2/27/08

DEPT. CORREC-TIONS

LEGISLATIVE RESEARCH REPORT

MAY 19, 2008

REPORT NUMBER 08.266

METHOCILLIN RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) IN ALASKA AND OTHER STATES

PREPARED FOR SENATOR HOLLIS FRENCH

BY TIM SPENGLER, LEGISLATIVE ANALYST

You asked for information on Methocillin Resistant *Staphyloccus aureus* (MRSA). Specifically, you wished to know the prevalence of MRSA in Alaska and other states. Additionally, we look at MRSA concerns in correctional facilities.

Briefly, *Staphylococcus aureus*, often referred to as "staph," are bacteria commonly carried on the skin or in the nose of healthy people. Approximately 25% to 30% of the population is colonized (when bacteria are present, but not causing an infection) in the nose with staph bacteria. Methocillin Resistant *Staphyloccus aureus* is a type of staph that is resistant to antibiotics. The Centers for Disease Control (CDC) estimates that approximately 1% of the population is colonized with MRSA. [1]

Methocillin Resistant *Staphyloccus aureus* can cause skin infections that may look like a common pimple and can be red, swollen, painful or have pus or other drainage. The more serious variety of this bacteria—invasive MRSA—can cause pneumonia, bloodstream infections, and death.[2] Staph bacteria are almost always spread by direct physical contact. For example if an individual's hands come in contact with MRSA and are not washed thoroughly, the bacteria may be spread to others.[3] Invasive MRSA is usually caused when the bacteria enters the body through a cut or other wound resulting in an infection in a normally sterile part of the body such as the blood stream.

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[1] We found background information on MRSA at the Centers for Disease Control website *www.cdc.gov*.

[2] According to the CDC, a case of MRSA infection is defined as invasive if MRSA is found in the blood or cerebrospinal fluid of an individual.

[3] Health care workers are in a high risk category of contracting MRSA. Others considered at high risk include hospital patients, prisoners, nursing home residents and others in long-term care facilities, children attending daycare, athletes, military recruits, and people with weakened immune systems. New Jersey Department of Health and Senior Services, *www.nj.gov/health/cd/mrsa/* (Frequently asked questions).

We conferred with experts in Alaska for insight into the disease in our state. In Alaska, as in the vast majority of the United States, MRSA is not a reportable disease, according to Dr. Beth Funk of the epidemiology section of the State of Alaska's Division of Public Health.[4] Dr. Funk explains that MRSA is a common (and usually harmless) affliction and it would be prohibitively costly—and bureaucratically problematic—to track MRSA on a large scale. As there are no detailed data regarding the pervasiveness of MRSA in Alaska or elsewhere, Dr. Funk was hesitant to make an estimate on its prevalence in the state.

Dr. Tom Hennessey of the CDC's Arctic Investigations program estimates that less than 5% of those who seek medical care for the disease have serious or "invasive" MRSA.[5] Dr. Hennessy confirmed that MRSA is not a reportable disease in Alaska—or in most of the country—making comparisons between and among states problematic. Along with Dr. Funk, Dr. Hennessey believes that the most thorough study on invasive MRSA was published in the October 17, 2007, edition of the *Journal of American Medical Association* (JAMA). In the study, the CDC arrived at national estimates by projecting from the number of invasive MRSA cases from nine sites in the United States.[6] The report estimates that MRSA caused more than 94,000 life-threatening infections and nearly 19,000 deaths in the United States in 2005, the majority of which were associated with health care settings. The study also found that infection rates were highest among individuals 65 years of age and older and that blacks were twice a likely to be affected as were whites. We include the study as Attachment A along with a CDC press release highlighting the results of the study.

Prisoners are among those groups recognized as being at a high risk of contracting MRSA. The CDC published a report in October 2003 that looks at MRSA transmission among inmates of correctional facilities in Georgia, California and Texas.[7] An example of the study's findings is that in Texas—with approximately 145,000 inmates—there were 10,942 cases of MRSA reported during the surveillance period (January 1996 through July 2002). Of these cases, 1.7% were the invasive variety of MRSA, while 94.6% were less serious skin or soft tissue infections. The study points out that because of their enclosed and often crowded environments, prisons and jails can serve as amplifiers of MRSA skin disease. Briefly, the study highlights the following factors as contributing to the spread of MRSA among inmates:

- Barriers to routine inmate hygiene (such as inadequate access to soap);
- Lack of access to medical care and inadequate supplies and staff for wound care;
- Medical staff turnover; and
- Lack of recognition of MRSA (e.g. wounds may be erroneously attributed to spider bites).

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[4] Reportable diseases are those tracked and monitored by states and/or countries usually through public health departments because of their potential to threaten the general population. Alaska currently has approximately 60 reportable diseases. Tuberculosis, HIV, botulism, hantavirus, and anthrax are examples of such diseases. Dr. Funk can be reached at (907) 269-8004.

[5] Dr. Hennessey can be reached at (907) 729-3400.

[6] The sites in the study were Monroe County, New York; Baltimore County, Maryland; Davidson County, Tennessee; Ramsey County, Minnesota; the San Francisco Bay Area; the state of Connecticut; and the metropolitan areas of Atlanta, Denver, and Portland, Oregon.

[7] The CDC study on MRSA in correctional facilities in Georgia, California, and Texas is included as Attachment B.

The study offers a basic strategy to improve hygiene and infection-control practices in correctional facilities. Their suggested strategy includes.

- Skin infection screening and monitoring;
- Culturing suspect lesions;
- Improving inmate hygiene (e g. basic hygiene education, appropriate laundering, and greater availability of soap); and
- Improved access to wound care and trained health-care staff.

Dwayne Peoples, Deputy Commissioner of Alaska's Department of Corrections (DOC), relates that the DOC does not have data on the prevalence of MRSA in Alaska's correctional facilities.[8] Mr. Peoples told us that the Department is in the process of creating a centralized surveillance system to track MRSA. When it is implemented, clinics at prison sites will make weekly reports regarding occurrences of MRSA that will allow for a better understanding of the magnitude of the problem.

Brad Wilson, Business Manager of the Alaska Correctional Officers Association (ACOA), argues that tracking MRSA incidents among the inmates and staff of correctional facilities is of paramount importance.[9] According to Mr. Wilson, MRSA infection is "rampant" among prisoners and correctional staff across the state. Nina Salerno-Ashford, administrator and attorney for Corrections U.S.A., concurs that MRSA is a significant problem nationwide in correctional facilities. She adds that a lack of data makes it difficult to quantify the magnitude of MRSA, but notes that Corrections U.S.A. considers it a major concern for correctional officers.[10] We include as Attachment C an ACOA document that includes information regarding MRSA in the correctional environment as well as proposed guidelines for management of the disease [11]

I hope you find this information to be useful. Please do not hesitate to contact us if you have questions or need additional information.

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[8] Dwayne Peoples can be reached at (907) 465-4652

[9] Brad Wilson can be reached at (907) 646-2262

[10] Corrections U.S.A. is a non profit corporation representing correctional officers employed by federal, state and local governments. Currently, they represent over 80,000 correctional officers across the county Nina Salerno-Ashford can be reached at (877-885-8756).

[11] Attachment C also includes the Federal Bureau of Prisons clinical practice guidelines regarding MRSA management.

Attachment A

Center for Disease Control press release: Study establishes baseline for MRSA infection estimates, October 16, 2007

and

Invasive Methicillin-Resistant *Staphylococcus aureus* Infections in the United States, the Journal of the American Medical Association, October 17, 2007

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CDC estimates 94,000 invasive drug-resistant staph infections occurred in the U.S. in 2005

Study establishes baseline for MRSA infection estimates

Methicillin-resistant staph aureus (MRSA) caused more than 94,000 life-threatening infections and nearly 19,000 deaths in the United States in 2005, most of them associated with health care settings, according to the most thorough study of life-threatening infections caused by these bacteria, experts with the Centers for Disease Control and Prevention (CDC) report

The study in the Oct. 17 edition of the Journal of American Medical Association (JAMA) establishes the first national baseline by which to assess future trends in invasive MRSA infections. MRSA infections can range from mild skin infections to more severe infections of the bloodstream, lungs and at surgical sites.

The study found about 85 percent of all invasive MRSA infections were associated with health care settings, of which two-thirds surfaced in the community among people who were hospitalized, underwent a medical procedure or resided in a long-term care facility within the previous year. In contrast, about 15 percent of reported infections were considered to be community-associated, which means that the infection occurred in people without documented health care risk factors

The 2005 rates of invasive infection were highest among people 65 years of age or older Black people were affected at twice the rate of whites, which could be due to higher rates of chronic illness among blacks

"These numbers show that many families are being affected by these drug-resistant infections," said Denise Cardo, M.D., director of CDC's Division of Healthcare Quality Promotion. "Healthcare facilities need to make MRSA prevention a greater priority. The closer we get to 100 percent compliance with CDC recommendations, the greater the impact on patient health and safety."

Experts arrived at the new national estimate by projecting from the number of invasive MRSA cases from nine U.S. sites. The sites included the state of Connecticut; the Atlanta metropolitan area; the San Francisco Bay area; the Denver metropolitan area; the Portland, Ore., metropolitan area; Monroe County, N.Y.; Baltimore City, Md.; Davidson County, Tenn.; and Ramsey County, Minn. All the sites were part of CDC's Active Bacterial Core surveillance program, which actively tracks a number of pathogens in the United States representing a population of 38 million Americans.

In health care settings, MRSA occurs most frequently among patients who undergo invasive medical procedures or who have weakened immune systems and are being treated in hospitals and health care facilities such as nursing homes and dialysis centers.

For more information on MRSA, please visit http://www.cdc.gov/ncidod/diseases/submenus/sub_mrsa.htm. For more information on CDC's guidelines for the prevention of MRSA in health care settings, visit http://www.cdc.gov/ncidod/dhqp/ar_mrsa_prevention.html

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Content Source: Office of Enterprise Communication
Page last modified: October 16, 2007

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Invasive Methicillin-Resistant *Staphylococcus aureus* Infections in the United States

R. Monina Klevens, DDS, MPH; Melissa A. Morrison, MPH; Joelle Nadle, MPH; Susan Petit, MPH; Ken Gershman, MD, MPH; Susan Ray, MD; Lee H. Harrison, MD; Ruth Lynfield, MD; Ghinwa Dumyati, MD; John M. Townes, MD; Allen S. Craig, MD, Elizabeth R. Zell, MSTAT; Gregory E. Fosheim, MPH; Linda K. McDougal, MS; Roberta B. Carey, PhD; Scott K. Fridkin, MD for the Active Bacterial Core surveillance (ABCs) **MRSA** Investigators

JAMA. 2007;298:1763-1771.

ABSTRACT

Context As the epidemiology of infections with methicillin-resistant *Staphylococcus aureus* (**MRSA**) changes accurate information on the scope and magnitude of **MRSA** infections in the US population is needed.

Objectives To describe the incidence and distribution of **invasive MRSA** disease in 9 US communities and to estimate the burden of **invasive MRSA** infections in the United States in 2005.

Design and Setting Active, population-based surveillance for **invasive MRSA** in 9 sites participating in the Active Bacterial Core surveillance (ABCs)/Emerging Infections Program Network from July 2004 through December 2005. Reports of **MRSA** were investigated and classified as either health care–associated (either hospital-onset or community-onset) or community-associated (patients without established health care risk factors for **MRSA**).

Main Outcome Measures Incidence rates and estimated number of **invasive MRSA** infections and in-hospital deaths among patients with **MRSA** in the United States in 2005; interval estimates of incidence excluding 1 site that appeared to be an outlier with the highest incidence; molecular characterization of infecting strains.

Results There were 8987 observed cases of invasive **MRSA** reported during the surveillance period. Most **MRSA** infections were health care–associated: 5250 (58.4%) were community-onset infections, 2389 (26.6%) were hospital-onset infections; 1234 (13.7%) were community-associated infections, and 114 (1.3%) could not be classified. In 2005, the standardized incidence rate of **invasive MRSA** was 31.8 per 100 000 (interval estimate, 24.4-35.2). Incidence rates were highest among persons 65 years and older (127.7 per 100 000; interval estimate, 92.6-156.9), blacks (66.5 per 100 000; interval estimate, 43.5-63.1), and males (37.5 per 100 000; interval estimate, 26.8-39.5). There were 1598 in-hospital deaths among patients with **MRSA** infection during the surveillance period. In 2005, the standardized mortality rate was 6.3 per 100 000 (interval estimate, 3.3-7.5). Molecular testing identified strains historically associated with community-associated disease outbreaks recovered from cultures in both hospital-onset and community-onset health care–associated infections in all surveillance areas.

Conclusions **Invasive MRSA** infection affects certain populations disproportionately. It is a major public health problem primarily related to health care but no longer confined to intensive care units, acute care

hospitals, or any health care institution.

INTRODUCTION

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After being initially reported among injecting drug users in Detroit in 1981[1] and then associated with the deaths of 4 children in Minnesota and North Dakota in 1997,[2] community-associated methicillin-resistant *Staphylococcus aureus* (**MRSA**) has become the most frequent cause of skin and soft tissue infections presenting to emergency departments in the United States.[3] Although community outbreaks of **MRSA** in diverse populations, including American Indian and Alaska Natives,[4] sports teams,[5-6] prison inmates,[7] and child care attendees,[8] usually involved skin disease, **MRSA** also can cause severe, sometimes fatal **invasive** disease.[9-13]

Studies of the emergence of community-associated **MRSA** disease over the past decade determined that isolates causing community-associated and health care–associated **MRSA** infections were distinct.[10] Isolates from the community were susceptible to most non–β-lactam antimicrobial agents,[10] carried staphylococcal cassette chromosome type IV,[14] and frequently encoded the dermonecrotic cytotoxin known as Panton-Valentine leukocidin.[15] The strain most often isolated in community outbreaks was pulsed-field type USA300.[16] Other strains of community origin include USA400, USA1000, and USA1100.[17] In contrast, strains most frequently associated with **MRSA** infections in health care settings were USA100, USA200, and less often, USA500[18]; these traditionally have been multidrug-resistant and have carried staphylococcal cassette chromosome type II.[10]

In hospitalized patients, **MRSA** has been a problem since the 1960s[19]; approximately 20% of bloodstream infections in the hospital setting have been caused by *S aureus*.[20] The proportion of hospital-onset *S aureus* infections that were methicillin-resistant reached 64.4% in US intensive care units in 2003.[21] In the hospital, **MRSA** infections are associated with greater lengths of stay, higher mortality,[22] and increased costs.[23,24] Although more recently there has been increased surveillance activity for **invasive MRSA** infections in the community, surveillance for **MRSA** bloodstream infections in the United States traditionally has been limited to hospital-onset (ie, nosocomial) disease.[20-21]

As the epidemiology of **MRSA** disease changes, including both community- and health care–associated disease, accurate information on the scope and magnitude of the burden of **MRSA** disease in the US population is needed to set priorities for prevention and control. In this report we describe the incidence and distribution of **invasive MRSA** disease in 9 US communities and use these results to estimate the burden of **invasive MRSA** infections in the United States.

METHODS

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Surveillance Methodology and Definitions

The Active Bacterial Core surveillance system (ABCs) is an ongoing, population-based, active laboratory surveillance system and is a component of the Emerging Infections Program (EIP) of the US Centers for Disease Control and Prevention (CDC). From July 2004 through December 2005, 9 EIP sites conducted surveillance for **invasive MRSA** infections. A site number was assigned in descending order of population size: site 1, the state of Connecticut (estimated population, 3.5 million); site 2, the Atlanta, Georgia, metropolitan area (8 counties; estimated population, 3.5 million); site 3, the San Francisco, California, Bay Area (3 counties; estimated population, 3.2 million); site 4, the Denver, Colorado, metropolitan area (5 counties; estimated population, 2.3 million); site 5, the Portland, Oregon, metropolitan area (3 counties; estimated population, 1.5 million); site 6, Monroe County, New York (estimated population, 733 000); site 7, Baltimore City, Maryland (estimated population, 636 000); site 8,

Davidson County, Tennessee (estimated population, 575 ,00); and site 9, Ramsey County (St Paul area), Minnesota (estimated population, 49 ,00). The total population under surveillance in 2005 was an estimated 16.5 million, or approxi ' 5.6% of the US population. Surveillance sites were similar to the US population in the distribution by race sex (49.2% and 49.2%, respectively); however, surveillance sites had a lower frequency of whites (72.7% and 81.0%, respectively) and of persons 65 years and older (10.8% and 12.4%, respectively).

ABCs case finding was both active and laboratory-based. Clinical microbiology laboratories in acute care hospitals and all reference laboratories processing sterile site specimens for residents of the surveillance area were contacted regularly for case identification. In hospitals without computerized microbiology data, surveillance personnel telephoned designated microbiology laboratory contacts regularly to identify new cases and request isolate submission. Where microbiology data were computerized, electronic line listings of all **MRSA** isolated from normally sterile sites were received on a monthly basis by surveillance staff, which investigated each potential case to confirm residency status, presence of infection, demographic characteristics, and underlying illness. The burden of disease can be estimated by this surveillance method using census data and the surveillance site–specific incidence rates and age-, race-, and sex-adjusted incidence rates pooled across all surveillance sites. This infrastructure is the same as that used for estimated incidence and disease burden for bacterial meningitis[25] and **invasive** infections with *Streptococcus pneumoniae*.[26-27]

Case reporting and isolate collection were determined to be surveillance activities at the CDC; in addition, each of the 9 participating surveillance sites evaluated the protocol and either deemed it a surveillance activity (eg, that involving a reportable disease) or obtained institutional review board approval with a waiver of informed consent.

A case of **invasive MRSA** infection was defined by the isolation of **MRSA** from a normally sterile body site in a resident of the surveillance area, including residents institutionalized in long-term care facilities, prisons, etc. Normally sterile sites included blood, cerebrospinal fluid, pleural fluid, pericardial fluid, peritoneal fluid, joint/synovial fluid, bone, internal body sit (lymph node, brain, heart, liver, spleen, vitreous fluid, kidney, pancreas, or ovary), or other normally sterile sites. Cultures designated as "fluid" were investigated as potentially sterile culture sites; cultures designated as "tissue" with no specification of original source were not investigated.

Personnel in each EIP site abstracted data from medical records from hospital and clinic visits using a standard case report form. Information on the following health care risk factors for **MRSA** was collected: culture obtained more than 48 hours after admission; presence of an **invasive** device (eg, vascular catheter, gastric feeding tube) at time of admission or evaluation; and a history of **MRSA** infection or colonization, surgery, hospitalization, dialysis, or residence in a long-term care facility in the 12 months preceding the culture. Cases could have more than 1 health care risk factor. For this analysis, we used health care risk factor information to classify cases into mutually exclusive groups (those with health care–associated and community-associated infections) justified previously[28] and consistent with other studies (Table 1).[29-30] Health care–associated infections, in turn, were classified as either community-onset (cases with a health care risk factor but with a culture obtained ≤48 hours after hospital admission) and hospital-onset (cases with culture obtained >48 hours after admission, regardless of whether they also had other health care risk factors). Community-associated cases were those without documented health care risk factors.

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Table 1. Definitions Used for Epidemiologic Classification of **Invasive** Methicillin-Resistant *Staphylococcus aureus* (**MRSA**) Infections

Surveillance personnel also collected demographic (including race), clinical, and outcome (hospital death or discharge) information on each case from the initial hospitalization. Mortality was collected from the patient record and represented crude, in-hospital deaths only. Race was collected from information available in the

medical record. Cases were considered to have a diagnosis of bacteremia, pneumonia, cellulitis, osteomyelitis, endocarditis, septic shock, or other infection, if there was documentation of such a diagnosis in the medical record, regardless of the source of the isolate. Cases could have more than 1 clinical diagnosis. Bacteremias included those classified as primary, secondary, and not specified. Use of up to 4 antimicrobial agents was recorded, but all such agents reflected only initial empirical therapy and did not include dose, duration, therapeutic changes, or procedures (eg, draining, surgical therapy). Concordant empirical therapy was defined as receipt of any antimicrobial agent to which the isolate was susceptible by laboratory testing and that was documented in the medical record. Recurrent **invasive MRSA** was defined as a positive culture result obtained from the same case 30 days or more after the initial culture.

Isolate Collection and Testing

Laboratories identified by the EIP site were asked to submit isolates from **invasive MRSA** infections. Of 123 laboratories serving residents of the surveillance areas, 48 (39%) contributed isolates. All isolates were sent to the CDC for identification, selected testing, and storage. In situations in which more than 1 isolate was available from a single case, the protocol selected 1 isolate, preferably from a nonblood sterile site. Isolates were prioritized for testing as follows: within each geographic site, all nonblood isolates and the subsequent submitted blood isolate were selected; then, among blood isolates, those from cases with a diagnosis other than uncomplicated bacteremia were selected. Testing included confirmation of *S aureus* identification using catalase and Staphaurex (Remel Europe Ltd, Dartford, United Kingdom) agglutination tests and tube coagulase if necessary, as well as description of morphology on nonselective blood agar, confirmation of oxacillin resistance by the broth microdilution method,[18] and pulsed-field gel electrophoresis (PFGE) using the restriction endonuclease *Sma*I. PFGE patterns were analyzed using BioNumerics version 4.01 (Applied Maths, Austin, Texas) and grouped into pulsed-field types using Dice coefficients and 80% relatedness, as previously described.[18] PFGE testing was conducted at the CDC and at the reference centers in Colorado, Connecticut, Georgia, Minnesota, and Oregon. All PFGE patterns were entered into a single database for analysis.

Statistical Analysis

We selected cases reported from July 2004 through December 2005 to describe epidemiologic, clinical, and microbiological characteristics. We included only cases reported from January through December 2005 for the annual 2005 incidence rate calculations. Recurrent cases were excluded from incidence calculations. We used US Census Bureau bridged-race vintage postcensus population estimates for 2005, provided by the National Center for Health Statistics for surveillance area and national denominator values.

Because the surveillance sites varied in the distribution by age and race, for national estimates of burden of disease we multiplied the aggregate age-, race-, and sex-specific rates of disease in the surveillance areas by the age, race, and sex distribution of the US population for 2005. Because 1 site (site 7, Baltimore City) reported an excessively high incidence of infection, we calculated interval estimates for the age-, race-, and sex-adjusted incidence rates and estimated burden as well. This was performed by creating a lower bound by pooling data from the 3 EIP sites with lowest overall incidence (sites 4, 5, and 9) and an upper bound by pooling data from the 3 EIP sites with highest overall incidence (sites 2, 6, and 8), excluding site 7. Because data from site 7 were excluded from the interval estimates, there are occasions when the intervals do not include the overall rate. Confidence intervals are based on the properties of a sampling distribution and cannot be calculated with our data because our surveillance areas captured all cases, not a sample. We tested differences in proportions of descriptive characteristics using χ^2. Analyses were performed using SAS version 9.1.3 (SAS Institute Inc, Cary, North Carolina).

RESULTS

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Incidence of Invasive MRSA

There were 8987 observed cases of **invasive MRSA** reported from July 2004 through December 2005. Most were health care–associated, with 5250 (58.4%) community-onset infections, 2389 (26.6%) hospital-onset infections, 1234 (13.7%)

community-associated infections, and 114 (1.3%) that could not be classified.

Unadjusted incidence rates of all types of **invasive MRSA** ranged between approximately 20 to 50 per 100 000 in most ABCs sites but were noticeably higher in 1 site (site 7, Baltimore City) (Table 2). The rate of **invasive** community-associated **MRSA** was less than 3 per 100 000 in 4 sites and approximately 5 per 100 000 in 3 sites. Incidence rates were consistently higher among blacks compared with whites in the various age groups (Table 3). Adjusting for age, race, and sex, the standardized incidence rate of **invasive MRSA** for calendar year 2005 was 31.8 per 100 000 persons (Table 4) The overall interval estimate after exclusion of the outlier site (site 7) was 24.4 to 35.2 per 100 000.

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Table 2. Observed Incidence Rates of **Invasive** Methicillin-Resistant *Staphylococcus aureus* (**MRSA**) by Active Bacterial Core Surveillance Site and Epidemiologic Classification, United States, 2005[a]

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Table 3. Estimated Incidence Rates of **Invasive** Methicillin-Resistant *Staphylococcus aureus* Infections by Race, Active Bacterial Core Surveillance, United States, 2005

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Table 4. Numbers and Incidence Rates of **Invasive** Methicillin-Resistant *Staphylococcus aureus* (**MRSA**) Infections and Deaths, by Selected Demographic Characteristics and Epidemiologic Classifications, Active Bacterial Core Surveillance, United States, 2005[a]

The rate of health care–associated, community-onset infections (17.6 per 100 000; interval estimate, 14.7-18.2) was greater than either health care–associated, hospital-onset infections (8.9 per 100 000; interval estimate, 6.1-11.8) or community-associated infections (4.6 per 100 000; interval estimate, 3.6-4.4). Standardized incidence rates overall were highest among persons 65 years and older (127.7 per 100 000; interval estimate, 92.6-156.9), blacks (66.5 per 100 000; interval estimate, 43.5-63.1), and males (37.5 per 100 000; interval estimate, 26.8-39.5) (Table 4). Rates were lowest among persons aged 5 to 17 years (1.4 per 100 000; interval estimate, 0.8-1.7).

The standardized mortality rate was 6.3 per 100 000 (interval estimate, 3.3-7.5) overall, and was higher among persons 65 years and older (35.3 per 100 000; interval estimate, 18.4-44.7), blacks (10.0 per 100 000; interval estimate, 5.7-9.9), and males (7.4 per 100 000; interval estimate, 3.7-8.9) (Table 4). Among persons with **MRSA**, mortality for health care–associated, community-onset infections was higher (3.2 per 100 000; interval estimate, 1.7-3.7) than for health care–associated, hospital-onset infections (2.5 per 100 000; interval estimate, 1.2-3.1) or for community-associated infections (0.5 per 100 000; interval estimate, 0.3-0.6).

There were 5287 infections reported in the surveillance areas during 2005; after adjusting for age, race, and sex to the US population, we estimated that 94 360 (interval estimate, 72 850-104 000) patients had an **invasive MRSA** infection. There were 988 reported deaths, which we estimated were 18 650 (interval estimate, 10 030-22 070) in-hospital deaths subsequent to **invasive MRSA** infections in the United States (Table 4).

Pooled among all sites, we looked at the frequency of reports over the 18-month period from July 2004 through December 2005. The number of cases reported per month ranged from 443 in August 2004 to 541 in September 2005. Among all cases reported in the 18-month period, the percentage with community-associated infections ranged from 4.2% in April 2005 to 6.6% in July August, and October 2005. When

limiting the evaluation to only the 172 community-associated pneumonia reports, there was no apparent clustering by season (data not shown).

Established MRSA Risk Factors and Spectrum of Disease

Apart from community associated cases which, by definition, had no established health care risk factors for **MRSA**, 4105 of 5250 (78.2%) cases with health care-associated, community-onset infections and 1993 of 2389 (83.4%) cases with health care-associated, hospital-onset infections had more than 1 health care risk factor for **MRSA** documented in medical records. The most common health care risk factors among cases with community-onset infections and hospital-onset infections were a history of hospitalization (76.6% and 57.7%, respectively), history of surgery (37.0% and 37.6%), long-term care residence (38.5% and 21.9%), and **MRSA** infection or colonization (30.3% and 17.4%).

Of the 8792 cases with complete information, the clinical syndrome associated with **invasive MRSA** disease included bacteremia (75.2%), pneumonia (13.3%), cellulitis (9.7%), osteomyelitis (7.5%), endocarditis (6.3%), and septic shock (4.3%). Almost all cases (8304 [92.4%]) were hospitalized, 1598 (17.8%) of all cases died during hospitalization, and 1162 (12.9%) developed recurrent **invasive** infections. Cases with endocarditis had a high frequency of recurrent infections (108 [19.3%]). Clinical outcome was recorded for 8849 cases (98%). Crude mortality varied by **MRSA**-related diagnosis, with high rates observed among cases with septic shock (55.6%) and pneumonia (32.4%), low rates among those with cellulitis (6.1%), and moderate rates among those with bacteremia (10.2%) or endocarditis (19.3%). The proportion of cases presenting with each major clinical condition varied between epidemiologic classifications (Table 5). Compared with the distribution of syndromes among cases with community-associated infections, bacteremia was more common, and cellulitis and endocarditis were significantly less common, among each of the cases with health care–associated infections.

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Table 5. Number and Percentage of **Invasive** Methicillin-Resistant *Staphylococcus aureus* Infections by Clinical Condition and Epidemiologic Classification, Active Bacterial Core Surveillance, United States, July 2004-December 2005[a]

Empirical therapy was documented for 5730 of the 8987 cases (63 8%). Overall, 4720 cases (82.4%) received concordant empirical therapy. Differential outcomes based on discordant therapy were not evaluated, since required data such as dose, duration, therapy changes, and adjunctive therapy were not abstracted. Receipt of concordant therapy was slightly lower among cases with community-associated infections compared with those having health care–associated infections either of community onset (80.1% vs 82.9%, respectively; $P = .03$) or hospital onset (80.1% vs 86.0%, $P < .001$). Vancomycin was the antimicrobial agent most frequently used for empirical therapy (75%), followed by semisynthetic penicillins (28%) and fluoroquinolones (26%). Similar proportions of cases were prescribed monotherapy (31.3%), therapy with 2 antimicrobials (37.9%), or therapy with more than 2 antimicrobials (30.9%).

Pulsed-Field Typing

PFGE results were available for 864 of the 1201 (71.9%) isolates received from 8 of the 9 ABCs sites (isolates were not available from site 7); these results represent 11.3% of the 7648 cases reported from these 8 sites (Table 6). Of these results, 81.6% were from blood cultures, 4.7% from bone, 4.8% from synovial fluid, 1.9% from pleural fluid, 1.5% from peritoneal fluid, and the remaining 5.5% from other normally sterile sites; this culture site distribution is similar to the distribution of culture sites reported among all 8987 cases. Isolates tested were associated with all of the major clinical conditions previously described, including uncomplicated bacteremia (69.8%), pneumonia (19.3%), cellulitis (11.3%), osteomyelitis (10.4%), endocarditis (8.5%), and septic shock (5.0%).

View this table: **Table 6.** Number and Percentage of Pulsed-Field Types USA100 and USA300 of

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Methicillin-Resistant *Staphylococcus aureus* Isolates, Active Bacterial Core Surveillance Sites, United States, 2005[a]

USA300 was the strain type identified for 100 of 150 (66.6%) isolates from community-associated cases and also was found among 108 of 485 (22.2%) isolates from health care–associated, community-onset cases and among 34 of 216 (15.7%) health care–associated, hospital-onset cases (Table 7). Also, 35 of 150 (23.0%) isolates from community-associated cases were USA100. In contrast, other strains of community origin (USA400, USA1000) were rare, accounting for only 3 of 150 (2.0%) isolates from community-associated cases, perhaps reflecting that these isolates all come from normally sterile sites and not skin abscesses, where these strain types have often been reported. USA100 and USA300 were the predominant pulsed-field types in each surveillance site, with the exception of site 1 (state of Connecticut) (Table 6).

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Table 7. Pulsed-Field Gel Electrophoresis Type of Methicillin-Resistant *Staphylococcus aureus* Isolates Cultured From **Invasive** Sites, by Epidemiologic Case Classification, Active Bacterial Core Surveillance, July 2004-December 2005 (n = 864)[a]

COMMENT

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These data represent the first US nationwide estimates of the burden of **invasive MRSA** disease using population-based, active case finding. Based on 8987 observed cases of **MRSA** and 1598 in-hospital deaths among patients with **MRSA**, we estimate that 94 360 **invasive MRSA** infections occurred in the United States in 2005; these infections were associated with death in 18 650 cases. The standardized incidence rate of **invasive MRSA** for calendar year 2005 was 31.8 per 100 000 persons. The incidence of other important **invasive** pathogens in 2005, such as **invasive** infections with *S pneumoniae* or *Haemophilus influenzae*, ranged from 14.0 per 100 000 to less than 1 per 100 000, largely due to the availability and success of vaccination.[31-33]

The estimated 94 360 infections is larger than the estimate from a recent study using hospital discharge-coded data; in 2000, the CDC estimated that there were 31 440 hospitalizations for **MRSA** bacteremias (ie, septicemia) in the United States.[34] Some of the discrepancy may relate to a more inclusive definition of **invasive** disease in our study and to the limitations inherent in discharge coded data. Of the estimated 94 360 infections from this study, 75.2% were bacteremias, and 26.6% were of hospital onset; thus, our estimates would yield approximately 18 900 **MRSA**, hospital-onset bacteremias. In 2002, the CDC estimated that there were 248 678 hospital-acquired bacteremias in the United States,[35] of which approximately 20 390 (8.2%) could be expected to be **MRSA**[20]—a result consistent with our findings.

