

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

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Welcome to the
LOS ANGELES COUNTY Jail



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**

Demographic information for Los Angeles County Jails, 2008

Race/Ethnicity	Sex	Total Bookings		Total Person Days		Duration of Stay		Age
		n	%	n	%	Mean	Median	Mean
Asian / Pacific Islander	F	148	0.5%	4,753	0.6%	32.1	10	32.4
African American	F	11,675	43.2%	359,783	43.9%	30.8	14	34.7
Hispanic	F	8,817	32.6%	256,028	31.3%	29.0	11	30.9
Native American	F	30	0.1%	1,396	0.2%	46.5	18	36.9
Other	F	669	2.5%	23,979	2.9%	35.8	13	33.3
White	F	5,711	21.1%	173,079	21.1%	30.3	14	35.7
All	F	27,050	100.0%	819,018	100.0%	30.3	13	33.6
Asian / Pacific Islander	M	690	0.5%	27,304	0.4%	39.6	11	32.7
African American	M	45,632	29.9%	2,066,310	32.6%	45.3	19	36.0
Hispanic	M	79,534	52.0%	3,205,479	50.5%	40.3	13	30.7
Native American	M	102	0.1%	3,708	0.1%	36.4	10.5	39.9
Other	M	4,147	2.7%	179,385	2.8%	43.3	15	33.1
White	M	22,713	14.9%	861,023	13.6%	37.9	15	37.2
All	M	152,818	100.0%	6,343,209	100.0%	41.5	15	33.3

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

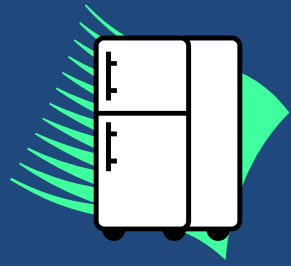
K6G Unit



- 100% MSM or MSM/W
- 25% IDU
- All tested for STDs prior to entering unit

Project - Background

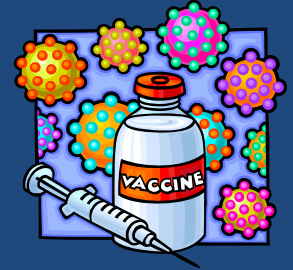
- K6G Inmates at risk of hepatitis A & B
- LASD interested in vaccinating but concerned:
 - Sustainability of any project
 - Ability to give follow-up doses
 - May not be transferable to general jail population



