

TWIN CITIES LITTLE LEAGUE



2020

Safety Manual

“Play Hard, Play Safe”

*League ID # 4-05-03-02
California District 3
District Administrator Ned White
District Safety Officer Ned White
TCLL Safety Officer Dr. Scott Calzaretta*

Table of Contents

	Page
TCLL Little League Telephone Directory	4
Introduction	5
TCLL Little League and the ASAP Program	6
What is ASAP?	6
Highlights of the ASAP Program	6
Coaching Requirements	8
Volunteer Application	8
2020 Expectations Contract	9
First-Aid and CPR/AED Training	11
Skills Training for Managers and Coaches	11
TCLL Little League Safety Code	13
First-Aid Training and Equipment	13
Field Conditions Must be Appropriate for Safe Play	14
General Safety Rules for Practices and Games	14
Safety Equipment	16
Safety Considerations	18
Pre-Game Safety Issues	18
Suggestions for Warm-up Drills	20
Insuring Safe Play on the Field	22
Overuse Injuries	26
Recognizing Pitching Arm Fatigue	29
Teach Safe Sliding Techniques	30
Advanced Sliding Techniques	32
Mouthguards	32
Make Sure Your Players Use Sunscreen	33
Keep Your Players Hydrated	35
Batting Cage Guidelines	36
Additional Health Tips for Baseball	36
Lightning Safety Procedures	36
General Safety Rules	39
General Accident Prevention	38
Bicycle Safety Rules	41
For Parents and Players at the S.F./Marin Little League Fields	41
Treating Baseball Related Injuries	42
Injury Management	43
Calling for Emergency Medical Assistance	43
What is First-Aid?	44
First-Aid Kits	44
Good Samaritan Immunity	45
Communicable Disease Safeguards	46
First-Aid	47
Cardiopulmonary Resuscitation (CPR)	47
How to Recognize a Heart Attack	48
How to Recognize a Cardiac Arrest	48
How to Perform CPR (on Adults)	49
How to Perform CPR (on Children)	51
Use of an AED	53
Using the AED on Children under 9	56
Heimlich Maneuver	57
Commotio Cordis	58

Table of Contents

	Page
Head Injuries	60
Concussion	60
Signs of Head and Spine Injuries	60
General Care for Head and Spine Injuries	61
Shock	61
Heat Exhaustion and Heat Stroke	62
Broken Bones	65
Eye Injuries	66
Tooth Injuries	68
Avulsion	68
Fracture	68
Luxation	69
Asthma	70
Sprains and Strains	70
Wound Care	71
Small Cuts or Abrasions	71
Deep Wounds	72
Nosebleed	73
Bee Stings	73
Accident Reporting Procedures	74
When to Report	74
How to Report	74
What to Report	75
Follow-up by the TCLL Little League	75
Little League Excess Insurance	75
Medical Release Requirements	76
Snack Bar Safety	77
Snack Bar Guidelines	77
Storage Shed Procedures	79
Appendix	80
Little League Volunteer Application	
Expectations Contract for Players and Parents	81
Pre-Game Checklist	82
Baseball Pitcher Eligibility Tracking Form	84
Pitch Count Form	85
Incident/Injury Tracking Report Form	86
Safety Suggestion Form	88
Little League Facility Survey	
Endnotes	89

Twin Cities Little League 2020 Telephone Directory

Important Phone Numbers

Emergency (private or public phone):	911
Emergency (cell phone):	415-472-0911 (Marin)/415-861-8020 (S.F.)
Police (Non Emergency):	415-927-5150 (Corte Madera Police Dept.)
Fire (Non Emergency):	415-927-5077 (Corte Madera Fire District) 415-388-8182 (So. Marin Fire District)

TCLL Little League Safety Officer

Dr. Scott Calzaretta	415-927-8806 (Home) 415-299-1200 (Cell) 415-495-2225 (Office)
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TCLL Little League Board of Directors(see website)

President	Michael Boland	707-772-9730
Vice President	Ted Meyer Jr	See Website
Secretary	Jamie Byrnes	See Website
Treasurer	Jon Weinberg	See Website
Safety Officer	Scott Calzaretta	415-299-1200
Player Agent	Chad Solter	415-548-0660
Season Scheduler	Rajeev Ghia	415-713-7578
IT/Website	Brent Baker	415-279-2201
Equipment & Field Manager	Ted Meyer	415-308-1510
Jr League Commissioner	Tad Finnie	See Website
Major League Commissioner	Jay Sternberg	415-497-3708
Minor League Commissioner	Paul Gehrman	415-596-5869
Rookie, Fall Ball Commissioner	Erik Brent	209-485-4583
Farm Ball Commissioner	Bryce Fenster	415-465-0311
T-Ball Commissioner	Ross Murray	415-516-8449
Umpire-in-Chief	Steve Lightfoot	415-945-1373
Concession Manager	Casey Roberts	415-845-9616
Director of New Sponsorships	Benjamin Faber	415-686-4980
Team Parent Coordinator	Karmela Cleary	See Website

Introduction

Welcome to another season of Twin Cities Little League!

Baseball is played by millions of children every year and is widely considered to be a safe sport. However, there are risks in playing the game that should be recognized. In April 2001, the American Academy of Pediatrics Committee on Sports Medicine and Fitness published a policy statement on baseball injuries in children. The report compiled some sobering statistics concerning the threat of injury to children participating in organized baseball programs.

“The overall incidence of injury in baseball ranges between 2% and 8% of participants per year. Among children 5 to 14 years of age, an estimated 162,000 baseball, softball, and tee-ball injuries were treated in emergency departments in 1995. The number of injuries generally increased with age, with a peak incidence at 12 years. Of the injuries, 26% were fractures and 37% were contusions and abrasions. The remainder were strains, sprains, concussions, internal injuries, and dental injuries.

The potential for catastrophic injury resulting from direct contact with a bat, baseball, or softball exists. Deaths have occurred from impact to the head resulting in intracranial bleeding and from blunt chest impact, probably causing ventricular fibrillation or asystole (commotio cordis). Children 5 to 15 years of age seem to be uniquely vulnerable to blunt chest impact because their thoraces may be more elastic and more easily compressed. Statistics compiled by the U.S. Consumer Product Safety Commission indicate that there were 88 baseball-related deaths to children in this age group between 1973 and 1995, an average of about 4 per year. This average has not changed since 1973. Of these, 43% were from direct-ball impact with the chest (commotio cordis); 24% were from direct-ball contact with the head; 15% were from impacts from bats; 10% were from direct contact with a ball impacting the neck, ears, or throat; and in 8%, the mechanism of injury was unknown.

“Direct contact by the ball is the most frequent cause of death and serious injury in baseball.”¹

Notwithstanding these statistics, the American Academy of Pediatrics emphasizes that “catastrophic and chronically disabling injuries are rare [and] the frequency of injuries does not seem to have increased during the past 2 decades.”² Indeed, in comparison to other sports, baseball had fewer overall injuries requiring medical treatment in 2007 than basketball or football according to injury data estimates published by the U.S. Consumer Product Safety Commission.³

In an effort to minimize the risks of baseball-related injuries, the TCLL Little League has joined with Little League Baseball®, Inc. and leagues throughout the country in making a commitment to safety through Little League Baseball’s ASAP program.



The ASAP Program

What is ASAP?

In 1995, Little League Baseball® introduced ASAP (“A Safety Awareness Program”). The mission of ASAP is:

“To create awareness, through education and information, of the opportunities to provide a safer environment for kids and all participants of Little League Baseball.”

The ASAP program has had a dramatic effect in reducing the rate of injuries in Little League Baseball®. Since its introduction, injury claims have dropped by 78% from 5695 annual injuries in 1995 to 1276 injuries in 2005.⁴

The TCLL Little League recognizes the importance of the ASAP program through the appointment of a Safety Officer to the Board of Directors and the implementation of safety measures that are designed to make playing baseball in our community a safer and more enjoyable experience for players, Managers, Coaches, and spectators.

As part of ASAP, the TCLL Little League is required to submit a completed safety plan to Little League Baseball® by April 1, 2020 explaining the steps we have taken and plan to take to become a safer league. By participating in the ASAP program, we not only gain the satisfaction of knowing we have made it safer for our children to play baseball; the league has the added benefit of obtaining a 20 percent premium credit on our player accident insurance coverage.

The 2020 Safety Manual provides a comprehensive overview of the league’s safety program as well as a summary of first-aid guidelines for use in addressing field emergencies. It is distributed annually to the league’s Managers, Coaches, Snack Bar workers, and Board of Directors. Please familiarize yourself with its contents, as adherence to its provisions is expected of all league volunteers.

Highlights of the ASAP Program

The TCLL Little League’s Safety Manual meets the following 13 requirements for a qualified ASAP plan.

- (1) The league has an active Safety Officer who sits on the Board of Directors and whose name is on file with Little League International. (See pp. 4, 13)
- (2) The league publishes and distributes a paper copy of the Safety Manual to volunteers. (See p. 6)
- (3) The league posts and distributes emergency and key official’s phone numbers. (See p. 4)

- (4) The league uses the 2020 Volunteer Application Form to conduct a background check on ALL volunteers (Managers, Coaches, board members and any others who provide regular services to the league and/or have repetitive access to or contact with players or teams) for sex abuse. (See pp. 8-9)
- (5) The league provides and requires fundamentals/skills training, with at least one coach or manager from each team attending each year. (See p. 11)
- (6) The league requires first-aid training for coaches and manager, with at least one Coach or Manager from each team attending. (See p. 11)
- (7) The league requires Managers/Coaches or Umpires to walk the field to check for hazardous conditions before it is used for a practice or game. (See p. 14, 18)
- (8) The league completes an annual Little League Facility Survey to help it find and correct facility concerns. (See Appendix)
- (9) The league has written safety procedures for concession stands, and the concession manager is trained in safe food handling/preparation and procedures. (See pp 72-73)
- (10) The league requires regular inspection and replacement of equipment. (See pp 16, 19)
- (11) The league requires prompt reporting of accidents to the league Safety Officer within 24 hours and tracking of such accidents to evaluate safety procedures and to help avoid future injuries. (See pp. 13, 69)
- (12) The league requires a first-aid kit at each practice and game. (See pp. 13, 43)
- (13) The league enforces Little League rules including those rules governing proper equipment and the rule prohibiting coaches from catching pitchers even during batting practice. (See pp. 13-17)

Coaching Requirements

Managing or coaching a Little League team is both a privilege and a responsibility. The TLCC Little League expects its coaching volunteers not only to understand the rules of the game, but how to interact with children of various ages; how to teach them fundamental baseball skills; and how to oversee practices and games that are safe, instructive, and fun. Managers and Coaches are also role models for their players and are expected to behave accordingly at all times.

“The actions of players, managers, coaches, umpires and league officials must be above reproach. Any player, manager, coach, umpire or league representative who is involved in a verbal or physical altercation, or an incident of unsportsmanlike conduct, at the game site or any other Little League activity, is subject to disciplinary action by the Local Little League Board of Directors.” [Little League Baseball® Official Regulations, XIV(a)].

In keeping with this philosophy, Managers and Coaches must satisfy the following four requirements:

- (1) Submit a Volunteer Application to the league President each year;
- (2) Subscribe to the league Managers/Coaches Expectations Contract;
- (3) Complete first-aid training on a biannual basis, with one Manager or Coach from each team attending each year; and
- (4) Attend a baseball skills course at least once every 3 years, with one Manager or Coach from each team attending each year.

Volunteer Application

Little League Baseball® has promulgated rules designed to insure that children participating in Little League programs are protected from individuals who would abuse or exploit them in any way. [See Official Regulations, I.(b) and I.(c)(8) and (9)].

At the heart of these rules is a requirement that **all volunteers with repetitive access to players or teams** complete a Little League Volunteer Application, a copy of which can be found in the Appendix, so that the league can conduct a national background screening. This includes Managers, Coaches, Team Parents, Strawberry Snack Bar workers, and members of the league’s Board of Directors. The Little League Baseball® 2020 Official Regulations provide that:

“As a condition of service to the league, all managers, coaches, Board of Directors members and any other persons, volunteers or hired workers, who provide regular service to the league and/or have repetitive access to, or contact with players or teams, must complete and submit an official ‘Little League Volunteer Application’ to the local league president. Annual background screenings must be completed prior to the applicant assuming his/her duties for the current season. Refusal to annually submit a fully completed ‘Little League Volunteer Application’ must result in the immediate dismissal of the individual from the local league.” [Official Regulations, I.(b)].

The Regulations further state that “No local league shall permit any person to participate in any manner, whose background check reveals a conviction or guilty plea for any crime involving or against a minor. A local league may prohibit any individual from participating as a volunteer or hired worker, if the league deems the individual unfit to work with minors.” [Official Regulations, I.(c)(6)].

The league President is required to maintain the applications, at a minimum, for the duration of the applicant’s service to the league for this year. [Official Regulations, I.(c)(8)]. The results of any background check by the league will be held in the strictest confidence.

A league’s failure to comply with these Regulations “may result in the suspension or revocation of tournament privileges and/or the local league’s charter by action of the Charter or Tournament Committee in Williamsport.” [Official Regulations, I.(c)(9)].

2020 Expectations Contract

For Managers and Coaches: In addition to the Volunteer Application, league Managers and Coaches are required to sign an expectations contract enumerating their responsibilities and the league’s expectations of them. Copies will be distributed with the Volunteer Application and are expected to be signed and returned to the League Commissioner or league President, who will retain the originals in the league’s files.

In the TLCC Little League, all Managers and Coaches have the responsibility:

- ❖ As a league representative, to be courteous, helpful, and always respectful of one’s players, umpires, and opposing teams. Model this behavior for your players as well as for spectators.
- ❖ To be encouraging at all times of one’s own team players and those of other teams. Be positive and respect each child as an individual; strive to understand each child’s skills and abilities as well as potential, and set reasonable expectations for each child’s level of play.
- ❖ To be physically and mentally fit to lead and teach players at all practices and games.
- ❖ To be as organized and ready for each practice and game as possible so that the players will benefit the most from your leadership.
- ❖ To supply information as necessary to complete your Volunteer Application.
- ❖ To be prepared for emergencies of any kind, as a responsible adult in charge of children.
- ❖ To make sure that the playing environment is safe and supportive for children learning new and improving existing baseball skills.
- ❖ To read, understand and follow all Little League rules and regulations, including those outlined in the league Safety Manual.

- ❖ To attend and complete a course in first-aid training on a biannual basis **prior** to Opening Day.
- ❖ To attend coaching and/or skills training programs at least once every 2 years in order to develop as much knowledge as possible of fundamental baseball skills and strategies.
- ❖ To attend scheduled meetings and functions as appropriate to your position.
- ❖ To bring the Little League Baseball® 2020 Official Regulations and Playing Rules to every game.
- ❖ To have, in your possession at all practices and games, the players' Registration and Medical Consent forms that list parent, physician, and dentist contact information and treatment authorization if an injury should occur.
- ❖ To make sure that emergency telephone numbers are posted in each equipment shed or box at league sponsored fields at all times.
- ❖ To have a fully charged cellular telephone with which to make emergency calls in your possession or confirm its availability at all practices and games.
- ❖ To be alert to potential hazards on or around the field, and to take action immediately to address those hazards, to the extent possible. The playing field **must** be inspected by the Manager or Coach prior to every practice and game.
- ❖ To notify the league Safety Officer, Scott Calzaretta, **within 24 hours**, of any incident that causes any player, Manager, Coach, umpire, volunteer or spectator to receive medical treatment or first-aid.
- ❖ To take immediate action if any player, Manager, Coach, umpire, official or spectator puts anyone at risk of harm or injury or inflicts injury on anyone (mental or physical), intended or not. If the Manager or Coach believes a player has intentionally injured another player during a practice or game, that player is to be immediately suspended from play until such time as the league Board of Directors has reviewed the incident and made a decision regarding the player. You must submit a report of any such incident to the league President, Mike Boland, **within 24 hours**.
- ❖ To enforce the Little League bans on the use of tobacco or alcohol in any form on the playing fields, in the dugouts or in the stands.
- ❖ To supervise the care and use of all league equipment and uniforms and to regularly inspect the equipment to make sure it is safe for use.
- ❖ To use only the baseballs specified for use in your league.
- ❖ To confirm that all male players are appropriately equipped with athletic supporters and hard cups, where appropriate, at both practices **and** games.
- ❖ To assist in the clean-up of the field and stands after every game, and, when home team, drag the field after every game and practice.
- ❖ To return all equipment to the league Equipment Manager at the end of the season and to complete any end-of season evaluation forms.

For Players and Parents: The TCLL Little League has also issued an expectation contract for players and parents that explains what is expected of them. These must be signed as part of the registration process for each player. A copy of this form can be found in the Appendix.

First-Aid Training

All league Managers and Coaches are required to undergo biannual training in first-aid. This training is important for a number of reasons.

First, as reflected in the Introduction, the overall incidence of injury in youth baseball ranges between 2% and 8% of participants each year. In 2007, an estimated 109,202 baseball and softball injuries involving children under 15 years of age were treated in hospital emergency rooms.⁵

Training in first-aid is critical because a person's response in the first few minutes after an injury can make a significant difference in the victim's outcome. Additionally, current training will help you remain calm in a crisis situation.

For these reasons, the league requires **every** member of the coaching staff from each team to receive this training every other year in order to insure that there will always be adults on the field who have been trained in these essential skills should an injury occur at a practice or game.

In 2020, the league is recommending first-aid training via the Corte Madera/Larkspur Fire Department-It is up to you to contact them for additional times and availability:

**Multiple dates First Aid Call 927-5077Corte Madera/Larkspur Fire Department
Call for Dates CPR (see above)
March 12/13/14 Kentfield C.E.R.T. training (415-961-0907)
April 9/11/18 San Rafael**

Skills Training for Managers and Coaches

Managers and Coaches are required to familiarize themselves with the skills needed by young players to play baseball, not only better but also more safely.⁶

Little League Baseball® now **requires** that one Manager or Coach from each team attend a skills training program each year. With Managers and Coaches being the most critical volunteers in the program -- from their presence at games and practices to their authority at those events -- having well trained Coaches and Managers is vital to the development of young players as well as to the health and safety of everyone involved.

Under Little League rules, in order to be eligible as a Manager or Coach in the TCLL Little League, every active Manager and Coach must attend a skills training programs once every 3 years, with one member of the coaching staff from each team attending each year.

For 2020, the league will be offering baseball skills training on the following dates and times at the listed locations:

Contact Tad Finnie(see BOD page) for dates TBD
(Tenative- [Weekly in March](#) - [Joe Wagner](#))

The TLCC Little League has taken a number of steps designed to strengthen the ASAP program.

League Safety Officer: Responsibility for safety procedures in the league rests with the Safety Officer, who is appointed to the Board of Directors to oversee and manage the ASAP program. For the 2020 season, the Safety Officer is Dr. Scott Calzaretta. He can be reached by telephone at:

Work: 415-495-2225
Cell: 415-299-1200

In the event of an accident or injury to a player, Manager, Coach, umpire or spectator that requires treatment by a physician or other medical provider, you **must** notify the Safety Officer **within 24 hours**. (See p. 69 for more details).

Emergency Response Issues: The league's baseball fields are located within the jurisdictions of the following fire districts.

Corte Madera/Larkspur Fire District: All TCLL Fields

The Little League Safety Code recommends that arrangements be made in advance of all games and practices for emergency medical services. For the 2020 season, the league Safety Officer has discussed safety issues and concerns, including response times to our fields, with emergency personnel for the Twin Cities Fire District. In addition, the fire district as well as the Marin County EMS Office has been advised that an AED is installed and maintained at Joe Wagner field.

League Safety Code: The TLCC Little League has adopted the following safety rules and procedures that incorporate the Safety Code of Little League Baseball®⁷ as well as other measures designed to make both practices and games as safe as possible. Please familiarize yourself with them before your first practice because they provide the foundation for the league's safety program.

First-Aid Training and Equipment

- ❖ **First-Aid Training:** All Managers and Coaches are required to have training in first-aid. Courses will be offered by the league prior to Opening Day. Recertification is required biannually.
- First-Aid Kits:** Each of the TCLL fields is equipped with a tool box sized, first-aid kit with various accessories including (e.g., ice packs, bandages, synthetic gloves, goggles, hydrogen peroxide, and CPR/Ambu masks). Emergency Contact Telephone Numbers are attached to the inside lid of each of the TCLL first-aid kits. The kits are stored in the storage sheds or equipment boxes at each field and are replenished on a regular basis. Portable first-aid kits are issued to the Manager of each team that travels to other communities. These should be brought to all practices and games outside the TCLL.
- ❖ **AEDs:** An AED (Automated External Defibrillator) is located in the equipment box at the following fields: **JOE WAGNER - IN THE SNACK SHACK**
- ❖ **Cell Phones:** Managers and Coaches must have accessible, at both practices

and games, at least one fully operational and charged cell phone.

Field Conditions Must Be Appropriate for Safe Play

- ❖ **Field Inspection:** Prior to each practice and game, the Manager or Coach of each team is **required** to inspect the field for holes, damage, stones, glass, foreign objects, and other potentially dangerous conditions. Any dangerous conditions should be promptly reported to the TCLL Safety Officer (Scott Calzaretta): 415-927-8806 or 415-299-1200); Field Officer (Ted Meyer) 707-996-7511 or 415-302-5438; or President (Michael Boland 707-772-9730). A Pre-Game Checklist for this purpose is included in the Appendix.
- ❖ **Weather and Lighting Conditions:** No games or practices should be held when weather or field conditions are unfavorable, particularly when lighting is inadequate.
- ❖ **Thunderstorms:** Although thunderstorms are uncommon in Northern California, they do occur from time to time. At the first sign of such a storm, everyone should leave the field and seek shelter. (See p. 35).

General Safety Rules for Practices and Games

- ❖ **Persons Allowed on Field:** Only players, Managers, Coaches, and umpires are permitted on the playing field or in the dugout during practice sessions and games.
- ❖ **Storage of Equipment:** During both practices and games, all team equipment must be stored within the team dugout or behind screens, and not within the area defined by the umpires as “in play.”
- ❖ **Keeping Equipment Off the Field:** During games, the responsibility for keeping bats and loose equipment off the field of play should be that of either a regular player assigned for this purpose or the team’s coaching staff.
- ❖ **Retrieving Foul Balls:** Foul balls that are batted out of the playing area should be retrieved by an adult or responsible child and returned to the umpire responsible for the game. At no time should there be a scramble for the ball.
- ❖ **Players Should Keep Their Eye on the Ball:** During practices and games, all players should be alert and watching the batter on each pitch.
- ❖ **Spacing Players During Warm-Ups:** During warm-up drills, players should be spaced so that no one is endangered by wild throws or missed catches.
- ❖ **Warm-Ups:** All pre-game warm-ups (i.e., playing catch, pepper, swinging bats, etc.) should be performed within the confines of the playing field and not within areas that are frequented by spectators.
- ❖ **Player Protecting Batter During Warm-Ups:** When a pitcher is warming up in the bullpen or along the side of the field during a game or batting practice, there must be a player with a batting helmet and glove stationed between the batter and the pitcher and catcher to field balls hit in their direction.