Regarding community-associated **MRSA**, noninvasive infections with **MRSA** greatly outnumber **invasive MRSA** infections. In fact, when 3 of the ABCs sites began surveillance in 2000 for all **MRSA** infections, only 7% represented **invasive** disease. However, findings described here further document that **invasive MRSA** disease does occur in persons without established health care risk factors,[28] is associated with strains of both community and health care origin,[36] and is associated with significant mortality. Molecular analysis of isolates in our study provides evidence supporting other studies[36] showing that strains of community origin do now cause some hospital-onset disease but also that, overall, most **invasive MRSA** disease is still caused by **MRSA** strains of health care origin.

Compared with rates of **invasive MRSA** infections in 2 of our sites from 2001-2002, the incidence of **invasive MRSA** has increased in 2005 from 19.3 per 100 000 to 33.0 per 100 000 in Atlanta and from

40.4 per 100 000 to 116.7 per 100 000 in Baltimore.[13] These increases were in both community- and health care-associated disease. However, in the state of Connecticut, the rate of community-onset **MRSA** bacteremias has been relatively stable at 2.5 per 100 000 in 1998[29] and 2.8 per 100 000 in 2005.

We describe striking differences in rates of **invasive MRSA** infections by race among all age groups. Connecticut documented a disparity for community-onset *S aureus* bacteremias in 1998.[29] More recently, surveillance in Atlanta reported a significantly higher rate of community-associated **MRSA** among blacks compared with whites[13]; however, little progress has been made in understanding why. It is likely that the prevalence of underlying conditions,[37] at least some of which vary by race,[38] may play a role. The incidence of **invasive** pneumococcal disease varies widely by underlying chronic illness, but racial disparities persist for all conditions evaluated.[39] **MRSA** prevalence has been linked to socioeconomic status,[40] and this might confound the association between race and incidence of **MRSA**. Future analyses should focus on understanding reasons for differences in **MRSA** incidence rates.

The geographic variability in **MRSA** rates has been documented in other studies.[3, 13] In this study we found that areas with lower incidence rates of **invasive MRSA** overall did not always have lower rates of community-associated **MRSA**. For example, site 6 (Monroe County, New York) had a relatively high rate of **invasive MRSA** overall (41.9 per 100 000) but a low rate of community-associated **MRSA** (2.7 per 100 000); site 5 (the Portland, Oregon, metro area) had a relatively low rate of **invasive MRSA** overall (19.8 per 100 000) but a high rate of community-associated **MRSA** (4.7 per 100 000). In addition to factors already mentioned such as socioeconomic status and underlying conditions, **MRSA** rates may be higher in urban areas.[29] As with differences in the incidence of **invasive MRSA** by race, geographic differences are probably multifactorial and complex. Improved understanding can help design and focus prevention messages as well as increase the timeliness of diagnosis and clinical management of **invasive** infections.

The majority of **invasive MRSA** cases occurred outside of the hospital (58%) but among persons with established risk factors for **MRSA**, such as a history of hospitalization in the past year. This observation was also made recently in a study from a single facility.[30] Patients with health care risk factors and community-onset disease likely acquired the pathogen from their health care contacts, such as those from a recent hospitalization or nursing home residence. Molecular analysis suggests that most of these infections were caused by **MRSA** strains of health care origin. If, in fact, these infections represent acquisition during transitions of care from acute care,[41] it follows that strategies to prevent and control **MRSA** among inpatients,[42-43] if properly applied, may have an impact on these infections as well as on the traditional hospital-onset infections. Since interventions for **MRSA** prevention are inconsistently implemented in US hospitals,[44] correlating the impact on either inpatient or outpatient disease will be challenging. Interventions used in the community to control outbreaks consist of improving hygiene and infection control along with enhanced surveillance, diagnosis, and appropriate treatment of infections[45-47]; however, studies of the effectiveness of community-based prevention and control interventions are lacking.

Our estimates have certain limitations. First, we may have underestimated the incidence of **invasive MRSA** disease if persons in the surveillance areas sought health care from facilities using laboratories outside the surveillance area. However, any underestimate is probably minor in light of the estimates derived from discharge data on **MRSA** hospitalizations.[34]

Second, we may have overestimated the incidence of community-associated **MRSA** if health care risk factors were not well documented in medical records. During surveillance conducted in 2000-2001, patient interviews were used to elicit undocumented health care risk factors; however, the effect on reclassification was small.[13]

Third, our surveillance sites were largely urban areas; thus, we might be overestimating the incidence of **invasive MRSA**.[29] Although our surveillance areas comprise a diverse set of regions and are likely representative of the United States, it is not known whether the incidence rates in the observed populations are actually representative of the distribution of incidence rates in other US cities. Since the methodology of population-based surveillance produces a single point estimate without confidence intervals (ie, all cases are identified), we calculated interval estimates excluding site 7 (Baltimore City) to allow the

reader to interpret a range of estimates reflecting different metropolitan areas. Regarding the high observed incidence rates reported by site 7, we conducted an evaluation to determine whether these results were valid, including a review of case-finding methods, elimination of cases to include only those with zip codes represented in the denominator, contamination in any laboratory, and other potential causes for increased rates; however, none were in error.

Fourth, our measures of deaths represented crude, in-hospital deaths, rather than attributable mortality. It is possible that **MRSA** infection did not cause or contribute to some deaths.

Fifth, the evaluation of isolates in this study was meant to describe strain diversity and to shed light on the potential crossover of strains from a community origin into the hospital setting. The isolate collection was a convenience sample. Furthermore, we only had test results from isolates of 864 (11.3%) of the cases reported; extrapolation of the molecular characterization to the US population should be avoided.

In conclusion, **invasive MRSA** disease is a major public health problem and is primarily related to health care but no longer confined to acute care. Although in 2005 the majority of **invasive** disease was related to health care, this may change.

AUTHOR INFORMATION

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Financial Disclosures: None reported.

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Funding/Support: This study was funded through the Emerging Infections Program, National Center for Preparedness, Detection, and Control of Infectious Diseases, Coordinating Center for Infectious Diseases, CDC.

Role of the Sponsor: No commercial entity had any role in the design and conduct of the study; the collection, management, analysis, and interpretation of the data; or the preparation, review, or approval of the manuscript.

Additional Contributions: We thank Elizabeth Partridge, Pam Daily, MPH, and Gretchen Rothrock, California EIP; Steve Burnite, Deborah Aragon, Nicole Comstock, Allison Daniels, and Jonathan Schwartz, Colorado EIP; Zack Fraser and Nancy L. Barrett, MS, MPH, Connecticut EIP; Wendy Baughman, MSPH, Janine Ladson, MPH, James Howgate, MPH, and Emily McMahan, RN, BSN, Georgia EIP; Janice Langford and Kathleen Shutt, Maryland EIP; Dave Doxrud and Selina Jawahir, Minnesota EIP; Nana Bennett, MD, Anita Gellert, RN, and Paul Malpiedi, New York EIP; Robert Vega, Janie Tierheimer, Karen Stefonek, Michelle Barber, and Ann Thomas, MD, Oregon EIP; Brenda Barnes, Terri McMinn, Jane Conners, and Melinda Eady, Tennessee EIP; and Sandra Bulens, MPH, Chris Van Beneden, MD, MPH, Tami Skoff, MS, Carolyn Wright, and Emily Weston, CDC, for ongoing surveillance and case follow-up; Christina Crane, CDC, for microbiological testing of the isolates; John Jernigan, MD, CDC, for guidance with the design of the surveillance project; and Jeff C. Hageman, MHS, CDC, for manuscript review and surveillance guidance. None of these individuals received any compensation from industry related to this study.

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REFERENCES

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1. Saravolatz LD, Markowitz N, Arking L, Pohlod D, Fisher E. Methicillin-resistant *Staphylococcus aureus*: epidemiologic observations during a community-acquired outbreak. *Ann Intern Med.* 1982;96(1):11-16. ISI | PUBMED

2. Centers for Disease Control and Prevention. Four pediatric deaths from community-acquired methicillin-resistant Staphylococcus aureus—Minnesota and North Dakota, 1997-1999. MMWR Morb Mortal Wkly Rep. 1999;48(32):707-710. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4832a2.htm. Accessibility verified September 25, 2007.

3. Moran GJ, Krishnadasan A, Gorwitz RJ, et al. Methicillin-resistant *S. aureus* infections among patients in the emergency department. *N Engl J Med.* 2006;355(7):666-674. FREE FULL TEXT

4. Baggett HC, Hennessy TW, Rudolph K, et al. Community-onset methicillin-resistant *Staphylococcus aureus* associated with antibiotic use and the cytotoxin Panton-Valentine leukocidin during a furunculosis outbreak in rural Alaska. *J Infect Dis.* 2004;189(9):1565-1573. FULL TEXT | ISI | PUBMED

5. Centers for Disease Control and Prevention. Methicillin-resistant *Staphylococcus aureus* infections among competitive sports participants—Colorado, Indiana, Pennsylvania, and Los Angeles County, 2000-2003. *MMWR Morb Mortal Wkly Rep.* 2003;52(33):793-795. PUBMED

6. Begier EM, Frenette K, Barrett NL, et al. A high-morbidity outbreak of methicillin-resistant *Staphylococcus aureus* among players on a college football team, facilitated by cosmetic body shaving and turf burns. *Clin Infect Dis.* 2004;39(10):1446-1453. FULL TEXT | ISI | PUBMED

7. Centers for Disease Control and Prevention. Outbreaks of community-associated methicillin-resistant *Staphylococcus aureus* skin infections—Los Angeles County, California, 2002-2003. *MMWR Morb Mortal*

Wkly Rep. 2003;52(5):88. PUBMED

8. Adcock PM, Pastor P, Medley F, Patterson JE, Murphy TV. Methicillin-resistant *Staphylococcus aureus* in two child care centers. *J Infect Dis.* 1998;178(2):577-580. ISI | PUBMED

9. Zetola N, Francis JS, Nuermberger EL, Bishai WR. Community-acquired meticillin-resistant *Staphylococcus aureus*: an emerging threat. *Lancet Infect Dis.* 2005;5(5):275-286. FULL TEXT | ISI | PUBMED

10. Naimi TS, LeDell KH, Como-Sabetti KM, et al. Comparison of community-and health care–associated methicillin-resistant *Staphylococcus aureus* infection. *JAMA.* 2003;290(22):2976-2984. **FREE** FULL TEXT

11. Kaplan SL, Hulten KG, Gonzalez BE, et al. Three-year surveillance of community-acquired *Staphylococcus aureus* infections in children. *Clin Infect Dis.* 2005;40(12):1785-1791. FULL TEXT | ISI | PUBMED

12. Francis JS, Doherty MC, Lopatin U, et al. Severe community-onset pneumonia in healthy adults caused by methicillin-resistant *Staphylococcus aureus* carrying the Panton-Valentine leukocidin genes. *Clin Infect Dis.* 2005;40(1):100-107. FULL TEXT | ISI | PUBMED

13. Fridkin SK, Hageman JC, Morrison M, et al. Methicillin-resistant *Staphylococcus aureus* disease in three communities. *N Engl J Med.* 2005;352(14):1436-1444. **FREE** FULL TEXT

14. Ma XX, Ito T, Tiensasitorn C, et al. Novel type of staphylococcal cassette chromosome mec identified in community-acquired methicillin-resistant *Staphylococcus aureus* strains. *Antimicrob Agents Chemother.* 2002;46(4):1147-1152. **FREE** FULL TEXT

15. Lina G, Piédmont Y, Godaíl-Gamot F, et al. Involvement of Panton-Valentine Leukocidin-producing *Staphylococcus aureus* in primary skin infections and pneumonia. *Clin Infect Dis.* 1999;29(5):1128-1132. FULL TEXT | ISI | PUBMED

16. Tenover FC, McDougal LK, Goering RV, et al. Characterization of a strain of community-associated methicillin-resistant *Staphylococcus aureus* widely disseminated in the United States. *J Clin Microbiol.* 2006;44(1):108-118. **FREE** FULL TEXT

17. McDougal LK, Wenming Z, Patel JB, Tenover FC. Characterization of two new community-associated oxacillin-resistant *Staphylococcus aureus* pulsed-field types consisting of U.S. isolates that carry SCCmecIV and the Panton-Valentine leukocidin gene [abstract]. Presented at: American Society for Microbiology 104th General Meeting; May 23-27, 2004; New Orleans, LA.

18. McDougal LK, Steward CD, Killgore GE, Chaitram JM, McAllister SK, Tenover FC. Pulsed-field gel electrophoresis typing of oxacillin-resistant *Staphylococcus aureus* isolates from the United States: establishing a national database. *J Clin Microbiol.* 2003;41(11):5113-5120. **FREE** FULL TEXT

19. Boyce JM. Methicillin-resistant *Staphylococcus aureus* in hospitals and long-term care facilities: microbiology, epidemiology, and preventive measures. *Infect Control Hosp Epidemiol.* 1992;13(12):725-737. ISI | PUBMED

20. Wisplinghoff H, Bischoff T, Tallent SM, Selfert H, Wenzel RP, Edmond MB. Nosocomial bloodstream infections in US hospitals: analysis of 24,179 cases from a prospective nationwide surveillance study. *Clin Infect Dis.* 2004;39(3):309-317. FULL TEXT | ISI | PUBMED

21. Klevens RM, Edwards JR, Tenover FC, McDonald LC, Horan T, Gaynes R. Changes in the epidemiology of methicillin-resistant *Staphylococcus aureus* in intensive care units in U.S. hospitals, 1992-2003. *Clin Infect Dis.* 2006;42(3):389-391. FULL TEXT | ISI | PUBMED

22. Cosgrove SE, Sakoulas G, Perencevich EN, Schwaber MJ, Karchemer AW, Carmeli Y. Comparison of mortality associated with methicillin-resistant and methicillin-susceptible *Staphylococcus aureus* bacteremia: a meta-analysis. *Clin Infect Dis.* 2003;36(1):53-59. FULL TEXT | ISI | PUBMED

23. Engemann JJ, Carmeli Y, Cosgrove SE, et al. Adverse clinical and economic outcomes attributable to methicillin resistance among patients with *Staphylococcus aureus* surgical site infection. *Clin Infect Dis.* 2003;36(5):592-598. FULL TEXT | ISI | PUBMED

24. Cosgrove SE, Qi Y, Kaye KS, Harbarth S, Karchmer AW, Carmeli Y. The impact of methicillin resistance in *Staphylococcus aureus* bacteremia on patient outcomes: mortality, length of stay, and hospital charges. *Infect Control Hosp Epidemiol.* 2005;26(2):166-174. FULL TEXT | ISI | PUBMED

25. Schuchat A, Robinson K, Wenger JD, et al. Bacterial meningitis in the United States in 1995. *N Engl J Med.* 1997;337(14):970-976. **FREE** FULL TEXT

26. Whitney CG, Farley MM, Hadler J, et al. Increasing prevalence of multidrug-resistant *Streptococcus pneumoniae* in the United States. *N Engl J Med.* 2000;343(26):1917-1924. **FREE** FULL TEXT

27. Centers for Disease Control and Prevention. Active Bacterial Core Surveillance: methodology—case definition and ascertainment. http://www.cdc.gov/ncidod/dbmd/abcs/meth-case.htm. Accessibility verified September 21, 2007.

28. Klevens RM, Morrison MA, Fridkin SK, et al. Spread of community-associated methicillin-resistant *Staphylococcus aureus* (**MRSA**) strains in healthcare settings *Emerg Infect Dis.* 2006;12(12):1991-1993. ISI | PUBMED

29. Morin CA, Hadler JL. Population-based incidence and characteristics of community-onset *Staphylococcus aureus* infections with bacteremia in 4 metropolitan Connecticut areas, 1998. *J Infect Dis.* 2001;184(8):1029-1034. FULL TEXT | ISI | PUBMED

30. Schramm GE, Johnson JA, Doherty JA, Micek ST, Kollef MH. Increasing incidence of sterile-site infections due to non-multidrug-resistant, oxacillin-resistant *Staphylococcus aureus* among hospitalized patients. *Infect Control Hosp Epidemiol.* 2007;28(1):95-97. FULL TEXT | ISI | PUBMED

31. Centers for Disease Control and Prevention. Progress toward elimination of *Haemophilus influenzae* type b **invasive** disease among infants and children, United States, 1998–2000. *MMWR Morb Mortal Wkly Rep.* 2002;51(11):234-237. PUBMED

32. Rosenstein NEPB, Stephens DS, Popovic T, Hughes JM. Meningococcal disease. *N Engl J Med.* 2001;344 (18):1378-1388. **FREE** FULL TEXT

33. Whitney CG, Farley MM, Schaffner W, et al. Effectiveness of seven-valent pneumococcal conjugate vaccine against **invasive** pneumococcal disease: a matched case-control study. *Lancet.* 2006;368 (9546):1495-1502. FULL TEXT | ISI | PUBMED

34. Kuehnert MJ, Hill HA, Kupronis BA, Tokars JI, Solomon SL, Jernigan DB. Methicillin-resistant *Staphylococcus aureus* hospitalizations, United States. *Emerg Infect Dis.* 2005;11(6):868-872. ISI | PUBMED

35. Klevens RM, Edwards JR, Richards CL, et al. Estimating healthcare-associated infections and deaths in U.S. hospitals, 2002. *Public Health Rep.* 2007;122(2):160-166. ISI | PUBMED

36. Seybold U, Kourbatova EV, Johnson JG, et al. Emergence of community-associated methicillin-resistant *Staphylococcus aureus* USA300 genotype as a major cause of health care-associated blood stream infections. *Clin Infect Dis.* 2006;42(5):647-656. FULL TEXT | ISI | PUBMED

37. Laupland KB, Church DL, Mucenski M, Sutherland LR, Davies HD. Population-based study of the epidemiology of and the risk factors for **invasive** *Staphylococcus aureus* infections. *J Infect Dis.* 2003;187 (9):1452-1459. FULL TEXT | ISI | PUBMED

38. Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *JAMA.* 2003;289(1):76-79. **FREE** FULL TEXT

39. Kyaw MH, Rose CE Jr, Fry AM, et al, Active Bacterial Core Surveillance Program of the Emerging INfections Program Network. The influence of chronic illnesses on the incidence of **invasive** pneumococcal disease in adults. *J Infect Dis.* 2005;192(3):377-386. FULL TEXT | ISI | PUBMED

40. Bagger JP, Zindrou D, Taylor KM. Postoperative infection with methicillin-resistant *Staphylococcus aureus* and socioeconomic background. *Lancet.* 2004;363(9410):706-708. FULL TEXT | ISI | PUBMED

41. Hidron AI, Kourbatova EV, Halvosa JS, et al. Risk factors for colonization with methicillin-resistant *Staphylococcus aureus* (**MRSA**) in patients admitted to an urban hospital: emergence of community-associated **MRSA** nasal carriage. *Clin Infect Dis.* 2005;41(2):159-166. FULL TEXT | ISI | PUBMED

42. Muto CA, Jernigan JA, Ostrowsky BE, et al, SHEA. SHEA guideline for preventing nosocomial transmission of multidrug-resistant strains of *Staphylococcus aureus* and *Enterococcus*. *Infect Control Hosp Epidemiol.* 2003;24(5):362-386. FULL TEXT | ISI | PUBMED

43. Siegel JD, Jackson M, Chiarello L, Healthcare Infection Control Practices Advisory Committee. Management of multidrug-resistant organisms in healthcare settings, 2006. 2006. http://www.cdc.gov/ncidod/dhqp/index.html. Accessed June 29, 2007.

44. Sunenshine RH, Liedtke LA, Fridkin SK, Strausbaugh LJ, Infectious Diseases Society of America Emerging Infections Network. Management of inpatients colonized or infected with antimicrobial-resistant bacteria in hospitals in the United States. *Infect Control Hosp Epidemiol.* 2005;26(2):138-143. FULL TEXT | ISI | PUBMED

45. Centers for Disease Control and Prevention. Methicillin-resistant *Staphylococcus aureus* infections in correctional facilities—Georgia, California, and Texas, 2001-2003. *MMWR Morb Mortal Wkly Rep.* 2003;52 (41):992-996. PUBMED

46. Zinderman CE, Conner B, Malakooti MA, LaMar JE, Armstrong A, Bohnker BK. Community-acquired methicillin-resistant *Staphylococcus aureus* among military recruits. *Emerg Infect Dis.* 2004;10(5):941-944. ISI | PUBMED

47. Wootton SH, Arnold K, Hill HA, et al. Intervention to reduce the incidence of methicillin-resistant *Staphylococcus aureus* skin infections in a correctional facility in Georgia. *Infect Control Hosp Epidemiol.* 2004;25(5):402-407. FULL TEXT | ISI | PUBMED

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JAMA 2008;299:519-519.
FULL TEXT

Protecting Your Patients, Colleagues, Family, and Yourself From Infection: First Wash
Alspach
Crit Care Nurse 2008;28:7-12.
FULL TEXT

From the Cover: Epidemic community-associated methicillin-resistant Staphylococcus aureus: Recent clonal expansion and diversification
Kennedy et al.
Proc. Natl. Acad. Sci. USA 2008;105:1327-1332.
ABSTRACT | FULL TEXT

A 39-Year-Old Man With a Skin Infection
Moellering
JAMA 2008;299:79-87.
ABSTRACT | FULL TEXT

Community acquired MRSA in Europe
Ferry and Etienne
BMJ 2007;335:947-948.
FULL TEXT

Invasive MRSA Infections
JWatch Emergency Med. 2007;2007:2-2.
FULL TEXT

The Epidemiology of MRSA
Journal Watch Dermatology 2007;2007:1-1.
FULL TEXT

MRSA in the U.S.
JWatch Infect. Diseases 2007;2007:2-2.
FULL TEXT

New Worries About Multidrug-Resistant Bacteria
JWatch General 2007;2007:2-2.
FULL TEXT

Antimicrobial Resistance: It's Not Just for Hospitals
Bancroft
JAMA 2007;298:1803-1804.
FULL TEXT

Attachment B

Methicillin-Resistant *Staphylococcus aureus* Infections in Correctional Facilities—Georgia, California, and Texas, 2001-2003, Centers for Disease Control, October 17, 2003

CDC

MMWR

Weekly

October 17, 2003 / 52(41);992-996

Methicillin-Resistant *Staphylococcus aureus* Infections in Correctional Facilities -- Georgia, California, and Texas, 2001--2003

Infections caused by methicillin-resistant *Staphylococcus aureus* (MRSA) (Figure) are common in hospitals and nursing homes. Because MRSA is resistant to all commonly prescribed beta-lactam antibiotics (e.g., penicillins and cephalosporins), these infections require treatment with alternative antimicrobial drugs. In addition, because antimicrobial drugs usually must be selected before identifying MRSA as the cause of infection, treatment presents a challenge for clinicians. MRSA has emerged recently as a more frequent cause of skin and soft tissue infections in the community, particularly in correctional facilities such as prisons, jails, and detention centers (*1*--*3*). This report summarizes recent investigations of MRSA transmission among inmates of correctional facilities in Georgia, California, and Texas. Inadequate personal hygiene, barriers to medical care, and other factors contributed to transmission. Information from these investigations has been used in the development of recently released Federal Bureau of Prisons guidance for control of MRSA (*4*), which recommends improvements in inmate hygiene, infection control, and targeted antimicrobial treatment.

Case Definition

For the investigations described in this report, a confirmed case of MRSA infection was defined as illness, compatible with staphylococcal disease, in an inmate with laboratory evidence of MRSA from culture of tissue or blood. A possible case of MRSA was defined as an illness, compatible with staphylococcal infection, in an inmate who had an epidemiologic link to a laboratory-confirmed case but did not have cultures performed. A case of MRSA infection was defined as invasive if MRSA was isolated from cultures of a normally sterile site such as blood or cerebrospinal fluid.

Georgia

Since 2001, the Georgia Division of Public Health has assisted the Georgia Department of Corrections (GDC) and local health departments with three investigations of MRSA skin infection outbreaks in three different types of correctional facilities. These investigations are described below.

Investigation 1. During June--September 2001, a total of 11 cases of MRSA skin infections were identified in an all-male, 200-bed, minimum-security state detention center with an average incarceration duration of 90 days. Of the 11 inmates, five had repeated MRSA skin infection occurring after the initial lesion (i.e., recurrent disease). A case-control study identified prolonged (>36 days) incarceration and outdoor work duty as risk factors for MRSA infection. Other possible risk factors included inadequate wound care by medical staff and limited access to soap for hand washing and general bathing (soap was locked in inmate cells away from sinks and showers). In response to this outbreak, the detention center implemented facility-wide screening for skin disease, standardized antimicrobial treatment recommendations, inmate education, and introduction of alcohol-based hand rubs. During December 2001--May 2002, no MRSA cases occurred; however, during June--November 2002, a total of 14 cases were reported. Staff reviewed previous recommendations for hygiene education with inmates and reinforced proper wound care and antimicrobial use. Chlorhexidine-containing soap was provided daily for 3 days among the entire inmate population. During December 2002--April 2003, five cases of MRSA occurred.

Investigation 2. During April--July 2002, a total of 11 cases of MRSA were reported from a 1,500-bed, maximum-security state prison with an average incarceration duration of 591 days. Infections ranged from small furuncles to deeper abscesses; no deaths or bacteremias occurred, and no inmates were hospitalized. A case-control study identified risk factors, including previous antimicrobial use, self-draining of boils, skin laceration (intentional or accidental), washing clothes by hand, sharing soap, and recent arrival at the prison (since 2001). On the basis of these findings, the prison implemented appropriate laundering, improved access to wound care, increased availability and quantity of soap, and began inmate hygiene education. Monitoring of MRSA infections from the beginning of the outbreak in April 2002 until February 2003 identified 73 inmates with infection, 10 of whom had recurrent disease.

During July--August 2002, a total of 23 cases of MRSA occurred in 19 inmates. Interventions were implemented during late July--August; however, six cases of MRSA occurred among inmates during September--October. In response, in February 2003, the prison housed a cohort of MRSA-infected inmates separately and provided a 5-day supply of chlorhexidine-containing soap for personal hygiene. Despite these measures, during March--May 2003, an additional 29 cases of MRSA were reported. GDC and

prison staff are working to improve implementation of recommended interventions for preventing additional cases of MRSA among inmates.

Investigation 3. During June--October 2002, a 2,800-bed county jail with an average incarceration duration of 25 days identified 13 cases of skin lesions, initially thought to be spider bites, from which MRSA was isolated. Three inmates were hospitalized for wound care. A retrospective chart review identified 16 cases and 29 possible cases of MRSA skin infections that had occurred during this period. Infections included folliculitis, furunculosis, and abscess. In December, the jail implemented screening for active skin lesions among the inmates, standardized treatment protocols including treatment with non--beta-lactam antibiotics for suspected *S. aureus* infections, hygiene education for inmates, and changes in laundry practices. Through increased use of bacterial cultures to evaluate skin infections, 59 additional MRSA cases were identified during February--April 2003. A review of medical records of 50 patients who received antimicrobials identified 13 (26%) instances in which beta-lactam antimicrobials were used inappropriately for nine (18%) inmates treated before culture results and for four (8%) inmates treated after results indicated culture-confirmed MRSA.

Los Angeles County, California

The Los Angeles (LA) County jail system, the largest in the country, houses an estimated 20,000 inmates daily and has an average duration of incarceration of 44 days. After an increase in reports of spider bites, the jail developed a protocol in September 2001 that included culture of any lesions suspected to be spider bites. The LA County Department of Health Services (LACDHS) was notified after MRSA was found as the cause of many "spider bite" lesions (*2*). In 2002, a total of 921 MRSA skin infections were identified; 726 (79%) inmates had data available for review. The median time from incarceration to MRSA culture was 45 days (range: 1--1,160 days); 65 (9%) MRSA cases were identified within 5 days after incarceration. During January--June 2003, a total of 776 inmates with MRSA infections were identified (14% identified within 5 days after incarceration), yielding 1,697 cases reported since the jail began surveillance for skin lesions. Investigators observed inadequate infection-control measures in the clinic area; enhanced administrative controls were necessary to ensure frequent showering and appropriate personal hygiene for inmates. LACDHS recommended improvements for skin lesion surveillance, standardized treatment protocols including empiric treatment with non--beta-lactam antimicrobials for all wound infections, hygiene education for inmates, environmental cleaning, and increased frequency of laundry changes. Improvements in antimicrobial treatment of MRSA infections have occurred; however, other recommendations have yet to be implemented fully.

Texas

The Texas Department of Criminal Justice (TDCJ) operates 105 facilities housing 145,000 inmates. In 1996, TDCJ implemented a comprehensive set of treatment and prevention guidelines for MRSA skin infections that included six components: 1) surveillance, 2) hygiene education for inmates, 3) access to proper wound care, 4) standardized antimicrobial therapy based on drug susceptibility data (including directly observed therapy), 5) early treatment of skin disease, and 6) eradication of MRSA from asymptomatic carriers who have recurrent MRSA infections. Since 1998, TDCJ has required culturing of all draining skin lesions and reporting of results to the TDCJ Office of Preventive Medicine. The proportion of *S. aureus* infections that were methicillin-resistant increased from 24% (864 of 3,520) in 1998 to 66% (5,684 of 8,633) in 2002. In December 2000, a case-control study (16 cases and 32 controls) was performed for all cases of MRSA identified during November 2000 at the correctional system's largest intake facility. The study identified previous skin infections and recent close contact with an MRSA-infected inmate as risk factors for infection. Of 10,942 cases of MRSA reported from the beginning of surveillance during January 1996--July 2002, a total of 189 (1.7%) were invasive. The remainder were either unknown site (397 [3.6%]) or skin and soft tissue infections (10,356 [94.6%]). During 1999--2001, three deaths were attributed to MRSA infections. Skin infection screening at the time of incarceration was added to the guidelines in 2003. Implementation of guidelines and a continued multidisciplinary approach to MRSA infections has not led to substantial decreases in the incidence of MRSA. Additional interventions and their effects on infection and carriage are being evaluated, and barriers to efficient implementation of the guidelines are being investigated.

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Editorial Note:

The investigations described in this report identified four factors that contributed to spread of MRSA among inmates. First, investigators identified barriers to routine inmate hygiene. Access to soap often was limited or was restricted for security reasons, and new alcohol-based hand rubs were difficult to introduce because of misuse of these products. Mental health and behavior problems among inmates might have contributed to poor adherence and hindered efforts to improve hygiene. Inmates' clothing was washed by hand or in bulk loads, and potentially contaminated laundry

might not have undergone sufficiently high water temperatures or drying to eliminate bacteria. Second, proper access to medical care was hindered by co-payments required for acute care visits and by inadequate supplies and staff for wound care. Third, frequent medical staff turnover was a challenge to providing education on proper infection-control procedures. Finally, MRSA might have been an unrecognized cause of skin infections among inmates; wounds often were attributed to spider bites, and cultures might have been collected infrequently even in cases in which antimicrobial treatment failed.

The emergence of MRSA as a cause of inmate skin and soft tissue infections presents a challenge to correctional facilities, health-care providers, and public health agencies. The potential public health impact of MRSA disease transmission in correctional facilities is substantial; during 2002, approximately 2 million prisoners in the United States were incarcerated at any given time, and one in every 142 U.S. residents was in prison or jail (*5*). Barriers to control of communicable diseases such as viral hepatitis and tuberculosis in correctional facilities are well known (*3,6--8*). Because of these barriers, prisons and jails can serve as amplifiers of MRSA skin disease. In areas where community-associated MRSA appears to be increasing (e.g., LA County), correctional facilities with shorter durations of incarceration might represent settings in which MRSA is imported from the community and exported back to the community via released inmates.

