

Alcohol and Pregnancy and Fetal Alcohol Spectrum Disorder: a Resource for Health Professionals

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Introduction

Objectives of Alcohol and Pregnancy and Fetal Alcohol Spectrum Disorder: a Resource for Health Professionals

This resource has been developed to support health professionals to address the issue of alcohol use in pregnancy with women.

Many health professionals do not routinely ask pregnant woman about their alcohol use, and many do not feel prepared to advise on the consequences of alcohol use in pregnancy. Health professionals have indicated that they would like materials to support them to address the issue of alcohol use in pregnancy.^{1,2}

Health professionals have an important role in ASKING women before and during pregnancy about alcohol use, ASSESSING the risk of alcohol use, ADVISING about the consequences, ASSISTING women to stop or reduce their alcohol consumption and avoid intoxication, and ARRANGING further support as appropriate.

This resource aims to support health professionals in this role by providing information on:

- women's alcohol use before and during pregnancy
- the consequences related to alcohol consumption during pregnancy
- strategies for health professionals to ASK, ASSESS, ADVISE, ASSIST and ARRANGE support for women around the issue of alcohol use in pregnancy
- resources related to alcohol use in pregnancy that are available to health professionals.

Expected outcomes of Alcohol and Pregnancy and Fetal Alcohol Spectrum Disorder: a Resource for Health Professionals

From this resource health professionals will:

- know the consequences of alcohol consumption during pregnancy, including the conditions that make up Fetal Alcohol Spectrum Disorder (FASD)
- understand why women consume alcohol before and during pregnancy
- recognise the importance of routinely asking and advising women about the consequences of consuming alcohol during pregnancy
- understand the effectiveness of using a screening tool to ask women about alcohol use
- recognise the importance of recording information about women's alcohol consumption before and during pregnancy
- offer brief intervention to women who are identified as drinking alcohol during pregnancy or while planning a pregnancy
- refer women who need further support
- be aware of the resources and services related to alcohol use in pregnancy.

Alcohol use in Australia and women's patterns of drinking

In Australia, societal approval for regular alcohol consumption by adults has contributed to increasing rates of at-risk alcohol use. Of particular concern, are the changing rates and patterns of alcohol use by women and, especially, by young women.

Women in Australia are drinking more and are consuming alcohol in more harmful ways than in the past.³⁻⁵ Young women are more likely to drink amounts of alcohol which are harmful for both the short and long-term. *Short-term risk for women is associated with consumption of five or more standard drinks on any single occasion.*

In 2004-2005, 30% of adult women reported consuming alcohol at risky levels for the short-term on at least one occasion in the last 12 months, with 4% consuming at this level at least once a week over the previous 12 months. For women aged between 18-24 years, the proportion was much higher, with 11% consuming alcohol at risky levels for the short-term at least once a week in the previous 12 months.⁵ Amongst Aboriginal and Torres Strait Islander women, 26% reported drinking alcohol at risky levels for the short-term in the *previous two weeks*.⁶

Alcohol use during pregnancy in Australia

In Australia, research has shown varying rates of alcohol use by pregnant women.

Data from a random sample of all non-Aboriginal women giving birth in Western Australia between 1995-1997 showed that of the 4,839 women, 80% reported drinking alcohol in the three months before pregnancy, and 59% drank alcohol in at least one trimester of pregnancy.⁷ In the first trimester of pregnancy, 15% of women drank in excess of the 2001 Australian Alcohol Guideline for alcohol consumption in pregnancy, as did 10% in the second and third trimesters.⁷

A survey in 2006 of 1103 Australian women of childbearing age indicated that 24% would continue to drink if they became pregnant, and 34% continued to drink alcohol during their previous pregnancy.⁸

Varying rates of alcohol consumption have also been reported for Aboriginal women. A study of 532 Aboriginal and non-Aboriginal women attending an antenatal clinic in Cairns in 2005 showed that 25% consumed alcohol during pregnancy.⁹ Of 269 Aboriginal women who gave birth to a child in the Perth metropolitan area, and were residents of Perth in the mid 1990s, 44% reported that they drank alcohol during pregnancy and 22% of these women reported that they had become intoxicated at least once during pregnancy.¹⁰ A state-wide survey of 5289 Aboriginal children aged 0 – 17 years in Western Australia reported that 23% of the birth mothers who provided information reported that they had drunk alcohol in pregnancy.¹¹

Alcohol use and unplanned pregnancy

Many pregnancies may be inadvertently exposed to alcohol as women may consume alcohol before they know that they are pregnant. In a random sample of non-Aboriginal women in Western Australia, 47% reported that their pregnancy was unplanned.⁷

Consequences of drinking alcohol in pregnancy

How alcohol affects the fetus and child

Alcohol is a teratogen which may affect the development of a fetus. Alcohol passes freely through the placenta and reaches concentrations in the fetus that are as high as those in the mother. The fetus has limited ability to metabolise alcohol. Alcohol and acetaldehyde can damage developing fetal cells.¹² Alcohol can also impair placental/fetal blood flow, leading to hypoxia.^{13, 14}

Miscarriage and stillbirth are among the consequences of alcohol exposure in pregnancy. In the child, alcohol exposure in pregnancy can result in prematurity, brain damage, birth defects, growth restriction, developmental delay and cognitive, social, emotional and behavioural deficits.

As the child grows, the social and behavioural problems associated with alcohol exposure in pregnancy may become more apparent. Intellectual and behavioural characteristics in individuals exposed to alcohol in pregnancy include low IQ, inattention, impulsivity, aggression and problems with social interaction.

