Communicable Disease in the LA County Jail

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IT IS A FELONY TO ENGAGE IN ANY SEXUAL ACTIVITY WITHIN THE LOS ANGELES COUNTY JAIL

PENAL CODE SECTION 286(e), 288a(e).
Presentation Outline

• General Overview of Corrections Medicine
  – Common public health issues among the incarcerated
• Los Angeles County Sheriff’s Department (LASD) and Jail Overview
• Future of Communicable Disease Prevention Efforts in the LA County Jail
  – Hepatitis Immunizations, MRSA Research
Jail vs. Prison

- **Jail** is locally operated correctional facility intended for temporary holding
  - During adjudication
  - Parole violators
  - Transfers to other correctional authorities
  - Sentenced to one year or less

- **Prison** is operated by state or federal govt
  - Sentence one year or more of incarceration
  - Usually felony convictions
US Correctional System

• 2.2 million in federal or state prisons or local jails
• 10 million booked into 3365 jails annually
• Demographics
  – 3145 per 100,000 black males in prison
  – 1244 per 100,000 Hispanic males in prison
  – 471 per 100,000 white males in prison

Department of Justice, Bureau of Justice Statistics
Available at: http://www.ojp.usdoj.gov/bjs/
The Past

Reflecting the English methods of punishment, American colonists typically used corporal and capital punishment. Public punishment and degradation were commonly prescribed for minor offenses.

The Civil Rights Movement/Prison Riots
Then and Now

• 1977 Supreme Court issues decision
• Mandate incarcerated access to medical care
• Only population in the US with a constitutional right to medical care
• Marked improvement in health care in corrections setting
Key Legal Decisions in Incarcerated Medicine

- **1976: Estelle v. Gamble**
  - Ignoring serious medical needs of incarcerated violates 8th Amendment right
  - Cruel and unusual punishment
- **Deliberate indifference**
  - Serious medical problem
  - Deliberately indifferent (medical or custody)
- **California law**
  - Failure to take reasonable action
Why care about health of inmates?

- Characteristics of people with history of incarceration:
  - 25% of HIV-infected Americans
  - 33% of Americans infected with Hep C
  - 40% of Americans with active TB
- Among inmates
  - Up to 50% have Axis 1 or 2 mental disorders
  - As many as 75% have alcohol and/or other substance abuse disorders
Medical Opportunities

- Constitutional right to health care
- Treatment access
- Diagnosis
- Prevention of complications
- Management of comorbid illnesses
Incarceration as an issue of public health?

- Resistant bacteria transmitted person-to-person
- Nosocomial - hospital
- Community - daycare, nursing homes
- No antibiotics left to use!!
- Only 8 new agents approved since 1998
- Deadly combination of virulence and resistance
- Resistant organisms in one part of the world only a plane ride away
THE WORLDWIDE SPREAD OF SARS

SARS passed to tourist guest on 9th floor who returns home to Toronto, Canada

Doctor who treated SARS patients in Guangdong Province, China travels to Hong Kong and stays on 9th floor of hotel

SARS passed to Hong Kong resident who visited 9th floor of hotel

SARS passed to flight attendant guest on 9th floor who then flies to Singapore

SARS passed to businessman guest on 9th floor who then travels to Vietnam
Public Health Opportunities

• Prevention of transmission
• Clustering of individuals with many health care needs
• Opportunity for directly observed therapy
• Opportunity for teaching?
Challenges

• Medical care for inmates is often episodic
• Insufficient attention given to interventions that would benefit the community upon release
• Released inmates impact the community:
  – Costs of medical care
  – Crime and recidivism
  – Disease transmission
  – Anti-microbial resistance
Common Medical and Mental Health Problems among Patients in the Incarcerated Setting
Common Health Issues

- Mental illness
- HIV
- Hepatitis C
- Tuberculosis
- Lack of immunizations
- MRSA
- Substance abuse
Mental Health in Correctional Facilities

