

## Infant Formula Preparation Instructions for Parents and Caregivers

Careful preparation and handling of infant formulas helps ensure their safety. Below are guidelines supported by the American Academy of Pediatrics for safe preparation and storage of formula.

Nipples/bottles need to be sterilized in boiling water for 5 minutes, only before their first use. Thereafter, clean the bottles/nipples in the dishwasher or hot soapy water with a thorough rinse. To prepare formula, ensure you have a clean work area and all your supplies available. Wash your hands with soap and water. Check the formula expiration date and clean off the lid.

If using **ready to feed formula**, shake the can well, open and pour directly into the clean bottles. If using **concentrated formula**, you will mix equal parts water with formula in each bottle. Again, make sure to shake the can before use to suspend any minerals that may have settled. For example, an 8 ounce prepared bottle would be made with 4 ounces of water and 4 ounces of formula.

If using **powdered formula**, follow the manufacturers' instructions, which generally will be 1 level scoop of formula per 2 ounces of water. It is important to use the scoop provided by the manufacturer to ensure the formula is mixed to the appropriate concentration. Shake the capped bottle to dissolve the formula. Some experts suggest avoiding powdered infant formula for infants with a weakened immune system (immunocompromised) or premature infants in the early months of life because powdered infant formula is not sterile. There have been rare cases in infants of severe infection from bacteria found in the powdered formula. Please see our handout on *Powdered Formula Use* for more information.

What type of water should you use? Municipal water, well water and bottled water are all fine. However, well water should be tested regularly, and bottled water is more expensive and environmentally unfriendly. If you are concerned or uncertain about the safety of your tap water, use bottled water or your tap water can be brought to a rolling boil for 1 minute before use in making formula. Longer boiling is not recommended as it may concentrate minerals too much. Municipal and well water should be collected from the cold tap before boiling.

Once opened, cans of ready to feed and concentrated liquid formula can be stored covered in the refrigerator for no longer than 48 hours. Powdered formula should be stored in a cool dry place even after it is opened. It should be used within 4 weeks of opening.

Prepared formula should not be left out of the refrigerator. If more than one bottle is prepared at a time, those bottles for later use should be refrigerated immediately. All bottles should be used within 24 hours. A bottle should not be unrefrigerated for more than 2 hours before being fed. Once a feeding has begun, the contents should be fed within 1 hour or discarded.

Most infants prefer warm infant formula. Warm an unopened bottle by putting it in a bowl of warm water for 5-10 minutes. Test the temperature by putting a small amount of formula on the caregivers forearm. Bottles of infant formula **SHOULD NOT** be warmed in the microwave. This can create "hot spots" in the bottle that can burn the infant's mouth.

Reviewed 11/13, 11/15, 1/21