986) Adolescent problem drinking: Psychosocial aspects and developmental outcomes. In Development as Action in Context: Problem Behaviour and Young Adult Development, Silbereisen, R. K., Eyferth, K., Rudinger, R. eds, Springer, New York,	Published before 1 January 2007 (1986)
Jessor, R. (1998) New Perspectives on Adolescent Risk Behaviour	Published before 1 January 2007 (1998)
Jiang H, Livingston M, Room R, Dietze P, Norstrom T, Kerr WC. Alcohol consumption and liver disease in Australia: A time series analysis of the period 1935-2006	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jiang H, Livingston M, Room R. Alcohol consumption and fatal injuries in Australia before and after Major Traffic safety initiatives: A time series analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jin M, Cai S, Guo J, Zhu Y, Li M, Yu Y, Zhang S, Chen K. Alcohol drinking and all cancer mortality: a meta-analysis	Already considered at full-text stage. Systematic review included the wrong outcome for this overview
Johansen D, Borgström A, Lindkvist B, Manjer J. Different markers of alcohol consumption, smoking and body mass index in relation to risk of pancreatic cancer. A prospective cohort study within the Malmö Preventive Project	Not available as full-text in a peer-reviewed journal
Johnson, L. and O'Malley, P. M. (2003) Tobacco, alcohol, and other drug use in adolescence: Modern-day epidemics. In Longterm Trends in the Well-being of Children and Youths: Issues in Children's and Families Lives, Weissberg, R. P., Walberg, H. J., O. Brien, M. U., Kuster, C. B. eds,	Published before 1 January 2007 (2003)
Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the future: national survey results on drug use, 1975–2012.	Not available as full-text in a peer-reviewed journal
Jokelainen K, Heikkonen E, Roine R, Lehtonen H, Salaspuro M. Increased acetaldehyde production by mouthwashings from patients with oral cavity, laryngeal, or pharyngeal cancer.	Published before 1 January 2007 (1996)
Jones C, Zhang X, Dempsey K, Schwarz N and Guthridge S. The Health and Wellbeing of Northern Territory Women: From the Desert to the Sea. Department of Health and Community Services, Darwin, 2005.	Published before 1 January 2007 (2005)
Jones HM, McKenzie A, Miers S, Russell E, Watkins RE, Payne JM, Hayes L, Carter M, D'Antoine H, Latimer J, Wilkins A, Mutch RC, Burns L, Fitzpatrick JP, Halliday J, O'Leary CM, Peadon E, Elliott EJ, Bower C. Involving consumers and the community in the development of a diagnostic instrument for fetal alcohol spectrum disorders in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Jones K, Smith D. Pattern of malformation in offspring of chronic alcoholic mothers	Published before 1 January 2007 (1973)
Jones S, Barrie L, Robinson L. The schoolies experience: the role of expectancies, gender roles and social norms of recent school leavers. Wollongong, NSW: Centre for Health Initiatives	Not available as full-text in a peer-reviewed journal
Jones SC, Magee CA. Exposure to alcohol advertising and alcohol consumption among Australian adolescents	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Joosten MM, Beulens JW, Kersten S, Hendriks HF. Moderate alcohol consumption increases insulin sensitivity and ADIPOQ expression in	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol

References provided by NHMRC based on public consultation process	Response
postmenopausal women: a randomised, crossover trial.	consumption)
Jousilahti P, Rastenyte D, Tuomilehto J. Serum γ-glutamyl transferase, self-reported alcohol drinking and the risk of stroke.	Published before 1 January 2007 (2000)
Jurk S, Mennigen E, Goschke T, Smolka MN. Low-level alcohol consumption during adolescence and its impact on cognitive control development	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Juvela S, Hillbom M, Palomäki H. Risk factors for spontaneous intracerebral hemorrhage	Published before 1 January 2007 (1995)
Kai Lee, James Olsen, Jiandong Sun and Arun Chandu. Alcohol involved maxillofacial fractures	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kalapatapu RK, Ventura MI, Barnes DE. Lifetime alcohol use and cognitive performance in older adults.	Not available as full-text in a peer-reviewed journal
Kastorini CM, Milionis HJ; Esposito K; Giugliano D; Goudevenos JA; Panagiotakos DB. (2011). The effect of Mediterranean diet on metabolic syndrome and its components: a meta-analysis of 50 studies and 534,906 individuals	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kavanagh AM, Kelly MT, Krnjacki L, Thornton L, Jolley D, Subramanian SV, Turrell G, Bentley RJ. Access to alcohol outlets and harmful alcohol consumption: a multi-level study in Melbourne, Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kehoe T., Gmel G., Shield K. D., Gmel G., Rehm J. Determining the best population-level alcohol consumption model and its impact on estimates of alcohol-attributable harms	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kelly, K. J. and Edwards, R. W. (1998) Image advertisements for Icohol products: Is their appeal associated with adolescents' intention to consume alcohol	Published before 1 January 2007 (1998)
Kerr D, Penfold S, Zouwail S, Thomas P, Begley J. The influence of liberal alcohol consumption on glucose metabolism in patients with type 1 diabetes: a pilot study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kerr WC, Ye Y. Relationship of life-course drinking patterns to diabetes, heart problems, and hypertension among those 40 and older in the 2005 U.S. National Alcohol Survey	Not available as full-text in a peer-reviewed journal
Kerr, W.C. & Stockwell, T. (2012) Understanding standard drinks and drinking guidelines	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Khocht A, Schleifer SJ, Janal MN, Keller S. Dental care and oral disease in alcohol-dependent persons.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kim EJ, Jin BH, Bae KH. Periodontitis and obesity: A study of the Fourth Korean National Health and Nutrition Examination Survey.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kim JW, Lee DY, Lee BC, Jung MH, Kim H, Choi YS, Choi IG. Alcohol and cognition in the elderly: a review	Submitted evidence that does not describe a research study or systematic review of research (primary studies): narrative review
Kim YH, Cho KH, Choi YS, et al. Low bone mineral density is associated with metabolic syndrome in South Korean men but not in women: The 2008-2010 Korean National Health and Nutrition Examination Survey.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kim, J.W. Kim, L.J. Shouten, S.C. Larsson, H.H. Chung, Y.B. Kim, W. Ju, N.H. Park, Y.S. Song, S.C. Kim and S.B. Kang. Wine drinking and epithelial ovarian cancer risk: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report. Review included in the overview but not included in the main analysis due to be superceded by Yan-Hong's systematic review
King DE, Mainous AG 3rd, Geesey ME. Adopting moderate alcohol consumption in middle age: subsequent cardiovascular events	Not available as full-text in a peer-reviewed journal
Kingman A, Susin C, Albandar JM. Effect of partial recording protocols on severity estimates of periodontal disease.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kirby T. Blunting the legacy of alcohol abuse in Western Australia	Submitted evidence that does not describe a research study or systematic review of research (primary studies): opinion piece

References provided by NHMRC based on public consultation process	Response
Kirby T. Elizabeth Elliott: champion of child health in Australia	Submitted evidence that does not describe a research study or systematic review of research (primary studies): opinion piece
Kitamura A, Iso H, Sankai T, Naito Y, Sato S, Kiyama M, Okamura T, Nakagawa Y, Iida M, Shimamoto T, Komachi Y. Alcohol intake and premature coronary heart disease in urban Japanese men	Published before 1 January 2007 (1998)
Kiyohara Y, Kato I, Iwamoto H, Nakayama K, Fujishima M. The impact of alcohol and hypertension on stroke incidence in a general Japanese population	Published before 1 January 2007 (1995)
Klarich DS, Brasser SM, Hong MY. Moderate Alcohol Consumption and Colorectal Cancer Risk	Submitted evidence that does not describe a research study or systematic review of research (primary studies).
Klatsky AL, Armstrong M, Friedman GD. Alcohol drinking and risk of hemorrhagic stroke.	Published before 1 January 2007 (2002)
Klatsky AL, Armstrong MA, Friedman GD, Sideny S: Alcohol drinking and risk of hospitalization for ischemic stroke	Published before 1 January 2007 (2001)
Klatsky AL, Armstrong MA, Friedman GD. Risk of cardiovascular mortality in alcohol drinkers, ex-drinkers and nondrinkers	Published before 1 January 2007 (1990)
Klatsky AL, Armstrong MA, Friedman GD: Alcohol use and subsequent cerebrovascular disease hospitalizations.	Published before 1 January 2007 (1989)
Klatsky AL, Friedman GD, Siegelaub AB. Alcohol consumption before myocardial infarction. Results from the Kaiser- Permanente epidemiologic study of myocardial infarction.	Published before 1 January 2007 (1974)
Klatsky AL, Gunderson E. Alcohol and hypertension: a review	Submitted evidence that does not describe a research study or systematic review of research (primary studies): narrative review
Klatsky, A. L. (2010). Alcohol and cardiovascular health	Submitted evidence that does not describe a research study or systematic review of research (primary studies): opinion
Klein, B. E., Klein, R. & Knudtson, M. D. (2004) Life-style correlates of tooth loss in an adult Midwestern population.	Published before 1 January 2007 (2004)
Kleinbaum, DG.; Kupper, LL.; Morgenstern, H. Epidemiologic Research: Principles and Quantitative Methods.	Submitted evidence that does not describe a research study or systematic review of research (primary studies): textbook
Klonoff-Cohen H, Lam-Kruglick P, Gonzalez C. Effects of maternal and paternal alcohol consumption on the success rates of in vitro fertilization and gamete intrafallopian transfer. Fertil Steril. 2003;79(2):330-9.	Published before 1 January 2007 (2003)
Knott C, Bell S, Britton A. Alcohol consumption and the risk of type 2 diabetes: A systematic review and dose-response meta-analysis of more than 1.9 million individuals from 38 observational studies	Already considered and included at full-text review. This systematic review is the primary reference for question 2 and its results are referred to in the main findings of the overview
Kodama et al. (2011) Alcohol consumption and risk of atrial fibrillation: a meta-analysis	Already considered and included at full-text review for the Evidence Evaluation Report. This systematic review is the primary reference for question 2 and its results are referred to in the main findings of the overview
Kojima A, Ekuni D, Mizutani S, Furuta M, Irie K, Azuma T, et al. Relationships between self-rated oral health, subjective symptoms, oral health behavior and clinical conditions in Japanese university students: a cross-sectional survey at Okayama University.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Koloverou E, Panagiotakos DB, Pitsavos C, Chrysohoou C, Georgousopoulou EN, Metaxa V, Stefanadis C; ATTICA Study group. Effects of alcohol consumption and the metabolic syndrome on 10-year incidence of diabetes: the ATTICA study	Not available as full-text in a peer-reviewed journal
Kono S, Ikeda M, Tokudome S, Nishizumi M, Kuratsune M: Alcohol and mortality: a cohort study of male Japanese physicians	Published before 1 January 2007 (1986)
Koskinen P, Kupari M. Alcohol and cardiac arrhythmias	Published before 1 January 2007 (1992)
Kraus, L., Bloomfield, K., Augustin, R. et al . (2000) Prevalence ofalcohol use and the association between onset of use and alcoholrelated problems in a general population sample in Germany.	Published before 1 January 2007 (2000)
Krishel S, Richards CF. Alcohol and substances abuse training for emergency medicine residents: a survey of US programs	Published before 1 January 2007 (1999)
Kumar V, Abbas AK, Fausto N, Mitchell RN. Robbins Basic Pathology,	Submitted evidence that does not describe a research study or systematic review of research (primary studies): textbook

References provided by NHMRC based on public consultation process	Response
Kuntsche, E., Knibbe, R., Gmel, G. et al . (2006) 'I drink spirits to get drunk and block out my problems. . .' Beverage preference, drinking motives and alcohol use in adolescence	Published before 1 January 2007 (2006)
Kurkivuori J, Salaspuro V, Kaihovaara P, et al. Acetaldehyde production from ethanol by oral streptococci	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kwon Y, Norby FL, Jensen PN, Agarwal SK, Soliman EZ, Lip GY, Longstreth WT Jr, Alonso A, Heckbert SR, Chen LY. Association of smoking, alcohol, and obesity with cardiovascular death and aschemic stroke in atrial fibrillation: The Atherosclerosis Risk in Communities (ARIC) Study and Cardiovascular Health Study (CHS).	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kydd R. M., Connor J. Inconsistency in reporting abstention and heavy drinking frequency: associations with sex and socioeconomic status, and potential impacts	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Kypri K, Dean J, Kirby S, et al. 'Think before you buy under-18s drink': evaluation of a community alcohol intervention	Published before 1 January 2007 (2005)
Kypri K, Voas RB, Langley JD, et al. Minimum purchasing age for alcohol and traffi c crash injuries among 15- to 19-year-olds in New Zealand.	Published before 1 January 2007 (2006)
La Torre G, Sferrazza A, Gualano MR, de Waure C, Clemente G, De Rose AM, Nicolotti N, Nuzzo G, Siliquini R, Boccia A, Ricciardi W. Investigating the synergistic interaction of diabetes, tobacco smoking, alcohol consumption, and hypercholesterolemia on the risk of pancreatic cancer: a case-control study in Italy	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
La Vecchia C, Zhang ZF, Altieri A. Alcohol and laryngeal cancer: an update	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review.
La Vecchia C. Mouthwash and oral cancer risk: an update.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Laatikainen T, Manninen L, Poikolainen K, Vartiainen E. Increased mortality related to heavy alcohol intake pattern (2003)	Published before 1 January 2007.
Lachenmeier DW, Gumbel-Mako S, Sohnius EM, Keck- Wilhelm A, Kratz E, Mildau G. Salivary acetaldehyde increase due to alcohol-containing mouthwash use: a risk factor for oral cancer	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Laffoy, M., McCarthy, T., Mullen, L., Byrne, D. and Martin, J. Cancer incidence and mortality due to alcohol: an analysis of 10-year data	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lai HMX, Sitharthan T, Huang QR. Exploration of the Comorbidity of alcohol use disorders and mental health disorders among inpatients presenting to all hospitals in New South Wales, Australia.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lampi C, Marecek S. Migraine and stroke—why do we talk about it?	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Langer RD, Criqui MH, Reed DM. Lipoproteins and blood pressure as biological pathways for effect of moderate alcohol consumption on coronary heart disease	Published before 1 January 2007.
Lanier, S. A., Hayes, J. E. and Duffy, V. B. (2005) Sweet and bitter tastes of alcoholic beverages mediate alcohol intake in of-age undergraduates.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Larsson SC, Drca N, Wolk A. Alcohol consumption and risk of atrial fibrillation: a prospective study and dose-response meta-analysis	Already considered and included in the overview in the Evidence Evaluation Report.
Larsson, S. C., Orsini, N., Wolk, A. (2015). Alcohol consumption and risk of heart failure: a dose–response meta-analysis of prospective studies	Already considered and included in the overview in the Evidence Evaluation Report.
Laslett AM, Ferris J, Dietze P, Room R. Social demography of alcohol-related harm to children in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Laslett, AM, Catalano P, Chikritzhs Y, Dale C, Doran C, Ferris J, Jainullabudeen T, Livingston M, Matthews S, Mugavin J, Room R, Schlotterlein M, Wilkinson C. Surveying the range and magnitude of alcohol's harm to others	Not available as full-text in a peer-reviewed journal