- ❖ **Managers/Coaches Cannot Warm Up Pitchers:** Managers or Coaches must not warm up a pitcher at home plate or in the bullpen or elsewhere at any time. [Rule 3.09]. This includes standing at the backstop during practices acting as an informal catcher for batting practice. However, they may stand by to observe a pitcher during warm-up in the bullpen. [*d.*]
- ❖ **No Soft Toss Against Fences:** Soft toss drills using baseballs against any chain link fence is not permitted.
- ❖ **Players Must Remain in Dugout:** During games, offensive players must remain in the dugout throughout the game. The only exception to this rule is when a player needs to use an available restroom, and in that case they must return immediately to the dugout. If only one adult Manager or Coach is present for a given game, he or she must remain in the dugout at all times and may not serve as a base coach. [Rule 4.05(2)].
- ❖ **Players Must Not Touch Bats in the Dugout:** Players must not pick up or handle a bat while in the dugout until it is his/her time to bat.
- ❖ **No On Deck Circle (Except in Juniors/Seniors):** There is no on-deck circle except in the Junior and Senior Leagues. [Rule 1.08, Note 1]. Only the first batter of each half inning is permitted outside the dugout between half-innings in the Major, Minor, Rookie Minor, Farm, and T-Ball leagues. [Rule 1.08, Note 2]. This means that no player should handle a bat, even while in the dugout, until it is his/her time to bat. Players in the on deck circle at the Junior and Senior League levels should be alert to the area around them when swinging a bat.
- ❖ **No Head First Slides (Except in Juniors/Seniors):** Head first slides are not permitted in the Major, Minor, Rookie Minor, Farm, and T-Ball leagues, except when returning to a base. Any runner at these levels who does so is out. [Rule 7.08(a)(4)].
- ❖ **Sliding Skills Must be Practiced:** Sliding should be introduced at the Rookie Minors level and practiced regularly at every level thereafter.
- ❖ **Cleats:** Except in the Juniors and Seniors, shoes with metal spikes or cleats are not permitted. Shoes with molded cleats are permissible. [Rule 1.11(h)].
- ❖ **No Horseplay:** At no time should “horseplay” be permitted on the playing field.
- ❖ **Pitching Machines:** Pitching machines must be in good working order (including extension cords, outlets, etc.) and must be operated only by adult Managers and Coaches.
- ❖ **Supervision Of Ejected, Ill or Injured Children:** Players who are ejected, ill or injured should remain under supervision until released to the child’s parent or guardian.

Safety Equipment

- ❖ **Regular Inspection of Equipment Required:** Equipment should be inspected regularly as to its condition as well as for proper fit. If any of your equipment needs to be repaired or replaced, please contact the Equipment Manager, Ted Meyer(415-308-1510).
- ❖ **Baseballs:** Safety balls are used in the T-Ball and Farm leagues.
- ❖ **Batting Helmet Standards:** Each team is provided with 6 batting helmets (7 for Juniors/Seniors) that must meet NOCSAE (National Operating Committee on Standards for Athletic Equipment) specifications and bear the NOCSAE stamp and an exterior warning label. Helmets may not be re-painted and may not contain tape or reapplied decals unless approved in writing by the helmet manufacturer or authorized dealer. [Rule 1.16]. If a player elects to use a personal helmet, it must also meet Little League standards.
- ❖ **Use of Batting Helmets:** During practices as well as games, use of the helmet by the batter, all base runners, and youth base coaches is **mandatory**. Use of a helmet by an adult base coach is optional. [Rule 1.16].
- ❖ **Faceguards:** Players who are functionally one eyed (best corrected vision in the worst eye of less than 20/50) are **required** to use these helmets during practices and games.⁸
- ❖ **Athletic Supporters/Cups Required:** All male players are required to wear athletic supporters. [Rule 1.17]. The league additionally recommends that all male players in the Seniors, Juniors, Majors, and Minors wear a plastic protective cup for all practices and games.
- ❖ **Cups Required for Catchers:** Male catchers must wear a metal, fiber or plastic type cup. [Rule 1.17].
- ❖ **Catcher's Required Safety Equipment:** All catchers must wear chest protectors with a neck collar, "dangling" type throat guard, shin guards, and catcher's helmet with mask, all of which meet Little League specifications and standards. [Rule 1.17].
- ❖ **Catcher's Chest Protector:** All male catchers must wear a long-model chest protector. Female catchers must wear a long or short model chest protector. Junior/Senior catchers must wear an approved long or short model chest protector. [Rule 1.17].
- ❖ **Catcher's Helmet:** All catchers must wear a catcher's helmet and mask with a "dangling" type throat protector during infield/outfield practice, pitcher warm-up, and games.⁹ The catcher's helmet must meet NOCSAE specifications and standards and bear the NOCSAE stamp. Catcher's helmets may not be repainted and may not contain tape or re-applied decals unless approved in writing by the helmet manufacturer or authorized dealer. Skull caps are not permitted. [Rule 1.17].
- ❖ **Catcher's Mitt:** All catchers must wear a catcher's mitt (not a first baseman's mitt or fielder's glove) of any shape, size or weight consistent with protecting the hand. [Rule 1.12]. In addition, catchers should be encouraged to wear a Palmgard® glove on their catching hand, which is specifically designed to

absorb impacts and help to prevent bone bruises and soft tissue damage.

- ❖ **Mouthguards:** Children who pitch as well as all infielders should also be strongly encouraged to wear mouthguards.
- ❖ **Safety Glasses:** Parents of players who wear glasses should be encouraged to provide “safety glasses.”
- ❖ **Jewelry Not Allowed:** Players must not wear watches, rings, pins, jewelry or other metallic items during games and practices. This includes Lance Armstrong type wrist bands. However, jewelry that alerts medical personnel to a specific condition is permissible. [Rule 1.11(j)].
- ❖ **Casts Not Permitted:** Casts may not be worn during practices or games. [Rule 1.11(k)].
- ❖ **Safety Bases:** Breakaway bases must be used at 1st, 2nd, and 3rd bases. [Rule 1.06].
- ❖ **No Bat Can Be White In Color:** White bats are prohibited. [Rule 1.10].
- ❖ **Testing Dented Bats For Play:** Non-wood bats may develop dents from time to time. Bats that cannot pass through the approved Little League bat ring must be removed from play. The 2¼ inch bat ring must be used for bats in the Major, Minor, Rookie Minor, Farm, and T-Ball Leagues. In the Juniors and Seniors, the 2 5/8 inch bat ring must be used. [Rule 1.10, Note 4].
- ❖ **Batting Donuts Cannot Be Used:** The traditional batting donut cannot be used at any level of play. [Rule 1.10, Note 1].

Non-Wood Bats Must State BPF/BESR (effective 2009): Beginning with the 2009 season, non-wood bats used in the Major League and all lower divisions of play must be printed with a Bat Performance Factor (BPF) of 1.15 or less. The BPF is a formula that measures how fast a baseball comes off the bat. [Rule 1.10, Note 3]. Junior and Senior League bats shall meet the BESR (Bat Exit Speed Ratio) performance standard, and such bats shall be printed with a permanent certification mark. Little League International has placed a moratorium on the use of composite bats in the Little League (Majors) Division and all other baseball divisions of Little League, effective immediately. See their website for list of approved bats.'

❖

- ❖ **Changes In Maximum Bat Diameter For Junior League Bats (effective 2009):** Beginning in 2009, the bat used in the Juniors shall be not more than 2 5/8 inches in diameter, and, if wood, not more than 15/16 inches in diameter (7/8 inch for bats less than 30”) at its smallest part. [Rule 1.10]

❖

Safety Considerations

Pre-Game Safety Issues

Safety considerations begin long before the first pitch of the game. Before a practice or game, you need to ask yourself:

(1) [Have you brought your Registration/Medical Treatment Consent forms with you?](#)

- ❖ The Manager of every team **must** bring these to **every** practice and game. The Registration forms provide essential emergency contact information for the parents, physicians, and dentists of every player.
- ❖ The Medical Treatment Consent forms are required for you to obtain medical care for a player in the absence of his/her parents. We have been advised by fire district personnel that if they respond to an emergency call, they cannot treat a player absent his/her parent unless you have the Consent form in your possession or the child is suffering from a serious, life threatening or limb threatening injury. Thus, if you neglect to bring these forms with you to your practices and games, you are placing your players at risk.
- ❖ In the event the Manager is unavailable and has delegated his/her responsibilities to a Coach, the Manager is responsible for providing the Coach with copies of these forms.

(2) [Do you have a fully charged cell phone available for emergency calls?](#)

- ❖ If an emergency occurs, you will need to use a cell phone at most fields to reach the County Emergency Dispatch Center. Make sure you have a fully charged cell phone that will work on the fields where you practice and play your games since some carriers' phones do not work in certain locations. If an emergency occurs, you will need to call for aid immediately.
- ❖ From a cell phone, you need to dial **415-472-0911 (Marin)/415-861-8020 (S.F.)** to reach the Emergency Dispatch Center. A cell phone call placed to 911 will be directed to the California Highway Patrol in Vallejo, and precious seconds will be lost as they reroute the call to the Emergency Dispatch Center. Store the number in your cell phone directory and commit the number to memory.

(3) Have you inspected the field for hazardous conditions?

- ❖ Since our practices and games are scheduled at fields that are open to the public, you are **required** before both practices and games to inspect the field for holes, damage, stones, glass and other conditions that could make playing there dangerous. A checklist is included in the Appendix.
- ❖ If you find a condition that needs to be addressed, should be promptly reported to the TCLL Safety Officer (Scott Calzaretta): 415-927-8806 or 415-299-1200); Field Officer (Ted Meyer)707-996-7511 or 415-302-5438.

(4) Is your equipment safe and in conformance with Little League specifications?

- ❖ Check your equipment frequently. Run your hands along bats to make sure there are no serious dents or splinters. If a dented bat passes through the approved Little League bat ring (2¼” for Majors and below; 2 5/8” for Juniors/Seniors) it is “legal” and may be used. Cracked or broken bats should never be used.
- ❖ Check the batting helmets to make sure they are not cracked. Every helmet must have the NOCSAE stamp and an exterior warning label. [Rule 1.16]. If any of your helmets are missing these or they are cracked, they must not be used and should be returned to the league so that they can be replaced.
- ❖ Constant attention must be given to the proper fit of personal protective equipment, including batting helmets and catcher’s masks, chest protectors, and shin guards. Do not permit a player to take the field with ill-fitting protective equipment.

(5) Have you had your players warm up and stretch before they begin to play?

- ❖ Before practices and games, have your players warm up and stretch prior to throwing. Warm up to throw, don’t throw to warm up.
- ❖ Jumping jacks or a jog around the field should be used first to warm up the entire body. Then you should focus on warming up the arms and shoulder muscles before stretching them. This can be done by having them make large circles with their arms, both forward and backward, followed by smaller circles. After stretching the arm and shoulder muscles, don't forget to have them stretch their hamstrings, quadriceps, calves, and Achilles tendons.
- ❖ The purpose of stretching is to increase flexibility within the various muscle groups and prevent tearing from overexertion. During stretching, you should contract (i.e. tighten) the muscle and then relax it before stretching further. Hold the stretch for at least 10 seconds. You should never “bounce” during any end range stretch, as this can tear the muscle tissue.
- ❖ Stretching the muscles related to the activity is very important. A pitcher should pay particular attention to stretching his/her arm and back muscles. A catcher should focus on stretching his/her legs and back.
- ❖ Sample stretches are illustrated on the following page.

Suggested Warm up Links

<http://www.coreperformance.com/knowledge/workouts/a-better-warm-up.html>

***SEE ATTACHED ARM CARE AND EXCERCISES* pages 97/98**

There are many different programs of which you can follow. It is important to include a warmup for every level of play. Keep age appropriate and make it fun for the younger ages. Teach the players that the warmup is for both physical and mental preparation. Teach them how to take care of their arms/body/minds with great habits that will translate to the game and life.

[Refer to Twin Cities Little league Player Development program](#)

(6) Have you placed your players far enough apart during their warm-up throws to prevent injuries?

- ❖ After your players have stretched, they generally will warm up their throwing arms by playing catch with a partner. This should always be done with one set of players standing along the outfield foul line and their partners standing at a reasonable distance toward center field. Do not allow warm-ups on the infield dirt.
- ❖ Please make sure that each pair is spaced far enough away from the players on either side that errant throws or missed catches will not hit another player.
- ❖ Always remind players who need to walk behind other players who are playing catch to pay attention to the thrown ball.

(7) Are your male players properly equipped?

- ❖ Little League rules require all male players to wear an athletic supporter and male players who catch must wear a cup. The league recommends that **every** male player in the Seniors, Juniors, Majors, and Minors wear a cup even if they do not catch to avoid damage from bad hops or misplayed balls. Make sure your players are properly equipped before they step onto the playing field.

Insuring Safe Play on the Field

Once play begins, there are a number of other safety issues you need to consider:

(1) Have you minimized the risk of players being hit by the ball?

- ❖ The majority of injuries occurring in Little League are from being hit by the ball.¹⁰ Therefore, during your practices, you should stress to all players that they need to keep their eye on the ball **at all times**, whether they are in the field or at bat. This safe practice should be drilled into them so continuously that it becomes a reflective action.
- ❖ Batters must be taught at an early stage how to avoid being hit by a wild pitch. The proper approach is to have the batter turn away from the pitch, toward the backstop, with his/her head down and protected by their

shoulders. A ball that hits a player in the back will still hurt, but will do less potential harm than a ball to the head or chest. Be particularly aware of the potential for commotio cordis when there is any blunt trauma to a child's chest. (See p. 53). Practice with whiffle balls so that the proper reaction becomes instinctive, but don't overemphasize this drill to avoid putting fear in the batter's head.

- ❖ Every batter, base runner, and youth base coach must wear a properly fitted, NOCSAE approved helmet that bears the NOCSAE stamp as well as an exterior warning label before stepping on the field. [Rule 1.16].
- ❖ Once a batter becomes a base runner, that player should be taught to run outside the foul lines when going from home to first and from third to home, to reduce the chance of being hit by a thrown ball.

- ❖ Players who have not demonstrated a measure of control with their throws should never be permitted to pitch to other players.
- ❖ Throwing and catching drills should be set up to minimize the risk that a thrown ball can hit a player who is focused on catching or throwing another ball.
- ❖ Help your players learn to judge fly balls by using drills that start out easy and become more difficult as the players' judgment and skill improves. Use whiffle balls in the lower leagues to develop confidence.

(2) Have you taught your players how to avoid collisions in the field?

Collisions between players on the field can lead to serious medical injuries.¹¹ They are usually caused by errors in judgment or lack of teamwork between fielders.

During the final game of the 2003 American League Division Series between the Boston Red Sox and the Oakland A's, Red Sox center fielder Johnny Damon collided with second baseman Damian Jackson on a pop fly hit to shallow center by the A's Jermaine Dye. "The ball had just landed in the outstretched pocket of Jackson's glove when Damon, racing in from his position and calling for the ball all the way, arrived at the same spot, the right side of his head cracking violently against the right side of Jackson's face."¹²



(AP Photo¹³)

Damon lay on the ground unconscious for several minutes before being taken from the field by ambulance. He suffered a Grade 2 concussion that kept him out of the first two games of the American League Championship Series against the N.Y. Yankees.

In order to reduce the potential for such collisions, it is critically important to establish zones of defense for your players. It is particularly important when players are chasing fly or foul balls. Once the zones are established, situation drills should be held until these zones and patterns become familiar to the players. The responsible player should call out his/her intentions in a loud voice to warn others away. Some general rules:

- ❖ **First Baseman:** The first baseman should catch all balls that are reachable and are hit between second base and the catcher.
- ❖ **Second Baseman:** The second baseman should call all balls that are reachable that are hit behind first base.

- ❖ **Third Baseman:** The third baseman should catch all balls that are reachable and are hit between third and the catcher.
- ❖ **Shortstop:** The shortstop should call all balls that are reachable that are hit behind third base. The shortstop also has the responsibility for fly balls hit in the center of the diamond and in the area of second base. Since the glove of most shortstops is on the left hand, it is easier for the shortstop than the second baseman to catch fly balls over second base.
- ❖ **Center Fielder:** The center fielder has the right of way in the outfield and should catch all balls that he/she can reach. Another player should take the ball if it is clear that it cannot be reached by the center fielder.
- ❖ **Fly Balls:** Outfielders have priority over infielders for fly balls hit between them.
- ❖ **Ground Balls:** Priorities are not so easily established on ground balls, but most managers expect their base players to field all ground balls they can reach. The third baseman should cut in front of the shortstop on slow hit grounders to third or short because their momentum will carry them toward first base.
- ❖ **Catcher:** The catcher is expected to field all topped and bunted balls that can be reached except when there is a force play or squeeze play at home.

In addition, the Little League Playing Rules include a series of rules designed to prevent collisions between opposing players.

- ❖ **Obstruction:** A fielder is not permitted to block off a base, base line or home plate from a base runner while not in possession of the ball. This is “obstruction,” and the obstructed runner is entitled to at least one base beyond the base last legally touched by the runner before the obstruction. [Rules 2.00, 7.06(a)].
- ❖ **Interference:** It is “interference” if any base runner fails to avoid a fielder who is attempting to field a batted ball. [Rules 2.00, 7.09(l)]. The runner is out and the ball is dead. It is also “interference” if:
 - the batter hinders the catcher in an attempt to field the ball. [Rule 7.09(a)];
 - the batter, with a runner on third and less than two outs, hinders a fielder, including the catcher, in making a play at home. [Rule 7.09(d)];
 - the batter-runner, in running the last half of the distance from home to first base, runs outside (to the right of) the three foot line or inside (to the left of the foul line) and, in the umpire’s judgment, interferes with the fielder taking the throw at first base or attempting to field a batted ball. [Rule 7.09(k)].
- ❖ **Preventing Collisions at a Base or at Home:** In order to prevent collisions at a base or at home plate, the Playing Rules require the runner to slide or attempt to get around a fielder who has the ball and is waiting to make the tag. [Rule 7.08(a)(3)]. If the runner fails to do so, he/she is out.

(3) [Have you taught your players safe bat handling techniques?](#)

- ❖ Younger players need to be taught not to throw the bat after hitting the ball. This can be done by having the player drop the bat in a marked-off circle near where the running starts or calling the player out in practice whenever he/she fails to drop the bat correctly.
- ❖ Players should **never** be permitted to pick up a bat in the dugout until they are heading out to the plate or, in the Juniors or Seniors, on deck circle. If mishandled, a bat can cause serious unintended injury.



Serious injuries, like this one to a Little League player, can occur when players are allowed to handle bats in the dugout. (Photo Courtesy of Little League Baseball®, Inc.)

- ❖ The on deck circle in the Juniors and Seniors should be located behind a screen so the player cannot be hit by a line drive foul. All players and adults should be trained to walk around the on deck circle, whether it is in use or not.
- ❖ No one should ever approach a player who is holding a bat from behind without letting him/her know of their presence.
- ❖ During infield or fly ball practice, a player (usually the catcher), who is assigned to catch balls for the hitting coach, should be given the specific assignment of warning away anyone who comes too close.

(4) Have you taught your catchers safe catching techniques?

- ❖ Assuming that the catcher is wearing the required protective equipment, his/her greatest exposure is to the ungloved hand. The catcher must be taught to keep the throwing hand relaxed and situated either behind his/her back or behind his/her glove.
- ❖ The catcher should be taught to throw the mask and helmet in the direction opposite his/her approach in going for a popup.
- ❖ The catcher should be taught to keep a safe distance back, about a foot, from the swinging bat. If the catcher hinders or prevents a batter from hitting a pitch, it is considered “interference” and the batter is entitled to first base. [Rules 2.00, 6.08(c)].

Overuse Injuries

Little League Elbow: Little League pitchers and other position players, such as catchers, who throw a lot are susceptible to a potentially serious overuse injury known as “Little League elbow.” According to the American Academy of Pediatrics Committee on Sports Medicine and Fitness, which published a policy statement on baseball and softball injuries in children in 2001,(still holds true today):

“The term ‘Little League elbow’ refers to medial elbow pain attributable to throwing by skeletally immature athletes. Pitchers are most likely to be affected by this condition, but it can occur in other positions associated with frequent and forceful throwing. . . . Early recognition of the symptoms is important to avoid chronic elbow pain, instability, and arthritis.”¹⁴

Mitchel Storey, M.D., the team physician for the Seattle Mariners, explains: “Little League elbow is a process of damage to the joint surfaces. Pitchers’ elbows at that age, as are most of their joints, are immature, so they have open growth plates and something of a tenuous blood supply to those growth plates. Little League elbow involves an overload on the medial side of the elbow, so that the ligament attached to the growth plate starts to pull away. And on the other side of the elbow there can be a compressive phenomenon that can cause a condition called osteochondritis dissecans, in which damage is followed by poor blood flow and small areas of bone death.”¹⁵

A recent survey found that 40.1% of pitchers between the ages of 9 and 12 suffered from chronic elbow pain.¹⁶ Among high school pitchers, the percentage rises to 58%.¹⁷

According to Gerald W. Bell, Ed.D., a certified athletic trainer and Director of the Sports Injury Research Lab at the University of Illinois, Urbana-Champaign, “poor mechanics, along with a developing elbow complex, leave young and inexperienced pitchers susceptible to Little League Elbow.”¹⁸

Causes: “Little League elbow” is particularly prevalent during the early weeks of the season because many players have not been throwing regularly during the off-season, and their arms have not been strengthened sufficiently to withstand the forces that are placed on them when throwing.¹⁹

Additionally, overuse injuries are being increasingly linked to specialization in one sport at an early age and the year-round training for that sport that often follows. Angela Smith, M.D., an orthopedic surgeon at Children’s Hospital of Philadelphia, notes that “parents in virtually every sport [are] pushing their children to excess in pursuit of college scholarships or the dream of a professional sports career.”²⁰ According to Lyle Micheli, M.D., the director of the sports medicine division at Boston Children’s Hospital, only 10 percent of the patients he treated 25 years ago came to him for injuries caused by overuse. Back then, most childhood injuries were fractures and sprains. Now, overuse injuries account for 70 percent of the cases he sees.²¹

Dr. Micheli says, “By playing one sport year-round, there is no rest and recovery for the overused parts of their body. Parents think they are maximizing their child’s chances by concentrating on one sport. The results are often not what they expected.”²²

Symptoms: Typically, the symptoms of “Little League elbow” include pain around the bony knob on the inner side of the elbow, swelling (possibly), pain when throwing overhand, and/or pain with gripping or carrying heavy objects.²³

Pitching Count Limitations: Recognizing the risks of overuse injuries, Little League Baseball® has established pitch count rules. Pitchers in all divisions of Little League, from

age 7 to 18, will have specific pitch count limits for each game, based on their age. The number of pitches delivered in a game will determine the amount of rest the player must have before pitching again.

In the past, Little League’s pitching regulations have used innings pitched to determine pitcher eligibility. Recently, researchers and medical professionals in the field of sports medicine have been working to determine if the actual number of pitches thrown (i.e., pitch count) is a safer way to regulate pitching in youth baseball. Most notable among those calling for pitch counts has been Dr. James R. Andrews, M.D., medical director at the American Sports Medicine Institute (ASMI) in Birmingham, Ala. Dr. Andrews is the world’s foremost authority on pitching injuries and ulnar collateral ligament reconstruction, or, as it is better known, “Tommy John surgery.” The ASMI and the USA Baseball Medical and Safety Advisory Committee have worked closely with Little League to create the guidelines for the new regulation.

