Community-Associated MRSA

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The participant will be able to...

• recall what CA-MRSA is
• list three ways to prevent CA-MRSA
• explain the signs and symptoms of CA-MRSA
• identify three ways CA-MRSA can be transmitted
• describe the proper way to wash hands
Definitions...

- Community Associated MRSA (CA-MRSA):
  - MRSA infections that are acquired by persons who have not been recently (within the past year) hospitalized or had a medical procedure (such as dialysis, surgery, catheters). CDC

- Carrier:
  - A person who has MRSA living in the nose or on the skin but has no symptoms

- Colonization:
  - The bacteria are present but not causing an infection

- Healthcare Associated MRSA (HA-MRSA):
  - MRSA that occurs most frequently among patients who undergo invasive medical procedures or who have weakened immune systems and are being treated in hospitals and healthcare facilities such as nursing homes and dialysis centers. CDC

- Infection:
  - The bacteria is present and is causing illness
Definitions Cont...

- **MRSA:**
  - MRSA is a kind of “staph” bacteria that has become resistant to many antibiotics, such as penicillins and cephalosporins

- **Reservoir:**
  - Anywhere bacteria can live and be colonized
What is *Staphylococcus aureus*...

- A bacteria commonly carried on the skin or in the nose of healthy people

Source: University of Wisconsin-Madison Department of Bacteriology
Facts About Staph...

- Approximately 25% to 30% of the population are colonized in their noses, but the bacteria is not causing them any infections (CDC)

- Staph is the **most common** cause of skin infections in the United States

- Staph can cause minor and serious infections
What is Methicillin-Resistant *Staphylococcus aureus* (MRSA)...

- MRSA is a type of staph that is resistant to certain antibiotics but not limited to
  - Methicillin
  - Oxacillin
  - Penicillin
  - Ampicillin
  - Cephalosporins

Source: University of Texas, Health Science
How Can MRSA Be Spread...

- Most commonly by skin to skin contact
- Close contact with an infected person
- Direct physical contact and not by air
- Touching objects such as towels, sheets, sports equipment etc., contaminated with staph
Chain of Infection...

Susceptible person

Ways of Transmission

MRSA

Reservoir
Is All MRSA Contagious...

**YES**

- If a person touches an object such as a towel that was touched by a person with MRSA, then they may become infected with MRSA too.
How is MRSA Diagnosed...

• It is identified by a lab from a sample of fluid taken from the wound or infection site

• The bacteria then is tested to determine which antibiotics it is sensitive or resistant to
What Does MRSA Look Like...

- Large, red, painful bumps under the skin (called boils or abscesses)
- A cut that is swollen, hot and filled with pus
- Blisters filled with pus (called *impetigo*)
- Sores that look and feel like spider bites (However, MRSA is not caused by a spider bite or any other insect bite)

Source: www.healthline.com/.../2006/10/mrsa.html
Source: Washington State Department of Health
How Can MRSA Be Treated?

• With appropriate antibiotics:
  - A person must take ALL of the medication to kill the bacteria
  - **DO NOT** share antibiotics with other people or save them for another time

• By draining the abscess or boil:
  - Draining of skin abscesses or boils should only be done by a healthcare provider
## CA-MRSA or HA-MRSA...

<table>
<thead>
<tr>
<th>Community - Associated (CA) MRSA</th>
<th>Healthcare-Associated (HA) MRSA</th>
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<tbody>
<tr>
<td>• Fairly new</td>
<td>• Around for &gt; 50 years</td>
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<tr>
<td>• May affect healthy people, often misdiagnosed as “spider bite”</td>
<td>• Usually affects sick people with access lines or wounds</td>
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<tr>
<td>• Less antibiotic resistance, currently treatable with Bactrium/doxycycline/Clindamycin</td>
<td>• Broad antibiotic resistance, may require IV antibiotic regimen</td>
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Source: Tacoma Health Department
You May Have Community Associated MRSA (CA-MRSA) If You Have...

- A diagnosis of MRSA in the outpatient setting or by a positive culture for MRSA within 48 hours after admission to a hospital
- No previous history of MRSA infection or colonization
- No medical history in the past year of:
  - Hospitalization
  - Admission to a nursing home or hospice
  - Dialysis
  - Surgery
  - Recent or frequent antibiotic use within 6 months
  - Direct contact with an infected person or a facility where MRSA cases have been identified
What is Community Associated MRSA (CA-MRSA)...

