

BASIC FIRST AID

Fortunately with the use of appropriate protective equipment like batting helmets and catcher's gear, serious injuries in youth baseball are rare. However, minor injuries are quite common. Each team is supplied with a first aid kit. This first aid kit should be nearby at all times during practices and games. The objective of this section is to review some of the more commonly encountered injuries and their on-field management, including criteria for return to play. In addition, guidance will be provided regarding situations that may warrant immediate medical attention. Ideally, a coach should have immediate access to a cell phone during practices and games in the case of such an emergency.

Abrasions and Lacerations

Abrasions are "scuff-like" injuries to the skin. They are often sustained when runners slide into a base ("hip strawberry") or fielders dive for a ball. Initial management of an abrasion consists of cleansing the wound to reduce the risk of subsequent infection. Hydrogen peroxide is an excellent agent for this purpose, although water applied under pressure to help flush foreign material from the wound can also be used. After cleansing an abrasion it is important to provide the player with some level of comfort. Ideally, a topical antibiotic ointment should be applied to the abraded surface, followed by a gauze covering. Bacitracin is the preferred antibiotic ointment because it does not contain neomycin which can cause allergic reactions in some players. To cover the wound, place a 2-inch or 4-inch gauze pad over the wound and then wrap the affected area with athletic tape. Alternatively, a gauze wrap can be used to cover the abrasion. In either case, pre-application of the antibiotic ointment will make removal of the gauze pad less unpleasant. Players are usually able to return to the game, provided they can tolerate the associated discomfort.

Superficial lacerations are when the skin is torn or ripped. Superficial lacerations do not involve damage below the skin and can generally be managed similar to an abrasion. A superficial laceration that is "smiling (i.e., the edges of the wound are separated) may need sutures or glue to facilitate healing, reduce bleeding and minimize scarring. Although long delays between the occurrence of the wound and its closure is not ideal, the one or two hours that it may take for a player to finish the game before seeking medical attention should not adversely affect the healing of the laceration.

Deep lacerations are tears that extend into the tissue layers below the skin. Initial management consists of cleansing the wound, applying antibiotic ointment and applying pressure with a gauze pad to control bleeding. Players suffering deep lacerations should be removed from the game and seek immediate medical attention to assess potential damage to underlying nerves, tendons, blood vessels, etc. These wounds will also need further extensive cleaning to reduce the risk of infection and will likely need to be sutured.

Contusions

Contusions are bruise-like injuries to the skin, underlying soft tissue, and occasionally to the underlying bone (but not a fracture). Contusions commonly occur when a player is hit by a pitched or batted ball, or when players collide with each other or the ground. Players can often shake these injuries off and immediately return to play. The initial management of these injuries includes the application of ice for up to twenty minutes to reduce pain and swelling. The application of ice can occur immediately if the player comes out of the game, or at the end of the half-inning if the player is able to remain in the game. Any obvious bone deformity or bone misalignment is suggestive of a fracture and the player is unable to bear weight on an affected limb. (Note: Contusions and abrasions often occur together.)

Sprains and Strains

Sprains and strains are stress/tear injuries to muscles, tendons (which connect muscles to bones) or ligaments (which connect bone to bone at joints). Common sites for muscle strains include the shoulder, groin, hamstring or calf. Common sites for tendon and ligament sprains and strains include the wrist, knee and ankle. Muscle sprains and strains usually occur when making extraordinary effort, such as trying to throw a runner out from the outfield or trying to stretch a double into a triple. Injuries to tendons and ligaments occur when a player falls on an outstretched hand (wrist injury), trips when running (knee or ankle injury) or slides awkwardly (knee or ankle injury). Players may be able to walk off these injuries and can be allowed to return to play if they can demonstrate normal running via a few short sprints for a leg injury or normal throwing in the case of an upper arm injury. Otherwise, the player should be removed from the game and should be treated with **Rest**, **Ice**, **Compression** and **Elevation**, or "**RICE**" for the next twenty-four hours. Players with obvious muscle or joint swelling should be managed using **RICE** and should seek medical attention within the next two days unless significant improvement is seen. Players with obvious bone deformities or misalignment should seek immediate medical attention, as should those that cannot bear weight.

