
Information on MRSA (Methicillin Resistant Staph Aureus) Infections

This information is provided to assist you in the control and prevention of staphylococcal (commonly called staph) infections. These infections are usually easy to treat with inexpensive, well-tolerated antibiotics. However, some staph bacteria have developed resistance: that is, the antibiotics can no longer kill the bacteria. Although antibiotic resistant infections pose a significant health threat, the following measures are effective against not only antibiotic resistant infections, but against almost all infectious diseases.

What is a STAPHYLOCOCCAL infection?

Staphylococcal Aureus commonly causes boils and soft-tissue infections as well as more serious conditions such as pneumonia or bloodstream infections. According to the Centers for Disease Control and Prevention, twenty-five to thirty percent of adults and children in the United States are "colonized" with staph – the bacteria are present but do not cause illness. Staphylococcus Aureus colonization usually occurs in the armpit, groin, genital area, and most frequently, the inside of the nose. Most infections occur through direct physical contact of the staphylococci with a break in the skin (cut or scrape) during contact with a person with the bacteria or during contact with an inanimate object (such as clothing, bed linens, or furniture) soiled with wound drainage. The bacterium is not carried through the air and is not found in dirt or mud.

Methicillin Resistant Staphylococcus Aureus (MRSA)

Methicillin is an antibiotic that represents a group or class of antibiotics. A MRSA (often pronounced mer-sa) infection, unlike a common Staphylococcus Aureus infection, cannot be treated with methicillin related antibiotics. The treatment may be longer, expensive, and more complicated; and infections can reappear frequently. Originally, MRSA was found only in hospitals and long-term care facilities, such as nursing homes. In the past few years, there have been increasing reports of MRSA not associated with the medical environment – such as with athletes in school.

How to Take Care of Wounds at Home:

- Be sure the infected child avoids direct contact with others until the wound is no longer draining and your physician has instructed you that your child can resume usual activities.
- Keep the wound covered. Change the dressing according to your doctor's recommendations. Usually the dressing must be changed whenever recommendations. Usually the dressing must be changed whenever drainage is apparent or at least twice a day. Check with your doctor.
- Wash your hands frequently, especially before and after changing band aides, bandages, or wound dressings.
- Wash hands between tasks and procedures on the same child (such as changing a band-aid and helping them on the toilet) to prevent cross-contamination of different body sites.
- It is preferable not to use tweezers or other equipment to change dressings, use your gloved hand.
- If equipment is necessary (tweezers/scissors), use disposable equipment whenever possible and discard when wound is healed. DO NOT share these items!!
- Do Not permit an infected child to share a bed with other family members.
- Disinfect all non-clothing items that come in contact with the wound with a fresh (prepared daily) mix of one tablespoon of household bleach to one quart of water or a phenol-containing product such as Lysol@ or Pinesol@. Use a phenol-containing spray to disinfect any cloth or upholstered surface.
- Discard all disposable materials that have come in contact with the wound in a separate trash bag and close the bag before placing in the common garbage.
- Designate a chair or area for the infected child to sit in. It should have an easily cleaned plastic or other hard cover for easy disinfection. No one else should sit here until the wound is healed.
- Use utensils and dishes in the usual manner with soap and hot water or using the standard home dishwasher.
- Carry laundry away from the body (may use plastic bag that will not allow wet articles to drain through). Wash hands after loading soiled laundry in the washer.
- Use a separate hamper and separate all clothing, towels, and linens that come in contact with the wound from those of other members of household
- Wash articles that come in contact with the wound with the usual detergent in hot water and change towels and linens daily if possible.

Strategies to prevent Staphylococcal Infections

***Hand Washing is the Single Most important behavior in preventing infectious disease!!**

Use an alcohol based hand sanitizer as a supplement or a substitute when soap and water are not available. Follow manufacturer directions or generally place enough hand sanitizer in the palm of your hand to thoroughly cover your entire hand. Rub hands together until dry.

Hand washing procedure:

- 1.) use warm running water
- 2.) wet your hands and wrists
- 3.) use a bar or a thumb-nail size dab of liquid soap
- 4.) work soap into a lather and wash between fingers, up to wrists and under fingernails for at least 15 seconds.
- 5.) dry hands thoroughly using a clean cloth towel or paper towel.

Wash hands and those of your child:

- After sneezing, blowing, or touching your nose or wiping your child's nose
- Before and after close contact with another person
- After using the toilet
- After arriving home from school or other activities

Other General Precautions:

- **Do not** share towels, soap, or other personal care items
- **Do not** share ointments or antibiotics
- **Do not** come into direct physical contact with infected wounds or contaminated materials.
- **Do** inform your school or daycare administration if your child has a skin infection.
- **Do** wash children's clothes and other laundered items that are taken to school and daycare, such as blankets, in hot water and dry on the hottest cycle possible.
- **Do** use a moisturizer to prevent dry, cracking skin.

With Your Physician:

If your child develops an infection that does not improve or worsens with your usual care, a physician should examine the wound. The physician should perform a culture and susceptibility test to determine what bacteria you have and what antibiotic will be the most effective with the fewest side effects. If the physician determines you do not have a bacterial infection, you will not receive an antibiotic. Antibiotics are only effective if the infection is bacterial.

If your child is treated with an antibiotic:

- Take ALL medication even after the infection seems to have healed.
- If a topical ointment is prescribed, apply as directed
- Follow all other directions the physician gives you
- Inform the physician if your child is not responding to treatment
- Share information about your child's condition with the school or daycare

Additional Sources of Information:

When in doubt of the correct procedure to follow, contact your healthcare provider.

Additional information on bacteria, antibiotics and antibiotic resistant organisms, disinfections, wound healing, and other treatment for infections can be found in your local library or the World Wide Web:

<http://www.cdc.gov/ncidod/hip/ARESIST/mrsa.htm>

<http://www.cdc.gov/drugresistance/community/>

Other sources

www.ahrq.gov