Evidence of risk

The amount of alcohol that is safe for the fetus has not been determined. Damage to the fetus is more likely to occur with high amounts of alcohol and, of particular risk, is a pattern of drinking in which high amounts of alcohol are consumed on any one occasion.¹⁵ ¹⁶ There is controversy about the consequences of low to moderate alcohol consumption in pregnancy.¹⁷ Some studies, though not all, show links between lower amounts of alcohol and low birth weight, miscarriage, stillbirth, birth defects, developmental and neurobehavioural problems.^{18, 19, 20} Research on the relationship between alcohol consumption during pregnancy and child outcomes is complicated by multiple prenatal, postnatal and childhood factors and the difficulty of obtaining accurate information on the level of alcohol exposure.¹⁹ The relationship between alcohol consumption and risk is one of dose response, not one in which there is a threshold of consumption over which damage to the fetus occurs.²¹

Not all children exposed to alcohol during pregnancy will be affected or affected to the same degree, and a broad range of effects is possible.²² The level of harm is related to the amount of alcohol consumed, the frequency of the consumption and the timing of the exposure. The effects of alcohol use in pregnancy on the fetus are also influenced by a number of other factors such as the general health and nutritional status of the mother, genetic factors, socio-economic status, other drug use, psychological wellbeing and combinations of these factors.^{22, 23} The level of risk to the fetus is hard to predict.

Amount and frequency of consumption and timing of exposure

The amount of alcohol consumed, and the frequency and timing of consumption all play a part in the manifestation and variation of adverse effects on the fetus.¹⁵

All types of alcoholic beverages can be harmful during pregnancy, and the risk to the fetus is proportional to the amount of alcohol consumed. Frequent heavy drinking poses the highest risk for detrimental effects on the fetus and damage is more likely to occur with high blood alcohol levels. Five or more standard drinks per occasion is associated with increased risk for the fetus.¹⁵

There is no safe time to drink alcohol during pregnancy. Alcohol exposure can have consequences for the development of the fetus throughout pregnancy and variation in effects can be due to the stage of development of the fetus at the time of exposure.

There is no known level of alcohol consumption in pregnancy below which no damage to a fetus will occur. Women should therefore be advised that,

No alcohol in pregnancy is the safest choice.

The *Australian Guidelines to Reduce Health Risks from Drinking Alcohol* state that for women who are pregnant, are planning a pregnancy, or are breastfeeding “not drinking is the safest option”.²⁴

Fetal Alcohol Spectrum Disorder (FASD)

Fetal Alcohol Spectrum Disorder (FASD) is a general term that was introduced in 2004 describing the range of effects that can occur in an individual who was exposed to alcohol during pregnancy. The effects include physical, mental, behavioural and learning disabilities with possible life-long implications.²⁵ In the United States, the estimated rate of FASD is 1 in 100 live births.²⁶

Children with diagnoses included under the general term of FASD often have:

- brain damage
- birth defects
- poor growth
- developmental delay
- difficulty hearing
- difficulty sleeping
- problems with vision
- high levels of activity
- difficulty remembering
- a short attention span
- language and speech deficits
- low IQ
- problems with abstract thinking
- poor judgement
- social and behavioural problems
- difficulty forming and maintaining relationships.

FASD is not a diagnostic term. It represents a spectrum of disorders and includes the diagnostic terms of Fetal Alcohol Syndrome, Alcohol Related Birth Defects and Alcohol Related Neurodevelopmental Disorder. Guidelines for the diagnosis of these conditions have been published.²⁶⁻²⁹

Fetal Alcohol Syndrome (FAS)

The association between alcohol exposure in pregnancy and a constellation of physical abnormalities was first published in the medical literature in 1968.³⁰ In 1973 the term Fetal Alcohol Syndrome (FAS) was coined to describe the facial characteristics, poor growth and neurobehavioural function in children exposed to alcohol during pregnancy.³¹

The Australian Paediatric Surveillance Unit in 2001-2004 estimated the birth prevalence of FAS to be 0.06 per 1000 livebirths.³² There was a significant increase each year in the number of children with FAS reported by paediatricians in each year of the study (from 2001-2004).³² In Western Australia, the prevalence of FAS for births from 1980-1997 was estimated to be 0.18 per 1000 births, with 0.02 per 1000 for non-Aboriginal infants and 2.76 per 1000 for Aboriginal infants.³³ Since this time, there has been increased research and clinical attention on FAS in Western Australia and the prevalence has increased to 0.5 per 1000 for births from 2000-2004.³⁴ This latter figure is also likely to underestimate the true prevalence. In the United States, the prevalence of FAS is 1-3 per 1000 live births.³⁵ The average age of diagnosis of FAS in Australia is 2.8 years.³⁴

Determining accurate birth prevalence of FAS may be hindered by under-diagnosis. Health professionals' lack knowledge and familiarity with FAS. A survey of Western Australian health professionals showed that only 12% could identify all four of the essential diagnostic features of FAS¹ (confirmed alcohol exposure in pregnancy, characteristic facial features, growth restriction and central nervous system abnormalities. See page 9).

Rates of FAS vary between countries and between ethnic groups. Some of this difference may reflect diagnostic expertise and clinical awareness, but it also may reflect the prevalence of factors that compound the risk, such as poverty and high-risk alcohol consumption patterns in some groups.

The difference in the rates of FAS between Aboriginal and non-Aboriginal populations has been observed in countries with Aboriginal peoples; including Australia, Canada and the United States of America. In Australia, a smaller proportion of Aboriginal and Torres Strait Islander women drink alcohol compared with non-Aboriginal women, but those who drink are more likely to drink amounts of alcohol that are harmful for the short and long-term. The higher rates of FAS in Aboriginal populations reflect the greater presence of risk factors, such as low socio-economic status and poor nutrition, the pattern of drinking and the greater amounts of alcohol being consumed by those who drink.³⁶

Diagnosis of conditions that make up FASD

Diagnosis of the conditions that come under the general term of FASD is complex,^{26, 27, 37} and the following lists of features and characteristics are not exhaustive.