• A MRSA infection which occurs in healthy people who HAVE NOT been recently (within the past year) hospitalized or had a medical procedure performed on them

• It usually presents as a skin infection, such as a pimple or boil, impetigo, or an infected wound
Possible Complications if CA-MRSA Is Not Treated...

- Cellulitis
- Endocarditis
- Toxic Shock Syndrome
- Pneumonia
- Blood Poisoning

Source; ADAM Health Encyclopedia
Underlying Diseases That May Increase The Risk of CA-MRSA ...

- Chronic renal disease
- Insulin dependent diabetes
- Peripheral vascular disease
- Dermatitis or skin lesions
High Risk Groups For CA-MRSA...

- Athletes
- Military
- Children
- Men Who Have Sex With Men (MSM)
- Prisoners
- Pacific Islanders & Native Americans
- Immuno Compromised Individuals
Risk Factors...

• Direct contact with an infected person

• Use of sport facilities in a community setting where CA-MRSA has been identified

• Sharing personal items, razors and washcloths that might have been used by a person infected with MRSA
How Can I Prevent CA-MRSA...

- **WASH HANDS FREQUENTLY!**
- If you get cut or scraped on the skin, clean it with soap and water, then cover it with a bandage.
- **DO NOT** touch sores. If you do, wash your hands afterwards.
- Cover all sores with a bandage.
- Clean bathrooms and countertops daily with a household cleaner.
- **DO NOT** participate in contact sports until sores have healed.
- **DO NOT** go to a gym, sauna, hot tub or pool until sores have healed.
- Bathe or shower frequently with soap.
- Wash sheets and towels at least weekly.
- Change clothing daily.
How Can I Prevent CA-MRSA Cont...

- Use disposable tissue for nasal discharge
- If you can not use soap and water use hand sanitizer to clean your hands
- **WASH HANDS FREQUENTLY!**
Changing Bandages

How do I change my bandages?

1. Wash and dry your hands well.
2. Put on disposable gloves.
3. Remove the old bandage.
4. Put the old bandage in a plastic bag. Take off the gloves and put them in the plastic bag too.
5. Wash and dry your hands well.
7. Apply the new bandage. If you have a leaking sore, put on extra dressings to keep the drainage from leaking though.
8. Take off the gloves and put them in the plastic bag. Seal or tie the bag and throw it away in the regular trash.
9. Clean your hands with soap and water and dry well.

Source: Minnesota Department of Health
Handwashing Is IMPORTANT To Prevent CA-MRSA

1. Wet hands
2. Apply liquid soap
3. Scrub backs of hands, between fingers, thumbs and around fingernails for at least 15 seconds
4. Rinse
5. Towel dry
6. Turn off taps with towel

REMEMBER, proper handwashing can remove germs that make you sick.

Source: Durham Region Health Department
Alcohol-based Hand Sanitizer

• Apply product to the palm of one hand (size of a quarter)

• Rub hands together

• Rub the product over all surfaces of hands and fingers until hands are dry

Source: CDC
1. Place a drop of alcohol-based hand sanitizer, the size of a dime in your palm.

2. Rub hands together; palm to palm.

3. Rub back of each hand with palm and interlaced fingers of the other hand.

4. Rub around each thumb clasped in the opposite hand.

5. Rub fingertips of each hand backward and forward in the opposite hand.

6. Keep rubbing until your hands are dry. Paper towels are not needed.

**REMEMBER**, proper hand sanitizing can kill germs that make you sick!
Cleaning The House...

- Use any cleaner that can be bought at the store that has the word “disinfectant” on it.
- Read the label and follow the directions.
- You can make your own cleaner by mixing one tablespoon of bleach into one quart of water in a spray bottle.
- Make fresh solution each time you want to clean the house.
- Never mix bleach with any other product except water.
Laundry And CA-MRSA...

- When collecting laundry or changing sheets, hold the dirty laundry away from your body and clothes.
- Wear disposable gloves to handle laundry that is soiled with body fluids.
- Wash the laundry with warm or hot water. Use bleach if possible.
- Dry in a warm or hot dryer, make sure the clothes are completely dry.
- Wash hands after handling dirty laundry.
- Wash hands before handling clean laundry.

Source: Washington State Department of Health
Resources...

- Center For Disease Control and Prevention
  www.cdc.gov

- Indiana State Department Of Health
  www.in.gov/isdh

- Mayo Clinic
  www.mayoclinic.com

- Mecklenburg County Health Department
  www.charmeck.org

- Minnesota Department of Health
  www.health.state.mn.us
Resources Cont...

- Tacoma Health Department
  www.tpchd.org