



*For more information about the Organization of Teratology Information Specialists or to find a service in your area, call (866) 626-6847 or visit us online at: [www.OTISpregnancy.org](http://www.OTISpregnancy.org).*

## **Breastfeeding Following a Natural Disaster**

The information below will help you determine whether certain exposures that a mother might come in contact with following a natural disaster are safe for her breastfed infant. This information should not take the place of medical care and advice from your health care provider.

### ***Why is breastfeeding good for my baby?***

There are many benefits to breastfeeding. Breast milk is the best source of nutrients for your growing baby. There are also substances called antibodies in it that help protect your baby from infection. Breastfeeding costs much less than bottle-feeding. It is more convenient because there are no bottles to wash or formula to buy, mix, and refrigerate. During a natural disaster, there is no need to worry about finding safe, clean water to mix the formula with or to wash bottles in. Finally, breastfeeding can be soothing and reduce stress for both mother and her baby.

### ***What kinds of things could I be exposed to in a natural disaster that might be passed in breast milk to my baby?***

#### **Vaccinations**

Vaccinations are given to protect individuals from serious diseases. Vaccinations are important for your own health, and the antibodies you produce after receiving them may be passed to the infant in breast milk. This may provide your baby with some protection as well. While most routine vaccinations are safe for women who are breastfeeding, there are some exceptions. There is some concern that vaccines that contain live virus may increase the risk for infecting you or your baby. Because of this risk, killed vaccines are preferred.

Typical vaccinations you might receive following a natural disaster include hepatitis A, hepatitis B, and tetanus. In most cases, these vaccinations are okay to have while breastfeeding.

While not typically needed, typhoid, small pox and yellow fever vaccinations may be considered. The typhoid fever vaccine is available in two forms. One is given by mouth and the other is given by injection. If you are given a choice, you should choose the injection because it does not contain live virus. Small pox and yellow fever vaccines contain live virus that can be passed through breast milk and possibly infect your baby. These vaccines are generally not

used in breastfeeding women unless there is a high risk of infection.

#### **Infections**

Some infections are more common following a natural disaster. Local infections of the skin usually do not result in a dangerous exposure to the baby through breast milk. However, the medication you take to treat the infection may affect your baby (see the next section). In some cases you may be able to use a topical antibiotic ointment or cream to treat your skin infection. Topical medications do not get into breast milk in high amounts.

More serious infections of the whole body such as West Nile fever, hepatitis A or B, malaria, giardia, cholera, typhoid fever, staphylococcus aureus, or Vibrio are a more complicated. Speak with your health care provider if you are breastfeeding and have a serious infection. With the exception of HIV, a mother's illness is generally not a reason to stop breastfeeding and there may be antibodies in your milk that may help your baby fight infection.

If you have an infection, see your doctor right away. Also be sure to drink enough liquids so that you don't become dehydrated. This can harm you and can also reduce the amount of milk that you make for your baby. Occasionally, while you are very ill, it may be necessary to stop breastfeeding for a while and give your baby formula (see the section on how to safely prepare formula).

#### **Medications**

You may need to take medication following a natural disaster. One type of medication you might be given is an antibiotic. Many antibiotics are safe to use while breastfeeding. Be sure to let your provider know you are breastfeeding so that they can consider this when choosing an antibiotic or other type of medication for you. Some babies are allergic to certain antibiotics, so if your baby develops hives or a rash, tell your doctor right away. Antibiotics can cause your baby to have an upset stomach or diarrhea. You can lessen the chances for this to happen by timing your breastfeeding so that you nurse, take your medication,

and then wait a few hours before you nurse again. Doing this will help reduce the amount in breast milk for almost all medications.

### **Insect Repellent**

A bite from a mosquito that carries a serious disease like West Nile virus or malaria poses a risk for infecting you with the illness. There are significant benefits to using insect repellent to protect yourself.

