Recent data shows 250,000 youth are injured each year playing baseball. This reference guide provides information on the most common baseball injuries requiring treatment.

HEAD INJURIES

A concussion is a brain injury usually caused by a sudden jolt or a blow to the head or neck that disrupts normal brain function. This can occur in baseball from a pitch that hits the batter’s head or a collision at home plate. An athlete does not need to be knocked out or have memory loss to have suffered a concussion.

You may observe that an athlete with a concussion:
• Appears dazed or stunned
• Moves clumsily
• Answers questions slowly
• Forgets plays
• Has behavior or personality changes
• Is unsure of game, score or opponent
• Can’t recall events either before or after hit
• Loses consciousness

An athlete with a concussion may have:
• Headache
• Concentration or memory problems
• Nausea
• Double or fuzzy vision
• Balance problems or dizziness
• Feelings of being “in a fog”
• Sensitivity to light or noise

An athlete with signs of a concussion should be removed from play immediately and not allowed to return until evaluated by a doctor. Do not leave an athlete alone after a concussion. Call for immediate medical help if your child displays:
• A headache that gets worse or lasts for a long time
• Confusion, extreme sleepiness or trouble waking up
• Vomiting (more than once)
• Seizures (arms and legs jerk uncontrollably)
• Trouble walking or talking
• Weak or numb arms or legs
• Any other sudden change in thinking or behavior

Most athletes with a concussion will recover completely within a few weeks of the initial injury. Returning to play before completely recovering puts the athlete at risk for a more serious injury, long term damage and even death.

ELBOW INJURIES

In young players, bones have not finished growing. Repetitive motion can cause muscles and tendons to pull on the bones at these growth sites where they are most vulnerable. Rest is the primary treatment. Prevention by following pitch count recommendations is most important. A good reference for the most up-to-date information on pitch counts is available on the Little League Web site (www.littleleague.org — under the rules and regulation changes tab).

Elbow pain should not be ignored. Rest is recommended to allow for sufficient recovery. If symptoms persist after two weeks of forced rest, a visit to a pediatric orthopedic surgeon is recommended.

ARM INJURIES

Pitching and throwing can lead to overuse injuries in the arms, elbows and shoulders. Tissue such as bone, cartilage or tendon can become damaged by repetitive motion activities. Without adequate time for recovery, the tissue cannot adapt to the demands placed on it. Symptoms of overuse injuries, also considered chronic sports injuries, include:
• Pain when performing the activity or sport
• Dull pain even at rest
• Intermittent swelling
• Inability to straighten the elbow
• Decreasing performance
BASEBALL SAFETY (CONT.)

SPORTS SAFETY

Children ages 5 to 14 make up almost 40 percent of all sports injuries treated in hospital emergency rooms. Injuries in children are best handled by pediatric specialists trained in treating skeletally immature patients.

Athletes should see a pediatrician or pediatric sports medicine physician if any of these symptoms are present:

- Deformity
- Limping that lasts more than 48 hours
- Soft tissue swelling that gets worse the next day despite ice and over-the-counter anti-inflammatory medication
- Effusion - mobile soft tissue swelling on both sides of a joint, often easily seen at the knee or ankle
- Pain that returns quickly with activity at the next session or is not gone after two weeks of rest

How to protect your child:

- Schedule your child for an annual physical before playing sports.
- Monitor play and practice and encourage players to abide by the rules.
- Have a first aid kit handy and an emergency action plan in place.
- Keep sports fun! Remember to be positive and don’t push kids to perform beyond their abilities.

Bumps, Bruises, Twists & Muscle Strains

These can affect all areas of the body. Recommended treatment is the PRICE formula:

- Protect the area with a sling or crutches, if necessary.
- Rest the injured area.
- Ice the injury for 20 minutes at a time. Do not apply the ice directly to the skin.
- Compress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.
- Elevate the injured area above the heart, if possible.

Make sure your young athlete:

- Wears appropriate properly-fitting safety gear, free of heavy wear and tear
- Stays properly hydrated. Kids don’t sweat as much as adults and need to drink plenty of fluids before, during and after activity
- Does warm-up and cool-down exercises before and after practices and games
- Gets proper rest and avoids overdoing it.

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Fifteen percent of basketball players ages 5-15 suffer injuries, mostly involving ankle and knee sprains. Sprains occur when one or more ligaments in a joint are stretched beyond their limits. This guide provides information on common basketball injuries requiring treatment.