- Mental health problems were 3 – 4 times higher among inmates than in the general population
  - Approximately 75% met criteria for definition of substance abuse
  - Female inmates had higher rates of mental illness

Available at: http://www.oip.usdoj.gov/bjs/pub/pdf/mhppji.pdf
Mental Illness among Inmates

- More likely to
  - Be victimized
  - Have more frequent rule infractions
    - May lead to longer sentence
- Upon release, less likely to follow d/c plan
  - Housing
  - Medical care
  - Treatment for substance abuse
- Higher recidivism rate

Available at: http://www.ojp.usdoj.gov/bjs/pub/pdf/mhppji.pdf
Impact of Mental Illness: HIV Screening and Treatment

- Mentally ill inmates
- Less likely to
  - Get tested and return for result
  - Accept and adhere to treatment
- More likely to
  - Engage in high-risk behaviors
  - Present with advanced disease
Mentally Ill Inmates

• Assess risk factors for poor adherence
  – Even more so than with many other chronic illnesses, poor adherence to HAART can limit the success of future treatment regimens
  – Implications for development of resistance

• Consider treatment options that increase the patient’s ability to adhere to a regimen
US HIV Data: Prison vs. GP

- HIV prevalence among prison population 4-5 times higher than that of the GP
- National survey data
- 1.8% of inmates known to be HIV+ (n=23,046)
  - Males: 1.7% (n=20,668)
  - Females: 2.4% (n=2084)
US AIDS Mortality Data: State Prisoners vs GP

- State prisons
  - Percentage of deaths due to AIDS (ages 15-54 years) > 1.5 x GP
    - Inmates: 8.0%
    - GP: 4.4%

- AIDS mortality among inmates (per 100,000)
  - Male: 12
  - Female: 8
  - Black: 19
  - White: 8
  - Hispanic: 4
  - >45 years of age: 23
  - 25 – 44 years of age: 5

Summary: Key HIV Epi Patterns and Trends

• HIV prevalence among the prison population was 4 – 5 times that of GP
  – Greater percentage among females
    • 2.4% (female) vs. 1.7% (males)

• Overall AIDS rate (confirmed) among prison population >3 times that of GP
  – 0.5% vs. 0.15%

• HIV/AIDS rates and associated mortality greater among African Americans

• Paralleling the free community, AIDS-related deaths in state prisons decreased 82% from 1995-2004
HIV: Continuity of Care after Release

• Former inmates with HIV may play important role in maintaining HIV epidemic
• Virologic and immunologic outcomes worsen after release
• Discharge follow-up and access to care important to limit disease progression and transmission among at-risk communities
• Needs: child care, housing, transport, substance abuse and mental health

Hepatitis C in US Populations VS California Prisons

NHANES III: Prevalence of HCV from the National Health and Nutrition Examination Survey (NHANES) of adult households
HEPCAP: Hepatitis C in CA Prisons

Source: Hepatitis C in CA Prisons (HEPCAP), University of California, San Francisco, [2003].
Hepatitis in State Prisons

• Between July 1, 1999 and June 30, 2000
  – 57,018 inmates tested for hepatitis C in 1209 of 1584 state prison facilities (5.1% sample of total inmate population)
    • 31% positive for Hep C (some as high as 41%)
  – Hepatitis B
    • 66% of facilities vaccinated high-risk inmates
    • 1 in 8 facilities vaccinated all prisoners for Hep B
    • Approximately 33% of facilities had no Hep B policy

Available at: http://www.ojp.usdoj.gov/bjs/pub/pdf/httsp.pdf
Tuberculosis among Inmates

• High incidence of TB infection and disease
  – Rate: >200 per 100,000 inmates
  – Major cause of death among inmates during 1990s

• More frequent risk factors vs. GP
  – Low SES, HIV co-infection, substance abuse, crowded living conditions
  – TB transmission in corrections contributes to greater risk among these populations (perfect environment)

Tuberculosis among Inmates

• TB outbreaks during incarceration
  – Dedicated housing units for inmates with HIV infection have been sites of TB transmission
• Jail/prison outbreaks have led to TB infection in the community
• Targeted testing and treatment important
  – Challenges
    • Communal living situations, short stays, abrupt/unexpected

The Pitfalls

Growing pains for 3-strikes measure

Prison: Popular law turns 6 today; half of its 4,000 terms for nonviolent crime.

