The Response to Recent MRSA Complaints in the District of Columbia:

What Did We Do?

John O. Davies Cole, PhD MPH Samuel C Washington, MPH District of Columbia Department of Health Division of Disease Surveillance and Investigation

Convocation of Southern State Epidemiologists

Objectives

- What is MRSA?
- Describe the scenario that developed in the District
- How the District of Columbia responded to the situation
- Lessons learned
- Discussion questions

Staphylococcus aureus



What is MRSA?

- Staphylococcus bacteria are bacteria that live harmlessly on the skin surfaces.
- When the skin is broken for any reason, *Staphylococcus* can enter the wound and cause infection.
- Methicillin-resistant Staphylococcus aureus (MRSA) are simply Staphylococcus bacteria that have become resistant to some (but not all) antibiotics.
- Because of their resistance to some antibiotics, MRSA may be more difficult to treat and possibly lead to more serious conditions like pneumonia and sepsis.

How do MRSA infections spread?

- Skin-to-skin contact with someone who is colonized with MRSA or has an active MRSA infection.
- Contact with personal items that have MRSA on them, such as shared workout and sports equipment (jerseys, pads, etc), towels, razors and sheets
- Openings in their skin such as cuts or scrapes
- Crowded living conditions
- Poor personal hygiene





How can MRSA infections be prevented?

- Wash hands with soap and running water for at least 20 seconds.
- Keep skin wounds clean and covered with bandages
- Do not touch other people's wounds or bandages
- Do not share personal items like towels or razors
- Thoroughly clean shared sports and workout equipment after every use



Data Collection

- No baseline for MRSA hospital-acquired infections had been established.
- In early 2007, the DC Department of Health (DOH) started a MRSA surveillance program
- 6-month pilot study to assess the levels of MRSA infections in DC hospitals.
- The purpose was to determine if MRSA was a rising threat in the District of Columbia.

MRSA Advisory Committee

 DOH also forms the MRSA Advisory Committee, in cooperation with several local hospitals, other public health professionals in order to address the "problem".



Staph Infection Fear In 21 Virginia Schools

October 16, 2007. Washington - Officials said that 21 schools of Bedford county in southern Virginia had been closed, on Wednesday, to clean them for the prevention of the spread of a dangerous bacterial infection that killed a 17-year-old high school student.



- Several reports regarding a student athlete in Bedford County, Virginia, who died following a MRSA infection started appearing in the media.
- The media coverage surrounding the case was tremendous but incomplete.
- Hysteria and panic surrounding MRSA infections started to spread quickly in the community.



October 17th

- No cases of communityacquired MRSA had been reported in the District of Columbia at this point.
- MRSA is not a District of Columbia reportable disease.



October 18th:

- The neighboring county has closed schools and started a "MRSA Cleaning" program in the schools in response to the media reports, despite recommendations to the contrary by their state and county health officials.
 - School closing and widespread surface cleaning is not recommended by the Centers for Disease Control and Prevention (CDC) as an effective means of managing MRSA infections.
- The closing of schools in the neighboring county put pressure on the District of Columbia and other neighboring states to mount a MRSA response.

October 18th

- Media hysteria has community concerned and asking for MRSA culture screening by their physicians.
- The first DC case reported is a school teacher in a public school.
- DC Public Schools (DCPS) considers closing school but consults with DOH first.
- The District of Columbia Department of Health (DOH) and DCPS make a formal decision to respond scientifically to the situation.



October 18th (cont)

- DOH consulted CDC officials, literature, and website, as well as the MRSA Advisory Committee to formulate a sound scientific and practical MRSA response.
- DOH starts to make site visits to several DCPS schools that are reporting they have MRSA cases, most of which are unsubstantiated.
- School staff very angry
- DOH decides to educate the general public about MRSA to reduce fear and hysteria.



DOH and DCPS authorities decide to educate the public about MRSA using MRSA disease factsheets:

- What is MRSA?
- What is the difference between community-acquired MRSA and hospital-acquired MRSA?
- MRSA Colonization vs MRSA infection
- How common (prevalent) is MRSA?
- How MRSA is transmitted and how is it prevented?
- Why closing and cleaning schools is not the answer?

DOH and DCPS decides to educate the public about MRSA:

- Letters and factsheets are sent to parents of DCPS students
- DCPS staff and officials are educated on MRSA prevention techniques
- DOH and DCPS coordinate to establish a school-based MRSA response policy





October 19th:

- Data Collection: DOH temporarily makes MRSA reportable in order to establish a community-acquired MRSA prevalence baseline.
- The DOH MRSA effort has a setback when the Director leaves the Department of Health.
- A new interim Director is quickly appointed and bought up to speed on the MRSA situation.





- DOH continues MRSA surveillance and the public education effort through November 1st.
- MRSA surveillance response is low with only 21 cases reported; Seven (7) were confirmed as MRSA.
- No deaths reported as a result of MRSA infection!
- Complete and accurate scientific data regarding MRSA, instead of media reports, provided to Mayor's office by DOH.
- Mayor's office and DOH share scientific data with media outlets.
- Public hysteria starts to slow down

MRSA-related cases investigated

Total suspected MRSA reports	21	Reports received
Confirmed MRSA cases	7	Physician/lab reports
Not MRSA	14	

Legislation

Since November 1:

- DC City Council expressed interest in legislation to make <u>all</u> MRSA cases reportable in the District. (Impractical)
- The DC City Council, DOH, and the MRSA Advisory Committee are collaborating to draft legislation making specific hospital-acquired MRSA cases and MRSA outbreaks reportable in the District.



Draft MRSA Bill

- All licensed hospitals to implement infection prevention programs in intensive care and surgical units or similar units
- All hospitals shall expand infection prevention to all areas of the hospital, except in-patient psychiatric unit
- Identification of both colonized and infected patients by screening for MRSA upon admission
- Patient cultures for MRSA upon discharge or transfer from unit where infection prevention has been implemented
- Strict adherence to hygiene guidelines

Lessons Learned

Respond to perceived threat early and quickly:

- Media was allowed to report inaccurate data for too long.
- Share information with the public as quickly as possible. Slow response leads to distrust.
- A televised press conference by the DOH and DCPS authority figures might have stopped the public hysteria earlier.



Lessons Learned

Communicate information effectively:

- Make sure all segments of the public receive the same information at the same time-
- DCPS schools received education material on MRSA from DOH rather quickly but distribution system to parents/public was slow.
- DCPS schools received MRSA information but no solid mechanism for reaching private or charter schools was in place.
- A new system of communication between DOH and independent charter and private schools was established as a result of this situation.



Lessons Learned

Rely on the Experts:

- DCPS did contact the Department of Health before taking any health-related action.
- Within the Department of Health, the various communicable disease epidemiologists and physicians were contacted and asked to assist in the development of a response plan.
- Allow the experts to do their job unimpeded



QUESTIONS?

- How did other states handle the recent MRSA reports?
- Should we make MRSA reportable?
- What should we report?
- Can any state share their reporting requirements?