**KNEE INJURIES**

A common injury in basketball is an anterior cruciate ligament (ACL) sprain or tear, which occurs when the knee is twisted forcefully or hyperextended. Athletes with a damaged ACL often describe a “pop” at the time of injury, followed by a lot of swelling within a few hours.

Athletes should see a pediatrician or pediatric sports medicine physician if pain and/or swelling persist. In addition:

- In younger athletes, bone maturity helps to determine the treatment plan. Injury to an open growth plate requires special consideration by a pediatric orthopedic specialist.

Core strengthening and training in proper cutting, jumping and landing technique may help to prevent this injury.

Knee pain that comes on slowly over time can indicate other problems, such as:

- **Patello-femoral pain syndrome (Runner’s Knee)** – pain in the front of the knee related to muscle and tissue stress around the knee cap; can be addressed with proper training in physical therapy

- **Osteochondritis dissecans** – a defect in the knee’s cartilage that can become evident over time during repetitive activity such as jumping

- **Osgood-Schlatter disease** – stress-related inflammation in a growth center at the front of the knee

**ASTHMA**

Asthma is a condition that causes wheezing, coughing, shortness of breath or chest tightness.

Some athletes have a form of asthma that causes symptoms during or after physical activity called exercise-induced asthma. Actions that may prevent or lessen exercise-induced asthma are:

- Warming up before a workout or game
- Breathing through the nose, and not the mouth, to warm and humidify the air before it enters the airways

Wheezing or coughing that begins between five to 20 minutes after beginning to run or play is a sign that asthma is not under control and more needs to be done to control symptoms.

**DEHYDRATION**

Basketball players are at risk of dehydration if they don’t get enough fluid to replace what is lost through the skin as sweat and through the lungs while breathing. It is important to drink plenty of fluids before, during and after a workout or game.

Athletes should take a water bottle to school and drink between classes and during breaks so that they are well-hydrated before their workout. In addition:

- Water should be readily available when working out.
- Athletes should drink often, ideally every 5 to 30 minutes.
- Sports drinks are recommended for activities lasting longer than one hour to replace sugar and salt as well as water.

Early signs of dehydration can be non-specific and include fatigue, nausea, decreased athletic performance, headache, apathy, irritability and thirst. Signs of advanced dehydration include dark urine, decrease in reaction time, dry lips and mouth and disorientation.

**ANKLE INJURIES**

Ankle sprains occur most in basketball when landing from a rebound or jumping to make a basket. Treatment varies with the severity of the injury:

- Mild sprains require rest but not necessarily medical treatment.
- Injuries with persistent swelling, pain, or any deformity should be seen by a physician.
BASKETBALL SAFETY (CONT.)

SPORTS SAFETY

Children ages 5 to 14 make up almost 40 percent of all sports injuries treated in hospital emergency rooms. Injuries in children are best handled by pediatric specialists trained in treating skeletally immature patients.

Athletes should see a pediatrician or pediatric sports medicine physician if any of these symptoms are present:
- Deformity
- Limping that lasts more than 48 hours
- Soft tissue swelling that gets worse the next day despite ice and over-the-counter anti-inflammatory medication
- Effusion – mobile soft tissue swelling on both sides of a joint, often easily seen at the knee or ankle
- Pain that returns quickly with activity at the next session or is not gone after two weeks of rest

Bumps, Bruises, Twists & Muscle Strains
These can affect all areas of the body.
Recommended treatment is the **PRICE** formula:
- Protect the area with a sling or crutches, if necessary.
- Rest the injured area.
- Ice the injury for 20 minutes at a time. Do not apply the ice directly to the skin.
- Compress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.
- Elevate the injured area above the heart, if possible.

Make sure your young athlete:
- Wears appropriate properly-fitting safety gear, free of heavy wear and tear
- Stays properly hydrated. Kids don’t sweat as much as adults and need to drink plenty of fluids before, during and after activity
- Does warm-up and cool-down exercises before and after practices and games
- Gets proper rest and avoids overdoing it.

How to protect your child:
- Schedule your child for an annual physical before playing sports.
- Monitor play and practice and encourage players to abide by the rules.
- Have a first aid kit handy and an emergency action plan in place.
- Keep sports fun! Remember to be positive and don’t push kids to perform beyond their abilities.

