



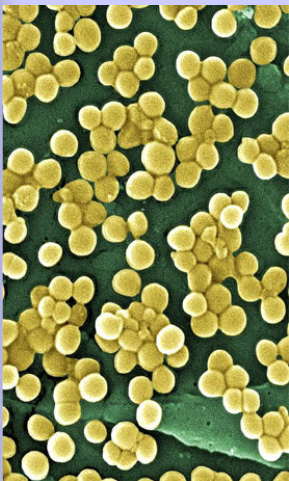
Louisiana High School Athletic Association Sports Medicine Advisory Board

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Preventing MRSA (Practical Solutions in a Locker Room)

Sean Stanton, ATC, LAT

Head Athletic Trainer, Zachary High School

The locker room is a place to prepare for battle. Athletes of all ages transform into soldiers that are ready to take on a formidable opponent with one goal in mind, winning. However, there is another enemy that all athletes must battle. This enemy can't be seen by the naked eye. It can't be tackled or scored on. But it can be beaten if the right strategy is used. This enemy is MRSA (methicillin-resistant staphylococcus aureus).

MRSA is a super germ. It is a bacterial infection that is known for its resistance against many antibiotics. The tough nature of MRSA makes it difficult to treat. In spite of this, there are methods to prevent the spread of MRSA in a locker room environment.

Good Hand Washing Techniques

The first step in preventing the spread of MRSA is to wash hands thoroughly. Make sure to wash with warm soapy water. Be sure to scrub between the finger and under the nail. Wash up to the middle of the forearm. Hands should be washed for approximately 120 seconds in order to make sure they are clean and free from infectious organisms. Rinse and dry hands with a clean towel. Use another clean towel to turn off the faucet. Hands should be washed often. If soap and water is unavailable, then alcohol-based antimicrobial hand sanitizer may be used.

Good Personal Hygiene

Take a shower immediately after practice or games. The shower is the best way to wash away those pesky germs. Use a clean dry towel to dry off after taking a shower. Do not share towels.

Take Care of Those Wounds

Have all wounds cleaned and covered before and after athletic participation. Use a triple-antibiotic ointment on the wound. Cover with a bandage and then secure the bandage in place with tape. If the wound is full of pus and very painful, have it evaluated by a healthcare professional immediately. Don't wait thinking it will eventually get better.

Be Selfish with Personal Items

We have been taught to share with our friends and family. This is not true when it comes to personal items. MRSA can hang out on soiled laundry. For this reason, it is a good idea to keep towels, wash cloths, clothes, and uniforms to yourself. Using someone else's personal items is not a good idea either. Remember, in this case, sharing is NOT caring, instead it is infecting.



Healthcare professionals (athletic trainers, doctors, nurses, etc.) are trained to recognize and treat infections. If you are unsure whether a wound is infected, immediately refer to a healthcare professional.



“A common way school districts employ an athletic trainer is to hire them as a teacher first and then pay them a stipend to serve as an athletic trainer. “

(MRSA Continued)

Clean, Clean, and CLEAN!

Keep that locker room clean! Locker rooms, weight rooms, and uniforms should be cleaned daily. This can seem difficult when there are numerous athletes using equipment and uniforms on a daily basis. However, creating a checklist and dividing duties between coaches, players, and athletic trainers can help manage cleaning responsibilities.

Be sure to wash practice and game uniforms after every use and make sure the water is hot enough to kill pathogens that may be on the soiled laundry. The wash temperature should be at least 159.8 degrees Fahrenheit. Latex or vinyl gloves should be used when handling soiled laundry.

When in Doubt, Refer

Healthcare professionals (athletic trainers, doctors, nurses, etc.) are trained to recognize and treat infections. If you are unsure whether a wound is infected, immediately refer to a healthcare professional. Ignoring a wound could be a serious mistake in the healthcare of an athlete. Instead of missing a single practice, the athlete could miss much longer if the infection turns out to be untreated MRSA. Not to mention, the ability for the infection to spread among other athletes.

