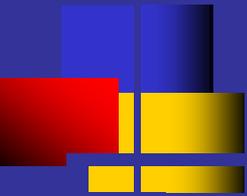


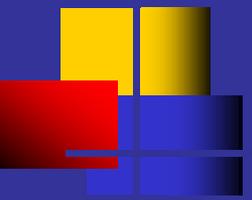
Community-Associated MRSA



Richard Judelsohn, MD

Medical Director

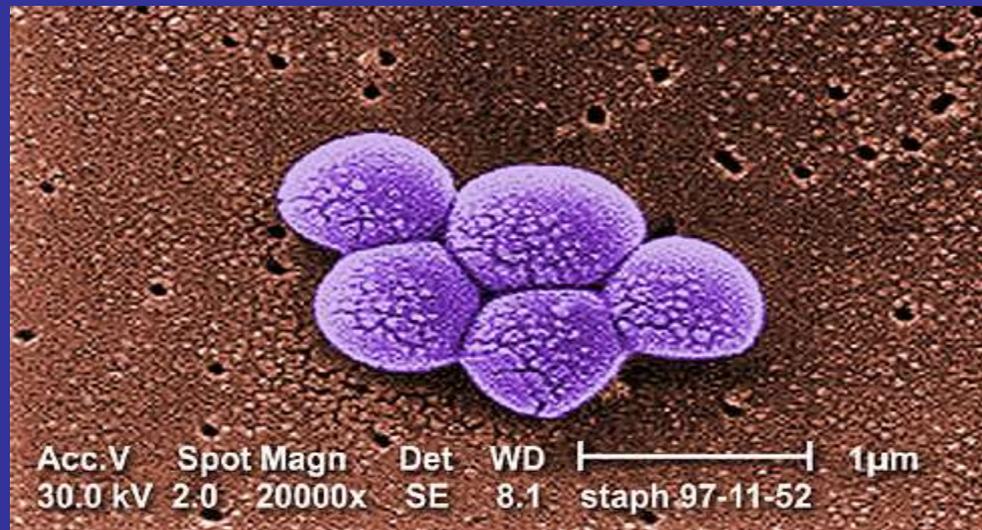
Erie County Department of Health



Objectives

- Define the CA-MRSA problem
- Describe CA-MRSA clinical features
- Present recommended CA-MRSA management
- Discuss strategies to prevent spread and control outbreaks

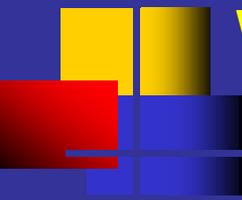
Staph. Aureus Bacteria





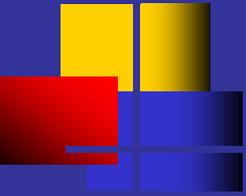
What is CA-MRSA?

- Community **A**cquired, **M**ethicillin-Resistant **S**taph **A**ureus
 - A type of *Staphylococcus aureus* bacteria
 - Resistant to some antibiotics
 - Treatable with other antibiotics



Where is CA-MRSA found?

- Staph commonly found in our environment and on the surface of our skin
- People can “carry” Staph bacteria in their bodies, especially their noses, without being sick
 - 30% of people are carriers of Staph
 - 1% of people are carriers of MRSA