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Flag football is not a contact sport, so the risk of injury is lower than in traditional football. However, knee and ankle injuries are still common. This reference guide provides information on how to care for some of the injuries that you may see in flag football.

KNEE INJURIES

A common injury in flag football is an anterior cruciate ligament (ACL) sprain or tear, which occurs when the knee is twisted forcefully or hyperextended. Athletes with a damaged ACL often describe a "pop" at the time of injury, followed by a lot of swelling within a few hours. Athletes should see a pediatrician or pediatric sports medicine physician if pain and/or swelling persist. In addition:

- In younger athletes, bone maturity helps to determine the treatment plan. Injury to an open growth plate requires special consideration by a pediatric orthopedic specialist.
- Core strengthening and training in proper cutting, jumping and landing technique may help to prevent this injury.

Knee pain that comes on slowly over time can indicate other problems, such as:

- **Patello-femoral pain syndrome (Runner’s Knee)** – pain in the front of the knee related to muscle and tissue stress around the knee cap. This can be addressed with proper training in physical therapy
- **Osteochondritis dissecans** – a defect in the knee’s cartilage that can become evident over time during repetitive activity
- **Osgood-schlatter disease** – stress-related inflammation in a growth center at the front of the knee

ANKLE INJURIES

The most common injury in sports is a lateral ankle sprain, which occurs in flag football by rolling the ankle over the outside of the foot. A lateral ankle sprain causes damage to the ligaments just below the bone on the outside of the ankle. In some cases a “pop” is felt or heard by the athlete. Treatment varies with the severity of the injury:

- Mild sprains require rest but not necessarily medical treatment.
- Injuries with persistent swelling, pain or any deformity should be seen by a physician.

HEAD INJURIES

A concussion is a brain injury usually caused by a sudden jolt or a blow to the head or neck that disrupts normal brain function. An athlete does not need to be knocked out or have memory loss to have suffered a concussion.

You may observe that an athlete with a concussion:

- Appears dazed or stunned
- Moves clumsily
- Answers questions slowly
- Forgets plays
- Has behavior or personality changes
- Is unsure of game, score or opponent
- Can’t recall events either before or after hit
- Loses consciousness

An athlete with a concussion may have:

- Headache
- Concentration or memory problems
- Nausea
- Double or fuzzy vision
- Balance problems or dizziness
- Feelings of being “in a fog”
- Sensitivity to light or noise
FLAG FOOTBALL SAFETY (CONT.)

Call for immediate medical help if your child displays:
• A headache that gets worse or lasts for a long time
• Confusion, extreme sleepiness or trouble waking up
• Vomiting (more than once)
• Seizures (arms and legs jerk uncontrollably)
• Trouble walking or talking
• Weak or numb arms or legs
• Any other sudden change in thinking or behavior

DEHYDRATION
Flag football players are at risk of dehydration if they don’t get enough fluid to replace what is lost through the skin as sweat and through the lungs while breathing. It is important to drink plenty of fluids before, during and after a workout or game. An athlete’s performance can be impacted by even mild dehydration. Athletes should take a water bottle to school and drink between classes and during breaks so that they are well-hydrated before their workout. In addition:
• Water should be readily available when working out.
• Athletes should drink often, ideally every 15 to 30 minutes.
• Sports drinks are recommended for activities lasting longer than one hour to replace sugar and salt as well as water

Early signs of dehydration can be non-specific and include fatigue, nausea, decreased athletic performance, headache, apathy, irritability and thirst. Signs of advanced dehydration include dark urine, decrease in reaction time, dry lips and mouth and disorientation.

Call for immediate medical help if your child displays:
• A headache that gets worse or lasts for a long time
• Confusion, extreme sleepiness or trouble waking up
• Vomiting (more than once)
• Seizures (arms and legs jerk uncontrollably)
• Trouble walking or talking
• Weak or numb arms or legs
• Any other sudden change in thinking or behavior

BRUISES, BUMPS, TWISTS & MUSCLE STRAINS
These can affect all areas of the body.
Recommended treatment is the PRICE formula:
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Gymnastics injuries send more than 26,000 young athletes to the emergency room each year. As the complexity of routines increases, so does the athlete’s risk of injury. This reference guide provides information on the most common gymnastics injuries that require treatment.