The battleground has been set and the battle plan in place. This nasty bacterial infection has been around long before organized sports began, and will be around far into the future. The greatest defeat is not on the field, court, or diamond. It is in the locker room. MRSA can be tougher than any opponent faced in the playoffs or a state championship game. Remember, MRSA can be beaten by following this simple strategy. The best treatment for MRSA is prevention.

How to Hire a Teacher/Athletic Trainer in a Secondary School Setting

**Ronnie Harper, Ed.D., ATC
Head Athletic Trainer, Dutchtown High School**

Are athletic trainers a luxury or necessity? Many years ago it was a clear answer; Certified Athletic Trainers were truly a luxury. However, in recent years many school districts are now considering them as an absolute necessity. In 2003-2005, the Louisiana Athletic Trainers Association (LATA) commissioned a task force to investigate the health care status of the secondary school athlete. The most significant information that came from their investigation was the lack of certified athletic trainers working in the secondary school setting in Louisiana. In a survey conducted by the task force, Louisiana secondary schools had .12 athletic trainers per school compared to a similar survey conducted in Texas which reported .72 athletic trainers per school. The mission of the task force was to help find ways to encourage schools to hire certified athletic trainers. A common way school districts employ an athletic trainer is to hire them as a teacher first and then pay them a stipend to serve as an athletic trainer. However, if an individual desired to become a certified athletic trainer they had to complete a Bachelors degree first and then pursue their teaching credentials which would take another two years to complete. Not many certified athletic trainers desired to invest six years of college to only be paid at the bachelor's degree level.

(Hire and Athletic Trainer Continued)

Members of the LATA task force approached the Department of Education inquiring about alternative teacher certification options. The task force members discovered that the Department of Education was already pursuing this issue and was ready to implement three new sports medicine courses into Schedule Bulletin 741. The Department of Education identified the certified athletic trainer as the only qualified health care professional that would be able to teach these new courses. They also declared that the certified athletic trainer with a bachelor's degree would have to obtain the Career, Technical, Trade and Industrial Education (CTTIE) teacher certification. To obtain the CTTIE teacher certification, certified athletic trainers had to complete one to three teaching methodology courses over three years and could immediately be given a one year temporary teacher certification (CTTTIE) as long as they had two years of work experience as a certified athletic trainer. With this road block quickly knocked down, schools begin to hire certified teacher/athletic trainers.

Schools that have hired CTTIE teacher certified athletic trainers over the past few years:

Central	Zachary Lutchter	Donaldsonville	Hahnville
Ouachita	Ruston	Sterlington	West Monroe \
West Ouachita	Denham Springs Doyle	St. James	Assumption
UHigh (BR)	Thibodaux	Plaquemine	White Castle
East Ibberville	Pineville	Destrehan	Dutchtown
St. Amant	East Ascension	St. Martinville	Airline
Lafayette	New Iberia	Broadmoor	LCB Learning Acedemy Northwest
Opelousas	Port Barre	Beau Chene	
Patterson			

The wave of hiring CTTIE teacher athletic trainers began to spread rapidly as the teacher certification road block was addressed. Besides teaching Sports Medicine I, II and III courses, CTTIE teacher certified athletic trainers also began to teach Medical Terminology, *First Responder, *Basic EMT and *Pharmacy Tech as well as other local initiative elective courses.

In some of these schools, athletic trainers who were already working in sports medicine clinics (private clinics, hospitals etc.) servicing those schools became CTTIE teacher certified and were hired on by the school system as a CTTIE teacher certified athletic trainer. Superintendents, School Board Members and Principals began to look at the athletic trainer as an employee that could not only add value to athletics but could also add value as a teaching faculty member. School administrators began to realize that a CTTIE teacher certified athletic trainer could impact their school's performance score (SPS) as they contribute toward the increase of Diploma Endorsements, Industry Based Certifications (First Responder, Pharmacy Tech), Work Based Learning (WBL) hours opportunities for their students as well as supporting the Grade Level Expectations (GLS's) in the core subjects. School administrators also discovered that the "Sports Medicine" career concentration was a great add-on to offer their students. The development of career concentrations were mandated by the passing of the Career Options Law (Act 1124) in 1997.