Fetal Alcohol Syndrome

Confirmed alcohol exposure in pregnancy:*

- excessive drinking characterised by considerable, regular, or heavy episodic consumption.
- Characteristic facial features, including:
- short palpebral fissures (small eye openings)
- thin upper lip
- flattened philtrum (an absent or elongated groove between the upper lip and nose)
- flat midface.

Growth restriction, including at least one of the following:

- low birth weight for gestational age
- failure to thrive postnatally not related to nutrition
- disproportional low weight to height ratio.

Central nervous system abnormalities, including at least one of the following:

- decreased head size at birth
- structural brain abnormalities (e.g. microcephaly, partial or complete agenesis of the corpus callosum, cerebellar hypoplasia)
- neurological hard or soft signs (as age appropriate), such as impaired fine motor skills, neurosensory hearing loss, poor tandem gait, poor eye-hand coordination.

*The diagnosis can be made in the absence of confirmed alcohol exposure if all of the other features are present and other diagnoses have been excluded.

There is no biomarker for the diagnosis of FAS.

The characteristic facial features associated with FAS may not be evident at birth, can be subtle, tend to normalise in adolescence and may be difficult to detect in some ethnic groups. Normal facial characteristics and those associated with other syndromes may be similar to typical FAS facial characteristics.

Characteristic facial features associated with FAS

Discriminating features

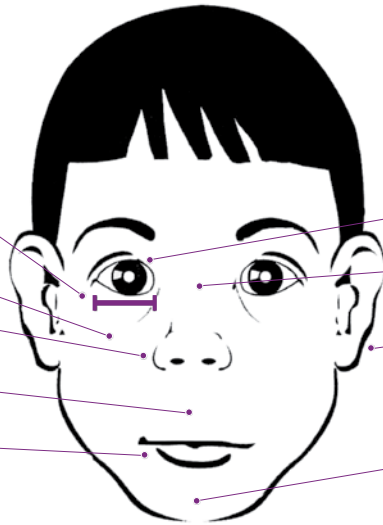
Short palpebral fissures

Flat midface

Short nose

Indistinct philtrum

Thin upper lip



Associated Features

Epicanthal folds

Low nasal bridge

Minor ear anomalies

Micrognathia

(Best Start, Ontario)

Alcohol Related Birth Defects

Confirmed alcohol exposure in pregnancy:

- excessive drinking characterised by considerable, regular, or heavy episodic consumption or lower quantities or variable patterns of alcohol use.

Birth defects, including:

- cardiac
- skeletal
- auditory.
- ocular
- renal

Alcohol Related Neurodevelopmental Disorder

Confirmed alcohol exposure in pregnancy:

- excessive drinking characterised by considerable, regular, or heavy episodic consumption or lower quantities or variable patterns of alcohol use.

Central nervous system neurodevelopmental abnormalities, including any one of the following:

- decreased head size at birth
- structural brain abnormalities (e.g. microcephaly, partial or complete agenesis of the corpus callosum, cerebellar hypoplasia)
- abnormal neurological signs (for age), such as impaired fine motor skills, neurosensory hearing loss, poor tandem gait, poor eye-hand coordination and/or

Evidence of a complex pattern of behaviour or cognitive abnormalities that are inconsistent with the child's developmental level and cannot be explained by familial background or environment alone, such as:

- marked impairment in the performance of complex tasks (complex problem solving, planning judgement, abstraction, metacognition, and arithmetic tasks); higher-level receptive and expressive language deficits; and disordered behaviour (difficulties in personal manner, emotional lability, motor dysfunction, poor academic performance, and deficient social interaction).

The role of the health professional

Health professionals' practice and women's expectations

Western Australian research has shown that 97% of health professionals thought that women should be informed about the consequences of consuming alcohol in pregnancy.¹ However, about 55% of health professionals caring for pregnant women did not routinely ask about alcohol use in pregnancy and 75% did not routinely provide information on the consequences of alcohol use in pregnancy.

Australian women consider health professionals to be the best source of information about alcohol use in pregnancy.⁸ A survey of Australian women of childbearing age, showed that over a third were unaware of the consequences of prenatal alcohol use on the fetus.⁸ In this survey, women identified health professionals as the best source of information about alcohol use during pregnancy.⁸ Women may not ask about alcohol consumption in pregnancy as they expect important issues to be raised by health professionals.

Women may be unaware of the consequences of alcohol consumption during pregnancy. Women generally trust the advice and information that they receive from health professionals, as shown by the comments of two women:

Especially if the information is coming from a health professional, you assume that they know what they were talking about and would take their advice.

I would be happy to listen to what they had to say. Make the informed choice from the information that they give you. I would trust what a health professional had to say.³⁸

Pregnancy is an opportunity for change. With the health of their developing baby in mind, many women may be willing to reduce and restrict their alcohol use if advised to do so.

Ability to make a difference

Health professionals have major strengths that contribute to their ability to make a difference with women around the issue of alcohol consumption before and during pregnancy:

- health professionals are expected to give advice
- the interaction is private
- health professionals are understood to have detailed knowledge of health issues
- advice is personalised rather than general and non-judgemental
- health professionals provide external authority to support women in changing their drinking behaviour.³⁹

Identifying risky alcohol consumption patterns in women before and during pregnancy provides an opportunity to change this pattern of alcohol consumption. There are brief and effective approaches that health professionals can use to address alcohol use in pregnancy.

Before pregnancy

Health professionals can ask all women of childbearing age about their alcohol use. With women who are planning a pregnancy, health professionals can discuss the benefits of stopping drinking before becoming pregnant in order to avoid alcohol exposure in the first weeks of pregnancy.