References provided by NHMRC based on public consultation process	Response
Latimer J, Elliott E, Fitzpatrick J, Ferreira M, Carter M, Oscar J, Kefford M. Marulu, The Lililwan Project: Fetal Alcohol Spectrum Disorders (FASD) Prevalence Study in the Fitzroy Valley: A Community Consultati	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Latino-Martel P., Arwidson P., Ancellin R., Druesne-Pecollo N., Hercberg S., Le Quellec-Nathan M. et al. Alcohol consumption and cancer risk: revisiting guidelines for sensible drinking	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Guideline.
Laug WE. Ethyl alcohol enhances plasminogen activator secretion by endothelial cells.	Published before 1 January 2007.
Lavstedt, S., Bolin, A. & Henriksson, C. O. (1986) Proximal alveolar bone loss in a longitudinal radiographic investigation (II). A 10-year follow-up study of an epidemiological material.	Published before 1 January 2007.
Lee CH, Ko YC, Huang HL, Chao YY, Tsai CC, Shieh TY, et al. The precancer risk of betel quid chewing, tobacco use and alcohol consumption in oral leukoplakia and oral submucous fibrosis in southern Taiwan.	Published before 1 January 2007.
Lee JB, Yi HY, Bae KH. The association between periodontitis and dyslipidemia based on the Fourth Korea National Health and Nutrition Examination Survey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lee K. Body composition and vitamin D status: The Korea National Health and Nutrition Examination Survey IV (KNHANES IV)	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lee K. Interpersonal violence and facial fractures	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lee Y, Back JH, Kim J, Kim SH, Na DL, Cheong HK, Hong CH, Kim YG. Systematic review of health behavioral risks and cognitive health in older adults	Already considered and included at full-text review for the Evidence Evaluation Report. The paper is superceded by Anstey 2009 and therefore it was not be selected for inclusion.
Leeming, D., Hanley, M. and Lyttle, S. (2002) Young people's images of cigarettes, alcohol and drugs.	Published before 1 January 2007.
Lemmens P, Tan ES, Knibbe RA. Measuring quantity and frequency of drinking in a general population survey: a comparison of five indices	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lemmens, P., Tan, E. S. & Knibbe, R. A. (1992) Measuring quantity and frequency of drinking in a general population survey: a comparison of five indices.	Published before 1 January 2007.
Leonardi-Bee J, Ellison T, Bath-Hextall F. Lifestyle factors of smoking, BMI and alcohol consumption on the risk of Non-Melanoma Skin cancer in adults: Systematic review	Already considered at full-text screen. This overview included melanoma skin cancer rather than non-melanoma skin cancer. The protocol for this overview did not pre-specify non-melanoma skin cancer as a main outcome of interest
Leppala J, Paunio M, Virtamo J, Fogelholm R, Albanes D, Taylor P, et al: Alcohol consumption and stroke incidence in male smokers.	Published before 1 January 2007.
Leppälä JM, Virtamo J, Heinonen OP. Validation of stroke diagnosis in the National Hospital Discharge Register and the Register of Causes of Death in Finland	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lesch CA, Squier CA, Cruchley A, Williams DM, Speight P. The permeability of human oral mucosa and skin to water	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Levi F, Pasche C, La Vecchia C, Lucchini F, Franceschi S, Monnier P. Food groups and risk of oral and pharyngeal cancer.	Published before 1 January 2007.
Lewis PT, Shipman VC, May PA. Socioeconomic status, psychological distress, and other maternal risk factors for fetal alcohol spectrum disorders among American Indians of the northern plains. Am Indian Alsk Native Ment Health Res. 2011;17(2):1–21.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Li S, Shin HJ, Ding EL, van Dam RM. Adiponectin levels and risk of type 2 diabetes: a systematic review and meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Li XH, Yu FF, Zhou YH, He J. Association between alcohol consumption and the risk of incident type 2 diabetes: a systematic review and dose-response meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report

References provided by NHMRC based on public consultation process	Response
Li Y, Zheng T, Kilfoy BA, Lan Q, Holford T, Han X, Zhao P, Dai M, Leaderer B, Rothman N, Zhang Y. Genetic polymorphisms in cytochrome P450s, GSTs, NATs, alcohol consumption and risk of non-Hodgkin lymphoma	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Liese AD, Nichols M, Sun X, D'Agostino RB Jr, Haffner SM. Adherence to the DASH Diet is inversely associated with incidence of type 2 diabetes: the insulin resistance atherosclerosis study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lin YC, Ho IC, Lee TC. Ethanol and acetaldehyde potentiate the clastogenicity of ultraviolet light, methyl methanesulfonate, mitomycin C and bleomycin in Chinese hamster ovary cells.	Not in humans
Linneberg A, Fenger RV, Husemoen LL, Thuesen BH, Skaaby T, Gonzalez-Quintela A, Vidal C, Carlsen BC, Johansen JD, Menné T, Stender S, Melgaard M, Szecsi PB, Berg ND, Thyssen JP, Association between loss-of-function mutations in the filaggrin gene and self-reported food allergy and alcohol sensitivity.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lintonen, T. P. and Konu, A. I. (2003) Adolescent alcohol beverage type choices reflect their substance use patterns and attitudes	Published before 1 January 2007.
Liu et al. (2010) Alcohol consumption and coronary heart disease in Eastern Asian men: a meta-analysis of prospective cohort studies	Not in English
Liu SW, Lien MH, Fenske NA, The effects of alcohol and drug abuse on the skin.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review.
Liu YK. Effects of alcohol on granulocytes and lymphocytes (1980)	Published before 1 January 2007.
Liu, Y., Nguyen, N., & Colditz, G. A. (2015). Links between alcohol consumption and breast cancer: A look at the evidence.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review.
Livingston M, Wilkinson C. Per-capita alcohol consumption and all-cause male mortality in Australia, 1911–2006	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Livingston M. A longitudinal analysis of alcohol outlet density and assault	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Livingston M. Alcohol outlet density and assault: a spatial analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Livingston M. Perceptions of low-risk drinking levels among Australians during a period of change in the official drinking guidelines. Canberra: Centre for Alcohol Policy Research (CAPR), and the Foundation for Alcohol Research and Education (FARE); 2012.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Livingston M. Recent trends in risky alcohol consumption and related harm among young people in Victoria, Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Livingston, M. (2012). Perceptions of low-risk drinking levels among Australians during a period of change in the official drinking guidelines.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Llewellyn CD, Linklater K, Bell J, Johnson NW, Warnakulasuriya S. An analysis of risk factors for oral cancer in young people: a case-control study.	Published before 1 January 2007.
LM Gentilello, BE Ebel, TM Wickizer, DS Salkever, and FP Rivara. Alcohol interventions for trauma patients treated in emergency departments and hospitals: a cost-benefit analysis.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Loeber, R. (1998) Multiple risk factors for multiproblem boys: Co-occurrence of delinquency, substance use, attention deficit, conduct problems, physical aggression, covert behaviour, depressed mood, and shy/withdrawn behaviour.	Published before 1 January 2007.
Longstreth WT, Nelson LM, Koepsell TD, Van Belle G. Cigarette smoking, alcohol use, and subarachnoid hemorrhage	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
Lowenstein SR, Weissberg M, Terry D. Alcohol intoxication, injuries and dangerous behaviours – and the revolving emergency department door	Published before 1 January 2007.
Loxley, W., Toumbourou, J., Stockwell, T.R., et al (2004). The Prevention of Substance Use, Risk and Harm in Australia: A Review of the Evidence.	Published before 1 January 2007.
Lucas B, Elliott E, Coggan S, Pinto R, Jirikowic T, Westcott McCoy S, Latimer J. Interventions to Improve Gross Motor Performance in Children with Neurodevelopmental Disorders: a Meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lucas BR, Latimer J, Doney R, Ferreira ML, Adams R, Hawkes G, Fitzpatrick JP, Hand M, Oscar J, Carter M, Elliott EJ. The Bruininks-Oseretsky Test of Motor Proficiency-Short Form is reliable in children living in remote Australian Aboriginal communities	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lui S, Terplan M, Smith EJ. Psychosocial interventions for women enrolled in alcohol treatment during pregnancy.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Lundberg M, Fredlund P, Hallqvist J, Diderichsen F. A SAS program calculating three measures of interaction with confidence intervals	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
M. Marron, P. Boffetta, H. Møller, W. Ahrens, H. Pohlabeln, S. Benhamou, C. Bouchardy, P. Lagiou, A. Lagiou, A. Slámová, M. Schejbalová, F. Merlett, L. Richiardi, K. Kjaerheim, A. Agudo, X. Castellsague, T.V. Macfarlane, G.J. Macfarlane, R. Talamini, L. Barzan, C. Canova, L. Simonato, A.M. Biggs, P. Thomson, D.I. Conway, P.A. McKinney, A. Znaor, C.M. Healy, B.E. McCartan, P. Brennan and M.Hashibe. Risk of upper aerodigestive tract cancer and type of alcoholic beverage: a European multicenter case-control study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
M. Rota, L. Scotti, F. Turati, I. Tramacere, F. Islami, R. Bellocco, E. Negri, G. Corrao, P. Boffetta, C. La Vecchia and V. Bagnardi. Alcohol consumption and prostate cancer risk: a meta-analysis of the dose-risk relation	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it did not meet the minimum criteria and a more recent review that meet the minimum criteria was included for this outcome.
M.L. Slattery, R.K. Wolff, J.S. Herrick, K. Curtin, B.J. Caan and W. Samowitz. Alcohol consumption and rectal tumor mutations and epigenetic changes	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
MacCall, C. A. (1998) 'Alcopop' use in Scottish bars: a pilot study	Published before 1 January 2007. (1998)
MacClellan LR, Giles W, Cole J. Probable migraine with visual aura and risk of ischemic stroke: the Stroke Prevention in Young Women Study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Maclure M. Demonstration of deductive meta-analysis: ethanol intake and risk of myocardial infarction	Published before 1 January 2007. (1993)
Magnus A, Cadilhac D, Sheppard L, Cumming T, Pearce D, Carter R. The economic gains of achieving reduced alcohol consumption targets for Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Maier H, Weidauer H, Zoller J, Seitz HK, Flentje M, Mall G, et al. Effect of chronic alcohol consumption on the morphology of the oral mucosa	Published before 1 January 2007. (1994)
Maisonneuve, P., & Lowenfels, A. B. (2014). Risk factors for pancreatic cancer: A summary review of meta-analytical studies. International Journal of Epidemiology	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Non-systematic review
Malarcher AM, Giles WH, Croft JB, Wozniak MA, Wityk RJ, Stolley PD, et al: Alcohol intake, type of beverage, and the risk of cerebral infarction in young women	Published before 1 January 2007. (2001)
Maloney E, Hutchinson D, Burns L, Mattick RP, Black E. Prevalence and predictors of alcohol use in pregnancy and breastfeeding among Australian women	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Manning M, Smith C, Mazerolle P. Trends & issues in crime and criminal justice series: The societal costs of alcohol misuse in Australia No. 454 [	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Mao, Q., Lin, Y., Zheng, X., Qin, J., Yang, K. and Xie, L. A meta-analysis of alcohol intake and risk of bladder cancer	Already considered. Identified in search and excluded as did not meet the minimum criteria for inclusion for the Evidence Evaluation Report.

