In addressing the needs of school nurses in Texas, the Department of State Health Services has listened to the school nurses around the state and developed this publication. DSHS hopes to bring you the latest research, evidence based practice, and resources in the area of nursing and more specifically, school nursing. As part of this publication, we hope to have your contributions added under the “Stories from the Field.” It is through such sharing that school nurses are both recognized for the work they do as well as share successful programs and practice with others in the field. If you have information to share please feel free to submit it for publication to anita.wheeler@dshs.state.tx.us.

Hot Topic

MRSA (Methicillin resistant *Staphylococcus aureus*) Infections – What You Need to Know

(Excerpt from: DSHS article: Information on Staphylococcal Infections For School Athletic Departments accessible at: [www.dshs.state.tx.us/idcu/health/antibiotic%5Fresistance/mrsa](http://www.dshs.state.tx.us/idcu/health/antibiotic%5Fresistance/mrsa))

BACKGROUND

Antibiotic-resistant bacteria currently pose a significant health threat. Since the summer of 2002, outbreaks of skin infections caused by antibiotic-resistant bacteria have been reported in sports teams including wrestling, volleyball and most frequently, football teams. A student may have already experienced an infectious disease that has not responded to antibiotics. The development of resistance to any antibiotic is dependent on many factors, including the widespread use of antibiotics, not taking all of the prescribed antibiotics, sharing antibiotics or inappropriate prescribing. While the situation is alarming, everyone can help in the effective control and prevention of antibiotic resistant infections.

Methicillin resistant *Staphylococcus aureus* (MRSA) (often pronounced mer-sa) infection, unlike a common *Staphylococcus aureus* infection, cannot be treated with the penicillins or other methicillin-related antibiotics. These bacteria are also resistant to the cephalosporins. Consequently, the treatment is often longer, more expensive, and more complicated, with frequent recurrence of infections. Depending on the antibiotic resistance patterns, alternative or newer antibiotics may also play a role in the treatment of serious infections, but these antibiotics may be rendered ineffective through the development of bacterial resistance. This underscores the need for aggressive control and prevention measures for all antibiotic resistant organisms.
ABSTRACT: Methicillin-resistant *Staphylococcus aureus* (MRSA) is a disease-causing organism that has been present in hospital settings since the 1960s. However, a genetically distinct strain of MRSA, called community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA), has emerged in recent years in community settings among healthy individuals. While this organism has been found to be less resistant to antibiotics, it is also more virulent and capable of causing a spectrum of illnesses. School nurses must be aware of the risk factors for this infection and understand its signs, symptoms, diagnostic testing and management. With this knowledge, school nurses can help protect students, staff and community members from this increasingly prevalent pathogen.

For members of National Association of School Nurses, the full text of the preceding article can be linked to from the NASN’s website, [www.nasn.org](http://www.nasn.org).

**CA-MRSA. The new sports pathogen.**
Author: Kurkowski C.

ABSTRACT: Skin infections in athletes caused by community-associated Methicillin-resistant *Staphylococcus aureus* (CA-MRSA) have been observed within many cities throughout the United States and within many countries throughout the world (Centers for Disease Control and Prevention [CDC], 2003). As the incidence rises in the athletic population, clinicians must learn to identify risk factors for CA-MRSA, diagnosis and treat infections with judicious use of antimicrobial agents and facilitate strategies to limit transmission. Recently, a new consensus guideline for handling CA-MRSA outbreaks in sports has been released by the CDC (Gorwitz et al., 2006). This article includes a review of the evolution of MRSA; distinguishes between healthcare associated Methicillin-resistant *Staphylococcus aureus* (HA-MRSA) and CA-MRSA; and reviews the diagnosis, management, and prevention strategies to limit transmission of CA-MRSA.

**PREVENTION STRATEGIES**

Hand washing is the single most important behavior in preventing infectious disease. Hands must be clean before you can touch your eyes, mouth, nose or any cuts or scrapes on the skin. You are the role model – wash your hands or use an alcohol-based hand sanitizer frequently. Do not share towels, soap, or other personal care items. Shower with soap and water as soon as possible after direct contact. Dry using a clean, dry towel. Ointments or antibiotics must not be shared. Pre-wash or rinse items that have been grossly contaminated with body fluids. Wash
towels, uniforms, and any other laundry in hot water and ordinary detergent and dry on the
hottest cycle. Inform parents of these precautions if laundry is sent home. Clean the area and
equipment in contact with an infected student at least weekly using a commercial disinfectant or
a fresh (mixed daily) solution of one part bleach and 100 parts water (1 tablespoon bleach in one
quart of water) Your facilities should introduce a policy in which students must inform a school
official if they have a skin infection and part of that policy should be a plan for when the student
can return to school. Have the students and parents sign a release to that effect.