Sports Medicine Courses

Sports Medicine I (1/2 credit)

Sports Medicine II (1/2 credit)

Sports Medicine III (1 credit)

Other Related Courses

Medical Terminology (1 credit)

***First Responder** (1/2 to 2 credits)

***Basic EMT** (2 credits)

***Pharmacy Tech** (1 credit)

*Requires additional certification/training from the Department of Education and/or related agencies

For many schools that have hired CTTIE certified teacher athletic trainers, it was an easy decision and the school system quickly implemented the courses. For other schools it has taken a few years to provide their justification to school board members and administrators in order to allocate the staff position. Two challenges await school systems desiring to pursue this as an option. One challenge is to begin the process of securing the teaching position. The second challenge is to find an athletic trainer who desires to pursue the teaching profession. Both are challenges that many school systems have overcome and many more will in the near future.

Resources for school administrators to learn more about how to move forward on both on those challenges can be located at: www.lssmc.ning.com and/or contact Ronnie Harper Ed.D., ATC at Dutchtown High School, 225-323-4372, harper@apsb.org.

Athletic Training Services in Louisiana

Alex Dibbley, Sports Medicine/Allied Health Instructor, Lake Charles-Boston Academy of Learning

For many years, high school athletic trainers in Louisiana represented a small group of loosely organized individuals scattered throughout the state. Many worked for hospitals and clinics providing outreach sports medicine services to schools in their area. A few were employed by school districts as teacher/athletic trainers. There has been growth in the profession for a number of years and in 2006, a sports medicine curriculum pilot program was initiated by the state allowing for further growth. The pilot phase is now over, but it was successful in growing the number of teacher/trainers. There has been growth in the outreach model in some areas of the state as well.



A 2009 survey identified 136 athletic trainers (ATs) covering secondary schools in the state of Louisiana. With approximately 400 schools in the state, there is a ratio of .34 ATs per school.

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Quantifying this growth and identifying medical coverage trends for high school athletics has been a goal of the Louisiana Athletic Trainer’s Association (LATA) for nearly a decade, perhaps longer. Specifically, it was important to determine 1) the raw number of athletic trainers covering high school sports, 2) which schools receive coverage, 3) the extent of the coverage (full-time or part-time), and 4) contact information. A project team was initiated by the LATA to create a database of athletic trainers in the state and to identify who was covering each school.

A 2009 survey identified 136 athletic trainers (ATs) covering secondary schools in the state of Louisiana. With approximately 400 schools in the state, there is a ratio of .34 ATs per school. (The number of schools and number of ATs vary slightly from year to year). Similar surveys have conducted in some of our border states. In a 2006 survey by SWATA (South Western Athletic Trainer’s Association), Texas was found to have 895 ATs covering 1239 schools for a ratio of .72 trainers per school. In Arkansas, the ratio was .12. A definitive number of athletic trainers in Mississippi was difficult to ascertain.

Building the database is an ongoing process and subject to some degree of error due to the mobility of our society. At this time, there is still a large number of schools receiving no services or whose status is unknown. In most cases where coverage exists, ATs are responsible for multiple schools resulting in part-time coverage. A small number of athletic trainers are responsible for one school only. In isolated cases, a school (or parish) has an assistant athletic trainer. To view the information at a particular school or region of the state, please visit www.zeemaps.com/74976. Zoom into the area you would like to learn more about and click on the marker for any school.

The vast majority (130/136) of total high school athletic trainers in Louisiana are located within a metropolitan area. The breakdown is as follows:

Metro Area	Parishes Included	# of ATs
New Orleans	Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Washington	36
Baton Rouge	EBR, WBR, Ascension, Assumption, Livingston, Iberville, E. Felic., W. Felic., Pointe Coupee, St. Helena	31
Shreveport	Bossier, Caddo, Desoto, Webster	9
Lafayette	Lafayette, St. Martin, St. Landry, Iberia, Acadia, Vermilion	25
Lake Charles	Calcasieu, Cameron, Jeff Davis, Beauregard	8
Alexandria	Rapides, Grant, LaSalle	13
Monroe	Ouachita, Union, Morehouse	5
Houma/Thibodaux	Lafourche, Terrebonne	3

Dehydration In Sports Other Than Football

David Bourque, ATC

Head Athletic Trainer -Denham Springs High School

Dehydration occurs when your body loses too much water and blood salts such as potassium and sodium. During an athletic contest, your body loses water through sweating and breathing. Sweating is the body's natural response to an increase in body temperature. As sweat evaporates from the skin, body heat is lost and core temperature is maintained at safe levels. When an athlete fails to properly hydrate, dehydration occurs and effects the working muscles.