During pregnancy

Health professionals can routinely ask all pregnant women about their alcohol use and advise them of the consequences of alcohol consumption during pregnancy. Health professionals may identify pregnant women who are consuming alcohol and can then assist women to reduce or stop drinking alcohol. Strategies include screening for alcohol use in pregnancy, providing information, brief intervention and motivational interviewing. Women whose alcohol consumption is of concern can be supported through planning additional consultations. Referral to specialised services and support groups may also be appropriate.

After pregnancy

Health professionals can watch for signs of conditions that make up FASD and refer infants or children for assessment and diagnosis. Early diagnosis and appropriate services can improve the long-term outcomes of children with conditions that make up FASD.

Guide to addressing alcohol use in pregnancy

Key practices by health professionals that address the issue of alcohol use during pregnancy are:

ASK all women of childbearing age and pregnant women about their alcohol use.

ASSESS and record the level of risk of women's alcohol consumption.

ADVISE women of childbearing age including pregnant women:

- that no alcohol is the safest choice if a woman is pregnant or trying to get pregnant
- that the amount of alcohol that is safe for the fetus has not been determined
- that alcohol reaches concentrations in the fetus that are as high as those in the mother
- of the consequences of alcohol exposure to the fetus.
- Women who have consumed alcohol in pregnancy should be advised that:
 - the level of risk to the fetus is hard to predict
 - stopping drinking at any time in the pregnancy will reduce the risk to the fetus
- any concerns about the child's development should be raised with a health professional
- the risk of harm to the fetus is low if only small amounts of alcohol have been consumed before they knew they were pregnant.

ASSIST women to stop or reduce alcohol consumption through:

- positive reinforcement for those already abstaining
- advising on the consequences of alcohol exposure to the fetus
- conducting brief intervention or motivational interviewing with the aim of supporting them to abstain, and where this is not possible, to reduce alcohol intake and avoid intoxication.

ARRANGE for further support for women by planning additional consultations or by referral to specialist services and support groups.

Barriers to addressing alcohol use in pregnancy

Health professionals may not ask women about alcohol use during pregnancy because they:

- lack knowledge about the consequences of alcohol consumption during pregnancy
- have concerns about a woman's response when asked about alcohol use
- assume that it is not relevant to the woman
- lack time
- think alcohol use is of low priority relative to other health issues that must be dealt with
- are unsure of how to ask
- are unaware of effective screening tools
- are unprepared to give advice
- have uncertainty about conflicting recommendations
- feel it is not their role
- lack skills in brief intervention and motivational interviewing
- are unaware of or do not consider that appropriate referral services exist for further support for women.^{40, 41}

The intention of *Alcohol and Pregnancy and Fetal Alcohol Spectrum Disorder: a Resource for Health Professionals* is to assist health professionals to overcome some of these barriers.

A non-judgemental approach

When asking or advising about alcohol use, consider the following engagement skills:

- understand your own beliefs and standards in a way that results in non-judgemental attitudes to women
- be aware that alcohol use is not isolated from other psychosocial and cultural factors
- be sensitive to broader issues such as poverty and abuse
- listen attentively to the woman's concerns and acknowledge her feelings and perceptions
- refrain from negative comments or reactions
- understand that disclosing alcohol use in pregnancy may be difficult
- focus on the woman as well as the child
- give positive reinforcement for the woman's decision to seek advice and care
- understand the significance of establishing and sustaining a sound and trusting professional relationship with women.⁴²

Under-reporting

Reporting issues are of particular importance during pregnancy as women may feel embarrassed or afraid about disclosing information about alcohol use, and there may be a tendency to under-report. Women may also underestimate their alcohol consumption because they lack knowledge about what constitutes a standard drink (see page 18 for the Standard Drink Guide). Good communication, a non-judgemental approach and the use of a screening tool may minimise errors of reporting and maximise collection and recording of accurate information.

Why women drink alcohol during pregnancy

In general, women who drink alcohol during pregnancy do not want to hurt their children.

A woman may drink:

- before she knows she is pregnant
- because she does not know of the consequences of alcohol exposure to the fetus
- to cope with life's problems
- because it is a social norm.

Alcohol use may stem from or lead to a range of unfavourable social and health conditions including:

- accidents or injuries
- poverty
- isolation
- abuse or domestic violence
- poor mental health
- addiction
- low self esteem
- high risk sexual behaviour
- sexually transmitted infection
- unplanned pregnancy
- legal problems
- housing issues.

Alcohol use may be associated with:

- tobacco use
- poor nutrition
- other drug use
- stress.

It is important to consider a range of health behaviours, as well as social support and emotional wellbeing when addressing alcohol use in pregnancy. Alcohol use often does not occur in isolation from other social and emotional risk factors for pregnancy.

Paternal alcohol use

Paternal alcohol use can lead to reduced fertility but has not been shown to cause the conditions that make up FASD. Paternal drinking has strong social and psychological influences on maternal drinking.⁴³ Fathers have an important role to play in the support of women to stop drinking alcohol or reduce their alcohol consumption during pregnancy.

Women requiring specific approaches

All women require empathetic, non-threatening and non-judgemental care. In order to engage and identify women requiring specific approaches, it is especially important to:

- provide accurate advice
- be non-judgemental
- be honest and open
- ask about cultural issues so that you have a better understanding of the woman's needs
- avoid making assumptions about the woman's knowledge, beliefs and practice.

Women with high socio-economic status

Alcohol use crosses all socio-economic boundaries. Avoid making assumptions based on income, education or marital status.

