

Avoid use of restraints (e.g., arm boards); if used, check that they are secured safely and not restricting circulation or movement (check for pressure areas).

Data from Association of Women's Health, Obstetric and Neonatal Nurses: *Evidence-based clinical practice guideline: neonatal skin care*, ed 3, Washington, DC, 2013, The Association; Edraki M, Paran M, Montaseri S, et al: Comparing the effects of swaddled and conventional bathing methods on body temperature and crying duration in premature infants, *J Caring Sci* 3(2):83–91, 2014; Lund CH, Durand DJ: Skin and skin care. In Gardner SL, Carter BS, Enzman-Hines M, Hernandez JA, editors: *Merenstein & Gardner's handbook of neonatal intensive care*, ed 7, St Louis, 2011, Mosby/Elsevier; Lund CH, Kuller JM: Integumentary system. In Kenner C, Lott J, editors: *Comprehensive neonatal care: an interdisciplinary approach*, ed 5, New York, 2014, Springer; Ness MJ, Davis DMR, Carey W: Neonatal skin care: a concise review, *Int J Derm* 52(1):14–22, 2013.

During skin assessment of preterm infants, nurses are alert to the subtle signs that indicate **zinc deficiency**, a problem sometimes seen in infants who have inadequate intake or abnormal losses of zinc. Breakdown usually occurs in the areas around the mouth, buttocks, fingers, and toes. In preterm and VLBW infants, it may also occur in the creases of the neck, wrists, and ankles and around wounds. Zinc deficiency is most likely to appear in preterm infants with inadequate zinc intake, an ileostomy, short-bowel syndrome, or chronic diarrhea. Suspicious lesions are reported to the practitioner so that zinc supplements can be prescribed. Skin injuries have been reported during the use of phototherapy blankets. Caution is warranted in using these products in ELBW infants and infants who are at risk for skin breakdown.

Administration of Medications

Administration of therapeutic agents (such as drugs, ointments, IV infusions, and oxygen) requires judicious handling and meticulous attention to detail. The computation, preparation, and administration of drugs in minute amounts often require collaboration among members of the health care team to reduce the chance for error. In addition, the immaturity of an infant's detoxification mechanisms and inability to demonstrate symptoms of toxicity (e.g., signs of auditory nerve involvement from ototoxic drugs, such as gentamicin) complicate drug therapy and require that nurses be particularly alert for signs of adverse reaction (see [Administration of Medication, Chapter 20](#)).