

Relief measures include pharmacologic and environmental intervention. The most effective intervention is the use of antipyretics to lower the set point.

Antipyretics include acetaminophen, aspirin, and nonsteroidal antiinflammatory drugs (NSAIDs). Acetaminophen is the preferred drug. Aspirin should not be given to children because of its association in children with influenza virus or chickenpox and Reye syndrome. One nonprescription NSAID, ibuprofen, is approved for fever reduction in children as young as 6 months old. The dosage is based on the initial temperature level: 5 mg/kg of body weight for temperatures less than 39.2° C (102.6° F) or 10 mg/kg for temperatures greater than 39.2° C. The recommended dosage for pain is 10 mg/kg every 6 to 8 hours, and the recommended maximum daily dose for pain and fever is 40 mg/kg. The duration of fever reduction is generally 6 to 8 hours and is longer with the higher dose.

The recommended doses of acetaminophen should never be exceeded. Acetaminophen should be given every 4 hours but no more than five times in 24 hours. Because body temperature normally decreases at night, three or four doses in 24 hours will control most fevers. The temperature is usually retaken 30 minutes after the antipyretic is given to assess its effect but should not be repeatedly measured. The child's level of discomfort is the best indication for continued treatment.

The nurse can use environmental measures to reduce fever if they are tolerated by the child and if they do not induce shivering. Shivering is the body's way of maintaining the elevated set point by producing heat. Compensatory shivering greatly increases metabolic requirements above those already caused by the fever.

Traditional cooling measures, such as wearing minimum clothing; exposing the skin to air; reducing room temperature; increasing air circulation; and applying cool, moist compresses to the skin (e.g., the forehead), are effective if used approximately 1 hour after an antipyretic is given so that the set point is lowered. Cooling procedures (such as sponging or tepid baths) are ineffective in treating febrile children (these measures are effective for hyperthermia) either when used alone or in combination with antipyretics, and they cause considerable discomfort ([Axelrod, 2000](#)).