A strategy to improve hygiene and infection-control practices in correctional facilities will likely be the most effective approach for long-term success. Such a strategy should include 1) skin infection screening and monitoring (e.g., maintaining a log of skin infections and visual skin screening on intake), 2) culturing suspect lesions and providing targeted antimicrobial therapy, 3) efforts to improve inmate hygiene (e.g., education about appropriate hand and body hygiene, appropriate laundering techniques, measures to limit use of shared items, and greater availability of soap), and 4) improved access to wound care and trained health-care staff. Adapting traditional hospital-based approaches to preventing MRSA transmission (e.g., placing infected persons in a separate area or eradicating nasal colonization) might not be feasible in most correctional facilities.

Some state public health agencies have developed their own approaches for addressing MRSA in correctional settings. In July 2003, the Federal Bureau of Prisons issued guidelines to prevent and control MRSA in correctional facilities (*4*). Facilities detecting a substantial number of MRSA infections should implement improved hygiene, infection-control, and treatment practices. Correctional facilities experiencing outbreaks of MRSA should seek assistance from their local and state health departments. Preventing MRSA disease in inmates might be an important measure for preventing MRSA in the community outside the correctional facility. Additional

information about MRSA is available at http://www.cdc.gov/ncidod/hip/aresist/mrsa.htm

References

1. CDC. Methicillin-resistant *Staphylococcus aureus* skin or soft tissue infections in a state prison---Mississippi, 2000. MMWR 2001;50:919--22.
2. CDC. Outbreaks of community-associated methicillin-resistant *Staphylococcus aureus* skin infections---Los Angeles County, California, 2002--2003. MMWR 2003;52:88.
3. CDC. Methicillin-resistant *Staphylococcus aureus* infections among competitive sports participants---Colorado, Indiana, Pennsylvania, and Los Angeles County, 2000--2003. MMWR 2003;52:793--5.
4. Federal Bureau of Prisons. Clinical practice guidelines for the management of methicillin-resistant *Staphylococcus aureus* (MRSA) infections (July 2003). Available at http://www.bop.gov/hsdpg/hsdcpgstaph.pdf.
5. Harrison PM, Karberg JC. Bureau of Justice statistics bulletin---prison and jail inmates at midyear 2002. Available at http://www.ojp.usdoj.gov/bjs/prisons.htm.
6. Zack B, Flanigan T, Decarlo P. What is the role of prisons in HIV, hepatitis, STD, and TB prevention? Available at http://www.caps.ucsf.edu/inmaterev.html.
7. Hammett TM, Harmon MP, Rhodes W. The burden of infectious disease among inmates of and releases from US correctional facilities, 1997. Am J Public Health 2002;92:1789--94.
8. Wolfe MI, Xu F, Patel P, et al. An outbreak of syphilis in Alabama prisons: correctional health policy and communicable disease control. Am J Public Health 2001;91:1220--5.

Figure

FIGURE. Scanning electron micrograph of *Staphylococcus aureus*

Photo/CDC

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This page last reviewed 10/16/2003

Attachment C

Alaska Correctional Officers Association, Guidelines for Officers in Preventing Work Place Injury from MRSA, December 12, 2007

and

Management of Methicillin-Resistant *Staphylococcus aureus* Infections, Federal Bureau of Prisons, August, 2005

Alaska Correctional Officers Association

Guidelines for Officers in Preventing Work Place Injury from

Methocillin Resistant Staphylococcus Aureus (MRSA)

ALASKA CORRECTIONAL OFFICERS ASSOCIATION

"Walking Alaska's Toughest Beat"

December 12, 2007

Correctional Officers,

Methicillin-Resistant Staphylococcus aureus (MRSA) is a dangerous infection. Many cases of MRSA have been found in our institutions and we suspect many others have gone unreported and undiagnosed. Several of your fellow Officers have been painfully incapacitated by this disease. ACOA put this packet together to help educate and inform you using the most recent information available. Please protect yourself and those you love from this infectious disease.

Also enclosed is a copy of a draft Policy and Procedure we are sending to the Department of Corrections. Hopefully, the Department will react by adopting this model Policy and Procedure and will initiate a proactive program to educate inmates and staff on the prevention and control of MRSA. In the meantime, ACOA feels compelled to "start the ball rolling". We must take care of ourselves.

On behalf of ACOA,

Daniel J. Colang

Sergeant Daniel Colang
President

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What is MRSA?

MRSA - Methicillin-Resistant Staphylococcus Aureus

Staphylococcus Aureus (known as "*Staph*") is a common bacteria which may cause skin infections that look like pimples or boils. Skin infections caused by Staph may be red, swollen, painful, or have pus or other drainage Most Staph infections are minor and respond to normal antibiotic treatments and/or drainage. Some strains of Staph bacteria, known as **Methicillin-Resistant Staphylococcus Aureus** or **MRSA**, have become resistant to standard antibiotic treatment (including methicillin and penicillin), making MRSA much harder to treat. Staph and MRSA Staph also may lead to more serious infections, such as infections of the bloodstream, surgical sites, or pneumonia.

Overview of MRSA Infection

Infection with MRSA has long been associated with exposure to a health care environment, particularly the inpatient hospital setting; known as **"hospital-acquired MRSA"** (**HA-MRSA**). MRSA infections affecting persons who have not been recently (within the past year) hospitalized or had a medical procedure (such as dialysis, surgery, and catheters) are known as **"community-acquired MRSA"** (**CA-MRSA**) infections. MRSA strains have evolved to affect previously healthy persons without direct or indirect contact with health care facilities. These community-acquired MRSA infections have particularly affected athletes in close-contact sports, military recruits, men who have sex with men, and inmate populations which is the focus of this report. Persons with complicating medical conditions such as diabetes, HIV infection, chronic skin conditions, indwelling catheters, post-surgical wounds, and bedsores are at increased risk of MRSA infections; however, *even otherwise healthy individuals can develop very serious MRSA infections.* Invasive MRSA infections, where the organism invades the bloodstream, are very dangerous and require intravenous antibiotics.

MRSA in Correctional Facilities

Correctional Officers and inmates are now at risk of acquiring MRSA infections not only during hospitalizations, but also within the jail setting, despite the absence of traditional risk factors for MRSA infection, such as a history of recent hospitalization, prior antibiotic usage, injection drug use, or long-term inpatient care. Correctional system CA-MRSA infections have been associated with illicit, unsanitary tattoo practices and poor inmate hygiene, inmates sharing towels, linens, razors, soap or other personal items contaminated by wound drainage, as well as inmates lancing their own boils or other inmates' boils with fingernails or tweezers.

Transmission of Staph/MRSA

Anyone can get a Staph/MRSA infection. People are more likely to get a Staph infection if they have:

- **Skin-to-skin contact with someone who has a Staph infection**
- **Contact with items and surfaces that have Staph on them**
- **Openings in their skin such as cuts or scrapes**
- **Crowded living conditions**
- **Poor hygiene**

STAPH/MRSA SKIN

Correctional Officers or inmates with MRSA skin infections may have or develop an infected boil, an **insect bite, a spider bite, or a sore or lesion** that may occur [illegible] an obvious source. Staph bacteria, including MRSA, can cause skin infections that [illegible] painful, or have pus or other drainage. Many MRSA infections cause minor [illegible] without pain and ***infected inmates may not seek medical attention***. Symptoms can [illegible].

In 2005, more than 18 [illegible] attributed to MRSA according to the Centers for Disease [illegible]

MRSA can begin like this...

... and develop into severe cases that may become life threatening.

PREVENTION OF MRSA

(CORRECTIONAL ENVIRONMENT)

- ***Routinely wash your hands during your entire shift.***
- ***Always wear gloves during pat-down searches, strip searches and area searches.***
- ***When conducting pat down or strip searches, change gloves between each prisoner.***
- ***Use appropriate personal protective equipment when you expect contact with any blood or other body fluids, including saliva. (Gloves, booties, gowns, face and eye protection.)***
- ***Always wear gloves when handling soiled linen or clothes. Sheets, towels, prison uniforms, and under clothing should be laundered with hot water and detergent. Dry on the hottest setting or use a disinfectant detergent.***
- ***Regularly clean all hard surfaces and high traffic areas like sinks, showers and toilets.***
- ***Disinfect fitness equipment after each use.***
- ***Disinfect handcuffs, leg irons, or other restraints after each use.***
- ***Never share any personal items. Do not allow prisoners to share personal items, such as razors or towels.***
- ***All bandages should be handled as medical waste and listed as biohazard.***
- ***Remove your uniform and shower as soon as possible after each shift.***
- ***Carry with you and use hand sanitizer regularly.***
- ***Keep your fingernails cut short. This will minimize bacteria growing under nails.***
- ***Launder your uniforms daily.***
- ***See your doctor immediately if you experience any swelling; pain; redness or red streaks radiating from the wound site; fever; or a general ill feeling.***
- ***Report all injuries, including small cuts, incurred at work to your supervisor on the appropriate forms.***

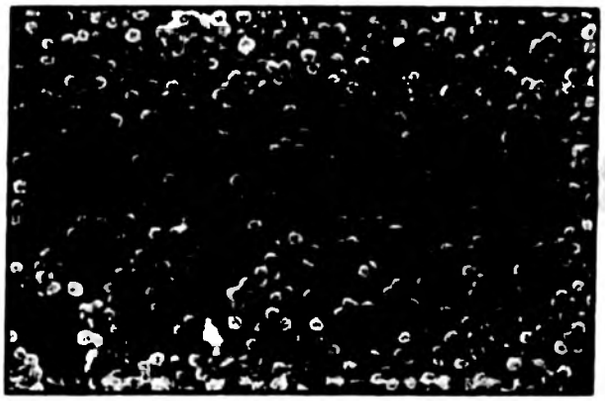
MANAGEMENT OF MRSA

(CORRECTIONAL ENVIRONMENT)

- ***Upon admittance to a Correctional Center all remands should be searched and examined for skin eruptions, such as lesions, pervasive acne, eczema, seborrhea, or insect bites.*** [14] [15] [16]
- ***Offenders with abscesses or other draining skin lesions should be referred to a mid-level practitioner or a doctor immediately.*** [17] [18]
- ***Incision and drainage should be performed <u>before</u> antibiotics are administered.*** [19] [20]
- ***Prisoners diagnosed with MRSA with wounds larger than one (1) cm should be isolated. (Administrative or Medical Segregation or housed with like offenders.)*** [21] [22]
- ***Outbreaks should be reported immediately to the Institutional and Departmental Health Care Officers.*** [23]
- ***Areas should be sanitized and disinfected after an outbreak or cluster has been identified.*** [24] [25]
- ***All potential opportunities for prisoners to have close physical contact or share communal items should be carefully scrutinized within each facility.*** [25] [27] [28]
- ***All cases should be reported to the state epidemiology lab.*** [29] [30]
- ***All cases of possible MRSA cases should be cultured.*** [31] [32] [33] [34]
- ***Bacterial cultures should be kept for thirty (30) days.*** [35]
- ***All inmates with suspected or confirmed MRSA infections should be systematically tracked in order to assess case clusters and help identify common source transmission.*** [36]
- ***Personal protection equipment should be provided to all staff.***
- ***Contact precautions for all KNOWN cases of MRSA (see policies and procedures).*** [37] [38] [39] [40]
- ***Linen should be exchanged every other day.*** [41]
- ***Laundry should be washed in a bleach solution for twenty minutes at 160° Fahrenheit.*** [42]
- ***Airborne and droplet precautions should be used when handling soiled linen and clothing to prevent the spread of the organism.*** [43] [44]
- ***Universal precautions should be used when conducting any barbering or hair dressing.*** [45]

STATISTICS AND FACTS ABOUT MRSA

- **MRSA is a bacteria commonly found on the skin, in the nose, in urine, and blood.**
- **MRSA is colonized on about 30% of the population (meaning that it lives on the skin without causing infection).** [1] [2]
- **2 million Americans contract MRSA each year.** [3]
- **318 out of 100,000 Americans are diagnosed each year with MRSA.** [4]
- **There were 18,650 deaths from MRSA and there were only 12,500 deaths from HIV/AIDS in 2005.** [5]
- **There are two types of MRSA - hospital acquired MRSA (HA-MRSA) and community acquired MRSA (CA-MRSA). They are treated differently and HA-MRSA is harder to treat.** [6] [7]
- **Correctional Officers are exposed to both types of MRSA.** [8]
- **MRSA can live for 24 hours on any non-porous surface.** [9]
- **MRSA can live in cotton for up to 3 months.** [10]
- **Symptoms appear in 1 – 10 days.** [11]
- **Common infections of the skin such as impetigo, abscesses, and lesions are generally uncomplicated and resolved with topical antibiotics. MRSA is much more difficult to treat.** [12]
- **More serious infections, where the organism invades the bloodstream, are very dangerous and require intravenous antibiotics.** [13]



Electron micrograph of MRSA

ALASKA CORRECTIONAL OFFICERS ASSOCIATION

PROPOSED POLICY AND PROCEDURES ON MRSA MANAGEMENT

Alaska Correctional Officers Association Proposed Policy for Managing MRSA Infections	Effective date	NUMBER:
	Replaces:	
	Formulated:	
***STAPH AUREUS* & METHICILLIN-RESISTANT *STAPH AUREUS* (MRSA)**		

POLICY

To provide guidelines for preventing the transmission of ***Staphylococcus aureus*** skin and soft tissue infection, and procedures for the clinical management and housing of offenders with ***Staphylococcus aureus*** infections, both methicillin sensitive (MSSA) and resistant strains (MRSA).

DISCUSSION

When following this policy, the clinician should keep three goals in mind: 1) proper treatment of the offender with MRSA or MSSA infection, 2) prevention of the emergence of drug resistant staphylococci, and 3) prevention of the spread of staphylococci. At times, more aggressive treatment than is indicated for the first goal will be necessary for attaining the other two goals.

DEFINITION

Staphylococcus aureus has remained a major human pathogen that colonizes and infects both hospitalized offenders with decreased host defenses and healthy immunologically competent offenders within the correctional facilities.

Humans can become intermittently colonized by ***Staphylococcus aureus*** by harboring the organism in their nasopharynx or on their skin and clothing. From these sites, ***Staphylococcus aureus*** can contaminate any site on skin or mucous membranes or other individuals by interpersonal transfer by direct contact. ***Staphylococcus aureus*** may adhere to skin and mucous membrane. If the integrity of the latter (i.e. skin or mucous membranes) are breached due to trauma, underlying dermatologic disorders, etc.; ***Staphylococcus aureus*** may gain access to the underlying tissue creating its characteristic local abscess lesion(s).

Methicillin-resistant Staphylococcus aureus (MRSA) is historically a nosocomial (hospital-acquired) pathogen, although there are recent reports of MRSA acquired in the community. MRSA in Department of Corrections (DOC) resembles community-acquired more closely than hospital acquired MRSA, particularly in that it retains susceptibility to many other antibiotics. Individuals **colonized** with ***Staphylococcus aureus*** have no signs of active disease but can transmit ***Staphylococcus aureus*** to others.

Alaska Correctional Officers Association Proposed Policy for Managing MRSA Infections	Effective date	NUMBER:
	Replaces:	
	Formulated:	
***STAPH AUREUS* & METHICILLIN-RESISTANT *STAPH AUREUS* (MRSA)**		

PROCEDURES:

I. OFFENDERS SHALL BE SEEN WITHOUT CO-PAY IF THEY ARE PRESENTING WITH A DRAINING SKIN LESION OR BOIL.

II. OFFENDERS PRESENTING WITH SKIN ERUPTIONS (dry skin, bites, eczema, seborrhea, etc)

A. These offenders are at increased risk for staphylococcal infections because the integrity of their skin is compromised by the underlying condition.

B. Offenders should be **identified promptly** and referred to the facility physician or mid-level practitioner (i.e. nurse practitioner or physician assistant) as soon as possible for aggressive management.

C. Offender **education** must be provided to minimize scratching of lesions and to alert offenders to seek medical attention as soon as abscesses or furuncles (boils) are detected.

D. Physicians/mid-level practitioners should **manage** skin eruptions **aggressively** and should be alert to the presence of early abscesses.

E. Individuals who fail to respond to management at the DOC facility may be referred to a **Dermatology Clinic**.

III. OFFENDERS PRESENTING WITH ABSCESSES OR OTHER DRAINING SKIN LESIONS:

A. Any offender with a draining skin lesion or abscess must be identified and referred to the facility physician/mid-level practitioner as soon as possible.

B. If uncertain whether to incise and drain (I&D), the physician/mid-level practitioner should **aspirate** any questionable abscess or draining skin lesion, and perform I&D if pus is present and lesion is too large to manage with moist heat. If I&D is performed, administration of prophylactic antibiotics one hour before the procedure is recommended. (See Section V., "Treatment.")

C. A **culture and sensitivity** (C&S) must be obtained whenever pus or drainage is obtained from a skin lesion or abscess.

IV. OFFENDERS PRESENTING WITH OTHER SKIN INFECTIONS USUALLY CAUSED BY OTHER ORGANISMS BUT IN WHICH *STAPHYLOCOCCUS AUREUS* MUST BE CONSIDERED A POSSIBLE CAUSE (e.g., cellulitis or impetigo)

A. Consider the possibility of staphylococcal infection when choosing an antibiotic. Generally, use of an antibiotic expected to cover both streptococci and staphylococci is appropriate. TMP/SMX is not recommended for streptococcal infections.

V. Treatment

A. For suspected MSSA or MRSA when treatment with antibiotics is planned

1. Based on culture surveillance, most MRSA isolated in DOC will be susceptible to TMP/SMX (e.g., Bactrim-DS®). If the offender is unable to take TMP/SMX, or there is a treatment failure on this drug, consider a combination of doxycycline and rifampin, or consulting an ID specialist for recommendations. Directly Observed Therapy is essential for rifampin containing regimens because of the risk for developing resistance if the drugs are not taken appropriately.

2. Resistance to clindamycin is increasingly common in DOC, so this drug is no longer recommended as a single agent for empiric therapy. The risk of developing resistance to clindamycin is greater if the organism is resistant to erythromycin. Clindamycin should only be used when necessary and when susceptibility is demonstrated by culture and sensitivity. If the organism is resistant to erythromycin, consider asking the lab to perform a "D test" for inducible clindamycin resistance before using this drug as a single agent.

3. **If prophylactic antibiotics are used before I&D**, the offender should be given one dose of TMP/SMX (e.g., Bactrim-DS®) and one dose of rifampin 600 mg p.o. or clindamycin 300 mg orally, if (s)he has no known allergies to these drugs. Please note the use of rifampin may cause body fluids to turn orange. Offenders should refrain from wearing contact lenses while on rifampin therapy. Also note that rifampin activates the cytochrome P-450 system, so the possibility of interactions with other medications should be considered.

4. Rifampin should not be used as a single agent for the treatment of staphylococcal infections because resistance develops quickly when it is used as monotherapy.

5. For treatment when antibiotic therapy is indicated, TMP/SMX (eg., Bactrim-DS, one BID) is recommended for initial therapy pending receipt of C&S results, usually within two-three days. Consider treating initially with wound care, heat and drainage rather than initiating empiric antibiotic therapy pending culture results, if clinically indicated. Continue treatment with an appropriate antibiotic based on drug susceptibility results.

6. Because of the prevalence of resistance to these drugs, treatment of suspected S. aureus infections with a cephalosporin or erythromycin is not recommended.

B. In offenders with 1) MRSA, 2) serious MSSA infection, or 3) with diabetes or HIV infection and either MRSA or MSSA infection, all anti-**Staphylococcal** antibiotics must be administered under a program of **Directly Observed Therapy**, as in the case of active TB cases. An acceptable alternative for these offenders is to dispense the medications at the pill line with daily or every other day compliance monitoring. If an offender receiving his medication in the pill line misses >10% of the expected total number of doses of antibiotic they must be placed on Directly Observed Therapy.

C. Anti-***Staphylococcal*** antibiotics may be **KOP** (Kept On Person) only in the case of minor MSSA infections or for non-draining, uncultured skin infections being presumptively treated for MSSA, in offenders who do not have diabetes or HIV infection.

D. **Follow-up antibiotic therapy** should be guided by the sensitivity report and the clinical situation. Duration of therapy is based on clinical judgment, but generally should not be less than 7 days, and should extend several days past clinical resolution, once the decision to start antibiotics has been made.

VI. MANAGEMENT OF OFFENDERS WITH RECURRENT *STAPHYLOCOCCUS* SKIN AND SOFT TISSUE INFECTIONS.

A. An offender shall be considered to have recurrent ***Staphylococcus*** skin and soft tissue infection when they have > 3 infections in a six month period. These 3 or more infections should be based on both clinically diagnosed and culture proven cases, since some infections, such as cellulitis, may not have positive cultures.

B. The acute infection should be diagnosed and treated as outlined in section IV.

C. Make an evaluation of and treat any dermatologic diseases.

1. Diagnose and treat any underlying skin disease.
2. Refer to dermatology clinic as indicated.

D. Decolonization.

1. Culture of the external nares to document colonization. (The laboratory request **must** state that the specimen is to be cultured for MRSA.) Although other body sites may be colonized, about 95% of persons with colonization of other body sites will also have nasal colonization.
2. Have offender shower with chlorhexidine containing soap (i.e. Hibiclens) for five days. Note: obtain non-formulary approval for chlorhexidine soap.
3. Apply mupirocin 2% ointment to external nares twice a day for five days (obtain non-formulary approval). Rifampin may act in concert with topical antimicrobial agents for **decolonization** of the carrier state. Most offenders being decolonized should also receive rifampin at 600 mg PO q day for 5 days under a program of **directly observed therapy.**
4. Two weeks after decolonization, repeat the nasal culture to verify that decolonization was successful. If the nasal culture is still positive after decolonization, the process may be repeated once. If decolonization fails twice, it is unlikely to be successful with additional treatments.

E. Other factors to consider in the management of offenders with recurrent ***Staphylococcus*** skin and soft tissue infections.

1. Evaluation of personal hygiene.

   a. Offenders should be evaluated for adequacy of showering and bathing; offenders should generally have a **daily** bath or shower with soap and water.
   b. During therapy all clothing including socks, underwear, towels, bath cloths and items including bedding should be replaced with clean items daily. Contact security for authorization to obtain clean linen for daily bedding change.
   c. Obese offenders with skin folds need to keep the skin in these folds dry to prevent maceration of the skin. This may require use of powder applied after bathing.

F. Evaluation of offenders for underlying systemic disease/condition.

1. ***Staphylococcus*** skin and soft tissue infections are associated with underlying diseases including diabetes mellitus, obesity, HIV infection, and other diseases and/or drugs causing immunosuppression.

2. Offenders with recurrent infection should be evaluated for underlying predisposing diseases and conditions as indicated.

   a. History and physical exam.
   b. Urine glucose, fasting blood sugar.
   c. HIV test.
   d. Referral to specialty clinics as indicated.

3. Control underlying disease.

   a. Obtain good control of blood glucose for diabetics.
   b. Encourage weight reduction for obese offenders.
   c. Optimize therapy for offenders with HIV infection/AIDS.
   d Use alternate drugs in place of glucocorticoids where possible.

4. A one-on-one education counseling session should be conducted with the offender to minimize the dissemination (i.e. spread) of microorganism by colonized offenders. (See Attachment B - ***Staphylococcus aureus*** Fact Sheet)

VII. HOUSING AND ISOLATION

A. Offenders with an active MRSA infection must be managed under contact isolation precautions when they are treated in a medical setting such as an infirmary or dialysis unit.

B. Offenders with MRSA infections who are outpatient offenders may be housed in the general population if their lesion is small (less than 1 cm), easily covered, and the offender understands the treatment regimen and is compliant (eg, infected ingrown toenail).

C. **Special Housing** (single cell or housed with another offender(s) with like condition and **sensitivity**) shall be instituted under the following circumstances:

1. Any offender **unwilling/unable to understand follow-up** management, or who is non-compliant with antibiotic treatment or therapy;
2. Any offender with a **large abscess** or draining skin lesion that cannot be adequately covered and kept dry and clean (eg, scalp, decubitus, etc.);
3. Any offender who is **immunocompromised** or who has cellulitis, lymphangitis, or sepsis as a complication. (Offender should be **hospitalized** or placed in an infirmary setting as his or her level of care warrants.)

D. Offenders on special housing should be assigned to **infection showers** rather than showering with the general population. This is not necessarily a separate shower facility. Infection showers are differentiated from standard showers in that:

1. Offenders on contact isolation do not shower at the same time as the general population.
2. The shower and dressing areas are cleaned with a detergent and disinfected with an antistaphylococcal disinfectant (e.g., bleach or Double-D) according to DOC policy after the infection shower period is over, before the general population uses the facility again.
3. Offenders are issued two towels and are instructed to use one to sit upon as a barrier when using the bench in the dressing area.

E. Special housing may be **discontinued** when:

1. The lesion is clinically resolved; or
2. There is no longer cellulitis, lymphangitis, or drainage from a clinically open lesion (eg, decubitus) and the offender has completed a minimum of 3 days (72 hours) of the course of antibiotics.

F. Upon completion of special housing the offender's cell should be thoroughly cleaned and disinfected.

VIII. HOUSING AND JOB ASSIGNMENT CONSIDERATIONS FOR COLONIZED OFFENDERS AND THOSE WITH RECURRENT *STAPHYLOCOCCUS* SKIN AND SOFT TISSUE INFECTION

A. Offenders who meet the definition of recurrent ***Staphylococcus*** skin and soft tissue infection (i.e. >3 infections in a six month period), and offenders who fail decolonization procedures twice, should be housed according to the guidelines set forth in Section VII.C, Special Housing (single cell or housed with another offender(s) with like condition and **sensitivity**).

B. Offenders who fail decolonization should generally not be assigned to work in the following areas.

- Medical department
- Barber shop
- Food handlers/processors

IX. PERSONAL PROTECTIVE EQUIPMENT

A. **Gloves** must be worn prior to touching any offender with abscesses or open, draining skin lesions.

B. Upon removal, gloves must be properly discarded and hands must be **washed** no less than 10 seconds using proper hand washing techniques.

C. **Gowns** should be worn for close contact when clothing is likely to be soiled.

D. Whether **dressing changes** are done in the infirmary or by the offender, provisions must be made for appropriate disposal of contaminated materials.

X. REPORTING

A. All cases of methicillin sensitive ***Staphylococcus aureus*** (MSSA) and methicillin resistant ***Staphylococcus aureus*** (MRSA) **must** be reported to the Medical Director by the facility nurse utilizing the appropriate Surveillance Form (Attachment A).

B. Reports must be submitted within 7 days of receipt of the culture result on the facility.

Attachment A

Staph Aureus Surveillance Reporting Form

Upon receipt of a positive MSSA or MRSA culture report, complete all fields on this form and promptly FAX it **along with a copy of the laboratory report** to the Medical Director for the Department of Corrections.

Last name: _____ **First name:** _____

DOC #: _____ **Unit:** _____

DOB: ___/___/___ **Race: B H W O Sex: M F**

Date cultured: _____

Culture result (check one): Methicillin-Resistant Staph Aureus **(MRSA)** ❑
Methicillin-Sensitive Staph Aureus **(MSSA)** ❑

Was this culture for (check one): **Infection** ❑ **Nasal Colonization** ❑

If this was an infection:

Date onset signs/symptoms: ___/___/___

Location of skin lesion: ❑ **N/A (not skin infection)** ❑ **Head and neck**
❑ **Upper extremity** ❑ **Torso** ❑ **Genitorectal** ❑ **Lower extremity**
❑ **Other** _____

Type of Infection: ❑ **Minor skin/soft tissue** ❑ **Serious skin/soft tissue**
❑ **Cellulitis** ❑ **Impetigo** ❑ **Pneumonia** ❑ **Sepsis**
❑ **Other (specify)** _____

Attachment B

Staph aureus and Methicillin-Resistant Staph aureus Offender Education Fact Sheet

Clinical evidence has led your healthcare provider to conclude that you do (or may) have an infection of staph aureus (S. aureus) or methicillin-resistant Staph aureus (MRSA).

Staph aureus is a common organism found on human skin that causes no harm under normal circumstances. If the bacteria enters the body through the skin, such as a cut or ingrown hair, it can cause an infection which appears as a boil or abscess. The boil can be as small as a pimple or become a large draining sore on any part of the body. The size and location of the boil or abscess will determine what type of care is needed.

In the past, penicillin was used to treat staph infections. Then, after a time, some strains of the bacteria became resistant to penicillin and a new drug, called methicillin, was developed to treat those infections resistant to penicillin. Once again, some strains of the bacteria began to find ways to resist methicillin. This is why methicillin-resistant staph aureus (or MRSA) infections are now being seen. For those individuals who have a resistant infection there are limited antibiotics available; therefore, it is extremely important that you take all medications prescribed for you. You will not be able to keep these medications on your person. A nurse or other medical worker will need to watch you while you take each dose. Failure to take all antibiotic dosages prescribed for you, helps increase resistance of the S. aureus bacteria.

There are other ways to prevent the spread of S. aureus and it is everyone's responsibility to help in this effort. S. aureus spreads easily by direct skin-to-skin hand contamination. Therefore, HANDWASHING is the most effective and important method in preventing its spread when there is more than incidental contact with someone who has the infection.

Incidental contact for security staff would be simply touching someone under normal circumstances (like pat searching). If there is more contact than this, and there is likelihood of soilage, gloves should be worn. Articles and objects handled by people who have MRSA are not as likely to transmit the bacteria as someone who fails to use good handwashing technique. Good handwashing technique means using soap and water and really washing for 10 seconds, then drying your hands thoroughly.

People with recurrent staph infections should take special precautions to contain the spread of the disease. It's important that you bathe or shower daily with soap and water. All clothing, including socks, underwear, towels, bath cloths and items including bedding should be replaced with clean items daily. Obese offenders with skin folds need to keep their skin in these folds dry to prevent breakdown of the skin. This may require applying powder after bathing.

Offenders who have underlying diseases, such as HIV, diabetes, skin disorders and/or obesity, are especially prone to staph infections and need to closely follow the instructions of their physicians to obtain good control of their underlying diseases. In other words, diabetics should try to maintain excellent control of their blood sugars, weight reduction is encouraged for obese offenders, HIV/AIDS offenders should take all medications prescribed for them without fail.

If you have any questions, or for more information, contact your unit medical department.