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

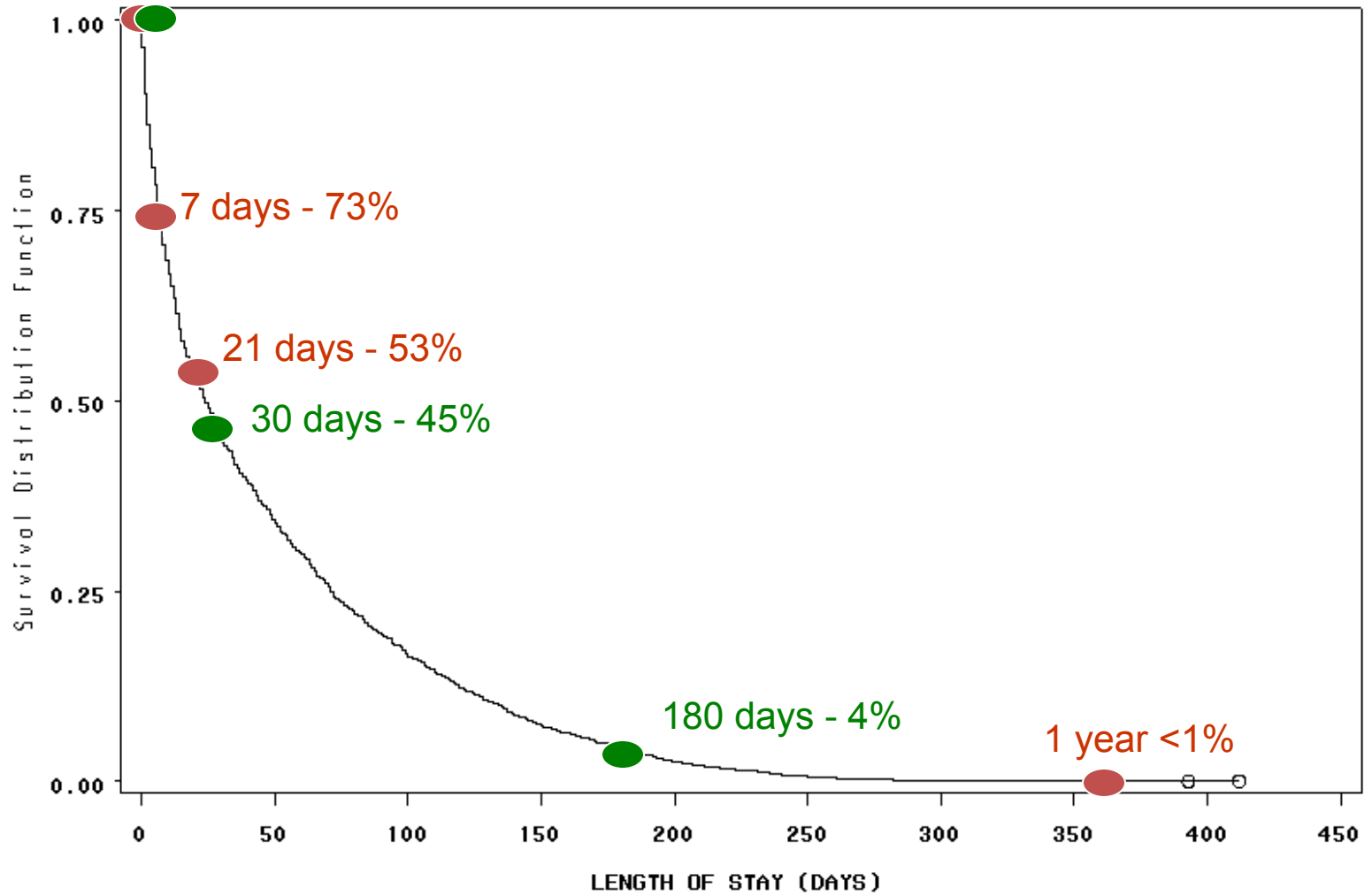


Combined HAV / HBV Vaccine

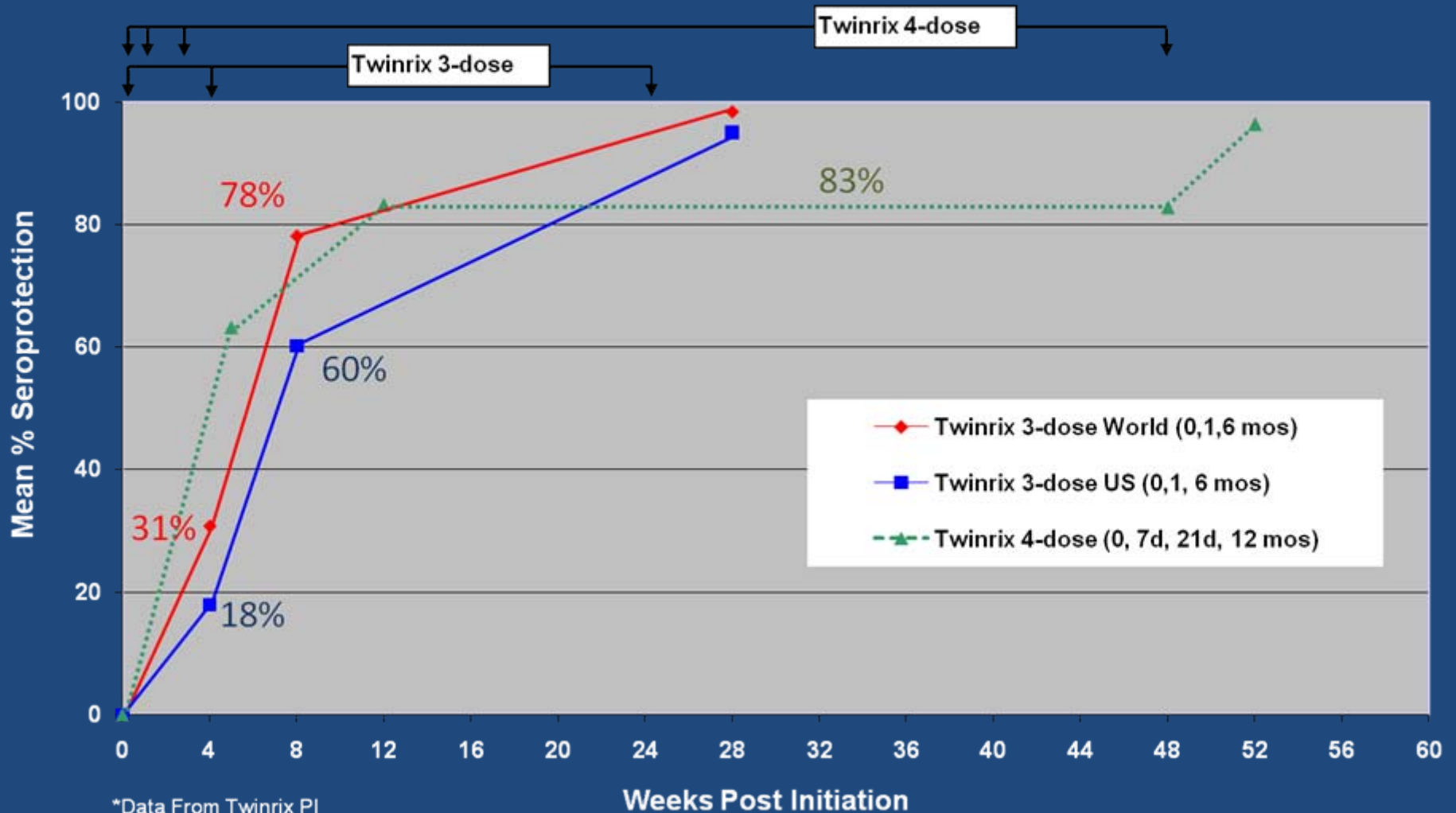
- **Twinrix® Accelerated/alternative schedule**
 - FDA approved April 2007
 - 4 doses: 0, 7, 21-30 days, 12 months
- **Rationale**
 - Short length of stay in jail
 - Unlikely to continue series after leaving jail
 - Immediate risk of hepatitis

