

# Smoking, Smoking Cessation and Breastfeeding

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*If you have any questions about this information, you can contact the Drugs in Breastmilk team through their [Facebook page](#) or on [druginformation@breastfeedingnetwork.org.uk](mailto:druginformation@breastfeedingnetwork.org.uk).*

## Smoking Whilst Breastfeeding

It is best for your health and your baby's health if you do not smoke. However, if you find it hard to stop smoking, you do not need to stop breastfeeding. Breastfeeding will still protect your baby, even if you are still smoking. You can reduce your baby's exposure to smoke by smoking only after feeding, outside of your home, away from your baby.

- Nicotine is found in breastmilk.
- The flavour of breastmilk collected 30-60 minutes after smoking was identified as tasting more like cigarettes than samples taken at any other time.
- The levels of cotinine (the chemical into which nicotine is changed in the body) in the urine of breastfed babies whose mothers smoked were ten times higher than those of formula fed babies of smoking mothers. It appears that this is due to passage through breastmilk and not through exposure to smoke in a room.
- Babies of mothers who smoke appear to be more likely to suffer from colic.
- Smoking appears to lower breastmilk production - more women who smoke believe that they have insufficient milk
- Mothers who smoke are likely to breastfeed for a shorter length of time
- Many women continue to smoke whilst breastfeeding perceiving that it is the only time that they have for themselves, to overcome tiredness or to reduce their appetite.
- Passive smoking is related to early onset of wheezing – breastfeeding may reduce the severity of bronchial asthma.
- Research shows exposure to smoke increases the risk of sudden infant death syndrome (SIDS) in babies.
- There have been recent reports linking smoking during breastfeeding with risk of obesity and endocrine dysfunction in the baby in later life (Lisboa 2012, 2015)
- Mothers and fathers should stop smoking – or not restart after pregnancy
- The use of nicotine replacement therapy exposes the baby to less nicotine than smoking does

## Smoking Cessation Whilst Breastfeeding

It is safer to use nicotine replacement therapy (NRT) whilst breastfeeding than to smoke.

**To talk to a mum who knows about breastfeeding call the National Breastfeeding Helpline 0300 100 0212**

*Calls to 0300 numbers cost no more than calls to UK numbers starting 01 and 02 and will be part of any inclusive minutes that apply to your provider and call package.*

There appears to be little current research on using e-cigarettes or vapes whilst breastfeeding. Although there is some vapour release the risk would probably be less than with smoking. [The NHS advises](#) that if you are breastfeeding and want to stop smoking, it is best to use licenced nicotine replacement therapy (NRT) products, rather than e-cigarettes or vapes to help with quitting smoking. However, if you choose to use an e-cigarette, it's still better to carry on breastfeeding, as the benefits outweigh the risks.

- NRT products are not licensed to be used by breastfeeding mothers. This means that the manufacturers have not included a statement on their use when they first made the product available. It does not mean they are not safe.
- Babies will be exposed to less nicotine through NRT than through smoking. Smoking produces blood levels of nicotine of 44ng/ml whilst NRT patches produce around 17 ng/ml
- NRT avoids exposure to the other chemical compounds in tobacco smoke.
- Mothers should not use NRT and continue to smoke
- Patches applied over a 24 hour period may produce vivid dreams in the mother; it might be advisable to remove the patch overnight so that the baby is exposed to less during night time feeds.
- NRT products do not cause breastmilk to smell of cigarettes.
- Nicotine gum produces large variations in nicotine levels whilst patches produce a sustained but lower level. If gum is used it should be chewed immediately after feeds to reduce the baby's exposure. NRT nasal sprays similarly produce rapid high levels and may best be used after feeds.
- Exposure of the baby to NRT products is safer than exposure to cigarettes and with appropriate support may help the mother (and ideally her partner) to quit smoking permanently.

Oral medication to help with smoking cessation Varenicline (Champix ®) and Bupropion (Zyban ®) should be avoided during breastfeeding.

## **Suggestions to Help You Stop Smoking**

- Think about why you want to stop smoking – is it for you, for your baby or older children, because somebody says you OUGHT to? If the latter, you are unlikely to succeed long term, you need to decide that it is what YOU want to do and have a clear reason to do so.
- Set a date when you plan to stop smoking and work towards that date.
- Decide on what NRT you wish to use – it is much easier than trying to go cold-turkey. Can you get support from your local community pharmacy, practice nurse or smoking cessation service? They may well prescribe for you so the NRT is free if your baby is under 12 months of age. They will also monitor your carbon monoxide level in your breath showing you how your lungs clear quickly.
- Think about when you smoke – is it a routine e.g. after a meal, with a cup of coffee, when you are tired or hungry? Think about each cigarette you have over several days – what made you decide to light this cigarette? Do you really want it?
- Think about where you smoke – is it always in the same place e.g. a chair you sit in, outside the kitchen door so in sight or sound of your baby but not with him/her.
- Decide how you can change each time you smoke – can you distract yourself for 20 minutes? This is the time it usually takes a craving to subside. Could you wash the floor, sing a song to your baby, make everything ready for the next meal, paint your nails or something else that works for you? Can you change where you sit?
- On the day you decide to stop you may want to tell everyone so that you elicit their support or you may want to keep quiet so no-one tries to tempt you because they haven't made their own decision.