Little League Baseball® is the first national youth baseball organization to institute a pitch count. The Little League International Board of Directors approved the measure unanimously at its annual meeting in September 2006. **Some important changes had been made to the rules for the 2016 season [See Reg. VI].**

Number of Pitches Allowed: The table below gives an overview of the number of pitches that will be allowed per day for each age group during the regular season in 2020.

League Age	Pitches allowed per day
13-16	95
11-12 9-10	85 75
7-8	50

The manager **MUST** remove the pitcher when he/she has reached the limit for their respective age group (except that the pitcher facing a batter, having reached their pitch count limit, may continue to pitch to that batter until the batter reaches base, the batter is put out, or the third out is made to complete the half inning), but the pitcher may remain in the game at another position. [Reg. VI, (c)].

A Pitcher Cannot Move to the Catching Position if he/she has delivered more than 40 pitches in a game: The rule changes added in 2012 provide that **“A pitcher who delivers 41 or more pitches in a game cannot play the position of catcher for the remainder of that day.”** [Reg. VI, (c), Note 1].

This rule recognizes that catchers throw as many balls as the pitcher and that the rest requirements would lose their purpose if pitchers could be put behind the plate after they have reached their pitch count limits. Although the rule does not say it, it would be equally

inappropriate to put a player on the mound after he has been the catcher for a part of the game.

Once Removed, A Pitcher Cannot Return to the Mound: Except in the Juniors and Seniors, players once removed from the mound may not return as pitchers. [Reg. VI(b)]. At the Junior and Senior level, a pitcher who remains in the game at a different position can retake the mound but only once during the remainder of the game.

Rest Requirements (Seniors to Minors) (OPTION 1): Pitchers league age 16 and under must adhere to the following rest requirements:

See 2020 Rule book for pitch count-(also special rules for Twin Cities Little League)

Breaking Pitches: Little League also continues to explore other pitching-related issues, such as the use of breaking pitches.

“While there is no medical evidence to support a ban on breaking pitches, it is widely speculated by medical professionals that it is ill-advised for players under 14 years old to throw breaking pitches,” Mr. Keener said. “Breaking pitches for these ages continues to be strongly discouraged by Little League, and that is an issue we are looking at as well. As with our stance on pitch counts, we will act if and when there is medical evidence to support a change.”

Little League International is beginning a five-year study on breaking pitches by Little League pitchers.

However, according to Dr. James Andrews, throwing a curveball increases the risk of injury to a young player because forceful supination and ulnar deviation places more medial stress on the forearm.²⁴ Moreover, safe mechanics for throwing the curveball are difficult to master before the age of 13 or 14.

In recognition of the concerns sports physicians like Dr. Andrews have voiced about permitting players to throw curveballs too early, Managers and Coaches should encourage their pitchers to develop a change-up as an off speed pitch. Since the change-up is thrown with essentially the same mechanics as a fastball, it is not likely to increase the risk of elbow or shoulder injury to a young pitcher.

Curveball Restrictions: Coaches and parents often wonder when a pitcher should begin to develop and throw a curveball. The American Sports Medicine Institute has provided recommendations for when a pitcher should begin to throw various pitches:

Age (in Years) Recommended for Learning Various Pitches

PITCH	AGE
Fastball	8 \pm 2
Change-up	10 \pm 3
Curveball	14 \pm 2
Knuckle Ball	15 \pm 3
Slider	16 \pm 2
Fork Ball	16 \pm 2

Prevention: In addition to limiting the number of pitches that young players throw, the American Academy of Pediatrics recommends other measures that can be taken to minimize the occurrence of “Little League elbow.”

A preseason conditioning program that includes strengthening the rotator cuff and the shoulder stabilizing muscles also may help reduce throwing injuries. Instruction on proper pitching mechanics is another way to prevent serious overuse throwing injuries. Finally, allowing time during the early part of the season to gradually increase the amount and intensity of throwing may allow young arms a better opportunity to adapt to the stresses of throwing.”²⁵

Managers and Coaches also need to be aware of each player’s activities outside Little League to insure they are not using their arm or shoulder in other sporting activities that could exacerbate the strain on their muscles and ligaments.

Recognizing Pitching Arm Fatigue

As the pitcher’s pitch count rises, the Manager and Coaches need to be watching for signs of arm fatigue.²⁶ Generally, the first indications a pitcher is tiring are **loss of control** and a **reduction in velocity**. In addition, it is likely a pitcher is tiring and should be removed from the mound if:

- ❖ The pitcher **rushes his motion** trying to generate more power with the body and reduce the stress on his arm. This action actually causes more stress because the arm drags behind the normal throwing rhythm. The pitcher will have a greater loss of hand and pitch speed.
- ❖ The pitcher **shortens his arm deceleration** path and follow-through. He will lose his normal arm extension during the release and deceleration phase.
- ❖ The pitcher takes **more time** between pitches, walks around the mound, etc.
- ❖ The pitcher **stretches, shakes or swings his arm** or shoulder more between pitches.
- ❖ The pitcher **does not get his/her hand and elbow up** to the normal height in the cocked position. It will appear that he/she has lowered his/her elbow during the motion.
- ❖ The pitcher **grimaces or flinches** during the release and deceleration phase.
- ❖ Between innings, the pitcher **massages his elbow** (lower biceps) or **top of the shoulder** (biceps tendon) area. With arm fatigue, the pitcher’s hand often trembles.

If a pitcher exhibits evidence of arm fatigue, take him/her out of the game and give their arm a chance to rest for an inning or two. Do not compound their fatigue by putting them at a position like catcher that will require them to continue to use their arm.

Teach Safe Sliding Techniques

Players, especially at the Rookie Minor and Minor League levels, need to be taught how to slide into a base both properly and safely. At the outset, you need to understand that most, if not all, of your players will not have received any formal instruction in sliding techniques. Some of the players may even be afraid to slide. You need to tailor your instruction to your players' level of experience.

First, explain why and when it is necessary to slide. In Little League, sliding is used:

- (1) to stop a player's forward momentum at the base;
- (2) to avoid a tag;
- (3) to get back to the base; and
- (4) always when the play is close.

In the Juniors/Seniors, sliding can also be used to break up a double play.²⁷

The Little League Playing Rules provide that any runner is out when he/she does not slide or attempt to get around a fielder who has the ball and is waiting to make the tag. [Rule 7.08(a)(3)]. Head first slides are not permitted while advancing to a base in T-Ball, Farm Ball, Rookie Minors, Minors or Majors. Any runner at these levels who slides head first while advancing is out. [Rule 7.08(a)(4)]. However, head first slides are permitted when returning to a base. [Safety Code for Little League, p. T-24].

Second, explain proper sliding technique. Players should be taught (1) to find a comfortable side for sliding; (2) how to land; and (3) how to use a bent-leg slide to insure safety. With respect to the sliding side, if the player slides to his/her right side, he/she will usually use his/her right foot as the takeoff foot. Going to the left side, he/she should use the left foot as the takeoff foot. As takeoff occurs, the arms are thrown out or up, the upper body is extended backwards, and the feet forward, all somewhat close to parallel to the ground.

When a player lands, he/she should land on his/her buttocks with his/her head up, arms out or up for balance (never with the hands down for support), hands closed (to avoid finger injuries), and toes upward. Major League baseball players sometimes put their batting gloves in their hands or scoop up some dirt from the infield to remind themselves to keep their hands closed when sliding.

The bent-leg slide, also known as a “Figure 4 slide,” is used most frequently at the Little League level and is the easiest to teach. The player tucks his left leg or right leg in a bent position and places his/her foot under the other leg, which has a slight bend to it to reduce the risk of ankle and leg injuries when sliding into the base. From above, the player’s legs look like the number 4.



Third, run your players through a sliding drill, which should be adapted to their level of skill. At the most basic level of skill, have your players sit on the ground and alternate bending their left leg and then their right leg in the bent-leg tucked position. This will help them find the most comfortable position for sliding.

If you have a commercial sliding pad available, place it on the the outfield grass. The pad is designed with a movable cloth sheet that is draped over the top surface of the pad. The players slide into this sheet, so place the loose end closest to your players, who should be lined up single file about 5 feet away. If you don’t have a sliding pad, you can use an old sheet on the grass and have your players take off their cleats.

Next, have each player stand on top of the sliding pad and fall into the bent-leg slide from a standing position. Do not have them take any steps, as yet. The player should concentrate on his/her landing and direction and getting the bent-leg tucked in underneath. You can then have all of the players practice from a standing position with three walking steps. Players that are comfortable on either side should practice both; however, others should perfect their best side first.

Next, all players should slide with a running four-to-five step start. Eventually, work up to having them run and slide into the pad from 15 feet away. A slide usually begins about two body lengths from the base, so they should learn how far they can slide with a good, running start.

During drills, the coaches can correct any mistakes by carefully watching the position in which the player lands. Make sure he/she has the hands out or up, the body is extended with head up, one leg is bent and tucked underneath the other, and the toes are up. The player’s buttocks and calf of the bent leg should show the wear of absorbing the force of the slide; otherwise, he/she is landing incorrectly.

Advanced Sliding Techniques

Bent-Leg and Pop-Up: As you slide, place the foot of the extended leg on the base, throw the weight forward, and raise the body in one motion. Continue running to the next base.



Bent-Leg and Hook Slide: Slide right or left of the bag by three-to-four feet, depending on the player's size. When approaching the base, bend the extended (top) leg back, and it will hook the bag when sliding by. Remember, the left foot hooks the bag sliding to the right, and the right foot hooks the bag sliding to the left.

Real Hook Slide: Same landing position as previously discussed. However, both legs remain extended toward the bag. As the bag is contacted, the toe of the inside foot will hook the base, and the knee will bend at the same time. The outside foot will continue past the bag and off the ground. On the hook slide, if sliding right, hook with the left foot and leg, keeping the right leg extended and off the ground. If sliding left, hook with the right foot and leg, keeping the left leg extended and off the ground.

Mouthguards

In October 1995, the American Academy of Pediatric Dentistry issued a press release that emphasized the importance of mouthguards in protecting youth baseball players against oral injury.

“Oral, facial, eye, and head injuries to children have become increasingly common. They occur in many sports, not just in the traditionally recognized collision sports of football, hockey, and lacrosse. Youth baseball and softball now lead all sports in the number of oral, facial, eye, and head injuries.

“The athletic mouthguard is clearly one of the most effective pieces of equipment available with documented effectiveness against dental trauma and concussion. All mouthguards offer some measure of protection against injuries.”²⁸ (Emphasis added).

The Academy of Sports Dentistry also recommends the use of a properly fitted mouthguard in baseball.²⁹

The league recommends that pitchers, particularly in the Major League, use a properly fitted mouthguard. At the Little League level, the pitching rubber sits only 46 feet away from the plate, compared with 60.5 feet at the Juniors'/Seniors' level. Due to the shorter distance, a line drive “comebacker” hit at a Little League pitcher will reach the mound in less than half a second. A pitcher may not be able to react in such a short period of time to protect himself/herself.

Even in the Juniors and Seniors', a mouthguard is highly recommended for pitchers. While the mound is further away than in Little League, the hitters are bigger and stronger. Pitchers at this level face the same risk of injury from a hard hit comebacker.

Mouthguards are also recommended for infielders, who often have to deal with bad hops from ground balls. A properly fitted mouthguard will reduce the potential for dental trauma in such a situation.

Make Sure Your Players Use Sunscreen

When she was 14, fair-skinned, blue-eyed Charlie Guild of Corte Madera was badly sunburned after she forgot to reapply her sunscreen at a pool party.³⁰ Two years later, she received another bad sunburn while on a family Christmas vacation trip to Puerto Vallarta.



Charlie Guild of Corte Madera was only 25-years old when she learned she had melanoma. She died 8 months later.

Charlie was just 25 when she learned she had melanoma. She died from it 8 months later, in November 2003. Her mother, Valerie Guild, says "I never had the faintest idea that literally a burn could cause you to get a fatal disease. It can."³¹

The incidence of malignant melanoma, an often fatal skin cancer, is increasing faster than any other form of cancer.³² Most people receive 80 percent of their entire life's exposure to the sun by the time they turn 18. Sun over-exposure, which can trigger skin cancer, is therefore mostly experienced as a child and young adult, the years when children are involved in Little League.

In November 2004, Major League Baseball Commissioner Bud Selig, 74, was diagnosed with a Level IV melanoma after his physician noticed a blotch on the skin above his right eye during a routine examination.³³ The following month, he underwent surgery, which included the removal of two lymph nodes. Fortunately, the pathology showed no spread of the cancer, and Selig has been given a clean bill of health.³⁴

Shonda Schilling, the 41-year old wife of Boston Red Sox ace pitcher Curt Schilling, learned that she had melanoma in February 2001.



Shonda Schilling, the 40-year old wife of Boston Red Sox pitcher Curt Schilling, was diagnosed with malignant melanoma in 2001. (Photo by Rich Pilling, MLB)

Although she grew up in the Baltimore area, Shonda always felt that being tan was a priority and spent hours every year sunbathing. Since her diagnosis, she has had two Stage II melanomas and four melanoma in situ's removed from her back, chest, legs, and arms in five different surgeries.

As a result of her experience, Shonda has established The SHADE Foundation (<http://www.shadefoundation.org>) with the goal of educating children about the risks of sun exposure and providing information on sun-safe products and clothing.³⁵

Educate your players about the risk of sun over-exposure, and teach them to look for signs of abnormal moles or other skin blemishes that might be precursors of skin cancer. Victims have died of melanoma as early as their early 20s.

Remind players that sunscreen is a vital part of their pre-game warm-ups and should be worn anytime when playing, especially between the hours of 10 a.m. and 4 p.m., when the sun's rays are at their strongest. **A bottle of sunscreen can be found in each of the league's first-aid kits for those players who forget to apply it before coming to the field.**

Melanoma Statistics:

- ❖ Malignant melanoma is increasing faster than any other cancer.
- ❖ California has one of the highest rates of melanoma cases in the nation. Other states with high rates include Arizona, Florida, Texas, and New York.
- ❖ Past prevalence rates of individuals diagnosed with melanoma were 1 in 1500 people. Current rates are 1 in 75.

Signs of Melanoma (ABCDs of Melanoma):

- ❖ **A** - Asymmetry, one half of the mole is unlike the other.
- ❖ **B** - Border is irregular in outline.
- ❖ **C** - Color changes or varies from light to dark brown.

- ❖ D - Diameter of the mole is larger than a pencil eraser.

Increased Risk Factors for Melanoma:

If you have any of the following, you should see a dermatologist for a melanoma screening.

- ❖ Light colored eyes, fair skin, blond/red hair or light brown hair.
- ❖ Freckles or many moles on the body.
- ❖ Anyone with considerable sun exposure or use of tanning parlors/booths.
- ❖ Family history of skin cancer.

Prevention:

- ❖ Wear protective clothing, large brim hats, long sleeves, pants, and sunglasses.
- ❖ Keep children under the age of 6 months out of the sun completely.
- ❖ Use sunscreen SPF-30 or higher that protects against both UVA/UVB rays. Look for sunscreen that contains zinc oxide, titanium dioxide or Parsol 1789. Apply the sunscreen half an hour before sun exposure, and reapply every 2 hours when outdoors or after getting out of the water.
- ❖ Winter sun is dangerous, especially at higher altitudes when skiing or hiking.
- ❖ Schedule a yearly body mole check with a dermatologist or knowledgeable physician.
- ❖ Schedule follow-up visits once a mole is removed.

Keep Your Players Hydrated

When children are physically active, their muscles generate heat, thereby increasing their body temperature. As the body temperature rises, the body's cooling mechanism -- perspiration -- kicks in. As a child perspires, his/her sweat evaporates, and the body is cooled.

Unfortunately, children get hotter than adults during physical activity, and their cooling mechanism is not as efficient as an adult's. If fluids are not replaced, children can become **overheated** and **dehydrated**. This is as true in the cooler days of spring as it is in the hotter summer months. The additional clothing children wear to stay warm on cool spring evenings makes it difficult for sweat to evaporate, so the body does not cool as quickly.

During both practices and games, your players must be encouraged to drink fluids even when they don't feel thirsty. You should schedule drink breaks every 15 to 30 minutes during practices and encourage your players to drink fluids between the innings of games.

Appropriate drinks for the dugout include water and low glycemic sports drinks. Fruit juices, which are high in carbohydrates, may cause stomach cramps, nausea, and diarrhea when the child becomes active. Avoid carbonated drinks like sodas because they

may decrease fluid volume and many contain caffeine, which is a diuretic and can dehydrate the body further.

Batting Cage Guidelines

The following guidelines³⁶ control the use of the league's batting cages:

- ❖ Adult supervision is required at all times when the batting cage is in use.
- ❖ If a pitching machine is used to deliver the balls, the pitching machine must be operated by an adult.
- ❖ Only one batter and one pitcher/pitching machine operator are allowed in the cage at a time.
- ❖ The pitcher/pitching machine operator must use an "L" fence protector.
- ❖ Every child in the batting cage, both hitters and pitchers, should wear a batting helmet.
- ❖ Make sure that observers do not stand close enough to the net that they could be struck by a ball that hits the netting.

Additional Health Tips for Baseball

Temple University Hospital³⁷ has compiled 10 health tips compiled that you should know to keep your players healthy and prevent injury:

- ❖ Stretching the muscles related to the activity is very important. For example, if a child is pitching, he or she should concentrate on stretching his/her arm and back muscles. If a child is catching, the focus should be on the legs and back.
- ❖ A good warm-up is just as important as stretching. A warm-up can involve light calisthenics or a short jog. This helps raise the core body temperature and prepares all of the body's muscles for physical activity.
- ❖ Children should not be encouraged to "play through pain." Pain is a warning sign of injury. Ignoring it can lead to greater injury.
- ❖ Swelling with pain and limitation of motion are two signs that are especially significant in children. Don't ignore them. They may mean the child has a more serious injury than initially suspected.
- ❖ Rest is by far the most powerful therapy in youth sports injuries. Nothing helps an injury heal faster than rest.
- ❖ Children who play on more than one team are especially at risk for overuse injuries.
- ❖ Injuries that look like sprains in adults can be fractures in children. Children are more susceptible to fractures because their bones are still growing.

- ❖ Children's growth spurts can make for increased risk of injury. A particularly sensitive area in a child's body during a growth spurt is the growth plate -- the area of growth in the bone. Growth plates are weak spots in a child's body and can be the source of injury if the child is pushed beyond his/her limit athletically.
- ❖ Ice is a universal first-aid treatment for minor sports injuries. Ice controls the pain and swelling caused by common injuries such as sprains, strains, and contusions.

Lightning Safety Procedures

While Northern California rarely experiences thunderstorms, you must understand the risks associated with such storms and know what steps to take in the event one occurs during a practice or game.³⁸

Lightning and Its Dangers: The average thunderstorm is 6-10 miles wide and moves at a rate of 25 miles per hour. The average lightning stroke is 5-6 miles long with up to 30 million volts at 100,000 amps flowing in less than a tenth of a second. All thunderstorms produce lightning and are dangerous. In an average year, lightning kills more people in the U.S. than either tornadoes or hurricanes.



(NOAA Photo Library)

Lightning often strikes outside the area of heavy rain and may strike as far as 10 miles from any rainfall. Once the leading edge of a thunderstorm approaches to within 10 miles, you are at immediate risk due to the possibility of lightning strokes coming from the storm's overhanging anvil cloud. This fact is the reason that many lightning deaths and injuries occur with clear skies overhead.

If you hear thunder, you are in danger. On average, the thunder from a lightning stroke can only be heard over a distance of 10 miles, depending on terrain, humidity, and background noise around you. By the time you can hear the thunder, the storm has already approached to within 10 miles. The sudden cold wind that many people use to gauge the approach of a thunderstorm is the result of down drafts and usually extends less than 3 miles from the storm's leading edge. By the time you feel the wind, the storm can be less than 3 miles away!

You can gauge the proximity of a lightning strike by counting the number of seconds between the sight of lightning and the sound of thunder that follows. Play should be halted and evacuation of the area called for when the count between the lightning flash and the sound of thunder is 30 seconds or less.

To avoid exposing players and spectators to the risk of lightning, take the following precautions:

- ❖ **Postpone activities if thunderstorms are imminent.** Prior to an event, check the latest forecast and, when necessary, postpone activities early to avoid being caught in a dangerous situation. Stormy weather can endanger the lives of participants, staff, and spectators.
- ❖ **Keep an eye on the sky.** Pay attention to weather clues that may warn of imminent danger. Look for darkening skies, flashes of lightning, or increasing wind, which may be signs of an approaching thunderstorm.
- ❖ **Listen for thunder.** If you hear thunder, immediately suspend the practice or game and instruct everyone to get to a safe place. Substantial buildings provide the best protection. Once inside, stay off corded phones and stay away from any wiring or plumbing. Avoid sheds, small or open shelters, dugouts, bleachers or grandstands. If a sturdy building is not nearby, a hard-topped metal vehicle with the windows closed will offer good protection, but avoid touching any metal.
- ❖ **Avoid open areas. Stay away from trees, towers, and utility poles. Lightning tends to strike the taller objects.**
- ❖ **Stay away from metal bleachers, backstops, and fences. Lightning can travel long distances through metal. Do not permit players to hold any metal objects such as metal bats.**
- ❖ **Do not resume activities until 30 minutes after the last thunder was heard.**

If you feel your hair on end (indicating lightning is about to strike):

- ❖ **Crouch down on the balls of your feet, put your hands over your ears, and bend your head down.** Make yourself as small a target as possible and minimize your contact with the ground.
- ❖ **Do not lie flat on the ground.**

What to do if someone is struck by lightning.

Most lightning strike victims can survive a lightning strike. However, medical attention may be needed immediately.

- ❖ Lightning victims do not carry an electrical charge, are safe to handle, and need immediate medical attention.
- ❖ **Call for help.** Have someone call **911** (or **415-472-0911 (Marin)/415-861-8020 (S.F.)** from a cell phone). Medical attention is needed as soon as possible.
- ❖ **Give first-aid.** Cardiac arrest is the immediate cause of death in lightning fatalities. However, some deaths can be prevented if the victim receives the proper first-aid immediately. Check the victim to see that they are breathing and have a pulse and continue to monitor the victim until help arrives. Begin CPR if necessary. (See p. 48 for a review of CPR). If an AED is available, use

it to analyze the person's heart rhythm and, if necessary, shock the heart to restore the natural sinus rhythm.

- ❖ **If possible, move the victim to a safer place.** An active thunderstorm is still dangerous. Don't let the rescuers become victims. Lightning CAN strike the same place twice.

General Safety Rules

General Accident Prevention

The league encourages parents and players to consider how they can incorporate safety in their thinking from the time they leave their homes to come to the games.