By Wendy Thomas

Beanbag death ruled homicide

Police: Autopsy finding, which doesn't imply guilt, says woman died from blunt force trauma when hit with 'less-than-lethal' weapon.

Doctors Who Lose Patience

Frustrated by the changes forced by a managed care system they contend is spreading like a virus, some physicians are reassessing their calling.

Mental health treatment law criticized

High Court Considers Care of Mentally Ill

By DAVID G. SAVAGE

THE LAW

Price of wrongful imprisonment: $36 million

Settlement: Four men combusted with help from college students.

The Los Angeles County Board of Supervisors has agreed to pay $1.1 million to settle a wrongful-death claim involving a Lakewood man whose condition apparently was not monitored adequately by a paramedic after the man was hogtied by sheriff's deputies.

The county counsel's office said an autopsy determined that Victor Cox, 29, died from "exsanguination and cocaine intoxication." It recommended the settlement, the counsel's office said a jury probably would conclude that the paramedic's failure to provide emergency medical treatment contributed to Cox's death.

Officials said deputies were summoned to Victor Cox's home on Premiere Avenue Sept. 5 by his wife, Jeredia Cox, who complained of spousal abuse. The deputies said that when Victor Cox, who was talking incoherently, tried to strike them, they tied his arms and legs together behind his back.

When one of the paramedics tried to question Cox, "he responded with profanities," the counsel's office said.

A few minutes later, the paramedic noticed that Cox had stopped breathing, the officials said. They said that instead of immediately using cardiopulmonary resuscitation, the paramedic waited until Cox had been placed in an ambulance. By the time the ambulance reached a hospital, Cox was dead.

The settlement will go to Cox's wife and his three children.

County to Pay Claim in Hogtie Case


Dentist Loses License in Death of Patient, 4

SANTA ANA — The state has revoked the license of one of the dentists involved in a 1997 incident in which a 4-year-old patient died at a Santa Ana dental office.

The action, which marks the first punitive steps taken by the State Board of Dental Examiners in the case, comes as prosecutors prepare for a criminal trial against the other dentist in the incident.

On Aug. 4, 1997, Javier Villa of Santa Ana stopped breathing after being given an oral sedative at the Medgad Dental Clinic. He died at UC Irvine Medical Center in Orange.

The 13-member state board voted to ban Dr. Miguel Angel Garcia, who was the managing dentist at the clinic, from prac-

Near-Fatal Beating of Inmate in Yard at Corcoran Triggers Probe

Prisons: Guard in exercise area was absent from his post while two men repeatedly kicked and punched the victim, officials say.
Welcome to the Los Angeles County Jail
Basic Sheriff’s Department Organizational Structure

- Custody
  - Security
- Corrections
  - Laundry
  - Food services
  - Medical, dental and mental health
Custody Operations

- High turnover
- High mobility
- Conflict of choices
- Custody career ladder
Information about LASD Jails

• Largest sheriff’s department in world
• Largest municipal jail system in world
• 18,500 – 20,000 inmates
  – Nine jail facilities
  – Spread out in LA County
• 13,000 -17,000 bookings and releases monthly
• Approximately 1/3 of inmates on regular pill call
Twin Towers  Men’s Central Jail
Los Angeles County Sheriff: Jail Demographics

- 88% Males
- 12% Females
- 44.37% Hispanic
- 35.99% Black
- 16.54% Cauc.
- 3.07% Other
Los Angeles County Sheriff: Demographics

