

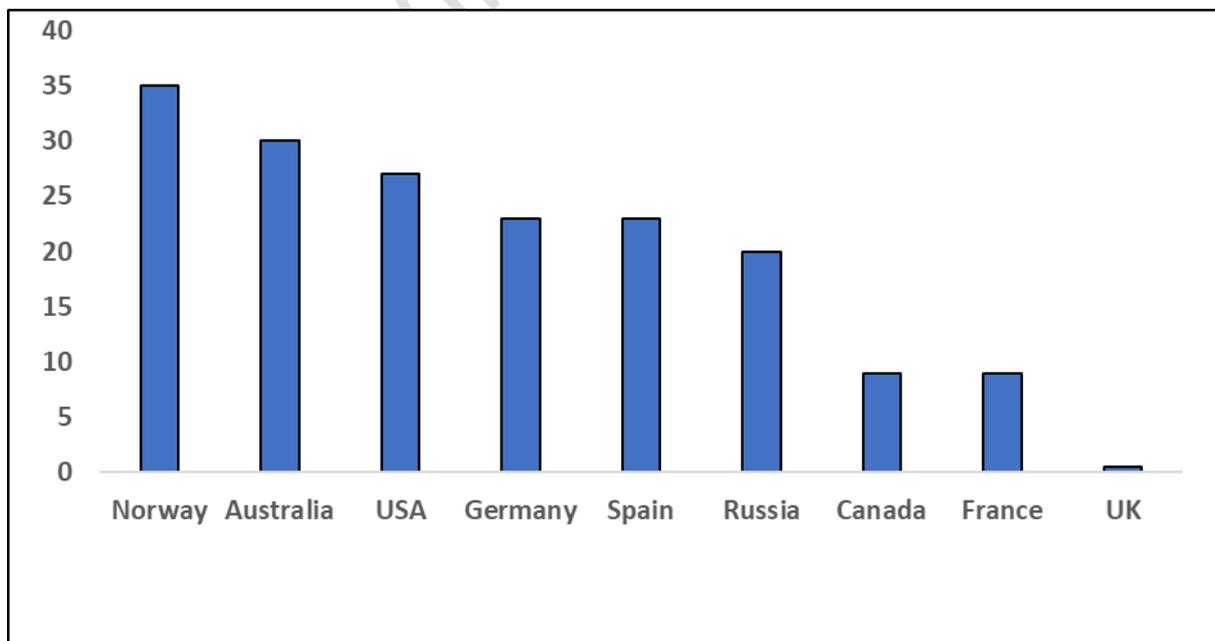
# Breastfeeding and Medication



## When a breastfeeding mother asks you about taking medication

For so many of us the moment when a patient asks if she can take an over the counter medicine whilst she is breastfeeding or asks you to confirm that her prescribed medication is compatible as her GP wasn't sure, is a heart sink moment.

The number of women who start breastfeeding is currently around 80% although it drops rapidly in the first 6 weeks after birth often because the mother finds it difficult to access face to face support with latching the baby. Breastfeeding should not hurt. If you have a mother (or father) asking for a product for sore nipples it is useful to have a list of local support services – be they health visitor or third sector led – to signpost the parent to. At 12 months the UK has the lowest breastfeeding rate in the world (0.5%) despite the NHS and World Health Organisation (WHO) guidelines stating that babies should be exclusively breastfed for 6 months and to 2 years and beyond alongside appropriate weaning foods.



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Breastfeeding Rates at 12 months (Victora CG et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 2016; 387: 475–90)

Breastfeeding has many health advantages for mother and child and has been shown that it could potentially save morbidity, mortality and money for the NHS. ([https://www.unicef.org.uk/wp-content/uploads/sites/2/2012/11/Preventing\\_disease\\_saving\\_resources.pdf](https://www.unicef.org.uk/wp-content/uploads/sites/2/2012/11/Preventing_disease_saving_resources.pdf),

Rollins N et al Why invest, and what it will take to improve breastfeeding practices? Lancet Series Breastfeeding 2016; 387:491-504)

If 45% of women exclusively breastfed for four months, and if 75% of babies in neonatal units were breastfed at discharge, every year there could be an estimated:

- 3,285 fewer gastrointestinal infection-related hospital admissions and 10,637 fewer GP consultations, with over £3.6 million saved in treatment costs annually
- 5,916 fewer lower respiratory tract infection related hospital admissions and 22,248 fewer GP consultations, with around £6.7 million saved in treatment costs annually
- 21,045 fewer acute otitis media (AOM) related GP consultations, with over £750,000 saved in treatment costs annually
- 361 fewer cases of NEC, with over £6 million saved in treatment costs annually.