**ANKLE INJURIES**

The most common injury in sports is a **lateral ankle sprain**, which occurs in cheerleading by rolling the ankle over the outside of the foot. A lateral ankle sprain causes damage to the ligaments just below the bone on the outside of the ankle. In some cases a “pop” is felt or heard by the athlete. Treatment varies with the severity of the injury:

- **Mild sprains** require rest but not necessarily medical treatment.
- **Injuries with persistent swelling, pain or any deformity** should be seen by a physician.

**KNEE INJURIES**

A common injury in flag football is an **anterior cruciate ligament (ACL) sprain or tear**, which occurs when the knee is twisted forcefully or hyperextended. Athletes with a damaged ACL often describe a “pop” at the time of injury, followed by a lot of swelling within a few hours.

Athletes should see a pediatrician or pediatric sports medicine physician if pain and/or swelling persist. In addition:

- **In younger athletes**, bone maturity helps to determine the treatment plan. Injury to an open growth plate requires special consideration by a pediatric orthopedic specialist.
- **Core strengthening and training in proper cutting, jumping and landing technique** may help to prevent this injury.

Knee pain that comes on slowly over time can indicate other problems, such as:

- **Patello-femoral pain syndrome (Runner’s Knee)** – pain in the front of the knee related to muscle and tissue stress around the knee cap. This can be addressed with proper training in physical therapy.

- **Osteochondritis dissecans** – a defect in the knee’s cartilage that can become evident over time during repetitive activity

- **Osgood-schlatter disease** – stress-related inflammation in a growth center at the front of the knee

**UPPER BODY INJURIES**

Shoulder and wrist injuries are common in gymnastics because the upper body is required to bear the body’s full weight during routines. A wide range of injuries can occur to these joints.

Gymnasts can suffer overuse injuries to their shoulders when they repeatedly use their shoulders as a weight-bearing joint. Overuse injuries occur when tissue is damaged by repetitive-motion activities over time. Without adequate time for recovery, the tissue cannot adapt to the demands placed on it and further damage is likely. Common shoulder injuries in gymnastics include:

- **Shoulder instability** – the ligaments and capsule that hold the shoulder in place may be loose

- **Shoulder tendonitis** – inflammation and pain caused by repetitive use of the shoulder muscles when the arm is brought above the head

Tumbling routines in gymnastics subject the wrist to forces greater than twice the athlete’s body weight. This can lead to overuse injuries in the hand, wrist and forearm. Tissue such as bone, cartilage or tendon can become damaged by repetitive pounding on the hands, which causes the wrist to be forcefully bent backward. Without adequate time for recovery, the tissue cannot adapt to the demands placed on it. Common wrist injuries in gymnastics include:

- **Wrist sprains** – sudden or repetitive stretching of the ligaments in the wrist.

- **Carpal stress fractures** – fractures to the small bones of the wrist.

Damage caused by repetitive stress in the shoulders and wrists leads to tissue inflammation that causes pain. Symptoms include: pain when performing the activity or sport, dull pain even at rest, intermittent swelling, loss of motion at the shoulder or wrist, decreasing performance.
GYMNASTICS SAFETY (CONT.)

BACK PAIN
Gymnastics puts a lot of demand on a young athlete's back due to repetitive maneuvers that require hyperextension of the back. Some injuries to the back occur suddenly, and are commonly known as a back strain. Others occur more gradually, especially if the body doesn't have time to recover properly. Over time, repeated hyperextension of the low back can cause:

- **Spondylolysis** – a stress fracture of the bones in the lower spine, or lumbar vertebrae
- **Spondylolisthesis** – the lumbar vertebrae slip forward, if an athlete with a stress fracture continues to participate in the sport

WEIGHT MANAGEMENT
Gymnasts should aim to stay close to their competition weight in the off-season in order to avoid dangerous weight-cutting practices during the competitive season. Gymnasts who desire to lose weight should not lose more than 1-2 pounds a week to avoid break down of lean body mass. Weight loss is best achieved using a combination of reducing caloric intake and increasing calories burned. Nutrition tips for good weight control include:

- Give your body energy from sources of carbohydrates, proteins and fats. Do not omit any food groups.
- Choose whole-grain foods, lean protein and healthy fats at meal times.
- Eat a balanced diet rich in fruits, vegetables and fiber.
- Drink calorie-free beverages; eat fresh fruits instead of drinking fruit juices.
- Watch your portion sizes.
- Choose low-fat dairy products.
- Do not skip meals. Eat a healthy snack if hungry in between meals.
- Limit high-calorie foods with added sugar and fat.