References provided by NHMRC based on public consultation process	Response
Marques-Vidal P, Ducimetiere P, Evans A, Cambou JP, Arveiler D. Alcohol consumption and myocardial infarction: a case-control study in France and Northern Ireland	Published before 1 January 2007. (1996)
Mascres C, Ming-Wen F, Joly JG. Morphologic changes of the esophageal mucosa in the rat after chronic alcohol ingestion	Not in humans.
Maserejian NN, Joshipura KJ, Rosner BA, Giovannucci E, Zavras AI. Prospective study of alcohol consumption and risk of oral premalignant lesions in men.	Published before 1 January 2007. (2006)
Mashberg A, Boffetta P, Winkelman R, Garfinkel L. Tobacco smoking, alcohol drinking, and cancer of the oral cavity and oropharynx among U.S. veterans	Published before 1 January 2007. (1993)
Matsuda T, Yabushita H, Kanaly RA, Shibutani S, Yokoyama A. Increased DNA damage in ALDH2-deficient alcoholics	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
May PA, Gossage JP. Maternal risk factors for fetal alcohol spectrum disorders: not as simple as it might seem. Alcohol Res Health. 2011;34 (1):15–26.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Mazzaglia G, Britton R, Altmann DR, Chenet L: Exploring the relationship between alcohol consumption and non-fatal or fatal stroke: a systematic review	Published before 1 January 2007. (2001)
McAleer MA, Mason DL, Cunningham S, O'Shea SJ, McCormick PA, Stone C, Collins P, Rogers S, Kirby B. Alcohol misuse in patients with psoriasis: identification and relationship to disease severity and psychological distress.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
McBride N, Carruthers S, Hutchinson D. Reducing alcohol use during pregnancy: listening to women who drink as an intervention starting point.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
McCormack C, Hutchinson D, Burns L, Wilson J, Elliott E, Olsson C, Allsop S, Naiman J, Jacobs S, Rossen L, Mattick R. Prenatal alcohol consumption prior to pregnancy recognition	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
McCullough M, Jaber M, Barrett AW, Bain L, Speight PM, Porter SR. Oral yeast carriage correlates with presence of oral epithelial dysplasia.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
McCullough MJ, Farah CS. The role of alcohol in oral carcinogenesis with particular reference to alcoholcontaining mouthwashes.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
McElduff P, Dobson AJ. How much and how often: population based case-control study of alcohol consumption and risk of a major coronary event	Published before 1 January 2007. (1997)
McKeganey, N. (1998) Alcopops and young people: a suitable cause for concern.	Published before 1 January 2007. (1998)
McKeganey, N., Forsyth, A., Barnard, M. et al . (1996) Designer drinks and drunkenness amongst a sample of Scottish schoolchildren.	Published before 1 January 2007. (1996)
McKenna CJ, Codd MB, McCann HA, Sugrue DD. Alcohol consumption and idiopathic dilated cardiomyopathy: a case-control study	Published before 1 January 2007. (1998)
McKibben, M. A. (1996) Designer drinks and drunkenness among schoolchildren. More “alcopops” have come on marker since study was done.	Published before 1 January 2007. (1996)
McLeod J. Spouse concordance for alcohol dependence and heavy drinking: evidence from a community sample	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Meade TW, Imeson J, Stirling Y. Effects of changes in smoking and other characteristics on clotting factors and the risk of ischaemic heart disease	Published before 1 January 2007. (1987)
Meurman JH, Uittamo J. Oral Micro-organisms in the aetiology of cancer	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Michalowicz, B. S., Aeppli, D., Virag, J. G., Klump, D. G., Hinrichs, J. E., Segal, N. L., Bouchard, T. J. & Pihlstrom, B. L. (1991) Periodontal findings in adult twins	Published before 1 January 2007. (1991)

References provided by NHMRC based on public consultation process	Response
Michot F, Gut J. Alcohol-induced bone marrow damage. A bone marrow study in alcohol-dependent individuals	Published before 1 January 2007. (1987)
Middleton Fillmore, K., Chikritzhs, T., Stockwell, T., Bostrom, A. and Pascal, R. Alcohol use and prostate cancer: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion as a newer systematic review was identified for this outcome.
Midford Richard ;, Johanna Mitchell, Leanne Lester, Helen Cahill , David Foxcroft, Robyn Ramsden, Lynne Venning, Michelle Pose Preventing alcohol Harm: Early results from a cluster randomised controlled trial in Victoria, Australia of comprehensive harm minimisation school drug education	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Midford, Richard; Robyn Ramsden, Leanne Lester, Helen Cahill, Johanna Mitchell, David R. Foxcroft, and Lynne Venning, Alcohol Prevention and School Students: Findings From an Australian 2- Year Trial of Integrated Harm Minimization School Drug Education	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Miller GJ, Beckles GL, Maude GH, Carson DC. Alcohol consumption: protection against coronary heart disease and risks to health	Published before 1 January 2007. (1990)
Miller PG, Coomber K, Staiger P, Zinkiewicz L, Toumbourou JW. Review of rural and regional alcohol research in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Ministerial Forum on Alcohol Advertising and Sponsorship: Recommendations on alcohol advertising and sponsorship	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Minozzi S. Psychosocial treatments for drugs and alcohol abusing adolescents (Protocol). Cochrane Database of Systematic Reviews 2011, Issue 3. Art. No.: CD008283. DOI: 10.1002/14651858.CD008283.pub2	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mitton C, Adair CE, McKenzie E, et al. Knowledge transfer and exchange: review and synthesis of the literature	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Miyakawa H, Baraona E, Chang JC, Lesser MD, Lieber CS. Oxidation of ethanol to acetaldehyde by bronchopulmonary washings: role of bacteria	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mizutani S, Ekuni D, Furuta M, Tomofuji T, Irie K, Azuma T, et al. Effects of self-efficacy on oral health behaviours and gingival health in university students aged 18- or 19-years-old	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mizutani S, Ekuni D, Tomofuji T, Azuma T, Kataoka K, Yamane M et al. Relationship between xerostomia and gingival condition in young adults.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
MJ McCullough, CS Farah The role of alcohol in oral carcinogenesis with particular reference to alcohol-containing mouthwashes	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mod eer T, Wondimu B. Periodontal diseases in children and adolescents.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Moncada S, Randomski NW. The problems and the promise of prostaglandin influences in atherogenesis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Monforte R, Estruch R, Graus F, Nicolas JM, Urbano-Marquez A. High ethanol consumption as risk factor for intracerebral hemorrhage in young and middle-aged people	Published before 1 January 2007. (1990)
Moniz C. Alcohol and bone	Published before 1 January 2007. (1994)
Moreno-Lopez LA, Esparza Gomez GC, Gonzalez Navaro A, Cerrera Lapiedra R, Gonzalez-Hernandez MJ, Dominguez-Rojas V. Risk of oral cancer associated with tobacco smoking, alcohol consumption and oral hygiene: a case-control study in Madrid, Spain.	Published before 1 January 2007. (2000)
Morgan A, McAtamney A. Key issues in alcohol-related violence	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
Mori TA, Burke V, Zilkens RR, Hodgson JM, Beilin LJ, Puddey IB. The effects of alcohol on ambulatory blood pressure and other cardiovascular	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol

References provided by NHMRC based on public consultation process	Response
risk factors in type 2 diabetes: a randomized intervention	consumption)
Morimoto K, Takeshita T. Low Km aldehyde dehydrogenase (ALDH2) polymorphism, alcohol-drinking behavior, and chromosome alterations in peripheral lymphocytes.	Published before 1 January 2007. (1996)
Mostofsky, E., Chahal, H. S., Mukamal, K. J., Rimm, E. B., Mittleman, M. A. (2016). Alcohol and immediate risk of cardiovascular events. A systematic review and dose–response meta-analysis	Already considered for Evidence Evaluation Report and included in overview.
Mu¨ ller P, Hepke B, Meldau U, Raabe G. Tissue damage in the rabbit oral mucosa by acute and chronic direct toxic action of different alcohol concentrations	Not in humans.
Muggli E, Cook B, O'Leary C, Forster D, Halliday J. Alcohol in pregnancy: What questions should we be asking?2010.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Muggli E, O'Leary C, Donath S, Orsini F, Forster D, Anderson P, Lewis S, Nagle C, Elliott E, Craig J, Halliday J. "Did you ever drink more?" A detailed description of pregnant women's drinking patterns.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Muggli E, O'Leary C, Forster D, Anderson P, Lewis S, Nagle C, Craig JM, Donath S, Elliott E, Halliday J. Study protocol: Asking QUestions about Alcohol in pregnancy (AQUA): a longitudinal cohort study of fetal effects of low to moderate alcohol exposure	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mukamal K, Ascherio A, Mittleman M, Conigrave K, Camargo C, Kawachi I, et al: Alcohol and risk for ischemic stroke in men: the role of drinking patterns and usual beverage	Published before 1 January 2007. (2005)
Mukamal K, Rimm E: Alcohol's effects on the risk for coronary heart disease	Published before 1 January 2007. (2001)
Mukamal KJ, Chung H, Jenny NS, Kuller LH, Longstreth WT, Jr, Mittleman MA, Burke GL, Cushman M, Beauchamp NJ, Jr, Siscovick DS. Alcohol use and risk of ischemic stroke among older adults: the cardiovascular health study.	Published before 1 January 2007. (2005)
Mukamal KJ, Rimm EB. Alcohol consumption: risks and benefits.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Mukamal KJ. A 42-year-old man considering whether to drink alcohol for his health	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Muller P, Hepke B, Meldau U, Raabe G. Tissue damage in the rabbit oral mucosa by acute and chronic direct toxic action of different alcohol concentrations.	Not in humans.
Munro, G. and Learmonth, A. (2004) 'An unacceptable risk': the problem of alcoholic milk.	Published before 1 January 2007. (2004)
Murray RP, Connett JE, Tyas SL, Bond R, Ekuma O, Silversides CK, Barnes GE. Alcohol volume, drinking pattern, and cardiovascular disease morbidity and mortality: is there a U-shaped function?	Published before 1 January 2007. (2002)
Muscat JE, Richie JP Jr, Thompson S, Wynder EL. Gender differences in smoking and risk for oral cancer.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mutch R, Peadon EM, Elliott EJ, Bower C. Need to establish a national diagnostic capacity for foetal alcohol spectrum disorders.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mutch R, Wray J, Bower C. Recording a History of Alcohol Use in Pregnancy: An Audit of the Knowledge, Attitude and Practices at a Child Development Service	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Mutch RC, Watkins R, Bower C. Fetal alcohol spectrum disorders: Notifications to the Western Australian Register of Developmental Anomalies	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Nagao T, Warnakulasuriya S, Gelbier S, Yuasa H, Tsuboi S, Nakagaki H. Oral pre-cancer and the associated risk factors among industrial workers in Japan's overseas enterprises in the UK	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)

