

Fairport Little League First Aid Manual 2013

Injury Prevention and First Aid

In the event of an emergency, call 911 and send someone to meet the ambulance and direct the EMTs to the proper field. Here are the addresses of all of the relevant FLL locations:

99 Lyndon Road (*always spell Lyndon*)

High Acres: 405 Perinton Parkway

Potter Park: Potter Place

Fellows Road Park: Fellows Road

NS/Dudley: 211 Hamilton Road

FHS: 1358 Ayrault Road

MD: 140 Hulbert Street

JP: 85 Potter Place

MB: 665 Ayrault Road

In a medical emergency, be prepared to quickly do or delegate all of the following:

- call 911
- begin CPR
- obtain the AED (defibrillator) and the big First Aid kit (concession stand)
- page the director on duty to the appropriate field (via PA system)

Evaluating severe injuries:

- Extremities: extreme, immediate swelling, deformity, painful range of motion
- Head: unconsciousness, changes in mental status
- Head/neck: injuries above clavicles with neck pain
- Eyes: vision loss or severe pain
- Chest: shortness of breath, sudden collapse

Treatment of severe injuries:

- Keep calm (you and the player)
- Call 911 for EMS (when in doubt, call for help!)
- Lay the player down, avoid exposure (keep warm/cool)
- Maintain circulation/airway/breathing if necessary
- Protect cervical spine if neck pain or significant trauma
- Apply pressure to bleeding site
- Splint injured extremities when possible

First Aid Kits

Each team is allotted one First Aid kit. Each kit containing an assortment of cold packs, gloves, tape, gauze, adhesive bandages and alcohol swabs. Plan to keep this First Aid manual and all the players' medical release forms with the First Aid kit at all times. Please notify Deb Abell (cell 690-3584) or debabell@rochester.rr.com if you need more supplies. ***Please return these kits at the end of the season!*** Please store the kits carefully. The cold packs will activate and be wasted if they are tossed around or crushed. Also, make sure the cold packs have not started leaking before applying them to skin, especially the face.

Here are some suggestions of other components you may want to add to your kit:

- a couple of old, clean towels or wash cloths
- a water bottle with clean water, not to be used for drinking
- a pair of scissors
- a pair of forceps or tweezers
- extra Zip-loc bags—one for garbage and some for ice

We also have a larger First Aid kit at the concession stand. If you have a medical emergency, plan on having someone run to get this kit. It contains:

- more of everything listed above
- barrier masks (for infection control during artificial respiration)
- rolls of Coban or Medi-Wrap (for wrapping sprained or strained extremities)

We also keep the AED (automatic external defibrillator) at the concession stand. All directors on duty have received training in its use. Deb is happy to review its use with any coaches who would like.

Preventing Injuries:

- Proper maintenance of practice and playing fields: don't practice or play when the fields are unsafe (ie, wet, potholes)
- Don't play or practice when lightning is a threat
- Be aware of playing conditions (ie heat and humidity): keep players well hydrated and dressed appropriately
- Conditioning, stretching, strength and endurance work to improve coordination and agility and prevent injuries
- Consistent and proper use of all protective gear (helmets, cups, etc.)
- Don't allow bat swinging outside of designated areas

CPR (cardiopulmonary resuscitation)

In the unlikely event of collapse on the part of a child or adult, CPR may need to be started. CPR, or cardiopulmonary resuscitation, is the administration of chest compressions and artificial breaths to a person whose own heart and breathing functions have stopped. Maintaining blood flow to the victim's organs by chest compressions is the only chance the person has of surviving such a catastrophic event. Usually, the person will also need treatment with the AED (automatic external defibrillator) as well, but the AED only works if good blood flow by CPR has been maintained as well. Usual causes of sudden cardiopulmonary collapse in adults include, but are not limited to: heart attack, stroke, pulmonary embolism (blood clot in the lungs), dissecting aortic aneurysm, sudden rupture of a cerebral aneurysm.

In children, causes of sudden *cardiac* collapse include: blunt trauma to the chest (see below), cardiomyopathies (thickened heart wall muscle), and myocarditis (infection or inflammation of heart wall muscle).