BRUISES, BUMPS, TWISTS & MUSCLE STRAINS
These can affect all areas of the body. Recommended treatment is the **PRICE** formula:

- **P**rotect the area with a sling or crutches, if necessary.
- **R**est the injured area.
- **I**ce the injury for 20 minutes at a time. Do not apply the ice directly to the skin.
- **C**ompress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.
- **E**levate the injured area above the heart.

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SOCCER SAFETY
A PARENT’S GUIDE FOR KEEPING KIDS IN THE GAME

Soccer is one of the fastest growing sports in the United States. With the rise in participation, the number of athletes at risk for injuries is also increasing. This reference guide provides information on the most common soccer injuries that require treatment.

KNEE INJURIES
A common injury in soccer is an anterior cruciate ligament (ACL) sprain or tear, which occurs when the knee is twisted forcefully or hyperextended. Athletes with a damaged ACL often describe a “pop” at the time of injury, followed by a lot of swelling within a few hours.

Athletes should see a pediatrician or pediatric sports medicine physician if pain and/or swelling persist. In addition:

• In younger athletes, bone maturity helps to determine the treatment plan. Injury to an open growth plate requires special consideration by a pediatric orthopedic specialist.

• Core strengthening and training in proper cutting, jumping and landing technique may help to prevent this injury.

Knee pain that comes on slowly over time can indicate other problems, such as:

• Patello-femoral pain syndrome (Runner’s Knee) – pain in the front of the knee related to muscle and tissue stress around the knee cap. This can be addressed with proper training in physical therapy.

• Osteochondritis dissecans – a defect in the knee’s cartilage that can become evident over time during repetitive activity.

• Osgood-schlatter disease – stress-related inflammation in a growth center at the front of the knee.

ANKLE INJURIES
The most common injury in sports is a lateral ankle sprain, which occurs in soccer by rolling the ankle over the outside of the foot. A lateral ankle sprain causes damage to the ligaments just below the bone on the outside of the ankle. In some cases a “pop” is felt or heard by the athlete. Treatment varies with the severity of the injury:

• Mild sprains require rest but not necessarily medical treatment.

• Injuries with persistent swelling, pain or any deformity should be seen by a physician.

HEAD INJURIES
A concussion is a brain injury usually caused by a sudden jolt or a blow to the head or neck that disrupts normal brain function. An athlete does not need to be knocked out or have memory loss to have suffered a concussion.

You may observe that an athlete with a concussion:

• Appears dazed or stunned

• Moves clumsily

• Answers questions slowly

• Forgets plays

• Has behavior or personality changes

• Is unsure of game, score or opponent

• Can’t recall events either before or after hit

• Loses consciousness

An athlete with a concussion may have:

• Headache

• Concentration or memory problems

• Nausea

• Double or fuzzy vision

• Balance problems or dizziness

• Feelings of being “in a fog”

• Sensitivity to light or noise

An athlete with signs of a concussion should be removed from play immediately and not allowed to return until evaluated by a doctor. Do not leave an athlete alone after a concussion.
SOCCER SAFETY (CONT.)

Call for immediate medical help if your child displays:

- A headache that gets worse or lasts for a long time
- Confusion, extreme sleepiness or trouble waking up
- Vomiting (more than once)
- Seizures (arms and legs jerk uncontrollably)
- Trouble walking or talking
- Weak or numb arms or legs
- Any other sudden change in thinking or behavior

BRUISES, BUMPS, TWISTS & MUSCLE STRAINS

These can affect all areas of the body.

Recommended treatment is the PRICE formula:
- Protect the area with a sling or crutches, if necessary.
- Rest the injured area.
- Ice the injury for 20 minutes at a time. Do not apply the ice directly to the skin.
- Compress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.
- Elevate the injured area above the heart.

