Alcohol during pregnancy and breastfeeding

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The AWRI helpdesk occasionally receives enquiries about drinking alcoholic beverages, including wine, during pregnancy and breastfeeding. This column provides answers to some key questions about the effects of alcohol on the developing foetus and child.

What are the current Australian recommendations about drinking alcohol and pregnancy?

As of March 2009, the National Health & Medical Research Council (NHMRC) advice on alcohol drinking during pregnancy is that for women who are pregnant, are planning a pregnancy or are breastfeeding, not drinking is the safest option.

In Australia, the overall consumption of alcohol by pregnant women has decreased over the last decade, and more women now abstain from drinking during pregnancy than drink (Australian Institute of Health and Welfare 2016). There is also recent published evidence, albeit limited, that women's awareness of the risks of alcohol consumption to the developing foetus has increased, and that the majority of women, irrespective of demographic, are aware of the risks.

What are the rules about pregnancy warnings on wine labels?

Voluntary pregnancy warning labelling on all alcoholic beverages was introduced in Australia during 2011-12, with the pregnancy pictogram the most common warning format. Approximately 50% of all alcoholic beverages currently carry a pregnancy warning label in Australia. Only two countries, France and the USA, currently mandate pregnancy warning labelling and another 29 countries have similar voluntary labelling schemes to that in Australia.

Why are there recommendations and warning labels?

There is convincing evidence that links heavy maternal drinking, regularly or irregularly, with adverse effects on the developing foetus (O'Leary 2004). Alcohol readily crosses from the maternal bloodstream via the placental barrier into the bloodstream of the foetus where it circulates until it is broken down or metabolised by the foetus's undeveloped liver. As alcohol metabolism is slower in the foetus than in the mother, higher blood alcohol levels will circulate for a longer time in the foetal bloodstream (where they affect developing cells) than in the maternal bloodstream.

Foetal alcohol spectrum disorders (FASD) are a range of adverse effects that may result from exposure of the foetus to alcohol in pregnancy, including growth deficiencies, physical birth defects and neuro-developmental problems (Sokol *et al.* 2003). They are increasingly recognised as preventable adverse effects that result in lifelong behaviour and learning difficulties, including problems with memory, attention, reasoning, impulsivity and language (O'Callaghan *et al.* 2003, 2007). Foetal alcohol syndrome (FAS) is the most severe adverse effect.

How common are foetal alcohol spectrum disorders?

It is difficult to estimate the prevalence of FASD in Australia as children are not routinely screened for FASD in infancy or childhood (Burns *et al.* 2012). Estimates for FAS at the more severe end of the spectrum of disorders range from between 0.01 to 1.7 per 1000 live births, where the incidence of FASD may be as high as 1.87 to 4.7 per 1000 births (Burns *et al.* 2011).

Although data on the birth prevalence of FASD in Australia are limited, they suggest that population rates are substantially lower than in North America, France and Sweden, and have remained relatively stable over the decades for the majority of Australian states and territories. This relatively low incidence in comparison with certain other countries may reflect different alcohol consumption patterns, diets and lifestyles. The prevalence of FAS in indigenous Australian children, however, is much higher than for non-indigenous children, which is consistent with findings from other indigenous populations. This is particularly obvious in assessing any Western Australian data (Srikartika and O'Leary 2015).

Can women who are breastfeeding drink alcohol?

For women who are breastfeeding, not drinking alcoholic beverages is also considered to be the safest option, especially during the first month after the baby has been born until breastfeeding is well established. Alcohol may adversely affect milk production which can cause babies to eat and sleep less.

Alcohol enters breast milk by passive diffusion and within 30 to 60 minutes of ingestion will reflect the maternal blood alcohol concentration. Alcohol can also adversely affect the continuing development of the baby's brain and spinal cord.

Additional information

If you have further questions about drinking alcohol during pregnancy and breastfeeding, consult your general practitioner and/or telephone the Australian Government's Pregnancy, Birth & Baby Helpline on 1800 882 436. Please also refer to the NHMRC's *Australian guidelines to reduce health risks from drinking alcohol* (March 2009) available from the NHMRC website and from the Australian Breastfeeding Association.

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