Seizures associated with a fever occur in 3% to 4% of all children, usually in those between 6 months and 6 years old. About 30% of children have subsequent febrile seizures; a younger age at onset and a family history of febrile seizures are associated with increased incidence of recurring episodes. Evidence does not support the use of antipyretic drugs (Rosenbloom, Finkelstein, Adams-Webber, et al, 2013) or anticonvulsants to prevent a second febrile seizure; nursing intervention should focus on ways to provide care and comfort during a febrile illness. Simple febrile seizures lasting less than 10 minutes do not cause brain damage or other debilitating effects (Jones and Jacobsen, 2007; Sadleir and Scheffer, 2007). (See Febrile Seizures, Chapter 27.)

## Hyperthermia

Unlike in fever, antipyretics are of no value in hyperthermia because the set point is already normal. Consequently, cooling measures are used. Cool applications to the skin help reduce the core temperature. Cooled blood from the skin surface is conducted to inner organs and tissues, and warm blood is circulated to the surface, where it is cooled and recirculated. The surface blood vessels dilate as the body attempts to dissipate heat to the environment and facilitate this cooling process.

Commercial cooling devices, such as cooling blankets or mattresses, are available to reduce body temperature. Place the patient on the bed and cover with a sheet or lightweight blanket. Frequent temperature monitoring is essential to prevent excessive cooling of the body.

Traditionally, cool compresses decrease high temperature. For tepid tub baths, it is usually best to start with warm water and gradually add cool water until the desired water temperature of 37° C (98.6° F) is reached to acclimate the child to the lower water temperature. Generally, the temperature of the water only has to be 1° C (or 2° F) less than the child's temperature to be effective. The child is placed directly in the tub of tepid water for 15 to 20 minutes while water is gently squeezed from a washcloth over the back and chest or gently sprayed over the body from a sprayer. In the bed or crib, cool washcloths or towels are used, exposing only one area of the body at a time. Continue sponging for approximately 20 minutes.