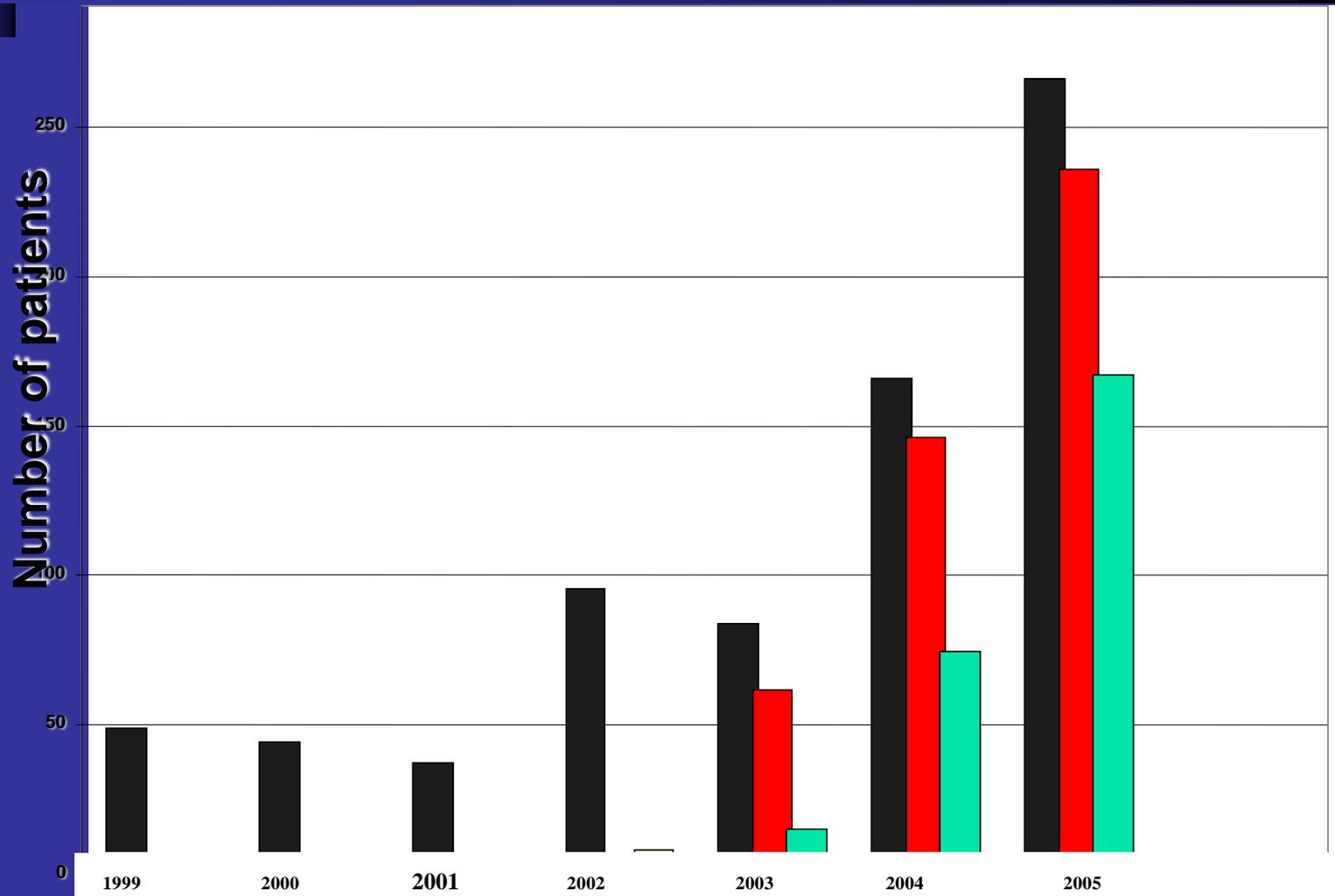


A new and different disease

- CA-MRSA first reported in the 1980s
 - Differs from Hospital-associated MRSA first reported in the 1960s
 - Infects previously healthy individuals
 - More likely to cause skin infections

Incidence of subcutaneous abscesses, WCHOB, 1999 - 2005

- All MRSA Pos
- New MRSA
- MRSA Abcs



Clinical Manifestations of CA-MRSA

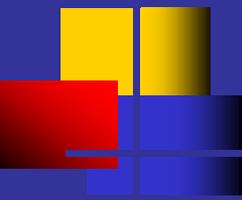
- Boils or draining pimples
- “Spider Bites” or “bug bites”
- Sores that won’t heal
- Red areas of skin that may feel warm to the touch
- Abscesses
- Systemic infections (e.g. pneumonia, blood infections) much less common

Clinical Presentation



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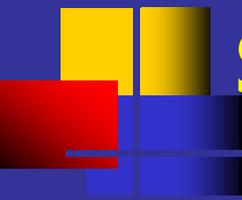




How is CA-MRSA Transmitted?