Regardless of cause, early, effective CPR is essential. Here is a summary of the steps in CPR:

1. Make sure the area is safe (eg, from car traffic, from lightning, etc.)
2. "Call 911 and get the AED" (99 Lyndon Rd.—spell Lyndon)
3. Briefly assess for breathing and pulse. If you have to closely listen for breath sounds, he's likely not breathing. Do not spend more than a couple of seconds on this. Learn how to assess for pulse in the carotid artery—the area on the neck just under the jaw. If the victim still has a pulse, this is the most likely location it will be felt. Do not hesitate to cut away, tear away, or otherwise remove the person's clothing so that you can assess and treat quickly.
4. If no pulse, begin chest compressions. Interlace your fingers, place the heel of your bottom hand on the person's chest, lock your elbows, and push down.
5. Your hands should be located between the person's nipples, directly over the middle of the chest. Make sure you are pushing straight down. Push down about 2 inches in adults, or about 1.5 inches in children. Give repeated compressions, at a rate of about 2 per second.
6. Give 30 chest compressions (adults and kids). Count out loud as you do it.
7. After 30 compressions, give 2 rescue breaths (or have a second person give the breaths). Make sure the chest rises.
8. After 2 rescue breaths, you may briefly assess for a return of pulse and breathing, but be prepared to quickly resume chest compressions.
9. Continue to alternate between 30 chest compressions and 2 rescue breaths until the AED and/or the EMTs arrive. Once the EMTs arrive, DO NOT stop CPR until instructed to do so by them. They may need to do some other stabilizing measures first, and will require your continued assistance.

*****SEE THE NEXT PAGE FOR FURTHER NOTES ON CPR*****

Further notes on CPR

- If there are 2 rescuers available (and there almost always will be in most Little League scenarios), one person may do the chest compressions and the second person may do the rescue breaths. These roles can be switched as one person gets tired.
- With 2-person CPR, the ratio of chest compressions to breaths in adults is still 30:2
- With 2-person CPR in *children*, the ratio of chest compressions to breaths is 15:2.
- Giving rescue breaths without the use of a barrier mask is not recommended. Be aware that victims often vomit once they have received artificial breaths. Directors on duty will be carrying barrier masks, and there are some included with the AED as well.
- CPR should be continued until the AED arrives. Once the AED arrives and is being set up, follow its instructions. Continue CPR until the verbal prompts tell you to stop.
- Consider taking a basic CPR course through the Red Cross or American Heart Association. Even if you are not certified, please familiarize yourself with the basic steps. ANY CPR IS BETTER THAN NO CPR!

Commotio Cordis (cardiac contusion)

This is a rare but devastating cause of sudden, unexpected cardiac death, so it is extremely important to be aware of and prepared for this condition.

In simple terms, commotio cordis is the sudden cessation of heart functioning after sustaining blunt chest-wall trauma, such as from a baseball.

Here is a more academic description: "Commotio cordis typically involves young, predominantly male athletes in whom a sudden, blunt, nonpenetrating and innocuous-appearing trauma to the anterior chest results in immediate cardiac arrest and sudden death from ventricular fibrillation. Resuscitation is rare. Although commotio cordis usually involves impact from a baseball, it has also been reported during hockey, softball, lacrosse, karate, and other sports activities..."

In pig models, the highest incidence of this fatal heart arrhythmia is induced by a hard object striking over the left side of the heart at just *40 mph*.

In witnessed human cases, the force of the blow to the chest usually seems harmless, but results in sudden collapse about 50% of the time, and the other 50% of the time, brief residual period of activity (eg, picking up and throwing a ball, crying) before the final collapse. The majority of reported cases involve a person being struck by a pitched, thrown or batted baseball or softball estimated to be traveling at 30-50mph at most.

Survival of commotio cordis is associated with IMMEDIATE recognition and effective CPR and defibrillation that occur within 1-3 MINUTES of the collapse.

Prevention is key: it is important to train batters to deflect a blow to the chest from a ball, and to train fielders to position their hands and arms in a way that deflects direct chest blows from incoming balls.

Recognition is also key: although the heart is vulnerable to failing in this way for only about 4% of the entire cardiac cycle, it would be prudent to have an immediate action plan in place *any* time a player gets hit in the chest. This plan should include having one or two designated people (parents, coaches, etc.) who can 1)immediately obtain the AED (defibrillator) and 2)call 911.

In this case, getting the defibrillator to the victim takes absolute priority. While awaiting the defibrillator, call 911 and begin CPR.

Choking

Choking occurs when a foreign object becomes lodged in the throat or windpipe, blocking the flow of air. In adults, a piece of food is often the culprit. Young children often put a variety of small objects in their mouths. Because choking cuts off oxygen to the brain, administer first aid as quickly as possible.

The universal sign for choking is hands clutched to the throat. If the person doesn't give the signal, look for these indications:

- Inability to talk
- Difficulty breathing or noisy breathing
- Inability to cough forcefully
- Skin, lips or nails turning blue or dusky
- Loss of consciousness

If choking is occurring, begin to perform the Heimlich maneuver.

