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Locate resources, guidelines on the New Mexico Hospital Association Website:

www.nmhanet.org

- Patient Safety Resources
- MRSA

MRSA in the News

It's been in the newspapers. It's been in the news. Your friends, neighbors, and patients want to know what your organization is doing about the "thousands of patients who die in the United States every year due to hospital errors, and others contract infections while hospitalized for other problems" (ABQ Journal

October 2, 2007). The nasty little bacteria seem to be everywhere. The following information is provided as a community service to New Mexico's Healthcare workers and the communities they serve.

Information has been compiled from credible sources (CDC website, APIC, or Institute for Healthcare Improvement), and reviewed by NM Infectious Disease Professionals.

THE C.D.C. on MRSA

The Centers for Disease Control and Prevention issued a report that estimates over 94,000 cases of methicillin-resistant staphylococcus aureus (MRSA) infection occurred in the U.S. in 2005. The study was reported Oct. 17 in the Journal of the American Medical Association. The CDC says the report establishes the first national baseline for MRSA infection rates.

While the study said most MRSA infections occur in health care settings, media coverage has focused on the dangers of community-based MRSA infections because of the death of a Virginia high school student who contracted MRSA from somewhere in his community.

Physicians, nurses and hospitals are fighting a never-ending battle with an invisible and increasingly powerful enemy. Hospitals are constantly beefing up their efforts to combat infections as we learn more about them. More than 70% of the bacteria that cause hospital-acquired infections are resistant to at least one

of the drugs most commonly used to treat them.

What's particularly helpful is understanding that some infections are acquired in health care settings, but others are not. This information helps us know what work has to be done inside hospitals, but there is also a need to reach out to the community and work with others.

If patients have any concerns while they are in the hospital, they **should talk to their doctors and nurses** and ask what's being done to prevent the spread of infection. Patients are an important part of the care team and they should take an active role in their care – including asking if their caregiver has washed their hands. The bottom line is **if we want to eliminate drug resistant infections, we all have to work together** – hospitals, caregivers, community organizations such as schools and others. This is a never-ending battle and requires multiple approaches in order to eliminate infections.

Centers for Disease Control, Oct. 2007.

Medical Disclaimer

CDC's Web site provides health information for your general knowledge. Concerns about a medical condition—either your own or that of a family member—should always be addressed to your primary care physician for advice and care appropriate to your specific medical needs. CDC does not recommend self-diagnosis or self-management of health problems that should be attended to by healthcare professionals.



Information for Healthcare Workers

CDC Website Resources for Clinicians

Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007
<http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/Isolat ion2007.pdf>

Management of Multidrug-Resistant Organisms in Healthcare Settings, 2006
<http://www.cdc.gov/ncidod/dhqp/pdf/ar/MDROGuidel ine2006.pdf>

Methicillin-resistant *Staphylococcus aureus* (MRSA) has become a prevalent nosocomial pathogen in the United States. In hospitals, the most important reservoirs of MRSA are infected or colonized patients. Although hospital personnel can serve as reservoirs for MRSA and may harbor the organism for many months, they have been more commonly identified as a link for transmission between colonized or infected patients. The main mode of transmission of MRSA is via hands (especially health care workers' hands) which may become contaminated by contact with a) colonized or infected patients, b) colonized or infected body sites of the personnel themselves, or c) devices, items, or environmental surfaces contaminated with body fluids containing MRSA. Standard Precautions (see box on left) should control the spread of MRSA in most instances. Additional measures to prevent the spread of MRSA can also be found on the CDC website.



How the Headlines May Affect You

A new Illinois state law took effect in August mandating screening of ICU and other-high risk patients for MRSA at Illinois hospitals. Many hospitals in other states have been contacted by the news media regarding their practice. Below is additional information that may be helpful:

- In August, Illinois became the first state to require MRSA screening of ICU patients and other patients identified as high-risk by the hospital. Full information on the law's requirements may be found at the Illinois Hospital Association website.
- Many of the cases in the news have been community-acquired MRSA, which means they were likely infected outside the health care system. However, it is true that MRSA is usually contracted via the health care system.
- The Institute for Healthcare Improvement's Five Million Lives Campaign has MRSA reduction/elimination as one of its key areas of focus.
- Hospitals are dedicated to providing high quality patient care. With a firm commitment to patient safety and infection control, they are working to keep this insidious disease at bay.