References provided by NHMRC based on public consultation process	Response
Nagy KN, Sonkodi I, Szo¨ke I, Nagy E, Newman HN. The microflora associated with human oral carcinomas	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Naimi T. S., Brown D. W., Brewer R. D., Giles W. H., Mensah G., Serdula M. K. et al. Cardiovascular risk factors and confounders among nondrinking and moderate-drinking U.S. adults	Published before 1 January 2007. (2005)
Naimi, T., Stockwell, T. Zhao, J., Xuan, Z., Danghardt, F., Saitz, R., Liang, W., Chikritzhs, T. (2016). Selection Biases in Observational Studies Affect Associations between 'Moderate' Alcohol Consumption and Mortality. Addiction. doi: 10.1111/add.13451	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Nam GE, Cho KH, Park YG, et al. Socioeconomic status and dyslipidemia in Korean adults: The 2008-2010 Korea National Health and Nutrition Examination Survey.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Nam GE, Kim DH, Cho KH, et al. 25-Hydroxyvitamin D insufficiency is associated with cardiometabolic risk in Korean adolescents: The 2008-2009 Korea National Health and Nutrition Examination Survey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Nam GE, Kim H, Cho KH, et al. Estimate of a predictive cut-off value for serum 25-hydroxyvitamin D reflecting abdominal obesity in Korean adolescents	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
National Health and Medical Research Council. Australian guidelines to reduce health risk from drinking alcohol.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Guidelines
Neafsey EJ, Collins MA. Moderate alcohol consumption and cognitive risk	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as the outcome was insufficiently defined.
Nelson, C. B. and Wittchen, H.-U. (1998) Smoking and nicotine dependence.	Published before 1 January 2007. (1998)
Neuman WL. Social research methods: Qualitative and quantitative approaches	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Nielsen NR, Truelsen T, Barefoot JC, Johnsen SP, Overvad K, Boysen G, Schnohr P, Gronbaek M. Is the effect of alcohol on risk of stroke confined to highly stressed persons?	Published before 1 January 2007. (2005)
NIH., N.I.o.H. Five lifestyle factors lower diabetes risk.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Web article
Nordqvist C, Wilhelm E, Lindqvist K, Bendtsen P. Can screening and simple written advice reduce excessive alcohol consumption among emergency care patients?	Published before 1 January 2007. (2005)
Nosova T, Jokelainen K, Kaihovaara P, Jousimies-Somer H, Siitonen A, Heine R, et al. Aldehyde dehydrogenase activity and acetate production by aerobic bacteria representing the normal flora of human large intestine.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Novacek G, Plachetzky U, Po¨tzi R, et al. Dental and periodontal disease in patients with cirrhosis — Role of etiology of liver disease	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Novacek, G., Platechetzky, U., Potzi, R., Lentner, S., Slavicek, R., Gangl, A. & Ferenci, P. (1995) Dental and periodontal disease in patients with cirrhosis – role of etiology of liver disease.	Published before 1 January 2007. (1995)
Nutbeam D, Harris E. Theory in a Nutshell. A practitioner's guide to commonly used theories and models in health promotion.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Nutrition Metabolism and Cardiovascular Diseases, 20, 366-375. Li S, Shin HJ, Ding EL, van Dam RM. Adiponectin levels and risk of type 2 diabetes: a systematic review and meta-analysis.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
O'Keefe JH, Bybee KA, Lavie CJ. Alcohol and cardiovascular health: the razor-sharp double-edged sword	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
O'Leary C. Fetal alcohol syndrome: Diagnosis, epidemiology, and developmental outcomes	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
O'Leary C. Foetal Alcohol Syndrome: A literature review. National Alcohol Strategy 2001 to 2003-04 Occasional Paper. Canberra: Commonwealth Department of Health and Ageing; 2002.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary CM, Bower C, Zubrick SR, Geelhoed E, Kurinczuk JJ, Nassar N. A new method of prenatal alcohol classification accounting for dose, pattern and timing of exposure: Improving our ability to examine fetal effects from low to moderate exposure	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary CM, Bower C. Guidelines for pregnancy: What's an acceptable risk, and how is the evidence (finally) shaping up?	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Guideline.
O'Leary CM, Bower C. Measurement and classification of prenatal alcohol exposure and child outcomes: time for improvement (commentary).	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Commentary
O'Leary CM, Heuzenroeder L, Elliott EJ, Bower C. A review of policies on alcohol use in pregnancy in Australia and other English-speaking countries	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary CM, Jacoby PJ, Bartu A, D'Antoine H, Bower C. Maternal Alcohol Use and Sudden Infant Death Syndrome and Infant Mortality Excluding SIDS	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary CM, Watson L, D'Antoine H, Stanley F, Bower C. Heavy maternal alcohol consumption and cerebral palsy in the offspring	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Malley P, Wagenaar A. Effects of minimum drinking age laws on alcohol use, related behaviors and traffic crash involvement among American youth: 1976-1987	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Neill S, Parra G, Sher K et al. Clinical relevance of heavy drinking during the college years. Crosssectional and prospective perspectives.	Published before 1 January 2007.
O'Rourke S, Ferris J, Devaney M. Beyond pre-loading: Understanding the associations between pre-, side- and back-loading drinking behavior and risky drinking	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Ogden GR, Wight AJ. Aetiology of oral cancer: alcohol	Published before 1 January 2007.
Ogeil RP, Room R, Matthews S, Lloyd B. Alcohol and burden of disease in Australia: The challenge in assessing consumption	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Ohno Y, Tamakoshi A, JACC Study Group. Japan Collaborative Cohort study for Evaluation of Cancer Risk Sponsored by Monbusho (Japan Collaborative Cohort Study)	Published before 1 January 2007.
Okamoto, Y., Tsuboi, S., Suzuki, S., Nakagaki, H., Ogura, Y., Maeda, K. & Tokudome, S. (2006) Effects of smoking and drinking habits on the incidence of periodontal disease and tooth loss among Japanese males: a 4-yr longitudinal study.	Published before 1 January 2007.
O'Keeffe LM, Greene RA, Kearney PM. The effect of moderate gestational alcohol consumption during pregnancy on speech and language outcomes in children: a systematic review	Already considered and included in the overview in the Evidence Evaluation Report.
O'Leary C, Jacoby P, D'Antoine H, Bartu A, Bower C. Heavy prenatal alcohol exposure and increased risk of stillbirth	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary C, Leonard H, Bourke J, D'Antoine H, Bartu A, Bower C. Intellectual disability: population-based estimates of the proportion attributable to maternal alcohol use disorder during pregnancy	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary CM, Bower C. Guidelines for pregnancy: What's an acceptable risk, and how is the evidence (finally) shaping up	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
O'Leary CM, Elliott EJ, Nassar N, Bower C. Exploring the potential to use data linkage for investigating the relationship between birth defects and prenatal alcohol exposure	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
O'Leary CM, Halliday J, Bartu A, D'Antoine H, Bower C. Alcohol-use disorders during and within one year of pregnancy: a population-based cohort study 1985-2006	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).

References provided by NHMRC based on public consultation process	Response
O'Leary CM, Heuzenroeder L, Elliott EJ, Bower C. A review of policies on alcohol use during pregnancy in Australia and other English-speaking countries, 2006, Med J Aust. 2007;186(9):466-71.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Olshan AF, Weissler MC, Watson MA, Bell DA. GSTM1, GSTT1, GSTP1, CYP1A1, and NAT1 polymorphisms, tobacco use, and the risk of head and neck cancer (2000)	Published before 1 January 2007.
Ouko LA, Shantikumar K, Knezovich J, Haycock P, Schnugh DJ, le Ramsay M. Effect of alcohol consumption on CpG methylation in the differentially methylated regions of H19 and IG-DMR in male gametes—implications for fetal alcohol spectrum disorders.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Case series
Oze I; Matsuo K; Wakai K; Nagata C; Mizoue T; Tanaka K; Tsuji I; Sasazuki S; Inoue M; Tsugane S. (2011). Alcohol drinking and esophageal cancer risk: an evaluation based on a systematic review of epidemiologic evidence among the Japanese population	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Review not systematic
Padilla et al. (2010) Alcohol consumption and risk of heart failure: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Repor, but was excluded as does not meet minimum criteria. Another systematic review with a more recent search date was identified.
Palj¨arvi, T., M¨akel¨a, P. and Poikolainen, K. (2005) Pattern of drinking and fatal injury: a population-based follow-up study of Finnish men	Published before 1 January 2007. (2005)
Palomäki H, Kaste M. Regular light to moderate intake of alcohol and the risk of ischemic stroke: is there a beneficial effect?	Published before 1 January 2007. (1993)
Pandeya N, Wilson LF, Webb PM, Neale RE, Bain CJ, Whiteman DC. Cancers in Australia in 2010 attributable to the consumption of alcohol	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Panza F, Capurso C, D'Introno A, Colacicco AM, Frisardi V, Lorusso M, Santamato A, Seripa D, Pilotto A, Scafato E, Vendemiale G, Capurso A, Solfrizzi V. Alcohol drinking, cognitive functions in older age, predementia, and dementia syndromes	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Panza F, Frisardi V, Seripa D, Logroscino G, Santamato A, Imbimbo BP, Scafato E, Pilotto A, Solfrizzi V. Alcohol consumption in mild cognitive impairment and dementia: harmful or neuroprotective	Not available as full-text in a peer-reviewed journal
Parazzini F, Bocciolone L, Lavecchia C, Negri E, Fedele L. Maternal and paternal moderate daily alcohol-consumption and unexplained miscarriages. British Journal of Obstetrics and Gynaecology. 1990;97(7):618-22.	Published before 1 January 2007. (1990)
Park, S., Shin, H. R., Lee, B., Shin, A., Jung, K. W., Lee, D. H., Jee, S. H., Cho, S. I., Park, S. K., Boniol, M., Boffetta, P. and Weiderpass, E. Attributable fraction of alcohol consumption on cancer using population-based nationwide cancer incidence and mortality data in the Republic of Korea	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Parkin, D. M. Cancers attributable to consumption of alcohol in the UK in 2010	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Passaro K, Little R, Savitz D, Noss J. Effect of paternal alcohol consumption before conception on infant birth weight.	Published before 1 January 2007. (1998)
Patra J, Bakker R, Irving H, Jaddoe VW, Malini S, Rehm J. Dose-response relationship between alcohol consumption before and during pregnancy and the risks of low birthweight, preterm birth and small for gestational age (SGA)-a systematic review and meta-analyses	Already considered. Identified in the search and included in the Evidence Evaluation Report
Patra J, Taylor B, Irving H, Roerecke M, Baliunas D, Mohapatra S, et al. Alcohol consumption and the risk of morbidity and mortality for different stroke types–a systematic review and meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Pavia M, Pileggi C, Nobile CG, Angelillo IF. Association between fruit and vegetable consumption and oral cancer: a meta-analysis of observational studies.	Published before 1 January 2007. (2006)
Payne J, France K, Henley N, D'Antoine H, Bartu A, O'Leary C, Elliott E, Bower C. Changes in health professionals' knowledge, attitudes and practice following provision of educational resources about prevention of prenatal alcohol exposure and fetal alcohol spectrum disorder	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).

References provided by NHMRC based on public consultation process	Response
Payne J, Watkins R, Jones H, Reibel T, Mutch R, Wilkins A, Whitlock J, Bower C. Midwives' knowledge, attitudes and practice about alcohol exposure and the risk of fetal alcohol spectrum disorder	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Payne JM, D'Antoine HA, France KE, McKenzie AE, Henley N, Bartu AE, Elliott EJ, Bower C: Collaborating with consumer and community representatives in health and medical research in Australia: results from an evaluation	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Payne JM, France KE, Henley N, D'Antoine HA, Bartu AE, Elliott EJ, Bower C. Researchers' experience with project management in health and medical research: results from a post-project review.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Payne JM, France KE, Henley N, D'Antoine HA, Bartu AE, Mutch RC, Elliott EJ, Bower C. Paediatricians' knowledge, attitudes and practice following provision of educational resources about prevention of prenatal alcohol exposure and Fetal Alcohol Spectrum Disorder	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Payne JM, France KE, Henley N, D'Antoine HA, Bartu AE, O'Leary CM, Elliott EJ, Bower C, Geelhoed E. RE-AIM evaluation of the Alcohol and Pregnancy Project: educational resources to inform health professionals about prenatal alcohol exposure and fetal alcohol spectrum disorder	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Peadon E, Elliott EJ. Alcohol consumption during pregnancy	Not available as full-text in a peer-reviewed journal
Peadon E, Elliott EJ. Distinguishing between attention-deficit hyperactivity and fetal alcohol spectrum disorders in children: clinical guidelines	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Peadon E, Fremantle E, Bower C, Elliott EJ. International survey of diagnostic services for children with Fetal Alcohol Spectrum Disorders	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Peadon E, O'Leary C, Bower C, Elliott E. Impacts of alcohol use in pregnancy--the role of the GP.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Peadon E, Payne J, Henley N, D'Antoine H, Bartu A, O'Leary C, Bower C, Elliott EJ. Attitudes and behaviour predict women's intention to drink alcohol during pregnancy: the challenge for health professionals	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Peadon E, Payne J, Henley N, D'Antoine H, Bartu A, O'Leary C, Bower C, Elliott EJ. Women's knowledge and attitudes regarding alcohol consumption in pregnancy: a national survey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Peadon E, Rhys-Jones B, Bower C, Elliott EJ. Systematic review of interventions for children with Fetal Alcohol Spectrum Disorders	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Pelucchi C, Galeone C, Tramacere I, Bagnardi V, Negri E, Islami F, Scotti L, Bellocco R, Corrao G, Boffetta P, La Vecchia C. Alcohol drinking and bladder cancer risk: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report, but was not the selected systematic review as a more recent systematic review of higher quality was considered.
Pelucchi C, La Vecchia C. Alcohol, coffee, and bladder cancer risk: a review of epidemiological studies.	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it did not meet the minimum criteria.
Pelucchi C, Tramacere I, Boffetta P, Negri E, La Vecchia C. Alcohol consumption and cancer risk	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Non-systematic review
Peters ES, McClean MD, Liu M, Eisen EA, Mueller N, Kelsey KT. The ADH1C polymorphism modifies the risk of squamous cell carcinoma of the head and neck associated with alcohol and tobacco use.	Published before 1 January 2007. (2005)
Peters R, Peters J, Warner J, Beckett N, Bulpitt C. Alcohol, dementia and cognitive decline in the elderly: a systematic review.	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it did not meet the minimum criteria.
Petti S, Scully C. Association between different alcoholic beverages and leukoplakia among non- to moderate-drinking adults: a matched case-control study	Published before 1 January 2007. (2006)
Petti S, Scully C. Oral cancer: the association between nationbased alcohol-drinking profiles and oral cancer mortality	Published before 1 January 2007. (2005)

