

Stevens Community Medical Center
Morris, MN 56267
MRSA (Methicillin Resistant *Staphylococcus Aureus*)

CAUSATIVE AGENT

- MRSA is a strain of the bacteria *Staphylococcus aureus* that is resistant to the antibiotic methicillin. MRSA may also be resistant to all other antibiotics except vancomycin.
- *Staph aureus* is a bacteria that is part of the normal flora of many people.
- *Staph aureus* usually lives on the skin and mucous membranes without causing infection. Under certain circumstances, it can cause abscesses, skin or wound infections and other severe infections.

CONCERNS

- There have been several reports of MRSA with intermediate resistance to vancomycin. If high level vancomycin resistance eventually occurs, many staph infections could become untreatable.
- MRSA can spread among patients and may cause invasive infection in colonized patients.
- Health care workers may colonize themselves by touching or rubbing their noses with contaminated gloves or unwashed hands after contact with a patient carrying MRSA.
- Hands are the major instrument for the transmission of MRSA and frequent handwashing is the most important measure that can be taken to prevent the spread of MRSA.

MODE OF TRANSMISSION

MRSA is spread by Contact Transmission

- Infective material: respiratory secretions, wound drainage, skin lesions.
- The role of aerosolization in the transmission of MRSA is not known. It is possible that MRSA may be aerosolized in the droplets from a cough or from the ventilator exhalation port of an intubated patient.
- As with most infectious organisms, MRSA may be carried on the hands of health care workers and transmitted from one patient to another. This is the most common ways of transmitting MRSA to others.
- Health care workers may colonize themselves by touching or rubbing their noses with unwashed hands after contact with a patient colonized or infected with MRSA. The organism may then be transmitted to other patients by the colonized health care worker.
- Colonization of health care workers may be transient (i.e., as short as a single shift) or of long duration.

INFECTION CONTROL PRECAUTIONS

- Private room.
- Contact Precautions in addition to Standard Precautions are to be taken.
- Gown and glove for all health care workers entering the room.
- For MRSA: in addition to gowns and gloves, masks will be worn by health care workers working within 3 feet of the patient. (If patient has respiratory infection).
- Health care workers must remove protective barriers and discard appropriately upon leaving the patient's room and immediately wash their hands with antimicrobial soap.
- Dedicate patient care equipment to the patient's room. Do not share blood pressure cuffs, stethoscopes, or thermometers. If equipment must be shared, disinfect between patients with alcohol or hospital disinfectant.

ADDITIONAL PRECAUTIONS

- Patients should not have contact with other patients and/or families.
- Limit the transport of the patient from his/her room to essential purposes only and ensure that precautions are maintained to minimize the risk of transmission of microorganisms to other patients.
- Family members do not need to wear barriers, since these are meant to prevent the spread of the organisms to other patients. Family and visitors must remember to wash their hands when entering and leaving the patient's room and should only visit and interact with their family member.
- Equipment and toys that are used must be cleaned between patients with the hospital approved disinfectant.
- Family and visitors should leave the hospital immediately after leaving the patient's room.

CAREGIVERS

- Staff members who transport the patient to another unit or ancillary care area must communicate the type of infection control precautions necessary.
- Consider staff assignments carefully: avoid coassignments with patients who are new surgicals, or have open wounds, VRE or tracheostomies. Staff assigned to other patients must remove gloves, gowns, and mask and wash hands well with an antimicrobial soap before contact with other patients.

PROTOCOL FOR DISCONTINUING PRECAUTIONS

- The patient must have 3 consecutive MRSA negative sets* of cultures (a minimum of 48 hours apart) after antibiotics have been discontinued for at least 72 hours.
- A set of cultures includes: nares, rectum, and trach/ETT. Gastrostomy site, deepline site, wound/incision site should also be cultured if present.

DEFINITIONS

- Colonization - the persistence of organisms on skin, in body tissues, or in body fluids but without a clinically adverse effect.
- Infection - the presence of an organism(s) in body tissues or fluids accompanied by a clinically adverse effect (either locally or systemically) on the host.
- Cohort - consists of two or more patients roomed together and/or physically separated from other patients by their location.
- Endemic - the usual prevalence of a particular infectious disease or health-related event in a given locale.
- Outbreak (epidemic) - a clear increase in the expected number of cases of a particular infectious disease or health-related event in a given locale.