RISK FACTORS FOR ACQUIRING CA-MRSA

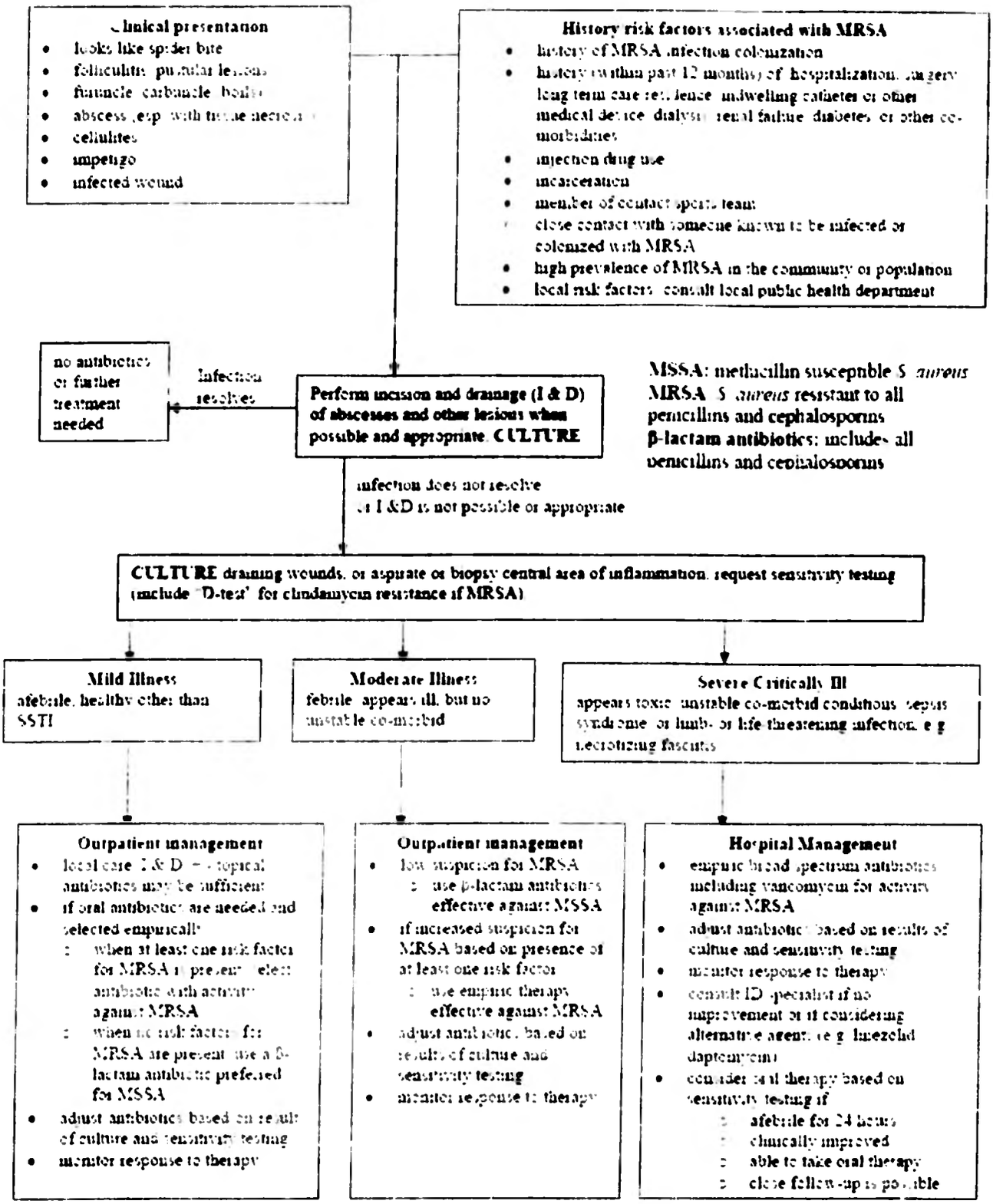
The following risk factors should increase suspicion for CA-MRSA in offenders presenting with compatible signs and symptoms:

- History of MRSA infection or colonization in offenders or close contact
- High prevalence of CA-MRSA in local community or offender population
- Recurrent skin disease
- Crowded living conditions (e.g. homeless shelters, correctional facilities)
- History of incarceration
- Participation in contact sports
- Skin or soft tissue infection with poor response to B-lactam antibiotics
- Recent and/or frequent antibiotic use
- Injection drug use
- Member of Native American, Pacific Island, Alaskan Native populations
- Child under 2 years of age
- Male with history of having sex with men
- Shaving of body hair

COMPARISON OF HOSPITAL-ACQUIRED MRSA (HA-MRSA) AND COMMUNITY-ACQUIRED MRSA (CA-MRSA)

	HA-MRSA	CA-MRSA
Health Care Contact	Yes	No
Mean Age at Infection	Older	Younger
Skin and Soft Tissue Infections	35%	75%
Antibiotic Resistance	Many Agents	Some Agents
Resistance Gene	SCC*mec* Types I, II, III	SCC*mec* Types IV, V
Strain Type	USA 100 and 200	USA 300 and 400
PVL Toxin Gene	Rare (5%)	Frequent (almost 100%)

Guidelines for management of suspected *Staphylococcus Aureus* skin and soft tissue infections (SSTI).



REFERENCES

[1] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice September 2006

[2] Community associated Methicillin Resistant Staphylococcus Aureus; Gwen Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C Fox MD, PPH 42160, October 2005

[3] Association for Professionals in Infection Control; William Jarvis MD

[4] Drug Resistant Staph Infections Reaching Epidemic Levels in some Parts of the US; Medline Plus October 10, 2007.

[5] Invasive MRSA Fact Sheet, Center for Disease Control Released October 7, 2007

[6] Community associated Methicillin Resistant Staphylococcus Aureus; Gwen Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C. Fox MD, PPH 42160, October 2005; Wisonsin Department of Public Health

[7] Guidelines for the Prevention and Control of Antibiotic Organisms in Health Care Settings: September 2005, Gwen Borlaug CIC MPH, PPH 42513, September 2005; Wisconsin Deaprtment of Public Health

[8] Infection Control in the Correctional Setting, Joseph Bick MD, Brown Medical School HEPP REPORT July August 2004;

[9] Staph/MRSA Infections in Inmates and Staff; Kern County California Training Bulletin February 10th, 2004.

[10] MRSA & Staph, "What You Need to Know to Protect Yourself at Work"; Texas Department of State Health Services, Infectious Disease Control Unit 2007

[11] Courtesy of Sgt. Astrid McDuffee; Los Angeles County Sheriff's Office Training Center; Health & Safety Unit

[12] Drug Resistant Staph Infections Reaching Epidemic Levels in some Parts of the US; Medline Plus October 10, 2007.

[13] Invasive Methicil;lin Resistant Staphylococcus Aureus Infections in the United States R. Monina, et al; Journal of the American Medical Association, CDC-Information Center, October 2007.

[14] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly, MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice.

[15] Texas Department of Corrections Policy & Procedure Manual B-14.16

[16] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[17] Los Angeles Sheriffs Department Policy & Procedure Manual 5-03/020.00; 5-30/030.00; 5-30/40.00

[18] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice.

[19] Community associated Methicillin Resistant Staphylococcus Aureus; Gewn Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C. Fox MD, PPH 42160, October 2005

[20] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[21] Texas Department of Corrections Policy & Procedure Manual B-14.16

[22] Los Angeles Sheriffs Department Policy & Procedure Manual 5-03/020.00; 5-30/030.00; 5-30/40.00

[23] Texas Department of Corrections Policy & Procedure Manual B-14.16

[24] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[25] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice.

[26] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[27] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice.

[28] Community associated Methicillin Resistant Staphylococcus Aureus; Gewn Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C. Fox MD, PPH 42160, October 2005

[29] Texas Department of Corrections Policy & Procedure Manual B-14,16

[30] Community associated Methicillin Resistant Staphylococcus Aureus; Gewn Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C. Fox MD, PPH 42160, October 2005

[31] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[32] Community associated Methicillin Resistant Staphylococcus Aureus; Gewn Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C. Fox MD, PPH 42160, October 2005

[33] Texas Department of Corrections Policy & Procedure Manual B-14,16

[34] Community associated Methicillin Resistant Staphylococcus Aureus; Gewn Borlaug CIC MPH, Jeffrey P. Davis MD, Barry C. Fox MD, PPH 42160, October 2005

[35] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[36] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[37] Management of Methicillin Resistant Staphylococcus Aureus 2005, Center for Disease Control & Federal Bureau of Prisons

[38] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice.

[39] Texas Department of Corrections Policy & Procedure Manual B-14,16

[40] Infection Control in the Correctional Setting, Joseph Bick MD, Brown Medical School HEPP REPORT July August 2004;

[41] Infection Control in the Correctional Setting, Joseph Bick MD, Brown Medical School HEPP REPORT July August 2004,

[42] Infection Control in the Correctional Setting, Joseph Bick MD, Brown Medical School HEPP REPORT July August 2004

[43] Infection Control in the Correctional Setting, Joseph Bick MD, Brown Medical School HEPP REPORT July August 2004

[44] Prevention, Treatment and Containment of MRSA in County Jails; Michael Kelly MD, MPH Director of Preventive Medicine Texas Department of Criminal Justice.

[45] Infection Control in the Correctional Setting, Joseph Bick MD, Brown Medical School HEPP REPORT July August 2004

THIS REPORT AND PROPOSED POLICY AND PROCEDURES FOR THE MANAGEMENT OF MRSA IS SUBMITTED BY THE ALASKA CORRECTIONAL OFFICERS ASSOCIATION.

DECEMBER 2007

Management of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Infections

August, 2005

(Federal Bureau of Prisons - Clinical Practice Guidelines)

Clinical Practice Guideline: Management of MRSA (August, 2005)

What's New in the Document?

The following changes have been made since the October, 2003 version of the guidelines:

Treatment

- **A conservative initial approach to treating minor skin infections** is recommended prior to prescribing antibiotics. This includes the use of warm soaks and compresses and/or incision and drainage. Many skin infections can resolve with conservative treatment without use of antibiotics.
- **The use of rifampin is not routinely recommended.**
- **Dosage recommendations have changed** for clindamycin and trimethoprim-sulfamethoxazole.
- **Aggressively manage pruritic rashes** to control itching and prevent development of secondary skin infections is recommended, including use of topical ointments and, if ineffective, prescribing either hydroxyzine or diphenhydramine.

Primary Prevention

- **Hand hygiene** is emphasized as critical for reducing MRSA transmission. The Infection Control Committee should monitor hand hygiene and assure that inmates with diagnosed MRSA are instructed in hand hygiene and have adequate handwashing supplies available.
- **Identify and regularly clean surfaces exposed to sweat,** e.g., exercise benches.
- **Modify hygiene practices for sweat lodge participants,** including showering before and after the sweat lodge and wearing clean shirts and shorts while participating.
- **Consider increasing influenza vaccination coverage in facilities experiencing a MRSA outbreak or endemic MRSA.** Consider vaccination regardless of individual influenza risk factors.

Containment

- **Guidelines for housing inmates with suspected or confirmed MRSA** are clarified.
- **Patients with MRSA pneumonia** should be housed in a single cell. In an outbreak situation, inmates with similar antibiotic resistance patterns can be cohorted. Droplet precautions should be utilized in addition to standard precautions.

Improved Appendices

- **Appendix 4 (Evaluation and Treatment of Skin and Soft Tissue Infections)** outlines general approach to managing skin and soft tissue infections.
- **Appendix 9 (MRSA Containment Guidelines)** provides a tool for decision-making about how to house MRSA patients.
- **Appendix 10 (MRSA Management Checklist)** outlines steps for managing a MRSA suspect, including decisions about containment, conducting the contact investigation and general risk management.
- **Appendices 6 and 7** outline **Correctional Standard Precautions** and **Correctional Contact Precautions** and can be used as fact sheets for correctional workers.
- **Appendix 8 (Inmate Fact Sheet - General Instructions for Skin Infections)** is an educational tool to be used with inmates with skin infections.
- **Appendix 11 (Line Listing of Contacts to MRSA Cases)** is provided to as a tool to track identified contacts and the outcome of their evaluation.

Management of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Infections

August, 2005
(Federal Bureau of Prisons - Clinical Practice Guidelines)

Table of Contents

Appendices

1. Purpose

The BOP Clinical Practice Guidelines for the Management of Methicillin-Resistant *Staphylococcus aureus* (MRSA) infections provide recommendations for the prevention, treatment, and containment of MRSA infections within Federal correctional facilities.

2. Introduction

MRSA infections are staphylococcal infections that are resistant to beta-lactam antibiotics including: penicillin, ampicillin, amoxicillin, amoxicillin/clavulanate, methicillin, oxacillin, dicloxacillin, nafcillin, cephalosporins, carbapenems (e.g., imipenem), and the monobactams (e.g., aztreonam).

Infection with MRSA has long been associated with exposure to a health care environment, particularly the inpatient hospital setting. Recent reports, however, indicate that new MRSA strains have evolved that are affecting previously healthy persons throughout the world without direct or indirect contact with health care facilities. These community-onset MRSA infections have particularly affected athletes in close-contact sports, military recruits, men who have sex with men, and inmate populations. Inmates are now at risk of acquiring MRSA infections not only during hospitalizations, but also *de novo* within the jail or prison setting, despite the absence of traditional risk factors for MRSA infection, such as a history of recent hospitalization, prior antibiotic usage, injection drug use, or long-term inpatient care.

Within the federal prison system, community-onset MRSA infections have been associated with illicit, unsanitary tattoo practices and poor inmate hygiene. MRSA transmission in other correctional systems has been linked to inmates sharing towels, linens, or other personal items potentially contaminated by wound drainage, as well as inmates lancing their own boils or other inmates' boils with fingernails or tweezers.

MRSA infections often present as mild skin or soft tissue infections, such as furuncles, that occur spontaneously without an obvious source. Inmates with MRSA skin infections commonly complain of "an infected pimple," "an insect bite," "a spider bite," or "a sore". Many MRSA infections cause minor inflammation without pain and infected inmates may not seek medical attention. Persons with complicating medical conditions such as diabetes, HIV infection, chronic skin conditions, indwelling catheters, post-surgical wounds, and decubiti are at increased risk of MRSA infections; however, even otherwise healthy individuals can develop very serious MRSA infections, such as cellulitis, deep-seated abscesses, necrotizing fasciitis, septic arthritis, necrotizing pneumonia, and sepsis.

3. Colonization

An estimated 10% to 30% of persons are colonized with *Staphylococcus aureus* in their nares, mucous membranes, or breaks in their skin. A smaller subset of these persons are colonized with MRSA. Colonized persons are more likely to develop staphylococcal infections, however, many colonized persons remain asymptomatic. Staphylococcal colonization occurs more commonly in injection drug users, persons with diabetes, hemodialysis patients, persons with acquired immunodeficiency syndrome (AIDS), surgical patients, and previously hospitalized patients.

4. Transmission

MRSA is transmitted from person to person by contaminated hands. MRSA may also be transmitted by sharing towels, personal hygiene items, athletic equipment, through close-contact sports, and by sharing injection drug use or tattoo equipment. Persons with MRSA pneumonia in close contact with others, can transmit MRSA by coughing up large droplets of infectious particles. Persons with asymptomatic MRSA nasal carriage can also transmit MRSA, especially when symptomatic from a viral upper respiratory infection. MRSA can also cause a toxin-mediated foodborne gastroenteritis.

5. Screening and Surveillance

Intake screening: All inmates undergoing intake medical screening and physical examinations should be carefully evaluated for skin infections.

Recently hospitalized inmates: All inmates who are discharged from the hospital should be screened for skin infections immediately upon return to the prison and specifically instructed to self-report any new onset skin infections or fever. (MRSA or other hospital-acquired infections may develop weeks after hospital discharge.)

Inmates at greater risk of serious MRSA infections: Inmates with risk factors such as diabetes, immunocompromised conditions, open wounds, recent surgery, indwelling catheters, implantable devices, chronic skin conditions, or paraplegia with decubiti should be evaluated for skin infections during routine medical evaluations.

Monitoring bacterial culture results: All bacterial culture results should be reviewed in a timely manner to detect new MRSA infections.

Observations by correctional workers: Inmates with minor skin infections may be reluctant to seek health care. Inmates with visible or reported sores or wounds, or who self-report "boils"or "insect or spider bites" should be referred to health services.

Food handlers: All inmate food handlers should be advised on the necessity of self-reporting all skin infections, no matter how minor. Food handlers should be routinely examined for visible skin infections. Food handlers with suspected or confirmed contagious MRSA should be removed from their duties until no longer infectious.

Transfers: Inmates with skin and soft tissue infections should ordinarily not be transferred to other institutions until fully evaluated and appropriately treated (see *Transfers and Releases*, below).

Employees: Correctional workers (including health care workers) should report all skin infections and any confirmed MRSA infections to their supervisor. Supervisors should refer correctional workers with possible skin infections to their health care provider. Employees should be removed from direct inmate contact until medically cleared by their health care provider.

6. Diagnosis

Correctional health care providers should consider MRSA infection in the differential diagnosis for all inmates presenting with skin and soft tissue infections or other clinical presentations consistent with a staphylococcal infection.

Skin examination: A careful examination of skin infections should be conducted to determine if there is fluctuance, crepitus, any evidence of a drainable infection, or cellulitis with or without streaking. Deep-seated MRSA abscesses may not be clinically apparent and only diagnosed through imaging studies.

Bacterial cultures: MRSA infections cannot be clinically distinguished from staphylococcal infections that are sensitive to beta-lactam antibiotics; therefore, routine bacterial cultures should be obtained whenever possible from purulent drainage from skin and soft tissue infections and aspirated material from potentially infected fluid collections. Blood cultures should also be obtained in febrile patients with suspected MRSA infections and whenever injection drug use or endocarditis is clinically suspected.

MRSA infections are diagnosed by routine aerobic bacterial cultures. Oxacillin-resistance on laboratory susceptibility testing also indicates methicillin-resistance. Positive cultures from blood and sterile body fluids (e.g., joint fluid, pleural fluid, cerebrospinal fluid) are diagnostic of MRSA infections. Positive cultures of drainage from nonsterile sites (e.g., wounds) may indicate bacterial colonization or infection. Wound cultures obtained from expressed pus (avoiding skin contamination) are diagnostically meaningful; whereas positive cultures obtained directly from the surface of a wound are of limited value in detecting true infection.

Empiric diagnosis: An empiric (i.e., suspected, but not confirmed) diagnosis of a MRSA infection should be considered in inmates with clinical evidence of a staphylococcal infection

with associated risk factors such as a presentation in the context of a known MRSA outbreak, recent hospitalization, previous anti-staphylococcal antibiotic usage, presence of an indwelling catheter, or a history of chronic wound drainage or repeated soft tissue infections.

Assessing MRSA colonization: Obtaining bacterial cultures of the nares is not routinely indicated, unless recommended by public health authorities in the context of a significant MRSA outbreak or as part of an inpatient surveillance program. The procedure for obtaining nares cultures is outlined in *Section 12 (Inpatient Units)*.

7. Reporting

All confirmed MRSA infections must be documented in the inmate's medical record and in Sensitive Medical Data (SMD). All suspected or confirmed MRSA outbreaks should be reported to the appropriate Regional Office, and the Central Office HSD, using *Appendix 1 (MRSA Case Tracking and Reporting Form)*, and as required to public health authorities.

8. Treatment

Warm soaks, drainage and removal of foreign devices: A conservative, mechanical approach is the treatment of choice for minor skin and soft tissue infections, i.e., the lesion is localized and there are no signs of systemic illness. **Uncomplicated MRSA skin infections may resolve with warm soaks and/or drainage, without antibiotics.**

- **Warm soaks and compresses:** When treating minor skin and soft tissue infections, including confirmed MRSA infections, the use of warm soaks or compresses should be routinely considered. Soak the infected area for 20 minutes, ideally 2 to 3 times per day in warm water. Continue regularly soaking the wound until it looks clear of infection. Then cleanse the wound and change the dressing once a day until the wound has healed. If soaking is not feasible, apply a heating pad or warm, moist washcloth to the reddened area for 20 minutes, 2 to 3 times a day.

  Decisions about how to safely implement warm soaks and/or compresses in the correctional setting must be made on a case by case basis in consultation with the infection control officer. Consideration should be given to how and where to safely perform the soaks and safely dispose of bandages to prevent further transmission of MRSA.

- **Incision and drainage (I & D):** Treatment should also include aggressive drainage of accessible fluid collections, particularly loculated soft tissue infections in conjunction with the use of warm soaks or compresses. Infections requiring drainage should be frequently reassessed to determine if repeated drainage is warranted.

- **Foreign devices:** Catheters and other foreign devices related to the infection should be

removed whenever possible.

Antibiotic therapy (skin and soft tissue infections): Community-onset MRSA infections are frequently caused by isolates that are sensitive to a wider range of antibiotics compared to MRSA infections acquired in the hospital setting. The selection of oral antibiotics to treat skin or soft tissue MRSA infections should be based on bacterial cultures and antibiotic susceptibility results whenever possible. In patients with mild, localized infections without systemic signs of illness, the effectiveness of warm soaks and/or I & D should be evaluated for several days before initiating antibiotic treatment. Antibiotics alone will be ineffective in treating fluctuant abscesses without incision and drainage.

- **Treatment regimens:** The optimal treatment regimen for community-onset skin and soft tissue MRSA infections that are susceptible to more than one antibiotic is unknown due to a lack of published data and the potential that *in vitro* antibiotic susceptibilities may not correlate with the *in vivo* (i.e., clinical) response. Limited clinical experience from recent community-based MRSA outbreaks suggests that many uncomplicated skin and soft tissue MRSA infections can be successfully treated with oral trimethoprim-sulfamethoxazole or clindamycin. Each of these antibiotics has its own advantages and disadvantages as a therapeutic choice as outlined in *Appendix 2 (Oral Antibiotic Treatment Options for Skin and Soft Tissue MRSA Infections)*.

- **Directly observed antibiotic administration is strongly recommended** for treating MRSA infections in the correctional setting.

- **The optimal dosaging of oral trimethoprim-sulfamethoxazole is unknown** for skin and soft tissue MRSA infections requiring antibiotics. Some experts recommend higher dosaging than the standard one DS tablet BID. Higher dosages are particularly recommended if rifampin is given along with trimethoprim-sulfamethoxazole since concomitant rifampin therapy will reduce serum concentrations of trimethoprim and sulfamethoxazole.

- **Trimethoprim-sulfamethoxazole should not be used if a Group A streptococcal (GAS) infection is suspected**, e.g., possible erysipelas. If a Group A streptococcal infection is suspected, therapy should include an agent active against this organism such as clindamycin, erythromycin, or a beta-lactam.

- **Special consideration is warranted when prescribing clindamycin for MRSA infection.** Many MRSA isolates are susceptible to clindamycin *in vitro*; however, routine susceptibility testing may not detect inducible *in vivo* resistance to clindamycin. Other tests, such as the double-disk diffusion test or "D" test, can detect inducible clindamycin resistance. In the D-test, the MRSA isolate is inoculated onto an agar plate with erythromycin and clindamycin susceptibility discs. For MRSA strains with inducible resistance, the circular zone of inhibition around the clindamycin disc is blunted by the adjacent erythromycin disc, creating a visible capital "D". Inducible clindamycin resistance should be ascertained when utilizing the drug for inmates with either severe disease and a high organism load or whose

organisms are erythromycin-resistant and clindamycin-sensitive on routine susceptibility testing.

- **Clindamycin has much better bone penetration than trimethoprim-sulfamethoxazole.**

- **The addition of rifampin** to trimethoprim-sulfamethoxazole or clindamycin has been used to bolster the treatment of MRSA infections and promote decolonization, but the benefits of this strategy are unproven. Clinicians should carefully review potential drug interactions if considering rifampin as an additive treatment option. **Rifampin monotherapy is ineffective against MRSA due to the rapid development of resistance (regardless of *in vitro* laboratory susceptibility results) and should never be prescribed.**

- **Doxycycline or minocycline, 100 mg orally BID, is an alternative treatment option for MRSA infection**. *In vitro* susceptibility results of tetracyclines should be interpreted carefully in consultation with knowledgeable laboratory personnel. Isolates resistant to tetracycline *in vitro* but susceptible to doxycyline or minocycline, may develop resistance when exposed to doxycycline or minocycline therapy.

- **MRSA isolates may be sensitive to oral quinolones *in vitro*; however, the development of resistance with the use of these agents is a major concern.** If quinolones are prescribed for MRSA infections, the addition of rifampin should be strongly considered.

- **Oral vancomycin should never be prescribed** since it is poorly absorbed, and thus ineffective.

- **Topical mupirocin may be effective to treat mild folliculitis, but its administration for this purpose within the correctional setting is ordinarily not recommended** due to concerns about widespread empiric use by the inmate population and the development of mupirocin resistance.

- **Duration of treatment:** The duration of antibiotic therapy for MRSA skin and soft tissue infections depends on the severity of the infection, the site of infection, and the clinical response to therapy. Treatment for at least 7-10 days is indicated in uncomplicated infections that do not respond to warm soaks and/or I & D within several days. Inmates with skin infections should be examined periodically during therapy to determine if drainage or redrainage is warranted and to ensure that the infection is resolving. Once antibiotic therapy is discontinued the inmate should be reevaluated in frequent follow-up appointments to ensure that new lesions have not developed.

Antibiotic therapy (serious MRSA infections): Endocarditis and other endovascular infections, osteomyelitis, necrotizing fasciitis, pneumonia, and other deep-seated MRSA infections require treatment with IV vancomycin or other effective agent for an extended period of time, i.e., 4-6 weeks or more. A second or third antibiotic may also be indicated in combination with vancomycin for certain MRSA infections (e.g., prosthetic valve

endocarditis). **Consultation with a physician expert is recommended for serious MRSA infections.**

Intravenous vancomycin can be safely administered to medically stable inmates in most BOP institutions. Clinical directors should consult with their chief pharmacists on protocols for administering and monitoring vancomycin therapy in the outpatient setting. Linezolid is a newly available oral and intravenous antibiotic that may be an alternative to intravenous vancomycin for highly resistant MRSA infections and allow earlier hospital discharge on an oral antibiotic regimen. Treatment efficacy and drug toxicity data using linezolid for serious MRSA infections are limited, although linezolid may be superior to vancomycin in treating MRSA pneumonia. **Linezolid therapy**, as well as other newly available treatment options, including investigational agents, **should only be considered in consultation with a physician expert.** Antibiotic options for serious MRSA infections are outlined in *Appendix 3 (Treatment Options for Serious MRSA infections).*

Empiric antibiotic therapy: Skin and soft tissue infections suggestive of staphylococcal infections that cannot be cultured or have nondiagnostic culture results should be evaluated and treated on a case-by-case basis. Empiric antimicrobial therapy may be appropriate for certain patients with suspected *S. aureus* skin and soft tissue infections, particularly individuals with significant cellulitis, abscess formation, fever or other systemic signs of infection, or underlying co-morbidities or immunosuppression. Empiric antibiotic therapy should be prescribed while considering the following:

- **Self-limited infections without systemic signs or symptoms** can often be effectively treated with warm soaks or warm compresses and/or I & D without antibiotics.

- **If no other MRSA risk factors are apparent and MRSA infections have not been recently documented in the correctional setting** then more serious infections (e.g., infected wounds and drained abscesses not responding to warm soaks or I &D) should be empirically treated with a first-generation cephalosporin, amoxicillin/clavulanate, or erythromycin.

- **If associated risk factors for MRSA infections are present** (e.g., presentation in the context of a known MRSA outbreak, recent hospitalization, previous anti-staphylococcal antibiotic usage, presence of an indwelling catheter, or a history of chronic wound drainage or repeated soft tissue infections), then empiric treatment for MRSA should be considered for more serious infections or minor infections not responding to warm soaks or I & D.

- **Intravenous antibiotic therapy in an inpatient setting** is indicated for pneumonia, toxic shock syndrome, skin and soft tissue infections associated with clinical evidence of sepsis or necrotizing fasciitis, or if the infection is clinically worsening despite oral antibiotic therapy.

Life Threatening Infections: Empiric therapy with IV vancomycin plus other antibiotics as warranted should be strongly considered for inmates who present with life threatening infections, such as pneumonia or sepsis, regardless of existing risk factors, due to the inherent risk of MRSA infection in the correctional setting.

Recurrent/persistent infections: Recurrent or persistent skin and soft tissue infections during or immediately following antibiotic therapy may indicate either patient nonadherence to the prescribed treatment regimen, the development of antibiotic resistance, or re-exposure to MRSA. Inmates with recurrent or persistent skin lesions should be evaluated on a case-by-case basis to assess the most likely cause and to determine the appropriate intervention.

Decolonization following treatment: Decolonization of the nares with topical mupirocin is not recommended for isolated cases of MRSA infection. Decolonization can be considered for inmates with recurrent MRSA infections on a case by case basis (e.g., 3 or more infections in less than 6 months) and in the context of a MRSA outbreak. **(Decolonization is of unproven benefit in controlling a MRSA outbreak in the correctional setting and is therefore not routinely indicated.)** The procedure for decolonization is outlined in *Section 12 (Inpatient Units)*.

An overall strategy for evaluating and treating MRSA infections is outlined in *Appendix 4 (Evaluation and Treatment of Skin and Soft Tissue Infections in the Correctional Setting)*.

Management of pruritic rashes: Inmates with intensely pruritic rashes should be prescribed topical ointments or lotions, and if ineffective, treated with an oral antipruritic agent such as hydroxyzine or diphenhydramine to minimize scratching and the development of secondary bacterial infections.

9. Infection Control - Primary Prevention: Efforts to Prevent MRSA Infections

Containing MRSA infections in a confined setting, such as a prison, is extraordinarily difficult, time consuming, and resource-intensive. The majority of inmates with MRSA infection or colonization have acquired MRSA from an external source; therefore primary infection control measures are critical. **All potential opportunities for inmates to have close physical contact or share communal items should be carefully scrutinized within each correctional institution** to identify strategies to interrupt MRSA transmission. The following general interventions should be considered.

Education: Inmates and correctional staff should be provided information on the transmission, prevention, treatment, and containment of MRSA infections. Condensed information for inmates is outlined in *Appendix 5 (MRSA Fact Sheet)*. Emphasis should be

placed on the importance of regular handwashing, and of promptly referring inmates with skin infections for a medical evaluation. Regular handwashing should be emphasized as the most important intervention to prevent a MRSA outbreak.

Correctional standard precautions: These measures require correctional workers to assume that all inmates are potentially contagious and to take precautions whenever direct contact is anticipated with blood, body fluids (e.g., secretions, excretions, feces, and urine), nonintact skin, and mucous membranes. Correctional standard precautions have been adapted from hospital standard precautions, including increased emphasis on sanitation in housing areas and adaptation to recently identified modes of transmission of MRSA, e.g., sharing of towels, use of exercise benches, and sweat lodge participation.

Correctional Standard Precautions are outlined in *Appendix 6a (Correctional Standard Precautions in the General Populationl)* and *Appendix 7a (Correctional Standard Precautions in the Health Care Setting)*. Standard precautions include adequate hand hygiene; routine use of gloves whenever contact with body fluids is anticipated; routine cleaning and disinfecting environmental surfaces; treating all linen as potentially infectious; safe disposal of needles and other sharp instruments and devices; and placement of inmates who may contaminate the environment in a private room (in consultation with medical staff).

Hand hygiene program: Hand hygiene is the simplest and most important infection control measure for preventing and containing MRSA infections and yet the most difficult to implement. Specific hand hygiene procedures are outlined in *Appendices 6a* and *7a*.

- **Oversight:** The hand hygiene program should be overseen by the institution's local infection control committee including ongoing observational studies and data collection (e.g., compliance with hand hygiene guidelines, amount of usage of hand hygiene supplies). The hand hygiene behaviors of all correctional workers who have contact with inmates should be assessed with subsequent ongoing feedback on the results of the evaluation.

- **Training:** Correctional staff, health care workers and inmates should be periodically provided education on the importance of hand hygiene and effective hand hygiene techniques during annual training and other venues.

Sanitation: MRSA is susceptible to most routinely used environmental cleaning agents. Sanitation measures are essential for preventing the spread of MRSA infections and are outlined in detail in *Appendix 6a* and 7a. Sanitation should be regularly assessed, and any lapses rectified, in accordance with local policies and procedures.

Antibiotic prescribing practices: Clinical directors should monitor antibiotic prescribing patterns at their institutions in consultation with their chief pharmacist to ensure that antibiotics are being appropriately prescribed and not used in lieu of recommended conservative treatments for uncomplicated MRSA, e.g., warm soaks or compresses and I & D.

The unnecessary use of broad-spectrum antibiotics should be strictly monitored and curtailed to reduce the development of antibiotic resistance among the inmate population.

10. Infection Control - Secondary Prevention: Efforts to Contain Detected MRSA Infections

Correctional Contact Precautions: When health care providers and correctional personnel have direct contact with inmates with suspected or confirmed MRSA skin and soft tissue infections, correctional contact precautions should be utilized. Hospital contact precautions have been adapted to the unique requirements of the correctional setting and are outlined in detail in *Appendix 6b (Correctional Contact Precautions in the General Population)* and *Appendix 7b (Correctional Contact Precautions in the Health Care Setting)*. General infection control principles for managing a MRSA infected inmate are outlined below.

Inmate education: All inmates with MRSA infections should be instructed in regular hand-washing, maintaining personal hygiene, including regular showers, and the importance of keeping wounds covered. Instructions for inmates with skin infections are outlined in *Appendix 8 (Inmate Fact Sheet - General Information on Skin Infections)*.

Hand hygiene: Adequate hand hygiene should be reemphasized with staff working with the inmate diagnosed with MRSA infections. Adequate handwashing supplies for the inmate diagnosed with MRSA and the staff in contact with them is critical. The availability of these supplies should be regularly assessed and remedied as necessary.

Housing: Inmates diagnosed with MRSA infections should be examined by a clinician to determine their risk of contagion to others. In general, inmates with non-draining wounds or wound with minimal drainage, contained by a simple dressing, can be housed in general population. Decisions about housing assignments should be made utilizing the guidelines outlined in *Appendix 9 (MRSA Containment Guidelines)*.

Factors entering into decisions about where to house inmates with MRSA infections include the degree to which wound drainage can be contained, the ability or willingness of an inmate to follow infection control instructions, and available housing options. Inmates with MRSA pneumonia should generally be housed in a single cell, utilizing droplet precautions (see *Definitions*) in addition to correctional standard precautions.

- **Activities and visitors:** Inmates with MRSA infections may be limited from certain activities on a case by case basis. For example, an inmate with a draining shoulder wound should be restricted from recreation activities, but not necessarily meals in the cafeteria if the drainage is contained. Visitor restrictions are rarely indicated and should be handled on a case by case basis in consultation with the infection control officer.