**In total, over £17 million could be gained annually by avoiding the costs of treating four acute diseases in infants. Increasing breastfeeding prevalence further would result in even greater cost savings**

If half those mothers who currently do not breastfeed were to breastfeed for up to 18 months in their lifetime, for each annual cohort of around 313,000 first-time mothers there could be 865 fewer breast cancer cases with cost savings to the health service of over £21 million, 512 breast cancer-related quality adjusted life years (QALYs) would be gained, equating to a value of over £10 million. This could result in an incremental benefit of more than £31 million, over the lifetime of each annual cohort of first-time mothers.

Only a few universities include a module on breastfeeding or on how to interpret the pharmacokinetics of a drug to assess safety during lactation. So, the first place to look is the BNF. However, this can be confusing too. “Not known to be harmful but consider discontinuing breastfeeding.”. What does that mean? Do the manufacturers have data on file that show concerns? You

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go to the SPC. This is one example “To date, no adverse effects on the health of infants nursed by mothers using sertraline have been reported, but a risk cannot be excluded. Use in nursing mothers is not recommended unless, in the judgment of the physician, the benefit outweighs the risk.” Are you anymore confident in counselling the mother in front of you who says that breastfeeding is important to her and her 10-month-old baby?

The two examples are both about sertraline one of the most widely used anti-depressants/ anti-anxiety medications used in the perinatal mental health period. Studies have shown us that virtually no sertraline gets to the baby via breastmilk and they rarely, if ever, react to it. For a mother to be TOLD by a GP or pharmacist that she must stop breastfeeding to receive treatment can be devastating. Breastfeeding may be the only positive part of her life. Using evidence and pharmacokinetic data the mother can be treated with an effective medication and can continue to breastfeed as long as she chooses.

So why the warning statements with a hint on negativity? When a manufacturer applies for a license to market their drug, they include only a general statement about breastfeeding normally to the effect that it passes into rat milk but that there is no data in humans. Of course, that is totally appropriate as none of us would want to include a breastfed baby in a clinical trial. However, these statements are not updated over time even though there may be case reports or small trials – these are never of the size that we would expect in a drug trial. If we consult specialist sources as recommended by NICE PH 11, we can see studies that have been undertaken. We can also access data on factors such as plasma protein binding, half-life, molecular weight and relative infant dose which allow us to evaluate risk. Drugs with low oral bio-availability such as infliximab are safe for a breastfeeding mother to use as the baby cannot absorb any from milk. Drugs with extensive first pass metabolism reach very low levels in milk e.g. propranolol which makes it an ideal drug for prophylaxis of migraine and for anxiety in breastfeeding mothers. Drugs which are extensively bound to the plasma proteins in milk are also limited in the amount passing through milk e.g. paroxetine 97%.

Perhaps the easiest method of determining safety is to look at whether the drug is licensed for children as these will invariably reach levels lower than those required to produce a therapeutic effect e.g. loratadine and cetirizine. The relative infant dose is given in specialist texts too and we are looking for drugs with levels < 10% e.g. sertraline 0.4-2.2%

So, if we can access pharmacokinetic data through specialist sources such as Hale, Jones or Martindale we can exercise professional judgement where the drug:

- is licensed for paediatric use
- has poor oral bio-availability
- plasma protein binding – >90%
- the molecular weight >200
- relative infant dose <10%
- milk plasma ratio <1

This may take time in a busy community pharmacy so using ready written fact sheets or texts is easier!

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Conditions which a community pharmacist may be asked about regularly.

