INFANT FEEDING IN DISASTERS AND EMERGENCIES

Breastfeeding and Other Options

In a Natural Disaster or Public Health Emergency

• There may be no clean drinking water or sterile environment.
• It may be impossible to ensure cleaning and sterilization of feeding utensils.

The cleanest, safest food for an infant, in disasters or emergencies, is human milk.

• It is nutritionally perfect.
• It is readily available without dependence on feeding supplies.
• It is protective against diseases, especially diarrhea and respiratory infections.
• It enhances the infant’s immune response.
• It is the right temperature and helps to prevent hypothermia.
• Hormone release during breastfeeding helps relieve maternal stress and anxiety.

Disadvantages of Formula Use During Disasters or Emergencies

• Supplies of formula may not be available.
• Formula may become contaminated if prepared with unclean water or stored in non-sterilized containers, or if refrigeration is not available for storage.
• Errors in formula preparation may occur.

Pediatricians can take action to support breastfeeding during a disaster or an emergency.

1. Keep families together.
2. Create safe havens for pregnant and breastfeeding mothers. These havens should provide security, counseling, water, and food. Pediatricians can contribute using offices, hospitals, or other shelters.
3. Assure mothers that human milk can contribute significant nutrition in the absence of safe complementary foods for the first year after birth and beyond.
4. Assist new mothers to initiate breastfeeding within 1 hour of birth, promote exclusive breastfeeding for about 6 months, and encourage breastfeeding for at least 1 year and beyond.
5. Encourage thoughtful discussions with families before weaning during times of emergency.
6. Provide support for breastfeeding through assessment of the infant’s and mother’s hydration and nutritional status. If abnormal, increase breastfeeding frequency for the infant and nutritional support of the mother. Extra food should be provided for all pregnant and lactating women.
7. In situations where the mother’s own milk is not available, the best option is pasteurized donor human milk. While pasteurized donor milk from a regulated milk bank is preferred, it is often not available during a disaster. If formula is given, recommend ready-to-feed standard formula. Use concentrated or powdered formula only if a safe water supply is ensured.
8. Advocate for optimal feeding options for orphaned infants, including donor human milk.
9. Lactating women may be immunized as recommended for adults and adolescents.
10. In the event of a pandemic, the most current Centers for Disease Control and Prevention (CDC) or American Academy of Pediatrics (AAP) guidance on breastfeeding should be consulted.
11. If radiation exposure is a concern
   a. When the risk of exposure to radioactive iodine is temporary, mothers can continue to breastfeed if potassium iodide (KI) is given to her and the infant within 4 hours of contamination.
   b. Mother and infant should be prioritized to receive protective measures like evacuation.
   c. Mothers should consider temporarily stopping breastfeeding and switching to either expressed milk from before the exposure or ready-to-feed infant formula until the mother and infant can be treated with KI. Powdered or concentrated formula should only be used if the water is free from radiation.
   d. If no other source of food is available for the infant, the mother should continue to breastfeed after washing the nipple and breast thoroughly with soap and warm water and gently wiping around and away from the infant’s mouth.
   e. Breastfeeding can resume when advised by local health officials or when the mother and infant have been evacuated to an environment free from radiation exposure.
12. Refer to www.cdc.gov for more information about precautions for lactating women involving specific diseases, immunizations, and treatments and to LactMed (https://www.ncbi.nlm.nih.gov/books/NBK501922) for information on medications and lactation. It is important to reassure mothers that most medications are compatible with breastfeeding, including antibiotics.
13. Advocate for breastfeeding promotion, protection, and support with relief agencies and workers. Infant feeding practices and resources should continually be assessed, coordinated, and monitored.
**Breastfeeding Facts**

1. Mothers continue to lactate in times of physical and emotional stress but will need support.
2. Malnourished women and women with medical illnesses can breastfeed.
3. Optimal human milk supply is maintained by infant demand.
4. For some mothers and babies, once breastfeeding has stopped, it may be resumed successfully.
   a. Encourage skin-to-skin contact and frequent suckling (every 2 hours).
   b. Supply increases gradually over days to weeks and supplementation should decrease accordingly.
   c. Careful assessment of the infant’s nutritional and hydration status is critical.
   d. A full milk supply is established more rapidly with the younger infant.
   e. Mothers need encouragement during this process.

For more information on infant feeding during a disaster and relactation technique, please visit the Emergency Nutrition Network (ENN) at [www.ennonline.net](http://www.ennonline.net).

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**KEY STRATEGY:** INCREASING THE CURRENT RATE OF BREASTFEEDING IN THE UNITED STATES IS FUNDAMENTAL TO OPTIMIZE INFANT NUTRITION WHEN DISASTER STRIKES.

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![Diagram of infant feeding in disasters and emergencies](#)