- **Discontinuing single cell housing:** Criteria for discontinuing single-cell housing for a MRSA suspect is outlined in *Appendix 9*.

Wound management: Draining wounds must be remain adequately dressed to prevent contamination of environmental surfaces and dressings should be changed regularly. A plan should be developed to assure that dressings can be replaced if they are no longer effective. Clean, nonsterile gloves should be worn when contact with wound drainage is anticipated. Gloves must be removed and hands cleaned immediately before leaving the patient's room. For isolated patients with grossly draining wounds, a clean non-sterile gown should be worn whenever it is likely that a person will come into contact with wound drainage.

- **Disposal of bandages:** Bandages should be disposed of in accordance with OSHA policy and as determined by the local safety and security policy. Bandages which fully contain wound drainage can be disposed of in a leak-proof container (e.g., plastic bag or wax paper) and then placed in the regular trash. Bandages which are saturated and do not contain the drainage or may become liquefied and leak blood or contaminated materials should be handled in accordance with regulated waste procedures. Inmates should be instructed in proper disposal of used bandages in accordance with local policy.

Sanitation: Sanitation measures used for primary prevention of MRSA infections should be strictly enforced. All rooms of infected inmates should be decontaminated ("terminally cleaned") prior to occupancy by another inmate.

Inmate transfers and releases

- **Inmates with contagious MRSA infections should ordinarily not be transferred** to other BOP institutions or halfway houses until their infection has been adequately treated and the risk of contagion controlled.

- **Required transfers:** Inmates with contagious MRSA infections absolutely requiring transfer for security reasons or medical care should have draining wounds dressed the day of transfer with bandages that adequately contain the drainage. The following should occur prior to the transfer.

  - Escort officers should be notified of the inmate's condition and educated on infection control measures including the importance of hand hygiene, protective measures, safe disposal of contaminated dressings, decontamination of security devices (e.g., handcuffs, leg irons, martin chains and other reusable restraints) and advised to use disposable restraints, when feasible.
  - The clinical director of the sending institution or designee should notify the receiving institution's clinical director or health services administrator of pending transfers of inmates with suspected or confirmed MRSA infections.

- **Releases:** Inmates with skin and soft tissue MRSA infections who are scheduled for release should:

- Have draining infections bandaged to adequately contain drainage prior to release;
- Be given enough antibiotics to complete treatment;
- Be counseled on practical infection control measures to prevent transmission to household members and other anticipated close contacts; and
- Should be given assistance with accessing follow-up medical services.

Surveillance: Upon the diagnosis of a single MRSA case, surveillance measures should be heightened to detect additional MRSA cases through the following procedures, summarized in *Appendix 10 (MRSA Containment Checklist)*.

- **Interview index case:** The index case should be interviewed to identify potential sources of infection and close contacts. The date of onset of the infection should be ascertained to determine how far back in time the investigation should go and whether the onset was before or after intake into the correctional system. The content of the interview should include prior incarceration history at other facilities, recent hospitalizations, housing and work assignments, sharing of personal hygiene items with other inmates, participating in sweat lodge ceremonies, recent injection drug use, tattooing, sexual contact with other inmates, participation in close-contact sports, or exposures to other inmates with draining wounds or skin infections. Identified contacts should be listed on *Appendix 11 (MRSA Contact Line-Listing)*.

- **Evaluate contacts:** Identified contacts at potential risk of acquiring MRSA should be examined for signs and symptoms of infection.

- **History of food handling:** The inmate's work assignments should be reviewed to determine if he or she has been a food handler.

- **Increased surveillance at routine visits**: Health care providers evaluating inmates during sick call visits and chronic care visits should be on the alert for inmates with skin or soft tissue infections or other evidence of MRSA infections.

- **Microbiology:** Bacterial cultures should be regularly monitored to detect any additional MRSA infections among the inmate population.

11. Outbreak Management

Detection of two or more cases of epidemiologically-related MRSA infections should prompt an immediate investigation to determine if an outbreak has occurred. Outbreak surveillance measures are not indicated if the MRSA infections are obviously unrelated (e.g., two inmates returning separately from a hospital where nosocomial MRSA infections are endemic or multiple MRSA infections separated in time without any epidemiologic linkage.) Once a MRSA outbreak is suspected the following measures should be taken.

Laboratory confirmation: MRSA isolates should be further evaluated for antibiotic susceptibilities. The evaluating laboratory should be instructed to save any cultures that are positive for MRSA for at least 30 days until a determination can be made whether molecular analysis is warranted. The 30-day period may be extended if necessary. The written instructions to the laboratory should be included on the requisition and should state:

"Save for at least 30 days if positive for MRSA. Notify provider prior to discarding."

A MRSA outbreak is suggested if similar antibiotic susceptibility patterns are identified among two or more MRSA isolates from epidemiologically-linked patients. Further confirmation of a MRSA outbreak through molecular analysis of MRSA isolates (e.g., pulsed-field electrophoresis) should be considered in consultation with Central Office HSD and public health authorities if the outbreak is extensive or when otherwise warranted for specific epidemiologic or correctional reasons. When molecular analysis is indicated, the typing pattern for the isolates should be noted on *Appendix 1 (MRSA Case Tracking and Reporting Form).*

Tracking: Inmates with suspected or confirmed MRSA infections should be systematically tracked using the *MRSA Case Tracking and Reporting Form* in order to assess case clusters and help identify common source transmission.

Containment: In the context of a large MRSA outbreak, inmate cohorting of infected skin or soft tissue cases may be considered as long as the cohorted inmates have MRSA infections with similar antibiotic susceptibilities.

Inmate transfers: Guidelines for inmate transfers outlined above should be followed during a MRSA outbreak. **In addition, all inmates scheduled for transfer from an institution with a MRSA outbreak should be interviewed by a health care provider and have a targeted examination of the skin to determine if they have a previously undiagnosed skin or soft tissue infection.**

Infection control measures: In addition to the infection control measures described above, the following should be emphasized in the context of a MRSA outbreak.

- **Hand hygiene and the use of correctional contact precautions** should be strictly enforced for all health care providers and correctional workers.

- **The broader use of antimicrobial soaps, washes, or shampoos** in affected housing units, dormitories, or throughout the entire correctional facility should be considered on a case by case basis in the context of a MRSA outbreak.

- **More stringent infection control practices should be implemented,** i.e., routine cleaning and disinfection of patient care items, such as stethoscopes and blood pressure cuffs, after all patient contacts.

- **Diligently inspect and reinspect living, sleeping, bathroom, recreational, and all other areas within the correctional facility where close skin-to-skin contact or sharing of personal hygiene or communal items is likely to occur** in order to detect potential means of ongoing MRSA transmission. If the outbreak is confined to a certain housing unit or dormitory, all living, sleeping, and bathroom areas should be carefully inspected, including cell "shakedowns", when necessary, to identify potential sources of infection such as unsanitary conditions or ongoing injection drug use or tattooing.

- **Influenza prevention:** Persons with influenza are at higher risk of secondary, pulmonary infections with *Staphylococcus aureus* and other bacteria. Necrotizing MRSA pneumonias affecting multiple inmates could occur during concurrent influenza and MRSA outbreaks within the correctional setting. If a MRSA outbreak occurs during influenza season or MRSA infections are endemic in the facility, clinical directors should consider more aggressive influenza prevention strategies including the following:

  - Influenza vaccination of the entire affected inmate population regardless of individual risk factors for influenza in consultation with Central Office HSD; and
  - Adopting a low threshold for administering antiviral influenza prophylaxis for all unvaccinated inmates or those only recently vaccinated (within the past two weeks) if influenza cases are documented in the facility.

Surveillance: Once a MRSA outbreak is suspected or confirmed, health care personnel should determine if inmates with MRSA infections have a common source of infection such as shared housing or work assignments, the same religious or recreational practices, the same social or gang affiliations, recent injection drug use activity, sexual contact with other inmates, new tattoos, hospitalization in the past 6 months, or a common primary health care provider.

Surveillance physical examinations for previously undetected MRSA infections should be considered in accordance with the following:

- **Common source outbreak suspected:** All potential inmate contacts should be examined, e.g., dormitory inmates, for unidentified skin or soft tissue infections or other evidence of MRSA infections.

- **Surveillance of high risk inmates:** If the outbreak involves multiple inmates or is sustained over time, targeted examinations should be considered for inmates who may be at higher risk of MRSA infections (e.g., inmates with diabetes, renal failure, surgical wounds, indwelling catheters, chronic skin diseases, or immunocompromised conditions) for both surveillance and diagnostic purposes.

- **Health care worker is possible source:** If a health care worker is the potential common source of MRSA infections, the health care worker should be interviewed by the clinical director or designee to determine if the worker has had any recent skin or soft tissue infections and to review the worker's infection control practices such as hand washing and use of contact precautions. The health care worker should be referred to a physician for

medical evaluation and clearance if a MRSA infection is suspected clinically or epidemiologically.

- **Environmental surveillance cultures** (i.e., swabbing medical equipment, clinical areas or living areas) to detect MRSA are normally of limited benefit in controlling a MRSA outbreak and should only be considered in consultation with public health authorities with expertise in outbreak control.

Decolonization of asymptomatic carriers: Nasal swab surveillance cultures for MRSA and decolonization of asymptomatic carriers with mupirocin are not routinely recommended in the context of a MRSA outbreak. Mupirocin treatment does not eradicate colonization in all treated persons, does not prevent recolonization following future exposures to MRSA, and, when used broadly, can result in mupirocin-resistant MRSA strains. MRSA decolonization of health care workers and patients may be of benefit in eradicating MRSA from certain confined settings, such as inpatient units. Decolonization of asymptomatic carriers should only be considered after consultation with public health authorities and Central Office HSD.

Education: Educational efforts should target inmates, correctional workers, and health care personnel in order to contain a MRSA outbreak. The following educational initiatives should be considered:

- **Town hall meetings with inmates** to reinforce the importance of regular hand washing, good personal hygiene, routine showering, maintenance of a clean cell, regular laundering of bed linens, self-reporting of all skin lesions, importance of inmates keeping wounds covered, and refraining from any injection drug use, tattooing, and sexual contact with other inmates.

- **Recalls with correctional staff** to reinforce the importance of regular hand washing, correctional standard precautions when interacting with all inmates, the use of correctional contact precautions when interacting with inmates with MRSA infections, the routine inspection of inmate housing units for cleanliness, the examination of foodhandlers for visible skin infections, and the detection of prohibited tattooing practices, injection drug use, and sexual activity among inmates.

- **Meetings with health care personnel** to reinforce the importance of hand hygiene before and after every patient contact, decontamination of shared medical devices, as well as the appropriate use of correctional standard and contact precautions.

12. Inpatient Units

Inpatient units within correctional facilities should develop site-specific infection control practices to prevent the spread of resistant organisms. Infection control guidelines used for the hospital setting should be adapted to the correctional inpatient setting.

Primary prevention: The following primary prevention infection control measures should be considered for inpatient units:

- **Educating inpatient health care providers** on the importance of preventing the spread of antibiotic resistant organisms and the efficacy of control measures;
- **Strictly enforcing hand hygiene** before and after all patient contacts;
- **Avoiding inappropriate or excessive antibiotic usage** for inpatients (monitoring through the infection control and the pharmacy and therapeutics committees);
- **Dedicating noncritical patient-care equipment to a single patient** when contact or droplet precautions are indicated and when use of common equipment or items is unavoidable, adequately cleaning and disinfecting before use with other patients;
- **Strictly enforcing environmental disinfection of patient rooms**, including terminal cleaning at the time of patient discharge with a focus on environmental surfaces exposed to frequent hand contact (i.e., bed rails and door knobs);
- **Regularly monitoring bacterial cultures** of inpatients and recently discharged inpatients to detect clusters of MRSA infections; and
- **Appropriately assigning beds for new admissions with undiagnosed, potentially infectious conditions**, including MRSA, to avoid placement in rooms with other inmates at high risk for developing infections.

Secondary prevention: The following secondary prevention infection control measures should be considered for containing MRSA infections in inpatient units:

- **Aggressively evaluating, containing, and treating inpatients with suspected or confirmed MRSA infections** since these patients are at greater risk of serious disease; (Transmission of MRSA infections to others within the inpatient setting can occur easily and can cause serious illness to other medically compromised patients. Contact precautions and other recommended infection control practices should be strictly enforced.)
- **Heightened MRSA surveillance of other inpatients**; and
- **Assigning specific staff to care for contagious MRSA patients (when staffing permits) in order to minimize the risk of cross-infection.** (These staff members should not be also assigned to care for inmates at high risk of developing infection.)

Outbreak management: MRSA outbreaks within the inpatient setting can be extremely difficult to control and are affected by multiple factors that vary among inpatient units. The most effective methods to eradicate MRSA infections from the inpatient setting have involved the active surveillance and isolation of patients with MRSA infection and/or MRSA

colonization along with the use of strict contact precautions when managing these patients. Public health authorities should ordinarily be consulted to develop a specific infection control strategy due to the difficulties in managing MRSA outbreaks in the inpatient setting and the inherent risks to the patient population.

Strategies for controlling a MRSA outbreak in the inpatient setting beyond full implementation of primary and secondary infection control measures may include the following:

- **Careful and repeated examinations of all inpatients for undiagnosed MRSA infections.**

- **Aggressive culturing of all potential infections** and regular review of culture results.

- **Obtaining nares surveillance cultures for new inpatients and periodically, thereafter,** particularly for inmates at high risk of MRSA infection. (Persons at high risk of MRSA infection include persons with diabetes, immunocompromised conditions, open wounds, recent surgery, indwelling catheters, implantable devices, chronic skin conditions, and paraplegia with decubiti.) The following procedure should be used for obtaining nares cultures:

  - Individual should be instructed to blow their nose prior to obtaining a specimen;
  - Remove swab collection device from its packaging material;
  - Confirm that swab collection device has been pre-labeled with appropriate identifiers;
  - Insert dry swab approximately 2 cm into one naris;
  - Rotate the swab against the anterior nasal mucosa for 3 seconds;
  - Using the same swab, repeat for the other naris;
  - Return swab to transport sleeve; and
  - Follow other specific manufacturer's recommendations for culture collection and transport, including storing swabs in refrigerator (with temperatures of 5°- 25°C) for no more than 7 days and shipping with a refrigerator pack.

- **Assign inpatients with MRSA infections and/or colonization to either single-cell housing or to cohorted housing** with other inmates who are similarly colonized.

- **Decolonizing procedure: Decolonization of targeted groups of inpatients and/or health care providers is rarely indicated and should only be pursued in consultation with Central Office HSD.**
  (Note: Ongoing or repeated decolonization should NEVER be employed.) The following procedure for decolonization should be used:

  - Apply approximately one-half of 2% calcium mupirocin ointment from the 1 gm single-use tube (Bactroban™) into one nostril and the other half of the ointment to the other nostril twice daily for 5 days, avoiding contact of the medication with the eyes.
  - The inmate should press the sides of the nose together and gently massage for one minute to spread the ointment throughout the inside of the nostrils.

Direct observation of the decolonization procedure is recommended for each administration of the ointment.

- **Treat inpatients with an antimicrobial wash and shampoo in conjunction with nares decolonization** in consultation with Central Office HSD.

Definitions

Beta-lactam antibiotics include: penicillin, ampicillin, amoxicillin, amoxicillin/clavulanate, methicillin, oxacillin, dicloxacillin, cephalosporins, carbapenems (e.g., imipenem), and the monobactams (e.g., aztreonam).

Colonization is the presence of bacteria on or in the body without causing infection.

Community-onset MRSA infections develop outside a hospital or nursing home setting and may or may not be associated with a health care setting, e.g., recent hospitalization.

Correctional standard precautions are *hospital standard precautions* (see below) that have been adapted to the correctional setting taking into account security issues, inmate housing factors, and infection control concerns inherent to jails and prisons (see *Appendix 6a*).

Correctional transmission-based precautions are transmission-based infection control precautions (see *hospital transmission based precautions* below) that have been adapted to the correctional setting taking into account relevant security concerns, inmate housing factors, and infection control issues inherent to jails and prisons (see *Appendix 6b* and *7b*)

Hospital standard precautions are infection control practices used in the hospital setting to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection.

- **Standard precautions apply to:** blood, all body fluids, secretions, and excretions (except sweat), regardless of whether or not they contain visible blood; nonintact skin; and mucous membranes.

- **Standard precautions include:**
  (a) adequate hand hygiene measures in accordance with CDC guidelines after touching blood, body fluids, secretions, excretions (includes wound drainage), and contaminated items, whether or not gloves are worn;
  (b) the routine use of personal protective equipment such as gloves, masks, eye protection or face shields, and gowns whenever contact with blood, body fluids, secretions, excretions (includes wound drainage) is anticipated;
  (c) ensuring that environmental surfaces in the health care setting are routinely cleaned and disinfected;
  (d) ensuring that linens are handled and cleaned in a manner that prevents staff exposures to contaminated laundry and avoids the transfer of microorganisms from person to person or from place to place;
  (e) the safe disposal of needles and other sharp instruments and devices in appropriate leakproof and puncture-resistant containers; and
  (f) the placement of patients who may contaminate the environment or cannot be expected to maintain adequate hygiene or a sanitary environment in a private room.

Hospital transmission-based precautions are patient-specific precautions that are indicated for hospitalized patients with suspected or diagnosed infections that are either highly transmissible or epidemiologically important. The three types of transmission-based precautions include **airborne, droplet**, and **contact** precautions. Contact precautions apply to draining MRSA skin and soft tissue infections; and droplet precautions apply to MRSA pneumonia.

- **Contact precautions** are indicated for patients with pediculosis, scabies, impetigo and noncontained skin infections such as abscesses, cellulitis and decubiti; viral conjunctivitis; certain highly contagious enteric infections such as *Clostridium difficile* or patients with diarrhea and infection with hepatitis A virus, *Shigella*, or *Escherichia coli* O157:H7; and gastrointestinal, respiratory, skin or wound infections or colonization with certain multi-drug resistant bacteria such as MRSA.

  Contact precautions include routine standard precautions as well as the following additional measures:

  - The patient should be placed in a private room. Patients with the same infection can be housed together if private rooms are not available.
  - Clean, nonsterile gloves should be worn when entering the room. Gloves should be changed when grossly contaminated with potentially infectious material such as fecal material and wound drainage. Gloves must be removed and hands cleaned immediately (i.e., by washing with an antimicrobial agent or use of a waterless antiseptic agent) before leaving the patient's room. Once hands have been cleaned, care should be taken not to touch potentially contaminated environmental surfaces or items
  - A clean, nonsterile gown should be worn when entering the patient's room whenever direct patient contact or contact with environmental surfaces or items in the room is anticipated. The gown should be removed before leaving the patient's room, taking care not to have one's clothing contact potentially contaminated environmental surfaces. The patient should leave the private room for essential purposes only. If the patient leaves the room, precautions should be taken to minimize the risk of transmission of microorganisms to other persons and to avoid contamination of environmental surface or items.
  - Noncritical patient-care equipment should be dedicated to a single patient. Common medical equipment that must be shared between patients must be adequately cleaned and disinfected before use by another patient.
  - No special requirements are indicated for eating utensils. Disposable or reusable utensils may be used. The use of detergent and washing procedures for decontamination are sufficient.

- **Droplet precautions** are indicated for patients with illnesses such as influenza, mumps, rubella, streptococcal pharyngitis or pneumonia, invasive *Haemophilus influenzae* type b disease such as pneumonia and epiglottis, invasive *Neisseria meningitidis* disease such as meningitis and pneumonia.

The use of droplet precautions is of unproven benefit in preventing MRSA transmission with MRSA pneumonia. Given the close proximity of inmates in a correctional setting, the Federal Bureau of Prisons recommends a conservative approach.

(**NOTE**: Patients with an unknown respiratory illness compatible with tuberculosis should be managed with airborne precautions (i.e., requires patient isolation in a room with negative pressure and patient management by staff wearing adequate respiratory protection such as an N95 respirator) rather than droplet precautions until the diagnosis of tuberculosis has been excluded.)

Illnesses requiring droplet precautions are caused by infectious agents that are transmitted in large-particle droplets (> 5 μm in size) when an infectious patient coughs, sneezes, talks, or has certain procedures performed such as suctioning and bronchoscopy. Transmission of infection occurs when droplets containing the microorganism are propelled a short distance in the air and then deposited on the host's mouth, nasal mucosa, or conjunctivae. Large-particle droplets do not remain suspended in the air.

Droplet precautions include routine standard precautions as well as the following additional measures:

- The patient should be placed in a private room. (**NOTE**: The room does not require negative pressure or a special air handling system.) The door of the room may be opened without concern that the infectious agent will be transmitted to others. Patients with the same infection may be housed together if private rooms are not available.
- A mask, eye protection, or a face shield should be worn to protect mucous membranes of the eyes, nose, and mouth during procedures and patient-care activities that are likely to generate splashes or sprays. Masks should be worn when entering the room or when within 3 feet of the patient. An N95 respirator is not required.
- Contagious patients infected with pathogens transmitted by large-droplet particles should wear a surgical mask if they must leave their private room. Patient movement outside a private room should be limited to essential purposes.

Methicillin-resistant *Staphylococcus aureus* or **"MRSA"** are staph bacteria that have become resistant to beta-lactam antibiotics, including: penicillin, ampicillin, amoxicillin, amoxicillin/clavulanate, methicillin, oxacillin, dicloxacillin, cephalosporins, carbapenems (e.g., imipenem), and the monobactams (e.g., aztreonam). MRSA causes the same types of infections as staph bacteria that are sensitive to beta-lactam antibiotics.

MRSA outbreak is a clustering of two or more epidemiologically-related, culture-positive cases of MRSA infection. (**NOTE**: MRSA colonization data, when available, should also be considered when assessing outbreaks, since new cases of MRSA colonization without infection also indicate ongoing MRSA transmission.) Confirmation that a MRSA outbreak is caused by the same organism is suggested by similar isolate antibiotic susceptibilities and further supported if molecular analysis, such as pulsed-field gel electrophoresis, identifies a predominant MRSA strain.

Primary prevention is the implementation of screening, infection control, treatment, and administrative measures aimed at reducing the incidence of MRSA infections in the inmate population and identifying MRSA infections in inmates upon prison entry.

Secondary prevention is the implementation of augmented screening, infection control, treatment, and administrative measures aimed at preventing further MRSA infections after the initial detection of a MRSA infection within the inmate population.

Staphylococcus aureus, often referred to as "staph," is a commonly occurring bacterium that is carried on the skin and in the nose of healthy persons. *Staphylococcus aureus* may cause minor skin or soft tissue infections such as boils, as well as more serious infections such as wound infections, abscesses, pneumonia, and sepsis.

References

MRSA (Overview / Treatment)

Chambers HF. Community-associated MRSA - resistance and virulence converge. *N Engl J Med* 2005;352:1485-1487.

Deresinski S. Methicillin-resistant *Staphylococcus aureus*: An evolutionary, epidemiologic, and therapeutic odyssey. *Clin Infect Dis* 2005;40:562-573.

Fridkin SK, Hageman JC, Morrison M, et al. Methicillin-resistant *Staphylococcus aureus* disease in three communities. *N Engl J Med* 2005;352:1485-1487.

Kendig N. Management of community-associated methicillin-resistant *Staphylococcus aureus* infections in the outpatient setting. *The Hopkins HIV Report* (September, 2004). Available from: http://hopkins-aids.edu/publications/report/nl_04_sept.pdf

Lowy FD. *Staphylococcus aureus* infections. *N Engl J Med* 1998;339:520-532.

Moellering RC. Linezolid: The first oxazolidinone antimicrobial. *Ann Intern Med* 2003;138:135-142.

Wargo KA, and Eiland EH. Appropriate antimicrobial therapy for community-acquired methicillin-resistant *Staphylococcus aureus* carrying the Panton-Valentine leukocidin genes. *Clin Infect Dis* 2005;40:1376-1378.

MRSA (Outbreaks / Disease Severity)

Baillargeon J, Kelley MF, Leach CT, et al. Methicillin-resistant *Staphylococcus aureus* infection in the Texas prison system. *Clin Infect Dis* 2004;38:e92-95.

Centers for Disease Control and Prevention. Methicillin-resistant *Staphylococcus aureus* infections in correctional facilities - Georgia, California, and Texas, 2001-2003. *MMWR* 2003;52(41):992-996.

Centers for Disease Control and Prevention. Methicillin-resistant *Staphylococcus aureus* skin or soft tissue infections in a State prison-Mississippi, 2000. *MMWR* 2001;50(42):919.

Francis JS, Doherty, MC, Lopatin U, et al. Severe community-acquired pneumonia in healthy adults caused by methicillin-resistant *Staphylococcus aureus* carrying the Panton-Valentine leukocidin genes. *Clin Infect Dis* 2005;40:100-107.

Jones TF, Kellum ME, Porter SS, et al. An outbreak of community-acquired foodborne illness caused by methicillin-resistant *Staphylococcus aureus*. *Emerg Infect Dis* 2002;8:82-84.

Kazakova SV, Hageman JC, Matava M, et al. A clone of methicillin-resistant *Staphylococcus aureus* among professional football players. *N Engl J Med* 2005;352:468-475.

Miller LG, Perdreau-Remington F, Rieg G, et al. Necrotizing fasciitis caused by community-associated methicillin-resistant *Staphylococcus aureus* in Los Angeles. *N Engl J Med* 2005;352:1445-1453.

MRSA (Infection Control)

Centers for Disease Control and Prevention. Guideline for hand hygiene in health-care settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR* 2002;51 (RR16):1-44.

Centers for Disease Control and Prevention [homepage on the internet]. Methicillin-resistant *Staphylococcus aureus* - information for healthcare personnel, August, 1999. Available from: www.cdc.gov/ncidod/hip/ARESIST/mrsahcw.htm

Farr BM. Prevention and control of methicillin-resistant Staphylococcus aureus infection. *Curr Opin Infect Dis* 2004;17:317-322.

Garner JS and the Hospital Infection Control Practices Advisory Committee. Guideline for isolation precautions in hospitals. *Infect Control Hosp Epidemiol* 1996;17:53-80; and *Am J Infect Control* 1996;24:24-52. Available from: http://www.cdc.gov/ncidod/hip/ISOLAT/Isolat.htm

Muto CA, Jernigan JA, Ostrowsky BE, et al. SHEA guideline for preventing nosocomial transmission of multi-drug resistant strains of *Staphylococcus aureus* and *Enterococcus*. *Infect Control Hosp Epidemiol* 2003;24:362-386.

Wenzel RP, Reagan DR, Bertino JS, et al. Methicillin-resistant *Staphylococcus aureus* outbreak: A consensus panel's definition and management guidelines. *Am J Infect Control* 1998;26:102-110.

Appendix 1. MRSA Case Tracking and Reporting Form*

FACL: **Date:** **Contact Name/Phone #:** **Page:**

Name Registration Number	Age	Sex	Hosp. Unit	Date of admission Transfer date (if < 30 days)	Date of specimen collection	Source of culture	Date of culture	Surgery (if applicable)	Outcome: Died, Discharged, Transferred Final culture done

* List all cases and suspected cases of MRSA. Note: Use *Appendix 11 (MRSA Contact List)* for contacts of MRSA cases.
If cultures unobtainable or nondiagnostic, list as suspected MRSA infection based on clinical and epidemiologic factors.

Appendix 2. Oral Antibiotic Treatment Options for Skin and Soft Tissue MRSA Infections

Drug	Oral Dosing	Monitoring	Adverse Effects/ Drug Interactions/ Comments
TMP-SMX	1 DS tablet BID (Consider higher dosing with more serious infections or concurrent rifampin use)	Routine lab tests are not indicated. Monitor CBC/platelets, renal and hepatitis parameters with prolonged treatment or in complicated patients.	**Adverse effects:** Rash,erythema multiforme, Stevens-Johnson syndrome, hemolysis w/ G-6-PD deficiency, hepatitis, pancreatitis, bone marrow suppression. **Drug interactions:** Dapsone, anticoagulants, phenytoin, cyclosporine, diuretics, MTX. **Comments:** Maintain hydration with renal insufficiency to prevent crystalluria. Check for sulfa allergy.
Clindamycin	450 mg TID OR 300 mg QID	Routine lab tests are not indicated.	**Adverse effects:** GI upset and relatively high incidence of *C. difficile*-induced colitis compared to other antibiotics. **Comments:** If isolate is erythromycin-resistant, *in vitro*, clindamycin resistance may develop during therapy; consult with microbiology laboratory prior to treatment. Advise inmate to report diarrhea immediately.

Clinical Notes:

- For less serious infections antibiotic treatment may be avoided utilizing a conservative approach, e.g., twice daily warm soaks or compresses and/or I & D.
- Select antibiotics based on susceptibilities.
- Consider administration of medications by directly observed therapy.
- Minocycline or doxycycline, 100 mg BID, may be an alternative treatment option, but carefully review laboratory susceptibility results.
- MRSA isolates may be sensitive to quinolones *in vitro*, however, the potential for resistance limits the use of this class of antibiotics.
- The addition of rifampin in the treatment regimen may help with the treatment of serious soft tissue infections and promote decolonization, but its use is of unproven benefit.
- Recurrent/persistent skin lesions may indicate nonadherence to treatment, antibiotic resistance, or re-exposure to an infected source.
- Resistant or serious infections usually require IV vancomycin or alternative agent.

Appendix 3. Treatment Options for Serious MRSA Infections

Drug	[illegible]	[illegible]	[illegible] / Drug Interactions / Comments
Vancomycin (Vancocin®)	500 mg IV q 6 hrs; OR 1,000 mg IV q 12 hrs Infuse over 1 hour **Ineffective given orally**	Monitor trough drug levels within 1 hour of next dose: target is 10-15 mcg/mL. Auditory function Renal function/CBC	**Adverse effects:** • Ototoxicity, nephrotoxicity, drug fever, hypotension, rash, pruritus, reversible neutropenia. • Use with aminoglycosides increases nephrotoxicity. • Histamine reaction; flushing. **Drug interactions:** Anesthetics **Comments:** • Infuse over 1 hour to reduce "red man syndrome"→ flushing, hypotension. Monitor BP. May need to extend infusion time. • Adjust dosage based on trough levels. • May require 2nd or 3rd antibiotic for serious infections.
Linezolid[2] (Zyvox®)	600 mg BID oral or IV Can take with or without meals	CBC with differential/platelet count weekly Monitor BP - if hypertensive or taking a sympathomimetic	**Adverse effects:** Diarrhea (including pseudomembranous colitis), bone marrow suppression, nausea, headache; serious neuropathies with extended use. **Drug interactions:** Avoid adrenergic and sertonergic agents, including decongestants. **Comments:** • Avoid consuming foods containing large amounts of tyramine[3]. • Use cautiously if patient is hypertensive.

[1] Sepsis requires at least 2 weeks of IV antibiotics. Endovascular infections such as endocarditis, osteomyelitis, and other deep-seated infections require 4-6 weeks of therapy and may require combination antibiotic therapy; consult with expert on treatment regimen and length of treatment.
[2] Linezolid is a new antibiotic with limited efficacy and toxicity data: prescribe only in consultation with a physician expert.
[3] Avoid foods with very high tyramine content such as packaged soups, pickled/smoked fish, orange pulp, fava beans, and aged cheeses.

Appendix 4. Evaluation and Treatment of Skin and Soft Tissue Infections in the Correctional Setting

Initial Assessment

- Conduct targeted history and physical: check for fluctuance, crepitus and cellulitis
- Assess risk factors for MRSA infection, including recent hospitalization
- Assess risk factors for systemic infection, e.g., recent injection drug use, prior endocarditis
- Diagnostic tests:
  - If signs of systemic infection (lymphangitis, fever, tachycardia) → blood cultures
  - If wound drainage available → wound cultures
  - If MRSA pneumonia suspected → chest x-ray and sputum cultures

Conservative Treatment

For uncomplicated infections, without systemic S/S, use conservative treatment prior to antibiotics.

- **Warm soaks and compresses:** Soak infected area or apply warm compresses for 20 minutes, 2 to 3 times per day until infection clears. Perform on a case by case basis, consulting with the infection control officer regarding how to safely implement.
- **Incision and drainage (I & D):** In conjunction with the use of warm soaks or compresses, drain accessible fluid collections, particularly loculated soft tissue infections. Frequently reassess to determine if repeated drainage is warranted.
- **Foreign devices:** When possible, remove catheters / foreign devices related to the infection.