Parents should be reminded repeatedly of their responsibility to:

- ❖ See that all passengers use seat belts. California law requires all vehicle occupants to be seat belted while a vehicle is in operation. Only adults and children older than 12 should sit in the front passenger seat if the car has a passenger-side airbag. Children must be secured in an appropriate child passenger restraint (safety seat or booster seat) until they are at least 6 years old or weigh at least 60 pounds. Do not carry passengers in cargo areas of vans and pick-ups.
- ❖ See that their vehicles are in safe operating condition.
- ❖ Observe all traffic signs and regulations.
- ❖ Drive defensively.

Youngsters who are walking or biking to or from the field should be reminded to:

- ❖ Not hitch rides.
- ❖ Use street or highway crossings protected by traffic signals as much as possible.
- ❖ Always walk in single file off the roadway, and on the side against the flow of traffic where there are no sidewalks.

- ❖ Wear light-colored clothing and carry a flashlight when walking along a road after dark.
- ❖ Be just as alert to the dangers of moving traffic when in a group as when alone. Do not depend on others.
- ❖ Observe bicycle safety rules.

Bicycle Safety Rules

If a child will be riding his/her bicycle to the field for practices or games, here are some important safety tips:³⁹

- ❖ Know the route.
- ❖ Wear a properly fitted helmet.
- ❖ Complete the ABC Bike Safety Check.

Plan the safest route from your home to the field with your child, and practice riding the route together. Promote good riding skills including obeying all traffic laws, riding to the right of the road, and wearing helmets properly.

Medical research shows that 85% of a cyclist's head injuries can be prevented by the correct use of a helmet. Your child's helmet should fit snugly and be worn level on their head, covering the forehead. The straps should be comfortably snug under the chin so that the helmet stays in place. If the helmet is properly adjusted, it should not move more than an inch in any direction, and the child should not be able to pull it off his/her head.

A Bike Safety Check requires the following before each ride:

- ❖ **A = Air.** Make sure the tires have the proper amount of air pressure. Improperly inflated tires cause wear and place the rider in danger. The required amount of pressure can be found on the side of the tire.
- ❖ **B = Brakes.** Make sure the brakes are in good working order. Brakes should bring the bike to a halt within a safe distance. Lever brakes should not pull closer than one-half the distance to the handlebar.
- ❖ **C = Crank.** The crank is the part of the bicycle where the sprocket, chain and pedals are connected. There should be no wobble or play when you move the crank arms side to side.

Have your child take a test ride on the sidewalk or in the driveway prior to leaving for the field. If the bicycle is not functioning properly, have it repaired by a qualified technician before letting your child ride.

Please remind your child not to wear a bike helmet when playing on playground equipment. The U.S. Consumer Product Safety Commission has received reports of two strangulation deaths to children when their bike safety helmets became stuck in openings on playground equipment resulting in hanging. When a child gets off a bike, he/she should take off his/her helmet.

For Parents and Players at TCLL League Fields

In addition to the safety procedures that have been adopted to improve safety conditions on and around the field, the TCLL Little League has developed a set of safety rules aimed at parents, players, and spectators to be observed prior to, during, and following practices and games. Please make sure you communicate these matters to your players and their parents.

- ❖ The speed limit is 5 mph in roadway and parking lots while attending any league function. Drivers should watch for small children around parked cars.
- ❖ No alcohol is allowed in any parking lot, field, or common areas where league activities occur.
- ❖ There is NO SMOKING in the stands at any league practice or game.
- ❖ Children should not be permitted to play in the parking lots at any time.
- ❖ Use crosswalks when crossing the roadway. Always be alert for traffic.
- ❖ No profanity, please.
- ❖ Players on their way to and from games shall not swing bats or throw baseballs at any time until they reach the field area and are under the supervision of a Manager or Coach.
- ❖ No throwing or batting balls against dugouts or against the backstop.
- ❖ No throwing rocks or other objects.
- ❖ No horseplay in the walkways at any time.
- ❖ No climbing fences.
- ❖ No pets are permitted at league games or practices.

- ❖ Observe all posted signs. Players and spectators should be alert at all times for foul balls and errant throws.
- ❖ After each game, each team must clean up trash in the dugout and around the stands.
- ❖ **NO BICYCLE RIDING OR SKATEBOARDING IS PERMITTED AROUND THE PERIMETER OF THE PLAYING FIELDS-WE HAVE HAD SEVERAL PEDESTIAN VS BICYCLE ACCIDENTS IN THE PAST**

Failure to comply with the above may result in expulsion from league fields and activities.

Treating Baseball Related Injuries

Injury Management

In the event of an injury to a player, the Manager and Coaches must take control and manage the situation. This requires an assessment of the severity of the injury, deciding whether the injury requires emergency medical assistance, providing appropriate first-aid to treat the injury, and simultaneously dealing with the other players on the team. Some things to keep in mind:⁴⁰

- ❖ Make sure all play is stopped to protect the injured player from further injury as well as to protect the other members of the team who are not being closely monitored due to the coaching staff's focus on the injured player.
- ❖ Check the player's breathing, pulse, and alertness to enable you to judge the seriousness of the injury.
 - If necessary, call or have someone else call for emergency assistance by dialing **911** or, if using a cell phone, **415-472-0911 (Marin)/415-861-8020 (S.F.)**.
 - Send someone to the nearest intersection to direct the emergency medical personnel to your location.
 - Review the Registration form for important information regarding any medical conditions the injured player may have.

- Call or notify the player's parents. Their telephone number(s) can be found on the Registration form that you are required to bring to every practice and game.
- ❖ Evaluate the seriousness of the injury.
 - Determine if the player can be moved off the field. If so, move the player to the sideline for a closer examination. If not, clear an area around the player and begin an evaluation of his/her condition.
 - Determine if the player can return to the field or needs first-aid. If first-aid is required, you should be prepared to provide the appropriate treatment.
- ❖ Administer first-aid, if necessary. (See p. 46 for details).
- ❖ If the Emergency Dispatch Center has been contacted, turn over care to the professionals when they arrive and assist as necessary.
- ❖ If the parents are not available, go to the hospital with the ambulance. Turn over responsibility for the other players to an Assistant Coach.
- ❖ If emergency medical treatment is not required, urge the parents and player to see a doctor for a proper diagnosis and treatment plan.
- ❖ Record the injury on the ASAP Incident/Injury Tracking Report, a copy of which can be found in the Appendix. Notify the league Safety Officer **within 24 hours**. (See p. 69).

Calling for Emergency Medical Assistance

When to Call: If a player or spectator suffers an injury or develops a serious medical condition during a practice or game, the first decision you must make is whether to seek emergency medical care by dialing 911. **If you are uncertain whether to call 911, your decision has been made for you -- call 911 immediately.**

Also, please note that the average response time on 911 calls is 5 to 7 minutes. In route, paramedics are in constant communication with the local hospital preparing them for whatever emergency action might need to be taken. You cannot do this.

Therefore, never try to transport an accident victim to the hospital. Perform whatever first-aid you are capable of to stabilize the victim and wait for the paramedics to arrive.

What Number to Call: The telephone number you dial for emergency medical assistance is dependent on whether you are placing the call from a public (or other land based) telephone or from a cell phone.

From a public phone (or other land based phone): **911**

From a cell phone: **415-72-0911 (Marin)**
415-861-8020 (S.F.)

From a cell phone, a 911 call will connect you to the California Highway Patrol in Vallejo, and precious minutes may be lost while the call is transferred to the Emergency Dispatch

Center in San Rafael. Therefore, you must call **415-472-0911/415-861-8020** from a cell phone to reach the Dispatch Center. Other counties use different telephone numbers. In Sonoma County, it is 707-565-2121.

What is First-Aid?

As the name implies, first-aid refers to the first level of care given to an injured person. It is usually performed by the first person on the scene and continued until professional medical assistance arrives. At no time should anyone administering first-aid go beyond his or her capabilities. **Know your limits!**

In order to insure that the league has properly trained adults at every practice and game, each Manager and Coach is required to complete a course in first-aid along with CPR certification on a biannual basis.

A thorough review of the topics covered by the league's first-aid course can be found beginning on page 46 of the Safety Manual.

First-Aid Kits

The TCLL Little League has equipped each playing field with a first-aid kit that contains the following items:

- ⇒ 10 Instant Ice Packs
- ⇒ Nitrile (Non-Latex) Gloves
- ⇒ 1 Bottle of Hydrogen Peroxide
- ⇒ 1 Roll of Gauze
- ⇒ 9 Packages of Antiseptic Wipes
- ⇒ 20 Regular Strip Bandages
- ⇒ 12 Extra Large Adhesive Bandages
- ⇒ 1 CPR Face mask
- ⇒ 1 Pair of Scissors
- ⇒ 1 Pair of Plastic Safety Glasses
- ⇒ 1 Roll of Tape
- ⇒ 1 Triangular Bandage
- ⇒ 2 Combine Dressings (5" x 9")
- ⇒ 5 General Use Sponges (4" x 4")
- ⇒ 5 Gauze Sponges (2" x 2")
- ⇒ 1 Bottle Sunscreen (SPF 45)

These First-Aid Kits are stored in the following locations:

Joe Wagner(Kirby and T-ball access Joe Wagner):	TCLL Lock Box
San Clemente Field:	TCLL Lock Box
Town Park:	TCLL Lock Box
Granada Field:	Coach
Hall Middle School Field:	Coach

Each kit has a label inside the lid with emergency telephone numbers as well as the address of the field so that you can provide this information to the EMS dispatcher in the event of an emergency.

The kits are replenished at regular intervals by the league Safety Officer. If you notice that any of the kits are missing the enumerated items, please let the Safety Officer know as soon as possible. The Pre-Game Checklist in the Appendix can be used to identify any items that are missing or are low in stock.

Teams in the Seniors, Juniors, and Majors that travel and play on fields outside the league are also equipped with small, portable First-Aid Kits as part of their team equipment. Please take these with you to all practices and games that take place in other communities.

Finally, the following fields are equipped with a Phillips AED, the use of which is covered during the TCLL's first-aid training classes.

Joe Wagner Field (shared by Kirby, T-ball as well):TCLL Lock Box

Good Samaritan Immunity

California has adopted several "Good Samaritan" statutes that grant specified immunity from liability arising out of acts or omissions committed during the rendition of emergency medical care. While this discussion should not be considered legal advice and is not intended to be an exhaustive account of the scope of this immunity, a brief summary follows:

Physicians: Physicians who in good faith render emergency care at the scene of an emergency cannot be held liable for damages resulting from their acts or omissions committed during the rendering of such care. [Business & Professions Code §2395]. The determination of whether the care was provided in "good faith" is a fact question as to whether the physician believed he or she was responding to an emergency situation or, instead, whether, under the circumstances, a physician acting in good faith would have reasonably concluded his or her immediate assistance was not required. *Bryant v. Bakshandeh* (1991) 226 Cal.App.3d 1241, 1247.

Lay Volunteers: No person, whether or not a trained medical professional, who, in good faith and not for compensation, renders emergency care at the scene of an emergency can be held liable for damages resulting from any act or omission in connection with the rendition of that aid. [Health & Safety Code §1799.102].

CPR Training: In addition, no person who has completed a basic cardiopulmonary resuscitation ("CPR") course which complies with American Heart Association or American Red Cross standards, and who in good faith renders emergency CPR at the scene of an emergency can be held liable for damages resulting from any acts or omissions arising out of the rendition of such aid unless his or her conduct in rendering the CPR amounted to "gross negligence" or he or she rendered the CPR with the expectation of receiving payment. [Civil Code §1714.2(a), (b) & (e)]. This immunity also extends to the entity or organization that provided, supervised or sponsored the CPR training and to the instructor who gave the training (provided the instructor was properly supervised). [Civil Code §1714.2(c) & (d)].

AED Training: Further, any person who, in good faith and not for compensation, renders emergency care or treatment by the use of an AED at the scene of an emergency is not liable for any civil damages resulting from any acts or omissions in rendering the emergency care, provided the user has not acted with gross negligence or willful or wanton misconduct. [Civil Code §1714.21(b) and (f)].

Heimlich Maneuver: Finally, those individuals who administer the “Heimlich Maneuver” or other first-aid procedures (not involving the insertion of any physical instrument or device into the mouth or throat) in attempting to remove food stuck in another person’s throat are immune from civil liability when acting in emergency situations. [Health & Safety Code §114180].

Communicable Disease Safeguards

COVID-19 SPECIFIC GUIDELINES ARE PENDING- WE ARE WAITING FOR GUIDELINES SET FORTH BY OUR STATE AND LOCAL GOVERNMENT AND HEALTH OFFICIALS IN TERMS OF PUBLIC GATHERINGS, ORGANIZED YOUTH SPORTS, AND SPORTING EVENTS WHEN DETERMINING WHEN IT IS SAFE TO RETURN TO LITTLE LEAGUE ACTIVITIES

While the risk of one player infecting another with HIV/AIDS during competition is close to non-existent, there is a remote risk that other blood borne infectious diseases, e.g., hepatitis, can be transmitted. For this reason, Little League Baseball® has established certain procedures for dealing with wound treatment on the field [see Little League 2006 Official Regulations and Playing Rules, p. 91]:

- ❖ Use gloves or other precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids is anticipated. The league first-aid kits found in the storage sheds or equipment boxes at every field contain a plastic bag with nitrile (non-latex) gloves for this purpose.
- ❖ The bleeding must be stopped, the open wound covered, and if there is an excessive amount of blood on the uniform, it must be changed before the player can continue playing.
- ❖ Follow acceptable guidelines in the immediate control of bleeding and when handling bloody dressings, mouthguards, and other articles containing body fluids.
- ❖ Immediately wash your hands and other skin surfaces if they come into contact with blood or other body fluids while treating a player or other person. If you are wearing gloves, wash your hands immediately after removing them.
- ❖ Clean all contaminated surfaces and equipment with an appropriate disinfectant before competition resumes.
- ❖ Practice proper disposal procedures of any material (gauzes, sponges, towels, etc.) containing blood or other body fluids.
- ❖ Although saliva has not been implicated in HIV transmission, to minimize the need for direct contact during emergency mouth-to-mouth resuscitation, use the face masks contained in each of the league first-aid kits.

- ❖ Managers and Coaches with bleeding or oozing skin conditions should refrain from all direct athletic care until the condition resolves.

First-Aid

This section of the league Safety Manual is designed to serve as a refresher course on the topics and issues that are discussed in the league's first-aid training program.

Required Training: All Managers and Coaches in the league are **required** to take a first-aid training class once every other year, and at least one Manager and Coach from each team is **required** to take the class **each year**. Classes are offered annually by the league prior to Opening Day. Physicians and other individuals (e.g., police officers, fire fighters, etc.) who are trained as part of their professional duties, are exempt from this requirement.

Cardiopulmonary Resuscitation ("CPR")

What is CPR?: Cardiopulmonary resuscitation ("CPR") involves a series of

assessments and skills used in sequence to provide rescue support and maintain some oxygen and blood flow to the heart and brain of an individual who has stopped breathing. This is the second of four links in the American Heart Association Chain of Survival. The four links encompass:

- ❖ Phoning 911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.) from a cell phone) to activate the emergency medical services (EMS) system;
- ❖ Starting CPR;
- ❖ Early defibrillation by trained rescuers or EMS personnel; and
- ❖ Advanced care by EMS and hospital personnel.

CPR is the critical link that buys time between the first link (calling 911) and the third link (early defibrillation). CPR allows oxygen to flow to the brain and heart until defibrillation or other advanced care can restore normal heart rhythm. Victims of cardiac arrest who receive CPR from bystanders are more than twice as likely to survive as victims who do not receive such support. The earlier you give CPR to a person in cardiac or respiratory arrest, the greater the victim's chance of survival.⁴¹

How to Recognize a Heart Attack

A heart attack (acute myocardial infarction) occurs when a coronary artery becomes blocked, and the heart muscle is dying. The most common signs of a heart attack are:

- ❖ Uncomfortable pressure, fullness, squeezing, heaviness, or pain in the center of the chest that lasts for more that a few minutes or that goes away and comes back.
- ❖ Pain to the neck, jaw or down the left arm.
- ❖ Chest discomfort with lightheadedness, fainting, sweating, nausea or shortness of breath.

Not all warning symptoms occur in every heart attack. People who are having a heart attack may complain of vague signs or symptoms. If any symptoms occur, don't wait. Get help immediately. **Phone 911 or 415-72-0911 (Marin)/415-861-8020 (S.F.)** (cell phone). *Delay can be deadly.*

After you have phoned 911, have the person rest quietly and calmly. Help the person into a position that allows the easiest breathing.

How to Recognize Cardiac Arrest

When a coronary artery is blocked during a heart attack, the heart muscle is deprived of oxygen and may stop pumping blood. The heart muscle may begin to quiver in the abnormal heart rhythm called ventricular fibrillation ("VF"). This produces cardiac arrest. The only treatment for VF is defibrillation with an automated external defibrillator ("AED"). If CPR is provided until an AED arrives, defibrillation is more likely to be successful.

How to Perform CPR (on Adults)

Go to the below link for a full explanation and protocol. There is a “HANDS ONLY” technique which makes it easy to administer CPR- See below link for video demo:

http://www.heart.org/HEARTORG/CPREandECC/HandsOnlyCPR/Hands-Only-CPR_UCM_440559_SubHomePage.jsp

Lay rescuer CPR

American Heart Association

Change in CPR Sequence: C-A-B Rather than A-B-C* (Circulation/Airway-Breathing)

2014-Can use “Hands only” approach”

2010 (New): Initiate chest compressions before ventilations.

2005 (Old): The sequence of adult CPR began with opening of the airway, checking for normal breathing, and then delivery of 2 rescue breaths followed by cycles of 30 chest compressions and 2 breaths.

Why: Although no published human or animal evidence demonstrates that starting CPR with 30 compressions rather than 2 ventilations leads to improved outcome, chest compressions provide vital blood flow to the heart and brain, and studies of out-of-hospital adult cardiac arrest showed that survival was higher when bystanders made some attempt rather than no attempt to provide CPR. Animal data demonstrated that delays or interruptions in chest compressions reduced survival, so such delays or interruptions should be minimized throughout the entire resuscitation. Chest compressions can be started almost immediately, whereas positioning the head and achieving a seal for mouth-to-mouth or bag-mask rescue breathing all take time. The delay in initiation of compressions can be reduced if 2 rescuers are present: the first rescuer begins chest compressions, and the second rescuer opens the airway and is prepared to deliver breaths as soon as the first rescuer has completed the first set of 30 chest compressions. Whether 1 or more rescuers are present, initiation of CPR with chest compressions ensures that the victim receives this critical intervention early, and any delay in rescue breaths should be brief.

Elimination of “Look, Listen, and Feel for Breathing”*

2010 (New): “Look, listen, and feel” was removed from the CPR sequence. After delivery of 30 compressions, the lone rescuer opens the victim’s airway and delivers 2 breaths.

2005 (Old): “Look, listen, and feel” was used to assess breathing after the airway was opened.

Why: With the new “chest compressions first” sequence, CPR is performed if the adult is unresponsive and not breathing or not breathing normally (as noted above, lay rescuers will be taught to provide CPR if the unresponsive victim is “not breathing or only gasping”). The CPR sequence begins with compressions (C-A-B sequence). Therefore, breathing is briefly checked as part of a check for cardiac arrest; after the first set of chest compressions, the airway is opened, and the rescuer delivers 2 breaths.

Chest Compression Rate: At Least 100 per Minute* (think of the song tempo of “staying alive” by the Bee Gees)

2010 (New): It is reasonable for lay rescuers and healthcare providers to perform chest compressions at a rate of at least 100/min.

2005 (Old): Compress at a rate of about 100/min.

Why: The number of chest compressions delivered per minute during CPR is an important determinant of return of spontaneous circulation (ROSC) and survival with good neurologic function. The actual number of chest compressions delivered per minute is determined by the rate of chest compressions and the number and duration of interruptions in compressions (eg, to open the airway, deliver rescue breaths, or allow AED analysis). In most studies, more compressions are associated with higher survival rates, and fewer compressions are associated with lower survival rates. Provision of adequate chest compressions requires an emphasis not only on an adequate compression rate but also on minimizing interruptions to this critical component of CPR. An inadequate compression rate or frequent interruptions (or both) will reduce the total number of compressions delivered per minute. For further information, see Box 2.

Chest Compression Depth*

2010 (New): The adult sternum should be depressed at least 2 inches (5 cm).

2005 (Old): The adult sternum should be depressed approximately 1½ to 2 inches (approximately 4 to 5 cm).

Why: Compressions create blood flow primarily by increasing intrathoracic pressure and directly compressing the heart. Compressions generate critical blood flow and oxygen and energy delivery to the heart and brain. Confusion may result when a range of depth is recommended, so 1 compression

Number of Compressions Delivered Affected by Compression Rate and by Interruptions. The total number of compressions delivered during resuscitation is an important determinant of survival from cardiac arrest.

The number of compressions delivered is affected by the compression rate and by the compression fraction (the portion of total CPR time during which compressions are performed); increases in compression rate and fraction increase the total compressions delivered, whereas decreases in compression rate or compression fraction decrease the total compressions delivered. Compression fraction is improved if you reduce the number and length of any interruptions in compressions, and it is reduced by frequent or long interruptions in chest compressions. An analogy can be found in automobile travel. When you travel in an automobile, the number of miles you travel in a day is affected not only by the speed that you drive (your rate of travel) but also by the number and duration of any stops you make (interruptions in travel). During CPR, you want to deliver effective compressions at an appropriate rate (at least 100/min) and depth, while minimizing the number and duration of interruptions in chest compressions. Additional components of high-quality CPR include allowing complete chest recoil after each compression and avoiding excessive ventilation.

BOX 2

Table 1

Summary of Key BLS Component Step 1: Check response. Before performing CPR, check whether the individual is responsive by gently shaking them and asking, “Are you OK?”

Step 2: Call 911. If the person is unresponsive, phone **911** immediately or send someone else to phone 911. Remember, from a cell phone you must dial **415-472-0911 (Marin)/415-861-8020 (S.F.)**. This number will connect you directly to the Emergency Dispatch Center.

Carefully place the person flat on his/her back on a firm surface. If the person is injured or you suspect an injury, move them only if necessary and turn the head, neck, and body as a unit.

Then, remember your C-A-B s: - Circulation-

Airway Breathing



How to Perform CPR (on Children)

Step 1: Check Response. Check whether the victim is responsive by shouting, “Are you OK?” and gently tapping the victim.

Step 2: Shout for help and begin CPR. If the victim is unresponsive, shout for help and begin CPR. If someone responds to the shout, tell the responder to call **911** or, from a cell phone, **415-72-0911 (Marin)/415-861-2020 (S.F.)**. If you are alone, begin CPR and provide approximately 1 minute of CPR and then call **911**.

Look at the following link for details on how to perform CPR on children:

http://www.heart.org/idc/groups/heart-public/@wcm/@ecc/documents/downloadable/ucm_317350.pdf

Use of an AED

According to the American Heart Association, approximately 250,000 Americans die every year from Sudden Cardiac Arrest (SCA).⁴² SCA occurs when the lower chambers of the heart suddenly stop beating normally and develop ventricular fibrillation (VF). VF is a chaotic heart rhythm in which the muscles of the heart begin quivering, preventing the effective pumping of blood. If this condition is not corrected immediately, death will result. An automated external defibrillator (AED) is the only treatment available to stop VF and allow the heart to re-pace itself into a normal rhythm.

