Tackling MRSA
MRSA
MRSA

**Risk factors**
- crowding
- skin trauma
- frequent skin to skin contact
- sharing of contaminated personal items or equipment
- poor hygiene
- frequent exposure to antibiotics
- limited access to health care

(CDC, 2006)

**Outbreaks**
- military
- child care centers
- native communities
- prisons
- athletic teams
Statistical and epidemiological data related to CA-MRSA is lacking due to:
- an increase frequency of empirical antibiotic treatment
- lack of appropriate cultures
- inconsistent methods of reporting

(McCaig et al., 2006)
MRSA & Athletes

Denton County Health Department

Survey - Fall 2007
School setting
155 MRSA cases were reported
124 (80%) of these were students and adults from middle and high schools in the county
71 (45.8%) - football players
22 of these were on the same high school team

(Gullion, 2008)
Risk factors
- Sharing towels
- Sharing soap
- Sharing protective equipment
- Multiple skin injuries
- Inadequate washing of uniforms
- Football-playing lineman, linebacker, wide receiver, or quarterback

(CDC, 2009)
Goals/Objectives

Determine the current prevalence and incidence of community acquired MRSA in the North Texas Denton ISD athlete population and provide education through a train-the-trainer program for coaches and trainers.

Expected outcome- decreased MRSA infections in the athletic setting
Objectives

1. Administer a survey tool to coaches and trainers to obtain current epidemiological data
2. Develop and implement a “Train the trainer” programs to include information on community acquired MRSA recognition; prevention and management
3. Provide middle school and high school coaches and trainers with educational materials to teach the athletes proper prevention, recognition and management of skin infections.
Objective 1

Descriptive study design

Determine the current incidence and prevalence of MRSA during the 2009-2010 academic year in the Denton ISD

Survey tool-- developed by the Texas Department of State Health Service (DSHS), Emerging and Acute Infectious Diseases branch
FOOTBALL PLAYERS

F1. Do you have a football program at your school? *

F2. What is the total number of football players (freshmen, JV, and varsity) that were enrolled in your football program at the beginning of the season?

F3. Since August 1, 2008, how many football players in your school have had boils, impetigo, infected abrasions or lacerations, or other skin infections? *Excluding ringworm, athlete’s foot, jock itch, and heat rash.*

F4. Since August 1, 2008, how many of these infections were diagnosed by a physician as being infected with “staph” (includes “Staphylococcal infection”, “S. aureus”, “coagulase positive Staph”)? This number should be EQUAL TO OR SMALLER than that of F3.

F5. Since August 1, 2008, how many of these staph infections in football players were diagnosed by a physician as methicillin-resistant Staphylococcus aureus (MRSA)? This number should be EQUAL TO OR SMALLER than that of F4.
Non-probability convenience sampling method
Six middle schools and four high schools in the Denton ISD
Initial survey
Resurvey- at 6 & 12 months following intervention
Results will be compared to determine if the educational intervention successful in decreasing the incidence of MRSA skin infections in the athletic setting

\( t \) test will be used with a p value of 0.05 or less

Descriptive report- demonstrating the incidence of MRSA and effectiveness of the educational intervention
Objective 2

EDUCATION

Teach “Train the trainer” classes related to CA-MRSA recognition, prevention, and management to coaches and trainers in the Denton ISD

Weekly focused educational sessions

Held in a central location in the Denton ISD school district

Various training dates will be offered over one to two months, depending on scheduling and availability
Teaching strategies

MRSA PowerPoint presentation

Discussion period

Games

Course evaluation

“Tackling MRSA” Train-the-Trainer certificate
Objective 3

- Provide educational in-service materials
- MRSA toolkit
  - Tacoma-Pierce County Health Department
  - Posters, checklist, fact sheets and brochures
- Educational DVD
  - “Prevention of MRSA in the athletic setting”
  - Mecklenburg County Health Department in North Carolina
# What to do about MRSA

## What is MRSA?
*(Methicillin-resistant Staphylococcus aureus)*
- Type of *Staph* infection
- Often causes skin infections
- Resistant to many antibiotics, including penicillin

## How is MRSA treated?
By a healthcare provider who may:
- Drain the infection *and/or*
- Give an antibiotic *and/or*
- Help reduce the amount of bacteria on the skin

## What does it look like?
- A "spider bite"
- Turf burn
- Abscess
- Boil
- Impetigo
- Infected skin / wound

## How do you get MRSA?
- Touching someone's MRSA-infected skin
- Touching surfaces that have MRSA on them, like doorknobs & light switches
- Sharing personal hygiene items (bar soap, towels, razors)
- Not having the resources to keep clean
- Overusing antibiotics, stopping them early, or missing doses

## Stop the spread of MRSA!
- **Wash your hands often** with warm, soapy water
- Use 60% alcohol-based hand sanitizer when soap & water are not available
- Shower immediately after practice & matches
- Do not share personal hygiene items (bar soap, towels, razors) or clothing
- Wear practice clothes/uniforms only once, wash with soap & hot water, dry in hot dryer
- Cover all wounds with a clean, dry bandage taped on all four sides
- Avoid contact with other people's skin infections
- Report skin infections to coach/trainer/nurse
- Clean and disinfect athletic/wrestling gear and practice surfaces (mats, benches, weight lifting equipment) after each use
- Do not let wrestlers practice with potentially contagious wounds, even if covered, and consider use of this rule for all contact sports

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This fact sheet was partially supported by Cooperative Agreement Number U50/CCU92388-01 from the Centers for Disease Control and Prevention (CDC).

Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.

1/2006
Stay in the Game!

Don’t let a skin infection put you on the bench.

Stay Healthy!

✓ Wash your hands often
✓ Shower after practice and games
✓ Don’t share bar soap, towels and razors
✓ Wash practice clothes/uniforms after each use
✓ Don’t place your hands and fingers near your nose and groin

Report skin infections to your coach

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Good hygiene and taking care of your skin are the best protection against skin infections.

To avoid skin infections:

- Wash your hands frequently.
- Shower after playing sports; use a clean towel.
- Keep cuts and scrapes clean and covered with a bandage.

Tell your coach or athletic trainer if you think you have a skin infection.
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<tr>
<th>Expense</th>
<th>Cost</th>
<th>Total</th>
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<td>Statistician</td>
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<td>Trainer/Educationer</td>
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Summary

EDUCATION

TACKLE

MRSA in Athletic setting
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5803a2.htm


http://www.charmeck.org/Departments/Health+Department/Top+News/MRSA.htm

Tacoma-Pierce County Health Department. (n.d.). MRSA toolkit for athletic departments. Retrieved from March 10, 2009, from:  
http://www.tpchd.org/files/library/6b80aa85be999242.pdf