

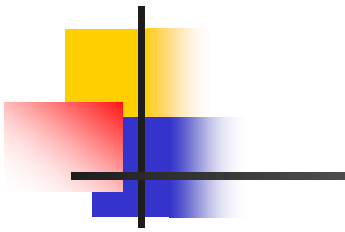
Methicillin-resistant *Staphylococcus aureus*

- How awareness and hygiene can help keep your teams healthy.

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Administration and Management Services







Staphylococcus aureus

- ***Staphylococcus aureus* is a bacteria commonly found on skin of healthy people.**
- **It was major cause of mortality before the advent of penicillin.**
- **With the discovery of penicillin the mortality due to *S. aureus* was greatly reduced.**
- **Resistance to penicillin quickly developed and methicillin was introduced to treat penicillin resistant strains.**
- **In 1961 methicillin resistance was first reported.**
- **Methicillin Resistant *S. aureus* (MRSA) is now a global problem**

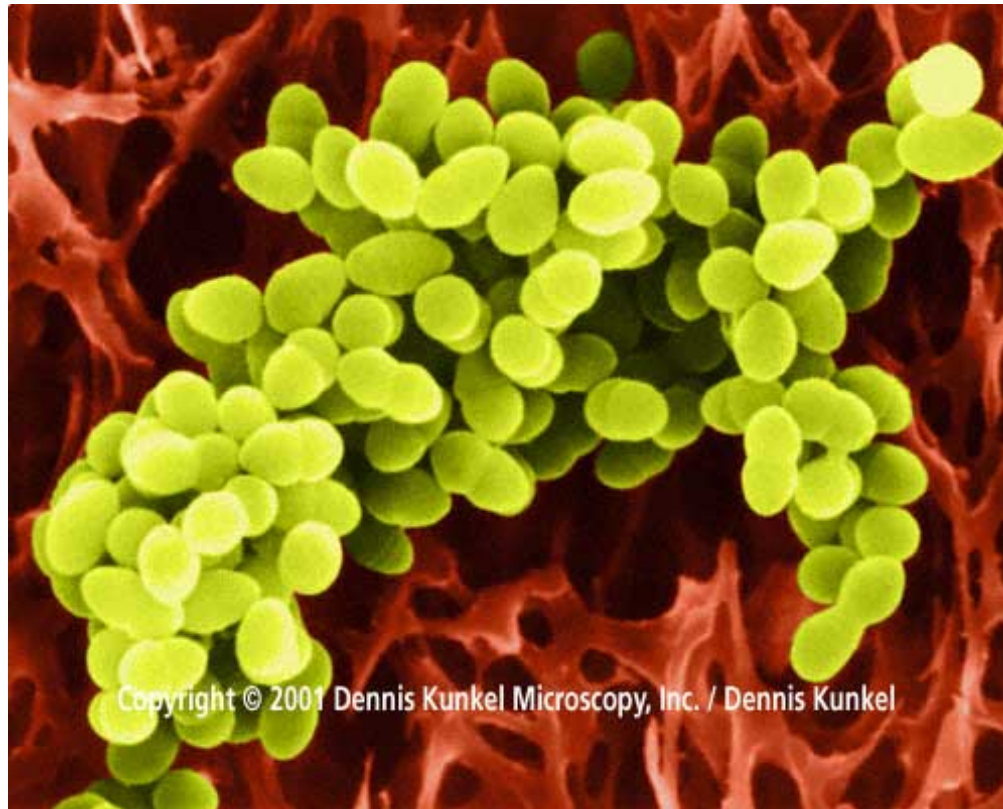


Important Facts

- *Staphylococcus aureus* (Staph)
 - Common bacteria
 - Acquired mainly through direct contact (individuals and objects)
 - Asymptomatic carriers
 - Found in nose, armpit, groin, and other similar areas
 - Causes soft tissue infections such as boils and impetigo
 - Can cause pneumonia and bloodstream infections
 - Treatable with antibiotics