Aboriginal women

Fewer Aboriginal women drink alcohol compared with non-Aboriginal women. However, those who do drink, are more likely to drink amounts of alcohol that are more risky for the short and long term. Culturally appropriate care involves recognising that alcohol may be used as a way to deal with stress and may be related to deeper, underlying social, cultural and economic issues. Aboriginal people expect health professionals to speak openly and honestly with them about their health, including issues related to alcohol use.⁴⁴ Health professionals may seek to be familiar with local drinking habits, patterns and terminology and, if required, refer women to an Aboriginal Community Controlled Health Organisation or primary health care service that provides culturally appropriate care.⁴²

Women from culturally and linguistically diverse backgrounds

There are various cultural beliefs and practices around the role of women, alcohol use, appropriate care during pregnancy and child-rearing practices. Be sensitive to the range of cultural values and beliefs held by women. New immigrants may experience language barriers and may be unaware of available services. Link new immigrants to culturally and linguistically appropriate services.

Women living in violent situations

Women may be using alcohol in order to cope with abuse. Screen all women for abuse and pay particular attention to signs of abuse in women who drink frequently or heavily. Link women with suspected or confirmed abuse to appropriate services. Ensure that the partner is not present when you ask about abuse and take care not to increase danger to these women.

Women with low socio-economic status

Women who live in poverty may drink alcohol as a coping mechanism to deal with high levels of stress and despair. The situation may be complex due to inadequate housing, lack of clothing, food and childcare, low levels of support and a history of trauma and abuse. Health professionals should seek to acknowledge these other issues, and if possible, arrange for additional support for these women.

Teenage women

Teenage women are more likely to consume alcohol in ways consistent with both short and long-term risk and may be more likely to have an unplanned pregnancy.

How to ASK about alcohol use before and during pregnancy

Who to ask

Ask all women about their alcohol use. All women of childbearing age, whether they are planning a pregnancy or not, should be asked about alcohol use and advised on the consequences of alcohol consumption during pregnancy.

When to ask

Before pregnancy

Alcohol may affect a developing fetus from conception to birth. Given that many pregnancies are unplanned, or unknown in the early stages, asking and advising women before pregnancy on the consequences of alcohol exposure during pregnancy is recommended. Ask women about their alcohol use as part of a health history, which often occurs at a first visit, and then re-assess this periodically.

Alcohol use may put women at risk of unplanned pregnancy. Discuss contraceptive methods with women.

During pregnancy

Alcohol use should be assessed at the initial visit (time of confirmation of pregnancy, at first booking-in visit, or first presentation) and routinely thereafter.

Health professionals should plan for a review of alcohol consumption at any subsequent visits with women who identify as consuming alcohol during pregnancy.

How to ask

Carefully consider the strategy that you will use to ask and assist women about their alcohol use before and during pregnancy. All women require empathetic, non-threatening and non-judgemental care.

The assurance of confidentiality at the beginning of a consultation may support accurate disclosure of alcohol consumption patterns.

Health professionals can initiate a discussion about alcohol by building it into a series of general health questions:

I would like to ask you some standard questions that I ask all women about their health³⁸

A health professional spoke about how she asked women about their alcohol consumption:

I wouldn't just say 'do you drink?' I would explain that I need a little background information on you and I'm going to ask you a few questions about your general health. Do you smoke? And then, do you drink? How much? How often? I'd be asking questions like when does she drink, how many days a week, what is it, wine, beer or spirits, how much of each. Does she ever drink more than 5 standard drinks or whatever... I'd explain what a standard drink means.³⁸

Screening tools

A validated screening tool, such as AUDIT, should be used to ascertain alcohol consumption before and during pregnancy in a standard, meaningful and non-judgemental way. The use of a screening tool can be the initiator of a discussion and advice about alcohol consumption before and during pregnancy. It may also indicate risky drinking and can be the first step in the delivery of a brief intervention.

AUDIT and AUDIT-C

AUDIT⁴⁵ is a simple 10-item questionnaire that is sensitive to early detection of risky and high-risk drinking. The Royal Australian College of General Practitioners⁴⁶, The Royal Australasian College of Physicians⁴⁷, The Royal Australian and New Zealand College of Psychiatrists and the Aboriginal Drug and Alcohol Council (South Australia)⁴⁸ support the use of AUDIT for use with the general population. AUDIT is also useful for assessing alcohol use during pregnancy.⁴²

See Appendix 1 for AUDIT and scoring guide.

AUDIT-C⁴⁹ is a 3-item questionnaire which consists of the first three items of AUDIT. AUDIT-C is recommended for use by general practitioners in the Pregnancy Lifescripts resources developed by the Australian General Practice Network.⁵⁰

Quantity, frequency, type of alcoholic drink and context

Health professionals may consider a more informal approach to asking about alcohol use to accurately assess risk. Detail on the amount of alcohol that a woman consumes, how often she is consuming alcohol, and what type of alcohol she drinks must be obtained and recorded.

As women do not generally consume alcohol in standard drink sizes and have different patterns of drinking on different occasions, it can be effective to explore quantity and frequency through the use of questions about the context of their drinking.

A health professional spoke about her experience of asking:

I associate it with their normal activities, like -

What about when you're relaxing after work, or at the end of the day?

How many drinks would you have on a Friday night if you were counting them?

If it was not a normal night, and you were having a bit of a big night, how many would you have then?