Empiric Therapy for Suspected *S. aureus* Infection

- **If systemic infection/sepsis possible** → admit as inpatient and consider empiric IV vancomycin
- **If mild to moderate illness** (e.g., significant cellulitis associated with abscess, fever, lymphangitis) and cultures unobtainable or nondiagnostic → consider empiric antibiotic therapy:
  - **If no MRSA risk factors and no other MRSA infections in population** → empiric treatment with first generation cephalosporin, or amoxicillin/clavulanate, or erythromycin
  - **If MRSA outbreak or MRSA risk factors** → treat with TMP-SMX or clindamycin

Targeted Antibiotic Therapy

- **If cultures and antibiotic sensitivities are available** → target antibiotic therapy accordingly
  - Highly resistant MRSA isolates and serious infections → usually require IV vancomycin
  - If susceptible → consider treatment with TMP-SMX or clindamycin
  - Can consider other antibiotics based on susceptibility results
- Monitor closely since *in vitro* sensitivities may not correlate with clinical response
- Persistent or recurrent disease may indicate nonadherence, new infection, or resistance

Decolonization

In context of significant MRSA outbreak → can consider decolonization of nares with 2% mupirocin BID for 5 days. Consult first with Central Office HSD given benefit is unproven.

Treatment Follow-up

- Re-evaluate 1 week after completion of antibiotic treatment and examine for recurrent lesions
- For uncontained draining lesions → document clinical improvement and 2 consecutive negative wound cultures 72 hours apart before discontinuing containment. Periodic follow-up as clinically warranted.

Appendix 5. MRSA Fact Sheet

What is MRSA?

Staphylococcus aureus, often referred to as "staph," is a common type of bacteria that is found on the skin and in the nose of healthy persons. Staph bacteria may cause minor skin infections such as boils or more serious infections such as pneumonia and blood poisoning. Certain "staph" bacteria that have become resistant to first-line antibiotics are called MRSA. MRSA infections are more difficult to treat, but usually respond to incision and drainage and/or antibiotics.

How is MRSA spread from person to person?

MRSA is usually spread through direct physical contact with an infected person, but may also be transmitted through contact with contaminated objects or surfaces. MRSA is not spread by coughing unless the infected person has pneumonia.

How can I prevent becoming infected with MRSA?

- **Wash your hands** thoroughly with soap and water throughout the day, particularly every time you use the toilet and before every meal.
- Never touch another person's wounds, infected skin, or dirty bandages.
- Don't scratch skin rashes.
- Maintain excellent personal hygiene through regular showers and by keeping your living space clean, including the regular laundering of your bed linens.
- Don't ever share personal hygiene items with others, including toiletries and towels.
- Clean off any surfaces shared with others such as weight benches.
- Use a towel or shirt as a barrier between your bare skin and exercise equipment.
- Shower after participating in close-contact recreational activities whenever possible.
- Don't get a tattoo in prison.
- Don't use injection drugs.
- Don't have sexual contacts with other inmates.

How does a person know that he or she has a MRSA infection?

Culturing pus from a skin infection is the most common way to detect MRSA.

Can MRSA be treated?

- MRSA skin infections are often treated first with frequent warm soaks and draining the wound. Strong antibiotics can be effective in treating MRSA. Serious or highly resistant MRSA infections may require intravenous (IV) antibiotics in the hospital.
- **Always seek medical attention if you develop a boil, red or inflamed skin, insect or spider bite, or a sore that does not go away.**

Appendix 6a. Correctional Standard Precautions in the General Population[1]

The following precautions should be observed by routinely by all correctional workers to prevent spread of disease.

Control Measure	Indicated (X)	Notes:
Hand Washing	X	Hands should be routinely washed with soap and running water: before eating, after using the lavatory, when hands are visibly dirty, and when there has been contact with blood or other body fluids. Wash hands with soap & running water for at least 15 seconds.
Personal Protective Equipment (PPE)	Not routinely	Personal protective equipment is indicated only if contact with blood/body fluids likely, i.e., gloves to protect hands from contact or mask, face/eye wear, gowns to protect from sprays and splashes.
Sharps	X	Dispose of in a leak-proof, puncture-resistant container. Never recap, bend, break or otherwise manipulate used needles by hand.
Single cell	Not routinely	Place potentially infectious inmates in a private room (in consultation with medical staff). Consider for inmates with poor hygiene practices
Sanitation		Routine cleaning with an Environmental Protection Agency (EPA)-registered disinfectant (http://www.epa.gov/oppad001/chemregindex.htm). Use according to the manufacturer's instructions. All washable (non-porous) surfaces should be cleaned **during** and **after** (terminal) cell occupancy. Correctional workers should conduct sanitation inspections of living & bathroom areas to identify visibly dirty areas.
Laundry	X	Collect at bedside or inmate may self-launder. If wet or soiled, handle as little as possible and bag in a leakproof bag at the location it was used, in accordance with local policy on management of contaminated linens. Machine wash and dry.
Activities	X	**Shared equipment**, weight benches or any other surface exposed to sweat should be disinfected *daily* and *routinely* wiped clean between users with a clean dry towel. Inmates should use barriers to bare skin, such as a towel or clean shirt while using exercise equipment. **Inmates participating in Sweat Lodges** should shower before-hand and wear clean shorts and shirt, and afterwards, shower and again put on clean clothes. Routinely clean blankets/towels used during the ceremony.
Report Skin Infections	X	Correctional workers with possible skin infections should report them promptly to their supervisor. Inmates with possible skin infections should be sent promptly for a medical evaluation.

[1] General Population refers to all correctional settings except health care settings.

Appendix 6b. Correctional Contact Precautions in the General Population[1]

Observe the following precautions (in addition to routine Correctional Standard Precautions) when working with an inmate known to have a skin infection.

[illegible]	[illegible]	[illegible]
Hand Washing	X rigorously	Hands should be routinely washed with soap and running water for at least 15 seconds. Perform hand washing BEFORE and AFTER every contact with an infected inmate, even if gloves were worn.
Personal Protective Equipment	as needed	Use gloves if touching contaminated items/contact with blood/infectious body fluids is likely. Use other personal protective equipment (mask, face/eye wear [illegible] wns) if contact with sprays or splashes likely.
Sharps	X	Dispose properly in a leak-proof, puncture-resistant container. Never recap, bend, break or otherwise manipulate used needles by hand.
Housing	varies	Medical determines the appropriate housing for an inmate with a skin infection. Inmates with skin infections may be housed in general population if the wound drainage can be contained in a dressing and the inmate is cooperative. Inmates with wounds that have significant drainage should generally be housed in a single cell. In an outbreak situation, inmates with MRSA may be housed together.
Sanitation	X	Routine cleaning with an Environmental Protection Agency (EPA)-registered disinfectant (http://www.epa.gov/oppad001/chemregindex.htm). Inmates are responsible for daily sanitation of cell. Instruct inmates to safely dispose of bandages in a leak-proof container according to local security policy. Remove trash *daily*. Clean all washable surfaces during and following (terminal) cell occupancy. Correctional workers should conduct sanitation inspections of living & bathroom areas.
Laundry	X	Change linens every other day (more often if visibly soiled). Linen bagged by the inmate in the cell. Change towels / wash cloths *daily*. Machine wash and dry.
Inmate Hygiene	X	Monitor inmate hygienic practices particularly if mentally impaired. Inmates with skin infections should shower daily.
Activities/ Visitors	case-by-case	Medical will decide about any restrictions on activities or visitors for inmates with skin infections. Restrictions on visitors rarely indicated.
Equipment	X	Single-use disposable is recommended, e.g., security devices. Clean hand cuffs, etc., after use.
Transports	Only when essential	If transfer is required for security or medical reasons the following procedures should be followed: (1) Wound should be dressed on the day of transfer with clean bandages that contain wound drainage; (2) Use contact precautions as described above (hand-washing, gloves if touching wound drainage & safe disposal of dressings). If soiling of securit, devices likely, use disposable restraints (if feasible). If not, decontaminate after use. (4) Place clean sheet on cloth seats in vehicle (not needed if vinyl). Decontaminate, if visible contamination occurs.

[1] General Population refers to all correctional settings except for health care settings.

Appendix 7a. Correctional Standard Precautions in the Healthcare Setting[1]

The following precautions should be observed routinely by all correctional workers and clinicians who work in healthcare (HC) settings.

Control Measure	Indicated (X)	Notes:
Hand Washing	X rigorous	Perform BEFORE and AFTER every patient contact, whether or not gloves were worn. If not visibly soiled, clean hands with a small quantity, e.g., 2-3 mL, of an alcohol-based handrub containing at least 60% alcohol (if permitted) or an antimicrobial soap. If visibly soiled, hands should be washed with soap (antimicrobial or regular) and running water using friction. Liquid soap dispensers at sinks preferred. Consider routine use of antimicrobial soap in clinical areas.
Personal Protective Equipment (PPE)	X	Access to single use, disposable gloves when contact with infectious body fluids or mucous membranes is anticipated. Latex-free gloves for latex-sensitivities. Gloves may be sterile or nonsterile, depending on the task. All HC staff should clean their hands before and after use of sterile/nonsterile gloves. Use other PPE if spray/splash is likely.
Sharps	X	Properly dispose in leak- & puncture-proof container per OSHA standards. Needles: Never recap, bend, break or manipulate by hand.
Room Assignment	Not routinely	Place potentially infectious inmates in a private room. Consider for those with poor hygiene.
Sanitation	X strictly enforced	Routinely clean all countertops, treatable surfaces in HC facilities per local schedule. Emphasis on frequently touched surfaces (i.e., door knobs, bed rails) & after any contamination with blood/body fluids. Use an appropriate quaternary ammonium (chloride containing) disinfectant. Change solutions on a *daily* basis and clean the container to prevent contamination. Ensure that patient care items and potentially contaminated surfaces are cleaned & disinfected after use. Barrier protective coverings, as appropriate, for surfaces that are touched frequently with gloved hands during patient care or may become contaminated with blood/body fluids or are difficult to clean.
Laundry	X	Collect & bag at bedside using standard precautions. Hot water, machine wash and dry regularly. Distribute when thoroughly dry.
Patient Care Equipment	X	Safely handle contaminated patient-care equipment to prevent skin and mucous membrane exposures, contamination of clothing & transfer of microorganisms to other patients & environments. Ensure that reusable equipment is decontaminated & reprocessed between each patient use. Discard all single-use items properly. Promptly decontaminate reusable equipment if contaminated with infectious body fluids or visibly soiled.
Report Skin Infections	X	HC staff should follow local procedures on reporting infections. Staff with suspected skin infections should report them to their supervisor.

[1] "Healthcare Setting" refers to areas where health care is delivered such as: medical/observation room, ambulatory or chronic care clinics, dental offices or inpatient units.

Appendix 7b. Correctional Contact Precautions in the Health Care Setting[1]

Observe the following precautions (in addition to Correctional Standard Precautions) when evaluating and treating inmates with skin or soft tissue infections in health care (HC) settings.

Control Measure	Indicated (X)	Notes
Hand Washing	X rigorously	Perform hand washing BEFORE and AFTER every contact with an infected inmate, in accordance with Standard Precautions.
Personal Protective Equipment (PPE)	X as needed	Clean, non-sterile gloves for patient care. Change gloves after contact with infective material. Remove gloves before leaving the patient's room; immediately wash hands with an antimicrobial. After glove removal, avoid touching potentially contaminated surfaces/items to avoid transfer of germs. Other PPE if drainage contact, likely.
Sharps	X	Dispose properly in a leak-proof, puncture-resistant container. Never recap, bend, break or otherwise manipulate used needles by hand.
Room Assignment	private or cohort	**Outpatient:** Private exam room, if suspect/confirmed to have MRSA. **Inpatient**: Private, if extensive draining lesions (keep covered) or MRSA pneumonia. May cohort if same antibiotic resistance. See *Appendix 9*.
Sanitation	X	Cleaned routinely per local schedule. Emphasis on high touch areas. Use quaternary ammonium. All patient care items & potentially contaminated surfaces must be cleaned & disinfected after use. Use barrier protective coverings, as appropriate, for surfaces that are frequently touched with gloved hands during patient care, or if likely to become contaminated with blood/body fluids, or if difficult to clean. Dispose of dirty bandages in accordance with local waste management policy.
Laundry	X	Use routine standard precautions. No separate "isolation linen".
Patient Care Equipment	X single-use, if feasible	Safely handle contaminated patient-care equipment to prevent skin and mucous membrane exposures, contamination of clothing & transfer of germs to other patients & environments. Ensure that reusable equipment is decontaminated & reprocessed between each patient use. Discard all single-use items properly. Promptly decontaminate reusable equipment if contaminated with infectious fluid or visibly soiled.
Report Infections	X	HC staff should follow local procedures on reporting MRSA infections. Staff with suspected skin infections should report to their supervisor.
Movement	Essential purposes only	Limit movement outside room to *essential* purposes *only*. Cover wound with clean dressing. If MRSA pneumonia, surgical mask indicated.
Transfers		**In general, do not transfer** inmates with contagious MRSA infections. If transfer is required for security or medical reasons: (1) On day of transfer, securely dress draining wounds to prevent seepage. (2) Use contact precautions (above). If soiling of security devices likely, use disposable restraints (if feasible). If not, decontaminate after use. (3) Place clean sheet on cloth seats in vehicle (not needed if vinyl). Decontaminate vehicle if visible contamination. (4) Have the clinical director (CD)/designee notify receiving CD/health services administrator of pending transfer with MRSA infection.

[1] "Healthcare Setting" refers to areas where health care is delivered such as medical/observation room, ambulatory or chronic care clinics, dental offices or inpatient units.

Appendix 8. **Inmate Fact Sheet**
General Instructions for Skin Infections

The following instructions are for inmates diagnosed with a skin infection.

Handwashing and General Hygiene

- Regularly wash your hands with soap and water for at least 15 seconds, especially:
  - before and after using the toilet
  - before and after touching your wound
  - before eating.
- Shower frequently and put on clean clothes. Change clothing whenever it is soiled with wound drainage.
- Change linens regularly and whenever soiled with wound drainage.
- Do not share personal items such as razors, towels, wash cloths, bars of soap, etc.
- If you have an open wound, it should be covered at all times with a bandage.
- Do not allow other inmates to touch your wound.
- If your bandage comes off, dispose of it carefully in a leak-proof container as instructed by health services staff. Wash your hands. Inform a correctional worker that you need a new bandage.

Warm soaks and compresses

You may be instructed to soak your skin infection regularly in warm salt water or apply moist compresses for 20 minutes at a time. Carefully follow the instructions you receive.
If your wound begins to drain, report it to the health center.

Antibiotics

Take all medications prescribed by your doctor exactly as you are told to.

Report any of the following to the health center:

- Fever
- Red streaks up from the wound.
- Increased foul smell from wound drainage
- Increased wound drainage.

Appendix 9. MRSA Containment Guidelines

MRSA Status	Containment Guidelines	Precautions
Non-draining MRSA skin infections	**Single cell housing not required.** Instruct in personal hygiene and to report worsening of infection and draining wounds.	[1] Correctional Standard Precautions
Small draining MRSA skin infections easily contained by simple dressing	**Single cell housing usually not required.** Single cell housing should be considered for mentally ill, cognitively impaired and uncooperative inmates. Visitor restrictions are generally not indicated.	[1] Correctional Standard Precautions
MRSA skin infections with uncontained drainage (e.g., weeping cellulitis, purulent catheter-site infections, non-healing abscesses, infected surgical wounds, etc.)	**Single cell housing recommended. In outbreak situations cohorting MRSA infected inmates with similar antibiotic resistance patterns is acceptable.** ▸ Restrict from recreation and common areas ▸ Visitor restrictions rarely indicated– handle on a case-by-case basis ▸ Separate shower and toilet facilities preferred; priority for inmates with draining peri-rectal or thigh lesions.	[1,2] Correctional Standard & Contact Precautions
MRSA pneumonia	**Single cell housing required.**	[1,3] Correctional Standard & Droplet Precautions

MRSA Status	Criteria for Discontinuing Containment
Healed wounds	Release 24 hours after wound drainage has ceased (even if antibiotic therapy incomplete).
Draining wounds	Release once wound drainage can be contained with a simple dressing OR after documenting clinical improvement and 2 consecutive negative cultures, at least 72 hours apart.
MRSA pneumonia	Release after documenting clinical improvement and 2 consecutive negative sputum cultures, at least 72 hours apart.

[1] The components of Correctional Standard Precautions are outlined in *Appendix 6a* and *7a*.
[2] The components of Correctional Contact Precautions are outlined in *Appendix 6b* and *7b*.
[3] Droplet Precautions include placing patient in a private room (negative pressure not required) or congregating patients with same infection; wearing mask eye protection or face shield during activities likely to generate spashes; wearing masks when entering room or within 3 feet of patient (N-95 not required); allowing patients to leave room only for essential purposes, always wearing a surgical mask. (See *Hospital Based Transmission Precautions* in the *Definitions* section for more detail.)

Note: Use of droplet precautions is of unproven benefit in preventing MRSA transmission with MRSA pneumonia; however, given the close proximity of incarcerated inmates, a conservative approach seems prudent.

Appendix 10. MRSA Containment Checklist (page 1)

✓	Index (Case) Tobe...

Index Case Last name: **First name:** **Registration #:**

1. History of current illness

- ☐ Non-draining skin infection (location):_____
- ☐ Draining wound (location)_____ Description: _____Onset Date: __/__/__
  - ☐ I & D Date: __/__/__ _____
  - ☐ I & D Date: __/__/__ _____
- ☐ Pneumonia Onset Date: __/__/__
- ☐ History of fever (obtain blood cultures)

2. Culture Results:

- ☐ Culture/Sus Source: _____ Date: ___/___/___ Organism:_____Resist:_____
- ☐ Culture/Sus Source: _____ Date: ___/___/___ Organism:_____Resist:_____
- ☐ Culture/Sus Source: _____ Date: ___/___/___ Organism:_____Resist:_____

3. Containment. The following housing is recommended (see *Appendix 9*)

- ☐ **General population** (generally non-draining lesions or lesions with contained drainage)
- ☐ **Single cell housing** (draining lesions, MRSA pneumonia, uncooperative inmates with MRSA)
  - ☐ Separate toilet facility preferred
  - ☐ Separate toilet facility required (thigh/peri-rectal lesions, etc.)
  - ☐ Droplet precautions - MRSA pneumonia (see *Definitions-Droplet Precautions*)
- ☐ **Cohorted housing** (outbreak situations) - inmates with MRSA with similar susceptibility patterns

4. Inmate teaching / restrictions (Check all that apply)

- ☐ teach inmate about wound care / precautions - *Appendix 8* (*General Instructions for Skin Infections*)
- ☐ restrict from work assignment (_____) until not infectious
- ☐ restrict from recreation - until not infectious
- ☐ restricted or ☐not restricted from dining hall (check one)
- ☐ visitor restrictions (rarely indicated – determine on a case by case basis)

5. Case interview to identify potential sources of infection Date:__/__/__

- ☐ history of MRSA ☐ hospitalization or surgery (where/when?)_____
- ☐ sharing of personal hygiene items_____
- ☐ recent injection drug use_____ ☐ tattoo while incarcerated_____
- ☐ other medical risk, e.g., diabetes, dialysis, etc. _____
- ☐ sexual contact with other inmates_____☐ participation in close-contact activity_____
- ☐ exposure to other inmates with draining lesions ☐ recent transfer

6. Identify potential contacts: Record on *Appendix 11* (*MRSA Contact Line-list*)

- ☐ review infection data, sick-call, e.g., trends, more cases? ☐Yes ☐No
- ☐ interact with providers, e.g., more cases?
- ☐ other positive laboratory cultures identified? ☐Yes ☐No
- ☐ work assignment:_____
- ☐ housing assignment(s) (dorm/room):_____

7. Discontinue Containment: __/__/__

- ☐ **Healed wounds:** Release 24 hours after wound drainage ceased (even if antibiotic TX incomplete)
- ☐ **Draining wounds responding to TX**: Release if cooperative and drainage contained by simple bandage OR after 2 consecutive, negative cultures, at least 72 hrs apart.
- ☐ **MRSA pneumonia responding to TX:** Release after 2 negative sputum cultures, 72 hrs apart.

8. Follow up visit to monitor for potential reoccurrence. **Date:** __/__/__

Appendix 10. MRSA Containment Checklist (page 2)

✓ Task(a) Contact Follow-up/Control Measures

Index Case Lastname: **Firstname:** **Registration #:**

9. Implement appropriate barrier precautions & promote good hand hygiene.
- ☐ insure appropriate staff communication
- ☐ insure processes to maintain access to appropriate hand hygiene supplies are in place for infected inmate and staff.

Describe:

Date: __/__/__

10. Communicate risks, educate on transmission, infection control & prevention.
- ☐ inmates
- ☐ correctional workers
- ☐ clinician staff - include management training, as necessary

Describe:

Date: __/__/__

11. Screen all close contacts for symptoms. (List on *Appendix 11*).

Date completed: __/__/__

Screen for localized symptoms or systemic symptoms/potential sepsis, e.g., fever, tachycardia, tachypnea, hypotension, mental status changes. **Expedite** to hospital, as indicated.

12. Evaluate symptomatic cases and treat and contain as indicated. Refer as necessary.

Obtain culture and susceptibility testing on draining lesions If MRSA is suspected refer back to steps 1 to 8 of this checklist.

13. Report MRSA outbreak to:

(2 or more epidemiologically related cases with similar antibiotic resistance pattern)
- ☐ Not applicable
- ☐ Warden __/__/__
- ☐ Regional Office __/__/__
- ☐ Central Office HSD __/__/__
- ☐ Local health department __/__/__

14. Continue surveillance to identify potential cases.

If transmission-linked cases is evident, consider mass screening of implicated areas

15. Provide feedback and address areas where improvement is indicated.

_____ _____

Investigating Employee (Last Name, First - Print) Date Completed

_____

Employee Signature

Appendix 11. Line listing of Contacts to MRSA Cases

(Suspected/Confirmed MRSA cases should be also listed on Appendix 1)

Index Case: **Registration#:** **Page:**

✔	Inmate Name (Last, First)	Registration #	Contact Type*	Evaluated/ Outcome

*e.g., cell-mate, dorm-mate, co-worker, other contact

Inbox (Two-Line View) Items 1 to 16 of 16

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RE: Injury Leave
Burke, Monica L (DOA)
To: Godfrey, Todd W (DOC)
Cc:

Hi Todd,

It believe it was Director Armstrong, and the Deputy Director of Personnel & Labor Relations.

Monica Burke
Payroll Supervisor
Public Protection Group
Division of Personnel & Labor Relations
907-465-3300

From: Godfrey, Todd W (DOC)
Sent: Wednesday, March 05, 2008 7:04 AM
To: Burke, Monica L (DOA)
Subject: RE: Injury Leave

Hi Monica,
Thank you for replying to my question. Could you please tell me who made the final determination on the denial of my Injury leave. Thanks , Todd.

MEMORANDUM

State of Alaska

DEPARTMENT OF CORRECTIONS
Division of Institutions

Anvil Mountain Correctional Center
P.O. Box 730
Nome, Alaska 99762-0730
Phone (907) 443-2241 Fax (907) 443-5337

TO: Supt. Okuley

DATE: 12/10/07

THRU: Sgt. Rendon

FROM: Todd Godfrey COII T.G.

SUBJECT: Injury Leave

On 12/07/07, during the course of my regular duties, I contracted the MRSA staff infection. I have been unable to report for duty since Saturday 12-08-07. The Doctor has informed me that this stage of the infection is contagious.

I am requesting to invoke section 20.7 of the Alaska Correctional Officer's Association contract covering Injury Leave. At this time, I do not know when I will be cleared to return to duty.

Thank you for your attention to this matter. Please feel free to contact me if you require more information.

Todd Godfrey COII

STATE OF ALASKA

EMPLOYEE NOTICE OF PAY PROBLEM

EMPLOYEE NAME (LAST, FIRST, MI)	SOCIAL SECURITY NUMER	BARGAINING UNIT
Godfrey, Todd W.	574-64-4527	GGU

DEPARTMENT	DIVISION	LOCATION
D.O.C.	Inst.	AMCC

PAY PROBLEM (Check the appropriate box and explain below):

☐ Pay Shortage ☐ Paycheck Late ☐ Late Termination Check ☑ Other

Problem occurred in the pay period ending Dec. 13 2007 (date).

Explanation of Problem.

I was charged personal leave for the dates of 12-8 to 12-12 for a total of 60 hrs. On 12-7 I requested to invoke section 20.7 of the Alaska Correctional officer's Association Contract covering Injury leave. I would like to be reimbursed the 60 hrs of leave. The Workers Compenstation number is 2007-19885.

EMPLOYEE'S SIGNATURE	DATE FILED	TIME FILED
Todd Godfrey	1-3-07	1100 Thur

SIGNATURE OF SUPERVISOR/FOREMAN IN RECEIPT OF NOPP	DATE REC'D	TIME REC'D

IMPORTANT NOTICE: Supervisor or Foreman must notify the appropriate department office by telephone, teletype, radio, or electronic mail the day the Notice of Pay Problem is received. Follow-up by sending the form to the appropriate department office. **Do not separate the form. Submit all copies to the Dept. Payroll/Personnel office.**

DEPARTMENT ACTION/RESPONSE (to be completed by Dept. Payroll/Personnel office):

DEPARTMENT AUTHORIZED SIGNATURE	PRINTED NAME	DATE

Distribution to be made by Payroll/Personnel office: Copy 1 - Dept. Payroll/Personnel office
2 - Labor Relations Section, Dept. of
3 - Union or Association Representative
4 - Employee

02-091 (Rev. 3/99)

Response to Employee Notice of Pay Problem

Employee: Todd Godfrey
SSN: 574644527
Filing Date: 1/3/08

Mr. Godfrey states that he was charged personal leave when he requested to invoke section 20.7 of the Alaska Correctional Officers Association contract covering injury leave. He would like his personal leave of sixty (60) hours reimbursed.

Per the Alaska Correctional Officers Association (ACOA) contract Article 20.7, Section B.3, the injury leave request must be submitted to the Superintendent for approval. Mr. Godfrey submitted an injury leave request memo to his Superintendent thru his supervisor on December 10, 2007. Due to the conditions surrounding the injury, the Superintendent has not approved the injury leave request. Once the Workers' Compensation determination is made the Superintendent will make the injury leave request approval determination.

Mr. Godfrey has been paid correctly, and will continue to see his personal leave charged until the approved leave request memo is approved by the Superintendent.

No further action required.

Mike Rader
Human Resource Tech III
Public Protection Payroll
January 10, 2008

Rader, Mary M (DOC)

From: Okuley, Marcus J (DOC) **Sent:** Fri 1/4/2008 12:48 PM
To: Rader, Michael B (DOA)
Cc: Armstrong, Garland H (DOC); Bingham, Rebecca Jean (DOC); Burke, Monica L (DOA)
Subject: RE: Todd Godfrey Injury Leave Request
Attachments:

That seems reasonable to me. Thank you.

From: Rader, Michael B (DOA)
Sent: Friday, January 04, 2008 12:16 PM
To: Okuley, Marcus J (DOC)
Cc: Armstrong, Garland H (DOC); Bingham, Rebecca Jean (DOC); Burke, Monica L (DOA)
Subject: RE: Todd Godfrey Injury Leave Request

Approving the injury leave is up to you. If you would like to wait until the Worker's Comp has been determined before approving the injury leave that is fine. I'm going to respond to the NOPP stating that we will be charging his personal until the Injury Leave request is approved. If you have any questions or concerns please let me know.

Thanks,

Mike Rader, Human Resource Technician III

Dept. of Admin., Div. of Personnel & Labor Relations

Technical Services Public Protection Group

Phone: 907-465-3324

Fax: 907-465-2202

From: Okuley, Marcus J (DOC)
Sent: Friday, January 04, 2008 10:53 AM
To: Rader, Michael B (DOA)
Cc: Armstrong, Garland H (DOC); Bingham, Rebecca Jean (DOC)
Subject: RE: Todd Godfrey Injury Leave Request

Mike,

The employee claimed in his memo that he contracted the infection "during his regular duties". However, t no corroboration. No known active MRSA cases were present in the facility at the time. I indicated on the

Workers Comp injury report that it was indeterminable whether the employee contracted MRSA at the facil the community. I have no problem approving the memo for Injury Leave (the possibility exists it was work r but had thought Workers Comp needed to make a determination?

What say you?

鼠

2008

A Year of Possibilities

Marc Okuley

Superintendent

Anvil Mountain Correctional Center

Box 730 Nome, Alaska 99762

(907) 443-5404

From: Rader, Michael B (DOA)
Sent: Friday, January 04, 2008 10:38 AM
To: Okuley, Marcus J (DOC)
Cc: Burke, Monica L (DOA)
Subject: Todd Godfrey Injury Leave Request

Hello,

Todd submitted a Notice of Pay Problem because he has not received his Injury Leave for a MRSA staff infection tha contracted during his regular duties on 12/7/07. He attached a copy of his Injury Leave request memo that was sent through his supervisor. Have you received or approved this? In order for my NOPP response to be accurate I would know if his request is approved or not. Please let me know if you need a copy of the memo for signature or if it's alre approved.

Thank you for your assistance.

Mike Rader, Human Resource Technician III

Dept. of Admin., Div. of Personnel & Labor Relations

Technical Services Public Protection Group

Phone: 907-465-3324

Fax: 907-465-2202

Reader, Mary M (DOC)

From: Okuley, Marcus J (DOC) **Sent:** Fri 1/18/2008 10:50 AM
To: Rader, Michael B (DOA)
Cc: Reader, Mary M (DOC)
Subject: RE: Request For Injury Leave - Godfrey
Attachments: Injury Leave Request Approval.pdf(135KB)

Mike,

I have approved injury leave for Todd Godfrey related to his absence from work 12/8 through 12/12/2007 (60 hours) due to a MRSA infection. It appears Workers Comp has made a determination, established a file and is footing his medical costs. I have not heard anything regarding this issue from Risk Management.

I have attached the request memo with my approval notation and additional AWCB documentation. My recommendation is that Mr. Godfrey be reimbursed 60 hrs of personal leave and the absence covered by ACOA injury leave (ACOA CBA Art. 20.7).

Please advise if there is anything further needed.

Marc Okuley

Superintendent

Anvil Mountain Correctional Center

Box 730 Nome, Alaska 99762

(907) 443-5404

2008

A Year Of Possibilities

From: Rader, Michael B (DOA)
Sent: Tue 1/15/2008 2:23 PM
To: Reader, Mary M (DOC)

Subject: RE: Notice of Pay Problem

The Superintendent will make the determination on the injury and if it qualifies. Often the Superintendent will wait until Worker's Comp. comes back with their determination. Let me know if you need anything else.
Thanks!

Mike Rader, Human Resource Technician III

Dept. of Admin., Div. of Personnel & Labor Relations

Technical Services Public Protection Group

Phone: 907-465-3324

Fax: 907-465-2202

From: Reader, Mary M (DOC)
Sent: Tuesday, January 15, 2008 2:20 PM
To: Rader, Michael B (DOA)
Subject: Notice of Pay Problem

I just received your reponse to employee notice of pay problem for Todd Godfrey. Do you know who makes the determination whether or not his condition/injury was work related? Is there someone I can contact to find out if a determination has been made? Thanks for your help.

Mary

File Copy

Okuley, Marcus J (DOC)

From: Rader, Michael B (DOA)
Sent: Wednesday, February 27, 2008 10:37 AM
To: Okuley, Marcus J (DOC)
Cc: Burke, Monica L (DOA)
Subject: Todd Godfrey Injury Leave Denied

Good Morning,
Diane Kiesel and Garland Armstrong made the decision that Todd's injury leave should not be approved for the MRSA staff infection. Since MRSA can be contracted at any location, and there was not a clear outbreak in the institution it was deemed not eligible for injury leave. We will not be running an adjustment to credit his leave back and will be charging his personal leave for any other leave taken for this reason. If you have any questions please let me know.
Thanks!