The primary determinant of survival from VF cardiac arrest is the time interval from collapse until defibrillation. Out-of-hospital defibrillation within the first 3 minutes of witnessed adult VF arrest results in survival rates greater than 50%. But the success of resuscitative efforts decreases dramatically with the passage of time. For every minute that passes without defibrillation following cardiac arrest, the survival rate declines by 7% to 10%.⁴³ Most AEDs can be used by lay rescuers even without training because the machines will orally instruct you what to do. However, legal immunity is provided only to those who have been certified in AED usage after undergoing appropriate training. [See p. 44].

Recognizing the potential delay that could occur in obtaining emergency treatment if a SCA or commotio cordis event were to occur at the fields where TCLL games are played, the TCLL has acquired a Phillips AED for use at the following fields:

Joe Wagner(shared by Kirby/T-ball):

IN THE SNACK SHACK

“Remembering all of the elements [in the Chain of Survival] in the proper order can be difficult for lay rescuers who, of course, are not used to dealing with cardiac arrest,” said Dr. Miller, the principal investigator and a member of the faculty at Harvard Medical School. “The study suggests AEDs that provide support-prompts to assist with carrying out the steps of the Chain may help achieve higher survival rates for out-of-hospital cardiac arrest.”



The Phillips AED uses voice prompts and visual graphics to guide the rescuer through a resuscitation sequence that may include defibrillation and/or CPR. **The adult cartridge is loaded, and a pediatric (weight below 55lbs.) is available in the case if needed.** Following attachment of electrodes to a victim's chest, the AED monitors the electrocardiographic (ECG) rhythm of the victim's heart, analyzes that rhythm, and determines whether the rhythm is shockable or non-shockable.

Steps for Using the AED

Step 1: Turn the AED on.

You do this by pushing the On/Off button located next to the handle. **Do this as soon as you retrieve the AED to begin activating the voice prompts.** Then open the lid and start following the visual and voice prompts.

Step 2: Follow the Voice Prompts.

When the cover of the AED is removed, the top of the unit contains a series of graphics that serve as reminders of the steps to follow when performing a rescue. The graphics are each combined with an indicator light. Voice prompts draw attention to the graphics in a sequence defined by current protocols for use of an AED by the American Heart Association.

- ❖ Check the responsiveness of the victim by shouting "Are you okay?"
- ❖ Call or send someone for help.
- ❖ Lift the victim's chin and tilt the head back. Open the victim's airway and check for breathing.

If there is no evidence of head or neck trauma, the head chin lift method is the recommended maneuver for opening the victim's airway. The cover of the AED may be placed under the victim's shoulders to help maintain head tilt.

If head or neck injury is suspected, DO NOT USE THE PASS (some AED covers can be used as a passive neck support). Place the victim on a firm surface before performing CPR.

- ❖ Check the victim's circulation. If signs of circulation are absent, then defibrillation is necessary.

Step 3: Attach the Electrode Pads.

- ❖ Remove the clothing from the victim's chest. Ensure the victim's chest is dry. If the victim has excessive chest hair, clip or shave the hair to help ensure proper adhesion of the electrodes.
- ❖ Open the AED pad package. If the victim is a child between 1 and 8 years of age (55lbs or less), you will need to use the pediatric pad package.
- ❖ Tear open the electrode package and unfold the electrodes.
- ❖ Hold the CPR plastic sensor and then place the sensor between the nipples and on the middle of the victim's breastbone, using the sensor's cross hairs to guide you. The graphic illustration on the AED will show you where to put the pads.
- ❖ Press the CPR sensor with your right hand and pull the number 2 tab to peel the protective backing from the electrode. Press the electrode from the center out to make sure it adheres properly to the victim's skin.
- ❖ Press the CPR sensor with your left hand and pull the number 3 tab to peel the protective backing from the electrode. Press the electrode from the center out to make sure it adheres properly to the victim's skin.



Step 4: "Clear" the Victim and Allow the AED to Check the Heart Rhythm.

- ❖ When you "clear" the victim, you make sure that no one is touching him/her. Advise anyone nearby to do the same. Then the AED can analyze the heart rhythm. The AED will say, "DON'T TOUCH PATIENT - ANALYZING."

Step 5: "Clear" and Press the SHOCK Button.

- ❖ If the audio prompt indicates that defibrillation is advised (the AED will say, "TREATMENT ADVISED"), "clear" the victim and then press the "Treatment" button to deliver a shock. This is the button with the graphic illustration of a heart in the center of the AED. The shock will cause the victim's arms and other muscles to jerk.
- ❖ Repeat this step until the unit no longer prompts you to deliver a shock. If there is a continuing shockable ECG rhythm, the AED is designed to perform up to three ECG analyses and stacked shocks before it prompts the rescuer to initiate CPR.
- ❖ If there is still no sign of circulation, administer 30 chest compressions to the victim. The compressions should be done on the CPR sensor in the middle of the victim's chest.
- ❖ If additional defibrillation is not needed, then administer CPR until emergency medical personnel arrive. Do not remove the electrodes.

What to Do If . . .

The AED provides a “No Shock Advised” message?

The AED may give a “no shock advised” message when you first attach the AED or after a shock is given. This means that the victim’s heart rhythm does not need a shock. The AED will then issue the following series of audio prompts:

NO SHOCK ADVISED. OPEN AIRWAY. CHECK BREATHING. CHECK CIRCULATION. IF NO CIRCULATION - START CPR.

- ❖ Check the victim’s airway and breathing, and look for signs of circulation.
- ❖ If there is no breathing or signs of circulation, give 1 minute of CPR and follow the prompts.

A period of 1 - 3 minutes is then provided for rescuer CPR. Following this CPR period, the AED automatically re-initiates additional ECG rhythm analyses.

The victim has no normal breathing but has signs of circulation?

- ❖ Leave the AED attached to the victim.
- ❖ If the victim is not injured, roll the victim to the side position. Watch the victim carefully until EMS personnel arrive.

The victim has signs of circulation but no normal breathing?

- ❖ Give rescue breaths **without** chest compressions -- 1 breath every 5 seconds.

Using the AED on Children Under 9

Although cardiac arrest in children is extremely rare, it can occur in cases of commotio cordis, hypertrophic cardiomyopathy, congenital coronary artery abnormalities, long QT syndrome, and Wolff-Parkinson White Syndrome.⁴⁴

Until recently, AEDs were only approved for people over 8 years of age. On July 1, 2003, the American Heart Association issued a Scientific Statement stating that AEDs are safe for children as young as 1 year of age.⁴⁵ The AHA Statement concluded that “current evidence suggests that AEDs are capable of appropriate sensitivity and specificity for pediatric arrhythmias and are both safe and effective for defibrillation of children 1 to 8 years of age.” However, special pediatric pads must be used for victims of this age.

Phillips® AED Plus has a separate set of pediatric electrode pads that can be used on children under 8. Each AED is stored with the adult pads connected to the unit. Therefore, if you encounter a cardiac emergency involving a child under 8, you will need to disconnect the adult pads and replace them with the pediatric pads.

Unlike the adult pads, the pediatric pads come in two pieces, requiring one pad to be placed on the chest and the other on the back. Follow the illustrations accompanying the pads. **The AED should be used on a child of this age where the child does not respond and has no normal breathing and no signs of circulation after 1 minute of CPR.**

Once the pediatric electrodes are attached, the AED Plus operates in some very important ways.

The AED Plus will let you know if the rescue in progress is for an adult or pediatric patient. This helps prevent mistakes. Rescuers are less likely to deliver too little energy to an adult because pediatric pads are attached, or too much energy to a child because adult pads are attached. You can even switch pads in mid-rescue if you discover a mistake.

With the pediatric pads attached, the AED Plus performs a pediatric heart analysis (electrocardiogram). With the pediatric pads attached, the AED Plus performs a special analysis designed for a child's faster heart rate.

The AED Plus can deliver six different levels of energy: 3 higher levels for adults and 3 lower levels for children.

The Phillips AED has two cartridges-The adult cartridge(9 yrs of age and above) is loaded in the unit. The pediatric is available in the case(ages 1-8yrs/less than 55lbs)

Heimlich Maneuver

If a child or adult is choking on a foreign body, use the Heimlich maneuver (abdominal thrusts) to relieve severe or complete obstruction of the airway caused by the object.

- ❖ Make a fist with one hand;
- ❖ Place the thumb side of the fist on the victim's abdomen, slightly above the navel and well below the breastbone;
- ❖ Grasp the fist with the other hand and provide quick, upward thrusts into the victim's abdomen;



- ❖ Repeat the thrusts and continue until the object is expelled or the victim becomes unresponsive.

If the obstruction is not relieved, the victim will stop breathing. When the victim becomes unresponsive and you are alone, activate the EMS system by **calling 911 (or 472-0911 (Marin)/861-8020 (S.F.) from a cell phone)**. Then attempt CPR. If another person is

present, send them to call 911 while you begin CPR.

CPR may be effective for the person who becomes unresponsive from choking because the muscles in the upper airway relax and a complete airway obstruction may become only a partial obstruction. If this occurs, you may be able to deliver rescue breaths successfully. Additionally, evidence indicates that chest compressions may help relieve choking.

Commotio Cordis

In June 1998, 6-year old Jacob Watt, an Illinois Little Leaguer, was hit in the chest by a foul ball while he waited to bat during a T-Ball game. He collapsed and died on the field from a rare condition known as commotio cordis.⁴⁶

What is Commotio Cordis? Commotio cordis (cardiac concussion) is a medical term used to refer to a low impact, blunt trauma to the chest that causes a frequently fatal heart arrhythmia, most commonly ventricular fibrillation (“VF”). Although the precise mechanism of cardiac arrest in commotio cordis has not been determined with certainty, it is believed that if the impact occurs at a precise point in the cardiac cycle, just over 1/100th of a second as the heart repolarizes electrically in preparation for the next heart beat, the heart can be short circuited.

Children under 16 years of age are particularly vulnerable, apparently because of their unique thoracic architecture.⁴⁷ According to Barry J. Maron, M.D. of the Minnesota Heart Institute Foundation, a leading researcher on the subject, “Not every blow to the chest is going to result in a death like this. Timing, force, and location have to conspire to produce this rare but tragic thing.”⁴⁸

Statistics compiled by the U.S. Commotio Cordis Registry in Minneapolis indicate that while the incidence of commotio cordis in youth sports is rare, it occurs more frequently in youth baseball than in any other sport. Of the 128 confirmed cases of commotio cordis reported to the Registry between 1985 and September 2001, 53% involved baseballs or softballs.⁴⁹

Similar data are available from the U.S. Consumer Product Safety Commission. From 1973 to 1995, there were a total of 88 deaths in the 5 to 14 year-old age group from baseball related injuries. Of this total, 43% occurred from commotio cordis.⁵⁰

In May 2002, 7-year old Nader Parman of Atlanta, Georgia, was playing baseball in his front yard with a 15-year old neighbor, who was hitting him pop-ups. The older boy accidentally hit a line drive that struck Nader in the chest. Although Nader’s father rushed outside, immediately called 911, and started administering CPR, Nader died as a result of commotio cordis.⁵¹

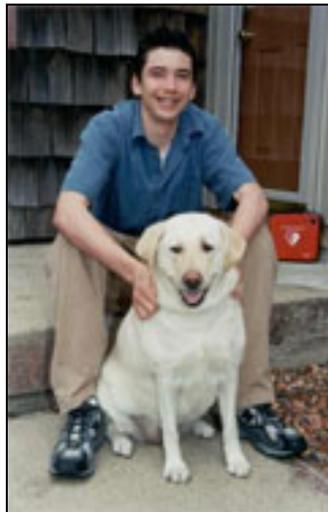


Seven-year-old Nader Parman was getting ready to finish up his Little League season when he was struck in the chest by a ball that ended his young life.

Prompt Treatment with an AED Required: Commotio cordis is almost invariably fatal unless the victim undergoes prompt defibrillation using an automated external defibrillator (“AED”).⁵² The most recent analysis of the cases entered into the Commotio Cordis Registry indicated that 84% of the reported cases resulted in death.⁵³

“After three to five minutes, if you cannot get the individual back into their regular rhythm, it’s unlikely that they’ll survive,” says Mark Link, M.D., Associate Professor of Medicine at Tufts New England Medical Center in Boston.⁵⁴ Of 68 Registry cases in which resuscitation was begun within 3 minutes, 25% survived, compared to only 3% in which resuscitation was delayed for more than 3 minutes.⁵⁵ Generally, every 1-minute delay in defibrillation reduces the survival rate by 7 to 10%.⁵⁶

In June 2001, Sean Morley, a 13-year old baseball player from Buffalo Grove, Illinois, was hit in the chest by an inside fastball during a junior high school game. He collapsed on the field as his heart went into VF. Sean was fortunate. Two of the parents in the stands were doctors who were promptly able to administer CPR. Another parent managed to flag down a patrolling police officer who happened to be driving by the field and had an AED in his vehicle, and Sean’s heart was successfully defibrillated.⁵⁷



Sean Morley, a 13-year old baseball player, survived a commotio cordis event through the prompt action of bystanders and the availability of defibrillation with an AED.

Chest Protectors Are Ineffective: Unfortunately, the risk of commotio cordis cannot be eliminated through the use of commercially available chest protectors. A study conducted by Mark S. Link, M.D. and colleagues at the Tufts-New England Medical Center and the Minneapolis Heart Institute Foundation tested seven models of chest protectors that are marketed for use by catchers as well as for batters, pitchers, and fielders. The study concluded the pads simply do not offer any substantial protection from chest wall trauma that can cause commotio cordis.⁵⁸

If You Suspect Commotio Cordis, What Should You Do?: In the event a player suffers a blunt trauma to the chest and collapses, loses consciousness or becomes lightheaded, commotio cordis should be considered the likely cause, and immediate action must be taken. According to Dr. Link, “Onlookers often assume the child had the wind

knocked out of him or her. But this can be a catastrophic assumption because, in fact, the child may have experienced a potentially fatal event.”⁵⁹

Immediately call 911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.) from a cell phone) and advise the dispatcher of the emergency and your precise location. If the victim is not breathing, CPR must be started at once. If an AED is available, use it to determine if the victim’s heart needs to be defibrillated and follow the instructions given by the device.

Head Injuries

Concussion. A concussion is defined as any blow to the head. Although once considered “a relatively benign condition,” as a commentary in a recent issue of the medical journal Pediatrics noted, medical research now recognizes it as “a critical medical issue with distressing, potentially permanent consequences.”⁶⁰ If a player receives a blow to the head, he/she should be removed from the game and should not be permitted to return until he/she has been examined by a physician and has received a medical release. Research has shown that exertion, whether physical or mental, can exacerbate and prolong symptoms as a child’s brain heals.⁶¹

- ❖ See that the victim gets adequate rest.
- ❖ Note any symptoms and see if they change within a short period of time.
- ❖ If the victim is a child, tell the parents about the injury and have them monitor the child after the game.
- ❖ Advise the parents to take the child to a doctor for further examination and tell them that the child will need a medical release before being permitted to return to the field.

If the victim is unconscious after the blow to the head, suspect a head and/or neck injury. **DO NOT MOVE the victim.** Call **911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.) from a cell phone)** immediately.

Signs of Head and Spine Injuries. The following are signs and symptoms of injuries to the head and/or spine.

- ❖ Changes in consciousness.
- ❖ Severe pain or pressure in the head, neck, or back.
- ❖ Tingling or loss of sensation in the hands, fingers, feet, and toes.
- ❖ Partial or complete loss of movement of any body part.
- ❖ Unusual bumps or depressions on the head or over the spine.
- ❖ Blood or other fluids in the ears or nose.
- ❖ Heavy external bleeding of the head, neck, or back.
- ❖ Seizures.

- ❖ Impaired breathing or vision as a result of an injury.
- ❖ Nausea or vomiting.
- ❖ Persistent headache.
- ❖ Loss of balance.
- ❖ Bruising of the head, especially around the eyes and behind the ears.

General Care for Head and Spine Injuries. In the event of any injury involving the head or spine:

- ❖ Call **911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.)** from a cell phone) **immediately.**
- ❖ Minimize movement of the head and spine.
- ❖ Maintain an open airway.
- ❖ Check consciousness and breathing.
- ❖ Control any external bleeding.
- ❖ Keep the victim from getting chilled or overheated till paramedics arrive and take over care.

Shock

An individual who suffers a serious injury or illness is likely to develop shock. Shock is a dangerous condition and can be fatal. Signs of shock include:

- ❖ Restlessness or irritability.
- ❖ Altered consciousness.
- ❖ Pale, cool, moist skin.
- ❖ Rapid breathing
- ❖ Rapid pulse.

Caring for shock involves the following simple steps:

- ❖ Have the victim lie down. Helping the victim rest comfortably is important because pain can intensify the body's stress and accelerate the progression of shock.
- ❖ Control any external bleeding.
- ❖ Help the victim maintain normal body temperature. If the victim is cool, try to cover him or her to avoid chilling.
- ❖ Try to reassure the victim.

- ❖ Elevate the legs about 12 inches unless you suspect head, neck, or back injuries or possible broken bones involving the hips or legs. If you are unsure of the victim's condition, leave him or her lying flat.
- ❖ Do not give the victim anything to eat or drink, even though he or she is likely to be thirsty.
- ❖ Call **911** (or **415-72-0911 (Marin)/415-861-8020 (S.F.)** from a cell phone) **immediately**. Shock cannot be managed effectively by first-aid alone. A victim of shock requires advanced medical care as soon as possible.

Heat Exhaustion and Heat Stroke

Sweat acts like our natural air conditioner. As sweat evaporates from our skin, it cools us off. Our personal cooling system can fail, though, if we overexert ourselves on hot and humid days. When this happens, our body heat can climb to dangerous levels. This can result in heat exhaustion or a heat stroke that is life threatening.

In July 2001, Corey Stringer, a 27-year old Pro Bowl tackle for the Minnesota Vikings, collapsed from heat stroke during an early training camp practice held during a heat spell when temperatures were in the 90's by mid-morning. His body temperature had climbed to 108 degrees by the time he was hospitalized, and he died early the following morning from cardiac arrest brought on by multiple organ failure.⁶²



Minnesota Vikings tackle Corey Stringer died during an early training camp practice in July 2001 after suffering heat stroke. (Jim Mone/AP Photo)

In the last several years, high school and college athletes have also died of heat illness during practices in hot, humid weather.⁶³ The combination of high heat and humidity can create an atmosphere where an athlete's body cannot properly dissipate the heat he/she generates in even normal activities.

Heat illness can also affect umpires. In June 2002, an umpire at Busch Stadium in St. Louis had to be assisted from the field when he collapsed behind the plate during a game being played in 96 degree weather with high humidity.⁶⁴

The young and old are especially susceptible to heat illness, as are people who work or exercise strenuously outside for long periods during the day. This combination demands that coaches of young athletes be vigilant.

Heat Cramps. Heat cramps usually occur after strenuous exercise or an outdoor activity. Symptoms of heat cramps are:

- ❖ Severe pain and cramps in the legs and abdomen.
- ❖ Faintness or dizziness.
- ❖ Weakness.
- ❖ Profuse sweating.

This condition requires immediate medical attention but is usually not life threatening.

Heat Exhaustion. Heat exhaustion occurs when one is exposed to heat for a prolonged period of time. It takes time to develop as fluids and salt, which are vital for health, are lost through perspiration during exercise or other strenuous activities. It is very important to drink lots of liquids before, during, and after exercise in hot weather.

The signs and symptoms of heat exhaustion include:

- ❖ Cool, clammy, pale skin
- ❖ Sweating
- ❖ Dry mouth
- ❖ Fatigue, weakness
- ❖ Dizziness
- ❖ Headache
- ❖ Nausea, sometimes vomiting
- ❖ Muscle cramps
- ❖ Weak and rapid pulse

First-aid for Heat Exhaustion.

- ❖ Move the person to shade or a cool place.
- ❖ Have the victim lie on his/her back with their feet elevated.
- ❖ If conscious, give half a glass of water every 15 minutes.
- ❖ Get medical help.

Heat Stroke. Heat stroke, unlike heat exhaustion, strikes suddenly, with little warning. When the body's cooling system fails, the body's temperature rises quickly. Heat stroke can be life threatening and requires immediate medical attention!

Signs of heat stroke include:

- ❖ Very high temperature (104°F or higher)
- ❖ Hot, dry, red skin
- ❖ No sweating
- ❖ Deep breathing and fast pulse -- then shallow breathing and weak pulse
- ❖ Dilated pupils
- ❖ Confusion, delirium, hallucinations
- ❖ Convulsions
- ❖ Loss of consciousness

Chronic medical conditions such as diabetes, use of alcohol, and vomiting or diarrhea can put children and adults at risk for heat stroke during very hot weather. Heat stroke in children is not only due to high temperatures and humidity, but also to not drinking enough fluids.

First-Aid for Heat Stroke. Heat stroke is a medical emergency. To treat heat stroke, you must:

- ❖ Call **911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.) from a cell phone)**, and then start first-aid.
- ❖ Move the victim to a cool place.
- ❖ Cool the victim quickly by giving a cool bath (sponging with cool water) and by fanning.
- ❖ Treat the victim for shock. (See p. 61 for details.).
- ❖ Offer a conscious person half a glass of water every 15 minutes.

Tips to Prevent Heat Illness. Heat exhaustion and heat stroke can be prevented with this advice:

- ❖ Know that once you are thirsty, you are already dehydrated. Some people perspire more than others. Those who do should drink as much fluid as they can during hot, humid days. Drink continuously during hot days, even before you are thirsty.
- ❖ Drink plenty of liquids such as water or sports drinks (Gatorade, All Sport, PowerAde) every 15 minutes (16-20 oz./hour). When you exercise, it is better to sip rather than gulp the liquids. Avoid sodas, which often contain caffeine because they increase the rate of dehydration.
- ❖ Do not exercise vigorously during the hottest times of the day. Instead, run, jog or exercise closer to sunrise or sunset. If the outside temperature is 82° F or above and the humidity is high, do your activity for a shorter time.

- ❖ Wear light-weight, light colored, loose-fitting clothing, such as cotton, so sweat can evaporate. And, put on a wide-brimmed hat with vents that provides shade and allows ventilation.
- ❖ Use sunscreen to prevent sunburn, which can hinder the skin's ability to cool itself.
- ❖ Do not stay in or leave anyone in closed, parked cars during hot weather.
- ❖ Take caution when you must be in the sun. At the first signs of heat exhaustion, get out of the sun or your body temperature will continue to rise.
- ❖ If you feel your abilities start to diminish, stop activity and try to cool off. Sit in the shade, an air conditioned car or use ice bags or cold water to lower the body's temperature. Drink lots of liquids, especially if your urine is a dark yellow, to replace the fluids you lose from sweating. Thirst is not a reliable sign that your body needs fluids.

Broken Bones

Signs and Symptoms. Always suspect a possible broken bone or other serious injury to a joint when the following signs are present:

- ❖ There is a significant deformity in the affected area of the body.
- ❖ There is bruising and swelling present.
- ❖ The person is unable to use the affected part of the body.
- ❖ There are bone fragments sticking out of a wound.
- ❖ If the victim felt a snap or pop at the time of injury.
- ❖ If the injured area is cold and numb.
- ❖ If the cause of the injury suggests that it may be severe.