References provided by NHMRC based on public consultation process	Response
Petti S. Lifestyle risk factors for oral cancer	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Pettigrew S, Jongenelis M, Chikritzhs T, Pratt IS, Slevin T & Glance D. A comparison of alcohol consumption intentions among pregnant drinkers and their nonpregnant peers of child-bearing age. Substance Use & Misuse, 2016 DOI: 10.3109/10826084.2016.1172641.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Piazza Gardner AK, Gaffud TJ, Barry AE. The impact of alcohol on Alzheimer's disease a systematic review.	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it included the incorrect study types (included meta-analyses).
Pihlstrom BL, Michalowicz BS, Johnson NW. Periodontal diseases	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Pikkarainen PH, Baraona E, Jauhonen P, Seitz HK, Lieber CS. Contribution of oropharynx microflora and of lungmicrosomes to acetaldehyde in expired air after alcohol ingestion.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Pilgrim JL, Gerostamoulos D, Drummer OH. 'King hit' fatalities in Australia, 2000–2012: The role of alcohol and other drugs.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Pitiphat W, Merchant AT, Rimm EB, Joshipura KJ. Alcohol consumption increases periodontitis risk	Published before 1 January 2007. (2003)
Pleis J, Lucas J, Ward B. Summary health statistics for us adults: National health interview survey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Plunk AD. The persistent eff ects of minimum legal drinking age laws on drinking patterns later in life.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Poggi P, Rodriguez y, Baena R, Rizzo S, Rota. MT. Mouthrinses with alcohol: cytotoxic effects on human gingival fibroblasts in vitro.	Published before 1 January 2007. (2003)
Poikolainen, K., Tuulio-Henriksson, A., Aalto-Set¨al¨a, T. et al . (2001) Predictors of Alcohol intake and heavy drinking in early adulthood: a 5-year follow-up of 15-19-year-old finnish adolescents.	Published before 1 January 2007. (2001)
Polańska K, Jurewicz J, Hanke W. Smoking and alcohol drinking during pregnancy as the risk factors for poor child neurodevelopment - A review of epidemiological studies	Already considered at full-text stage for the Evidence Evaluation Report, but excluded as it included the incorrect study types (included cross-sectional).
Polesel J, Dal Maso L, La Vecchia C, Montella M, Spina M, Crispo A, Talamini R, Franceschi S. Dietary folate, alcohol consumption, and risk of non-Hodgkin lymphoma	Not available as full-text in a peer-reviewed journal
Poschl G, Seitz HK. Alcohol and cancer	Published before 1 January 2007. (2004)
Pouplard C, Brenaut E, Horreau C, Barnetche T, Misery L, Richard MA, Aractingi S, Aubin F, Cribier B, Joly P, Jullien D, Le Maître M, Ortonne JP, Paul C. Risk of cancer in psoriasis: a systematic review and meta-analysis of epidemiological studies.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Powers JR, Anderson AE, Byles JE, Mishra G & Loxton D. Do women grow out of risky drinking? A prospective study of three cohorts of Australian women.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Powers JR, Loxton DJ, Burns LA, Shakeshaft A, Elliott EJ, Dunlop AJ. Assessing pregnant women's compliance with different alcohol guidelines: an 11-year prospective study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Prabhu A; Obi KO; Rubenstein JH. (2014). The synergistic effects of alcohol and tobacco consumption on the risk of esophageal squamous cell carcinoma: a meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Prevalence of fetal alcohol syndrome (FAS) in a population-based sample of children living in remote Australia: The Lililwan Project	Not available as full-text in a peer-reviewed journal
Psaltopoulou, T., Sergentanis, T. N., Sergentanis, I. N., Karadimitris, A., Terpos, E. and Dimopoulos, M. A. Alcohol intake, alcoholic beverage type and multiple myeloma risk: a meta-analysis of 26 observational studies	Already considered at full-text stage for the Evidence Evaluation Report. We have not included this systematic review given that it covered a diverse group of haematological malignancies that weren't prespecified at protocol stage

References provided by NHMRC based on public consultation process	Response
Puddey IB, Beilin LJ, Vandongen R, Rouse IL, Rogers P. Evidence for a direct effect of alcohol consumption on blood pressure in normotensive men: a randomized controlled trial	Published before 1 January 2007. (1985)
Puddey IB, Rakic V, Dimmitt SB, Beilin LJ: Influence of pattern of drinking on cardiovascular disease and cardiovascular risk factors - a review	Published before 1 January 2007. (1999)
Purdue MP, Hashibe M, Berthiller J, La Vecchia C, Dal Maso L, Herrero R, et al. Type of alcoholic beverage and risk of head and neck cancer--a pooled analysis within the INHANCE Consortium.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Qi, Z. Y., Shao, C., Yang, C., Wang, Z. and Hui, G. Z Alcohol consumption and risk of glioma: a meta-analysis of 19 observational studies	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Quirke M, Ayoub F, McCabe A, Boland F, Smith B, O'Sullivan R, Wakai A, Risk factors for non-purulent leg cellulitis: a systematic review and meta-analysis.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Race, H. (2014). Health professional's use of the Australian Alcohol Guidelines, Baseline Survey	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Guidelines
Raithel, J. (1999) Unfallursache: Jugendliches Risikoverhalten. [Causes of accidents: risk behaviour of adolescents].	Published before 1 January 2007. (1999)
Raithel, J. (2001) Risikoverhaltensweisen Jugendlicher—ein U¨ berblick [Risk behaviors of young people—an overview].	Published before 1 January 2007. (2001)
Rajala M, Honkala E, Rimpela¨ M, Lammi S. Toothbrushing in relation to other health habits in Finland.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rantakömi SH, Laukkanen JA, Sivenius J, Kauhanen J, Kurl S. Alcohol consumption and the risk of stroke among hypertensive and overweight men	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Reddy S, Kaul S, Agrawal C, et al. Periodontal status amongst substance abusers in Indian population	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Reducing alcohol use during pregnancy: listening to women who drink as an intervention starting point Nyanda McBride, Susan Carruthers and Delyse Hutchinson	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Regan T. Alcohol and the cardiovascular system	Published before 1 January 2007. (1990)
Rehm J, Irving H, Ye Y, Kerr WC, Bond J, Greenfield TK: Are lifetime abstainers the best control group in alcohol epidemiology? On the stability and validity of reported lifetime abstention	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rehm J, Mathers C, Patra J, Thavorncharoensap M, Teerawattananon Y, Popova S: Global burden of disease and injury and economic cost attributable to alcohol use and alcohol use disorders	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rehm J, Room R, Graham K, Monteiro M, Gmel G, Sempos CT. The relation between different dimensions of alcohol consumption and burden of disease: an overview	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rehm J, Sempos CT, Trevisan M: Alcohol and cardiovascular disease - more than one paradox to consider. Average volume of alcohol consumption, patterns of drinking and risk of coronary heart disease - a review	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Rehm J, Taylor B, Mohapatra S, Irving H, Baliunas D, Patra J, et al: Alcohol as a risk factor for liver cirrhosis - a systematic review and meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report and an included systematic review.
Rehm J., Patra J., Popova S. Alcohol drinking cessation and its effect on esophageal and head and neck cancers: a pooled analysis	Published before 1 January 2007. (1998)
Rehm, J. (1998) Measuring quantity, frequency, and volume of drinking.	Published before 1 January 2007 (1998)
Reinert DF, Allen JP. The alcohol use disorders identification test (AUDIT): A review of recent research.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Reynolds K, Lewis LB, Nolen JD, Kinney LG. Alcohol consumption and risk of stroke: a meta-analysis.	Published before 1 January 2007 (2003)

References provided by NHMRC based on public consultation process	Response
Richard MA, Barnetche T, Horreau C, Brenaut E, Pouplard C, Aractingi S, Aubin F, Cribier B, Joly P, Jullien D, Le Maître M, Misery L, Ortonne JP, Paul C. Psoriasis, cardiovascular events, cancer risk and alcohol use: evidence-based recommendations based on systematic review and expert opinion.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Ridker PM, Vaughan DE, Stampfer MJ, Hennekens CH. Association of moderate alcohol consumption and plasma concentration of endogenous tissue-type plasminogen activator.	Published before 1 January 2007. (1994)
Ridolfo B, Stevenson C: The quantification of drug-caused mortality and morbidity in Australia 1998	Published before 1 January 2007. (1998)
Rimm EB, Williams P, Fosher K, Criqui M, Stampfer MJ. Moderate alcohol intake and lower risk of coronary heart disease: meta-analysis of effects on lipids and haemostatic factors.	Published before 1 January 2007. (1999)
Ritchie SJ, Bates TC, Corley J, McNeill G, Davies G, Liewald DC, Starr JM, Deary IJ. Alcohol consumption and lifetime change in cognitive ability: a gene × environment interaction study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Roberts, C., Blakey, V. and Tudor-Smith, C. (1999) The impact of "alcopops" on regular drinking by young people in Wales	Published before 1 January 2007. (1999)
Robledo de Dios, T. (1998) Alcopops: design drinks . . . and what else?	Published before 1 January 2007. (1998)
Roche AM, Steenson T, Andrew R. Alcohol and young people: what the legislation says about access and secondary supply	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Roeleveld N, Vingerhoets E, Zielhuis G, Gabreels F. Mental retardation associated with parental smoking and alcohol consumption before, during, and after pregnancy.	Published before 1 January 2007. (1999)
Roeleveld N, Vingerhoets E, Zielhuis GA, Gabreels F. Mental-retardation associated with parental smoking and alcohol-consumption before, during, and after pregnancy. Preventive Medicine. 1992;21(1):110-9.	Published before 1 January 2007. (1992)
Roerecke and Rehm (2012) The cardioprotective association of average alcohol consumption and ischaemic heart disease: a systematic review and meta-analysis	Already considered for Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.
Roerecke M, Greenfield TK, Kerr WC, Bondy S, Cohen J, Rehm J. Heavy drinking occasions in relation to ischaemic heart disease mortality- an 11-22 year follow-up of the 1984 and 1995 US National Alcohol Surveys	Published before 1 January 2007. (1995)
Roerecke M; Rehm J. (2014). Chronic heavy drinking and ischaemic heart disease: a systematic review and meta-analysis	Already considered for Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.
Roerecke, M. and J. Rehm, Irregular heavy drinking occasions and risk of ischemic heart disease: A systematic review and meta-analysis	Already considered for Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.
Roerecke, M., & Rehm, J. (2014). Alcohol consumption, drinking patterns, and ischemic heart disease: a narrative review of meta-analyses and a systematic review and meta-analysis of the impact of heavy drinking occasions on risk for moderate drinkers	Already considered for Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.
Roizen, R., et al., Light-to-moderate drinking and dementia risk: The former drinkers problem re-visited	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Rojo-Martínez G, Maymó-Masip E, Rodríguez MM, et al. Serum sCD163 levels are associated with type 2 diabetes mellitus and are influenced by coffee and wine consumption: results of the Di@bet.es study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Romanus, G. (2000) Alcopops in Sweden—a supply side initiative.	Published before 1 January 2007. (2000)
Ronksley PE, Brien SE, Turner BJ, Mukamal KJ, Ghali WA. Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis.	Already considered in the Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.

References provided by NHMRC based on public consultation process	Response
Roozen S, Peters GJ, Kok G, Townend D, Nijhuis J, Curfs L. Worldwide Prevalence of Fetal Alcohol Spectrum Disorders: A Systematic Literature Review Including Meta-Analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rosenblatt KA, Daling JR, Chen C, Sherman KJ, Schwartz SM. Marijuana use and risk of oral squamous cell carcinoma	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rossen L, Hutchinson D, Wilson J, Burns L, A Olsson C, Allsop S, J Elliott E, Jacobs S, Macdonald JA, Mattick RP. Predictors of postnatal mother-infant bonding: the role of antenatal bonding, maternal substance use and mental health.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rota M, Pasquali E, Bellocco R, Bagnardi V, Scotti L, Islami F, Negri E, Boffetta P, Pelucchi C, Corrao G, La Vecchia C. Alcohol drinking and cutaneous melanoma risk: a systematic review and dose-risk meta-analysis	Already considered. Included in the Evidence Evaluation Report
Rota M, Pasquali E, Scotti L, Pelucchi C, Tramacere I, Islami F, Negri E, Boffetta P, Bellocco R, Corrao G, La Vecchia C, Bagnardi V. Alcohol drinking and epithelial ovarian cancer risk. a systematic review and meta-analysis	Already considered for the Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.
Rota, M., Porta, L., Pelucchi, C., Negri, E., Bagnardi, V., Bellocco, R., Corrao, G., Boffetta, P. and La Vecchia, C. Alcohol drinking and multiple myeloma risk--a systematic review and meta-analysis of the dose-risk relationship	Already considered for the Evidence Evaluation Report. Identified in search and reviewed at full-text but excluded as a systematic review with a more recent search date was identified.
Rota, M., Porta, L., Pelucchi, C., Negri, E., Bagnardi, V., Bellocco, R., Corrao, G., Boffetta, P. and La Vecchia, C. Alcohol drinking and risk of leukemia-a systematic review and meta-analysis of the dose-risk relation	Already considered for the Evidence Evaluation Report. Was identified in the search and reviewed at full-text. However, it was excluded as none of which was considered high-quality or comprehensive.
Rothman K. J., Greenland S. Causation and causal inference in epidemiology	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rothman, K. J. and Greenland, S. (1998) Causation and causal inference. In Modern Epidemiology, Rothman, K. J., Greenland,S. eds, Lippincott Williams and Wilkins, Philadelphia, PA, 7–28. Sakai, J. T., Hall, S. K., Mikulich-Gilbertson, S. K. et al . (2004) Inhalant use, abuse, and dependence among adolescent patients: Commonly comorbid problems.	Published before 1 January 2007. (1998)
Rothman, KJ.; Greenland, S.; Lash, TL. Modern Epidemiology	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Royston P, Altman DG: Regression using fractional polynomials of continuous covariates: parsimonious parametric modeling	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Royston P: A strategy for modelling the effect of a continuous covariate in medicine and epidemiology	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Rubin, DB. Multiple Imputation for Nonresponse in Surveys.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Sacco RL, Elkind M, Boden-Albada B. The protective effect of moderate alcohol consumption on ischemic stroke (1999)	Published before 1 January 2007.
Sakki TK, Knuuttila ML, Vimpari SS, Hartikainen MS. Association of lifestyle with periodontal health (1995)	Published before 1 January 2007.
Sakki, T. K., Knuuttila, M. L. E., Vimpari, S. S. & Hartikainen, M. S. L. (1995) Association of lifestyle with periodontal health	Published before 1 January 2007.
Sakki, T. K., Knuuttila, M. L. E., Vimpari, S. S. & Kivela¨, S. L. (1994) Lifestyle, dental caries and number of teeth.	Published before 1 January 2007.
Salaspuro MP. Acetaldehyde, microbes, and cancer of the digestive tract	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Salaspuro V, Salaspuro M. Synergistic effect of alcohol drinking and smoking on in vivo acetaldehyde concentration in saliva	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).

