

# Facts...and SOLUTIONS!

METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS* - IN COMMUNITY-ASSOCIATED SETTINGS From the Center for Disease Control (www.cdc.gov)

#### What is community-associated MRSA (CA-MRSA)?

Staph and MRSA can also cause illness in persons outside of hospitals and healthcare facilities. 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) are know as CA-MRSA infections. Staph or MRSA infections in the community are usually manifested as skin infections, such as pimples and boils, and occur in otherwise healthy people.



#### Are certain people at increased risk for community-associated staph or MRSA infections?

CDC has investigated clusters of CA-MRSA skin infections among athletes, military recruits, children, Pacific Islanders, Alaskan Natives, Native Americans, men who have sex with men, and prisoners. Factors that have been associated with the spread of MRSA skin infections include close skin-to-skin contact, openings in the skin such as cuts or abrasions, contaminated items and surfaces, crowded living conditions, and poor hygiene.

#### What are the clinical features of CA-MRSA?

CA-MRSA most often presents as skin or soft tissue infection such as a boil or abscess. Patients frequently recall a "spider bite". The involved site is red, swollen, and painful and may have pus or other drainage. Staph infections also can cause more serious infections, such as blood stream infections or pneumonia, leading to symptoms of shortness of breath, fever, and chills.

What are the criteria for distinguishing community-associated MRSA (CA-MRSA) from healthcare-associated MRSA (HA-MRSA)? Persons with MRSA infections that meet all of the following criteria likely have CA-MRSA infections:

· Diagnosis of MRSA was made in the outpatient setting or by a culture positive for MRSA within 48 hours after admission to the hospital.

- No medical history of MRSA infection or colonization.
- No medical history in the past year of: Hospitalization, Admission to a nursing home, skilled nursing facility, or hospice; Dialysis or Surgery.
- No permanent indwelling catheters or medical devices that pass through the skin into the body.

#### What is the main way that staph or MRSA is transmitted in the community?

The main mode of transmission of staph and/or MRSA is via hands which may become contaminated by contact with a) colonized or infected individuals, b) colonized or infected body sites of other persons, or c) devices, items, or environmental surfaces contaminated with body fluids containing staph or MRSA. Other factors contributing to transmission include skin-to-skin contact, crowded conditions, and poor hygiene.

#### How is a MRSA infection diagnosed?

In general, a culture should be obtained from the infection site and sent to the microbiology laboratory. If S. *aureus* is isolated, the organism should be tested as follows to determine which antibiotics will be effective for treating the infection.

Skin Infection: Obtain either a small biopsy of skin or drainage from the infected site. A culture of a skin lesion is especially useful in recurrent or persistent cases of skin infection, in cases of antibiotic failure, and in cases that present with advanced or aggressive infections.

Pneumonia: Obtain a sputum culture (expectorated purulent sputum, respiratory lavage, or bronchoscopy).

Bloodstream Infection: Obtain blood cultures using aseptic techniques.

Urinary Infection: Obtain urine cultures using aseptic techniques.

#### How are CA-MRSA infections treated?

Staph skin infections, such as boils or abscesses, may be treated by incision and drainage, depending on severity. Antibiotic treatment, if indicated, should be guided by the susceptibility profile of the organism.

#### How do CA-MRSA and HA-MRSA strains differ?

Recently recognized outbreaks of MRSA in community settings have been associated with strains that have some unique microbiologic and genetic properties compared with the traditional hospital-based MRSA strains, suggesting some biologic properties (e.g., virulence factors) may allow the community strains to spread more easily or cause more skin disease. Additional studies are underway to characterize and compare the biologic properties of HA-MRSA and CA-MRSA strains. There are at least three different *S. aureus* strains in the United States that can cause CAMRSA infections. CDC continues to work with state and local health departments to gather organisms and epidemiologic data from known cases to determine why certain groups of people get these infections.





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# PRACTICAL INFORMATION FOR DEALING WITH MRSA IN CLEANING PROCEDURES

- Clean appropriate areas where cross-contamination is likely with an EPA Registered Disinfectant Cleaners carrying a MRSA Efficacy claim. Follow directions carefully for proper use.
- Use of Green Seal Certified Hand Cleaners is recommended; encourage frequent hand washing as a part of an overall program of good hygiene practices.
- Encourage schools and public facilities to employ green cleaning procedures to achieve higher levels of cleaning efficiency with lower impact on facility guests and workers.

## CONCENTRATED DISINFECTANT CLEANERS

- Earth Sense® #7 Healthcare Neutral Disinfectant Cleaner
- Earth Sense® #17 HD Detergent/Disinfectant
- Earth Sense® pH Neutral Disinfectant Cleaner
- MicroChem Plus™ Detergent Disinfectant Cleaner
- NeutraCide 256™ Disinfectant Neutral Cleaner
- Neutral-Q<sup>™</sup> Neutral Disinfectant Cleaner Deodorizer
- Vira-Quat<sup>™</sup> Detergent Disinfectant Cleaner







### READY-TO-USE DISINFECTANT CLEANERS

- Bathroom Plus<sup>™</sup> Non-Acid Disinfectant Bowl & Bathroom Cleaner
- Germi-Kleen™ Non-Acid Bowl & Bathroom Disinfectant Cleaner
- Pronto TB<sup>™</sup> Ready-To-Use Foaming Disinfectant Cleaner
- Sani-Turge<sup>™</sup> Non-Acid Bowl & Bathroom Disinfectant Cleaner
- NEW! AVISTAT-D<sup>™</sup> Ready-To-Use Spray Disinfectant Cleaner



