United States; therefore, the extent of neonatal screening is determined by state laws and voluntary guidelines. All states require screening for phenylketonuria (PKU) and congenital hypothyroidism; many states also have programs that include screening for sickle cell disease and galactosemia. Because concern has been voiced regarding the inconsistency among states in screening for genetic disorders based on cost, population demographics, resource availability, and political environment, the Task Force on Newborn Screening was formed by the American Academy of Pediatrics and other federal health care agencies to address this issue. A number of resolutions and policies have been developed to better address the issue of newborn screening (Kaye, Committee on Genetics, Accurso, et al, 2006a, 2006b).

The nurse's responsibility is to educate parents regarding the importance of screening and to collect appropriate specimens at the recommended time (after 24 hours of age). With early newborn discharge before 24 hours, some authorities recommend a repeat screening for PKU within 2 weeks (Kaye, Committee on Genetics, Accurso, et al, 2006a, 2006b). Accurate screening depends on high-quality blood spots on approved filter paper forms. The blood should completely saturate the filter paper spot on one side only. The paper should not be handled, placed on wet surfaces, or contaminated with any substance (see Atraumatic Care box).

Atraumatic Care

Heel Punctures

Heel lancing is necessary to obtain blood for newborn blood tests, including newborn screening. Studies have shown that venipuncture performed by an experienced phlebotomist elicited fewer pain responses (as measured by the Premature Infant Pain Profile [PIPP]) from full-term newborns than did heel punctures (Shah and Ohlsson, 2011). Furthermore, the need for additional skin punctures was reduced with venipuncture. Although maternal anxiety was initially higher in the venipuncture group, mothers who observed the venipuncture reported observing less pain response than mothers who observed heel punctures.

Oral sucrose and nonnutritive sucking have proved effective in