DEHYDRATION

Soccer players are at risk of dehydration if they don’t get enough fluid to replace what is lost through the skin as sweat and through the lungs while breathing. It is important to drink plenty of fluids before, during and after a workout or game. An athlete’s performance can be impacted by even mild dehydration. Athletes should take a water bottle to school and drink between classes and during breaks so that they are well-hydrated before their workout. In addition:

- Water should be readily available when working out.
- Athletes should drink often, ideally every 15 to 30 minutes.
- Sports drinks are recommended for activities lasting longer than one hour to replace sugar and salt as well as water

Early signs of dehydration can be non-specific and include fatigue, nausea, decreased athletic performance, headache, apathy, irritability and thirst. Signs of advanced dehydration include dark urine, decrease in reaction time, dry lips and mouth and disorientation.

Call for immediate medical help if your child displays:

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SOFTBALL SAFETY

A PARENT’S GUIDE FOR KEEPING KIDS IN THE GAME

Softball is a non-contact sport so the risk of injury is much lower than other sports. However, shoulder, knee, and ankle injuries are common. This reference guide provides information on softball injuries that require treatment.

SHOULDER INJURIES

Shoulder injuries are common injuries in softball. They most often are caused by the collision that is forced when one player drives another into the boards or ice. Seek immediate medical care when the collar bone appears deformed or if the athlete indicates the shoulder is “out of socket.” Symptoms include:

- Pain when performing the activity or sport
- Dull pain even at rest
- Intermittent swelling
- Loss of motion at the shoulder or wrist
- Decreasing performance

ANKLE INJURIES

The most common injury in sports is a lateral ankle sprain, which occurs by rolling the ankle over the outside of the foot. A lateral ankle sprain causes damage to the ligaments just below the bone on the outside of the ankle. In some cases a “pop” is felt or heard by the athlete. Treatment varies with the severity of the injury:

- Mild sprains require rest but not necessarily medical treatment.
- Injuries with persistent swelling, pain or any deformity should be seen by a physician.

HEAD INJURIES

A concussion is a brain injury usually caused by a sudden jolt or a blow to the head or neck that disrupts normal brain function. An athlete does not need to be knocked out or have memory loss to have suffered a concussion. You may observe that an athlete with a concussion:

- Appears dazed or stunned
- Moves clumsily
- Answers questions slowly
- Forgets plays
- Has behavior or personality changes
- Is unsure of game, score or opponent
- Can’t recall events either before or after hit
- Loses consciousness

An athlete with a concussion may have:

- Headache
- Concentration or memory problems
- Nausea
- Double or fuzzy vision
- Balance problems or dizziness
- Feelings of being “in a fog”
- Sensitivity to light or noise

An athlete with signs of a concussion should be removed from play immediately and not allowed to return until evaluated by a doctor. Do not leave an athlete alone after a concussion.

DEHYDRATION

Softball players are at risk of dehydration if they don’t get enough fluid to replace what is lost through the skin as sweat and through the lungs while breathing. It is important to drink plenty of fluids before, during and after a workout or game. An athlete’s performance can be impacted by even mild dehydration. Athletes should take a water bottle to school and drink between classes and during breaks so that they are well-hydrated before their workout. In addition:

- Water should be readily available when working out.
- Athletes should drink often, ideally every 15 to 30 minutes.
- Sports drinks are recommended for activities lasting longer than one hour to replace sugar and salt as well as water.

Early signs of dehydration can be non-specific and include fatigue, nausea, decreased athletic performance, headache, apathy, irritability and thirst. Signs of advanced dehydration include dark urine, decrease in reaction time, dry lips and mouth and disorientation.
SSM Health Cardinal Glennon SportsCare is the premier pediatric sports medicine provider in St. Louis and St. Charles. We provide exclusive, direct access to comprehensive medical care for young athletes. By working with multiple specialists and care partners, we guarantee your child will get the top care that is best suited to treat their unique injury, improving recovery time and outcome.

Specialists your child has access to through SSM Health Cardinal Glennon SportsCare include orthopedists, pulmonologists, cardiologists, radiologists, neurologists, emergency medicine physicians, adolescent medicine physicians, rehabilitation specialists, physical therapists, nutritionists and pediatric psychologists.

Partners your child has access to through SSM Health Cardinal Glennon SportsCare include SSM Health Cardinal Glennon Children’s Hospital, SSM Health Orthopedics, SSM Physical Therapy and SLUCare Physician Group of Saint Louis University. We also keep kids in the game through educational programs and support for parents, coaches and athletes that focus on injury prevention, proper technique and overall athletic health.