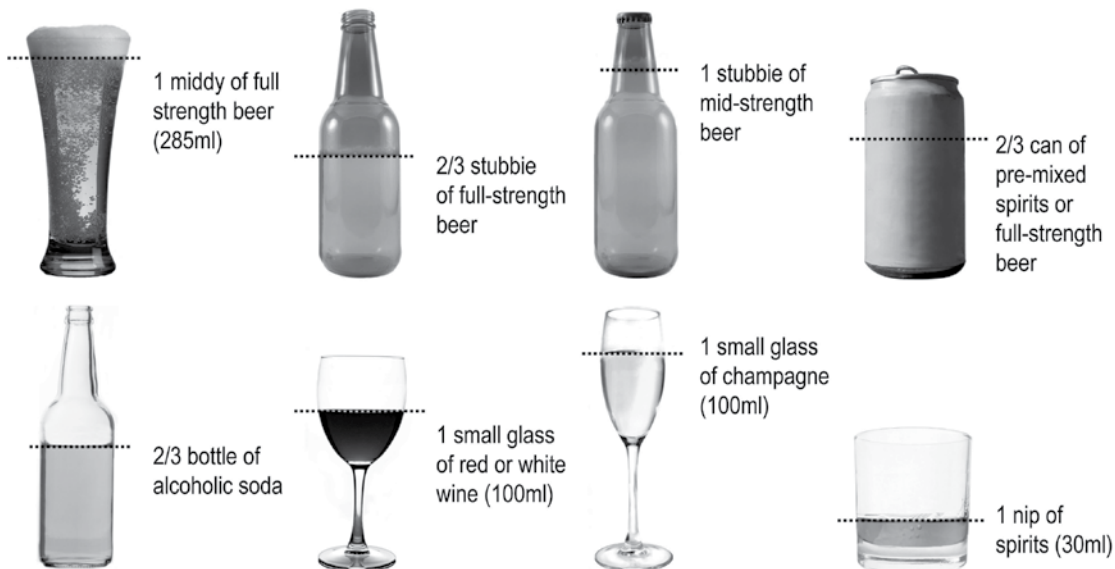
What about on the weekend, do you have a drink when you are watching the footy?

If it was a party night or a band was playing, is it any different?³⁸

The Australian Standard Drink measure contains 10g of alcohol.

STANDARD DRINK GUIDE

Each of these drinks is approximately **ONE STANDARD DRINK**



Many single serve bottles, cans and glasses contain more than one standard drink. The number of standard drinks contained in an alcoholic drink is stated on the label.

Recording alcohol consumption

It is important to record any information obtained about a woman's alcohol consumption before and during pregnancy. Health professionals should take notes on the screening tool used and score, the level of risk identified and any information about the quantity, frequency and type of alcohol and pattern of consumption.

Documented information about alcohol consumption before and at any time during pregnancy can support subsequent alcohol screening and brief intervention. Information about alcohol consumption during pregnancy may also facilitate accurate assessment and diagnosis of conditions that make up FASD.

How to ADVISE about alcohol use before and during pregnancy

Advise ‘No alcohol in pregnancy is the safest choice’*

Advise women to stop drinking alcohol if they are planning a pregnancy or if they are pregnant. Use a clear straight forward statement such as:

When planning a pregnancy, it is safest to stop drinking alcohol before becoming pregnant.

No alcohol in pregnancy is the safest choice.

If you think you are pregnant the safest choice is to stop drinking alcohol.

There is no safe time to drink alcohol during pregnancy.

If a woman is unable to stop drinking alcohol, advise her to reduce her alcohol intake as much as possible and avoid intoxication, and arrange for further support.

Advice about the consequences

All women should be given information on the consequences of drinking alcohol during pregnancy and be advised that the amount of alcohol that is safe for the fetus has not been determined.

Health professionals should advise women that the consequences of drinking alcohol during pregnancy include:

- brain damage
- poor growth
- developmental delay
- birth defects
- social and behavioural problems
- low IQ.

The consequences are life-long and may not be evident at birth.

Women who drank before they knew they were pregnant

Women who have consumed alcohol in pregnancy should be advised that:

- the level of risk to the fetus is hard to predict
- stopping drinking at any time in the pregnancy will reduce the risk to the fetus
- any concerns about the child’s development after birth should be raised with a health professional
- the risk of harm to the fetus is low if only small amounts of alcohol have been consumed before they knew they were pregnant.

Not ready to disclose pregnancy?

If a woman is not ready to disclose to others the fact that she is pregnant, health professionals may offer advice on how to deal with social situations such as parties or workplace events that involve alcohol. For example, women may be advised to:

Tell people you are on a health kick.

Tell people that you are having an alcohol-free day.³⁸

* The *Australian Alcohol Guidelines to Reduce Health Risks from Drinking Alcohol* state that for women who are pregnant, are planning a pregnancy or are breastfeeding “not drinking is the safest option”.²⁴

How to ASSIST in addressing alcohol use in pregnancy

Harm minimisation

While the safest choice is not to drink any alcohol during pregnancy, many women are not ready, willing or able to consider abstinence. Recommending that women do not drink alcohol during pregnancy may serve to alienate women from antenatal care. Antenatal care and reduction in alcohol consumption has the potential to improve outcomes for the fetus.

When a woman has been advised on the risks of alcohol consumption in pregnancy and is not able to consider abstinence, health professionals may assist her in a non-judgemental way to reduce her consumption as much as possible and avoid intoxication, and arrange for further support by planning additional consultations or by referral to specialist services and support groups.

Brief intervention

Brief intervention should be offered to all women who are consuming potentially risky amounts of alcohol. Pregnancy is a time when women may be more responsive to interventions related to alcohol use and brief intervention has been shown to be effective in reducing alcohol consumption in pregnancy. Brief intervention may be conducted during a consultation and a number of further consultations may be required.

Brief intervention involves identification of alcohol consumption in pregnancy, assessment of the level of risk of consumption, provision of information on the consequences of alcohol use in pregnancy, a method of delivery that facilitates behaviour change and monitoring of change and progress.⁵¹

Brief intervention should address the risk factors associated with the woman's drinking behaviour, and may include problem-solving and referral to services that can help the woman meet basic needs for social support, food, housing and safety.

Brief intervention should include a review of:

- the general health of the woman
- the course of the pregnancy
- the lifestyle changes the woman has made since pregnancy
- interest in changing drinking behaviour
- goal setting
- situations when the woman is most likely to drink.