Excerpt from: DSHS article: *Information on Staphylococcal Infections for School Athletic
Departments* accessible at: www.dshs.state.tx.us/idcu/health/antibiotic%5Fresistance/mrsa

THE LAW
Several Texas laws (Tex. Health & Safety Code, Chapters 81, 84 and 87) require specific
information regarding notifiable conditions be provided to the Texas Department of State Health
Services (DSHS). Health care providers, hospitals, laboratories, schools and others are required
to report patients who are suspected of having a notifiable condition (*25 Tex. Admin. Code
§97.2*).

Enacted through 2007 Legislation:
p_g=1&p_tac=&tl=25&pt=1&ch=97&rl=3
Vancomycin intermediate and resistant (MIC > 2mcg/mL) *Staphylococcus aureus* is similar to
MRSA. Immediately report isolates of vancomycin intermediate and resistant Staphylococcus
aureus (VISA) and (VRSA) by calling (800) 252-8239 or faxing (512) 458-7616. Isolates of
VISA and VRSA shall be submitted to the Texas Department of State Health Services,
Laboratory Services Section, 1100 West 49th Street, Austin, Texas 78756-3199. All reports of
VISA and VRSA shall include patient name; date of birth or age; sex; city of submitter; anatomic
site of culture; date of culture; and minimum inhibitory concentration (MIC) if available.

ASSESSMENT HELP
CDC pocket card for MRSA and skin infection treatment:
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/mrsa/MRSApocketcard.pdf

DSHS images of MRSA-WARNING-Graphic material:
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/MRSA/picpage.asp

EDUCATIONAL TOOLS
Because of the increasing prevalence and awareness surrounding Community Associated MRSA
(CA-MRSA), in Texas schools, this section contains forms, flyers and educational tools nurses
can use everyday with their staff, students and parents.

What is MRSA? A Powerpoint Presentation accessed at:
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/mrsa/WhatMRSA.ppt

Staph infection notification letter for parents in English and Spanish:
English
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/educational/notificationofstaph.doc
Spanish
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/educational/Snotificationofstaph.doc

MRSA information flyers for parents in English and Spanish:
English
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/educational/whathyouneedtoknowstaph.pdf
Spanish
www.dshs.state.tx.us/idcu/health/antibiotic_resistance/educational/Spregonuntas.pdf

MRSA video—available for viewing on the web for viewing but also for purchase:
“MRSA: The Ticking Time Bomb?” (A video geared towards Athletes)
www.staphaseptic.com/mrsa-video.cfm

DISCLAIMER:
While the Texas Department of State Health Services (DSHS) cannot endorse any commercial product, staff from the DSHS Infectious Disease Surveillance and Epidemiology Branch and the MRSA team within the Branch have reviewed this video and find it to be a valuable educational tool with information that does not market any specific product in the content presented. Recommendations provided are in concert with those developed by MRSA workgroups convened by DSHS. Additionally, the video format provides an additional learning approach to disseminate recommendations and guidelines to prevent and control MRSA and staph infections. Further information concerning MRSA and staph infections can be obtained through the DSHS Infectious Disease Control Unit website.

When in doubt of the correct procedure to follow, contact your local or regional health department www.dshs.state.tx.us/regions/default.shtm#lhd, the Infectious Disease Control Unit of the Texas Department of State Health Services at www.dshs.state.tx.us/idcu or your healthcare provider.

FROM LITTLE CYPRESS-MAURICEVILLE ISD
By reading the Friday Beat, Kelly Meadows, an RN for Little Cypress-Mauriceville Intermediate, learned about the Lowe’s Toolbox Education Grant. On Monday, January 14th, Little Cypress-Mauriceville Intermediate received a $5,000.00 check that is allowing the school to complete their “Health Walk”; a ½ mile paved walking trail in front of the school that can be used even if it rains. This new “Health Walk” will host their 3rd annual American Diabetes Association School Walk and Blood Drive on March 14th. Last year, the students raised $7,000.00, 68 pints of blood were donated and over 1,125 people walked for a total of over 3000.00 miles in just 6.5 hours! Kelly uses this opportunity to invite community groups that promote health and wellness and are family friendly to set up booths and information tables. The school encourages everyone to have a picnic lunch if they choose. This year Little Cypress-Mauriceville Intermediate has even bigger goals. They will have an inaugural celebration for
their new “Health Walk” and invite everyone to join them on March 14th for the ribbon cutting and first lap.

FROM FORT SAM HOUSTON ISD
On November 10th, 2007, Ms. Robin Harvel, RN, BSN from Fort Sam Houston Independent School District was awarded the Texas School Nurse of the Year by the Texas School Nurse Organization and is now a candidate for National School Nurse of the Year. Ms. Harvel has been a school nurse for over 23 years in several school districts large and small, in Texas, and overseas. She has been nominated as result of her School Health Helper program that gives staff and student’s health skills and responsibilities in their classrooms in order to promote prevention and healthier schools. Ms. Harvel has also designed a graphic of the Coordinated School Health accomplishments and activities that she has used in her school district. In Ms. Harvel’s coordinated School Health Diagram, she participates in numerous activities that bridge the gap of health and wellness for her students, staff and community through education and direct participation. (Diagram attached) School Nurses’ Notes wishes an outstanding Texas school nurse good luck on her nomination for National School Nurse of the Year!