- Put away the cash you would have spent on the cigarettes and spend it after 6 weeks of being cigarette free on a treat for YOU – not the family, not the baby, this is YOUR celebration of overcoming the addictive habit called smoking.
- If you smoke to give yourself “5 minutes peace” think about how else you could spend that time.
- Have strong tasting sweets around to suck – traditionally these are mints but could be anything you like. Also have lots of healthy snacks so you don’t resort to chocolate instead.
- Be proud of yourself – stopping smoking is not easy! Take every day as it comes and celebrate. If you have one cigarette it doesn’t mean you failed, think why it happened and plan how to avoid that situation again. Do not give up giving up!

## Bibliography

- Amir LH, Donath SM. Does maternal smoking have a negative physiological effect on breastfeeding? The epidemiological evidence. *Breastfeed Rev.* 2003 Jul; 11(2):19-29. [www.ncbi.nlm.nih.gov/pubmed/14768313?dopt=Abstract](http://www.ncbi.nlm.nih.gov/pubmed/14768313?dopt=Abstract)
- British National Formulary
- Dahlström A, Ebersjö C, Lundell B Nicotine exposure in breastfed infants. *Acta Paediatr.* 2004 Jun;93(6):810-6. [www.ncbi.nlm.nih.gov/pubmed/15244232?dopt=Abstract](http://www.ncbi.nlm.nih.gov/pubmed/15244232?dopt=Abstract)
- Hale T. W Medications in Mothers Milk
- Ilett KF, Hale TW, Page-Sharp M, Kristensen JH, Kohan R, Hackett LP. Use of nicotine patches in breast-feeding mothers: transfer of nicotine and cotinine into human milk. *Clin Pharmacol Ther.* 2003 Dec; 74(6):516-24. [www.ncbi.nlm.nih.gov/pubmed/14663454?dopt=Abstract](http://www.ncbi.nlm.nih.gov/pubmed/14663454?dopt=Abstract)
- Jones W Breastfeeding and Medication 2018 Routledge
- Lactmed website <https://www.ncbi.nlm.nih.gov/books/NBK501922/>
- Lisboa, P. C., de Oliveira, E., Manhães, A. C., Santos-Silva, A. P., Pinheiro, C. R., Younes-Rapozo, V., Faustino, L. C., Ortiga-Carvalho, T. M., & Moura, E. G. (2015). Effects of maternal nicotine exposure on thyroid hormone metabolism and function in adult rat progeny. *The Journal of endocrinology*, 224(3), 315–325. <https://doi.org/10.1530/JOE-14-0473>
- Lisboa PC, Elaine de Oliveira E, and de Moura E G Obesity and Endocrine Dysfunction Programmed by Maternal Smoking in Pregnancy and Lactation. *Front Physiol.* 2012; 3: 437 [www.ncbi.nlm.nih.gov/pmc/articles/PMC3500832/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3500832/)
- Tobacco: preventing uptake, promoting quitting and treating dependence NICE guideline [NG209] Published: 30 November 2021 Last updated: 16 January 2023. <https://www.nice.org.uk/guidance/ng209>
- Reijneveld, S. A., Brugman, E., & Hirasing, R. A. (2000). Infantile colic: maternal smoking as potential risk factor. *Archives of disease in childhood*, 83(4), 302–303. <https://doi.org/10.1136/ad.83.4.302>
- Shenassa ED, Brown MJ. Maternal smoking and infantile gastrointestinal dysregulation: the case of colic. *Pediatrics.* 2004 Oct; 114(4):e497-505. <http://pediatrics.aappublications.org/content/114/4/e497.full>

## Resources

- NHS website, breastfeeding and smoking: <https://www.nhs.uk/conditions/baby/breastfeeding-and-bottle-feeding/breastfeeding-and-lifestyle/smoking/>
- NHS Stopping Smoking Services: <https://www.nhs.uk/live-well/quit-smoking/nhs-stop-smoking-services-help-you-quit/>
- Smoke Free NHS 28 day service <https://quitnow.smokefree.nhs.uk/>
- ASH Scotland <https://ashscotland.org.uk/>