If any of these conditions exists, call **911** (or **415-472-0911 (Marin)/415-861-8020 (S.F.)** from a cell phone) immediately and administer care to the victim until the paramedics arrive. **DO NOT MOVE VICTIM UNLESS PROPERLY TRAINED-FRACTURED BONES CAN BE RAZOR SHARP AND CAUSE FURTHER TRAUMA TO VICTIM.**

Treatment for Fractures. Fractures need to be splinted in the position found and no pressure is to be put on the area. Splints can be made from almost anything: rolled up magazines, twigs, bats, etc. In children, it is often impossible to determine if there is a fracture unless an x-ray of the bone is taken. If you suspect a fracture, the child should receive professional medical attention.

Treatment for Compound Fractures. A compound fracture is one where the bones are displaced and poking through the skin. Once you have established that the victim has such a broken bone, you should call **911** (or **415-472-0911 (Marin)/415-861-8020 (S.F.)** from a cell phone) and control the bleeding. Then, you should comfort the victim, keep him/her warm and still, and treat the person for shock if necessary.

Eye Injuries

You can treat many minor eye irritations by flushing the eye, but more serious injuries require medical attention. Injuries to the eye are the most common preventable cause of blindness; so, when in doubt, err on the side of caution and call for help.⁶⁵

Routine Irritations (Sand, dirt, and other “foreign bodies” on the eye surface).

- ❖ Do not try to remove any “foreign body” except by flushing.
- ❖ Wash your hands thoroughly before touching the eyelids to examine or flush the eye.
- ❖ Do not touch, press or rub the eye, and do whatever you can to keep the child from touching it.
- ❖ Tilt the child’s head over a basin with the affected eye down and gently pull down the lower lid, encouraging the child to open his/her eyes as wide as possible.
- ❖ Gently pour a steady stream of lukewarm water from a pitcher across the eye.
- ❖ Flush for up to fifteen minutes, checking the eye every five minutes to see if the foreign body has been flushed out.
- ❖ Since a particle can scratch the cornea and cause an infection, the eye should be examined by a doctor if there continues to be any irritation afterwards.
- ❖ If a foreign body is not dislodged by flushing, it will probably be necessary for a trained medical practitioner to flush the eye.

Embedded Foreign Body (An object penetrates the globe of the eye).

- ❖ Call **911** (or **415-472-0911 (Marin)**/**415-861-8020 (S.F.)** from a cell phone) for emergency help.
- ❖ Cover both eyes (the unaffected eye must be covered to prevent movement of the affected eye). If the object is small, use eye patches or sterile dressings for both. If the object is large, cover the injured eye with a small cup taped in place and the other eye with an eye patch or sterile dressing. The point is to keep all pressure off the globe of the eye.
- ❖ Keep the child as calm and comfortable as possible until the paramedics arrive.

Treating a “Black Eye.”

A black eye is often a minor injury, but it can also appear when there is significant eye injury or head trauma. A visit to your doctor or an eye specialist may be required to rule out serious injury, particularly if you are not certain of the cause of the black eye.

For a “simple” black eye:

- ❖ Apply cold compresses intermittently: 5 minutes to 10 minutes on, 10 minutes to 15 minutes off. If you are not at home when the injury occurs and there is no ice available, a cold soda will do to start. If you use ice, make sure it is covered with a towel or sock to protect the delicate skin on the eyelid.
- ❖ Use cold compresses for 24 to 48 hours, then switch to applying warm compresses intermittently. This will help the body reabsorb the leakage of blood and may help reduce discoloration.
- ❖ If the child is in pain, give acetaminophen (Tylenol) - not aspirin or ibuprofen, which can increase bleeding.
- ❖ Prop the child's head with an extra pillow at night, and encourage him/her to sleep on the uninjured side of his/her face (pressure can increase swelling).
- ❖ Have the parent call the child's doctor, who may recommend an in-depth evaluation to rule out damage to the eye. Call immediately if any of the following symptoms appear:
 - Increased redness;
 - Drainage from the eye
 - Persistent eye pain
 - Distorted vision
 - Any visible abnormality of the eyeball

If the injury occurred during one of the child's routine activities such as a sport, follow up by investing in an ounce of prevention -- protective goggles or unbreakable glasses are vitally important.

[Tips to Help Prevent Sports-Related Eye Injuries](#)

- ❖ Parents must insist their children wear appropriate eye protection during sporting activities.
- ❖ Children participating in baseball or softball, considered high-risk sports for eye injuries by the American Association of Ophthalmology, should always wear appropriate sports-specific protective eyewear. The league encourages the use of appropriate eye protection.
- ❖ Protective lenses should be made of polycarbonate material, a material ten times more impact-resistant than other plastics that can withstand the force of a .22 caliber bullet. Polycarbonate material offers the best protection against many sports-related eye injuries.
- ❖ Contact lenses, ordinary street glasses or industrial safety eyewear (ANSI Z87.1) are not a substitute for protective eyewear. Contact lenses, ordinary glasses, and industrial safety eyewear offer no protection against eye injuries.
- ❖ Make sure the sports protective eyewear fits properly. The eyewear can be properly fitted by an ophthalmologist.

- ❖ Make sure the child wears his/her sports protective eyewear every time he/she plays.
- ❖ If a child sustains an eye injury, don't try to treat it yourself. Go to the local emergency room or call the child's ophthalmologist immediately.

Tooth Injuries

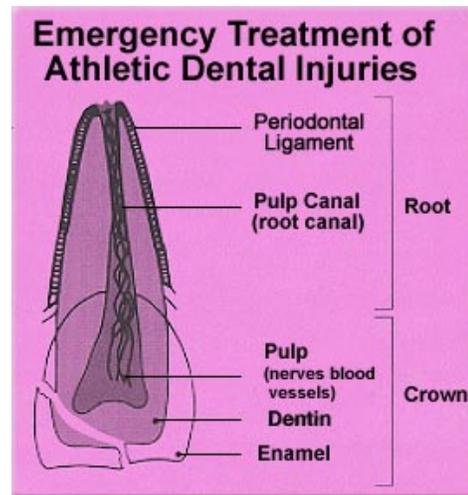
Tooth injuries can be divided into three categories: avulsion, fracture, and luxation.⁶⁶

An **avulsion** removes the entire tooth from its socket.

A **fracture** typically splits the tooth into two fragments, one attached to the socket and one free.

A **luxation** shifts the tooth position at the level of the root but does not remove it from the socket.

Often these injuries occur in combination, but each requires a different approach on the field. However, **all require immediate treatment by a professional. If the child's dentist is unavailable, transport them immediately to the nearest emergency room.** ER physicians know how to address these injuries, and emergency rooms have dentists on call to treat problems that only a dentist can handle.



Avulsion (Tooth Knocked Out Entirely). If a player receives a blow to the mouth and an entire tooth is knocked out, place a sterile dressing directly in the space left by the tooth and tell the player to bite down on it to stop the bleeding. A dentist can successfully replant a tooth that has been knocked out if they can do so quickly and the tooth has been cared for properly.

- ❖ Avoid trauma to the tooth while handling it. Handle the tooth only by the crown. **Do not** handle the tooth by the root. **Do not** brush or scrub the tooth. **Do not** sterilize the tooth.
- ❖ If there is debris on the tooth, gently rinse it with water or saline.
- ❖ **Do not** attempt to reinsert the tooth. This can potentially injure the victim or harm the tooth.
- ❖ Place the tooth in the any of the following liquids in the stated order of preference: (1) Cold whole milk is preferred, followed by cold 2% milk; (2) cold normal saline solution; (3) saline soaked gauze on ice; (4) between the player's gum and the side of cheek or under the player's tongue, if he/she is alert; or (4) a cup of cold water.

Time is essential. Transport the player to a dentist or nearest emergency room immediately. Reimplantation within 30 minutes has the highest rate of success.

Fracture. A fracture can be classified as a root fracture, broken tooth, or chipped tooth. If the fracture involves the pulp, which contains nerves and blood vessels and is housed in the pulp chamber and root canals, it can be very painful. Pulp involvement can be identified by a bleeding site or a pink or red dot in the middle of the dentin, which is the yellowish portion of the tooth located directly beneath the enamel.

- ❖ Tooth fragments should be handled on their enamel surfaces and sent with the player to the dental office as described under Avulsion, above. Stabilize the portion of tooth left in the mouth by gently biting on a towel or handkerchief to control the bleeding.
- ❖ Should extreme pain occur, which occurs if the pulp nerve is exposed, limit contact with the victim's other teeth, tongue or the air.
- ❖ A tooth can also be loosened by trauma with no visible fracture or displacement. This injury should also be referred to a dentist for radiologic evaluation to look for tooth fracture below the gum line.

Transport the player to the dentist or nearest emergency room immediately.

Luxation (Tooth in Socket but in Wrong Position). There are three types of displaced tooth: extruded, laterally displaced, and intruded. All require immediate transfer to a dental office.

Extruded Tooth: The extruded tooth appears longer than the surrounding teeth.

- ❖ Reposition the tooth in the socket using firm finger pressure.
- ❖ Stabilize the tooth by having the player gently bite on a towel or handkerchief.

Transport the player to the dentist or nearest emergency room immediately.

Lateral Displacement: The laterally displaced tooth is positioned ahead of or behind the normal tooth row.

- ❖ Try to reposition the tooth using finger pressure.
- ❖ The player may require a local anesthetic to reposition the tooth; if so, stabilize the tooth by having him/her gently bite on a towel or handkerchief.

Transport the player to the dentist or nearest emergency room immediately.

Intruded Tooth: The intruded tooth is pushed into the gum and appears shorter than the surrounding teeth.

- ❖ **DO NOTHING.** Avoid any repositioning of the tooth.

Transport the player to the dentist or nearest emergency room immediately.

Asthma

Asthma rates among children in the U.S. have increased in recent years.⁶⁷ If one of your players suffers from asthma, their condition should be listed on their Registration form. Asthma is a potentially life threatening condition.

Asthma breathing problems usually happen in “episodes,” but the inflammation underlying asthma is continuous. An asthma episode is a series of events that result in narrowed airways. These include: swelling of the lining, tightening of the muscle, and increased secretion of mucus in the airway. The narrowed airway is responsible for the difficulty in breathing with the familiar “wheeze.”⁶⁸

Asthma medications help reduce underlying inflammation in the airways and relieve or prevent symptomatic airway narrowing. Two classes of medications have been used to treat asthma -- anti-inflammatory agents and rescue medicines or bronchodilators.

You should seek emergency care if a child experiences any of the following⁶⁹:

- ❖ The child’s wheezing or coughing does not improve after taking medicine (15-20 minutes for most asthma medications).
- ❖ The child’s chest or neck is pulling in while struggling to breathe.
- ❖ The child has trouble walking or talking.
- ❖ The child stops playing and cannot start again.
- ❖ The child’s fingernails and/or lips turn blue or gray.
- ❖ The skin between the child’s ribs sucks in when breathing.

If you are at all uncertain of what to do in case of a breathing emergency, call **911** (or **415-472-0911 (Marin)/415-861-8020 (S.F.)** from a cell phone) as well as the child’s parent/guardian.

Sprains and Strains

What is the difference? A **sprain** is an injury to a ligament -- a stretching or a tearing. One or more ligaments can be injured during a sprain.⁷⁰ The severity of the injury will depend on the extent of injury to a single ligament (whether the tear is partial or complete) and the number of ligaments involved.

A **strain** is an injury to either a muscle or a tendon. Depending on the severity of the injury, a strain may be a simple overstretch of the muscle or tendon, or it can result in a partial or complete tear.

Sprains. A sprain can result from a fall, a sudden twist, or a blow to the body that forces a joint out of its normal position. This can result in a tear or overstretch of the ligament supporting that joint. Typically, sprains occur when people fall and land on an outstretched arm, slide into base, land on the side of their foot, or twist a knee with the foot planted firmly on the ground. Ankle sprains are the most common type of sprain, but the knee is another common site for this type of injury.

The usual signs and symptoms of a sprain include pain, swelling, bruising, and loss of the ability to move and use the joint. However, these signs and symptoms can vary in intensity, depending on the severity of the sprain. Sometimes people feel a pop or tear when the injury happens.

Strains. A strain is caused by twisting or pulling a muscle or tendon. Strains can be acute or chronic. An acute strain is caused by trauma or an injury such as a blow to the body. It can also be caused by improperly lifting heavy objects or overstressing the muscles. Chronic strains are usually the result of overuse - prolonged, repetitive movement of the muscles and tendons.

Typically, people with a strain experience pain, muscle spasm, and muscle weakness. They can also have localized swelling, cramping, or inflammation and, with a minor or moderate strain, usually some loss of muscle function. Individuals typically have pain in the injured area and general weakness of the muscle when they attempt to move it. Severe strains that partially or completely tear the muscle or tendon are often very painful and disabling.

Treatment. Treatment for sprains and strains is similar and can be thought of as having two stages. The goal during the first stage is to reduce swelling and pain. At this stage, doctors usually advise patients to follow a formula of **RICE - Rest, Ice, Compression, and Elevation** - for the first 24 to 48 hours after the injury. The doctor may also recommend an over-the-counter or prescription nonsteroidal anti-inflammatory drug, such as aspirin or ibuprofen (e.g., Advil), to help decrease pain and inflammation.

For people with a moderate or severe sprain, particularly of the ankle, stabilization may be required such as an aircast, an orthopedic boot, or a similar functioning device. **An early assessment by a sports medicine specialist (orthopedist, sports certified chiropractor, sports certified family physician) is recommended.** Treatment by sports specialists can expedite the healing time and assist in maintaining sports specific or complementary (cross training) activities. Proper advice can not only improve/expedite clinical outcome but also reduce the chance of reoccurrence through sports oriented treatment and rehabilitation. Depending on the area involved, severe sprains and strains may require surgery to repair the torn ligaments, muscle or tendons.

Wound Care

Some wounds such as small cuts or minor abrasions require only simple first-aid measures. Others, however, require immediate first-aid followed by professional medical care.

Small cuts or abrasions. Even minor cuts and scrapes can become contaminated and infected. In order to reduce the chances of infection, you should:

- ❖ Whenever possible, wash your hands thoroughly with soap and hot water before administering first-aid. If you cannot do so, use some of the hydrogen peroxide or antibacterial wipes found in the league first-aid kits.
- ❖ Keep the wound and all first-aid materials as clean as possible. When opening packages of sterile pads or dressings, handle only the edges. Do not touch the area that comes in contact with the wound.
- ❖ Clean the wound and the surrounding area gently with mild soap and water and rinse it. If water and soap are unavailable, use hydrogen peroxide. Blot the area dry with a sterile pad or clean dressing.
- ❖ Cover the wound with an appropriate sized bandage, pad, or wrapped gauze. These materials are contained in the league first-aid kits.

Deep wounds. A serious wound must be cleansed and treated by professional medical personnel. If a person suffers such a wound, **call 911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.) from a cell phone) immediately** and treat the person for bleeding and shock.

- ❖ To control bleeding, have the victim lie down and elevate the injured limb higher than the heart unless you suspect a broken bone.
- ❖ Apply direct pressure on the wound with a sterile pad or clean cloth.
- ❖ If the bleeding is controlled by direct pressure, bandage the wound firmly with clean cloth strips or bandages to protect the wound and prevent possible infection. Check the person's pulse to make sure the bandage is not too tight.
- ❖ If direct pressure is ineffective, bleeding can often be controlled by applying strong finger pressure on the nearest main artery supplying blood to the affected area.
- ❖ **For the scalp:** Press the thumb against the bone in front of the ear. Because of extensive circulation, pressure may have to be applied to both sides of the head.
- ❖ **For the face:** Press the fingers against the hollow area of the jaw. Both sides may require compression.
- ❖ **For the neck:** Place the thumb against the back of the victim's neck against the vertebrae. Slide three fingers to the side of the airway where the wound is located. Locate the pulsing artery; then squeeze it toward the thumb. Do not compress both sides of the neck.
- ❖ **For the chest or armpit:** Press the thumb downward in the groove behind the collarbone.
- ❖ **For the arm:** Place the flat side of the finger in the groove between the muscles on the inner side of the arm. With your thumb on the outside of the arm, press toward the bone at a point about halfway between the shoulder and the elbow.
- ❖ **For the hand:** Place your thumb on the inner side of the wrist and press toward the bone.
- ❖ **For the leg:** At the groin area where the legs and the torso meet, press the inner thigh against the bone with your fist or the heel of your hand.

DO NOT APPLY A TOURNIQUET UNLESS IT IS THE ONLY WAY TO SAVE THE VICTIM'S LIFE. A TOURNIQUET WILL RESULT IN THE LOSS OF THE LIMB BELOW THE TOURNIQUET.

Nosebleed

To treat a nosebleed (epistaxis), loosen the clothing around the neck area and instruct the victim to sit up with his/her head tilted forward.

- ❖ Instruct the victim to breath through the mouth.
- ❖ If the bleeding is from the front of the nose,

- Pinch the nostrils together for 10-15 minutes.
 - Place cold, wet towels or cloths over the nose and face.
 - If the bleeding continues, insert a small sterile pad in one or both nostrils. Do not use cotton or anything with loose fibers. Pinch the nostrils together. If the bleeding persists, get professional medical care.
- ❖ If the bleeding is from the back of the nose, take the victim to the emergency room or get professional medical help immediately.

Bee Stings

Some individuals are highly sensitive or allergic to bee venom. If such a person is stung by a bee, wasp or yellow jacket, he/she may develop an anaphylactic reaction, which can be life threatening if not treated immediately. **IF IT IS KNOWN THAT A PLAYER HAS SUCH AN ALLERGY, THE PARENTS SHOULD INFORM THE MANAGER AND SUPPLY AN EPI PEN FOR THE MANAGER TO KEEP IN THE FIRST AID KIT**

- ❖ Do not wait for allergic symptoms to appear. **Call 911 (or 415-472-0911 (Marin)/415-861-8020 (S.F.) from a cell phone) immediately.**
- ❖ If breathing difficulties occur, start rescue breathing techniques; if the pulse is absent, begin CPR.
- ❖ Signs of an allergic reaction: nausea; severe swelling; breathing difficulties; bluish face, lips and fingernails; shock or unconsciousness.
- ❖ If the victim has gone into shock, treat accordingly (See p. 60).

If the person is not known to have an allergy to bee stings and does not exhibit signs of an allergic response:

- ❖ Remove the stinger or venom sac by gently scraping with a fingernail or business card. Do not remove the stinger with tweezers as more toxins from the stinger could be released into the victim's body.
- ❖ For multiple stings, soak the affected area in cool water. Add one tablespoon of baking soda per quart of water.
- ❖ For mild or moderate symptoms, apply ice to reduce the swelling.

Accident Reporting Procedures

When to Report

Any incident that causes any player, Manager, Coach, umpire, volunteer or spectator to receive medical treatment and/or first-aid must be reported to the league Safety Officer **within 24 hours** of the incident. This includes active and passive treatments such as the evaluation and diagnosis of the extent of the injury or periods of rest. Basically, if you are required to take a player or other person off the field of play due to an injury, you should report the incident to the Safety Officer.

How to Report

All such incidents described above must be reported either by telephone or by e-mail. To reach the league Safety Officer, Scott Calzaretta, you can call:

Home Phone:	415-927-8806
Cell Phone:	415-299-1200

He can also be reached by email at SC@CMGHealth.com.

What to Report

The TCLL Little League uses the ASAP Incident/Injury Tracking Report form for tracking accident information and informing Little League Baseball®. A copy of this form is provided in the Appendix.

Complete the form and either fax it to the league Safety Officer or provide him with the information necessary to complete the form when you call. This will include:

- ❖ The name, address, and phone number of the individual involved.
- ❖ The date, time, and location of the incident.
- ❖ As detailed a description of the incident as possible.
- ❖ A description of what type of first-aid was rendered and by whom.
- ❖ The preliminary estimation of the extent of any injuries.
- ❖ The name and phone number of the person reporting the incident.
- ❖ An indication as to whether this incident could have been prevented.

Follow-up by the TCLL Little League

Within 48 hours of receiving the incident report, the Safety Officer will contact the injured party and/or the injured party's parents and (1) verify the information received; (2) obtain any other information deemed necessary; (3) check on the status of the injured party; and (4) in the event that the injured party required other medical treatment (i.e., Emergency Room visit, doctor's visit, etc.) will advise the parent or guardian of the league's insurance coverage and the provisions for submitting any claims.

If the extent of the injuries are more than minor in nature, the league President will periodically call the injured party to (1) check on the status of any injuries, and (2) check if any other assistance is necessary in areas such as submission of insurance forms, etc. until such time as the incident is considered "closed" (i.e., no further claims are expected and/or the individual is participating in the League again).

Little League Excess Insurance

The TCLL Little League provides excess insurance coverage through Little League Baseball® for injuries suffered to players during practices and games. This insurance is to be used as a supplement to other insurance carried under a family policy or insurance provided by the player's parent's employer. If there is no primary coverage, Little League insurance will provide benefits for eligible charges, up to Usual and Customary allowances for our area, after a \$50.00 deductible per claim, up to the maximum stated benefits.

If a child sustains a covered injury while taking part in a scheduled Little League Baseball® game or practice, here is how the insurance works:

- ❖ The Little League Baseball® Accident Notification Form must be completed by the child's parents (if the claimant is under 19 years of age) and a league official and forwarded directly to Little League Headquarters within 20 days after the accident. Initial medical/dental treatment must be rendered within 30 days of the Little League accident.
- ❖ Itemized bills, including description of service, date of service, procedure and diagnosis codes for medical services/supplies and/or other documentation related to a claim for benefits are to be provided within 90 days after the accident. In no event shall such proof be furnished later than 12 months from the date the initial medical expense was incurred.

- ❖ When other insurance is present, the parents or claimant must forward copies of the Explanation of Benefits or Notice/Letter of Denial for each charge directly to Little League Headquarters, even if the charges do not exceed the deductible of the primary insurance program.
- ❖ The policy provides benefits for eligible medical expenses incurred within 52 weeks of the accident, subject to Excess Coverage and Exclusion provisions of the plan.
- ❖ Limited deferred medical/dental benefits may be available for necessary treatment after the 52-week time limit when:
 - Deferred medical benefits apply when necessary treatment requiring the removal of a pin/plate, applied to transfix a bone in the year of injury, or scar tissue removal, after the 52-week time limit is required. The Company will pay the Reasonable Expense incurred, subject to the Policy's maximum limit of \$100,000 for any one injury to any one Insured. However, in no event will any benefit be paid under this provision for any expenses incurred more than 24 months from the date the injury was sustained.
 - If the Insured incurs Injury to sound, natural teeth and Necessary Treatment requires treatment for that Injury be postponed to a date more than 52 weeks after the injury due to, but not limited to, the physiological changes of a growing child, the Company will pay the lesser of: (1) A maximum of \$1,500 or (2) Reasonable Expenses incurred for the deferred dental treatment.
 - Reasonable Expenses incurred for deferred dental treatment are only covered if they are incurred on or before the Insured's 23rd birthday. Reasonable Expenses incurred for deferred root canal therapy are only covered if they are incurred within 104 weeks after the date the Injury occurs. No payment will be made for deferred treatment unless the Physician submits written certification, within 52 weeks after the accident, that the treatment must be postponed for the above stated reasons. Benefits are payable subject to the Excess Coverage and the Exclusions provisions of the Policy.