Head Injuries

Since the advent of batting helmets, catcher's masks and RIF (cushioned) baseballs, serious head injuries in youth baseball have gone from rare to exceedingly rare. Should a player sustain a blow to the head from a bat, ball, the ground or another player, the initial management should focus on signs of underlying brain injury. Signs that should prompt removal from the game and immediate medical evaluation include loss of consciousness (no matter how brief), disorientation, abnormal behavior (including excessive sleepiness) or vomiting. Players who do not display any of these signs and who are headache-free can return to play but should be watched closely throughout the rest of the game and afterward for any changes in condition.

Nosebleeds

Nosebleeds are best managed by applying continuous pressure (with or without ice). This can be accomplished by pinching the nose just below the nasal bridge. The nasal bridge is where the bone transitions to softer cartilage. Usually ten to twenty minutes of continuous pressure will stop the bleeding and allow the player to return to play. Nosebleeds that do not cease after twenty minutes of continuous pressure, show obvious nose deformities, create difficulty with breathing through the nose or show signs of brain injury (outlined in the head injury section) are all indications that medical attention should be sought immediately.

Eye Injuries

The most common acute eye complaint in youth baseball (other than "the sun got in my eyes") is dirt in the eye. A bottle of saline eye wash/contact solution is ideal for irrigating the eye (although water will do) and usually provides fast relief, as well as reducing the risk of eye infection. If the player's vision is unaffected and he feels no discomfort, he can return to play immediately.

Occasionally a player will sustain a direct blow to the eye or near the eye. If this occurs the player should be assessed for 1) the integrity of eye movement in all directions (left, right, up, down and combinations thereof), 2) visual acuity (have the player read letters on a tee shirt at a distance of fifteen feet), 3) any obstruction of vision (swelling of lid or face) and 4) any bleeding within the eye. Players failing any of these four assessments should be removed from the game and seek immediate medical attention.

Dental/Oral Injuries

The biggest concerns with most dental or oral injuries are control of bleeding and preservation of permanent teeth. Bleeding can usually be controlled by applying direct pressure with a gauze pad, wash cloth or tee shirt. Using ice while applying pressure will also help stop bleeding and help with discomfort. If bleeding cannot be controlled within twenty minutes or if the player complains of breathing difficulties, immediate medical attention should be sought.

In the case of partially dislodged teeth, an attempt (gentle) should be made to reseat the tooth in its socket and hold it in place with gentle pressure until a dentist is consulted. Completely dislodged teeth should be stored in a container with saline, the player's saliva or milk and dentist should be consulted immediately. Storing the tooth in one of these fluids increases the chance that the tooth will survive.

Dehydration

Dehydration is a condition that can be avoided. Review the following section on Player Safety. Within this section is a discussion on dehydration and the need for a player to consume sixteen ounces of a sports drink every hour that he practices or plays.

Dehydration is more likely to occur on days that are both hot and humid. The body sweats fluids onto the skin's surface. The sweat then evaporates, cooling the body. When the humidity is high, this evaporative cooling process is hindered.

By the time a player feels thirsty, dehydration has already begun. As dehydration continues, the player will feel fatigued and light-headed. Dizziness and increased pulse and heart rate may also occur. Cramping of hamstring muscles is a sign of heat cramps. If any of these symptoms appear, have the player rehydrate with a sports drink and keep him in the shade. If the player's body core temperature continues to rise, heat exhaustion will occur. Signs of this are nausea, vomiting and fainting, and medical attention should be sought immediately. In severe cases, heat stroke can occur. Heat stroke can cause loss of consciousness and seizures. If the heat illness has progressed to this level, EMS should be called immediately.

Other

If a player has a chronic medical condition such as asthma or epilepsy, it is very important that his parents and coaches communicate and formulate a plan for dealing with the condition. This action plan can avert a crisis in the event of a seizure or asthma attack.