Hospitals are focusing on areas where they can make the most difference. This includes targeting:

- infections that have the potential for greatest complications
- infections where prevention efforts have been identified, and
- areas where good measures and solid data exist.

Patients and communities should also realize that since the advent of antibiotics and the whole philosophy of continuous improvement of performance, healthcare providers have dramatically improved their ability to deliver safer care and better outcomes. It's not just up to doctors, nurses and infection control professionals to prevent infections, everyone can help. Here are some suggestions – eat healthier, exercise, don't ask for antibiotics for a cold, wash hands frequently, and don't visit patients in the hospital when you're sick.

Information obtained from State Hospital Association Government Relations Officers

**Frequently Asked Questions:
 Who gets staph or MRSA infections?**

Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers) who have weakened immune systems. These healthcare-associated staph infections include surgical wound infections, urinary tract infections, bloodstream infections, and pneumonia.

Is it true that hospital-acquired infection rates are rising?

Yes, they are indeed on the rise. There are new and emerging infections arising all the time. These include infections caused by organisms that are now increasingly resistant to antibiotics. There are also more infections because of the increasing number of individuals with chronic diseases or in frail health.

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.

What precautions should be taken with patients?

The CDC recommends that all patients with signs or symptoms of infections be treated with precautions appropriate for their clinical syndrome until a diagnosis is made. For instance, all patients with skin and soft tissue infections should be treated with contact precautions pending further evaluation and treatment.



Information on Prevention for the Community

What Is MRSA (murh-sa)?

Staphylococcus aureus, often referred to simply as “staph,” are bacteria commonly carried on the skin or in the nose of healthy people. Approximately 25-30% of the population is colonized (when bacteria are present, but not causing an infection) in the nose with staph bacteria. Sometimes, staph can cause an infection, most are minor. However, staph bacteria can also cause serious infections (such as surgical wound infections, bloodstream infections and pneumonia).

MRSA is a type of staph that is resistant to antibiotics called beta-lactams. Beta-lactam antibiotics include methicillin and other common antibiotics. While 25-30% of the population is colonized with staph, approximately 1% is colonized with MRSA.

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

Staph and MRSA can also cause illness in persons outside the hospital 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 known as CA-MRSA infections.

How can I prevent staph or MRSA skin infections?

Taking antibiotics when you have a virus may do more harm than good. Get smart about when antibiotics are appropriate.



Practice good hygiene:

1. Keep your hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer.
2. Keep cuts and scrapes clean and covered with a bandage until healed.
3. Avoid contact with other people’s wounds or bandages.
4. Avoid sharing personal items such as towels or razors.

Can I get a staph or MRSA infection at my health club?

In the outbreaks of MRSA, the environment has not played a significant role in the transmission of MRSA. MRSA is transmitted most frequently by skin-to-skin contact. You can protect yourself from infections by practicing good hygiene, and wiping surfaces of equipment before and after use.

Antibiotics Are Not for Colds and Flu

Antibiotic resistance is one of the world’s most pressing public health problems. Antibiotic resistance occurs when bacteria change in some way that reduces or eliminates the effectiveness of drugs, chemical or other agents designed to cure or prevent infections. Widespread inappropriate use of antibiotics is fueling an increase in antibiotic resistant bacteria. So the next time you really need an antibiotic for a bacterial infection, it may not work. Taking antibiotics for viral infections – such as a cold, cough, the flu, and acute bronchitis:

- o Will NOT cure the infection
- o Will NOT keep other individuals from catching the illness
- o Will NOT help a person feel better
- o May cause an unnecessary harmful side effect

What should you do?

- o Do not demand antibiotics when a healthcare provider says they are not needed. They will not help treat your infection.
- o Do not take an antibiotic for a viral infection like a cold, a cough, or the flu.