Staphylococcus aureus



Methicillin-resistant

Staphylococcus aureus (MRSA)

- MRSA

- Cannot be treated with common penicillin-like antibiotics
- In the past confined to hospitals, nursing homes, long-term care facilities

- CA-MRSA = Community-Associated MRSA

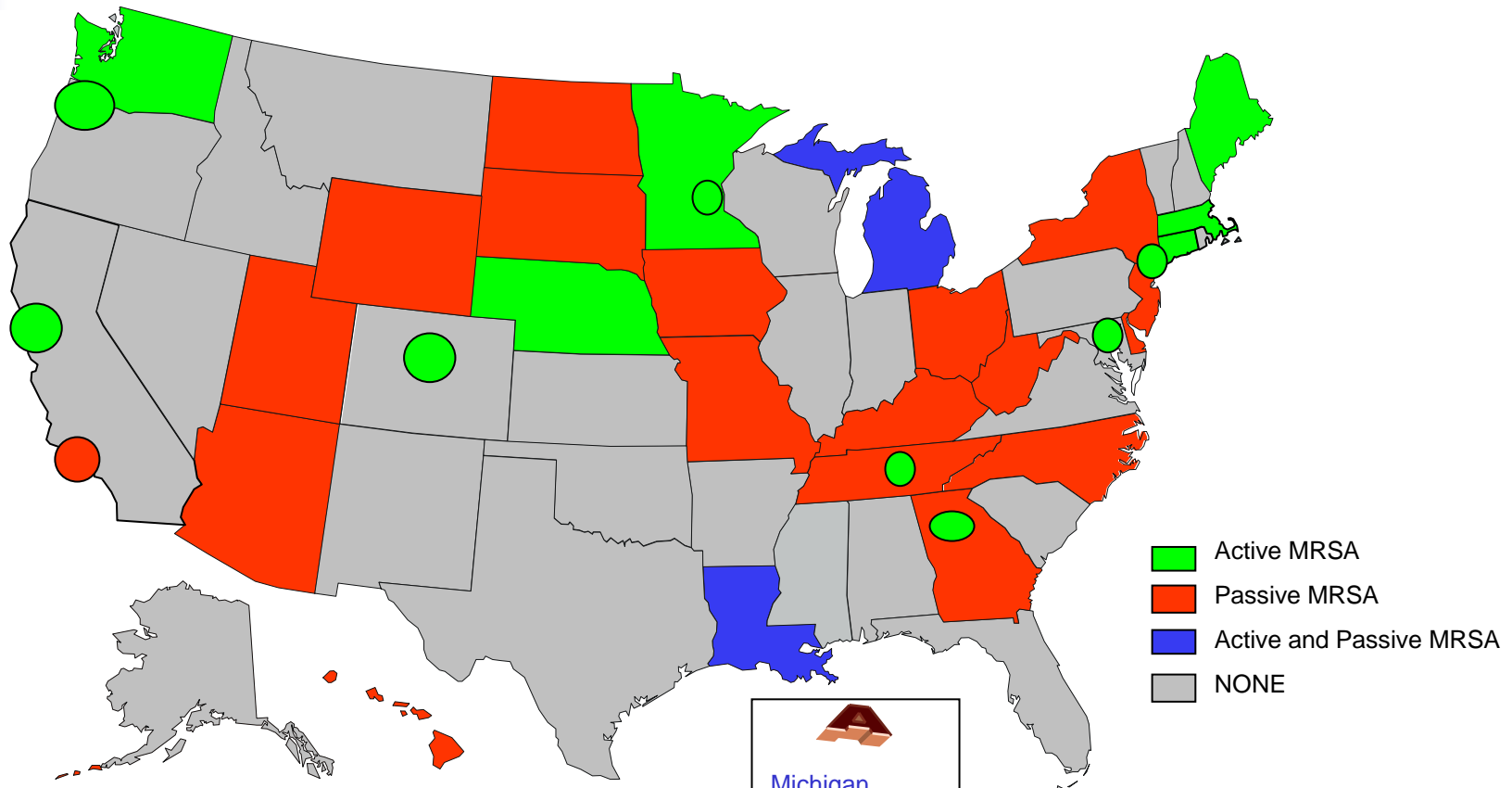
- Movement into the community
- Affecting athletes