Mike Rader, Human Resource Technician III
Dept. of Admin., Div. of Personnel & Labor Relations
Technical Services Public Protection Group
Phone: 907-465-3324
Fax: 907-465-2202

File Copy

Okuley, Marcus J (DOC)

From: Rader, Michael B (DOA)
Sent: Wednesday, February 27, 2008 10:37 AM
To: Okuley, Marcus J (DOC)
Cc: Burke, Monica L (DOA)
Subject: Todd Godfrey Injury Leave Denied

Good Morning,
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Thanks!

Mike Rader, Human Resource Technician III
Dept. of Admin., Div. of Personnel & Labor Relations
Technical Services Public Protection Group
Phone: 907-465-3324
Fax: 907-465-2202

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Injury Leave
Burke, Monica L (DOA)
To: Godfrey, Todd W (DOC)
Cc: Rader, Michael E (DOA)

Hello CO Godfrey,

Your injury leave has been denied due to the fact there is no evidence that you contracted MRSA in the institution, and there were no other reports of any other employee having this in your facility.

Please let me know if you have further questions. Thanks.

Monica Burke
Payroll Supervisor
Public Protection Group
Division of Personnel & Labor Relations
907-465-3300

Methicillin-resistant *Staphylococcus aureus* (MRSA)

Joe McLaughlin MD, MPH
State Epidemiologist and Chief,
Alaska Section of Epidemiology
Division of Public Health
Department of Health and Social Services

Outline

- Epidemiology of *Staphylococcus aureus* and MRSA
- MRSA in prisons

Staphylococcus aureus

- Bacteria
  - Commonly carried on the skin or in the nose of healthy people
- Common cause of minor skin infection
  - E.g., pimples and boils
  - Can be treated without antibiotics
- Can also cause serious infections
  - Surgical wound infections
  - Bloodstream infections
  - Pneumonia

MRSA

- Methacillin-resistant *Staph aureus*
  - Resistant to beta-lactam antibiotics
- Beta-lactam antibiotics include
  - Methicillin
  - Oxacillin
  - Penicillin
  - Amoxicillin

Colonization

- *S. aureus*: 25–30%
  - Nares, axillae, groin
  - "Carriers"
- MRSA colonization increasing
  - 2001–2002: 0.8%
  - 2003–2004: 1.5%
- Risk factor for infection
  - ~80% of infections

MRSA Colonization Consequences

- Consequences of MRSA colonization compared to MSSA
  - Increased risk of infection
  - Longer hospital stays (by ~10 days)
  - 2.5-fold higher mortality rate
  - Increased health care cost

Health Care-associated MRSA

- Immunocompromised are at highest risk
- Most common manifestations
  - Wound infections
  - Urinary tract infections
  - Bloodstream infections
  - Pneumonia
- Proportion of *S. aureus* infections that were MRSA in ICUs in the United States
  - 1974 2%
  - 1995 22%
  - 2004 64%

Community-acquired MRSA

- Occurs in otherwise healthy people who have not been hospitalized or had a medical procedure within the past year
- Most common manifestations
  - Pimples
  - Boils
  - Cellulitis
- ~12% of MRSA infections

Staph aureus Incidence

- ~12 million outpatient healthcare visits annually in the US
- ~292,000 hospitalizations per year
- ~94,000 people were diagnosed with invasive MRSA in 2005
  - 19,000 died
  - 86% were HC-MRSA
  - 14% were CA-MRSA
  - Annual cost: $3.2–$4.2 billion

MRSA Surveillance

- Most states do not require MRSA reporting
  - Burden to HCP and laboratorians
  - Public health response
- Alaska reporting regulations
  - >50 reportable infectious diseases
  - MRSA is not reportable
  - An unusual number or clustering of any infectious disease is reportable

What do Staph and MRSA skin infections look like?

Photos from http://www.staph-infection-resources.com/mrsa-pictures.html

Pimples, Boils, Cellulitis

Ulcers, Impetigo, Drainage

Who is at increased risk for CA-MRSA?

- Risk factors
  - Close skin to skin contact
  - Openings in the skin such as cuts or abrasions
  - Contaminated items and surfaces
  - Crowded living conditions
  - Poor hygiene
- Identified risk groups
  - Alaskan Natives
  - Athletes
  - Children
  - Men who have sex with men
  - Military recruits
  - Native Americans
  - Pacific Islanders
  - Prisoners

Diagnosis of MRSA Skin Infection

- Clinical
- Culture
  - Recommended
  - From drainage or skin biopsy
  - Antimicrobial resistance testing

Treatment

- Incision and drainage
  - Boils and abscesses
  - Should only be done by a health care provider
- Antibiotics
  - Guided by susceptibility profile of the organism
  - Often not necessary
  - Indicated for
    - Large area of cellulitis
    - Systemic illness (fever)
    - Significant co morbidity
    - Immune suppression

Decolonization

- Mupirocin (Bactroban®), chlorhaxidina, rifampin
- Occasionally effective in the short-term for individual patiant (e.g., dialysis, ICU)
  - Effectiveness interrupting transmission in healthcare settings not established
  - No data for community transmission
- Increasing resistance to mupirocin
- No consensus recommendations

Prognosis/Recurrence

- Highly favorable for people with good general health who have mild cases
  - Patients may be carriers for years
  - Recurrence may be as high as 40%
- Few develop invasive disease
  - <1–7% ?
  - ~20% of patients with invasive MRSA die

Prevention

- Wash hands
- Keep cuts and scrapes clean and covered with a bandage until healed
- Avoid contact with other people's wounds or bandages
- Avoid sharing personal items such as towels or razors
- Effectively diagnose and treat to prevent MSSA→MRSA

MRSA in Prisons

Presentation and Risk Factors

- Implicated risk factors
  - Longer incarceration
  - Prior antibiotic use
  - Gender
  - Washing clothing by hand
  - Not using soap to wash
  - Co-morbidities
  - Self-draining of boils
  - Sharing towels, razors
  - Tattoos obtained in prison
- Presentation
  - Skin infections
  - "Spider Bites"
  - Often recurrent

MRSA Colonization in Prisons

- Mississippi — 2000
  - 1,757 inmates samples; 4.9% colonization
  - Sex: 2.5% males vs. 5.9% females
- New York — 2005–06
  - Men's prison: 0.8%
  - Women's prison: 4.7%
- New Orleans — 2008
  - 302 inmate samples; 16.6% colonization
  - Sex: 15% males vs. 20% females

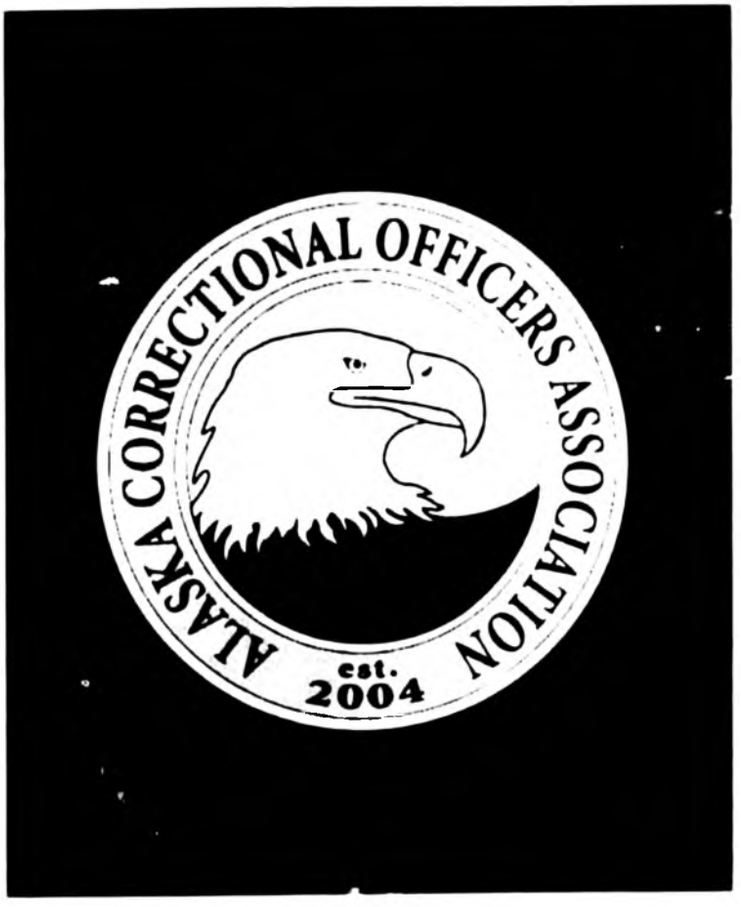
Incidence

- Texas study
- 299,179 inmates incarcerated from 1999–2001
- Incidence: 12 MRSA infections/1000 person-years

Management in Prisons

- Federal Bureau of Prisons
- *Management of MRSA Infections*
  - August 2005
  - Screening and surveillance
  - Reporting
  - Treatment
  - Infection control
  - Outbreak management

Legislative Hearing
May 27, 2008



Reference Book

Table of Contents

1

[redacted]

1. Fill all 776 positions funded in the Budget
2. Bring minimums back up to pre-December 4, 2006. Open discussion on staffing/posts.
3. Make Officer Hansen whole
4. Have an independent person review discipline
5. Allow ACOA hats, turtlenecks again
6. Do not lay off Sergeant John Macomber (SCCC)
7. Fight for MRSA coverage by Workers Compensation
8. Cover MRSA infections – Injury Leave
9. Investigation into DOC Management for:
    A. Unnecessary & detrimental actions against membership
    B. Disciplinary actions against members for their own personal reasons.
    C. Evasive and/or false statements in Arbitrations
    D. Propagating an investigative hearing process that is more about guilt-finding than fact-finding.
    E. Undermining the morale of the Department
10. Permission to conduct CISD meeting at Institutions
11. Authorization for a dress uniform

2

Pennsylvania: PHS sued.
http://www.philly.com/inquirer/front_page/20071123_Jails_contagious_dispute.html
Posted on Fri, Nov. 23, 2007
Jail's contagious dispute
As MRSA infections spread, so does legal mess.
By Jan Hefler

Inquirer Staff Writer

At the Gloucester County Jail, Michael DiFelice requested a cell that would keep him away from more hardened criminals. The real estate appraiser, who was serving time for driving with his license suspended, got his wish. The price was a mattress on the floor, in a cell shared with two other inmates.
From the beginning of his 40-day stay in 2005, parts of the chronically overcrowded jail seemed unusually dirty, DiFelice said. The bathrooms were often so filthy that he tried to time his showers to their cleanings. "I'd watch and wait because I was afraid of getting something," he said.

What DiFelice did not know was that his cell block also housed sick inmates. One was his cell mate, who had a "big, nasty boil" on his back. The relevance of this would not be known for five months, when DiFelice was back on the street and his armpit swelled to the size of a softball. At the hospital that day, the emergency-room doctor said the septic cyst would "explode unless we operate."

DiFelice suffered from methicillin resistant staphylococcus aureus - MRSA - a strain of a common bacterium that causes staph infections, spreads by casual contact, and sometimes goes undetected until it shows up as a boil or a swollen area.

Unlike most staph infections, MRSA is difficult to treat and potentially lethal if it spreads to vital organs or the blood. A recent nationwide scare over staph was driven by a federal study that estimated the number of MRSA deaths at 19,000, and by an infected 17-year-old student's death in Virginia.

At the Gloucester County Jail, MRSA spread among inmates to corrections officers and beyond: Several spouses of inmates and corrections officers were infected. No one has died, but the infections have left many of the victims with lifelong medical complications, produced 18 lawsuits, and raised questions about the jail's response.

The federal lawsuits have already cost tens of thousands of dollars to defend, and there is a local precedent for substantial jury awards and payments to plaintiffs. The Bucks County Jail was the subject of 19 MRSA-related lawsuits. Two years ago a jury awarded $800,000 and $400,000 to two inmates, and $150,000 settlements were reached with others. A lawsuit to improve conditions at the jail, filed on behalf of 36 other inmates, is pending.

Corrections facilities are especially vulnerable to MRSA because the germ spreads in close quarters and thrives in unsanitary settings. Aside from the cases in Bucks County, MRSA outbreaks have taken place in other county jails in the region and in Philadelphia. The Pennsylvania Institutional Law Project, a rights advocate for inmates, estimates that as many as 30 people infected with MRSA in city prisons have received undisclosed settlements.

The Gloucester County Jail, home to about 300 men awaiting trial or serving sentences of less than one year, became a kind of incubator for MRSA in 2003, according to the lawsuits and interviews with inmates, corrections officers and others.

The lawsuits allege that county officials withheld or "fraudulently concealed" information about the spread of MRSA and failed to "put procedures or policies in place to eliminate or minimize the risk of exposure." County officials deny the allegations and say they responded aggressively as soon as they learned MRSA was spreading.

For the victims, the shock of learning they are infected is followed by the rigors of treatment, which in some cases will continue for years.

Sgt. Ken Warfield, a corrections officer, broke out with boils in August 2003, six months after MRSA first struck the jail. Despite aggressive treatment, the boils reoccur. Two years after he became infected, Warfield required 14 days of intravenous applications of Vancomycin, a powerful antibiotic. Last month, he was hospitalized with pneumonia, and doctors aren't sure whether his continuing battle with MRSA caused it.

Now 60 and still working when able, Warfield retreats to his upstairs bedroom in his Franklinville home whenever the boils return because he fears infecting his wife or their six grandchildren. His clothes are laundered separately - in hot water and bleach. And he is constantly washing his hands.

The infection, he said, "really ruined my life."

Mysterious lesions
Officials at the Gloucester County Jail were mystified. It was February 2003, and 14 inmates had developed oozing lesions. The initial theory?
Spider bites.

Chad Bruner, the jail's former health director, told The Inquirer in 2004 that it had taken the jail "a long time to figure out" what caused the lesions. But once MRSA was identified, jail and county officials said, they acted.

Within three months, county freeholders replaced the sheriff who oversaw the jail and brought in a professional administrator to make improvements. Health experts say education and hygiene are key to controlling the spread of MRSA, particularly in group settings, and officials said plans had been put in place at the jail.

"Every employee and corrections officer went through a program with the health department on avoidance and how to spot" MRSA, Freeholder Director Stephen M. Sweeney said in a recent interview. "We never ignored the problem."

By 2004, hand-sanitizer dispensers were installed around the jail. Daily logs of confirmed and suspected MRSA cases were kept, starting that September. Over the next two years, according to the jail, MRSA cases decreased by half, from 20 to 10.

But soon after the logs were started, the warden was suspended for misrepresenting the numbers, and corrections officers demanded his ouster and pushed for stronger action to protect them from MRSA.

In January 2005, the warden was replaced and a new jail director, Robert Balicki, was named. A policy to isolate infected inmates was adopted, but persistent overcrowding defined how well it was applied.

Unsanitary conditions

DiFelice landed in the jail in April 2005. For 40 days, his home was a three-story brick building attached to the courthouse in Woodbury. Built 20 years ago, the jail often exceeds its capacity of 225. In 2005 and 2006, for example, the average was 313.

Although the MRSA outbreak had taken place two years earlier, DiFelice said, no one told him about the infection or instructed him in how to protect himself. He said he quickly had noticed the boil on his cell mate.

"What is that thing?" DiFelice said he had asked. The cell mate said that he had a cream to treat it, and that he sometimes got gauze from the nurse to try to keep it covered.

MRSA spreads through skin-to-skin contact, contaminated items and surfaces. A general lack of cleanliness contributes, according to the Centers for Disease Control and Prevention. At the jail, the conditions for contagion were often ideal.

DiFelice said he draped his towel across the rail of his cell mate's bunk because the cell lacked hooks. When he was assigned to clean the showers, he said, there was often a shortage of bleach.

"Slimy and nasty," he said of the showers. "Sometimes we were told to just give them a few squirts to clean them, or to just use dish soap when there was no bleach."

The New Jersey Department of Corrections noted several lapses during annual inspections in 2005 and 2006. One inspection, in December 2005, noted that inmates did not receive the required allotment of clean bedding and towels.

Inmates also were not given a rules handbook, which informs them how to get medical services, according to the inspectors. DiFelice was asked to sign a document stating he had received the handbook when he arrived, he said, even though officers had not provided him one because none were available. In 2006, inspectors cited the jail for failing to have records showing that indigent inmates received hygienic supplies, such as soap and toothpaste, as required.

Under New Jersey law, corrections facilities have 60 days to respond to citations and are reinspected within six months. When inspectors returned each of the last two years, the jail was in compliance except for the continued overcrowding, a common problem in jails.

Balicki, the director at the jail, said the deficiencies noted by state inspectors had been a result of the jail's not having the proper documentation. "We don't have these documents in our back pocket when the inspector arrives," he said.

Officers were unaware

Warfield's precautions have kept MRSA from spreading to his family. Other corrections officers have been less fortunate. Three have infected their spouses.

Robert A. Greenberg, a lawyer in Cherry Hill who represents those three corrections officers and two others, said the impact of MRSA went beyond the medical. "They're ashamed, and in many cases they're shunned," he said of the officers.

Greenberg faulted the county for failing to inform the officers of the problem and not addressing it promptly. Corrections officers, he said, were unaware of the signs of MRSA or its consequences.

"They didn't know," Greenberg said. "They thought it was just a pimple or a boil – and passed it on to their spouses by direct contact."

Even after the jail identified MRSA as a threat in 2003, the infection persisted. Michael A. Collins was infected in 2004 while serving six months for violating parole. He said jail officials had ignored his complaints about a painful sore for three days.

"My leg blew up like a hot-air balloon, and it turned blue, yellow, orange and green," said Collins, 36, of Franklin, a plaintiff in the lawsuits. He underwent three operations to excise an infection that bored deep into his muscle. He now walks with a cane.

The persistence of MRSA at the jail has pitted the union representing the corrections officers against jail administrators. Union officials accuse the jail of not doing enough and contend that MRSA remains a threat, while jail officials say their monitoring has significantly reduced the rate of infection. The antagonism is rooted in part in the early confusion of MRSA and the fact that the infection spread to officers and their spouses.

Sgt. Joseph Hetzel, who was vice president of Lodge 97 of the Fraternal Order of Police during the 2003 outbreak, said jail officials refused to admit there was a problem. When officers became infected and learned the truth from their doctors, they informed jail officials but were ignored, Hetzel said.

"Some people were just given a cream for their boils and were told they'd be OK," said Joseph Marano, a Westmont lawyer who represents several former inmates and one corrections officer.

The union said measures implemented by the jail after the 2003 outbreak were insufficient. Only when sued did jail officials begin isolating inmates with MRSA, but quarantine is often difficult because of overcrowding and inconsistent practices, Hetzel said.

Sgt. Eugene Caldwell, president of the Gloucester County Corrections Sergeants Association, said the county could still be a lot more aggressive. "Our biggest fear is getting the disease and bringing it home to our families," he said. "They need to take the problem more seriously."

His union, which represents 16 officers at the jail, is advocating for procedures established at federal and state corrections facilities, including immediate medical attention for inmates who exhibit a boil and a routine examination of their cell mates.

Union officials also said that the jail had reduced the number of cultures that are taken - such tests are the only way to confirm MRSA - and that inmates with boils were treated with the antibiotic Bactrim and tested only if the boils persisted.

Balicki, the jail's director, said measures had reduced MRSA cases. "There's hysteria about MRSA," he said. "We're not the breeding ground people think we are."

Though cell mates of infected inmates are not checked, their cells are immediately disinfected, Balicki said. Sick inmates are seen within 72 hours, and inmates with a boil can get prompt attention by notifying an officer, he said.

Balicki said cultures cost $87 apiece - too prohibitive, he said, to order routinely. They are ordered only if inmates have a sore that is draining or won't respond to antibiotics, he said, adding that inmates sometimes served short sentences and were released before results come back.

Health experts, however, say cultures are critical to verify infection, identify the bacterial strain, and choose the proper medication. In federal prisons, if two or more inmates have the same strain, it is deemed an outbreak and the facility is disinfected and other inmates are examined.

Preparing for trial

The current lawsuits, filed in U.S. District Court in Camden, have been consolidated for discovery purposes. They could go to trial next year.

The complaints name as defendants Gloucester County, the Board of Chosen Freeholders, the Department of Correctional Services, the county Sheriff's Office, Prison Health Services Inc., and individual jail directors and wardens, among others.

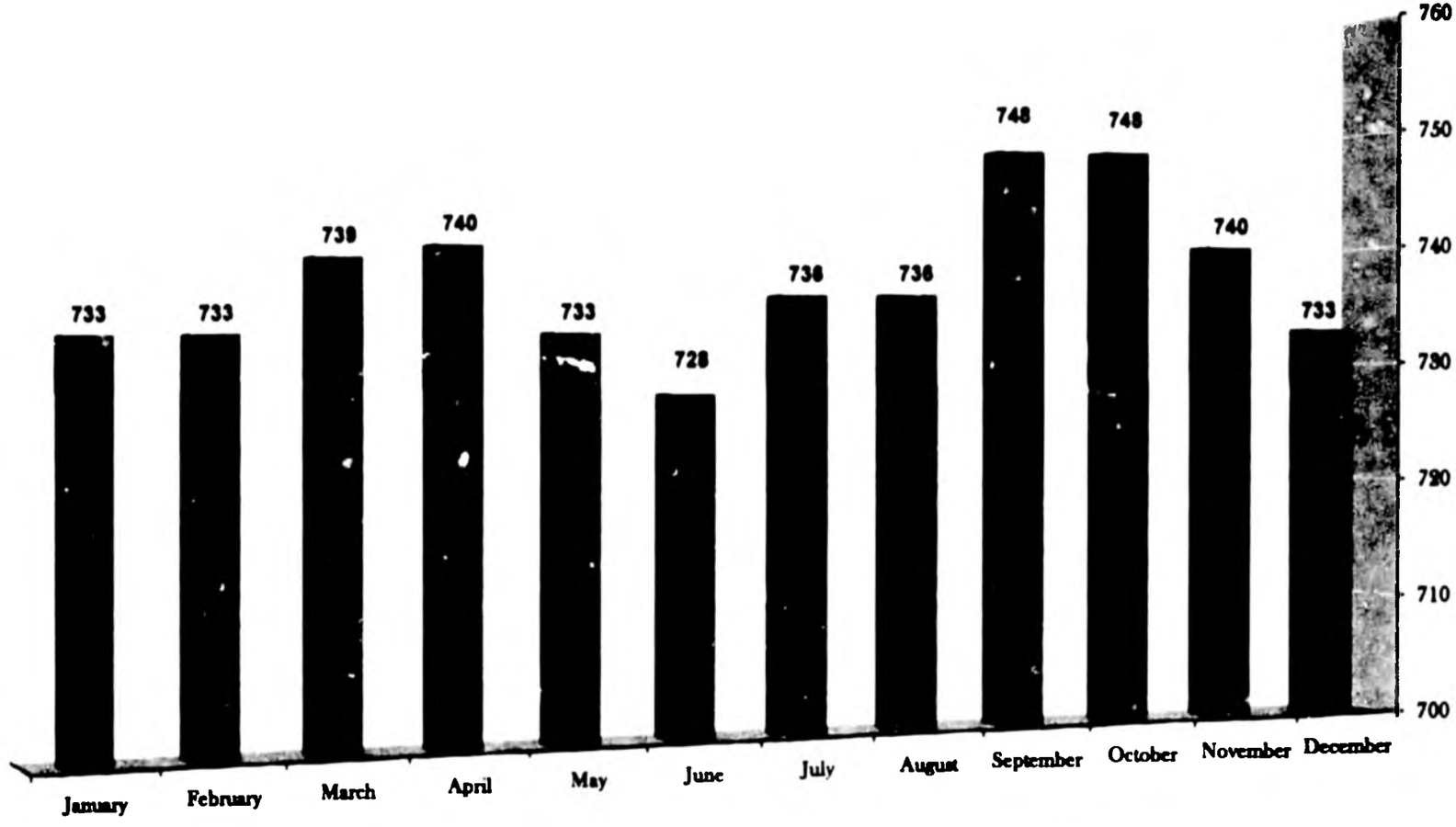
Lawyers for the inmates said current conditions at the jail were providing them with a steady stream of potential clients. Derek J. Layser, another attorney in the litigation, said he had 10 cases under review. "We're getting calls from inmates who say it takes five days to see a doctor," Layser said.

3

January 2007 - December 2007 Staffing Counts

per Kevin Brew, DOC Special Assistant

Unofficial

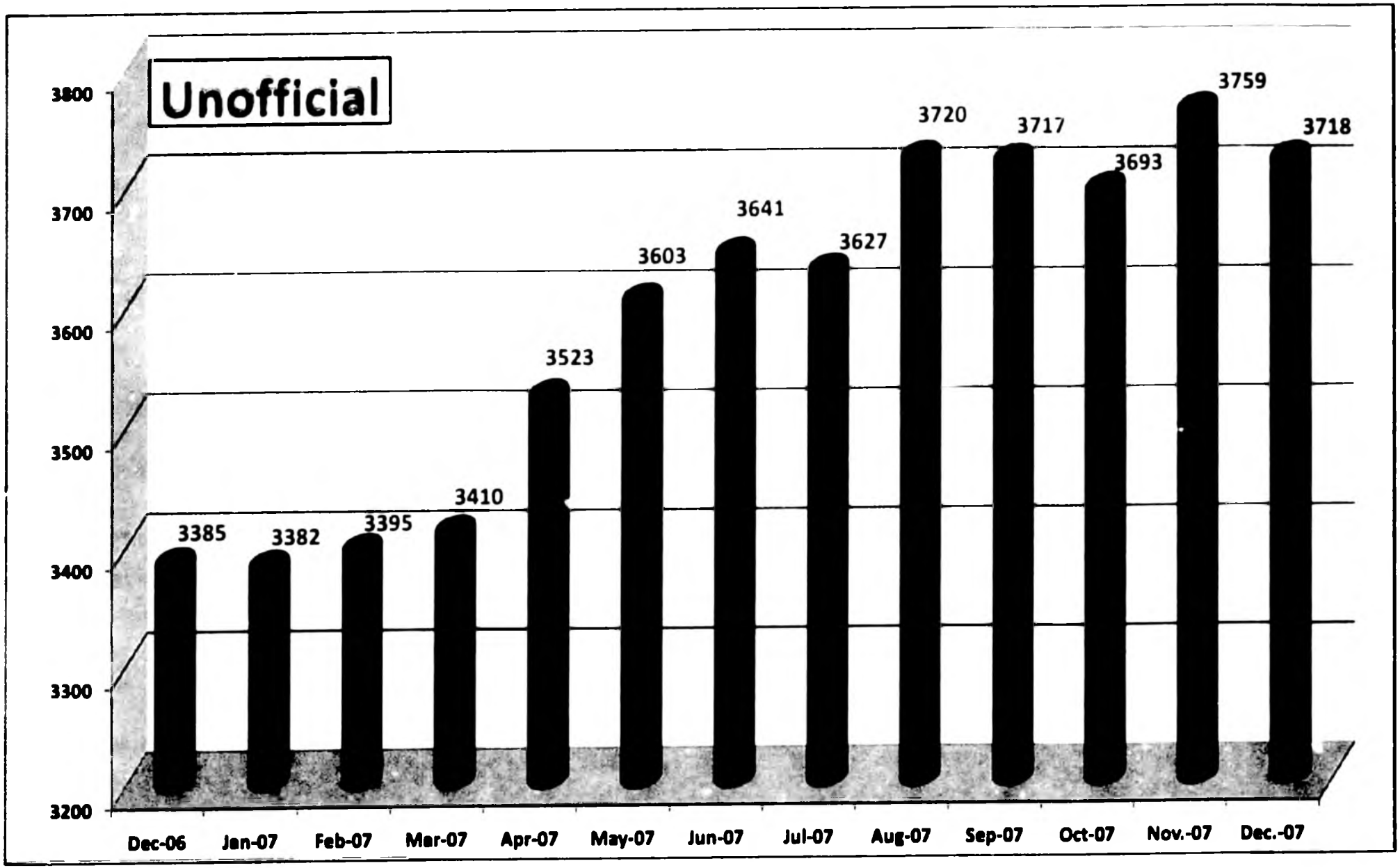


Staffing

These numbers include Officers out on Workers' Compensation and Military Duty.

4

December 2006 - December 2007 Inmate Counts



These counts are based on the average number of inmates per month, per DOC Institutional Counts.

Alaska Correctional Officers Association

5

History: Inmate Population

Cleary August 1997: **3099 Inmates**

December 2006: **3385 Inmates (average)**
December 2007: **3718 Inmates (average)**

August 1997: **3099 Inmates**
December 2006: **3385 Inmates**
(Schmidt Administration takes office)
Inmate increase over 9 years: **286**

December 2006: **3385**
December 2007: **3718**
Inmate increase (January 2007-December 2007) **333**

Average yearly Inmate increase (1997 to 2006): **31.77 per year**
1st year of Schmidt Administration (2007): **333 last year**

Previous Administration's 9 years — 286 Inmate increase
Commissioner Schmidt's 1 year — 333 Inmate increase

Then:
August 1997: 731 Officers

Now:
December 2007: 733 Officers

6

SHIFT #2

Date:

	Officer's Name	Date:11/16/06 Dayshift (5 Overtime)	Date: 11 /03/06 Nightshift (5 Overtime)	
1	Sergeant	Sgt. [redacted]	Sgt.	Ops
2	Supervisor	Sgt. Carter	Sgt. Carter	Module
3	Booking	Ofc.	Ofc. [redacted]	
4	Bravo	Ofc.	Ofc. [redacted]	
5	Charlie	Ofc.	Ofc. [redacted]	
6	Delta	Ofc.	Ofc. [redacted]	
7	Echo	Ofc.	Ofc. [redacted]	
8	Foxtrot	Ofc.	Ofc. [redacted]	
9	Gulf	Ofc.	Ofc. [redacted]	
10	Hotel	Ofc.	Ofc. [redacted] OT	
11	Juliet	Ofc.	Ofc. [redacted] OT	
12	Kilo	Ofc.	Ofc. [redacted] OT	
13	Lima	Ofc.	Ofc. [redacted] OT	
14	Mike	Ofc.	Ofc. Courtright	
15	November	Ofc.	Ofc. [redacted]	
16	CVR	Ofc.	Ofc. [redacted]	Ofc [redacted] working for Ofc [redacted]
17	CVR	Ofc.	Ofc. [redacted] OT	
18	CVR	Ofc.	Ofc.	
19	Rover	Ofc.	Ofc. [redacted]	
20	Rover	Ofc.	Ofc. [redacted]	
21	Rover	Ofc.	Ofc. [redacted] OT	
22	Rover	Ofc.	Ofc. [redacted] OT	
23	Hospital			
24				
25				
26		FTO [redacted]	COI [redacted]	Week (4) 11/02/06
27		FTO [redacted]	CO I [redacted]	Week (7) 11/02/06
28		FTO [redacted]	COI [redacted]	Week (5) 11/02/06
30		FTO [redacted]	CO I [redacted]	Military Leave

	Shift 4 West	05/22/08-5/28/08		
		Night Shift		
1	Mod SGT.	S/t [redacted]	[redacted]	
2	Booking	Ofc. [redacted]		
3	Rover	Ofc. [redacted]		
4	CVR	Ofc. [redacted]		
5	CVR	Ofc. [redacted]		
6	Bravo	Ofc. [redacted]		
7	Charlie	Ofc. [redacted]		
8	Delta	Ofc. [redacted]		
9	Echo	Ofc. [redacted]		
10	Fox	Ofc. [redacted]	To Nov after 2200 hrs.	
11	Gulf	Ofc. [redacted]		
12	Hotel	Ofc. [redacted]		
13	Juliet	Ofc. [redacted]		
14	Kilo	Ofc. [redacted]		
15	Lima	Ofc. [redacted]		
16	Mike	Ofc. [redacted]		
17				
18				
19				
20				
	A/L	[redacted]		

Need 1 for Hospital

7

UNOFFICIAL

The Rest of the Story.....

Paul Harvey

34 MORE OFFICERS....THE REALITY

Commissioner Schmidt told the press that Officers were not being honest when we stated there were fewer Officers on the floor. He went on to say that there were 34 more Officers in 2007 than in 2006.

The Facts, the Math, and the Truth

THE FACTS

Commissioner Marc Antrim began a recruitment/hiring drive at the end of his term. (See attached) This carried into December 2006 and January 2007 of the new administration. Commissioner Schmidt took credit for the last administration's hiring drive. Commissioner Schmidt arrives at his 34 more Officers by taking the average in 2006 of 703 employees and comparing it to the 2007 average of 737 employees. The Commissioner went on many radio shows. When asked directly about posts and less Officers on the floor, he kept redirecting the listeners to the 34 new Officers. He deflected answering the question while also taking credit for previous Commissioner Marc Antrim's hiring drive.

