Hepatitis A/B Vaccination of inmates in the Los Angeles County Jail

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Welcome to the 14th Annual Conference
Los Angeles County Bar Association

2010
Information about LASD Jail

- 20,000 inmates
  - Nine jail facilities
  - Spread out in LA County
- Largest municipal jail system in world
- Approximately 1/2 of inmates on regular pill call
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<th>Race/Ethnicity</th>
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<th>Total Bookings</th>
<th>Total Person Days</th>
<th>Duration of Stay</th>
<th>Age</th>
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<td>n</td>
<td>n</td>
<td>Mean</td>
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<tr>
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<tr>
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<td>100.0%</td>
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Communicable Disease Risks in Jail

- Overcrowding
- Suboptimal environment and personal hygiene
- Infrequent showers
- High mobility and turnover of inmates
Hepatitis Vaccination Recommendations

• In the US, the highest rates of hepatitis B infection are in 25-44 year olds in high-risk groups, including
  – Injecting drug users (IDU)
  – Men having sex with men (MSM)
  – Incarcerated

• Advisory Committee on Immunization Practices (ACIP) recommends
  – Hep A vaccine: MSM, IDU, non-injection drugs users
  – Hep B vaccine: MSM, IDU, Corrections, HIV infected
K6G Unit

- 100% MSM or MSM/W
- 25% IDU

- All tested for STDs prior to entering unit
Project - Background

• K6G Inmates at risk of hepatitis A & B

• LASD interested in vaccinating but concerned:
  – Sustainability of any project
  – Ability to give follow-up doses
  – May not be transferable to general jail population
SET-UP  Collect vaccine from refrigerator, set up in Unit

RETURN PATIENTS
Community Worker (CW) locates record, 2 PHNs vaccinate

NEW PATIENTS
Visit dormitories – ‘house mouse’ encourages inmates
CW checks list, registers & screens acceptors
PHNs vaccinate

PAPERWORK
Jail: Complete medical record and patient record card
Office: Enter in registry & database
List patients due next week
Combined HAV / HBV Vaccine

• **Twinrix® Accelerated/alternative schedule**
  - FDA approved April 2007
  - 4 doses: 0, 7, 21-30 days, 12 months

• **Rationale**
  - Short length of stay in jail
  - Unlikely to continue series after leaving jail
  - Immediate risk of hepatitis
7 days - 73%
21 days - 53%
30 days - 45%
180 days - 4%
1 year <1%
Twinrix Schedules
Standard Versus Accelerated

*Data From Twinrix PI
Results – Vaccine Given

1st 13 months of the project (from 8/07)

Overall, 1800 doses of vaccine given to 768 inmates

• 97% of inmates given Twinrix
• 3% given single antigen vaccine

• ~ 35% of inmates started a vaccine series

• Initially 40-60 inmates / session
• Now ~ 20-30 inmates / session
Return Rates

<1% refused 2nd or 3rd dose due to side effects or concurrent illness
“This is great, it’s not what you think about when you’re on the street!”
Vaccinee Risk Factors
(first 7 months)

- 88% Male
- 12% Transgender
- 64% Sex with men
- 34% Sex with men and women
- 20% Inject drugs (+/- other drugs)
- 36% Use other street drugs (no IDU)
- 18% Sex Workers
- 22% report being HIV positive
- 0.8% report partner hep. B carrier

N=522
Challenges

SEROLOGY:
- To detect existing immunity & hep B carriers
- Not available due to limited lab resources & LASD staff

INEFFICIENT USE OF STAFF:
- No LVNS/RNs available
  - Inmates arrive in batches, need to be processed efficiently
  - Staff safety

SCHEDULING OF VACCINE SERVICES:
- Shortage of secure space, jail staff and STD Program staff.
- All inmates offered vaccine every Friday but many asleep.
- Attempts to increase numbers mixed success
**Immunization Registry**

**CHALLENGES**
- Web-based, no internet access
- No Twinrix accelerated schedule
- Unable to generate State report
- No medical information

**SUCESSES**
- Acceptable (only one inmate opted out)
- Records previous vaccination at other sites (5 inmates)
- Facilitates continuing series at other sites (3 inmates)
Continuing the Vaccine Series