### Hayfever

Loratadine and cetirizine have paediatric licenses and are widely used by breastfeeding mothers. Steroid nasal sprays and anti-allergy eye drops e.g. sodium cromoglycate act locally and wont reach breastmilk so can be used. Avoid sedating antihistamines e.g. chlorpheniramine as they cross the blood brain barrier and can cause drowsiness in the baby and reduction in milk supply. For more information - <https://www.breastfeedingnetwork.org.uk/wp-content/dibm/hayfever%20and%20breastfeeding%20june%202018%20%281%29.pdf>

### Analgesia

Paracetamol and non-steroidal drugs reach breastmilk in low levels and can be used by breastfeeding mothers e.g. ibuprofen, naproxen, diclofenac. Similarly, non-steroidal gels are compatible with feeding. Codeine should be avoided particularly in opiate naïve women as some will concentrate morphine into milk producing drowsiness in the baby which has in one case proved fatal. <https://breastfeedingnetwork.org.uk/wp-content/dibm/codeine%20and%20brestfeeding.pdf>. The preferred drug for breastfeeding mums who need more than paracetamol and an NSAID is dihydrocodeine which has a cleaner metabolism. It can be sold over the counter as Paramol although outside of license application. Many mothers suffer from migraines and their remedy of choice may be Migralveve<sup>®</sup> - make the mother aware of the risk of codeine and observing the baby for any signs of drowsiness – sleeping more frequently or for longer. Sumatriptan carries a warning from the manufacturer to avoid breastfeeding for 12 hours after consumption. Studies show that levels in milk are very low because of the low oral bio-availability (14%) so mothers can take it and feed as normal. <https://breastfeedingnetwork.org.uk/wp-content/dibm/migraine%20and%20breastfeeding.pdf>.

### Laxatives

Most laxatives can be taken during breastfeeding – osmotic and bulk forming laxatives are preferable as they do not pass into milk but use of stimulant laxatives may be necessary e.g. after a caesarean section which will involve morphine or to soften faeces in a mother who has had stitches <https://breastfeedingnetwork.org.uk/wp-content/dibm/constipation%20and%20breastfeeding.pdf>

### Threadworms

It is not uncommon to have requests for threadworm treatment for pre-school and school aged children many of whom will have younger siblings who need treatment and their breastfeeding mother. Mebendazole can be taken during breastfeeding as its oral bioavailability is <10%, even if the breastfed baby (> 6 months) needs to take its own dose. <https://breastfeedingnetwork.org.uk/wp-content/dibm/threadworms%20and%20breastfeeding.pdf>

### Coughs and colds

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We know that there is little evidence for the efficacy of cough medicines, but the market continues to grow. A medicine which does not contain an antihistamine which might make the baby drowsy or a decongestant would be suitable for a breastfeeding mother.

<https://breastfeedingnetwork.org.uk/wp-content/dibm/cough%20and%20cold%20remedies%20and%20breastfeeding%202018.pdf>.

Personally, I would avoid the current widely available product containing thyme as there is evidence that the herb reduces milk supply.

Decongestant tablets should not be taken by breastfeeding mothers, there is good evidence that even one dose of pseudoephedrine can reduce supply by 24% and is more likely with an established supply. The same evidence is not available for phenylephrine, but it seems sensible to be cautious. During a viral infection the mother passes antibodies to her baby to protect against the infection which she has, so we do not want to reduce her supply. Decongestant nasal sprays can be used with normal breastfeeding as can steam inhalation which probably has the best evidence base.

### Informed decision making

In all cases where you are suggesting that a drug is used outside of its licence application and against what it says in the PIL it is wise to discuss the information with the mother so she is involved in making an informed decision in taking the drug or not, in continuing to breastfeed or not. Some authorities have suggested documenting the discussion on the PMR.

### Want to learn more?

#### Books:

- Hale TW Medications and Mothers Milk – available as a paperback book or by online subscription including an APP
- Jones W Breastfeeding and Medication – available as a paperback
  - Why Mothers Medication Matters
  - The importance of Dads and Grandmas to the Breastfeeding Mother

Fact sheets on many commonly prescribed drug conditions -

- [www.breastfeedingnetwork.org.uk/drugs-factsheets/](http://www.breastfeedingnetwork.org.uk/drugs-factsheets/)
- [www.breastfeeding-and-medication.co.uk](http://www.breastfeeding-and-medication.co.uk)
- <https://www.sps.nhs.uk/articles/ukdilas/>

Specialist Service UKDILAS part of the UKMI service with centres in Leicester and Birmingham

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