

ATTACHMENT

Summary of MRSA Article List of On-line Resources

Summary of “Invasive Methicillin-Resistant *Staphylococcus aureus* Infections in the United States”

Active, population-based surveillance for invasive MRSA was conducted in 9 sites participating in the Active Bacterial Core surveillance (ABCs)/Emerging Infections Program Network from July 2004 through December 2005. The incidence rate of invasive MRSA was 31.8 per 100 000 with a mortality rate of 6.3 per 100 000. The 2005 rates of invasive infection were highest among people 65 years of age or older. Black people were affected at twice the rate of whites, which could be due to higher rates of chronic illness among blacks. The estimated 94,360 infections annually in the U.S. projected from this incidence are significantly higher (by at least half) than previous estimates, although some of the differences may be methodological. The study found about 85 percent of all invasive MRSA infections were associated with health care settings, of which two-thirds surfaced in the community among people who were hospitalized, underwent a medical procedure or resided in a long-term care facility within the previous year. In contrast, about 15 percent of reported infections were considered to be community-associated, which means that the infection occurred in people without documented health care risk factors.

Summary of “Antimicrobial Resistance - It’s Not Just for Hospitals”

Dr. Bancroft’s editorial pointed out that “invasive MRSA is only the tip of the drug-resistance iceberg,” since only 6-9% of community-associated MRSA infections in previous studies were invasive, and there are other antibiotic-resistant organisms of increasing prevalence in the community including a new strain multidrug-resistant *S pneumoniae* also reported in the same issue of JAMA.

Key points of the article:

- Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is resistant to certain antibiotics. Most of life-threatening MRSA infections are associated with healthcare;
- MRSA infections that occur in otherwise healthy people are typically skin infections, such as abscesses, boils, and other pus-filled lesions. These are mostly mild. Death is rare;
- As MRSA infections are not nationally reportable, these are the first population-based measures of serious (i.e., invasive) MRSA infections in the U.S.;
- New findings in the study include:
 - The estimated number of people developing a serious (i.e., invasive) MRSA infection in 2005 was about 94,360; this is higher than estimates using indirect methods (such as administrative databases);

- Serious MRSA disease is still predominately related to exposures to healthcare delivery;
 - About 1 out every 12 deaths during hospitalization with a serious MRSA disease occurs in persons admitted for community-associated MRSA infection, the remaining 11 of every 12 deaths are associated with MRSA related to healthcare exposures;
 - Although the rates of disease varied between the geographically diverse sites participating in the surveillance, overall rates of disease were consistently highest among older persons (Age >65), blacks, and males.
- **Transmission:** MRSA is spread through touch and contaminated items. It is not spread through the air;
 - **The primary risk factors for MRSA skin infections – The 5 C's:** Crowding, Frequent skin to skin (**C**ontact), **C**ompromised skin (i.e. cuts or abrasions), Contaminated items and surfaces, lack of **C**leanliness;

What should people do if they are infected?

You can prevent spreading staph or MRSA skin infections to others by following these steps:

- **Cover your wound.** Keep wounds that are draining or have pus covered with clean, dry bandages. Follow your healthcare provider's instructions on proper care of the wound. Pus from infected wounds can contain staph and MRSA, so keeping the infection covered will help prevent the spread to others. Bandages or tape can be discarded with the regular trash.
- **Clean your hands.** You, your family, and others in close contact should wash their hands frequently with soap and warm water or use an alcohol-based hand sanitizer, especially after changing the bandage or touching the infected wound.
- **Do not share personal items.** Avoid sharing personal items such as towels, washcloths, razors, clothing, or uniforms that may have had contact with the infected wound or bandage. Wash sheets, towels, and clothes that become soiled with water and laundry detergent. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria in clothes.
- **Talk to your doctor.** Tell any healthcare providers who treat you that you have or had a staph or MRSA skin infection.

School closings:

In general we do not encourage closing of schools to "disinfect" the school because usually transmission has been shown to be by direct skin-to-skin contact, indirect contact with shared personal items, or could be self-inoculation in colonized persons. It is important to remember, these infections are now prevalent in the community, and the location of acquisition/transmission may not be the schools (e.g., household transmission).

For patients in healthcare:

- Ask the doctor if they have washed their hands before they touch you.
- Ask the healthcare professional if you still need the catheter (A patient may need a catheter to deliver life-saving medicine but as soon as the patient does not need a catheter it should be removed as it can provide a path for bacteria to enter).
- Ask what your doctor and the facility are doing to prevent healthcare-associated infections, including MRSA.

List of on-line resources available for the prevention and management of Community-Associated and Healthcare-Associated MRSA infections.

Community-Associated MRSA

CDPH: <http://www.cdph.ca.gov/healthinfo/discond/Pages/MRSA.aspx> including [Community-associated \(CAMRSA\)/Staph Infections: A Guideline for Athletic Departments](#) and [Methicillin-Resistant Staphylococcus aureus for Athletes.](#)

CDC: www.cdc.gov/ncidod/dhqp/ar_mrsa_ca.html

Los Angeles Department of Public Health: <http://lapublichealth.org/acd/MRSA.htm>

Tacoma-Pierce County Health Department [Living with MRSA \(booklet\)](#) and other information including [MRSA Toolkit for Outpatient Clinics/Offices:](#) <http://www.tpchd.org/page.php?id=12>.

Washington State Department of Health: [Guidelines of Evaluation & Management of Community Associated MRSA Skin & Soft Tissue Infections in Outpatient Settings.](#)

Healthcare-Associated MRSA

CDPH: <http://www.dhs.ca.gov/ps/dcdc/disb/pdf/armgdepp.pdf> Prevention and Control of Antibiotic Resistant Microorganisms in California Long Term Care Facilities

CDC: http://www.cdc.gov/ncidod/dhqp/ar_mrsa.html including [Management of Multidrug-Resistant Organisms in Healthcare Settings, 2006](#)