Jail
• May be difficult to access e.g. court, work program, transferred, medical center, lock-up, lock-down

Released:
• No reminder / recall - homeless, give false addresses
• Vaccine record cards, helpline, website, “never too late”
• 14 LA County funded STD Clinics offer free vaccine

Readmitted:
• Vaccinate on readmission
Logistics

- **Equipment:** refrigerator, anaphylaxis kit, safety needles
- **Patient Information:** brochure, poster
- **Documentation:** record cards, leaflet, needle log, LINK disclosure, dual tickler system
- **Create database:** evaluation, reporting & recall
- **Collaboration:** Jail, Immunization & STDP
- **Training:** vaccination and working in the jail

The priority for the jail is custody, not preventative health
IT IS A FELONY TO ENGAGE IN ANY SEXUAL ACTIVITY WITHIN THE LOS ANGELES COUNTY JAIL

PENAL CODE SECTION 286(e), 288a(e).
K6G Serosurvey - Preliminary results
8/18/2008-9/19/2008

- 66.2% of inmates tested had serology showing past infection with hep A (60/213, not counting 3 with insufficient specimen)

- 28.2% of inmates tested had serology showing past infection with hep B (60/213, not counting 3 with insufficient specimen)

- 52.6% of inmates tested had serology showing immunity to hep B from infection or vaccination (110/209, not counting 6 with insufficient specimen, 1 unknown)

- 1.9% of inmates tested had serology showing chronic infection with hep B (4/214, not counting 2 insufficient specimen)

- 20.8% of all inmates tested had reactive hep C tests plus 1.3% weakly reactive (45/216 and 3/216)
### K6 CT/GC Testing and Morbidity by Anatomic Site (2/4/08 - 4/30/08)

<table>
<thead>
<tr>
<th></th>
<th>CT/GC Tests</th>
<th>CT</th>
<th>GC</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>No. of tests</td>
<td>% tested</td>
<td>Positive</td>
</tr>
<tr>
<td>Overall*</td>
<td>627</td>
<td>98%</td>
<td>46</td>
</tr>
<tr>
<td>Urine</td>
<td>618</td>
<td>96.4%</td>
<td>18</td>
</tr>
<tr>
<td>Pharyngeal</td>
<td>604</td>
<td>94.0%</td>
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</tr>
<tr>
<td>Rectal</td>
<td>561</td>
<td>87.5%</td>
<td>37</td>
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<tr>
<td>At least 2 Sites**</td>
<td>614</td>
<td>95.8%</td>
<td>4</td>
</tr>
<tr>
<td>All 3 Sites***</td>
<td>542</td>
<td>84.6%</td>
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</tbody>
</table>

*At least one anatomic site tested

**CT/GC positives represent positive tests at 2 or more sites

***GC positives represent positive tests at all 3 sites

Total inmates N=641
Summary of K6G Project

- ~35% of inmates started vaccine series
- 59% have had 3 doses
- >99% accepted CAIR
- <3% report Hx vaccine or disease so combination vaccine used for majority
Vaccinating General Population

- 645 short-dated hep B vaccines: GP
  - 2\textsuperscript{nd} dose: 377 (58\%)
  - 3\textsuperscript{rd} dose: 140 (22\%)

Night before:
- Fact sheets, consent and CAIR forms

On the day:
- Inmates lined up, 1 Clerk per 2 PHNs
What works!

Free Vaccine

Leadership Buy-In

Inmate Education

Infrastructure and Partners

Forms Night Before
Conclusions

• Inmates are at high risk of hepatitis A & B.
• Vaccination is demanding of staff time.
• Inmates are willing to be entered onto a registry & to continue the vaccine series.
• The alternative vaccine schedule enables the majority of inmates to receive 2 or more doses during their short jail stay.
• Providing vaccination is feasible in this setting, but compromises have to be reached.
Moving Forward

- The K6G program and the pilot in GP show that vaccination can be accomplished
- A universal program is not feasible at this time
- Targeting of high-risk, longer stay inmates
- Mandatory drug treatment dorms
Acknowledgments

STD Program
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Aineeh Montano
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Jennifer Vonghack
David (Chi-Ngai) Yu

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