References provided by NHMRC based on public consultation process	Response
Salonen, L., Frithiof, L., Wouters, F. & Hellde´n, L. (1991) Marginal alveolar bone height in an adult Swedish population.	Published before 1 January 2007.
Samokhvalov AV; Irving HM; Rehm J. (2010). Alcohol consumption as a risk factor for atrial fibrillation: a systematic review and meta-analysis	Already considered for the Evidence Evaluation Report. Identified in search but not selected for inclusion as another systematic review identified with a more recent search date for this outcome.
Sandercock P, Molyneux A, Warlow C: Value of computed tomography in patients with stroke: Oxfordshire Community Stroke Project	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Sankai T, Iso H, Shimamoto T, Kitamura A, Naito Y, Sato S, Okamura T, Imano H, Iida M, Komachi Y. Prospective study on alcohol intake and risk of subarachnoid hemorrhage among Japanese men and women (2000)	Published before 1 January 2007.
Sasha Petrova with Elizabeth Elliott. Women aren't following advice to stop drinking when pregnant.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Saunders JB, Aasland OG, Babor TF, De la Fuente JR, Grant M. Development of the alcohol use disorder identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Saunders JB. Alcohol: an important cause of hypertension (1987)	Published before 1 January 2007.
Schermer CR, Bloomfield LA, Lu SW, Demarest GB. Trauma patient willingness to participate in alcohol screening and intervention	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Schmid, H., Delgrande Jordan, M., Kuntsche, E. N. et al . (2007) Der Konsum Psychoaktiver Substanzen von Sch¨ulerinnen und Sch¨ulern in der Schweiz [Consumption of psychoactive substances of pupils in Switzerland]	Not in English
Schoonderwoerd BA, Smit MD, Pen L, Van Gelder IC. New risk factors for atrial fibrillation: Causes of 'not-so-lone atrial fibrillation	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Scoccianti C., Lauby-Secretan B., Bello P. Y., Chajes V., Romieu I. Female breast cancer and alcohol consumption: a review of the literature	Already considered at full-text stage for the Evidence Evaluation Report - this is an update of IARC, which was not included but a section in the report discussed IARC findings.
Scoccianti C., Straif K., Romieu I. Recent evidence on alcohol and cancer epidemiology	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Seitz H. K., Pelucchi C., Bagnardi V., La Vecchia C. Epidemiology and pathophysiology of alcohol and breast cancer: update 2012	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Seitz HK, Becker P. Alcohol metabolism and 1. cancer risk	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Seitz HK, Matsuzaki S, Yokoyama A, Homann N, Va¨keva¨inen S, Wang XD. Alcohol and cancer (1998)	Published before 1 January 2007.
Seitz HK, Oneta CM. Gastrointestinal alcohol dehydrogenase	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Seitz HK, Stickel F. Molecular mechanisms of alcohol-mediated carcinogenesis.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Selvaratnam L, Cruchley AT, Navsaria H, Wertz PW, Hagi-Pavli EP, Leigh IM, et al. Permeability barrier properties of oral keratinocyte cultures: a model of intact human oral mucosa	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Selwitz, R. H., Ismail, A. I. & Pitts, N. B. (2007) Dental caries	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Dental caries narrative review.
Sesso HD. Alcohol and cardiovascular health: recent findings. (2001)	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
Settertobulte, W. and Hurrelmann, K. (2003) Alcopops—der neue Einstieg zum Alkoholkonsum im Jugendalter? [Alcopops—the new entrance to the consumption of alcohol in youth?].	Published before 1 January 2007.
Shahim FN, Cameron P, McNeil JJ, Maxillofacial trauma in major trauma patients	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Shaper A, Wannamethee G, Walker M: Alcohol and mortality in British men: explaining the U-shaped curve. (1988)	Published before 1 January 2007.
Shaper AG, Wannamethee G, Walker M. Alcohol and coronary heart disease: a perspective from the British Regional Heart Study (1994)	Published before 1 January 2007.
Shepherd J. Violent crime: the role of alcohol and new approaches to the prevention of injury. Alcohol.	Published before 1 January 2007.
Shield K. D., Parry C., Rehm J. Chronic diseases and conditions related to alcohol use	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Shield, K. D., Soerjomataram, I., Rehm, J. (2016). Alcohol Use and Breast Cancer: A Critical Review	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Shimazaki Y, Saito T, Kiyohara Y, et al. Relationship between drinking and periodontitis: The Hisayama Study. (2005)	Published before 1 January 2007.
Shiu MN, Chen TH, Chang SH, Hahn LJ. Risk factors for leukoplakia and malignant transformation to oral carcinoma: a leukoplakia cohort in Taiwan. (2000)	Published before 1 January 2007.
Shiu MN, Chen TH. Impact of betel quid, tobacco and alcohol on three-stage disease natural history of oral leukoplakia and cancer: implication for prevention of oral cancer (2004)	Published before 1 January 2007.
Shizukuishi, S., Hayashi, N., Tamagawa, H., Hanioka, T., Maruyama, S. & Takeshita, T. (1998) Life style and periodontal health of Japanese factory workers	Published before 1 January 2007.
Shuler, C. F. (2001) Inherited risks for susceptibility to dental caries	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Interventions to reduce drink-driving.
Shults RA, Elder RW, Sleet DA, et al. Reviews of evidence regarding interventions to reduce alcohol-impaired driving.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Interventions to reduce drink-driving.
Sierksma A, Patel H, Ouchi N, Kihara S, Funahashi T, Heine RJ. Effect of moderate alcohol consumption on adiponectin, tumor necrosis factor-alpha, and insulin sensitivity (2004)	Published before 1 January 2007.
Simapivapan, P., Boltong, A. and Hodge, A. To what extent is alcohol consumption associated with breast cancer recurrence and second primary breast cancer?: A systematic review	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion as did not meet the PEO.
Simpura J. Finnish drinking habits: results from interview surveys held in 1968, 1976 and 1984 (2002).	Published before 1 January 2007.
Singletary K. Alcohol and Cancer: Biological Basis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Book chapter.
Singletary KW, Barnes SL, van Breemen RB. Ethanol inhibits benzo[a]pyrene-DNA adduct removal and increases 8-oxodeoxyguanosine formation in human mammary epithelial cells.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Sittig LJ, Redei EE. Paternal genetic contribution influences fetal vulnerability to maternal alcohol consumption in a rat model of fetal alcohol spectrum disorder.	Not in humans
Sivenius J, Tuomilehto J, Immonen-Räihä P, Kaarisalo M, Sarti C, Torppa J, Kuulasmaa K, Mähönen M, Lehtonen A, Salomaa V. Continuous 15-year decrease in incidence and mortality of stroke in Finland: The FINSTROKE Study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Slack A, Nana G, Webster M, Stokes F, Wu J. Costs of Harmful Alcohol and Other Drug Use. Final Report [Internet]. Wellington: Business and Economic Research Limited; 2009.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).

References provided by NHMRC based on public consultation process	Response
Smart, R. G. (1996) Behavioral and social consequences related to the consumption of different beverage types	Published before 1 January 2007.
Smart, R. G. and Walsh, G. W. (1995) Do some types of alcoholic beverages lead to more problems for adolescents	Published before 1 January 2007.
Smith AJ, Hidgson RJ, Bridgeman K, Shepherd JP. A randomised trial of brief intervention after alcohol-related facial injury	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Smith DI, Burvill, PW. Eff ect on traffi c safety of lowering the drinking age in three Australian states	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Smith EM, Ritchie JM, Pawlita M, et al. Human papillomavirus seropositivity and risks of head and neck cancer	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Soedamah-Muthu SS, De Neve M, Shelton NJ, Tielemans SM, Stamatakis E. Joint associations of alcohol consumption and physical activity with all-cause and cardiovascular mortality.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Joint association of alcohol consumption and physical activity.
Sofi F; Cesari F; Abbate R; Gensini GF; Casini A. (2008) Adherence to Mediterranean diet and health status: meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Narrative review.
Solfrizzi, V., et al., Diet and Alzheimer's disease risk factors or prevention: the current evidence	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Narrative review.
Song DY, Song S, Song Y, Lee JE. Alcohol intake and renal cell cancer risk: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a more recent systematic review was identified.
Sood A, Midha V, Goyal O, Goyal P, Sood P, Sharma SK, Sood N, Skin and soft tissue infections in cirrhotics: a prospective analysis of clinical presentation and factors affecting outcome.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Sood B, Delaney-Black V, Covington C, et al. Prenatal alcohol exposure and childhood behaviour at age 6 to 7 years: I. dose-response effect. Pediatrics. 2001;108:e34.	Published before 1 January 2007.
Soyama Y, Miura K, Morikawa Y, Nishijo M, Nakanishi Y, Naruse Y, Kagamimori S, Nakagawa H, Oyabe Study. High-density lipoprotein cholesterol and risk of stroke in Japanese men and women: the Oyabe Study (2002)	Published before 1 January 2007.
Squier CA, Cox P, Hall BK. Enhanced penetration of nitrosonornicotine across oral mucosa in the presence of ethanol	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Squier CA, Cox P, Wertz PW. Lipid content and water permeability of skin and oral mucosa.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Squier CA, Kremer MJ, Wertz PW. Effect of ethanol on lipid metabolism and epithelial permeability barrier of skin and oral mucosa in the rat	Not in humans
Squier CA. The permeability of oral mucosa	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
SquierCA,CoxP,WertzPW.Lipidcontentandwaterpermeability of skin and oralmucosa	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Stade BC, Dailey C, Dzendoletas D, Sgro M, Dowswell T, Bennett D. Psychological and/or educational interventions for reducing alcohol consumption in pregnant women and women planning pregnancy.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Stampfer MJ, Colditz GA, Walter BS, Willett C. A prospective study of moderate alcohol consumption and the risk of coronary heart disease and stroke in women (1988)	Published before 1 January 2007.
Stampfer MJ, Hu FB, Manson JE, Rimm EB, Willett WC. Primary prevention of coronary heart disease in women through diet and lifestyle (2000)	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
StataCorp: Stata Statistical Software: Release 101 [Computer software}	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Software.
Steinberger EK, Ferencz C, Loffredo CA. Infants with single ventricle: a population-based epidemiological study. Teratology. 2002;65(3):106-15.	Published before 1 January 2007.
Stockwell T, Zhao J, Panwar S, Roemer A, Naimi T, Chikritzhs T. Do "Moderate" Drinkers Have Reduced Mortality Risk? A Systematic Review and Meta-Analysis of alcohol Consumption and all-Cause Mortality	Already considered for Evidence Evaluation Report. Included in overview
Stockwell, T. Jinhui Zhao, Sapna Panwar, Audra Roemer, Timothy Naimi, and Tanya Chikritzhs (2016). Do moderate drinkers have reduced mortality risk? A systematic review and meta-analysis of alcohol consumption and all-cause mortality. *Journal of Studies on Alcohol and Drugs. 77,* 185–198	Already considered for Evidence Evaluation Report. Included in overview
Stockwell, T., et al., Health benefits of moderate alcohol consumption: How good is the science?	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Letter.
Stockwell, T., Zeisser, C., Chikritzhs, T. (2014) Methodological biases in estimating the relationship between alcohol consumption and breast cancer: The role of drinker misclassification errors in meta-analytic results". Alcoholism: Clinical and Experimental Research. 38(8): 2297-2306. doi: 10.1111/acer.12479.	Already considered and included at full-text review for the Evidence Evaluation Report.This reference has been incorrectly cited and should read with Zeisser as the first author. The paper was not selected for inclusion because the WCRF report only included cohort studies and nested case-control studies that are typically at lower risk of bias.
Stockwell. T., & Zhao, J. (2016). Alcohol's contribution to cancer is underestimated for exactly the same reason that its contribution to cardioprotection is overestimated	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Letter
Stokes GS. Hypertension and alcohol: is there a link (1982).	Published before 1 January 2007.
Stratton K, Howe C, Frederick B (eds). Fetal Alcohol Syndrome: Diagnosis, epidemiology, prevention, and treatment.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Streissguth A, Bookstein F, Barr H, Sampson P, O'Malley K, Young J. Risk factors for adverse life outcomes for fetal alcohol syndrome and fetal alcohol effects. J Dev Behav Pediatr. 2004;25(4):228–238.	Published before 1 January 2007.
Strong K, Mathers C, Bonita R: Preventing stroke: saving lives around the world	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Epidemiology of stroke.
Stroup DF, Berlin JA, Morton SC, Olkin I, Williamson GD, Rennie D, Moher D, Becker BJ, Sipe TA, Thacker SB. Meta-analysis of observational studies in epidemiology: a proposal for reporting. Meta-analysis Of Observational Studies in Epidemiology (MOOSE) group.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Reporting standards.
Suh I, Jee SH, Kim HC, Nam CM, Kim IS, Appel LJ. Low serum cholesterol and haemorrhagic stroke in men: Korea Medical Insurance Corporation Study. Lancet. 2001 Mar 24;357(9260):922-5.	Published before 1 January 2007.
Suh I, Jee SH, Kim HC, Nam CM, Kim IS, Appel LJ. Low serum cholesterol and haemorrhagic stroke in men: Korea Medical Insurance Corporation Study	Published before 1 January 2007. (2001)
Suh I, Jee SH, Kim HC, Nam Cm, Kim IS, Appel LJ: Low serum cholesterol and haemorrhagic stroke in men: Korea Medical Insurance Corporation Study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Alcohol was not an exposure measured.
Sun J, Chen X, Chen H, Ma Z, Zhou J. Maternal alcohol consumption before and during pregnancy and the risks of congenital heart defects in offspring: A systematic review and meta-analysis.	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion the exposure details were insufficient and includes before pregnancy.
Sun Q, Xu L, Zhou B, Wang Y, Jing Y, Wang B. Alcohol consumption and the risk of endometrial cancer: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion as did not meet the minimum criteria.
Susanna C. Larsson, Alice Wallin, Alicja Wolk, and Hugh S. Markus Differing association of alcohol consumption with different stroke types: a systematic review and meta-analysis	Already considered for the Evidence Evaluation Report. Included in the overview.
Suter, P. (2005). Is alcohol consumption a risk factor for weight gain and obesity?	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
Sutherland GT, Sheedy D, Kril JJ. Using autopsy brain tissue to study alcohol-related brain damage in the Genomic age	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). About brain bank.
Sutherland, I. and Willner, P. (1998) Patterns of alcohol, cigarette and illicit drug use in English adolescents	Published before 1 January 2007.
Swann PF, Coe AM, Mace R. Ethanol and dimethylnitrosamine and diethylnitrosamine metabolism and disposition in the rat. Possible relevance to the influence of ethanol on human cancer incidence.	Not in humans
Szabo G. Consequences of alcohol consumption on host defence. (1999)	Published before 1 January 2007.
Szklo M., Nieto F. Chapter 10. Epidemiologic Issues in the Interface with Public Health Policy	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Book chapter
Takeshita T, Morimoto K. Development of a questionnaire method to discriminate between typical and atypical genotypes of low Km aldehyde dehydrogenase in a Japanese population (1998)	Published before 1 January 2007.
Takeshita T, Morimoto K. Self-reported alcohol-associated symptoms and drinking behavior in three ALDH2 genotypes among Japanese university students (1999)	Published before 1 January 2007.
Tamaki N, Tomofuji T, Maruyama T, Ekuni D, Yamanaka R, Takeuchi N, et al. Relationship between periodontal condition and plasma reactive oxygen metabolites in patients in the maintenance phase of periodontal treatment	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Tambasco N, Scaroni R, Corea F, Silvestrelli G, Rossi A, Bocola V, et al: Multimodal use of computed tomography in early acute stroke, part 1	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Use of CT in stroke.
Tan, C., Denny, C., Cheal, N., Sniezek,J. and Kanny, D. (2015). Alcohol use and binge drinking among women of childbearing age – United States 2011-2013	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Prevalence of alcohol consumption and binge drinking.
Tanaka H, Suzuki N, Arima M. Experimental studies on the influence of male alcoholism on foetal development.	Not in humans
Tearne L, Cox K, Giglia R. Patterns of alcohol intake of pregnant and lactating women in rural Western Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption) The outcome is alcohol consumption.
Telfer MR, Jones GM, Shepherd JP. Trends in the aetiology of maxillofacial fractures in the UK (1977-1987).	Published before 1 January 2007.
Teunissen LL, Rinkel GJE, Algra A, van Gijn J: Risk factors for subarachnoid hemorrhage: a systematic review.	Published before 1 January 2007. (1996)
Tezal, M., Grossi, S. G., Ho, A. W. & Genco, R. J. (2001) The effect of alcohol consumption on periodontal disease.	Published before 1 January 2007.
Tezal, M., Grossi, S. G., Ho, A. W. & Genco, R. J. (2004) Alcohol consumption and periodontal disease. The third national health and nutrition examination survey.	Published before 1 January 2007.
The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Checklist for assessing observational studies.
The Parliament of the Commonwealth of Australia 2012. House of Representatives Standing Committee on Social Policy and Legal Affairs. FASD The Hidden Harm. Inquiry into the prevention, diagnosis and management of Fetal Alcohol Spectrum Disorders	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
The Royal Australasian College of Physicians and The Royal Australian and New Zealand College of Psychiatrists: Alcohol Policy 2016	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Policy statement.
Theobald, H., Bygren, L. O., Carstensen, J. & Engfelt, P. (1999) Validity of two questions on alcohol use in a health survey questionnaire.	Published before 1 January 2007.
Thrift A, Donnan G, McNeil J: Heavy drinking, but not moderate or intermediate drinking, increases the risk of intracerebral hemorrhage. Epidemiol.	Published before 1 January 2007. (1999)