- Average Length of Stay = 44.2 Days
- Average Weekly Releases
  - Overall = 3,262
  - State Prison = 678
  - INS = 115
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Los Angeles County Sheriff Operational Stats

Annual Inpatient Admissions = 6,338

Annual Outpatient Clinic Visits = 2,059,249

Prescriptions Filled Annually = 1,068,000

Medical Records Opened = 91,391
“The Frustrations”

• Hi – Volume, Hi - Turnover & Hi – Mobility Environment
• No Control over Movement
• “VSOL”
• “Eternal Ground Hog Day”
• “Between a Rock and a Hard Place”
• “No matter what you do, you will get sued”
Intake Philosophy

In today’s high volume/high turnover jail intake environment, medical and mental health screening at intake are essential functions that are vital to an efficient, safe custody environment.
Medical Screening: 16 Questions

- Medical problems
- Medication
- Current open cut or boil
- Disability
- 55 or older

- Psychiatric illness
- Psychiatric meds
- Do you hear voices?
- History of or current suicidal ideation
- Bizarre or unusual behavior
The Basic Services Provided:

- Intake Screening
- Outpatient Clinics
- Correctional Treatment Center (Skilled Nursing)
- Specialty Clinic Consultation
- Urgent Care
- Emergency Referral
- Mental Health Services
- Basic Dental Services
Special Circumstances

• “…during transfer (my) self meds were confiscated and thrown out. “
• “….a small person, his safety is an issue especially because he is in GP. “
Historical Challenges

- 1985 – TB Screening
- 1986 – Mening Outbreak
- 1987 – Resurgence of TB
- 1989 – Emergence of HIV
- 1995 – Hepatitis C
- 1996 – CTC Licensure
- 1990s – Prenatal Services
- 1997 – DOJ Investigation
- 2001 – MRSA
- 2002 – SARS
- 2006–? Varicella (chickenpox)
- 200? – Emerging Pathogens
The Adventures

- CAMP - "OJ"
- THE MENDENDEZ BROTHERS
- THE NIGHT STALKER
- SEAN PENN
- TODD BRIDGES
- KELSEY GRAMMER
- RODNEY KING
- ROBERT BLAKE
- THE DNC
The Future

- Digital X-RAY
- Tele-Medicine
- Electronic Medical Records
- Blood Test for TB
- Rapid HIV Test
- Immunizations
- Hep C treatment …?
Hepatitis Immunization Pilot

- Twinrix® Hepatitis A and B vaccine
- Accelerated dosing schedule
- State funded grant to immunize
- 400 Inmates in K-6G (Gay dorm)
- Tracking of released inmates using LINK (LA-OC Immunization Registry)
- Expand to GP: 700 inmates last week
Acknowledgements

- Infection Control Unit:
  - Hazel Price
  - Harout Arslanian
  - Armidia Miranda
  - Reynaldo Franco
  - Patricia Epuna
  - Frances Kamara
  - Ann Carter
  - Martha Tadesse

- LADHS:
  - Dr. Peter Kerndt
  - Dr. Sarah Guerry
  - Dr. Ali Stirland
  - Dr. Elizabeth Bancroft
  - Lindsey Hageman
“Don’t impress people with how much you know; impress them with how much you care.”

D. A. Henderson
LASD: Chronology of Events I

- September 2001
  - Occasional Reports of Spider bites at North County Facilities
  - Physician Protocol for Insect bites developed
    - CBC, C & S, Bicillin or Bactrim, Benadryl, Motrin
  - Spider bite Briefing notes
LASD: Chronology of Events II

• March/April 2002
  – Focus of reports shifts to the Men’s Central Jail (MCJ)
  – Five spiders captured and taken to the entomologist for identification
  – Inmate interviews reveal insights: showers, sharing razors, popping boils, etc.
May/June 2002

- Results of culturing show alarming number of MRSA infections
- Custody Executives briefed
- Dept of Public Health: Acute Communicable Disease Program notified
Number of Hospitalized Inmates with MRSA on Jail Ward at LAC-USC

