completely submerge all washed equipment, ensuring there are no trapped air bubbles. Cover the pan with a lid and bring it to a rolling boil, making sure the pan does not boil dry. Keep the pain covered until the equipment is needed.

Powdered infant formula is not sterile, and it has been associated with severe illness attributable to *Cronobacter* species (formerly known as *Enterobacter sakazakii*) and *Salmonella enterica* (Pickering and American Academy of Pediatrics, Committee on Infectious Diseases, 2012). Careful preparation and handling reduce the risk of illness; reconstitution with water brought to a rolling boil, and mixed when it is at or above 70° C is helpful, because this is hot enough to inactivate *Cronobacter* and other pathogens (Pickering and American Academy of Pediatrics, Committee on Infectious Diseases, 2012; World Health Organization, 2007). Bottled water is not considered sterile and must be boiled before use.

Following the manufacturer's instructions for preparing the formula is essential to ensure the infant receives adequate calories and fluid for adequate growth. Parents are cautioned not to alter the reconstitution or dilution of infant formula except under the specific directions of the primary practitioner. Powdered formula and concentrated formula are prepared and bottled and refrigerated if not used for feeding immediately. Warming the formula is optional, although many parents prefer to warm it before feeding. Any milk remaining in the bottle after the feeding is discarded because it is an excellent medium for bacterial growth. Opened cans of ready-to-feed or concentrated formula are covered and refrigerated immediately until the next feeding. Because of incidents involving contamination of powdered formula with *Cronobacter* species and subsequent infant death in a neonatal unit, it is now recommended that hospital formula preparation for newborns follow separate guidelines; these are discussed in Chapter 7.

Laws governing the labeling of infant formulas require that the directions for preparation and use of the formula include pictures and symbols for non-reading individuals. In addition, manufacturers are translating the directions into foreign languages, such as Spanish and Vietnamese, to prevent misunderstanding and errors in formula preparation.