The most common active ingredient in insect repellent is DEET (diethyltoluamide). It is not known whether DEET is passed into breast milk. Fortunately, only about only 6-8% of what you put on your skin gets absorbed into your blood stream and this would mean that very little would get into the breast milk. It is still best to limit the amount of DEET that you are exposed to while breastfeeding. You can do this by applying the DEET to your clothing and then only putting it on exposed skin such as hands and face. Be sure not to apply DEET to the breast area. You should also wash your hands before breastfeeding to make sure that the baby does not get exposed directly to the DEET.

### **Cleaning Agents**

Agents such as detergents, bleach, and ammonia have not been well studied in connection to breastfeeding. Fortunately, most exposures to these products do not result in large amounts in your blood and would not be expected to appear in milk at levels that could hurt your baby. Wearing gloves and airing out your work area can help to reduce the exposure to you and your baby.

### **Pollutants**

If you think that you may have been exposed to something poisonous like a chemical or lead, you should contact your doctor as soon as possible.

Lead levels in breast milk are the same as in mother's blood. If you have been exposed to lead, a blood test can be done to see if you have a high level of lead in your blood. A mother should not stop breastfeeding unless the level of lead in her blood is very high.

Exposure to low levels of environmental chemicals is not a reason to stop breastfeeding. If you feel ill from the exposure you may want to stop breastfeeding until you are away from the chemicals and feel better.

### ***How can I keep my breast milk as safe as possible?***

Many substances are low risk for the baby or are passed into breast milk in very low amounts. It is important to be aware of your exposures, and consider their effect on your breastfed baby. If a doctor is prescribing a medication for you, let him know you are breastfeeding so that he can choose one that is safe for you and your baby. Always watch your baby for side effects when taking any medication. Speak to

your doctor if you notice anything unusual and are concerned.

### ***What if I need to give my baby formula?***

Following a natural disaster, use ready-to-feed formula if possible, since you don't need to add water to it. If ready-to-feed formula is not available, use bottled water to mix powdered or concentrated formula. Do not use water treated with iodine or chlorine tablets. Be sure to clean bottles and nipples thoroughly with bottled, boiled, or treated water before using them. Always wash your hands before preparing baby's formula.

### ***Where can I find more information on specific exposures to infants through breast milk?***

The International Lactation Consultant Association maintains a 'Find a Lactation Consultant' directory of individual lactation consultants who can help with breastfeeding concerns such as reduced milk supply (website: [www.ilca.org](http://www.ilca.org)). La Leche League International provides information about breastfeeding to women affected by natural disasters (website: [www.laleche.org](http://www.laleche.org); phone: 800-525-3243). OTIS has additional fact sheets on other exposures that include information about breastfeeding.

**September 2005.**

Copyright by OTIS.

Reproduced by permission.



The Development of this fact sheet was supported by funds from the Centers for Disease Control and Prevention (CDC).

### **Selected References:**

AAP Section on Breastfeeding. 2005. Policy Statement: Breastfeeding and the Use of Human Milk. Pediatrics 115(2):496-506.

Centers for Disease Control and Prevention. 2005. Breastfeeding: Recommendations: Vaccinations. [cited 2005 Dec]. Available from: <http://www.cdc.gov/breastfeeding/recommendations/vaccinations.htm>.

Hale T. 2004. Medications and Mothers' Milk, 11<sup>th</sup> Ed., Pharmasoft Publishing, TX.

World Health Organization. 2002. Breastfeeding and maternal medication. Recommendations for drugs in the eleventh WHO model list of essential drugs. [cited 2005 Dec]. Available from: [http://www.who.int/child-adolescent-health/New\\_Publications/NUTRITION/BF\\_Maternal\\_Medicati on.pdf](http://www.who.int/child-adolescent-health/New_Publications/NUTRITION/BF_Maternal_Medicati on.pdf).

*If you have questions about the information on this fact sheet or other exposures during pregnancy, call **OTIS** at 1-866-626-6847.*