School Nurses’ Notes wants to know about your success stories and best practices. Please send your stories, awards and successes to Anita.Wheeler@dshs.state.tx.us and look for the next issue of School Nurses’ Notes towards the end of March 2008.

Resources

Additional information on bacteria, antibiotics, resistant organisms, disinfection, wound healing, and other treatment for infections can be found in your local library or the World Wide Web at www.cdc.gov/ncidod/hip/ARESIST/mrsa.htm and www.cdc.gov/drugresistance/community. Other sources are www.ahrq.gov , www.tufts.edu/med/apua/Pactitioners/RSMarticle.html, and www.mrsatexas.org .

Contact: Anita Wheeler, RN, BSN, CPN, Nurse Consultant anita.wheeler@dshs.state.tx.us 512-458-7111, Ext. 2909
Accomplishments and Activities in Coordinated School Health – Robin Harvel, BSN, RN

Lifetime member of TSHA since the mid 80’s, 2006 selected by Commissioner of Health to serve on Texas School Health Advisory Committee, taught 7th grade health, health fairs, developed a 4 hour Growth and Dev. program for 5th graders, offer wide selection of health topics for teaching students and staff; teachable moments in the health room daily with all encounters, numerous political activities, taught CPR, First Aid, Swim lessons, Gun Safety, ‘Til Help Arrives, Tar Wars, worked with PK-College students, their parents and extended families, attends workshops/conferences, networks/mentors with others, contributes newsletter articles and serves as officer in several health organizations.

Offers workshops on health topics, walks the perimeter of the building weekly, provides communicable disease control, implements disaster and pandemic preparedness, teaches first aid to community groups/staff/students, organized a school board tour on school buses to school sites to observe and hear from district nurses on school health issues, implements best practice nursing techniques/procedures, assessing illness/injury, ethical principles/codes of professional nursing practices, health education, and wellness.

Addresses health disparity/cultural competency issues--counsels daily, referrals to counselor or community agencies, coordinated psychiatrist as featured speaker for TSNO ‘07 conf., provide support for a special family each year at school, staff seek her out for information and support for numerous issues of a personal nature and issues with students, TSNO committee chair for students in Special Situations, trained for Texas Council of family violence-survivors caucus, provides staff stress reducers, arranges for student field trips to emphasize health ‘92 legislature “anti tobacco rally” and ‘07 HEB-fitness, nutrition, meal planning and portion size.

Works with America’s military families, greets all new families to school and provides them a school orientation, recruits volunteers and is an active volunteer in numerous community organizations, sensitive to health disparities and cultural competence, observes students participating in weekend sporting events, calls to parents after hours to follow up on students, visit students in the hospital, added a Family Wellness Fair with McGruff, Sparky, other mascots and numerous agency services to PE Family night.

Developed model programs for student/staff health and wellness since 1988 with a comprehensive health analysis in 4 districts, Kick off Ms.Wellness party, Health Fairs, Blood drives, requested that School Health Helper Award monies be used to create a formal staff wellness program at FSH, practice good health habits personally, offer free flu inoculation to staff, regularly screen B/P, wt, health of staff, Six grants/Programs recognized and shared throughout the country: 2007, 1996, 1995, 1993, 1990, and 1986. provide privacy for staff needing services-breast pumping, injections, etc.

Successfully implemented IDEA, Hep B catch up in the 90’s, HIPPA, FERPA, SB19, 504’s, full day PK for military dependents, coordinated with medical center for walk in immunizations for new students, screens for vision and hearing w/referrals early in the year with a trained team of volunteers, ensures best nursing practices, summer school nurse for the ES-HS & Sp. Ed coop, manages numerous acute and chronic health conditions, special needs and technology dependent students, 100 % immunization compliance.

Requested healthy snacks for field days vs. junk food, started Early Bird program in the 90’s where students received breakfast and an exercise program, 1st aid stations for field days, Running club sponsor, Outdoor education sponsor, stay physically active personally-walk at lunch, ride bike to work often, walk with colleagues at school, and participate in current legislation affecting all areas of school health.

Eat lunch with students in the cafeteria once a week, included nutrition education as part of coordinated health in School Health Helper program, advocate for nutritious snacks for staff at school functions through administration, work closely with Food Service Director on students with allergies and special dietary needs, contacted local university nutrition dept. for RD’s to consult on school lunches with the district, created healthy habit/weight loss student/staff programs-Go for the Goal, Forever Fit, Weight No More, Vista Cares, Must Eat, and chronic Health, health conditions, special needs and extended families, attends workshops/conferences, networks/mentors with others, contributes newsletter articles and serves as officer in several health organizations.

In the 90’s, HIPPA, FERPA, SB19, First Aid, Swim lessons, Gun Safety, ‘Til Help Arrives, Tar Wars, worked with PK-College students, their parents and extended families, attends workshops/conferences, networks/mentors with others, contributes newsletter articles and serves as officer in several health organizations.

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