# Alcohol and breastfeeding:

## an evidence summary

## **Key points**

- Alcohol passes into breastmilk, and breastmilk alcohol levels closely parallel the blood alcohol levels of the adult.
- The highest alcohol level in breastmilk occurs 30 to 60 minutes after an alcoholic product has been consumed.
- All types of alcohol can be harmful to the baby, be it wine, beer or spirits, and no amount of alcohol has been proven to be safe.
- Alcohol affects the release of prolactin and oxytocin, which are the hormones responsible for regulating milk supply and milk ejection.
- It takes on average two hours from the commencement of drinking one standard drink to clear alcohol from breastmilk, and up to eight hours after drinking four standard drinks.
- Alcohol exposure through breastmilk has been linked to reductions in verbal IQ, deficits in motor development, lower cognitive capacity in early childhood and slowed growth trajectory.
- If alcohol is consumed, it is recommended, to wait a minimum of two hours per standard drink before feeding.

# For women who are breastfeeding, not drinking alcohol is safest for their baby.

National Health and Medical Research Council (NHMRC) Australian Guidelines to Reduce Health Risks from Drinking Alcohol, 2020<sup>1</sup>

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## **Alcohol and breastfeeding**

The National Health and Medical Research Council's (NHRMC) Australian Guidelines to Reduce Health Risks from Drinking Alcohol (2020) recommend for women who are breastfeeding not drinking alcohol is the safest option for their baby.<sup>1</sup>

In 2019, approximately 51 per cent of women who were breastfeeding (or pregnant and breastfeeding) reported consuming alcohol.<sup>2</sup>

Alcohol passes into breastmilk, and breastmilk alcohol levels closely parallel the blood alcohol levels of the adult. The highest alcohol level in breastmilk occurs 30 to 60 minutes after an alcoholic beverage has been consumed.<sup>3</sup> It takes on average two hours from the commencement of drinking one standard drink to clear alcohol from breastmilk, and up to eight hours after drinking four standard drinks.<sup>4</sup>



Only time reduces the concentration of alcohol in the breastmilk supply to a level of zero. Expressing breast milk then throwing it away ("pumping and dumping") after alcohol has been consumed does not decrease the amount of alcohol in the breast milk. If alcohol is consumed while breastfeeding, it is recommended to wait a minimum of two hours per standard drink before feeding.<sup>1</sup>

## Alcohol and breastmilk supply and ejection

Several studies have indicated that alcohol may affect milk supply and inhibit the milk ejection reflex.<sup>5,6</sup> This is because alcohol affects the release of two hormones that are important for regulating milk supply and milk ejection, called prolactin and oxytocin.<sup>4</sup> Alcohol inhibits oxytocin in a dose-dependent manner, which parallels the dose-dependent inhibition of milk ejection following alcohol exposure.<sup>6</sup>

Infants who had reduced milk intake following maternal alcohol consumption compensated by increasing their milk intake with the next feed.<sup>7</sup> People who report alcohol consumption are more likely to cease breastfeeding earlier, which may be related to issues with milk supply and ability to be able to express breastmilk.<sup>8</sup>

## Other effects of alcohol on the infant



Infants metabolise alcohol at approximately half the rate of an adult, due to lower activity of alcohol dehydrogenase. 9,10 Research has shown that exposure to small amounts of alcohol in breastmilk produces distinctive changes in the infant's sleep-wake patterning. 11

There is mixed evidence as to whether consuming alcohol while breastfeeding contributes to longer term impacts for the developing baby. Some studies have found that alcohol exposure through breastmilk has been linked to reductions in verbal IQ,<sup>12</sup> deficits in motor development,<sup>13</sup> lower cognitive capacity in early childhood,<sup>14</sup> and slowed growth trajectory.<sup>15</sup>

Several studies have found that sharing a sleep surface with an infant after alcohol has been consumed can increase the risk of Sudden Infant Death Syndrome (SIDS).<sup>16</sup>

## More information and support



## NHMRC Australian Guidelines to Reduce Health Risks from Drinking Alcohol (2020)

The National Health and Medical Research Council's guidelines provide health professionals, policy makers and the Australian community with evidence-based advice on the health effects of drinking alcohol: nhmrc.gov.au/health-advice/alcohol

#### Alcohol and other drugs

The National Alcohol and Other Drug Hotline offers support, information, counselling and referral to services for individuals, family and friends, General Practitioners and other health professionals:

1800 250 015 or drughelp.gov.au



### Talking to people who are pregnant about their alcohol consumption

The Women Want to Know resources can assist with having conversations with people about alcohol and pregnancy: health.gov.au/resources/collections/women-want-to-know-resources

#### Fetal Alcohol Spectrum Disorder (FASD)

To learn more about FASD visit the FASD Hub: **fasdhub.org.au** and NOFASD's website: **nofasd.org.au** or call the NOFASD helpline on **1800 860 613** 

### **Breastfeeding and alcohol**

The Australian Breastfeeding Association provides further information about alcohol and breastfeeding: breastfeeding.asn.au/bf-info/safe-when-breastfeeding/alcohol-and-breastfeeding or call the breastfeeding helpline on 1800 686 268

#### Safe sleeping

To learn more about safe sleeping visit Red Nose: **rednose.org.au/section/education** and the Sleep Foundation: **sleepfoundation.org/baby-sleep/sudden-infant-death-syndrome** 

Learn more about alcohol, pregnancy, breastfeeding and Fetal Alcohol Spectrum Disorder at **everymomentmatters.org.au** 

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Learn more about FARE at fare.org.au

#### References

<sup>1</sup>National Health and Medical Research Council, Australian Research Council and Universities Australia. (2020). Australian Guidelines to Reduce Health Risks from Drinking Alcohol. Canberra, ACT: Commonwealth of Australia, Canberra

<sup>2</sup>Australian Institute of Health and Welfare. (2020). National Drug Strategy Household Survey 2019: Drug Statistics Series No. 32. Canberra, ACT: AIHW (Australian Institute of Health and Welfare)

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<sup>4</sup>Giglia, R. & Binns, C. (2006). Alcohol and lactation: A systematic review. *Nutr Diet*, 63: 103-116.

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<sup>13</sup>Little, R. E., Anderson, K. W., Ervin, C. H., Worthington-Roberts, B. & Clarren, S. K. (1989). Maternal alcohol use during breast-feeding and infant mental and motor development at one year. *N Engl J Med*, 321(7): 425–30.

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<sup>15</sup>Backstrand, J. R., Goodman, A. H., Allen, L. H. & Pelto, G. H. (2004). Pulque intake during pregnancy and lactation in rural Mexico: Alcohol and child growth from 1 to 57 months. Eur J Clin Nutr, 58(12):1626-1634.

<sup>16</sup>Young, J., & Shipstone, R. (2018). Shared sleeping surfaces and dangerous sleeping environments. SIDS sudden infant and early childhood death: the past, the present and the future.