Heimlich Maneuver

If the person can cough or make sounds, let him or her cough to try to get the object out. If you are worried about the person's breathing, call 911.

If the person can't breathe, cough or make sounds, then:

Stand or kneel behind the person and wrap your arms around his or her waist. If the person is standing, place one of your legs between his or her legs so you can support the person if he or she faints.

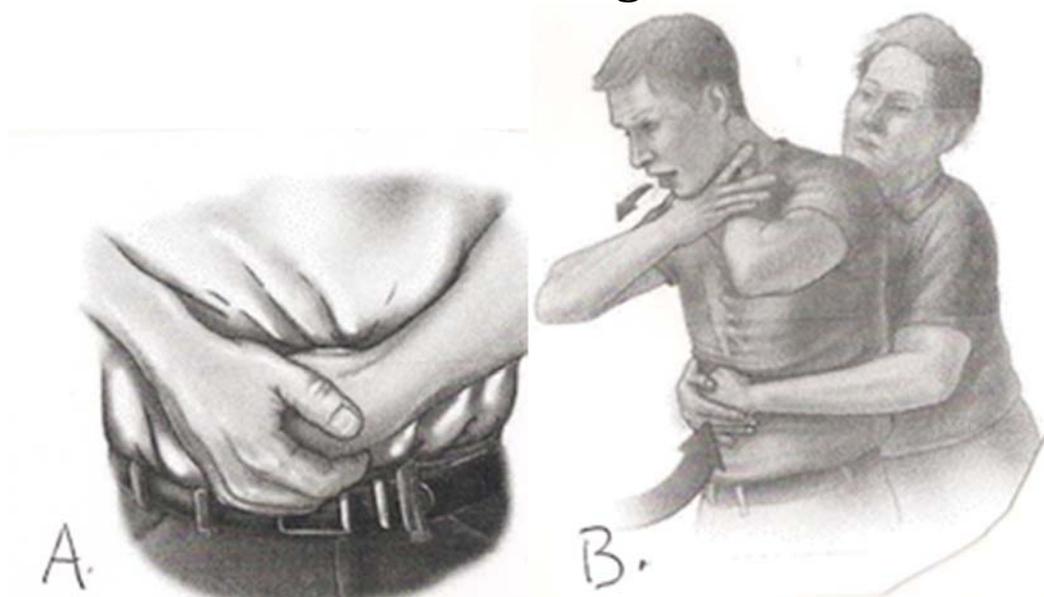
Make a fist with one hand. Place the thumb side of your fist against the person's belly, just above the belly button but well below the breastbone. See picture A (next page)

Grasp your fist with the other hand. Give a quick upward thrust into the belly. This may cause the object to pop out. You may need to use more force for a large person and less for a child or small adult. See picture B (next page)

Repeat thrusts until the object pops out or the person faints.

*****SEE NEXT PAGE FOR DIAGRAMS AND FURTHER INFORMATION*****

Choking, continued



To perform the Heimlich maneuver on yourself:

- Place a fist slightly above your navel
- Grasp your fist with the other hand and bend over a hard surface, like a countertop or a chair
- Shove your fist inward and upward

To perform the Heimlich maneuver on a pregnant or obese person:

- Position your hands a little bit higher than with a normal Heimlich maneuver, at the base of the breastbone, just above the joining of the lowest ribs
- Proceed as with the Heimlich maneuver, pressing hard into the chest, with a quick thrust
- Repeat until the food or other blockage is dislodged or the person becomes unconscious

Clearing the airway of an unconscious person:

- Lower the person on his or her back onto the floor
- Clear the airway. If there is a visible blockage at the back of the throat or high in the throat, reach a finger into the mouth and sweep out the cause of the blockage. Be careful not to push the food or object deeper into the airway, which can happen easily in young children
- If the object remains lodged and the person doesn't respond after you take the above measures, begin cardiopulmonary resuscitation (CPR). The chest compressions used in CPR may dislodge the object. Remember to recheck the mouth periodically.

*****SEE NEXT PAGE FOR FURTHER INFORMATION ON CHOKING*****

Choking, continued

Clearing the airway of a choking infant younger than age 1:

- Assume a seated position and hold the infant facedown on your forearm, which is resting on your thigh
- Thump the infant gently but firmly five times on the middle of the back using the heel of your hand. The combination of gravity and the back blows should release the blocking object
- If this doesn't work, hold the infant face up on your forearm with the head lower than the trunk. Using two fingers placed at the center of the infant's breastbone, give five quick chest compressions.
- If breathing doesn't resume, repeat the back blows and chest thrusts. Call for emergency medical help.
- If one of these techniques opens the airway but the infant doesn't resume breathing, begin infant CPR.