To assess levels of motivation to change drinking behaviour ask:

- how important it is to the woman
- how confident is the woman of making the change.

FRAMES is an effective brief intervention strategy that includes several important elements. Alcohol screening, combined with a brief intervention based on FRAMES, results in reduced drinking in heavy drinkers.⁵²

FRAMES

Feedback: provide the woman with personal feedback regarding her individual status. Feedback can include information about the score of a screening tool such as AUDIT and information about the consequences for the child of consuming alcohol if she became pregnant, or if she is pregnant

Responsibility: emphasise personal responsibility for change and the individual's freedom of choice

Advice: provide clear advice regarding the risks associated with her continued pattern of consumption of alcohol, in a supportive rather than an authoritarian manner

Menu: offer a menu of strategies to reduce or stop her consumption of alcohol, providing options from which a woman may choose

Empathy: be empathetic, reflective and understanding of the woman's point of view

Self-efficacy: reinforce the woman's expectation that she can change.

Motivational interviewing

Motivational interviewing is a technique that is often used within brief intervention to reduce the risk of alcohol exposed pregnancies.⁵³ Motivational interviewing seeks to increase a woman's readiness to change by resolving ambivalence about behaviour change.⁵⁴

The key principles of motivational interviewing are to express empathy, enhance discrepancy, allow resistance and avoid argumentation, and support self-efficacy;⁵⁵ five specific skills are used:

- open ended questioning
- summarising
- affirmation
- reflective listening
- eliciting discussion about behaviour change.

The motivational interview may begin with an open-ended question which may evoke concerns related to the consequences of alcohol consumption and allow the health professional to elicit empathetic reflections. Throughout the motivational interview, the health professional should show that they understand, encourage the woman to express her own perspective, highlight ambivalence and reinforce any comments she makes about behaviour change.

Some *open-ended questions* that health professionals may use to enhance discrepancy and evoke self-motivational statements:

How do you feel about your alcohol use?

What are some of the good things about your alcohol use?

What worries you about your alcohol use?

What might be some benefits of you stopping or reducing the amount of alcohol that you drink?

Some *affirmation* statements that may be used to create an empathetic environment and build a woman's confidence about behaviour change:

Thank you for coming today.

Thank you for being willing to talk about this with me.

It isn't easy to talk about things like this.

That's a good idea.

Reflective listening can be used to respond to information given by the woman about her situation and feelings. Reflective listening shows understanding and encourages the woman to keep talking. These statements can be used to highlight discrepancies and ambivalence about behaviour change, and to reinforce a woman's thoughts about and strategies for behaviour change.

You want your child to have the best chance in life.

You find it hard not to drink when you are out with your friends.

You think that it might help if you ask your partner to support you to cut down.

Summarising the information that a woman has given supports the process of reflective listening and emphasises information that will support the woman's behaviour change. It is important that the summary is succinct.

You find it hard not to drink when you go out on the weekend and everyone else is drinking. You have seen some women who have drunk alcohol while they are pregnant and their babies seem OK. On the other hand, you're concerned that drinking alcohol while you are pregnant may have consequences for your child, and you want your child to have the best possible chance in life.

Health professionals can *elicit discussion about behaviour change* by encouraging a woman to recognise the disadvantages of continuing the pattern of consumption and the advantages of changing, and encouraging optimism about intention to change.

Further support

Some women will require more intensive approaches and support for changing their alcohol consumption patterns. Health professionals should make themselves aware of services that may be able to provide further support for women who are consuming risky amounts of alcohol during pregnancy.

See page 26 for 'Further information'.

After Pregnancy

Alcohol and breastfeeding

Risky or daily intake of alcohol is not recommended for any breastfeeding mother²⁴ due to issues relating to the care of the infant and the risk of conditions that make up FASD for a subsequent pregnancy.

Alcohol consumed by the mother passes into her bloodstream and her breast milk. Alcohol levels in the breast milk are similar to the blood alcohol levels of the mother at the time of feeding. The effect on the infant can be sedation, irritability and weak sucking. Alcohol consumption can also lead to decreased milk supply and milk odour.⁵⁶ The *Australian Guidelines to Reduce Health Risks from Drinking Alcohol* state that for women who are pregnant, are planning a pregnancy or are breastfeeding, “not drinking is the safest option”.²⁴

Excessive consumption of alcohol can affect milk flow in breastfeeding mothers. Adverse effects on infants who are breastfeeding can include:

- impaired motor development
- decrease in milk intake
- changes in sleep patterns
- risk of hypoglycaemia.

Suspecting FASD

Health professionals are quite likely to be the first to notice characteristics of conditions that make up FASD in a child. In the case of FAS, early diagnosis and appropriate intervention is associated with improved outcomes for children and prevention of secondary disabilities such as disrupted school experience, unemployment, mental health problems, trouble with the law and inappropriate sexual behaviour.⁵⁷ Parents often find their ability to cope improves when they understand that behaviour and learning problems are most likely caused by brain damage, not the child’s choice to be inattentive or uncooperative, or the parenting style. Diagnosis requires a multidisciplinary approach and it is important to note that:

- facial characteristics (in the case of FAS) may not be apparent at birth, tend to normalise in adolescence, and may be difficult to detect in some ethnic groups
- learning, attention and behavioural difficulties may not become apparent until the child starts school
- information on alcohol consumption in pregnancy may not be available or reliable.

Early identification of conditions that make up FASD is also important for preventing alcohol exposure in subsequent pregnancies.

If a condition that is included with the general term of FASD is suspected, arrange referral to health professionals experienced in diagnosis and management.

Families affected by FASD

Raising children with conditions that make up FASD can be challenging. These children have complex medical, psychological and social needs. Stable living environments, early diagnosis and appropriate services appear to reduce the severity of the behavioural and social problems exhibited by an affected child.

