

# Breastfeeding and Medication



## Breastfeeding and Cannabis smoking

Cannabis has a long half life (25-57 hours) and it takes 5 times this to be removed from milk. THC crosses the blood brain barrier and it is known to accumulate in body fats. Although it is highly protein bound and subject to first pass metabolism, the milk plasma ratio is 8. We do not know enough about the impact on the developing brain to be sure that the amount passing through breastmilk is safe. Regular use is not recommended in the breastfeeding mother or other members of the family who may expose the baby through passive inhalation.

The main ingredient of marijuana is delta-9 tetrahydrocannabinol or THC, which is rapidly distributed to the brain and adipose tissue, it is stored in fat tissue for long periods and may accumulate with ongoing use. Small to moderate secretion into breastmilk has been documented. In 27 infants evaluated at 1 year of age who were exposed to marijuana via breastmilk, compared with 35 non-exposed infants, no significant difference was found in age at weaning, growth and mental and motor development (Tennes et al. 1985). Occasional and chronic use may need to be differentiated, together with the risk to the infant of inhaling second-hand smoke containing marijuana, be that from the mother or other significant adults in the infant's life.

In addition, the mother's ability to respond appropriately to her child's needs may be questioned if she is a regular heavy user. In chronic users, the half-life of marijuana may be four days because of storage in body fat, which can be detected for up to a month after last use. It is excreted in urine and faeces over a prolonged period (Djulus et al. 2005).

Klonoff-Cohen and Lam-Kruglick (2001) studied 239 infants who died of SIDS in southern California from 1989 to 1992, and compared them with a matched group of healthy infants. After adjusting for confounding factors, maternal dose was not associated with SIDS. However, there were statistically significant differences between the cases and controls in terms of marijuana use around conception and post-natally and the risk of SIDS.

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March 2019 *The information on this sheet is based upon my professional experience as a pharmacist with a specialised interest in the safety of drugs in breastmilk, supported by evidence from expert sources. However, I cannot take responsibility for the prescription of medication which remains with the healthcare professionals involved. I am happy to discuss the evidence by email [wendy@breastfeeding-and-medication.co.uk](mailto:wendy@breastfeeding-and-medication.co.uk)*

Astley and Little (1990) studied 68 infants exposed to marijuana via maternal milk and 68 matched controls. They found a decrease in infant motor development at one year associated with maternal use during the first month post-partum.

In a study comparing THC concentrations in breastmilk and plasma of two women who were long-term users and had breastfed for seven–eight months, there was a marked difference between the two samples (Perez-Reyes and Wall 1982). The difference in THC between the two samples was thought to be due to the amount of marijuana smoked and the interval between smoking and collection of samples. There were high levels of metabolites found in faecal samples from the infants that the author interpreted as individual differences in the infants' absorption and metabolism of THC. Both infants were developing normally.

In adults THC may impair perception, judgement, motor skills, short-term memory and learning and is strongly associated with symptoms of paranoia. The longer-term effects of THC in breastmilk exposure are unknown (i.e., effect on children entering teens) in addition to exposure via passive smoking. Smoking marijuana and breastfeeding, or using near children, should not be undertaken until more data are available on long-term effects, especially the risk of psychosis in later life.

Occasional recreational use may not be detrimental but regular use should be strongly discouraged.

#### References

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