The fact is that while there may be more Officers overall, the number of Officers on the floor has decreased and the number of inmates for each Officer has dramatically increased. What matters is what the Department refers to as "minimum required staffing requirements", the number of Officers actually required to be on duty to supervise inmates. Shifts at institutions have seen these "minimums" lowered while at the same time inmate overcrowding has increased. There are insufficient Officers on staff to supervise inmates and respond to critical situations safely. Overcrowded facilities are considered more volatile than un-crowded facilities.

THE MATH

34 new Officers sounds good until you do the math. There are 13 institutions (not counting the Academy and Central Transportation). Each institution has four shifts. That makes 52 shifts in all. 34 new Officers divided into 52 shifts, comes out to an average of just .6 Officers added to each shift.

THE TRUTH

As an example of the math, let's say an institution had a minimum of 19 Officers when Commissioner Schmidt took office December of 2006, and now that institution has a new minimum of 16 Officers. The truth is .6 Officers per shift does not change the fact that there are more inmates and fewer Officers. It does not change the fact that there are now 3 less Officers on the shift than before Commissioner Schmidt took office.

8

INMATE TO OFFICER RATIO
ANCHORAGE CORRECTIONAL COMPLEX

April 2008

ACC-E

April 2008:

# of inmates = 472

Minimum staff (days) = 19

(nights) = 17

472 ÷ 19 = **24.8 inmates per 1 officer on dayshift**

472 ÷ 17 = **27.7 inmates per 1 officer on nightshift**

ACC-W

April 2008:

# of inmates = 483

Minimum staff (days) = 18

(nights) = 16

483 ÷ 18 = **26.8 inmates per 1 officer on dayshift**

483 ÷ 16 = **30.1 inmates per 1 officer on nightshift**

9

UNOFFICIAL

QUICK GLANCE

More Officers?

Correctional Officers say "*we are down Officers*"
Commissioner Schmidt says they, Correctional Officers, "*are not being truthful*".

The Math

13 Institutions	x	4 Shifts =	52 Shifts
34 New Officers	+	52 Shifts =	.6 Officers

.....

13 Institutions	x	4 Shifts =	52 Shifts
43 New Officers	+	52 Shifts =	.8 Officers

.....

13 Institutions	x	4 Shifts =	52 Shifts
77 New Officers (43 x 34)	+	52 Shifts =	1.4 Officers

1.4 More Officers per Shift

10

Maximum and Emergency Capacity of Facilities

Policy

A. The Department will determine the maximum and emergency capacity of each facility using the criteria in this policy. The Department also will promulgate regulations to determine the maximum capacity of each facility in order to protect against overcrowding. These regulations will comply with the requirements in this policy.

Procedures

A. Maximum Capacity. When determining the maximum capacity of a facility, the Department will measure the cell size or square footage requirements deemed appropriate for prisoners from interior wall to interior wall, including the space occupied by fixtures, beds, desks, closet space, entrance, and exits, but not including the space occupied by plumbing chases.

1. Existing Facilities. The Department will use the following cell size and square footage criteria when determining the maximum capacity for existing facilities:

   a. when a prisoner is locked in his or her living unit for 10 hours or less per day, the Department may assign;

      (1) no more than one prisoner to a 60 square foot or smaller cell or room;

      (2) no more than two prisoners to a 61-100 square foot cell or room;

      (3) no more than three prisoners to a 101-150 square foot cell or room; and

      (4) no more than one prisoner for every 50 square feet in a dormitory, including dayroom space, but excluding bathroom space.

      NOTE: The Ketchikan facility is in compliance with this provision as long as it continues to allow prisoners from the general population modular unit into the dayroom by rotating half the prisoners out at one time in four-hour shifts.

   b. when a prisoner is locked in his or her living unit for more than 10 hours per day, the Department may assign:

      (1) no more than one prisoner to an 80 square foot or smaller cell or room;

      (2) no more than two prisoners to an 89-120 square foot cell or room. (This provision does not apply to the Ketchikan facility where the Department assigns two prisoners to 81-120 square foot rooms and provides at least 35 square feet of adjacent dayroom space per prisoner);

(3) no more than three prisoners to a 121-180 square foot cell or room; and

(4) no more than one prisoner for every 60 square feet in a dormitory, including dayroom space but excluding bathroom space. (The four-bed segregation dorm in the Fairbanks facility with 59.6 square feet of space per prisoner complies with this provision).

2. New Facilities. The Department will use the following cell size and square footage criteria to determine the maximum capacity for new facilities:

a. when a prisoner is locked in his or her living unit for 10 hours or less per day, the following minimum square footage requirements per prisoner apply for each cell, room, or dormitory;

(1) 60 square feet in a cell or room for one prisoner;

(2) 80 square feet in a cell or room for two prisoners;

(3) 140 square feet in a cell or room for three prisoners;

(4) no more than one prisoner for every 40 square feet in a dormitory, excluding the bathroom and the dayroom space; and

(5) 35 square feet of dayroom space or leisure area for each prisoner in addition to cell, room, or dormitory space.

b. when a prisoner is locked in his or her living unit for more than 10 hours per day, the following minimum square footage requirements per prisoner apply for each cell or room:

(1) 80 square feet in a cell or room for one prisoner;

(2) 90 square feet in a cell or room for two prisoners; and

(3) 150 square feet in a cell or room for three prisoners.

3. The Department will ensure that its determination of maximum capacity does not:

a. restrict prisoners' indoor and outdoor recreational opportunities;

b. restrict prisoners' visitation;

c. result in a prisoner-to-total staff ratio exceeding 3.5 to one, and does not result in insufficient staff to deliver medical, educational, and rehabilitative services to prisoners;

d. exceed the facility's sewage treatment requirement or water supply;

e. adversely affect requirements for food service, medical care, rehabilitation and educational programs, or fire and life safety;

f. result in double-celling prisoners of high custody levels with other prisoners in a manner that creates an unreasonable risk to a prisoner or the security of the facility;

g. include areas not designed for prisoner housing, such as gymnasiums, hallways, dayrooms, cafeterias, etc.; and

h. include cells or rooms that the Department uses for temporary detention, segregation, and medical care.

B. **Square Footage Exceptions.** Notwithstanding the square footage requirements in section A above, the Department may assign a prisoner to a living unit that does not meet these standards during the first 15 days of the prisoner's incarceration.

C. **Rules Regarding Emergency Capacity.** An institution is at its emergency capacity if it has a population of maximum capacity plus prisoners occupying one-half of the special beds. (The Department allots special beds for temporary detention, segregation, and medical care.) The standards below apply:

1. The Department will take all reasonable steps to ensure that facilities operate at or below maximum capacity and do not reach emergency capacity.

2. The total prisoner population in all of the Department facilities may not exceed emergency capacity for 30 consecutive days or a total of 45 days in any 90 day period.

3. No individual facility may exceed its emergency capacity for 10 consecutive days or for a total of 30 days in any 90 day period.

4. If the prisoner population in a facility has exceeded emergency capacity for 10 consecutive days, the Department immediately will act to reduce the prisoner population to below maximum capacity within 20 days. If this is not possible, the Department will take steps set out in the *Cleary* Final Order. [1]

---

[1] The *Cleary* Final Order provides that if the Department does not reduce the prisoner population to below maximum capacity within 20 days, the Department must present the court with a plan explaining how it will reduce the population to below maximum capacity:

a. within 20 days whenever the prisoner population in a facility exceeds emergency capacity for 10 consecutive days and is not reduced to maximum capacity within 20 days thereafter; or when the population exceeds emergency capacity for 30 days in any 90 day period; or

b. within 30 days if the total prison population of the Department's facilities exceeds emergency capacity for 30 consecutive days or the population exceeds emergency capacity for a total of 45 days in any 90 day period.

The *Cleary* plaintiffs may object to the Department's plan and seek other appropriate relief.)

D. **Exceeding Emergency Capacity.** The Commissioner may approve the use gymnasiums, hallways, and dayrooms for temporary housing when a facility exceeds its emergency capacity. In such a case, the Department may not house any prisoner in this setting for longer than 48 hours, nor may any facility use such space for temporary housing for more than five days in any given month unless the Department takes steps set out in the *Cleary* Final Order.[2]

ORIGINAL

July 9, 1995
Date

Margaret M. Pugh
Margaret M. Pugh, Commissioner
Department of Corrections

Authority
Cleary Final Order, 3AN-81-5274 CIV, Sept. 199[illegible]

[2]If the Department uses these common areas longer than five days in a given month, it immediately shall present a plan to the court for bringing the population back to maximum capacity or explain why the situation will not reoccur.

11

MONEY AVAILABLE FOR OFFICERS

	300	Inmates
x	$50	Savings per inmate
	$15,000	Daily Savings
x	365	Days per year

$5,475,000

Total Savings

12

STATE OF ALASKA

DEPARTMENT OF CORRECTIONS
Institution Director's Office
550 W 7th Avenue, Suite 601
Anchorage, AK 99508
Phone (907) 269-7409 Fax (907) 269-7420

November 5, 2007

Dennis Hansen
P.O. Box 3141
Seward, AK 99664-3141

Re: Suspension

Dear Mr. Hansen,

The Department has concluded its investigation into allegations that you failed to follow the Department's Policies & Procedures, specifically the Standards of Conduct (202.15) and Special Incident Reporting (104.01) when you inappropriately disclosed incorrect information about the Department to a news source after previously agreeing with your Union to do so.

Due to the seriousness of the allegations on October 25, 2007 you were placed on leave with pay and given notice that you were directed to report to a meeting Monday, October 29, 2007. As you are aware, you met with the Deputy Director of Institutions and a representative from the Division of Personnel & Labor Relations in the presence of your union business agent as well as your union business manager.

During that meeting, your union business manager disclosed that he had contacted a news source and referred that source to you as an employee willing to provide information about the union's concerns. You also disclosed that you had planned with your union to provide information about the Department to the news source as a challenge to the Department's Policies & Procedures.

In explanation, you stated that you spoke to the news source and offered only information based on your experience and personal beliefs. You also explained that while you felt management was not appropriately following up on your concerns regarding methicillin-resistant staphylococcus aureus (MRSA), you had not contacted any one in your chain of command for two years regarding those concerns.

The investigation found your explanations for why you failed to follow appropriate Department Policy & Procedure unreasonable. You admitted to clearly understanding that you would be subject to discipline for your actions. You indicated that you understood the information you provided would be sensitive in nature and of interest to the media yet, despite the gravity of your concerns you did not follow up your chain of command or exhaust appropriate channels to report those concerns to management. Instead, you colluded with your union business manager to provide information about the Department that you indicated you understood would be detrimental to the Department. Despite your explanation that your opinions and information given to the news source were your own, the average person watching the news would not be able to distinguish your statements from those of the Department.

After careful consideration, I find this matter warrants significant discipline. The Department concludes that your actions are contrary to fundamental expectations of appropriate workplace behavior and are violations of the Standards of Conduct. These behaviors violate Department Policy & Procedure 202.15, the Standards of Conduct, which include and state in part:

- Section G (1)- *All official statements for public release concerning the affairs of the Department must be authorized by the Commissioner, a Director, or Designee.*
- Section G (2)- *In any public statement, employees will clearly distinguish between those that are positions of the Department and those that are personal views.*
- Section G (3)-*Employees shall not disclose confidential information (ranging from personal data concerning employees...) Employees who receive such a request for information will refer the inquiring party to the office or facility manager.*

These behaviors also violate Department Policy & Procedure 104.01, Special Incident Reporting, which include and state in part:

- Section VI. A- *The timely and accurate reporting of incident is essential for the proper management and administration of the Department. Significant incidents occurring within the Department concerning safety and security within operational units, or that may result in media attention shall be promptly reported to Department management personnel.*

Officer Hansen, it is unreasonable to believe an officer with your years of experience did not understand how to use the appropriate chain of command or that you did not expect the incorrect information you disclosed to the news source to cast the Department in a negative light. The Department will not tolerate employees who have serious concerns choosing to follow up those concerns with a news source instead of to management. Your actions did not demonstrate serious concern for the welfare of fellow officers as you stated; if they had then you would have followed up with the channel to address those concerns: management. Had your concerns been valid and based on correct information, the Department would have been able to take immediate and appropriate action. Thankfully, your concerns were unfounded. Your actions indicate disrespect for the Department and for management.

The Department considered more significant discipline, but determined your union's inappropriate guidance to be a mitigating factor. Therefore, I have determined that a one week, eighty-four hour suspension is the most appropriate sanction. This suspension will start at 06.00 on Thursday, November, 8th, 2007 and end at 18:00 on Wednesday, November, 14, 2007. During that time you are not to return to the premises of the Spring Creek Correctional Center or any Department of Corrections property without scheduling an appointment.

Any future conduct of this nature will result in immediate dismissal. You are reminded of your rights under your collective bargaining unit agreement.

Sincerely,

Bryan Brandenburg

Bryan Brandenburg
Deputy Director

cc: Garland Armstrong, Director of Institutions/Craig Turnbull, Superintendent
DOP Public Protection Management Services (via fax 465-5332)
DOP Public Protection Technical Services (via fax 465-2202)
ACOA (via fax 646-2286)

ACOA Grievance 07-020
Hansen, Dennis E. (SCCC)
SSN: 560-82-3880
P.O. Box 3141, Seward, Alaska 99664-3141

Contract Provisions violated: Management's actions are in violation of the Bargaining Agreement, including Article 12 (Notice of Discipline and Discharge)

Nature of Grievance:

The Grievant's Suspension Letter states that "*The Department concludes that your* (the Grievant's) *actions are contrary to fundamental expectations of appropriate workplace behavior and are violations of the Standards of Conduct.*" The letter then goes on to cite four specific Standards of Conduct violations. The Association takes exception to the conclusion that the Grievant's actions were contrary to the *fundamental expectations of appropriate workplace behavior* statement and to the Employer's claim that the Standards of Conduct were violated. The Association also takes exception to numerous statements throughout the Grievant's letter that have no basis in fact. The Association grieves the fact that the Grievant was punished solely for exercising his Constitutional right to free speech, and that, in punishing him for that, the Employer hopes to unlawfully restrain others who might choose to exercise their freedom of speech rights as well.

First, our disagreement with the statement; "*The Department concludes that your* (the Grievant's) *actions are contrary to fundamental expectations of appropriate workplace behavior and are violations of the Standards of Conduct.*" What the Grievant was disciplined for had nothing whatsoever to do with workplace behavior. It took place hundreds of miles from his workplace when he was not on duty. It involved information he gained from personal experience and from open discussions with his fellow officers. Next, we will take exception with each of the 202.15 violations cited, addressing each individually

The Department's finding that the Grievant violated Section G (1) is without factual basis. This Standard requires that *Official* statements be authorized by the Commissioner, Director, or designee. The Grievant made no official statements, his statements were based on his own personal experience and were conveyed in response to questions he was asked while being telephonically interviewed by a reporter. He was in Fairbanks and the Reporter was in Anchorage. He made it clear to Grace Jang, the CBS 11 reporter who conducted the interview and taped the news report that he was speaking only for himself and not for the Department. Her written recollection of this is "*Before we began to interview on October 23, Dennis Hansen wanted to make sure I understood that he was speaking for himself, not as a Department of Corrections representative. He said, "I just want to make it clear that I am not speaking for the department."* Is the Department Management team to be held equally accountable for statements they have made that came out a bit differently than what they intended when reported in the media?

Third, the Department's finding that the Grievant violated Section G (2) is without factual basis. This Standard requires employees to clearly distinguish between positions that are the Department's and those that are their own personal views. The Grievant met this obligation and made this perfectly clear before he answered any questions asked by CBS Reporter Jang. He was not participating in an on-camera situation and had no opportunity to convey that while directly in front of a camera.

Fourth, the Department's finding that the Grievant violated Section G (3) is without factual basis. This Standard prohibits the disclosure of confidential information without approval, and directs employees who receive such requests to refer the inquiring party up the chain of command. At no point did Reporter Jang request any confidential information, and at no point did the Grievant divulge any. The Grievant was not at his facility when this reporter contacted him and he did not know he was going to be contacted before he departed his facility for Fairbanks. He did not review any documents or data and he took none with him. He needed none, he had a painful personal experience with MRSA and he responded as an individual with recollections from personal experience. The contradiction of convicting him for releasing confidential information and then, later in his suspension letter, declaring that he released "incorrect" information is significant. It is self contradicting to claim he released confidential information and then claim it was false.

Lastly, as related to the Standards of Conduct specifically cited as reasons for disciplining the Grievant, is the Department's conclusion that he violated Policy and Procedure 104.01, Section VI. A. This standard requires the timely and accurate reporting of Special Incidents concerning safety and security or that may result in media attention. The Grievant is a Correctional Officer II. Policy and Procedure 104.01 specifically deals with Special Incident Reporting (SIR). While it is applicable to "all staff", in practice Correctional Officers II are only involved with the writing of individual incident reports that become attachments to SIRs when directed by supervisors or work leaders to do so. Correctional Officers II do not determine what situations require SIRs. The left column of the SIR form details the situations that require SIRs, categorizing them as Class A and Class B incidents. MRSA is not a Class A incident. It could, perhaps, be a Class B incident under the heading of an incident that is not listed on the form that the Superintendent or Chief Probation Officer considers to be a SIR, but that decision is pay grades above the Grievant. The Grievant did not violate Policy and Procedure 104.01. Perhaps the Employer inserted this violation while struggling to find something, anything to support the severe discipline imposed on the Grievant. Perhaps, the Employer was attempting to imply by innuendo that the Grievant made no report of his experience and that they had no knowledge MRSA existed or that the Grievant had contracted it. The fact is, the onset of MRSA can be very insidious and it is often difficult to diagnosis; one does not go home realizing "today I caught MRSA". The fact is the Grievant contracted it in July and was not fully aware of what he had until sometime in August, at which time he did notify the employer by submitting an Injury Leave Request. The fact is the Employer had all the knowledge needed and knew, or should have known, that inmates and staff were being exposed to MRSA and negligently failed to provide appropriate guidance. The Employer failed to respond to the Grievant's

situation or to MRSA information provided to them by the Association in July. The Grievant did his part - the Employer did not!

So far this grievance has focused on the unsupportable conclusion that severe discipline was warranted because the Employer falsely concluded the Grievant violated four specific sections of policy and was guilty of inappropriate workplace behavior. The Association must also respond to several of the many patently and outrageously false statements the Employer wrote in the Grievant's Letter of Suspension. The totality of the incorrect conclusions drawn by the Employer combined with numerous false, inaccurate, and intentionally contentious statements speaks eloquently to the Employer's bias and the focused agenda that prevailed throughout this investigation. The investigation, the conclusions arrived at, and the discipline imposed violates all reasonable definitions of just cause.

Policy and Procedure 202.15 requires that Department employees "*...shall be truthful and forthright in their statements and communications regarding other employees...*" Almost every disciplinary notice refers to this requirement and issues a warning that "*...failure to do so will be considered dishonesty and is also grounds for discipline up to and including immediate dismissal,*" as did the Grievant's notice. In a similar manner, almost every hearing starts with a reminder of this responsibility. Perhaps overlooked during this particular discipline process is the fact that these requirements are binding upon everyone involved in the process, not just upon the person being interviewed. There is no "management pass" setting a lesser standard for Management. The Grievant's Suspension Letter contains numerous false statements and attributes them to statements made during the investigative interview; statements that are not contained in the recorded or transcribed record of the hearing. It is unreasonable to believe that so many false and misleading statements could accidently be made by such well educated Administrators in such positions of great responsibility and trust.

The Grievant's letter contains the statement that "*...your business manager disclosed that he had contacted a news source and referred that source to you as an employee willing to provide information about the union's concerns*". That is false, is not what occurred, and is not supported by records of the hearing. The fact is that KTVA reporter Grace Jang contacted the Association and asked if the Association had knowledge of MRSA incidents in Correctional Facilities or other information on MRSA. We provided her with copies of the New Jersey MRSA video and the Federal Bureau of Prisons guidelines that we shared months ago with Management. In the course of discussing what we knew and believed, she asked if there might be Correctional Officers she could interview. That led to contact being established between her and the Grievant. The facts are considerably different than the letter represents them to be. The final words of that same sentence are "*...willing to provide information about the union's concerns*" This is another misrepresentation that does not relate to anything the Association or Grievant stated that was recorded during the hearing. The fact is that the Grievant was willing to discuss his concerns and personal experience as a victim of MRSA that he contracted while working in a Correctional Facility. However, the Employer is correct that the Association is concerned and we do not understand why the Employer has not

been concerned. Departments of Correction elsewhere across the nation have been very concerned and have responded by educating inmates and staff and by instituting comprehensive guidelines.

The very next sentence in the Suspension Notice contains the false statement: "*You also disclosed that you had planned with your union to provide information about the Department to a news source as a challenge to the Department's Policies and Procedures*". One needn't be a rocket scientist to discern the Employer's reason for including this statement: however it has no basis in fact. I have a fair recollection of what was said at the hearing and do not recall it, I read the transcript five times and cannot find it, I listened to the tape and did not hear it. Regardless of what the Employer wishes others to believe, wishing does not make it so. There was no "*disclosure*" of any planned challenge of the Department's Policies and Procedures and there is no factual basis to say otherwise. The Suspension Letter contains other falsehoods and innuendos, but we shall end the discussion having highlighted two of the most glaring examples. There will no doubt be a forum to discuss all of them at a later date.

During the Investigative Hearing the Grievant asked several times if the Department believed Department Policy superseded his right to free speech. That was not answered at the time it was asked, but it was answered by the disciplinary action that has been imposed. An eighty-four hour suspension has been imposed as a result of the Grievant exercising his constitutionally protected freedom of speech right. To impose this discipline the Employer has attributed meaning that does not exist to its Policy and Procedure and represents falsehood as fact in spite of what is a matter of record. The Employer's plummeting credibility has dropped about as low as it can go.

When did this occur? November 5, 2007

Relief Sought: The grievant should have his discipline reversed and should be made whole in every way, including having all pay, benefits, allowances and anniversary dates corrected to what they would have been had discipline not been imposed, and having all reference to this incident purged from all of his files.

State of Alaska
Grievance Form continuation sheet
Bargaining Unit: ACOA
Represented by the Alaska Correctional Officers Association (ACOA)
Contract Year: July 1, 2006-June 30, 2009

Name of Grievant: Dennis Hansen
Union Case #: ACOA 07-020
State Case #: 08-C-183

13. Remarks: The Grievant alleges that the Department of Corrections violated Article 12 (Notice of Discipline and Discharge) of the collective bargaining agreement (CBA) when it suspended the Grievant. The union has not provided any facts or evidence that the actions taken were in violation of the CBA nor did it offer any information as how the CBA was allegedly violated.

Due to the seriousness of the allegations the Grievant was placed on approved leave with pay and was directed to a meeting Monday, October 29, 2007 in the presence of his union representative to provide him with the opportunity to offer facts, information, and mitigating circumstances.

The Grievant's statements regarding the Department of Corrections were not approved by the Department and the Grievant made no reasonable effort to address his concerns with the Department before taking them to the media. The Grievant acknowledged that he knew his statements to the media were meant for public release and that those statements would be detrimental to the Department. Because the Grievant's statements regarding the rate of MRSA infection were incorrect, the public perception of the Department and its operations was negatively impacted. While he stated that he was not speaking for the Department, the unauthorized disclosure of incorrect and biased information was harmful to the Department.

The Grievant's claim that he did not release confidential information is unreasonable; the Grievant released information he believed was correct regarding medical information about other Department employees. In addition, when the news source contacted him he did not refer the source to his supervisor or chain of command.

The Department takes the health and safety of everyone in facilities very seriously and takes measures to protect people from infections like MRSA; while it is regrettable that he contracted MRSA, his experience was relatively rare and he was provided time off and medical attention.

14. Decision: The decision to suspend the Grievant was based on facts and evidence the employer reasonably believes to be true. There has been no violation of the CBA; therefore, the grievance is denied.

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"There are lies, damn lies, and statistics."
Mark Twain

49 HEARINGS – A SIGN OF PROFESSIONALISM, NOT CORRUPTION

Commissioner Schmidt informed all Alaskans on T.V., radio, and newspaper that the 96% "No-Confidence" vote was in response to him "cleaning up" the Department of Corrections. As evidence of his good deeds and the corruption of Correctional Officers, he pointed out that he had initiated 49 "Internal Investigations".

The Facts, the Math and the Truth

The Facts

There were **not** 49 "Internal Investigations". There were 49 "Hearings" or "Investigative Hearings", usually called "Administrative Investigations". There were no cloak and dagger "Internal Investigations", covertly conducted to uncover corruption. The first time anyone heard the term "internal investigation" was when the Commissioner held his press conference after ACOA's ballot count of the "No-Confidence" vote.

Yes, there were 49 hearings. There were 46 the year before and December '06 was a transition month between administrations. The average is 50-55 per year. Contrary to Commissioner Schmidt's distorted assertions, the hearings conducted his first year were *not* about corruption. Such hearings were simply workplace meetings that for the most part dealt with minor issues regarding work performance, easily correctable misunderstandings, or often for false inmate allegations. These meetings did not necessarily lead to discipline. These hearings were routine management/employee inquiries and interactions common to any employer or agency. They were not "internal investigations" to clean up the Department, as the Commissioner has misrepresented them to be. For the record, there were no hearings involving allegations of contraband, drugs, or corruption.

The Math

Alaska has 13 Correctional facilities, not counting the Academy or Central Office. 49 "Hearings" divided by 13 work-sites comes to 3.7 "Hearings" per year per institution. There is currently an average of 56 C. :ers per institution (730 Officers divided by 13 work-sites). Take any office or workplace that has 50 plus employees and imagine the boss having to call only 3-4 employees into his office to discuss some aspect of their job performance during the entire year. That does not always mean that those 3.7 times a year are for discipline; it may simply be to ask job or performance-related questions. It is not a sign of corruption. Commissioner Schmidt took a below-average annual hearings statistic on the annual number of hearings and manipulated it to demonize all Correctional Officers. The purpose of this well-planned misinformation campaign is to deflect attention away from under-staffing, unsafe policies, and mismanagement.

The Truth

The truth is 49 hearings is not an indication of a corrupt Department. Commissioner Schmidt's words to the press were well-calculated to shift blame from him to his employees. There is an old saying, "there are lies, *damn* lies, and statistics". Joe Schmidt used a statistic to take a group of Officers with one of the best records in the nation to portray them as a bunch of corrupt individuals in need of his reforms. The Commissioner attacked his own membership to deflect away from himself and his adversarial leadership. In 2005, Alaska Correctional Officers received the National Institute of Ethics (NIE) Integrity Certification. 49 workplace hearings are not a sign of a corrupt group of employees; it is a sign of professionalism.

QUICK GLANCE

49 Hearings in 2007

SIGN OF CORRUPTION or PROFESSIONALISM

49 hearings

+ 13 work-sites

3.7 hearings per work site a year

730 Officers

+ 13 work-sites

56 Officers per work-site *

(* Average number of Officers per facility)

3.7 Workplace Hearings per year per institution

(Average of only 3.7 Workplace Hearings per 56 Officers a year)

A hearing does not necessarily mean discipline. It can be a meeting about an incident, job performance, or question about some part of the job. When there is discipline, the vast majority is minor. Not one of the 49 hearings involved any type of corruption.

Imagine you are the manager for an office/business with over 50 employees and you only had to question, *not discipline*, but question four of your employees in an entire year.

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"A half truth is a whole lie."
Yiddish Proverb

4 TERMINATIONS. NOT WHAT IT SEEMS

Commissioner Schmidt stated that he had terminated four Officers[1]. He offered this up as proof that he was holding Officers accountable, implying that he was cleaning up corruption within the ranks. The Commissioner went on to state that the Association was attacking him due to "cleaning up" the Department, not safety concerns.

The Facts, the Math, and the Truth

THE FACT

There were four terminations. But the Commissioner failed to mention that three of these four terminations were overturned, two by arbitrators and one by the State. The one termination that was not overturned is now going to court due to the Director's testimony being found "not credible" by an arbitrator[2] in a subsequent arbitration and another manager's recanting testimony. Along with three of four terminations being overturned, there were three other disciplines and all of those were overturned. That makes six of seven disciplines that have been adjudicated and overturned. ACOA has also won the only arbitration dealing with a contract violation, during his administration.

THE MATH

One termination cost the State $110,594.77, another cost $94,580.47, and another over $20.000[3]. The fourth termination could cost the State even more. That case is headed to litigation. The testimony by the Director of Institutions was found "*not credible*" in a subsequent arbitration on the exact same issue. If a Correctional Officer was found to be "not credible" by management, he would be fired.

THE TRUTH

Four terminations are not a sign of reform; they are a sign of mismanagement that may cost the State of Alaska almost **a quarter of a million dollars**.

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[1] 4/23/08, Radio: KUDO-1080 AM, Cutting Edge with CC, Commissioner stated. "*...four resulted in termination*"

[2] Arbitrator Howell L. Lankford, in his November 26, 2007 decision in his case number 162, stated, "*The Department argues that the disciplinary decision makers – the top managers of the Department – did not know of _____'s union involvement. But the ___ Superintendent testified that he knew _____ was the Shift Representative of the Association. And the testimony that the Director of Institutions did not know of _____'s union involvement was not credible.*" ...

[3] According to information provided through Labor Relations.

QUICK GLANCE

4 TERMINATIONS

Sgt. Elde (Dismissal overturned by Arbitrator)

$ 94,580.47	Base Salary
Plus $$$	Overtime Costs
Plus $$$	Arbitrator's fees

$94,580.47 Plus $$$ Plus$$$

Sgt. Galvano (Dismissal overturned by Arbitrator)

$ 89,438.77	Base Salary
10,700.00	Overtime Costs
10,456.00	Arbitrator's fees

$110,594.77

Officer Schneider (Dismissal overturned by State Officials - LGR)

$ 20,000.00	Base Salary – 5 months pay
1,020.00	Arbitrator's fees

$ 21,020.00

Officer Hovey (Director's testimony found later to be "not-credible")

Plus $$$	Court costs
Plus $$$	Settlement/Award

Approximately

$200,000.00

PLUS $ PLUS $ PLUS $ PLUS $ PLUS $ PLUS $

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FOR IMMEDIATE RELEASE
August 1, 2005

No. 05-024

ALASKA DEPARTMENT OF CORRECTIONS FIRST TO RECEIVE NATIONAL INSTITUTE OF ETHICS INTEGRITY CERTIFICATION

(JUNEAU) – The Alaska Department of Corrections has become the first corrections department in the nation to receive the National Institute of Ethics (NIE) Integrity Certification. The department was given the certification by institute founder Dr. Neal Trautman today at the department's training academy in Anchorage.

To hold the certification, the department has committed to a wide-ranging and ambitious three-year program with direct impact on recruitment and hiring practices, management style, and on-the-job training.

"This touches all aspects of department operations," said Commissioner Marc Antrim. "Certification is just a starting point. It's about good government and committing to provide the best public protection possible."

The integrity initiative begins by establishing an ethics committee – the first of seven goals. Other goals include strengthening the hiring process, implementing integrity training and an Oath of Honor, and increasing the level of trust within the management team . Additional key goals include improving on-the-job training along with the inclusion of ethics awareness, and establishing an awards and intervention program.

The department's ethics committee has been meeting for about a year, and a strengthened hiring process has been in place since the beginning of 2005. Efforts to achieve the remaining goals are ongoing, Commissioner Antrim explained.

"The NIE ethics certification process is designed to be a grass-roots effort – not top-down," Antrim said. "That's why it's a long-term process. The overall goal is to create a culture of 'this is how we do it here.' Basically, we want to hire good people, train all our staff well and treat them right. We want mutual trust and respect, a better command structure, and a fertile ground for developing leaders."

With the certification in place, the department is continuing its efforts to complete its Integrity Plan. Important tasks underway include the delivery of an eight-hour block of integrity training to all staff, enhancing the Field Training Officer program, and developing an Employee Recognition Board.

The National Institute for Ethics (NIE) was formed to improve the public's confidence in public safety agencies. The NIE is a non-profit, 501(c)(3) organization dedicated to furthering ethics and integrity. The NIE provides integrity related certification programs, video training tapes, manuals, books, and seminars.