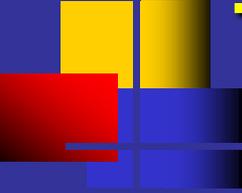
- **Direct skin-to-skin contact**
 - **Contact with soiled bandages, wound drainage**
- **Sharing personal items**
 - **Linens, towels, razors, bars of soap, clothing**
- **Athletic equipment (e.g. weight benches)**
 - **Warm, moist environment**
 - **Athletes with cuts, scratches**
- **More common in some settings (e.g. households, dorms, sports' teams, daycare)**

I think I have MRSA, what should I do?



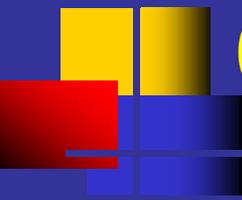
Seek medical attention

- Incision and drainage to remove infected material
- Lab tests to identify the bacteria
- Treatment with appropriate antibiotics (e.g. Bactrim)
- Proper wound care at home: cover your wound with clean dry bandages. Pus from infected wounds can contain MRSA, so keeping the infection covered will help prevent its spread
- If multiple household members are infected, or repeat infection in the same person, doctor may treat with nasal antibiotic ointment (e.g. Bactroban)



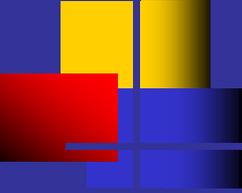
Treatment

- Idea is to treat infection and clear people of colonization to prevent recurrence when indicated
- May not be possible; the epidemiology of respiratory (not skin-to-skin) transmission is under investigation



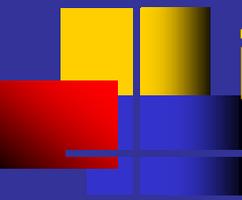
Other Measures

- Improved hygiene
- Antibacterial soaps
- No sharing of bathroom items
- Bathroom/house cleaning
- Clean well-trimmed fingernails



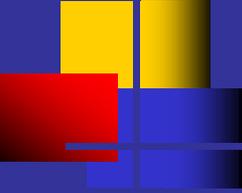
I heard that there is a case of MRSA in my school/workplace.....

- Risk of transmission in class/at work is low
- Exclusion of infected students or staff is not necessary, *unless*:
 - Doctor recommends exclusion
 - Draining, infected wounds cannot be covered
 - Should exclude infected persons from contact sports, swimming



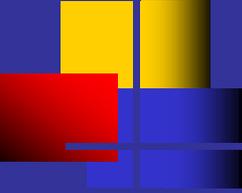
I heard that there is a case of MRSA in my school/workplace.....

- Notification of parents and staff is discretionary
 - should be based on existing policy for other illnesses
- Clusters of related cases should be reported to health department



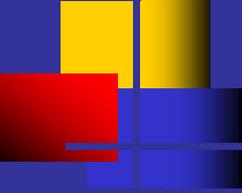
ECDOH Guidelines for Preventing CA-MRSA Transmission in Schools

- Good hand hygiene is the most effective prevention strategy
 - Wash hands frequently with non-bar soap.
 - Ensure access to sinks, soaps, and clean towels.
 - Use liquid hand sanitizers when soap and water are not available or as an addition to existing hand hygiene regimens



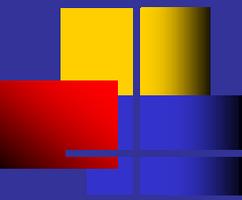
ECDOH Guidelines for Preventing CA-MRSA Transmission in Sports' Teams

- Discourage sharing of personal items such as towels, razors, lotions, deodorants, etc.
- Regularly clean sinks, showers, and toilets by saturating with disinfectant.
- Disinfect athletic equipment between users.



