## Drug Use during Breastfeeding

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Drug	Comments
Alcohol	<ul> <li>Not compatible with breastfeeding. Alcohol transfers readily into breast milk. Breast milk levels are similar to plasma levels. The alcohol metabolizing capacity (alcohol and aldehyde dehydrogenase) is premature throughout the neonatal and infantile period. Overall, motor development is slightly slower in infants breastfed by mothers who regularly drink alcohol. Chronic or heavy consumers of alcohol should not breastfeed.<sup>[8]</sup></li> <li>Short-term alcohol consumption by nursing mothers reportedly has an immediate effect on the odour characteristics of the breast milk and the feeding behaviour of their infants, resulting in less consumption of breast milk.<sup>[220]</sup> To avoid exposure of the infant to alcohol, breastfeeding mothers should not consume alcohol or should consume no more than 1 drink 2–3 h before breastfeeding.<sup>[8]</sup></li> </ul>
Caffeine	<ul> <li>Hypothetically, a nursing infant ingests 0.11% of the maternal dose after the mother drinks 1–2 cups of coffee. This is an insignificant amount of the drug, but it must be remembered that the half-life of caffeine is 80 h in a term newborn and 97.5 h in a premature infant (20–30 times that of an adult). Therefore, repeated ingestion might lead to accumulation of caffeine in the infant during the first 2 wk of postnatal life. This has yet to be studied. Occasional use of caffeine is not contraindicated.<sup>[8]</sup></li> </ul>
Cannabis	<ul> <li>Experts agree that breastfeeding mothers should refrain from using cannabis.<sup>[7]</sup> <sup>[8][32][221][222][223]</sup></li> <li>One study reports that an exclusively breastfed infant would receive between     0.4–8.7% of the weight-adjusted maternal dose of inhaled cannabis.<sup>[a][224]</sup>     Delta-9-tetrahydrocannabinol (THC) is a liposoluble constituent of cannabis that     accumulates in fat tissue and may reach a concentration in breast milk up to 8     times concurrent plasma level.<sup>[225]</sup> THC can be detected in infant urine up to 3     wk after exposure through breast milk.<sup>[226]</sup> Short- and long-term adverse     effects on a child due to maternal cannabis use while breastfeeding are     unknown. Concerns about cannabis' possible effects on neurotransmitters,     nervous system development and endocannabinoid-related functions have been     raised.<sup>[227]</sup> A higher risk of sudden infant death syndrome (SIDS) was linked to     homes of cannabis consumers in 1 study.<sup>[228]</sup> Despite reduction in maternal     prolactin level with cannabis use, no decrease in milk production has been     observed.<sup>[8]</sup></li> </ul>
Recreational or street drugs	<ul> <li>No systematic studies of recreational or street drug (or drug metabolite) transfer exist. Potential for serious adverse effects on the infant is concerning and these products should not be used while breastfeeding.</li> </ul>

Drug	Comments
Tobacco	<ul> <li>Discourage tobacco use during breastfeeding because there are well- documented health risks to the mother and infant from second-hand smoke. Infant exposure to nicotine is largely through inhalation of second-hand smoke. In mothers unwilling to stop smoking during breastfeeding, it should be noted that breastfed babies of mothers who continue to smoke have better immunity and less respiratory infections than bottle-fed babies of mothers who continue to smoke.<sup>[225][229]</sup></li> </ul>
	<ul> <li>Nicotine is concentrated in breast milk.<sup>[230][231]</sup> One study suggests that cigarette smoking significantly reduces breast milk production.<sup>[232]</sup></li> <li>Encourage nursing mothers to speak to their health-care providers regarding options for smoking cessation.</li> </ul>

<sup>[a]</sup> Weight-adjusted maternal dose is a mother's dose based on body weight (e.g., mg/kg). Experts recommend that an amount of drug received by the infant via breast milk per day that is >10% of the weight-adjusted maternal dose per day should be a theoretical level of concern when considering the acceptability of drug exposure. The estimated amount of drug received by the infant via breast milk is calculated by multiplying the standard breast milk intake (150 mL/kg/day) by the drug concentration in breast milk.

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