

MRSA Mis-Information: Taking a Look at the Scary Topic of Resistant Bacterial Infections in Child Care

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Subjects we don't know much about sometimes frighten us. When health is involved, this fear triggers an additional set of emotional reactions, especially if the condition or concern is associated with serious illness or sudden death. Partner this limited knowledge with worry for children or families, and it is easy to have a hysterical reaction. And, just for excitement, add the penchant of the media for exaggerated or incomplete information to feed increased concern among viewers. Historically, we have lived through many such events: think plague, West Nile Virus, Lyme Disease, Legionnaire's Disease, HIV. . . Then, motivated by the desire to keep infections at bay, we often put program policies and practices in place that are based on worry rather than fact.

MRSA is the most recent concern that has driven Head Start and Early Head Start programs to create punitive practices that are often not science-based, and frequently violate the dignity and confidentiality of the victims and their families. **MRSA** (mer'-sah), methicillin-resistant *Staphylococcus aureus*, refers to a staphylococcus strain of bacteria that is resistant to some commonly used antibiotics. Although those antibiotics will not work against these bacteria, there are others that effectively treat these infections.

Staph aureus has been a common human colonizer and pathogen throughout history. *Staphylococcus aureus*, often referred to as "staph" are bacteria commonly carried on the skin or in the nose of healthy people. Occasionally, staph will cause an infection, and is one of the most common causes of skin infections in the US. Most of these infections are minor and are treated without antibiotics. However, staph can also cause serious infections, such as in surgical wounds, the bloodstream, or the lungs. About 25% of the population have the bacteria present but causing no harm, and about 1% are colonized with **MRSA**.

MRSA was first noted in the hospital setting in the 1960s, when resistance to methicillin drugs began to be detected, but was not recognized outside that setting until 1981. We now differentiate between hospital-acquired, **HA-MRSA**, and community acquired, **CA-MRSA**. **CA-MRSA** typically infects otherwise healthy people and usually involves skin and soft tissues, and is the one recently making headlines.

What does **CA-MRSA** look like? Symptoms vary depending on the part of the body infected, but skin infections are the most common site and usually result in warm, red, tender areas with or without pus. They often resemble boils, bug bites, blisters, or infected wounds. Those affected

often complain of a “spider bite”. Young children may not be able to articulate what is wrong, but may be irritable and guard the area.

Treatment for skin and soft tissue infections includes opening, draining, and cleaning done by a medical provider, and antibiotics. The drainage should always be sent for culture. It is vital that families be certain children finish completely all antibiotics, as resistance can occur when only part of an antibiotic regimen is completed.

Factors associated with the spread of **CA-MRSA** in the skin include the “Five C’s”: Crowded conditions, skin-to-skin Contact, Compromised skin (cuts or scrapes), Contaminated items/surfaces, and lack of Cleanliness. Management of **MRSA** infections in the early childhood setting revolves around routine cleaning and sanitizing. Frequent, thorough hand washing with ordinary soap and running water is the best prevention. Children should **not** be excluded from the group-care setting, as long as the wound can be covered and the dressing kept dry and in place. If the dressing cannot contain the drainage and/or be kept dry, **short term** exclusion is appropriate.

Confidentiality must be maintained. Parents of children with draining wounds or red/swollen/painful areas must have their child evaluated by a medical provider. Written documentation from the provider must accompany the child for re-entry. Unless the child is in obvious distress or has a draining site that cannot be safely covered, there is **no reason for immediate exclusion**.

Cleaning of classroom surfaces with soap and water, and the use of a disinfecting solution (one tablespoon household bleach to one quart water, mixed daily) is sufficient. Toys that may have been contaminated should be cleaned and disinfected following routine practice, and can be done by hand or using a commercial dishwasher. Ensure children do not share personal items, like blankets, sheets or towels. Launder such items in a routine manner. The use of hot water and a hot dryer can help kill the bacteria. Staff must use disposable towels for cleaning, and nonporous gloves should be worn, with hands washed before and after gloving. Remember that the disinfecting solution should be allowed to air dry if at all possible, or have at least two minutes of contact before being wiped dry. Teach children not to touch their or anyone’s wounds or bandages. Be sure to include custodians in hygiene and hand washing trainings and instructions.

The key to management of **MRSA** is to understand that “closing and disinfecting” a building is an act of futility because as soon as people return, they bring all variety of bugs with them.

Additional reading can found at: www.cdc.gov, www.ucsfchildcarehealth.org, https://fortress.wa.gov/doh/here/materials/PDFs/12_MRSAskin_E09L.pdf.