References provided by NHMRC based on public consultation process	Response
Thuler LC, de Menezes RF, Bergmann A. Cancer cases attributable to alcohol consumption in Brazil.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Timmons SR, Nwankwo JO, Domann FE. Acetaldehyde activates Jun/AP-1 expression and DNA binding activity in human oral keratinocytes.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Tobacco smoke and involuntary smoking. IARC Monogr Eval Carcinog Risks	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Tobin AM, Higgins EM, Norris S, Kirby B, Prevalence of psoriasis in patients with alcoholic liver disease	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Tolonen H, Salomaa V, Torppa J, Sivenius J, Immonen-Räihä P, Lehtonen A. The validation of the Finnish Hospital Discharge Register and Causes of Death Register data on stroke diagnoses	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Not about alcohol.
Torrungruang, K., Tamsailom, S., Rojanasomsith, K., Sutdhibhisal, S., Nisapakultorn, K., Vanichjakvong, O., Prapakamol, S. Premsirionirund, T., Pusiri, T., Jaratkulangkoon, O., Unkurapinun, N. & Sritara, P. (2005) Risk indicators of periodontal disease in older Thai adults.	Published before 1 January 2007.
Toumbourou JW, Evans-Whipp TJ, Smith, R, et al. Adolescent predictors and environmental correlates of young adult alcohol use problems.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Toumbourou JW, Hemphill SA, McMorris BJ, et al. Alcohol use and related harms in school students in the USA and Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Toumbourou, J.W., Kypri, K., Jones, S., and Hickie, I. (2014) Should the legal age for alcohol purchase be raised to 21?	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Narrative review.
Tramacere I, Negri E, Bagnardi V, Garavello W, Rota M, Scotti L, et al. A meta-analysis of alcohol drinking and oral and pharyngeal cancers.	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Tramacere I, Negri E, Pelucchi C, et al (2012). A meta-analysis on alcohol drinking and gastric cancer risk.	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Tramacere I, Pelucchi C, Bagnardi V, et al (2011). A meta-analysis on alcohol drinking and esophageal and gastric cardia adenocarcinoma risk	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Tramacere I, Scotti L, Jenab M, et al (2010). Alcohol drinking and pancreatic cancer risk: a meta-analysis of the dose-risk relation	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Tramacere, C. Pelucchi, M. Bonifazi, V. Bagnardi, M. Rota, R. Bellocco, L. Scotti, F. Islami, G. Corrao, P. Boffetta, C. La Vecchia and E. Negri. A meta-analysis on alcohol drinking and the risk of Hodgkin lymphoma.	Already considered at full-text.
Tramacere, C. Pelucchi, M. Bonifazi, V. Bagnardi, M. Rota, R. Bellocco, L. Scotti, F. Islami, G. Corrao, P. Boffetta, C. La Vecchia and E. Negri. Alcohol drinking and non-Hodgkin lymphoma risk: a systematic review and a meta-analysis	Already considered at full-text.
Tsang T, Elliott E. High global prevalence of alcohol use during pregnancy and fetal alcohol syndrome indicates need for urgent action	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).Commentary
Tsantoulis PK, Kastrinakis NG, Tourvas AD, Laskaris G, Gorgoulis VG. Advances in the biology of oral cancer	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Not on alcohol risk. Narrative review.
Tucker, J. S., Orlando, M. and Ellickson, P. L. (2003) Patterns and correlates of binge drinking trajectories from early adolescence to young adulthood.	Published before 1 January 2007.

References provided by NHMRC based on public consultation process	Response
Turati F, Gallus S, Tavani A, Tramacere I, Polesel J, Talamini R, Montella M, Scotti L, Franceshi S, La Vecchia C. Alcohol and endometrial cancer risk: a case-control study and a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Turati, F., Galeone, C., Rota, M., Pelucchi, C., Negri, E., Bagnardi, V., et al. (2014). Alcohol and liver cancer: A systematic review and meta-analysis of prospective studies	Already considered at full-text stage for the Evidence Evaluation Report but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Turati, F., Garavello, W., Tramacere, I., Pelucchi, C., Galeone, C., Bagnardi, V., Corrao, G., Islami, F., Fedirko, V., Boffetta, P., La Vecchia, C. and Negri, E. : A meta-analysis of alcohol drinking and oral and pharyngeal cancers: results from subgroup analyses	Already considered and included at full-text review for the Evidence Evaluation Report. The paper is superceded by Bagnardi and therefore it was not selected for inclusion.
U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary guidelines for Americans	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption). Guidelines
Uehara Y, Kiyohara C (2010). Alcohol consumption and lung cancer risk among Japanese: a meta-analysis	Not available as full-text in a peer-reviewed journal
Uhl, A. (2007) How to camouflage ethical questions in addiction research.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
UK Department of Health. Alcohol and pregnancy.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
US Department of Health, Education and Welfare Smoking and Health: Report of the Advisory Committee of the Surgeon General of the Public Health Service.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
V. Bagnardi, M. Rota, E. Botteri, L. Scotti, M. Jenab, R. Bellocco, I. Tramacere, C. Pelucchi, E. Negri, C. La Vecchia, G. Corrao and P. Boffetta. Alcohol consumption and lung cancer risk in never smokers: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion as a systematic review of higher quality was identified for this outcome.
Vakevainen S, Tillonen J, Agarwal DP, Srivastava N, Salaspuro M. High salivary acetaldehyde after a moderate dose of alcohol in ALDH2-deficient subjects: strong evidence for the local carcinogenic action of acetaldehyde	Published before January 2007. (2000)
Valentine JA, Scott J, West CR, St. Hill CA. A histological analysis of the early effects of alcohol and tobacco usage on human lingual epithelium.	Not available as full-text in a peer-reviewed journal
van de Wiel A, de Lange DW. Cardiovascular risk is more related to drinking pattern than to the type of alcoholic drinks	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Van Dyke TE, Sheilesh D. Risk factors for periodontitis	Published before January 2007. (2005)
Velly AM, Franco EL, Schlecht N, et al. Relationship between dental factors and risk of upper aerodigestive tract cancer	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Vidal F, Figueredo CM, Cordovil I, Fischer RG. Higher prevalence of periodontitis in patients with refractory arterial hypertension: A case-control study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Vincon P, Wunderer J, Simanowski UA, Koll M, Preedy VR , Peters TJ, et al. Inhibition of alcohol-associated colonic hyperregeneration by alpha-tocopherol in the rat	Not in humans.
Volk RJ, Steinbauer JR, Cantor SB, Holzer CE 3rd. The alcohol use disorders identification test (AUDIT) as a screen for at-risk drinking in primary care patients of different racial/ethnic backgrounds.	Published before January 2007. (1997)
Wagenaar AC, Wolfson M. Deterring sales and provision of alcohol to minors: a study of enforcement in 295 counties in four states	Published before January 2007. (1995)
Wagenaar AC. Research aff ects public policy: the case of the legal drinking age in the United States	Published before January 2007. (1993)
Waiters, E. D., Treno, A. J. and Grube, J. W. (2001) Alcohol advertising and youth: A focus group analysis of what young people find appealing in alcohol advertising.	Published before January 2007. (2001)

References provided by NHMRC based on public consultation process	Response
Wakabayashi I. Light-to-moderate alcohol drinking reduces the impact of obesity on the risk of diabetes mellitus	Not available as full-text in a peer-reviewed journal
Waldschmidt TJ, Cook RT, Kovacs EJ. Alcohol and inflammation and immune responses: summary of the 2005 Alcohol and Immunology Research Interest Group (AIRIG) meeting	Published before January 2007. (2006)
Walker AE, Robins M, Weinfeld FD. The National Survey of Stroke	Published before January 2007. (1981)
Walker, M., Al-Sahab, B., Islam, F. and Tamim, H. (2011). The epidemiology of alcohol utilization during pregnancy: an analysis of the Canadian Maternity Experiences Survey (MES).	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Wang C; Xue H; Wang Q; Hao Y; Li D; Gu D; Huang J. (2014). Effect of drinking on all-cause mortality in women compared with men: a meta-analysis	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion as the outcome focus is on risk for men compared to women.
Wang D, Ritchie JM, Smith EM, Zhang Z, Turek LP, Haugen TH. Alcohol dehydrogenase 3 and risk of squamous cell carcinomas of the head and neck	Published before January 2007. (2005)
Wang X, Cheng W, Li J, Zhu J. A meta-analysis of alcohol consumption and thyroid cancer risk	Included in the overview.
Wang XD. Alcohol, vitamin A, and cancer.	Published before January 2007. (2003)
Wang, R., et al., Do cardiovascular risk factors explain the link between white matter hyperintensities and brain volumes in old age? A population-based study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Wang, Y., Duan, H., Yang, H., & Lin, J. (2015). A pooled analysis of alcohol intake and colorectal cancer.	Already considered at full-text stage for the Evidence Evaluation Report, but not selected for inclusion as it did not meet the minimum criteria.
Wang, Y., Gou, Y., Jin, W., Xiao, M., & Fang, H. (2016). Association between alcohol intake and the risk of pancreatic cancer: A dose–response meta-analysis of cohort studies	Included in the overview.
Wannamathee G, Shaper AG. Alcohol intake and variations in blood pressure by day of examinations.	Published before January 2007. (1991)
Wannamethee SG, Shaper A: Patterns of alcohol intake and risk of stroke in middle-aged british men.	Published before January 2007. (1996)
Warnakulasuriya S, Parkkila S, Nagao T, et al. Demonstration of ethanol-induced protein adducts in oral leukoplakia (pre-cancer) and cancer.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Warnakulasuriya S. Causes of oral cancer e an appraisal of controversies	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Watkins RE, Elliott EJ, Halliday J, O'Leary CM, D'Antoine H, Russell E, Hayes L, Peadon E, Wilkins A, Jones HM, McKenzie A, Miers S, Burns L, Mutch RC, Payne JM, Fitzpatrick JP, Carter M, Latimer J, Bower C. A modified Delphi study of screening for fetal alcohol spectrum disorders in Australia.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Watkins RE, Elliott EJ, Mutch RC, Latimer J, Wilkins A, Payne JM, Jones HM, Miers S, Peadon E, McKenzie A, D'Antoine HA, Russell E, Fitzpatrick J, O'Leary CM, Halliday J, Hayes L, Burns L, Carter M, Bower C. Health professionals' perceptions about the adoption of existing guidelines for the diagnosis of fetal alcohol spectrum disorders in Australia.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Watkins RE, Elliott EJ, Mutch RC, Payne JM, Jones HM, Latimer J, Russell E, Fitzpatrick JP, Hayes L, Burns L, Halliday J, D'Antoine HA, Wilkins A, Peadon E, Miers S, Carter M, O'Leary CM, McKenzie A, Bower C. Consensus diagnostic criteria for fetal alcohol spectrum disorders in Australia: a modified Delphi study	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Watkins RE, Elliott EJ, Wilkins A, Latimer J, Halliday J, Fitzpatrick JP, Mutch RC, O'Leary CM, Burns L, McKenzie A, Jones HM, Payne JM, D'Antoine H, Miers S, Russell E, Hayes L, Carter M, Bower C. Fetal alcohol spectrum disorder: development of consensus referral criteria for specialist diagnostic assessment in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).