Medical Release Requirements

Where any player has suffered an injury that requires medical treatment, whether or not the injury occurred while playing baseball, the player's parent or guardian must provide the league Safety Officer with a copy of a signed medical release from the player's physician authorizing him/her to resume play before he/she will be permitted to return to the field.

Snack Bar Safety

The Snack Bar at the Joe Wagner field has implemented a number of food safety handling guidelines for the 2020 season. These will be posted in the Snack Bar and should be communicated to the Team Parent of each team that will be providing individuals to work at the Snack Bar during games or league events.

All Snack Bar personnel are required to submit a Volunteer Application to the league in accordance with Little League Baseball® regulations (see p. 8).

In addition, all Snack Bar personnel are required to familiarize themselves with Snack Bar procedures before working in the Snack Bar or handling food. The league has a Snack Bar safety and operation meeting before the Snack Bar goes into operation each season.

Snack Bar Guidelines

Training: Training of all Snack Bar volunteers is required in safe food handling/preparation and procedures.

Menu: The Snack Bar menu should be kept simple and should not include potentially hazardous foods (meats, eggs, dairy products, protein salads, cut fruits and vegetables, etc.). Avoid using precooked foods or leftovers. Use only foods from approved sources, avoiding foods that have been prepared at home. Complete control over your food, from source to service, is the key to safe, sanitary food service.

Cooking: Use a food thermometer to check on cooking and holding temperatures of potentially hazardous foods. All potentially hazardous foods should be kept at 41° F or below (if cold) or 140° F or above (if hot). Ground beef products (e.g. hamburgers and hot dogs) must be cooked thoroughly to an internal temperature of 155° F. Burgers must be cooked frozen. Do not thaw them out. Most food borne illnesses from temporary events can be traced back to lapses in temperature control. Return the uncooked burgers to the freezer.

Reheating: Do not reheat any food items.

BBQ: Do not wear plastic or other flammable gloves while operating the BBQ. An adult should remain at the BBQ at all times to prevent small children from suffering accidental burns. If the BBQ operator is handling raw, uncooked food, take care not to handle cooked food, buns or other products.

Cooling and Cold Storage: Foods that require refrigeration must be cooled to 41° F as quickly as possible and held at that temperature until ready to serve. To cool foods down quickly, use an ice water bath (60% ice to 40% water), stirring the product frequently, or place the food in shallow pans no more than 4 inches in depth and refrigerate. Pans should not be stored one atop the other and lids should be off or ajar until the food is completely cooled. Check temperature periodically to see if the food is cooling properly. Allowing hazardous foods to remain unrefrigerated for too long has been the Number ONE cause of food borne illness.

Hand Washing: Frequent and thorough hand washing remains the first line of defense in preventing food borne disease. The use of disposable gloves can provide an additional barrier to contamination, but they are no substitute for hand washing!

Health and Hygiene: Only healthy workers should prepare and serve food. Anyone who shows symptoms of disease (cramps, nausea, fever, vomiting, diarrhea, jaundice, etc.) or who has open sores or infected cuts on the hands should not be allowed in the food concession area. Workers should wear clean outer garments and should not smoke in the concession area. The use of hair restraints is recommended to prevent hair ending up in food products.

Food Handling: Avoid hand contact with raw, ready-to-eat foods and food contact surfaces. Use an acceptable dispensing utensil to serve food. Touching food with bare hands can transfer germs to food.

Dishwashing: Use disposable utensils for food service. Keep your hands away from food contact surfaces, and never reuse disposable dishware. Wash in a four-step process:

- ❖ Washing in hot soapy water;
- ❖ Rinsing in clean water;
- ❖ Chemical or heat sanitizing; and
- ❖ Air drying.

Ice: Ice used to cool cans/bottles should not be used in cup beverages and should be stored separately.

Wiping Cloths: Rinse and store any wiping cloths in a bucket of sanitizer (example: 1 gallon of water and 1/2 teaspoon of chlorine bleach). Change the solution every two hours. Well sanitized work surfaces prevent cross-contamination and discourage flies.

Insect Control and Waste: Keep foods covered to protect them from insects. Store pesticides away from foods. Place garbage and paper wastes in a refuse container with a tight fitting lid. Dispose of wastewater in an approved method (do not dump it outside). All water used should be potable water from an approved source.

Food Storage and Cleanliness: Keep foods stored off the floor at least six inches. After your session is finished, clean the concession area and discard unusable food.

Minimum Worker Age: The minimum age for paid Snack Bar workers is 16. Volunteers under 16 should work under the supervision of an adult.

Storage Shed Procedures

The following procedures apply to all of the storage sheds and lock boxes used by the league and apply to anyone who has been issued a key and access to all our facilities.

- ❖ All individuals with keys to the league equipment sheds or lock boxes (i.e., Managers and Coaches) should be aware of their responsibilities for the orderly and safe storage of equipment.
- ❖ Before you use any machinery located in the shed or lock boxes (e.g., pitching machines, lawn mowers, weed whackers or other electrical equipment), please familiarize yourself with the proper use of the equipment. If it is available, locate and read the written operating procedures for the equipment. Otherwise, discuss the proper use of the equipment with a knowledgeable individual in the league.
- ❖ All chemicals or organic materials stored in league sheds shall be properly marked and labeled as to contents.
- ❖ All chemicals or organic materials (i.e., lime, fertilizer, etc.) stored within the equipment sheds shall be separated from the areas used to store machinery and gardening equipment (i.e., rakes, shovels, etc.) to minimize the risk of puncturing storage containers.
- ❖ Any witnessed “loose” chemicals or organic materials within these sheds should be cleaned up and disposed of as soon as possible to prevent accidental poisoning.

Appendix

2020 Forms-Distributed via league commissioners

1. 2020 Volunteer Application
2. Expectations Contract for Players and Parents

3. **Pre-Game Checklist**
4. **Baseball Pitcher Eligibility Tracking Form**
5. **Baseball Game Pitch Log**
6. **Incident/Injury Tracking Report Form**
7. **Safety Suggestion Form**
8. **Little League Facility Survey**

LITTLE LEAGUE EXPECTATIONS CONTRACT

2020 SEASON

WHAT DO WE EXPECT FROM OUR PLAYERS?

- to be on time for all practices and games.
- to always do their best whether in the field or on the bench.
- to be cooperative at all times and share team duties.
- to respect not only others, but themselves as well.
- to be positive with teammates at all times.
- to try not to become upset at their own mistakes or those of others ... we will all make our share this year, and we must support one another.
- to understand that winning is only important if you can accept losing, as both are important parts of any sport.

WHAT CAN YOU AND YOUR CHILD EXPECT FROM US?

- to be on time for all practices and games.
- to be as fair as possible in giving playing time to all players.
- to do our best to teach the fundamentals of the game.
- to be positive and respect each child as an individual.
- to set reasonable expectations for each child and for the season.
- to teach the players the value of winning and losing.
- to be open to ideas, suggestions or help.
- to never holler at any member of our team, the opposing team or umpires. Any confrontation will be handled in a respectful, quiet, and dignified manner.

WHAT DO WE EXPECT FROM YOU AS PARENTS AND FAMILY?

- to let us know at least a day in advance if your child will be unable to make a practice or game.
- to pick your child up promptly after each practice and game.
- to come out and enjoy the games. Cheer to make all players feel important.
- to allow us to coach and run the team.
- to try not to question our leadership. All players will make mistakes, and so will we.
- do not holler at us, the players or the umpires. We are all responsible for setting examples for our children. If we eliminate negative comments, the children will have an opportunity to play without any unnecessary pressures and will learn the value of sportsmanship.
- if you wish to question the strategies or leadership of the coaching staff, please do not do so in front of the players or fans. Our phone numbers are available for you to call at any time if you have a concern.

“The actions of players, managers, coaches, umpires and league officials must be above reproach. Any player, manager, coach, umpire or league representative who is involved in a verbal or physical altercation, or an incident of unsportsmanlike conduct, at the game site or any other Little League activity, is subject to disciplinary action by the Local League Board of Directors.”
Official Regulations, Section XIV(a), Little League Baseball, Inc.

Manager/Coach

Player

Parent/Guardian

Pre-Game Checklist

DATE: _____ FIELD: _____

FIELD CONDITIONS: _____
Playing Field, Bases, Benches, Fences, Bleachers

EQUIPMENT:

HELMETS: _____

CATCHER'S EQUIPMENT: _____

BATS: _____

BALLS: _____

FIRST-AID BOX: _____

PLEASE NOTE ANY UNUSUAL CONDITIONS: _____

CHECKED BY: _____

Activities/Reporting A Safety Awareness Program's Incident/Injury Tracking Report

League Name: _____ League ID: ____ - ____ - ____ Incident Date:

Field Name/Location: _____ Incident

Time: _____

Injured Person's Name: _____ Date of Birth:

Address: _____ Age: _____ Sex: r

Male r Female

City: _____ State _____ ZIP: _____ Home Phone: ()

Parent's Name (If Player): _____ Work Phone: ()

Parents' Address (If Different): _____ City

Incident occurred while participating in:

A.) r Baseball r Softball r Challenger r TAD

B.) r Challenger r T-Ball (5-8) r Minor (7-12) r Major (9-12) r Junior (13-14)

r Senior (14-16) r Big League (16-18)

C.) r Tryout r Practice r Game r Tournament r Special Event

r Travel to r Travel from r Other (Describe): _____

Position/Role of person(s) involved in incident:

D.) r Batter r Base runner r Pitcher r Catcher r First Base r Second

r Third r Short Stop r Left Field r Center Field r Right Field r Dugout

r Umpire r Coach/Manager r Spectator r Volunteer r Other: _____

Type of injury:

Was first aid required? r Yes r No If yes,

what: _____

Was professional medical treatment required? r Yes r No If yes, what:

(If yes, the player must present a non-restrictive medical release prior to to being allowed in a game or practice.)

Type of incident and location:

A.) On Primary Playing Field B.) Adjacent to Playing Field D.) Off Ball Field

r Base Path: r Running or r Sliding r Seating Area r Travel:

r Hit by Ball: r Pitched or r Thrown or r Batted r Parking Area r Car or r Bike or

r Collision with: r Player or r Structure C.) Concession Area r Walking

r Grounds Defect r Volunteer Worker r League Activity

r Other: _____ r Customer/Bystander r Other: _____

Please give a short description of incident:

Could this accident have been avoided? How:

This form is for Little League purposes only, to report safety hazards, unsafe practices and/or to contribute positive ideas in order to improve league safety. When an accident occurs, obtain as much information as possible.

For all claims or injuries which could become claims, please fill out and turn in the official Little League Baseball

Accident Notification Form available from your league president and send to Little League Headquarters in

Williamsport (Attention: Dan Kirby, Risk Management Department). Also, provide your District Safety Officer with a copy for District files. All personal injuries should be reported to Williamsport as soon as possible.

Prepared By/Position: _____ Phone Number: (____)

Signature: _____ *Date:* _____

Safety Suggestion Form

All League Officials, Managers, Coaches, Parents, Players, and interested persons are encouraged to submit any suggestions that will improve our Little League safety program.

Your Name and Address are Optional

Suggestion: _____

Date _____

Please mail your suggestion to:

Twin Cities Little League

Endnotes

¹ American Academy of Pediatrics, Committee on Sports Medicine and Fitness, "Risk of Injury from Baseball and Softball in Children," *Pediatrics*, Vol. 107, No. 4, pp. 782-784 at 782 (April 2001). A copy of this article can be downloaded from the American Academy of Pediatrics website at <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;107/4/782.pdf>.

² *Id.* at 783.

³ Statistics published by the U.S. Consumer Product Safety Commission as part of its National Electronic Surveillance System (NEISS) in 2007 show that baseball and softball ranked behind football, basketball, playground equipment, and bicycles on the list of sporting activities for children between the ages of 5 and 14 sports with the highest number of injuries receiving medical treatment in hospital emergency rooms. "NEISS Data Highlights for 2007," which can be found on the U.S. Consumer Product Safety Commission website at: <http://www.cpsc.gov/neiss/2007highlights.pdf>.

However, in a three-year study of high school athletes in ten sport, the National Athletic Trainers Association found that baseball had the lowest injury rates of the high school sports studied (11.8 per 100 players).

http://www.momsteam.com/alpha/features/health_safety/baseball_injury_stats.shtml.

⁴ "ASAP: A Safety Awareness Program," Little League Baseball®, Inc. at p. 21, available online at http://www.littleleague.org/programs/asap/2006safetymanual/2006ASAP_Sm.pdf.

⁵ "NEISS Data Highlights for 2007," which can be found on the U.S. Consumer Product Safety Commission website at: <http://www.cpsc.gov/neiss/2007highlights.pdf>.

⁶ An excellent source of instructional articles on baseball coaching can be found at <http://www.baseballtips.com/instruction.html>.

⁷ The Safety Code for Little League Baseball® can be found on page T-24 of the 2006 Playing Rules.

⁸ According to the American Academy of Pediatrics Committee on Sports Medicine and Fitness, "Baseball is the leading cause of sports-related eye injuries in children, and the highest incidence occurs in children 5 to 14 years of age. Approximately one third of baseball-related eye injuries result from being struck by a pitched ball. As a result, for this age group, Prevent Blindness America has recommended the use of batting helmets with polycarbonate face guards that meet Standard F910 of the American Society for Testing and Materials. These cover the lower part of the face from the tip of the nose to below the chin. They also protect against injuries to the teeth and facial bones. Functionally one-eyed athletes (best corrected vision in the worst eye of less than 20/50) must use these face guards." American Academy of Pediatrics, Committee on Sports Medicine and Fitness, "Risk of Injury from Baseball and Softball in Children," *Pediatrics*, Vol. 107, No. 4, at p. 783, <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;107/4/782.pdf>.

In a recent analysis of Little League injury claims, Stephen W. Marshall, Ph.D. and colleagues concluded that faceguards were associated with a 35% reduced risk of facial injury. S.W. Marshall, Ph.D., et al., "Evaluation of Safety Balls and Faceguards for Prevention of Injuries in Youth Baseball," *JAMA*, Vol. 289, No.5, pp. 568-574 at 572 (February 5, 2003).

⁹ The importance of requiring catchers to wear a helmet during infield/outfield practice was reinforced by a recent tragedy that occurred in Florida's District 9 Little League near St. Petersburg. According to the April 2003 issue of Little League Baseball's *ASAP News*, an 11-year old catcher named Austin was catching return throws while his coach hit balls to the infielders during a practice. He was not wearing his catcher's helmet in violation of Rule 1.17. The coach hit a ball to the third baseman, who missed it, and the ball went through into the outfield. Rather than wait for the ball to be retrieved, the coach simply hit another ball to the third baseman, who fielded it and threw it to first base. Meanwhile, a teammate had shagged the original ball and both balls were thrown to home at the same time. Austin caught one, but the other one hit him in the temple. At the time, he appeared to be all right, and he finished the practice. However, when he got home, he became ill and started to vomit. He was taken to the Emergency Room and then airlifted to All Children's Hospital in St. Petersburg. Somewhere in the process, Austin lost consciousness and went into a coma, which lasted for several weeks. *ASAP News*, Vol. 10, No. 3 (April 2003), a copy of which can be found online at <http://www.littleleague.org/programs/asap/newsletters/2003/apr03asapnews.pdf>.

Austin eventually came out of the coma, but he continues to suffer from neurological deficits. According to a report in the January-February 2004 *ASAP News*, "Austin, now 12, is still making a slow recovery. He is basically all there mentally, but still suffers physical disability as a result of the brain damage he suffered from the accident. His right arm and right leg are both less mobile and coordinated than his left, and he still limps somewhat." Prior to the accident, Austin was a star athlete in both baseball and football. It is unclear that he will ever make a full recovery. *ASAP News*, Vol. 11, No. 1, p. 6 (January-February 2004), which can be found online at <http://www.littleleague.org/programs/asap/newsletters/2004/feb04asapnews.pdf>.

¹⁰ S.W. Marshall, Ph.D., et al., "Evaluation of Safety Balls and Faceguards for Prevention of Injuries in Youth Baseball," *JAMA*, Vol. 289, No.5, pp. 568-574 at 571 (February 5, 2003). Marshall and colleagues analyzed a national database of compensated insurance claims involving Little League Baseball® players during the 1997 to 1999 regular seasons. They noted that of the 4,233 compensated claims, a majority (44.6% or 1890 claims) involved baseballs. "Ball-related injuries were evenly split between batted balls (36.0%), thrown balls (31.4%), and pitched balls (28.6%; unspecified balls accounted for 4.1%)" *Id.*

¹¹ One of the most serious potential injuries from an on-field collision is concussion. Although once viewed as a "relatively benign condition" when involving children, as a commentary in a recent issue of the medical journal *Pediatrics* noted, modern research indicates that it is a critical medical issue with potentially permanent consequences.

According to an October 2006 article in *The Washington Post*, "Growing evidence indicates that youth is not a plus with concussions. When jolted violently from a hard hit or fall, a juvenile brain may be slower to heal. It also seems in greater jeopardy of subsequent damage. Yet many pediatricians and frontline practitioners are only beginning to adjust what they tell patients." S. Levine, "Playing Through Pain? Not for Kids: Concussions Take Longer to Mend, Research Shows," *The Washington Post* (October 10, 2006), available online at: <http://www.washingtonpost.com/wp-dyn/content/article/2006/10/09/AR2006100901302.html?referrer=email>.

¹² G. Edes, "Damon has Vague Memory of Collision," *The Boston Globe* (October 9, 2003), http://www.boston.com/sports/baseball/redsox/articles/2003/10/09/damon_has_vague_memory_of_collision.

¹³ "Red Sox 4, A's 3: Lowe and behold . . . Sox live another day; Rally from two games down to eliminate Athletics," *The Cincinnati Enquirer* (October 7, 2003), available online at <http://reds.enquirer.com/2003/10/07/wwwred1b.html>.

¹⁴ American Academy of Pediatrics, Committee on Sports Medicine and Fitness, "Risk of Injury from Baseball and Softball in Children," *Pediatrics*, Vol. 107, No. 4, pp. 782 -784 (April 2001). A copy of this article can be downloaded from the American Academy of Pediatrics' website at <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;107/4/782.pdf>.

¹⁵ “Little League Elbow,” ESPN Training Room, ESPN.com (2000), which can be found via a cached file through Google at:

<http://64.233.179.104/search?q=cache:wHbODLOthAEJ:espn.go.com/trainingroom/s/2000/0426/503111.html+ESPN+and+%22Little+League+elbow%22&hl=en&gl=us&ct=clnk&cd=1>.

¹⁶ J. Whiteside, M.D., James R. Andrews, M.D., et al., “Elbow Injuries in Young Baseball Players,” *The Physician and Sportsmedicine*, Vol. 27, No. 6 (June 1999), a cached copy of which can be found through Google at:

http://64.233.179.104/search?q=cache:woTufqvYFakJ:www.physsportsmed.com/issues/1999/06_99/whiteside.htm+James+Andrews+%22Elbow+Injuries+in+Young+Baseball+Players%22&hl=en&gl=us&ct=clnk&cd=1.

¹⁷ This statistic is taken from a study by the National Athletic Trainers’ Association as reflected in an article on the Moms Team website discussing the risks and types of injuries in baseball. See http://www.momsteam.com/alpha/features/health_safety/baseball_injury_stats2.shtml.

¹⁸ “Reducing the Risk of ‘Little League Elbow,’” National Athletic Trainers’ Association Press Release (November 27, 1995), which can be downloaded from the Association’s website at http://www.nata.org/publications/press_releases/little_league_elbow.htm.

¹⁹ B. Thurston, “Recognition and Prevention of Throwing Arm Fatigue and Arm Injury,” <http://www.baseballtips.com/armfatigue.html>. Thurston is a baseball coach at Amherst College in Massachusetts. His article is one of several excellent instructional articles on baseball coaching found at <http://www.baseballtips.com/instruction.html>.

²⁰ B. Pennington, “Doctors See a Big Rise in Injuries as Young Athletes Train Nonstop,” *The New York Times*, p. A1 (February 22, 2005), which is available for a fee or, for subscribers, through Times Select, at:

<http://select.nytimes.com/search/restricted/article?res=F30810FA345E0C718EDDAB0894DD404482>.

²¹ *Id.*

²² *Id.*

²³ L. LaRusso, MS, ELS, “Little League Elbow,” an online article that can be found at <http://community.healthgate.com/GetContent.asp?siteid=ehosp&docid=/dci/LLeibow>.

²⁴ J. Whiteside, M.D., James R. Andrews, M.D., et al., “Elbow Injuries in Young Baseball Players,” *The Physician and Sportsmedicine*, Vol. 27, No. 6 (June 1999), a cached copy of which can be found through Google at:

http://64.233.179.104/search?q=cache:woTufqvYFakJ:www.physsportsmed.com/issues/1999/06_99/whiteside.htm+James+Andrews+%22Elbow+Injuries+in+Young+Baseball+Players%22&hl=en&gl=us&ct=clnk&cd=1.

²⁵ American Academy of Pediatrics, Committee on Sports Medicine and Fitness, “Risk of Injury from Baseball and Softball in Children,” *Pediatrics*, Vol. 107, No. 4, pp. 782 -784 (April 2001). A copy of this article can be downloaded from the American Academy of Pediatrics website at <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;107/4/782.pdf>.

²⁶ B. Thurston, “Recognition and Prevention of Throwing Arm Fatigue and Arm Injury,” <http://www.baseballtips.com/armfatigue.html>.

²⁷ The information in this section is derived from T. O’Connell, “Sliding,” [baseballtips.com](http://www.baseballtips.com/sliding.html), which can be found online at <http://www.baseballtips.com/sliding.html>. O’Connell coached baseball at Brandeis University from 1972 to 1981 and at Princeton University from 1982 to 1997. He is a member of the Massachusetts Baseball Coaches Hall of Fame.

²⁸ Press Release, “Give Your Teeth a Sporting Chance,” American Academy of Pediatric Dentistry (October 1995), http://www.aapd.org/media/pressreleases.asp?NEWS_ID=58.

²⁹ Academy for Sports Dentistry, "Position Statement on Athletic Mouthguard Mandates," ASD Newsletter, 14:7-8 (1999), http://www.sportsdentistry-asd.org/position_statement.asp.

³⁰ K. Springen, "Dying to be Tan," *Newsweek* (June 28, 2005)(web exclusive), <http://www.msnbc.msn.com/id/8379291/site/newsweek/>. As a result of Charlie's death, the Guild family has started the Charlie Guild Melanoma Foundation (www.charlie.org), which is trying to raise awareness about skin cancer and its prevention through education and legislation. See also, J. Ryan, "Grieving Moms Fight Melanoma," *San Francisco Chronicle* (July 4, 2004), available at <http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2004/07/04/BAG157GN181.DTL>.

