STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

EDUCATIONAL ALERT!!!

TO: DDA Licensed Service Providers
All DD RN Delegating Nurses/Case Managers

FROM: Michael S. Chapman, Executive Director, Developmental Disabilities Administration
Wendy Kronmiller, Director, Office of Health Care Quality

DATE: September 25, 2008

RE: MRSA – Methicillin-Resistant Staphylococcus aureus

The Developmental Disabilities Administration (DDA) receives many inquiries related to MRSA (**M**ethicillin **R**esistant **S**taphylococcus **a**ureus). To assist providers in understanding and addressing concerns related to caring for individuals with MRSA colonization or infections and to clarify the reporting requirement, the DDA Regional Nurses have compiled, with review and support by Dr. Brenda Roup, Maryland Epidemiology and Disease Control Program, the following information:

What is MRSA (Methicillin Resistant Staphylococcus aureus)?

- Staphylococcus Aureus (i.e., "staph") is a bacteria commonly carried on the skin or in the nose of healthy people.
- MRSA is a strain of staph that is unique in its resistance to traditional treatment.
- The presence of MRSA can only be confirmed by culture and sensitivity test.

What is MRSA Colonization?

- MRSA is present on the skin or in the body (nares, sputum) without causing illness.
- No treatment is indicated.
- Approximately 25 to 30% of the population is considered colonized with Staph in the nose. Only 1% is colonized with MRSA.
- Any person who is found to be culture-positive for MRSA, but without signs/symptoms (asymptomatic) of infection is considered colonized. A colonized individual may transmit MRSA to others but may not require treatment.
- MRSA colonization may be independent of or the result of a MRSA infection.

What is MRSA Infection?

- MRSA invades tissues causing illness.
- Infections require treatment.
- Any person who has a positive culture for MRSA and has clinical evidence of an infection caused by MRSA. An infection is associated with signs/symptoms, such as, fever, malaise, lesions, wound drainage, elevated WBCs, etc.

How is MRSA transmitted/spread?

- Direct contact with infected person/object.
- Direct contact with inanimate objects where MRSA can live, such as furniture, gym equipment, tabletops, sheets, clothes, wound dressings, and other objects.
- Airborne droplet transmission is unlikely.

Who is at risk for developing a MRSA infection?

- Everyone is at risk for getting MRSA; however, there is increased risk for individuals who:
  - are hospitalized or in a healthcare facility (nursing home) over extended periods of time;
  - are elderly;
  - are medically fragile;
  - have poor hygiene;
  - live in crowded living conditions;
  - have invasive devices (e.g., urinary catheter, G or J tube, tracheostomy),
  - are malnourished; and/or,
  - have open wounds, chronic renal failure, anemia, or respiratory issues (pneumonia).

What are signs and symptoms of MRSA infection?

- General signs and symptoms of infection: fever, malaise and/or elevated WBCs
- Skin infection: inflammation, lesion (e.g., pimples/boils), draining wound
- Respiratory infection: productive cough
- Infection at site of invasive device (e.g., urinary catheter, G or J tube, tracheotomy), increase in drainage, change in color of secretions or urine

How is MRSA treated?

- Colonization does not require treatment. Infection does require treatment.
- Antibiotic therapy (oral or IV) using medications specifically targeting MRSA

What are the complications of a MRSA infection?

- Abscess development
- Sepsis
- Respiratory failure
- Death

Can an individual return to a DD community placement if s/he is MRSA positive?

- YES! Many individuals are colonized with MRSA.
- YES! An individual who has been treated for a MRSA infection may return to the community even though s/he remains positive for MRSA colonization.
- If a MRSA infected wound can be covered with an occlusive dressing, the individual may return to the day program.

If an individual has MRSA, how should their laundry be cleaned?

- Special handling of laundry is <u>not</u> necessary.
- General recommendations for all laundry, include:
  - Water temperature should be $\geq 160°$. If water temperature is $<160°$, should use detergent with bleach; and,
  - Dry clothes in a hot dryer versus air-drying because heat helps kill bacteria.

If an individual has a MRSA infection, what can I do to prevent others from getting infected?

- Standard Precautions.
- If the individual has a draining wound/poor respiratory hygiene, a private room may be considered.
- The individual may reside with a person with intact skin and no "tubes" or with a person who is also MRSA+.
- The individual with the MRSA infection should not be placed with anyone who has another antibiotic resistant organism, who is immuno-compromised or who has indwelling tubes.
- Cover draining wounds
- Teach good respiratory hygiene (cover mouth when coughing)
- Avoid sharing personal items of consumers (towels, razors, combs, clothing).
- If individual is MRSA+, inform all health care professionals and document in individual's medical record.

What are environmental considerations for individuals infected with MRSA?

- If an individual has a MRSA infection:
  - Regularly clean the environment with a disinfectant solution.
  - Equipment used for bathing (e.g., tub, shower chair, etc) should be cleaned with a disinfectant solution after use.
  - Furniture used by an individual with MRSA+ wound drainage not contained with a dressing or secretions that cannot be controlled should be non-porous and should be cleaned with a disinfectant solution after use/daily.

What should be considered when dealing with a MRSA infected wound?

- A person should have an occlusive dressing to contain/control wound drainage.
- Follow Standard Precautions, the protocol for the wearing of Personal Protective Equipment (gloves, masks, gown, etc.) and the protocol on disposal of wound dressings, Kleenex, or other waste products.
- Follow the health care professinal's instructions and the Nursing Care Plan on proper care of the wound.
- Advise staff, family and other close contacts to wash their hands frequently for 20 – 30 seconds with antibacterial soap and warm water.
- Advise staff, family and other close contacts that if they change the person's bandages or touch the infected wound or potentially infectious materials gloves should be worn.

What should be considered when dealing with a MRSA respiratory infection?

- Air borne spread of MRSA has not been confirmed.
- Persons with MRSA colonization in the nares or sputum do not need a mask if they can control their secretions and cover their mouth when coughing.
- Persons who have a MRSA respiratory infection (e.g., pneumonia, bronchitis) and who cannot control their secretions, may consider wearing a mask.
- If respiratory infection, coughing and poor secretion control, individual should be 3 feet from others.
- Teach good respiratory hygiene.

How can we prevent MRSA contamination for direct care workers and individuals we serve in the community?

- **STANDARD PRECAUTIONS!!**
- **HAND WASHING!!**

What is the criterion for reporting MRSA?

- If ≥ 3 individuals are confirmed by culture and sensitivity to have MRSA infections that are linked by person (e.g., same health care provider), place (e.g., same room, house, program, etc.), or time (infections occurring within 10 days of one another), this could be considered an outbreak and the local Health Department must be notified.
- If an outbreak occurs, notify your DDA Regional Office, the Regional Nurse, and the Office of Health Care Quality.
- An outbreak of MRSA is a reportable incident under the DDA Policy on Reportable Incidents and Investigations (PORI). Your agency must notify the authorities set forth in the PORI and conduct an investigation as directed in the PORI.

Additional information may be obtained from:
www.edcp.org
www.cdc.gov/ncidod/hip/ARESIST/mrsa_comm_faq.html
MRSA Powerpoint Presentation developed by DDA Regional Nurses

Thank you for your attention to this important issue and your commitment to provide quality services to and protect the safety and well being of the individuals with developmental disabilities. If you have questions or need further assistance, you may contact your DDA Regional Nurse. The DDA Regional Nurses' contact information:

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