



ASH Scotland Breastfeeding, tobacco use, and second-hand smoke

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Key points:

- breastfeeding has health advantages for mothers and babies
- the benefits of breastfeeding are still greater than formula feeding even if a mother smokes
- toxins from smoking and exposure to smoking do pass into breast milk
- mothers who smoke tend to have poorer breastfeeding outcomes
- exposure to second-hand smoke has a serious impact on maternal and infant health
- giving up smoking has long-term health benefits for parents and children.

This information is for mothers and for health professionals involved with parents and young children.

Benefits of breastfeeding¹

Breastfed babies have a decreased risk of:

- sudden infant death syndrome (SIDS)²
- developing necrotizing enterocolitis (bowel tissue death in premature infants)
- diarrhoea and vomiting
- developing severe chest infections
- developing asthma
- developing acute ear infections
- becoming obese and developing type 1 and 2 diabetes
- developing childhood leukaemia
- developing eczema.

Breastfeeding mothers have a decreased risk of:

- breast and ovarian cancer
- developing type 2 diabetes
- developing post-menopausal osteoporosis³.

Smoking whilst breast-feeding

Because breast milk provides a complete source of nutrition for the first six months of life and contains a range of immunological substances that cannot be replicated in formula milk⁴ it remains the best option for feeding a baby even when a mother has been unable to stop smoking. Nicotine passes into breast milk and has the potential to cause serious effects on a newborn depending on how heavily the mother smokes⁵. Smoking is best limited to after feeds as the flavour of cigarettes is strongest in milk 30-60 minutes after smoking.

Exposure to second-hand smoke

Second-hand smoke is smoke from other people's tobacco (also called passive smoking) and breathing it in brings non-smokers many of the same health risks as active smoking would. Exposure to second-hand smoke increases the risk of fatal and non-fatal coronary heart disease in non-smokers by about 30%⁶. Compared with unexposed non-smokers, non-smokers exposed to second-hand smoke have blood chemistry similar to that of active smokers⁷. For example, even 30 minutes of exposure to a typical dose of second-hand smoke can damage the layer of flat cells lining the inside of a non-smoker's blood vessels and heart in the same way that actively smoking would⁸.

Children and infants face the highest level of second-hand exposure at home and in cars as they are often unable to remove themselves from smoky environments. With their smaller airways, faster rates of breathing and immature immune systems children and infants are also most vulnerable to any adverse health effects⁹. Exposure to second-hand smoke in childhood is associated with reduced lung function, middle ear disease, an increased risk of a range of respiratory symptoms and a higher incidence of respiratory tract infections. Living in a household in which one or more people smoke more than doubles the risk of sudden infant death syndrome (SIDS) and appears to more than double the risk of meningitis¹⁰.

Smoking and stress

It is sometimes suggested that smoking relieves stress but in one study people who smoked then managed to quit for six months reported a steady reduction in stress from the first month of abstinence, such that six months after quitting their stress levels were lower than when they smoked¹¹. The 'stress-relieving' properties of smoking are probably caused by the relief from nicotine withdrawal symptoms which smoking another cigarette produces, perhaps heightened by deep inhalation and reward/time-to-self factors.

Giving up smoking when breastfeeding

There is evidence that giving up smoking increases the duration of breastfeeding¹². Stopping smoking will also improve maternal health and have future benefits from a reduction in a baby's exposure to second-hand smoke.

Free support to stop smoking

Women who breastfeed can use nicotine replacement therapy (NRT) to help them stop smoking. A baby's exposure to NRT via breast milk is small compared with that of an adult smoker or compared with an adult using nicotine replacement therapy and any risk is negated by the benefits of a reduction in exposure to second-hand smoke¹³, and to the chemicals and carcinogens in active smoking which may pass into the breast milk. NRT patches produce a steady but low level of nicotine (but should be removed at night¹⁴) whereas the levels in gums and sprays may produce sudden highs and are perhaps best used after feeds to minimize a baby's exposure. Varenicline (Champix) and bupropion (Zyban) should not be used. Many pharmacies/local chemists are able to provide advice and support. Where appropriate, the pharmacist can identify the most suitable nicotine

replacement therapy (NRT) and some pharmacies even run NHS-funded stop smoking services.

People who smoke have a much better chance of giving up smoking if they get support to do so, There are lots of different ways to find support: :

- through the local doctor's surgery
- phone free to Smokeline on **0800 84 84 84** (9am to 9pm, seven days a week). Smokeline advisers provide free advice and information for anyone who wants to stop smoking, or who wants to help a loved one to quit. Smokeline also provides information about the free stop smoking services provided by every health board in Scotland
- request stop smoking leaflets, a magazine and a DVD from Smokeline either by calling the helpline, or by texting 'QUIT' to 83434
- or visit www.canstopsmoking.com and enter a postcode to find the nearest stop smoking service
- use webchat support (9am to 9pm) at www.canstopsmoking.com/WebChat.htm
- download smoking apps and desktop widgets at <http://smokefree.nhs.uk/quit-tools/>

Types of tobacco used in some minority ethnic groups

There are several minority ethnic groups in which tobacco use is not limited to smoking cigarettes. Different kinds of tobacco use include: paan, pan masala, betel quid, areca nuts, gutkha, hookah, water pipe, nargeela/arghileh/nargile, shisha/sheesha, okka, kalyan, ghelyoon or Ghalyan, or hubble-bubble. All of these have a negative impact on health.

For more information see:

- Briefing on tobacco use and minority ethnic groups
- Briefing on types of tobacco used in some minority ethnic groups from ASH Scotland information briefings at: www.ashscotland.org.uk/ash/4261
- or visit the minority ethnic communities section of the ASH Scotland website: www.ashscotland.org.uk/projects/inequalities/minority-ethnic-communities

Breastfeeding support:

National Breastfeeding Helpline 0300 100 0212

The Breastfeeding Network, PO Box 11126, Paisley, PA2 8YB.

www.nationalbreastfeedinghelpline.org.uk

Also see at www.ashscotland.org.uk/ash/4261

- Tobacco use and pregnancy
- Child exposure to second-hand smoke in the home
- Second-hand smoke in cars

References

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