³¹ *Id.*

³² This information is derived from "The Silent Epidemic," *ASAP News*, Vol. 9, No. 4, pp 2-3 (May 2002). During the past 50 years, new cases of melanoma have jumped an average of 6% a year. At this rate, by 2010, the lifetime risk of melanoma will be 1 case in every 50 people. The good news is that melanoma is being diagnosed sooner, making the odds of survival an encouraging 90% if caught early and surgically removed. "Latest Trends in Melanoma Rates," <http://physchoiceaz.com/news.html>.

³³ "Selig Treated for Skin Cancer in New York," FOXSports.com (December 8, 2004). See also, "Selig Has Surgery for Skin Cancer," *The New York Times* (December 7, 2004), available from the paper's archives at: <http://query.nytimes.com/gst/fullpage.html?res=9D01E1D61431F934A35751C1A9629C8B63>.

³⁴ T. Boswell, "Steroids? Politics? Selig Discovers Perspective," *The Washington Post* (December 25, 2004), <http://www.washingtonpost.com/wp-dyn/articles/A24872-2004Dec24.html>. Also available at <http://www.runfromthesun.com/research/selig.html>.

³⁵ This information is taken from "Shonda's Story," which can be found online at The Shade Foundation website at <http://www.shadefoundation.org/shondas-story.php>.

³⁶ These guidelines are taken from *ASAP News*, Vol. 8, No. 3 (April 2001), available online at <http://www.littleleague.org/programs/asap/newsletters/2001/apr01asapnews.pdf>.

³⁷ These tips are part of the advice given to Little League coaches by Jim Rogers, a certified athletic trainer at Temple University Hospital's Sports Medicine Center. Rogers notes that "many adults don't realize children's bodies can't take the same amount of physical stress adult bodies can take. That's because children are still growing and therefore are more susceptible to injury." Rogers' advice can be found online at <http://www.baseballtips.com/healthtips.html>.

³⁸ This information is derived from Little League Baseball's *ASAP News*, Vol. 10, No. 6 (November/December 2003). A copy can be downloaded from the Little League website at <http://www.littleleague.org/programs/asap/newsletters/2003/novdec03asapnews.pdf>.

³⁹ "Bike Safety First!," *ASAP News*, Vol. 9, No. 4, p. 4 (May 2002), a copy of which can be found online at <http://www.littleleague.org/programs/asap/newsletters/2002/may02asapnews.pdf>.

⁴⁰ "First-Aid Clinics," *ASAP News*, Vol. 11, No. 1, p. 3 (January-February 2004), which can be found online at <http://www.littleleague.org/programs/asap/newsletters/2004/feb04asapnews.pdf>.

⁴¹ American Heart Association, "Cardiac Arrest," which is available online at the AHA's website at <http://www.americanheart.org/presenter.jhtml?identifier=4481>. The AHA estimates that more than 95 percent of cardiac arrest victims die before reaching the hospital. Brain death and permanent death start to occur in just 4 to 6 minutes after someone experiences cardiac arrest. In cities where defibrillation is provided within 5-7 minutes, the survival rate from sudden cardiac arrest is as high as 49 percent.

⁴² American Heart Association, "Sudden Cardiac Death," which is available online at the AHA's website at <http://www.americanheart.org/presenter.jhtml?identifier=4741>.

⁴³ R. Sampson, M.D., et al., "Use of Automated External Defibrillators for Children: An Update," *Circulation*, Vol. 107 (July 1, 2003).

⁴⁴ S. Berger, "Sudden Cardiac Death in Children and Adolescents," *AMAA Journal* (Spring 2002), online at http://www.findarticles.com/cf_0/m0NHG/1_15/90534106/print.jhtml.

⁴⁵ R. Sampson, M.D., et al., "Use of Automated External Defibrillators for Children: An Update," *Circulation*, Vol. 107 (July 1, 2003).

⁴⁶ R.A. Knox, "Cause of Heart Stoppage Pinpointed," *The Boston Globe* (June 18, 1998). See also, K. Webster, "Baseball Can Kill If It Hits Chest At Wrong Heart-Cycle Point, Study Says," *The Seattle Times* (June 18, 1998). A copy of this article is available from *The Seattle Times'* archives, which can be accessed at: <http://archives.seattletimes.nwsource.com/cgi-bin/texis.cgi/web/vortex/display?slug=2756854&date=19980618&query=commotio+cordis>.

⁴⁷ M.S. Link, M.D., "Mechanically Induced Sudden Death In Chest Wall Impact (Commotio Cordis)," *Progress in Biophysics & Molecular Biology*, Vol. 82, pp. 175-186 (2003). A pdf. copy of this article is available online at http://www.la12.org/articles/link_research_11-03.pdf.

See also, S.M. Yabek, M.D., "Commotio Cordis," eMedicine.com (August 18, 2003), available online at <http://www.emedicine.com/ped/topic3019.htm>.

⁴⁸ K. Webster, "Baseball Can Kill If It Hits Chest At Wrong Heart-Cycle Point, Study Says," *The Seattle Times* (June 18, 1998). A copy is available from *The Seattle Times'* archives at <http://archives.seattletimes.nwsource.com/cgi-bin/texis.cgi/web/vortex/display?slug=2756854&date=19980618&query=commotio+cordis>.

A national spotlight was recently focused on commotio cordis as a result of the March 2004 death of George Boiardi, a senior captain of the Cornell University lacrosse team, who died after being struck in the chest by a ball during a game against Binghamton University. According to an article in *The Washington Post*, Boiardi stepped in front of a ball fired by a Binghamton player and immediately collapsed. Medical personnel tried to revive him on the field but were unsuccessful. T. El-Bashir, "Former Landon Lacrosse Star Remembered as a 'Great Kid,'" *The Washington Post* (March 19, 2004). A copy of this article can be found at <http://www.washingtonpost.com/ac2/wp-dyn/A6171-2004Mar18?language=printer>.

More recently, Steven Domalewski, a 12-year old pitcher from Wayne, New Jersey, was struck in the chest by a line drive while he was on the mound in June 2006. The impact stopped his heart, and three spectators at the game -- including a dentist -- immediately rushed to help him and started administering CPR. The Police Athletic League, which supervised the game, had a defibrillator on-site but it was not used because aid arrived so quickly. According to Detective Paul Ireland of the Wayne Police Department, "Wayne police, first aid, and paramedics arrived on the scene in less than four minutes. Members of the First Aid on PAL Drive nearby were actually going through a CPR training at the time and were able to respond immediately." Steven was hospitalized and on life support at St. Joseph's Regional Medical Center in Paterson. According to relatives and friends, he is spunky and "a little spitfire." M. Collins, "Line Drive Stops Boy's Heart," northjersey.com (June 9, 2006), available online at <http://www.bergen.com/page.php?qstr=eXJpcnk3ZjczN2Y3dnFIZUVFeXk1OSZmZ2JlbDdmN3ZxZWVFRXI5NDQ1NjA2MyZ5cmlyeTdmNzE3Zjd2cWVIRUV5eTM>.

See also, N. Schweber, "A Line Drive Puts a Boy in a Coma in New Jersey," *The New York Times* (June 10, 2006), http://www.nytimes.com/2006/06/10/nyregion/10mound.html?_r=1&oref=slogin; M. Collins, "Baseball Accident Raises Call for Safety," northjersey.com (June 10, 2006), <http://www.bergen.com/page.php?qstr=eXJpcnk3ZjczN2Y3dnFIZUVFeXk0JmZnYmVsN2Y3dnFIZUVFeXk2OTQ2MjgXJnlyXJ5N2Y3MTdmN3ZxZWVFRXI5Mg>.

⁴⁹ B.J. Maron, M.D., et al., "Clinical Profile and Spectrum of Commotio Cordis," *JAMA*, Vol. 287, No. 9, pp. 1142-1146 (March 6, 2002). A pdf. copy of this study is available online at <http://www.la12.org/articles/CommotioJAMA2002.pdf>. Maron and colleagues examined the 128

confirmed cases of commotio cordis entered into the U.S. Commotio Cordis Registry in Minneapolis as of September 1, 2001.

Although the study notes that commotio cordis occurred during a variety of competitive sporting activities, **the overwhelming majority involved baseball and softball.** “Of 107 commotio cordis events that involved a blunt impact to the chest from a projectile, 53 occurred with baseballs. Of these, 50 were baseballs of apparent regulation design, 1 was a hard rubber ball, and 2 involved baseballs that were marketed commercially as reduced injury, softer-than-normal (so-called safety or training) balls. Another 14 events involved softballs.” *Id.* at 1144.

The scenarios that gave rise to commotio cordis varied. “In 23 instances, balls struck young children in the chest at relatively close range, either batted or thrown by friends, parents, or siblings, at speeds not unusual for the circumstances. For example, 1 fatal incident occurred on a family outing, when a soft baseball gently tossed underhand by a father to a 6-year-old son deflected off the heel of his glove striking the child’s chest.

“In competitive circumstances, 13 cases were batters (or in 1 case an umpire without a chest protector) who were struck by a pitched ball; body size and athletic ability of the pitcher and the speed of the ball were considered unremarkable for the game and only 1 pitcher was an adult. Velocities of the pitched ball were estimated to be 48 to 80 km/h (30-50 mph) from distances of about 12 to 18 m (40-60 ft.). Eleven other baseball players were pitchers struck in the chest by batted balls over similar distances. Twenty other players, including base runners and catchers, were hit in the chest at distances of up to 30 m (100 ft.) by batted or thrown balls.” *Id.* at 1143-44.

Commotio cordis can also occur as a result of nonprojectile blows. One of the cases reported by Maron, et al. involved a collision between two baseball players in pursuit of a batted ball. *Id.* at 1144.

Even though commotio cordis is the most frequent cause of death in baseball, Dr. Mark S. Link, a leading commotio cordis researcher, notes that “it’s still uncommon, and certainly it’s no reason not to play baseball.” R.A. Knox, “Cause of Heart Stoppage Pinpointed,” *The Boston Globe* (June 18, 1998).

⁵⁰ American Academy of Pediatrics, Committee on Sports Medicine and Fitness, “Risk of Injury from Baseball and Softball in Children,” *Pediatrics*, Vol. 107, No. 4, pp. 782-784 (April 2001). A copy of this article can be downloaded from the American Academy of Pediatrics website at <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;107/4/782.pdf>.

Commotio cordis is significantly under-diagnosed and underreported. S.M. Yabek, M.D., “Commotio Cordis,” eMedicine.com (August 18, 2003), a copy of which can be obtained online at <http://www.emedicine.com/ped/topic3019.htm>. “The incidence of this event has been thought to be 2-4 deaths per annum in the United States, but underreporting and misclassification of deaths undoubtedly occur and the true number of deaths due to relatively mild chest wall impacts is unknown. The Commotio Cordis Registry, in its 5 year existence, has documented > 140 cases of commotio cordis and is accruing 5-10 cases/year.” M.S. Link, M.D., “Mechanically Induced Sudden Death In Chest Wall Impact (Commotio Cordis),” *Progress in Biophysics & Molecular Biology*, Vol. 82, pp. 175-186 (2003), http://www.la12.org/articles/link_research_11-03.pdf.

Since the publication of Dr. Link’s article in 2003, the number of registered cases has continued to climb. As of November 2006, the number of commotio cordis cases in the Registry had reportedly reached 182. “Sports Chest Protectors Don’t Fully Protect Young Hearts,” *Forbes.com* (November 13, 2006), <http://www.forbes.com/forbeslife/health/feeds/hscout/2006/11/13/hscout535981.html>.

In just the past five years, there have been two apparent commotio cordis events in the Bay Area that were reported in local newspapers. In July 2003, Jacob Salas, a 16-year old San Jose teen, died during a party when he and a friend agreed to throw punches at each other until one of them gave up. Jacob stopped breathing and collapsed after he received a blow to the chest. C. Burress, “Teens’ Booze Session Ends in Tragedy: Punching Contest Claims 16-year-old’s Life in San Jose,” *San Francisco Chronicle* (July 28, 2003), <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2003/07/28/BA41982.DTL&hw=Jacob+Salas&sn=001&sc=1000>. See also, A. Gathright, “Man Won’t Face Charges in Friend’s Punching Death: San Jose Teen Died”

Roughhousing Accident, Police Say,” *San Francisco Chronicle* (July 29, 2003), <http://sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2003/07/29/BA224058.DTL>.

In August 2002, 19-year old James Williams, who played football for Diablo Valley College, collapsed and died after being tackled during practice. According to the news accounts, “he was wearing full protective gear at the time and other players said the blow did not appear to be hard enough to injure him.” K. Belcamino, “Coroner: A Blow to Heart Killed Player,” *Contra Costa Times* (May 8, 2003). Interestingly, the cause of death was originally ruled to be from an undetermined cause and was not linked to commotio cordis until the Deputy Coroner pressed the supervising pathologist to review the case. It was reported that the physician who had performed the original autopsy was not familiar with this type of event. *Id.*

⁵¹ “Just the Wrong Moment: Boy Struck in Chest with Baseball Dies,” abcNEWS.com (May 22, 2002). See also, “Heartbreaking,” tufts e-news (May 22, 2002). A copy is available on line at <http://enews.tufts.edu/printerversion/052202Heartbreaking.htm>.

⁵² B.J. Maron, M.D., et al., “Clinical Profile and Spectrum of Commotio Cordis,” *JAMA*, Vol. 287, No. 9, pp. 1142-1146 at 1146 (March 6, 2002). A pdf. copy of this study is available online at <http://www.la12.org/articles/CommotioJAMA2002.pdf>.

⁵³ *Id.* at 1144.

⁵⁴ “Just the Wrong Moment: Boy Struck in Chest with Baseball Dies,” abcNEWS.com (May 22, 2002). See also, “Heartbreaking,” tufts e-news (May 22, 2002). A copy is available on line at <http://enews.tufts.edu/printerversion/052202Heartbreaking.htm>.

⁵⁵ M.S. Link, M.D., “Mechanically Induced Sudden Death In Chest Wall Impact (Commotio Cordis),” *Progress in Biophysics & Molecular Biology*, Vol. 82, pp. 175-186 at 177 (2003).

⁵⁶ American Heart Association, “Sudden Cardiac Death,” which is available online at the AHA’s website at <http://www.americanheart.org/presenter.jhtml?identifier=4741>.

⁵⁷ “L. Guerrero, “Pitch Wasn’t Teen’s Last, Thanks to Defibrillator,” *Chicago-Sun Times* (June 15, 2001), available online at <http://www.la12.org/articles/chicago.htm>. See also, “Young Teen Doesn’t Miss a Beat After a Philips HeartStart Defibrillator Saved His Life,” which can be found at http://www.medical.philips.com/us/products/resuscitation/survivor_stories/sean_morley.html.

⁵⁸ The findings of this study were presented at the Heart Rhythm Society annual scientific sessions held on May 21, 2004 in San Francisco. According to a news account of the presentation, the study tested seven commercially manufactured chest protectors marketed to youth baseball players, including foam and hard plastic models. Half of the protectors were designed for use by young catchers and half were designed for use by batters, pitchers, and fielders. Mark S. Link, M.D., Associate Professor of Medicine at Tufts University School of Medicine and a member of the research team, stated, “Frankly, none of the pads work. And there was little or no difference in their performance under game conditions. Uniformly, they do not offer adequate protection for a child’s chest wall.” H. Van Scoy, “For Little Leaguers, Chest Protectors Strike Out,” *Health Day* (May 21, 2004)..

Michael E. Cain, M.D., President of the Heart Rhythm Society and a Professor at Washington University School of Medicine in St. Louis, noted, “The lack of protection afforded by chest wall protectors is alarming news for young athletes. It is obvious that improvements must be made in these pads so that they actually protect these children.” *Id.*

In an earlier study of five commercially available baseball chest protectors, David C. Viano, M.D. and his colleagues found that only one, the All Star vest, reduced the risk of injury and fatality at speeds of 40, 50, 60, and 70 miles per hour using a standard hard ball. However, even this protector only provided a 61% reduction in potential cases of commotio cordis. D. Viano, et al., “Prevention of Commotio Cordis in Baseball: An Evaluation of Chest Protectors,” *Journal of Trauma-Injury Infection & Critical Care*, 49(6):1023-1028 (December 2000). They concluded that the protectors failed to provide consistent reductions in commotio cordis risk. Nonetheless, there stated there are benefits from their use in baseball until improved safety

equipment is developed and standard tests are established to assess sport equipment effectiveness.

According to The Institute for Preventative Sports Medicine, which sponsored the Viano study, the manufacturers need to “develop improved materials and structures that could further diminish the risk of injury and fatality. See <http://www.ipism.org/research-update.html>.

In a recent study by Dr. Barry J. Maron and colleagues, presented at the annual meeting of the American Heart Association in November 2006, they found that of the 85 cases (out of 182 total cases) involving competitive athletes whose cases have been reported to the National Commotio Cordis Registry, a total of 33 (39%) were wearing “potentially protective equipment.” The athletes, average age 15, included 14 hockey players (2 of whom were goalies), 10 football players, 6 lacrosse players (3 of whom were goalies), and 3 baseball players, all of whom were catchers. In 10 of the cases, the projective involved directly struck the chest protector. “Sports Chest Protectors Don’t Fully Protect Young Hearts,” *Forbes.com* (November 13, 2006), <http://www.forbes.com/forbeslife/health/feeds/hscout/2006/11/13/hscout535981.html>.

⁵⁹ Press Release, “Study Finds AEDs Effective in Treating Sudden Cardiac Arrest Caused by Blunt Trauma in Children,” (May 2, 2001). This press release can be downloaded from the website of Medtronic Inc, a Redmond, Washington manufacturer of AEDs, at http://wwwp.medtronic.com/Newsroom/NewsReleaseDetails.do?itemId=1095964108313&lang=en_US.

The failure of bystanders to recognize a commotio cordis event is not uncommon due to the lack of general awareness of the condition. On March 25, 2000, Louis Acompora, a 14-year old goalie on the Northport High School junior varsity lacrosse team on Long Island, was killed during his team’s first game of the season when he was hit in the chest by a shot. He collapsed and died on the field as his coaches and teammates failed to appreciate the nature of his condition, and critical emergency aid was delayed. Although CPR was commenced, there was no AED on the field. By the time paramedics arrived, it was too late. Louis’s parents, who were in the stands and witnessed their son’s tragic death, established the Louis J. Acompora Memorial Foundation, which seeks to improve sports safety by requiring schools to have AEDs at all sporting events. See B. de Lench, “Karen Acompora: On a Mission So No More Young Athletes Die from a Blow to the Chest,” an article on the Moms Team website, which can be downloaded at http://www.momsteam.com/alpha/features/cardiac_awareness_center/karen_acompora.shtml.

As a result of the efforts by the Acomporas and others, New York State passed the a law requiring schools to have AEDs in each school facility. [Section 917 of the NYS Education Law]. The legislation was signed by Governor George Pataki at a ceremony held at Northport High School. The Acomporas continue to spread their message across the country and have created an excellent source of information about commotio cordis on the foundation’s website at <http://www.la12.org>.

Pennsylvania and Illinois have recently adopted similar legislation, and many other states are looking to follow suit. The Pennsylvania law, the first in the nation, was passed as a result of the death of Greg Moyer, a 15-year old basketball player at Notre Dame High School in rural Pike County, Pennsylvania who suffered a cardiac arrest in the locker room after a game in 2000. The school, which had just opened a new gymnasium, had no defibrillator, and it took more than 30 minutes before one was available. He died in the Emergency Room. His parents established the Gregory W. Moyer Defibrillation Fund, which raise money to place AEDs in area schools, and successfully supported efforts to require AEDs in every Pennsylvania school. See R. Moyer, “One Mother’s Mission: A Portable Defibrillator in Every School, Church and Gym in America,” http://www.teamsofangers.org/research/cardiac_info/gregory_moyer.shtml. See also: <http://www.isbe.state.il.us/pdf/defibrillator.pdf> (Illinois legislation).

⁶⁰ S. Levine, “Playing Through Pain? Not for Kids: Concussions Take Longer to Mend, Research Shows,” *The Washington Post* (October 10, 2006), available online at: <http://www.washingtonpost.com/wp-dyn/content/article/2006/10/09/AR2006100901302.html?referrer=email>.

⁶¹ *Id.*

⁶² “Struck Down by Heat: Heat Stroke Kills NFL Player After Morning Workout,” abcNews.com (August 1, 2001). The news account notes that Stringer, 27, had sat out the first day of training camp practice on Monday, July 30, 2001 because of heat exhaustion. Team officials told the Minneapolis Star-Tribune that he was upset with himself for his poor performance and was determined to make up for it. The following day, the team worked out in full pads with the temperature climbing into the mid-90s by mid-morning. Stringer vomited several times during the workout and could not keep water down, but he refused to drop out of practice. He developed symptoms of heat stroke and was unresponsive when he was taken to Immanuel St. Joseph’s–Mayo Health System in Mankato, MN. Despite receiving attention from a team of specialists, Stringer never regained consciousness and died at 1:50 a.m. the following morning.

In February 2003, Baltimore Orioles pitcher Steve Bechler collapsed during a spring training practice in Florida and also died of heat stroke. The autopsy reports showed that Bechler had been taking ephedrine, a weight loss drug and energy stimulant. It had been reported that bottles of ephedrine were also found in Corey Stringer’s locker, but ultimately the supplement was not discovered in his blood system. As a result of Stringer’s death, the NFL along with its union banned the use of ephedrine. B. Bloom, “MLB Seeks Ban on Stimulants,” mlb.com (February 21, 2003).

⁶³ Between 1995 and 2001, heat-related problems during summer drills killed 18 high school or college football players according to statistics from the University of North Carolina. “Struck Down by Heat: Heat Stroke Kills NFL Player After Morning Workout,” abcNews.com (August 1, 2001).

⁶⁴ “Heat Illness: What You Need to Know,” *ASAP News*, Vol. 9, No. 5, pp. 2-3 (June/July 2002), <http://www.littleleague.org/programs/asap/newsletters/2002/junjul02asapnews.pdf>.

⁶⁵ This information is provided by the American Association of Ophthalmology (AAO) and is taken from Little League Baseball’s *ASAP News*, Vol. 9, No. 5 at pp. 4-5 (June-July 2002), available online at <http://www.littleleague.org/programs/asap/newsletters/2002/junjul02asapnews.pdf>.

⁶⁶ This information is taken from W.O. Roberts, M.D., “Field Care of the Injured Tooth,” *The Physician and Sportsmedicine*, Vol. 28, No. 1 (January 2000).

⁶⁷ Asthma is the leading serious chronic illness among children, afflicting an estimated 6.1 million children under the age of 18. “Asthma in Children Fact Sheet,” American Lung Association (June 2004), located online at <http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=44352>.

⁶⁸ “Asthma in Children Fact Sheet,” American Lung Association (July 2005), located online at <http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=44352>.

⁶⁹ “Asthma Emergency Signs,” *ASAP News*, Vol. 8, No. 6 (July 2001), available online at <http://www.littleleague.org/programs/asap/newsletters/2001/jul01asapnews.pdf>.

⁷⁰ This information is take from an article by E. Quinn, “Sprains and Strains,” About.com, which is available online at <http://sportsmedicine.about.com/cs/injuries/a/sprains.htm>.