Living in Louisiana, everyone knows the risk and dangers of dehydration while practicing or playing outside. What about dehydration in other sports? How about indoor sports such as basketball or volleyball, which are played in cooler, less humid environments? Sometimes hydration doesn't seem to be a high priority due to the cooler environment in which these athletes play in. The truth is that the high intensity of these sports, for example the stop-and-go nature of basketball or the constant diving and jumping of volleyball, causes rapid increases in body temperature and, consequently, large amounts of sweat loss. The result of substantial sweat loss, can lead to significant dehydration along with decreased performance in these young athletes. Sweat loss of just 1.5% can impair performance. During competition, blood is diverted to the working muscle delivering oxygen and nutrients to the skin to cool the body. As an athlete sweats and fails to replace their fluid losses during competition, blood volume shrinks. Consequently, the heart has to work harder to meet the demands of the working muscles. This reduction in blood volume compromises blood flow to the skin, causing an increase in core body temperature and decreases blood flow to the working muscles making exercise more difficult.

Staying hydrated will inevitably play a role in the later stages of a game when errors in judgment may be costly. Recent studies have found that dehydration can negatively impact cognitive performance. Research has revealed that as little as 1-2 percent dehydration leads to reductions in perceived alertness and ability to concentrate – a necessity when a player is standing at the free-throw line during the final moments of a basketball game. Perceptions of fatigue are also higher when a player is inadequately hydrated. In practical terms, this means that running the floor and playing defense will feel much more difficult.



Drink plenty of water early and often during the time of physical activity. You should drink 8 to 12 ounces of water every 15 to 20 minutes during exercise.



The purpose of the taping or bracing is to aid in support of the total ankle joint.

(Dehydration Continued)

So what can be done to prevent dehydration?

1. **Drink water regardless of whether or not you are thirsty.** Thirst is not the only indicator of the need for fluids. Waiting until you are thirsty before drinking water is not recommended and by then, it could be too late.
2. **Drink water before exercise.** Guidelines from the National Athletic Trainers and Sports Nutritionists suggest drinking 12 to 20 ounces, 2 to 3 hours before beginning an activity.
3. **Drink water often during competition.** Drink plenty of water early and often during the time of physical activity. You should drink 8 to 12 ounces of water every 15 to 20 minutes during exercise.
4. **Drink water after exercise.** According to the National Athletic Trainers and Sports Nutritionists, drink 3 cups of fluid for every pound lost during competition.
5. **Do not restrict fluids during training sessions or competition.** Dehydration can cause athletes to fatigue early and lose coordination skills.
8. **Can sports drinks replace water consumption?** Dr. James Rohack with Texas A&M University's College of Medicine suggests that water is best for simple fluid replacement and that sports drinks may be an appropriate choice for athletes involved in vigorous activities since they contain glucose and sodium.
9. **Taking salt tablets is NOT recommended.** Most foods provide enough sodium.
10. **Avoid drinks with caffeine.** Caffeine is a diuretic and can increase the chance of dehydration and muscle cramps.

It is important to know that dehydration can occur in any sport. Every athlete is different and all face different obstacles during athletic competition. The truth for everyone, in any sport, or any activity, is that the benefits of drinking fluids are universal. Drinking enough fluids regularly helps the body function properly, optimizing physical performance and bodily functions. Not drinking enough water can lead to mild or even serious dehydration. Athletes should be educated in the benefits of drinking plenty of fluids in order to prevent dehydration. Athletes need to know that you can improve athletic performance with optimal sports hydration. With a little effort, athletes can ensure they take full advantage of the link between dehydration and athletic performance.