For more information about SSM Health Cardinal Glennon SportsCare or to find a specialist for your athlete, call us at 314-577-5640 or visit us at cardinalglennon.com/sportscare.

Expert care for young athletes by SSM Health Cardinal Glennon Children’s Hospital and SSM Health emergency medicine specialists, 24 hours a day in the ER at: SSM Health DePaul Hospital, SSM Health St. Clare Hospital, SSM Health St. Joseph Hospital - Lake Saint Louis, SSM Health St. Joseph Hospital - St. Charles.
Volleyball Safety

A Parent’s Guide for Keeping Kids in the Game

Knee and ankle injuries are the most common injuries seen in youth volleyball. Parents and coaches should take precautions to be sure their players don’t suffer sudden or overuse injuries. This reference guide provides information on the most common volleyball injuries requiring treatment.

**Shoulder Injuries**

Because of repeatedly moving their arms overhead, volleyball players can suffer overuse injuries to their shoulders. Without ample time for recovery, the tissue cannot adapt to the demands placed on it, and further damage is likely. Overuse injuries, also called chronic sports injuries, can have symptoms including:

- Pain when performing the activity or sport
- Intermittent swelling
- Decreasing athletic performance
- Dull pain even at rest

**Knee Injuries**

A common injury in youth volleyball is an anterior cruciate ligament (ACL) sprain or tear, which occurs when the knee is twisted forcefully or hyperextended. Athletes with a damaged ACL often describe a “pop” at the time of injury, followed by a lot of swelling within a few hours.

Athletes should see a pediatrician or pediatric sports medicine physician if pain and/or swelling persist. In addition:

- In younger athletes, bone maturity helps to determine the treatment plan. Injury to an open growth plate requires special consideration by a pediatric orthopedic specialist.
- Core strengthening and training in proper cutting, jumping and landing technique may help to prevent this injury.

Knee pain that comes on slowly over time can indicate other problems, such as:

- Patello-femoral pain syndrome (Runner’s Knee) – pain in the front of the knee related to muscle and tissue stress around the knee cap. This can be addressed with proper training in physical therapy
- Osteochondritis dissecans – a defect in the knee’s cartilage that can become evident over time during repetitive activity
- Osgood-schlatter disease – stress-related inflammation in a growth center at the front of the knee

**Ankle Injuries**

The most common injury in sports is a lateral ankle sprain. This injury occurs in volleyball by rolling the ankle over the outside of the foot. A lateral ankle sprain causes damage to the ligaments just below the bone on the outside of the ankle. In some cases a “pop” can be felt or heard by the athlete.

Treatment recommendations vary with the severity of the injury:

- Mild sprains require rest, but not necessarily medical treatment.
- Injuries with persistent swelling, pain, or any deformity should be seen by a physician.
Volleyball Safety (Cont.)

Sports Safety

Children ages 5 to 14 make up almost 40 percent of all sports injuries treated in hospital emergency rooms. Injuries in children are best handled by pediatric specialists trained in treating skeletally immature patients.

Athletes should see a pediatrician or pediatric sports medicine physician if any of these symptoms are present:

- Deformity
- Limping that lasts more than 48 hours
- Soft tissue swelling that gets worse the next day despite ice and over-the-counter anti-inflammatory medication.
- Effusion – mobile soft tissue swelling on both sides of a joint, often easily seen at the knee or ankle
- Pain that returns quickly with activity at the next session or is not gone after two weeks of rest.

How to protect your child:

- Schedule your child for an annual physical before playing sports.
- Monitor play and practice and encourage players to abide by the rules.
- Have a first aid kit handy and an emergency action plan in place.
- Keep sports fun! Remember to be positive and don’t push kids to perform beyond their abilities.

Bumps, Bruises, Twists & Muscle Strains

These can affect all areas of the body. Recommended treatment is the PRICE formula:

- Protect the area with a sling or crutches, if necessary.
- Rest the injured area.
- Ice the injury for 20 minutes at a time. Do not apply the ice directly to the skin.
- Compress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.
- Elevate the injured area above the heart, if possible.

Make sure your young athlete:

- Wears appropriate properly-fitting safety gear, free of heavy wear and tear
- Stays properly hydrated. Kids don’t sweat as much as adults and need to drink plenty of fluids before, during and after activity.
- Does warm-up and cool-down exercises before and after practices and games
- Gets proper rest and avoids overdoing it.

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