

- Subcutaneous and intramuscular (IM) hemorrhages
- Hemarthrosis (bleeding into the joint cavities), especially the knees, ankles, and elbows
- Hematomas: Pain, swelling, and limited motion
- Spontaneous hematuria

Prevent Bleeding

The goal of prevention of bleeding episodes is directed toward decreasing the risk of injury. Prevention of bleeding episodes is geared mostly toward appropriate exercises to strengthen muscles and joints and to allow age-appropriate activity. During infancy and toddlerhood, the normal acquisition of motor skills creates innumerable opportunities for falls, bruises, and minor wounds. Restraining the child from mastering motor development can bring more serious long-term problems than allowing the behavior. However, the environment should be made as safe as possible, with close supervision during playtime to minimize incidental injuries.

For older children, the family usually needs assistance in preparing for school. A nurse who knows the family can be instrumental in discussing the situation with the school nurse and in jointly planning an appropriate activity schedule. Because almost all individuals with hemophilia are boys, the physical limitations in regard to active sports may be a difficult adjustment, and activity restrictions must be tempered with sensitivity to the child's emotional and physical needs. Use of protective equipment, such as helmets, face masks, shin/wrist/forearm guards, kneepads, and other equipment appropriate for the type of athletic activity, is encouraged to prevent injury. Children and adolescents with severe hemophilia may participate in noncontact sports, such as aerobic exercise, stretching exercises, swimming, walking, jogging, tennis, golf, fishing, and bowling ([Blaney, Forsyth, Zourikian, et al, 2010](#)). However, the use of prophylaxis to prevent joint hemorrhage or use of exercise during low-impact athletic participation remains unknown ([Broderick, Herbert, Latimer, et al, 2012](#); [Michael, Mulder, and Strike, 2014](#); [Ross, Goldenberg, Hund, et al, 2009](#)).

To prevent oral bleeding, some readjustment in terms of dental