Ankle Injuries: Taping vs. Bracing

Tommy Dean, ATC, LA Athletic Care

In high school sports, ankle sprains are one of the most common injuries that are dealt with on a daily basis. The role of the athletic trainer or coach is to ensure that after an injury proper protocol is followed and the athlete is safely prepared to return to the field of play. Once this accomplished the trainer/coach must begin to support the athlete's ankle with some sort of taping technique or brace daily. Athletes, who do not have acute ankle injuries, request to be taped to take preventative measures. The question is raised on which method may be the best in attempts to accomplish this task. Should the athletic trainer use taping techniques or bracing?

In order to make this decision, an understanding of what these techniques are trying to accomplish must be obtained. The purpose of the taping or bracing is to aid in support of the total ankle joint, and to limit the degrees in range of motion of the ankle complex. Scientifically once the ankle is limited in its range of motion though either tape or brace, it is less likely to sustain an initial injury or have a recurring injury. Both of the techniques however cannot completely prevent injuries from taking place.

(Taping Vs. Bracing Continued)

Several factors must be taken into consideration when making the choice of what method will be used including cost, durability, time and personal connection with the athlete. The first and possibly the most important factor to consider is the personal relationship that is achieved by the athlete coming into the training room for taping. Having the athlete sit in the training room and have another person take hands on approach by taping, gives the athlete a sense of security and protection. Humans have an instinctual need to be touched, which is accomplished through the taping techniques. Medically it also gives the athletic trainer or coach a chance to monitor the athlete to see if there is anything else that may be going on not only with the injury but with the athletes' person. The ability to build a trusting relationship between the athlete and the Athletic Trainer/ coach is something that may pay off in the future. The bracing technique is something that may come off to the athlete as impersonal and may inhibit the athlete from communicating with the Athletic Trainer.

The time effectiveness of taping an ankle is something that also needs to be considered. On average it takes between 2-4 minutes per ankle to apply a sufficient ankle tape job. It has been shown that after just 10 minutes of intense activity the tape loses on average 18- 70% of its tensile strength. Once the tape job needs to be retightened, the shoe must be taken off, tape removed, and the process started over, taking valuable time away from the athlete's playing time. The ankle brace however is something that once the athlete is shown how to appropriately apply the brace, is something that can be achieved outside of the training room by the athlete themselves. The athlete no longer needs to go out of the way to report to the training room to wait in line to be taped. When the brace loosens up the athlete simply takes the shoe off and retightens the brace, cutting down on the amount of time lost from the field.

Lastly economic or financial considerations are always taken into account when Athletic Trainers make supply orders through their athletic department. It takes approximately one roll of tape per day

“A case of tape may run the training room on average anywhere from \$35.00-\$55.00 per case of 24-32 rolls...That breaks down to roughly 1.55 per roll, or \$95.00 for a 12 week season per ankle. Conversely a standard ankle brace can be obtained for 18.00-50.00”

to tape an athlete's ankle not considering the pre-wrap, adhesive spray, heel and lace pads and specialty tape that may be used in conjunction with the standard white tape. That breaks down to roughly 1.55 per roll, or \$95.00 for a 12 week season per ankle. Conversely a standard ankle brace can be obtained for 18.00-50.00 per brace. These braces have been shown to last through numerous seasons, with proper care, before having to be replaced. It is estimated that 2 to 3 ankle braces can be purchased for the same amount of budget it would take to tape a single ankle for an entire season.

Overall the choice of whether to use ankle tape or ankle braces is something with no concrete answer. The choice should be made not overall but as individual situations present themselves. Athletic Trainers and coaches know that no injuries or athletes are ever the same, meaning that no situation can be handled in the same manner. The ability to adapt to situations may just be the best choice. It is the role of the Athletic Trainer or coach to keep the best interest of the athlete in the utmost regards, and to help them achieve the ultimate goal of safely returning to the field and competition as soon as possible. The ability to use and try multiple techniques may just be the best way to accomplish this task.





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LHSAA History

In October of 1920 a group of high school principals met in Baton Rouge to discuss ways to better regulate and develop the high school interscholastic athletic program. This meeting led to the formation of the Louisiana High School Athletic Association (LHSAA).

Today the LHSAA is working with professionals in the field of sports medicine to help educate coaches on areas that affect the health and performance of high school athletes.

www.lhsaa.org