What you need to know about Methicillin-Resistant Staphylococcus aureus (MRSA)

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So, What is **Staphylococcus aureus???

- “Staph” are bacteria that are commonly carried on the skin or in the nose of healthy people
- One of the most common causes of skin infections in the U.S.
  - Most are minor (pimples or boils) and won’t need treatment with an antibiotic
- The bacteria can cause serious infections such as surgical wound infections, bloodstream infections and pneumonia
Ok then...What is MRSA???

- Staph bacteria that become resistant to antibiotics over time
- MRSA is staph bacteria that is resistant to beta-lactam antibiotics
  - These antibiotics include methicillin, as well as penicillin, oxacillin and amoxicillin.
- 20% - 30% of the population is colonized with regular staph and approximately 1% are colonized with MRSA
So tell me this, how does bacteria become resistant???

- Three ways bacteria becomes resistant:
  - Over-use of antibiotics
  - Overall change in bacteria DNA
  - Over-use of antibiotics in cattle
Your asking yourself, How can I catch MRSA???

- Most common transmission is skin to skin contact
- Touching contaminated surfaces
- Living in crowded facilities
- Having poor hygiene
What is the difference between hospital acquired and community acquired MRSA???

- **Hospital-Acquired**
  - History of recent hospitalizations, surgery, dialysis, or live in long term care facilities
  - Immunocompromised patients
  - Usually responsible for hospital acquired pneumonia, bloodstream infections and surgical wound infections
  - Resistant to many other antibiotics

- **Community-Acquired**
  - No recent history of hospitalizations, surgery, dialysis, etc.
  - Most manifest themselves as skin infections, pimples or boils, and occur in otherwise healthy people.
  - Data from a prospective study in 2003, suggests that 12% of clinical MRSA infections are community-associated, but this varies by geographic region and population.
Who is at risk of acquiring MRSA???

- The Center for Disease Control has reported high risk members for acquiring CA-MRSA:
  - Athletes
  - Military Recruits
  - Children
  - Pacific Islanders
  - Alaskan Natives
  - Native Americans
  - Gay Men
  - Prisoners

- Those with recent hospital stays are at risk for acquiring HA-MRSA
If I have it, What does it look like???

• **MRSA looks like any other Staph skin infection.**
  - It looks like a pimple or boil which can be red, swollen, painful and have pus or other drainage

• **Only a health care professional can confirm MRSA through lab testing**
Most importantly...How can I prevent catching MRSA???

- Prevent catching MRSA by performing good hygiene
  - WASH YOUR HANDS CORRECTLY or use an alcohol-based hand sanitizer
  - Keep cuts or scrapes clean and covered
  - Avoid contact of anyone else’s wounds
  - Avoid sharing personal items (towels, razors, etc.)
  - Disinfect desks, gym equipment, and gym mats regularly
Proper Hand Washing is #1

• Wet your hands with clean running water and apply soap, use warm water if it is available
• Rub hands together to make a lather and scrub ALL SURFACES
• Continue rubbing hands for 20 seconds, try “Happy Birthday” twice
• Rinse hands well under running water
• Dry your hands using a paper towel or air dryer. If possible, use your paper towel to turn off the faucet
• If soap and water is not available use alcohol based hand sanitizer
How will my physician treat my infection???

- Don’t worry...MRSA is treatable
- Proper wound care
- Antibiotics (take full dose)
  - Common medications used are vancomycin and teicoplanin
    - Both need to be administered IV or IM so they are given in a hospital setting
- Report back to physician if it does not resolve
- YOU CAN GET MRSA AGAIN!
How do I prevent spreading MRSA to others???

- Cover your wound: keep open wounds covered with a dry, clean bandage
- Wash your hands constantly and remind others around you to wash frequently
- Avoid sharing any personal items, these include: towels, razors, clothing, washcloths, or uniforms
  - Wash any sheets, towels or clothes that become soiled
Just so you don’t forget, here is a Summary

- **MRSA** is a antibiotic resistant Staph
- More common in hospitals and long-term care facilities
- Community acquired MRSA is more easily treated
- Hand washing is your best protection against catching MRSA
- School desks and gym equipment are common sites to catch MRSA
- See your doctor if you suspect you might be infected
What references did we use???