Specialised parenting and education strategies can improve outcomes for these children. While we have much to learn about working with infants, children, adolescents and adults with conditions that make up FASD, there are some generalisations that can be made.

Infancy

Strategies in infancy should focus on efforts to calm the baby, address failure to thrive and exclude birth defects. Special methods can be used to swaddle, hold, soothe, feed and stimulate the infant.

Childhood

Children may have vision, hearing and speech problems that should be assessed as early as possible. Recommendations for a positive learning environment include: calm and quiet, structure and routine, repetition and reducing distractions.

Adolescence and Adulthood

When children with conditions that make up FASD reach adolescence, behaviour may become challenging at school and home. Difficulties may include mental health problems, substance abuse and trouble with the law. In some cases, problems progress to include incarceration, early parenthood and difficulties with employment and independent living. People with conditions that make up FASD fail to consider the consequences of actions and this can lead to many adverse situations. Adaptive function and cognitive ability become worse as the child gets older, contributing to social problems. Adolescents continue to need secure and structured environments. Advocacy and case management are important services at this stage.

Conclusions

Pregnancy is a time when women may be more ready to think about and improve their health. A pregnant woman, thinking about her child and her role as a mother, may be more able to initiate the process of changing her alcohol use.

The safest approach is not to drink alcohol at all during pregnancy. Alcohol consumption during pregnancy can affect fetal development at all stages of pregnancy. Stopping drinking at any time in the pregnancy will reduce risk to the fetus.

Health professionals have an important role in addressing alcohol use with women before and during pregnancy. Health professionals can:

- ASK all women about their alcohol use
- ASSESS and record the level of risk of alcohol consumption
- ADVISE that no alcohol in pregnancy is the safest choice
- ADVISE on the consequences of alcohol consumption during pregnancy
- ASSIST women in stopping or reducing their alcohol consumption and avoid intoxication
- ARRANGE for further support by planning additional consultations or by referral to specialised services.

Fetal Alcohol Spectrum Disorder describes the range of effects that can occur in an individual who was exposed to alcohol in pregnancy. These effects include brain damage, birth defects, poor growth, social and behavioural problems, developmental delay and low IQ.

After pregnancy health professionals are likely to be the first to notice the characteristics of conditions that make up FASD in a child. Health professionals can support accurate diagnosis by asking women about alcohol consumption during pregnancy and recording information about the quantity, frequency, type of alcohol and pattern of consumption.

Further information

Alcohol and Pregnancy Research Group, Telethon Institute for Child Health Research

www.ichr.uwa.edu.au/alcoholandpregnancy

Ph: (08) 9489 7777

Australian Paediatric Surveillance Unit

www.apsu.org.au

Ph: (02) 9845 3005

National Organisation for Fetal Alcohol Syndrome and Related Disorders (NOFASARD)

NOFASARD is a nationwide service providing support for parents and carers of children or adults with FASD, information and advocacy about FASD.

www.nofasard.org

Mobile 0418 854 947

Alcohol Drug and Information Services

Alcohol & Other Drugs Treatment Services National Directory

www.aodservices.net.au

Australian Capital Territory (Alcohol and Drug Program)

Ph: (02) 6207 9977 (24 hrs)

New South Wales (ADIS)

Ph: 1800 422 599 (24 hrs)

New South Wales (Drug and Alcohol Specialist Advisory Service)

Ph: 1800 023 687

Northern Territory (ADIS)

Ph: (08) 8922 8399

Queensland (ADIS)

Ph: 1800 177 833 (24 hrs)

South Australia (ADIS)

Ph: 1300 131 340 (24 hrs)

Tasmania (Alcohol and Drug Service)

Ph: 1800 888 236 (24 hrs)

Victoria (Direct Line ADIS)

Ph: 1800 888 236 (24 hrs)

Western Australia (ADIS)

Ph: 1800 198 024 (24 hrs)

Useful resources

Telethon Institute for Child Health Research

Resources for use by health professionals to support their advice to women about alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder:

- 32 page booklet for health professionals
- Fact sheet for health professionals
- Wallet cards for women *No Alcohol in Pregnancy is the Safest Choice*.

Australian Guidelines to Reduce Health Risks from Drinking Alcohol

www.nhmrc.gov.au/publications/synopses/ds10syn.htm

Fetal Alcohol Syndrome: A Literature Review

[www.health.gov.au/internet/wcms/publishing.nsf/Content/health-publth-publicat-document-fetalcsyn-cnt.htm/\\$FILE/fetalcsyn.pdf](http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-publth-publicat-document-fetalcsyn-cnt.htm/$FILE/fetalcsyn.pdf)

Rural Health Education Foundation

Fetal Alcohol Spectrum Disorder (also on DVD)

www.rhef.com.au/programs/614/614.html

Drinking for Two? (also on DVD)

www.rhef.com.au/programs/708/708.html

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AUDIT

Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest.

Place an X in one box that best describes your answer to each question.

Try to answer questions in terms of 'standard drinks'.

Questions	0	1	2	3	4	Score
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the past year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the past year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the past year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the past year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the past year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or has someone else been injured as a result of your drinking?	No		Yes, but not in the past year		Yes, during the past year	
10. Has a relative or friend or a doctor or other health worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the past year		Yes, during the past year	
					Total	

(World Health Organization)

Scoring of AUDIT

Items 1 to 8 are scored on a 0 to 4 scale and items 9 and 10 are scored 0, 2, 4.

For pregnant women or women who are planning a pregnancy

Total scores of 1-7 may initiate a discussion about alcohol use in pregnancy. A brief intervention may be appropriate for women identified as consuming alcohol during pregnancy.

For the general population

Total scores of 8 or more are recommended as indicators of risky or harmful alcohol use as well as possible alcohol dependence.

Notes

alcohol
thinkagain



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