References provided by NHMRC based on public consultation process	Response
Watkins RE, Elliott EJ, Wilkins A, Mutch RC, Fitzpatrick JP, Payne JM, O'Leary CM, Jones HM, Latimer J, Hayes L, Halliday J, D'Antoine H, Miers S, Russell E, Burns L, McKenzie A, Peadon E, Carter M, Bower C. Recommendations from a consensus development workshop on the diagnosis of fetal alcohol spectrum disorders in Australia	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Webb, G. R., Redman, S., Gibberd, R. W. & Sanson-Fisher, R. W. (1991) The reliability and stability of a quantity–frequency method and a diary method of measuring alcohol consumption.	Published before January 2007. (1991)
Weber MA, Julius S, Kjeldsen SE, et al. Blood pressure dependent and independent effects of antihypertensive treatment on clinical events in the VALUE Trial	Published before January 2007. (2004)
Wechsler H, Lee JE, Kuo M, Lee H. College binge drinking in the 1990s: a continuing problem. Results of the Harvard School of Public Health 1999 College Alcohol Study.	Published before January 2007. (1999)
Wechsler, H., Davenport, A., Dowdall, G. et al . (1994) Health and behavioral consequences of binge drinking in college	Published before January 2007. (1994)
Wells, S., Graham, K., Speechley, M. et al . (2005) Drinking patterns, drinking contexts and alcohol-related aggression among late adolescent and young adult drinkers	Published before January 2007. (2005)
White J, Lynn R, Ong S, Whittington P. The Effectiveness of Alcohol Pricing Policies: Reducing harmful alcohol consumption and alcohol-related harm	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
WHO International Agency for Research on Cancer (2010). Monographs on the Evaluation of Carcinogenic Risks to Humans	Included in overview
Wicki, M., Gmel, G., Kuntsche, E. et al . (2006) Is alcopop consumption in Switzerland associated with riskier drinking patterns and more alcohol-related problems?	Published before January 2007. (2006)
Wight AJ, Ogden GR. Possible mechanisms by which alcohol may influence the development of oral cancer e a review	Published before January 2007. (1998)
Williams C, Perry C, Farbakhsh K, Veblen-Mortenson S. Project Northlands: Comprehensive alcohol use prevention for young adolescents, their parents, school, peers and community.	Published before January 2007. (1999)
Wilson, N., Syme, S. L., Boyce, W. T. et al . (2005) Adolescent alcohol, tobacco, and marijuana use: The influence of neighborhood disorder and hope.	Published before January 2007. (2005)
Wimmer, G., Kohldorfer, G., Mischak, I., Lorenzoni, M. & Kallus, K. W. (2005) Coping with stress: its influence on periodontal therapy	Published before January 2007. (2005)
Windham GC, Fenster L, Hopkins B, Swan SH. The association of moderate maternal and paternal alcohol consumption with birthweight and gestational age. Epidemiology. 1995;6(6):591-7.	Published before January 2007. (1995)
Windham GC, Fenster L, Swan SH. Moderate maternal and paternal alcohol consumption and the risk of spontaneous abortion. Epidemiology. 1992;3(4):364-70.	Published before January 2007. (1992)
Windle, M. (2003) Allcohol use among adolescents and young adults	Published before January 2007. (2003)
Winn DM, Diehl SR, Brown LM, Harty LC, Bravo-Otero E, Fraumeni Jr JF, et al. Mouthwash in the etiology of oral cancer in Puerto Rico.	Not available as full-text in a peer-reviewed journal
World Health Organisation (WHO). Global Status Report on Alcohol 2004	Published before January 2007. (2004)
World Health Organization Guidelines for identification and management of substance use and substance use disorders in pregnancy. 2014.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
World Health Organization. Framework for alcohol policy in the WHO European region.	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Grey literature - report
World Health Organization. The World Health Organization MONICA project (monitoring trends and determinants in cardiovascular disease	Not available as full-text in a peer-reviewed journal

References provided by NHMRC based on public consultation process	Response
Wozniak M. B., Brennan P., Brenner D. R., Overvad K., Olsen A., Tjonneland A. et al. Alcohol consumption and the risk of renal cancers in the European prospective investigation into cancer and nutrition (EPIC)	Not available as full-text in a peer-reviewed journal
Wu D, Cederbaum AI. Alcohol, oxidative stress, and free radical damage	Published before January 2007. (2003)
Wurtz P, Cook S, Wang Q, Tiainen M, Tynkkynen T, Kangas AJ, Soininen P, Laitinen J, Viikari J, Kahonen M, et al. Metabolic profiling of alcohol consumption in 9778 young adults.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Wyllie, A., Zhang, J. F. and Casswell, S. (1998) Responses to televised alcohol advertisements associated with drinking behaviour of 10–17 year olds.	Published before January 2007. (1998)
Wynder EL, Kabat G, Rosenberg S, Levenstein M. Oral cancer and mouthwash use	Published before January 2007. (1983)
Xu, X., Zhu, Y., Zheng, X. and Xie, L. Does beer, wine or liquor consumption correlate with the risk of renal cell carcinoma? A dose-response meta-analysis of prospective cohort studies	Already considered at full-text stage for the Evidence Evaluation Report and an included systematic review for question 2
Yamashita T, Ozawa H, Aono H, Hosokawa H, Saito I, Ikebe T. Heart disease deaths on death certificates re-evaluated by clinical records in a Japanese city.	Published before January 2007. (1997)
Yang, Y., Liu, D. C., Wang, Q. M., Long, Q. Q., Zhao, S., Zhang, Z., et al. (2016). Alcohol consumption and risk of coronary artery disease: A dose-response meta-analysis of prospective studies	Included in the overview.
Yan-Hong H, Jing L, Hong L, Shan-Shan H, Yan L, Ju L. Association between alcohol consumption and the risk of ovarian cancer: a meta-analysis of prospective observational studies	Included in the overview.
Yano K, Rhoads GG, Kagan A. Coffee, alcohol and risk of coronary heart disease among Japanese men living in Hawaii	Published before January 2007. (1977)
Ye XH, Huai JP, Ding J, Chen YP, Sun XC. Smoking, alcohol consumption, and the risk of extrahepatic cholangiocarcinoma: a meta-analysis	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Yeomans, M. R. (2010). Alcohol, appetite and energy balance: Is alcohol intake a risk factor for obesity?	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Ying L, Hui L, Yafei L, Jia C. Association between socio-psychobehavioral factorscand male semen quality: systematic review and meta-analyses.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Yokoyama A, Omori T. Genetic polymorphisms of alcohol and aldehyde dehydrogenases and risk for esophageal and head and neck cancers.	Published before January 2007. (2003)
Yokoyama A, Watanabe H, Fukuda H, Haneda T, Kato H, Yokoyama T, et al. Multiple cancers associated with esophageal and oropharyngolaryngeal squamous cell carcinoma and the aldehyde dehydrogenase-2 genotype in male Japanese drinkers.	Published before January 2007. (2002)
Yonkers KA. Screening for prenatal substance use: development of the Substance Use Risk Profile-Pregnancy Scale. Obstet. Gynecol 2010; 116 (4): 827-33.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Young, S. E., Corley, R. P., Stallings, M. C. et al . (2002) Substance use, abuse and dependence in adolescence: Prevalence, symptom profiles and correlates.	Published before January 2007.(2002)
Zakhari S. Chronic alcohol drinking: liver and pancreatic cancer?	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Zakhari S. To say moderate alcohol use causes cancer is wrong	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Opinion piece
Zakhari S., Hoek J. B. Alcohol and breast cancer: reconciling epidemiological and molecular data	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Zeisser C., Stockwell T. R., Chikritzhs T. Methodological biases in estimating the relationship between alcohol consumption and breast cancer: the role of drinker misclassification errors in meta-analytic results	Already considered and included at full-text review for the Evidence Evaluation Report. The paper was not selected for inclusion because the WCRF report only included cohort

References provided by NHMRC based on public consultation process	Response
	studies and nested case-control studies that are typically at lower risk of bias.
Zhang C, Qin YY, Chen Q, et al. Alcohol intake and risk of stroke: a dose–response meta-analysis of prospective studies. Int J Cardiol. 2014;174:669–677. doi: 10.1016/j.ijcard.2014.04.225.	Already considered for the Evidence Evaluation Report and excluded. Identified in the search and reviewed at full-text but not selected for inclusion as a systematic review with a more recent search date was identified.
Zhang L, Wang XH, Zheng XM, Liu TZ, Zhang WB, Zheng H, Chen MF. Maternal gestational smoking, diabetes, alcohol drinking, pre-pregnancy obesity and the risk of cryptorchidism: a systematic review and meta-analysis of observational studies	Already considered for the Evidence Evaluation Report. Identified in search. Excluded at full-text for not meeting PEO/minimum criteria.
Zhang P, Bagby GJ, Happel KI, Raasch CE, Neslon S. Alcohol abuse, immunosuppression, and pulmonary infection	Submitted evidence that does not describe a research study or systematic review of research (primary studies). Narrative review
Zhang X; Shu L; Si C; Yu X; Gao W; Liao D; Zhang L; Liu X; Zheng P. (2015). Dietary patterns and risk of stroke in adults: a systematic review and meta-analysis of prospective cohort studies.	Already considered for the Evidence Evaluation Report and excluded. Identified in the search and reviewed at full-text but not selected for inclusion as it's focus was not only on alcohol and the analysis was not as in-depth as others identified. There was no dose response and only moderate drinking compared to not drinking was analysed.
Zhang XY, Shu L, Si CJ, Yu XL, Liao D, Gao W, Zhang L, Zheng PF. Dietary Patterns, Alcohol Consumption and Risk of Coronary Heart Disease in Adults: A Meta-Analysis.	Already considered for the Evidence Evaluation Report and excluded. Identified in the search and reviewed at full-text but not selected for inclusion as it's focus was not only on alcohol and the analysis was not as in-depth as others identified. There was no dose response and only moderate drinking compared to not drinking was analysed.
Zhang Z, Shi Q, Liu Z, Sturgis EM, Spitz MR, Wei Q. Polymorphisms of methionine synthase and methionine synthase reductase and risk of squamous cell carcinoma of the head and neck: a casecontrol analysis.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption).
Zhang, Y., Wang, R., Miao, L., Zhu, L., Jiang, H. and Yuan, H. Different levels in alcohol and tobacco consumption in head and neck cancer patients from 1957 to 2013	Already considered for the Evidence Evaluation Report and excluded. Identified in the search and reviewed at full-text but not selected for inclusion as it collected data for alcohol and tobacco but no consideration of their interaction
Zhao J, Stockwell T, Roemer A, Chikritzhs T. Is alcohol consumption a risk factor for prostate cancer? A systematic review and meta-analysis	Already considered for the Evidence Evaluation Report. Included in the Report
Zheng TZ, Boyle P, Hu HF. Dentition, oral hygiene, and risk of oral cancer: a case-control study in Beijing, People's Republic of China.	Not available as full-text in a peer-reviewed journal
Zheng, YL., Lian, F., Shi, Q., Zhang, C., Chen, YW., Zhou, YH., He, J. (2015) Alcohol intake and associated risk of major cardiovascular outcomes in women compared with men: a systematic review and meta-analysis of prospective observational studies	Already considered for the Evidence Evaluation Report and excluded. Identified in the search and reviewed at full-text but not selected for inclusion as the focus was on men compared to women and a systematic review with a more recent search date was identified.
Zhong H, Song Z, Chen W, Li H, He L, Gao T, Fang H, Guo Z, Xv J, Yu B, Gao X, Xie H, Gu H, Luo D, Chen X, Lei T, Gu J, Cheng B, Duan Y, Xv A, Zhu X, Hao F, Chronic urticaria in Chinese population: a hospital-based multicenter epidemiological study.	Did not report on one or more health outcomes at different levels of exposure (i.e. frequency or amount of alcohol consumption)
Zhou Q, Guo P, Li H, Chen XD. Does alcohol consumption modify the risk of endometrial cancer? A dose-response meta-analysis of prospective studies	Already considered for Evidence Evaluation Report. Included in the Report
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