

Children's Hospital Hemophilia Treatment Center

**GUIDELINES FOR SCHOOL PHYSICAL EDUCATION  
FOR THE CHILD WITH HEMOPHILIA**

**FOOTBALL:** The child should not participate in tackle football due to high risk for bleeding problems. However, he could participate with the team as an exercise manager or referee, which would allow him some exercise. He can participate in supervised touch football if he is not prone to knee or ankle bleeds.

**SOCCER, BASKETBALL:** The child can participate with shin and knee pads in soccer and basketball and possibly elbow pads for basketball due to hard flooring. If child is prone to knee or ankle bleeds, assign child to be a lineman or referee during games which allows for running up and down the sidelines without player contact.

**VOLLEYBALL:** The child can participate with wrist and forearm padding and possibly knee and elbow pads due to hard flooring. If a child has a problem with wrist bleeds, he should not serve.

**BASEBALL:** The child can participate fully with a helmet for hitting and base running to avoid head trauma. If child has a problem with arm bleeds, he should avoid pitching.

**GYMNASTICS:** The child can work on a low balance beam with mats below and can participate in supervised low-level tumbling, e.g. somersaults, cartwheels, on mats. He should avoid horse or bar activities. He can use this time to do general strengthening and stretching exercises or a prescribed exercise program.

**TRACK AND FIELD:** The child should start with a walking program until strength in legs increases enough to begin a running program. The running program should be advanced slowly within the limits of the child's strength and endurance. Throwing events should be allowed unless child has problems with elbow and shoulder bleeds. Hurdles and jumping events should be avoided.

**SWIMMING AND GOLF:** These sports are highly recommended due to the low risk for injury. Swimming is excellent for strengthening and endurance while placing minimal stress on joints.

**CALISTHENICS:** The child should avoid pushups and pull-ups if he has shoulder, elbow, or wrist bleeds. He should wear sneakers when participating in jumping jacks and jumping rope. Sit-ups are an excellent exercise and place minimal stress on the joints.

## FIRST AID FOR HEMOPHILIACS

Hemophiliacs do not bleed harder or faster, just longer. Prolonged bleeding in hemophilia is caused by the absence of one of the plasma proteins necessary for blood to form a clot. Minor abrasions and cuts usually do not present a problem to hemophiliacs and can be controlled with the same first aid measures used for non-hemophiliacs. Apply ice, not heat, to a swelling or painful area. **If analgesia is needed, use a pain medication that does not contain aspirin.** Avoid heat and aspirin as these may cause increased bleeding.

Internal bleeding will require prompt attention. Head injuries, bleeding into the throat or neck, bleeding into joint or muscles, or deep cuts require medical attention and the administration of factor concentrate to replace the missing clotting protein. Notify the child's parents at once if these injuries should occur. The following is a guide for first aid for hemophiliacs.

**HEAD INJURY:** If the child sustains a hard fall and strikes his head or receives a blow to the head, he must be kept quiet and parents and doctors notified immediately, as medical attention may be required.

**BLEEDING INTO THROAT OR NECK:** If the child complains of pain or swelling in this area, medical attention should be sought immediately as airway can become blocked. Notify parents.

**JOINT BLEEDS:** If a child is bleeding internally into a joint, he will usually complain of pain and avoid using that joint. Swelling is a late symptom of active bleeding. An ace bandage and ice should be applied to the affected joint and the child should be encouraged to rest the joint. Notify parents. All joint bleeds should be treated promptly with replacement factor.

**SOFT TISSUE OR MUSCLE BLEEDS:** The earliest symptom may be pain as swelling is a late symptom. An ace bandage and ice should be applied to the area. Parents should be notified as medical attention may be required.

**LARGE CUTS/LACERATIONS:** If there is a large amount of bleeding, apply pressure to the area with a clean cloth or bandage. Dressing should be left in place and reinforced as needed. Parents should be notified and medical attention obtained immediately.

**MINOR CUTS/LACERATIONS:** Clean the area with soap and water to remove debris. Apply pressure for several minutes until bleeding has stopped. Cover with a clean dressing. If a large amount of bleeding occurs, or if unable to stop the bleeding with a reasonable time, notify parents and seek medical assistance.

## **MANAGEMENT OF A NOSEBLEED**

1. Blow your nose very gently. When having a nosebleed, it is important that a firm, solid clot form to stop the bleeding. Often times, soft, stringy clots may form that are not effective and may interfere with the formation of a solid clot. To remove these soft, stringy clots, blow your nose very gently.
2. Apply firm pressure for at least five minutes, pressing the sides of the nose together. While holding pressure on the nose, keep your head in an upright position. Leaning forward may increase the blood flow and pressure to the nose. Leaning backward will cause the blood to flow down the throat.
3. You may use a cold cloth on the nose while applying pressure. Ice packs may be placed over the ridge of the nose or on the throat. The cold cloth or ice over the nose and throat will help constrict the blood vessels in this area which will decrease the blood flow to the nose.
4. If the bleeding has not stopped after five minutes, blow your nose again very gently and reapply pressure for ten minutes. Your hand may get tired while applying the pressure, but it is important to maintain firm, continuous pressure. You need to come to the hospital if the bleeding has not stopped after the reapplying of pressure.
5. When the bleeding has stopped, you may apply two drops of Neo-Synephrine nose drops into the nose. The Neo-Synephrine will help reduce the swelling and make the blood vessels smaller.
6. If you have a tendency to have nosebleeds, you may apply a small amount of Vaseline into the nose. The Vaseline will help to keep the inside lining of the nose moist which will help prevent the formation of crusts. Bleeding can restart if the crusts were to crack, causing another nosebleed.