

Project title: Methicillin resistant Staphylococcus aureus (MRSA) in a Texas County Jail

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Project summary:

Methicillin resistant Staphylococcus aureus (MRSA) in correctional facilities has garnered the attention of public health officials since 2000. This study assessed nasal carriage rate and strain-relatedness of MRSA among inmates incarcerated less than two weeks in a Texas county jail using a cross-sectional design for surveying and obtaining nasal swabs and pulsed field gel electrophoresis (PFGE) to determine strain relatedness. Four hundred three (61.6%) of 654 inmates screened allowed questionnaires and nasal swabs to be collected. One hundred fifteen inmates (28.5%) carried *S. aureus*. Of the 403 inmates tested for nasal carriage of MRSA, 18 were positive for a carriage rate of 4.5% (95% CI=2.7-7.1). PFGE identified 10 different strains: four subtypes of each other, apparently USA300 (638, 703, 774, 776,); two additional strains (775, 800), related to each other but not subtypes of the previous four related strains; and four, totally divergent from each other and from the other six strains (773,799,805,772).

This is important because our data suggest that MRSA is endemic in persons coming into correctional facilities. Health care workers in correctional facilities should be prepared not only to prevent outbreaks through control of transmission within the facility but to treat MRSA infections that are unrelated epidemiologically arising from exposures prior to inmates' incarceration.

Presentations:

Rodney Rohde, Marilyn Felkner, DrPH, Dr. Anna Maria-Valle, and Tamara Baldwin. (Accepted for National ASCLS, July 2006), Chicago, Ill.

Rohde, R. et al. April 28, 2006. MRSA Study. Annual College of Health Professions Research Forum, Texas State, San Marcos, TX

Rohde, R. et al. March 31, 2006. MRSA in a Texas Prison. Texas Association of Clinical Laboratory Science Conference, San Antonio, TX

Marilyn Felkner, DrPH, Rodney E. Rohde, Dr. Anna Maria-Valle, and Tamara Baldwin. February 23, 2006. MRSA Study. Fifth Bi-Annual Conference of Public Health Laboratory Directors of Texas, Courtyard Marriott, Austin, TX

Rohde, R. et al. April 29, 2005. Methicillin Resistant Staphylococcus aureus (MRSA) Prevalence in a Texas Correctional Facility. Annual College of Health Professions Research Forum, Texas State, San Marcos, TX

Rohde, R. April 21, 2005. Community Acquired-Methicillin Resistant Staphylococcus aureus. In Service CE Presentation for HAYS ISD Nurses, Kyle Performing Arts Center, Kyle, TX