History of Staph & MRSA in Athletes



- 1984 - rugby team in London
- 1986 - outbreak of boils in football and basketball Kentucky
- 1993 - 1st case of MRSA in a wrestling team in Vermont
- 2002 - 03 – MRSA boom!!!
 - Los Angeles county: athletes & county jail
 - Colorado, Indiana, and Pennsylvania – fencers, football, & wrestlers
- 2004 - 05 – high school, college, professional football and basketball

Current Status of Surveillance for Methicillin-resistant *Staphylococcus aureus* by State 2004 & 2005



Information collected from:
1. Current U.S. surveillance systems survey. April, 2005.
2. <http://www.cdc.gov/ncidod/dbmd/abcs/meth-surv.htm>.
3. Updated January, 2006.

Michigan
Massachusetts
Washington
Maine
Louisiana
Missouri



Football and Wrestling

- Most Affected Athletic Program Sectors
 - Football (more participants)
 - Wrestling (higher percentage)

- Most likely due to:
 - Contact sports (person to person transmission)
 - Increased risk of lesions as well as turf and mat burns
 - Sites of infections go unnoticed
 - Sharing of unclean equipment and/or personal items



Volleyball and Cross Country

- Emerging
 - Volleyball high number of reported infections
 - Cross country few reported infections
- Cause of concern
 - Volleyball: low contact sports
 - Cross country: non-contact sport
 - Possibly the first reported cases

Adults and Non-Athlete Students



- Emerging

- Individuals not directly participating in competition being affected
- Adults are being affected more than some sports sectors
- Non-athlete students seem to be the least affected

- Most likely due to

- Adults: fix, dress, and wrap athlete wounds
- Non-athletes: clean up equipment and clean up after players

Presentation of MRSA

- MRSA presentation can include any of a number of disease manifestations
- However, the most common presentation are soft tissue infections such as boils, abscesses, furuncles, carbuncles etc.



Recommendations to Prevent MRSA Infections

- For All Adults and Students
 - Stress the importance of HAND WASHING and hygiene
 - Keep wounds covered and dispose of bandages properly
 - Eliminate sharing of equipment and personal items
 - Stress clean facilities



The diagnosis:



- There are a number of infectious organisms that can cause skin lesions.
- The only way to determine what organism you are dealing with is by culturing the site.
- In addition to identification of the organism the laboratory report can give information on the antibiotics that the organism is sensitive to and information that may be useful in an epidemiology investigation.

Don't be quick to blame spiders for those "spider bite" wounds!

- Misdiagnosis of methicillin resistant *Staphylococcus aureus* (MRSA) infections as spider bites has been occurring throughout the United States.
- This misdiagnosis impedes the proper treatment of the infection and facilitates the spread of the infection.





Preventing CA-MRSA Skin Infections and Transmission

- Ensure availability of soap and water
- Encourage good hygiene
- Discourage sharing of towels and personal items
- Establish cleaning schedules for equipment
- Cover wounds and provide wound care and dressing change on a set schedule
- Reduce barriers to health care clinics for potentially infectious disease
- Encourage the reporting of skin lesions and assess new individuals for skin lesions
- Regularly clean bathrooms
- Wash laundry with detergent and/or bleach in hot water and use hot dryer



“Relax – MRSA will get you before the Asian Flu”



Your Questions and Concerns

Please share additional concerns through
your district's Safety/Risk Representative

Or

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