If the child is older than one, give abdominal thrusts only

To prepare yourself for these situations, learn the Heimlich maneuver and CPR in a certified first-aid training course.

Dental Trauma

Save any adult tooth that has been knocked out for possible reimplantation. Dental care should be sought immediately. Handle the tooth only by the crown (chewing edge). Use one of the following options to transport the tooth:

- Try to replace the tooth in the socket, to the level of adjacent teeth. Have the child bite down gently on gauze or a wet tea bag to help keep it in place. The surrounding teeth can be used as anchors. Care must be taken not to swallow the tooth.
- If the tooth cannot be replaced in the socket, place it in a container and cover with a small amount of whole milk or saliva. The tooth can also be carried between lower lip and lower gum or under the tongue.

Ice packs and gauze may be applied to the mouth to control pain and bleeding.

Anaphylaxis and Allergic Reactions

A life-threatening allergic reaction (anaphylaxis) can cause shock, a sudden drop in blood pressure and trouble breathing. In people who have an allergy, anaphylaxis can occur minutes after exposure to a specific allergy-causing substance (allergen). In some cases, there may be a delayed reaction or anaphylaxis may occur without an apparent trigger. Some common anaphylaxis triggers include foods such as peanuts, tree nuts, fish and shellfish, insect stings from bees, yellow jackets, wasps, hornets and fire ants, and certain medications.

Signs and symptoms of anaphylaxis include:

- Skin reactions including hives, itching, and flushed or pale skin
- Swelling of the face, eyes, lips or throat
- Constriction of the airways, leading to wheezing and trouble breathing
- A weak and rapid pulse
- Nausea, vomiting or diarrhea
- Dizziness, fainting or unconsciousness

If you're with someone having an allergic reaction with signs of anaphylaxis:

- Call 911. DON'T WAIT to see whether symptoms get better. ANY sign of anaphylaxis requires emergency care!
- Ask the person if he or she is carrying an epinephrine autoinjector to treat an allergic attack (for example, EpiPen, Twinject).
- If the person says he or she needs to use an autoinjector, ask whether you should help inject the medication. This is usually done by pressing the autoinjector against the person's thigh.
- Have the person lie still on his or her back.
- Loosen tight clothing and cover the person with a blanket. Don't give the person anything to drink.
- If there's vomiting or bleeding from the mouth, turn the person on his or her side to prevent choking.
- If there are no signs of breathing, coughing or movement, begin CPR. Do uninterrupted chest presses of about two a second until paramedics arrive.
- Get emergency treatment even if symptoms start to improve. After anaphylaxis, it's possible for symptoms to recur. Monitoring in a hospital setting for several hours is usually necessary.

Heat Exhaustion

Heat exhaustion is one of the heat-related syndromes, which can range in severity from mild heat cramps to heat exhaustion to potentially life-threatening heatstroke. Signs and symptoms of heat exhaustion often begin suddenly, sometimes after excessive exercise, heavy perspiration and inadequate fluid intake. Signs and symptoms resemble those of shock and may include:

- Feeling faint
- Nausea
- Heavy sweating
- Ashen appearance
- Rapid, weak heartbeat
- Low blood pressure
- Cool, moist skin
- Low-grade fever

If you suspect heat exhaustion:

- Get the person out of the sun and into a shady or air-conditioned location
- Lay the person down and elevate the legs and feet slightly
- Loosen or remove the person's clothing
- Have the person drink cool water (not iced), or a sports drink containing electrolytes
- Cool the person by spraying or sponging him or her with cool water or by fanning
- Monitor the person carefully. Heat exhaustion can quickly become heatstroke. If there is fever greater than 102, fainting, confusion or seizures, get emergency medical assistance

Black Eye

This is caused by bleeding beneath the skin around the eye. Sometimes a black eye indicates a more extensive injury, even a skull fracture, particularly if the area around both eyes is bruised or if there has been a head injury. Although most black-eye injuries are not serious, bleeding within the eye (a *hyphema*) is serious and can reduce vision and damage the cornea. In some cases, abnormally high pressure inside the eyeball (*glaucoma*) can result. To take care of a black eye:

- Using gentle pressure, apply a cold pack to the area around the eye as soon as possible to prevent and reduce swelling. Take care not to press on the eye itself. Continue using cold packs for 24 to 48 hours.
- Be sure there's no blood in the white and colored parts of the eye
- DO A VISION TEST: test the good eye first, then the injured eye. You can hold up a varying number of fingers from a few feet away.
- Have player seek medical care or call 911 if there are any vision problems (double vision, blurring, decreased vision), severe pain, or bleeding from the eye or nose