ECDOH Guidelines for Preventing CA-MRSA Transmission in Sports' Teams

- Wear gloves when handling dirty laundry from sports related activities
- Launder sheets, towels, sports uniforms, and underclothing with hot water and detergent
 - dry on the hottest setting



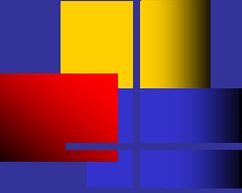
Disinfection

- Follow New York State Office of General Services (OGS) school green cleaning guidance for routine classroom and school bus cleaning using OGS-approved green-cleaning products
- Details available on OGS web site:
<http://www.ogs.state.ny.us/bldgadmin/environmental/default.html>



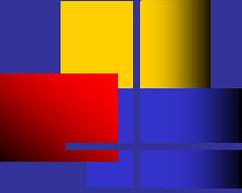
Disinfection

- Follow regular cleaning and maintenance procedures for equipment and materials that may be shared in the classroom such as protective eyewear or clothing.
- May also consider disinfectants on shared environmental surfaces and equipment as part of regular facility maintenance.



Management of MRSA in School NYSED/NYSDOH

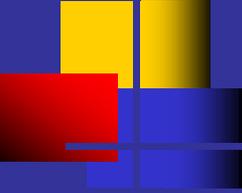
- Classrooms and schools do not need to be closed!!!!!!!!!!!!
- Students and staff with MRSA can attend school regularly
 - if wound covered and receiving proper treatment
- Students and staff should NOT be isolated or sent home for suspected MRSA infection.



Management of MRSA in School

NYSED/NYSDOH

- Wash the area with soap and water and cover it lightly.
- Those who touch the wound should wash their hands immediately.
- Student should be encouraged to have the wound examined by healthcare provider as soon as possible to confirm MRSA infection and determine treatment.
- Wound should be kept lightly covered until it has dried completely.
- Disinfection indicated only for surfaces and objects that have been exposed to wound drainage



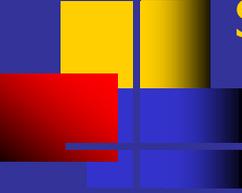
Management of MRSA in School NYSED/NYSDOH

For more information, go to:

NYS State Education Department and
Department of Health:

HEALTH ADVISORY: PREVENTION OF
METHICILLIN-RESISTANT *STAPHYLOCOCCUS*
AUREUS (MRSA) INFECTIONS IN THE
SCHOOL SETTING October 25, 2007

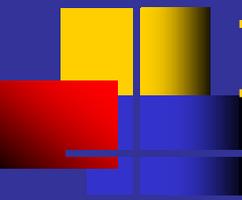
HEALTH ADVISORY: PREVENTION OF METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS* (MRSA) INFECTIONS IN THE SCHOOL SETTING October 25, 2007



Unless directed by a physician, students with MRSA infections should not be excluded from attending school. According to NYSED Commissioner's Regulations [8 NYCRR 136.3 (h)], schools may only exclude those students with communicable diseases which are reportable under Public Health Law. A list of such diseases may be found at 10 NYCRR.2.1.

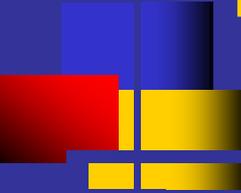
Individual cases of MRSA infection are not reportable in New York State.

Students with any open or draining wounds, such as MRSA infections, should be excluded from swimming pools, whirlpools, hot tubs, etc. until the wound has healed.



Considerations for Students with Immune Suppression (e.g., HIV)

- **Students with weakened immune systems may be at risk for more severe illness with MRSA.**
- **These students should follow the same prevention measures**
 - **should also contact their healthcare provider with any specific concerns.**
- **Schools should maintain the student's right to privacy and confidentiality with this or any health issue.**



What The Erie County Department of Health is Doing

Guidelines for schools, workplaces, the public
Establishing surveillance for MRSA infections

MRSA Info Hotline 858-2929

Website information and links at:

www.erie.gov/health/mrsa.asp

For more information, please go to these websites:

Erie County Department of Health

<http://www.erie.gov/health/mrsa.asp>

(This site has links to many other sites)

You may also call (716) 858-2929 for MRSA information

MRSA Toolkit for Schools

<http://www.tpchd.org/page.php?id=364>

**Questions and Answers about MRSA
for School Health Professionals**

**[http://www.mass.gov/dph/cdc/antibiotic/
mrsa_school_health.htm](http://www.mass.gov/dph/cdc/antibiotic/mrsa_school_health.htm)**

Window/Mirror Clings

send request to cmt04@health.state.ny.us