When you are prescribed an antibiotic:

- o Do not skip doses
- o Do not save antibiotics for the next time you get sick

- o Do not take antibiotics prescribed for someone else. It may not be appropriate for your illness. Taking the wrong medicine may delay correct treatment and allow bacteria to multiply.

I have a MRSA Infection. How do I prevent spreading it to others?

Cover your wound. Keep wounds that are draining or have pus covered with a clean, dry bandage until healed. Follow your healthcare provider’s instructions on proper care of the wound. Pus from infected wounds can contain staph, including MRSA, so keeping the infection covered will help prevent the spread to others. Bandages and tape can be discarded in the regular trash. Clean your hands frequently. You, your family, and others in close contact should wash their hands frequently with soap and water or use an alcohol-based hand sanitizer, especially after changing the bandage or touching the infected wound.



New Mexico
Hospital Association



“MRSA” has been featured in the news and on television a great deal recently. MRSA stands for **methicillin-resistant Staphylococcus aureus**.

This type of bacteria causes “staph” infections that are resistant to treatment with some antibiotics.

What type of infections does MRSA cause?

In the community, most MRSA infections are skin infections that may appear as pustules or boils which are often red, swollen, painful, or have pus or other drainage. These skin infections commonly occur at sites of visible skin trauma, such as cuts or abrasion, and areas of the body covered by hair (for example, back of neck, groin, buttock, armpit, beard area of men). Almost all MRSA skin infections can be effectively treated by drainage of pus with or without antibiotics. More serious infections, such as pneumonia, bloodstream infections, or bone infections, are very rare in healthy people who get MRSA skin infections.

How is MRSA transmitted?

MRSA is usually transmitted by direct skin-to-skin contact or contact with shared items or surfaces that have come into contact with someone else’s infection (towels, used bandages)

In what settings do MRSA skin infections occur?

They can occur anywhere, but some settings have factors that make it easier for MRSA to be transmitted. These factors, referred to as the **5 C’s** are as follows: **Crowding**, frequent skin-to-skin **Contact**, **Compromised** skin (cuts or abrasions), **Contaminated** items and surfaces, and lack of **Cleanliness**. Locations where the **5 C’s** are common include schools, dormitories, military barracks, households, correctional facilities, and daycare centers.

What does a staph or MRSA infection look like?

Staph bacteria, including MRSA, can cause skin infections that look like a pimple or boil and can be red, swollen, painful, or have pus or other drainage. More serious infections may cause pneumonia, bloodstream infections, or surgical wound infections.

How do I protect myself from getting MRSA?

You can protect yourself by:

- Practicing good hygiene (keeping your hands clean by washing with soap and water or using an alcohol-based hand sanitizer and showering immediately after participating in exercise).
- Covering skin abrasions or cuts with a clean dry bandage until healed.
- Avoid sharing personal items (towels, razors) that come into contact with your bare skin, and using a barrier (such as clothing or a towel) between your skin and shared equipment such as weight training benches.

Should schools close because of a MRSA infection?

The decision to close a school for any communicable disease should be made by school officials in conjunction with local and/or state public health officials. However, in most cases, it is not necessary to close schools because of a MRSA infection in a student. It is important to note that MRSA transmission can be prevented by simple measures such as hand hygiene and covering infections.

Should the schools be closed to be cleaned or disinfected when a MRSA infection occurs?

Covering surfaces will greatly reduce the risks of surfaces becoming contaminated with MRSA. In general, it is not necessary to close schools to “disinfect” them when a MRSA infection occurs. The skin infections are transmitted primarily by skin-to-skin contact and contact with surfaces that have come into contact with someone else’s infection.

Should students with MRSA infections be excluded from attending school?

Unless directed by a physician, students with MRSA infections should not be excluded from attending school. Exclusion from school and sports activities should be reserved for those with wound drainage (“pus”) that cannot be covered and contained with a clean, dry bandage and for those who cannot maintain good personal hygiene.