Concussion

The signs and symptoms of a concussion can be subtle and may not be immediately apparent. Symptoms can last for days, weeks or even longer. Some symptoms of concussions may be immediate or delayed in onset by hours or days after injury. Signs and symptoms of a concussion may include:

- Headache or a feeling of pressure in the head
- Temporary loss of consciousness
- Confusion or feeling as if in a fog
- Amnesia surrounding the traumatic event
- Dizziness or "seeing stars"
- Ringing in the ears
- Nausea or vomiting
- Slurred speech
- Fatigue
- Concentration and memory complaints
- Irritability and other personality changes
- Sensitivity to light and noise
- Sleep disturbances
- Psychological adjustment problems and depression
- Disorders of taste and smell

*****Concussion, continued, on next page*****

Concussion, continued

Seek emergency care for a child who experiences a head injury and:

- Repeated vomiting
- Seizures
- Loss of consciousness lasting more than a minute
- A headache that gets worse over time
- Behavioral changes, including irritability and fussiness
- Changes in physical coordination, including stumbling or clumsiness
- Slurred speech or other changes in speech
- Vision or eye disturbance, including pupils that are bigger than normal (dilated pupils) or pupils of unequal sizes
- Changes in breathing pattern
- Lasting or recurrent dizziness
- Blood or fluid discharge from the nose or ears
- Large head bumps or bruises on areas other than the forehead
- Symptoms that worsen over time

Athletes: No one should return to play or vigorous activity while signs or symptoms of a concussion are present. Experts recommend that an athlete with a suspected concussion not return to play until he or she has been medically evaluated. Experts also recommend that child and adolescent athletes with a concussion not return to play on the same day as the injury. For a very good, free, on-line tutorial about head injury and sports, go to <http://www.cdc.gov/concussion/HeadsUp/Training/HeadsUpConcussion.html>

Sprains & Strains

A **sprain** is the partial or complete stretching or tearing of *ligaments*, the tissue bands that connect bones at the joints. A **strain** is the stretching or tearing of muscles or *tendons*, the tissue bands that connect muscles to bones. Basically, injuries to joints are usually sprains, injuries to muscles and tendons are usually strains.

Ice or heat? **Both.**

Ice first: this will help keep the swelling down initially, as well as reduce muscle spasms and numb nerve endings. Apply periodically for the first 72 hours, until the swelling is improved. Pressure may also be applied, using the same cold pack, or wrapping the site with a bandage or gauze. Pressure also helps reduce swelling, as does elevating the injured site if possible. Most people are familiar with the acronym **RICE**: rest, ice, compression, elevation.

Heat next: this will help enhance circulation to the injury site and speed healing.

Many injuries will need an x-ray to fully assess the severity. When a child is injured, notify the parents, and encourage them to follow up with their child's pediatrician.

If you strongly suspect a fracture, don't move the victim. Call 911 and keep the player comfortable and calm until medical help arrives. Try to keep all unnecessary people away from the injured player. If the accident occurred on the field, you can direct the team to the dugout. **STAY CALM**—the injured child and others around you will react to your actions. You are the coach and it is up to you to take control of the situation.

Fractures

Fractures (broken bones) require medical attention. If the fracture is the result of a major trauma or injury, call 911. Also call 911 if:

- The person is unresponsive, isn't breathing or isn't moving. Begin CPR if there is no respiration or heartbeat
- There is heavy bleeding
- Even gentle pressure or movement causes pain
- The limb or joint appears deformed
- The bone has pierced the skin
- The extremity of the injured arm or leg, such as a toe or finger, is numb or bluish at the tip
- You suspect a bone is broken in the neck, head or back
- You suspect a bone is broken in the hip, pelvis or upper leg (for example, the leg and foot turn outward abnormally, compared with the uninjured leg).

Take these actions immediately while waiting for medical help:

- **Stop any bleeding.** Apply pressure to the wound with a sterile bandage, a clean cloth or a clean piece of clothing.
- **Immobilize the injured area.** Don't try to realign the bone, but if you've been trained in how to splint and professional help isn't readily available, apply a splint to the area.
- **Apply cool packs** to limit swelling and help relieve pain until emergency personnel arrive.
- **Treat for shock.** If the person feels faint or is breathing in short, rapid breaths, lay the person down with the head slightly lower than the trunk, and, if possible, elevate the legs.