Year: 1998 1999 2000 2001 2002
Cases: 0 10 20 40 70
Recommendations

• Immediate identification of skin infections during intake and among incarcerated
• Appropriate treatment with occlusive dressing
• Cohorting of affected inmates
• Strict hygiene
• Environmental cleaning
Recommendations

Appropriate diagnosis and treatment

- Incision and drainage of abscesses
- Antibiotics for cellulitis
- Optimize wound care
- Culture lesion, determine susceptibilities
- Appropriate disposal of bandages
MRSA Transmission in Jail: a Black Box
4 Study Stages

• Randomized, Controlled, Blinded Study to decrease colonization:
  – Chlorhexidine “bath” units vs.
  – Usual care units vs.
  – Tea Tree Oil?

• Genotyping of MRSA Isolates
  – Environmental Contamination Study
  – *S. aureus* Skin Infection Study
Goal #1: How Many MRSA Carriers in the jail?
Model: How MRSA Moves in the Jail
1 & 2. Inmates Come and Go
Model: How MRSA Moves in the Jail

3 & 4. MRSA Transmission

Inmate with skin infection
Model: How MRSA Moves in the Jail

3 & 4. MRSA Transmission

Inmate with skin infection
Goal #2: Slow MRSA Transmission

Inmate with skin infection
Varicella

- Chickenpox usually among children
- More serious disease among adults
- Number of active cases increasing 2-3x per year since 2006
- Disparities in vaccination campaign?
- Unique epidemiology
  - Born after 1980
  - Cases restricted to one facility
Varicella Immunization

- Current response to varicella case is reactive
- Cost saving to immunize susceptible inmates during intake?
Acknowledgements

• LASD Med Services
  – Lt. Stephen Smith
  – Dr. Sander Peck
  – Dr. Keith Campeau

• University of Chicago
  – Dr. Robert Daum
  – Dr. Michael David
Challenges and Opportunities in Correctional Setting
Tuberculosis Program Priorities

- Receiving screening (Chest X-ray)
- Isolation of Suspects
- Diagnosis/Treatment of active cases
- Employee Skin Testing
- Skin Testing HIV Population
- Chemo-therapy of HIV/Skin test Positive
- Skin testing General Inmate Population
• Medical Management Staff participation in Custody Management meetings
• Providing on-site access and office space for Health Department Staff.
• Proactive Continuity of care/Community Linkage
Support from the Executive Command

Counseling

Staffing Training

Education for Inmates

Staff Education
Lessons Learned

- OMSF
- 3 - Questions
- 15 – Questions
- Physician in Booking
Lessons Learned

55 years of Age & Older enhanced screening.

- CBC
- Blood Chemistry
- EKG
- Chest X-ray
Lessons Learned

- 60 to 70% have Hx of ETOH or Drugs.
- Over 50% of the legal cases involve a death related to ETOH.
- “Letting them sleep it off” is asking for trouble.
- The Protocol for PAS must be “pro-active” instead of “reactive”.

PAS (Post Alcoholic Syndrome)
Public Health Issues

• Turf Issues
• Role and Responsibility definition (Jail Physician versus Public Health Officer)
• Lack of Resources and Funding
Notes

- Transitional case Mgmt
- Mental Health
- Womens’ health
- Tb
- Mrsa
- Hiv
- Immunizations
- Hepatitis A-C

- Pandemic and disaster planning
- IVDU Substance abuse
- Limitations due to legal reasons, behavior of inmates, security and cooperation of sheriffs, transfers, d/c from court
Outline

• IRC process, flow and 16 questions
• Housing: rating, ethnicity, medical
• Characteristics by crime, gender, ethnicity, social
• Health care in jail, Constitution, MDs, RNs, USC, difficults
• Jail health: prev slide
• Transition to outside, specific examples of women’s health + HIV
• Resistant bugs, direct spread of bugs: reflect and amplifies community: MRSA
• Conclude: care, rehab, community, DA