K6 LENGTH OF STAY, SCREENING DATE FROM JAN 2005—DECEMBER 2005

LENGTH OF STAY STARTING FROM SCREENING DATE



Twinrix Schedules Standard Versus Accelerated



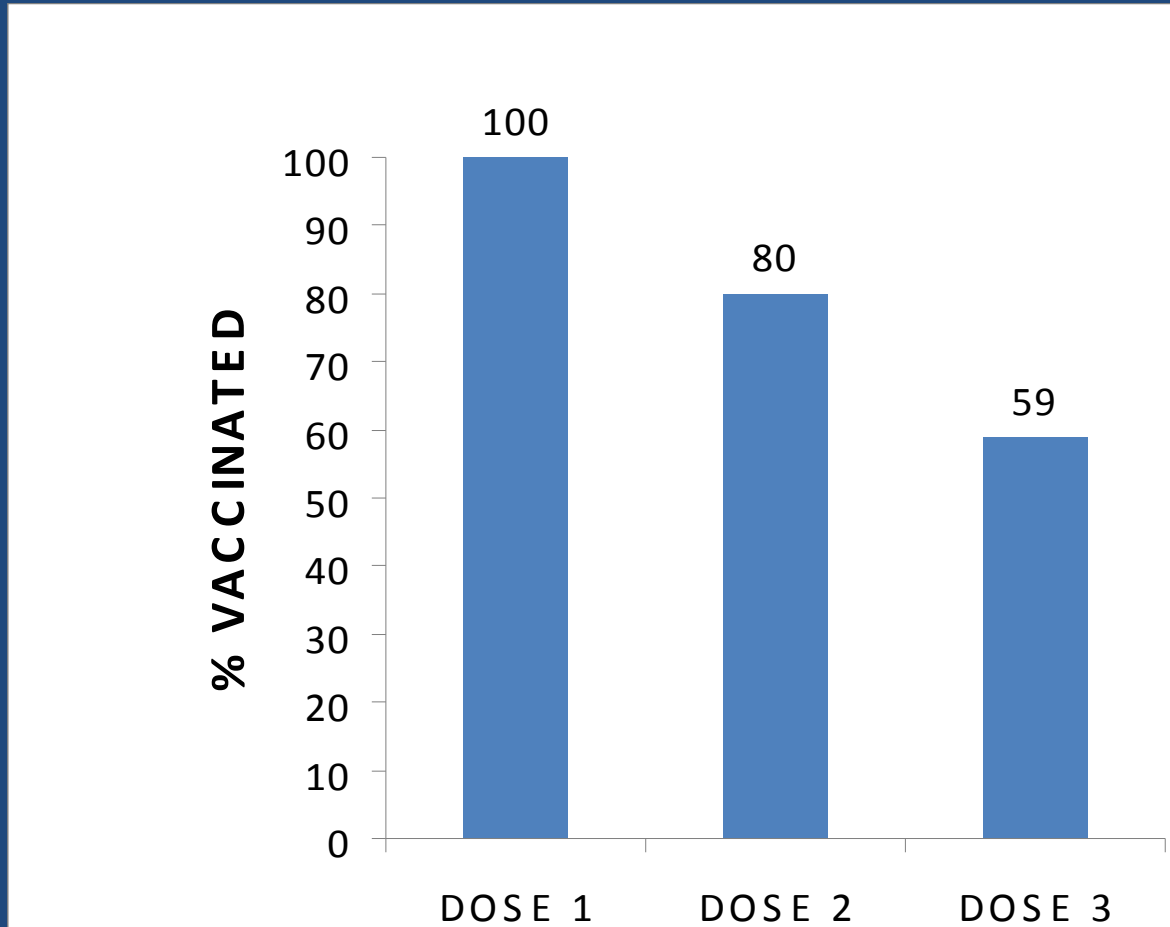
Results – Vaccine Given

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!"



Simulation using models

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

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

LINK - Patient Immunization History

Registry ID: 1 Med. Rec. No: 22553 Kaiser No: Pref: Y
Name: POZON, TONI Suf: Sex: F DOB: 05/15/2001 Age: 3y 10m 7d
Next Vac. Date: 05/15/2012 Reactions: DTaP
Waivers: Risks: DTaP

History | Parent/Guardian | Address | Preferences | BirthInfo | OtherInfo

Vaccine	Group	#	Seq	Date Recv.	Age	Provider
OPV	POLIO	1		09/15/2001	0y 4m 0d	TRANSCRIBEE
OPV	POLIO	2		11/15/2001	0y 6m 0d	TRANSCRIBEE
DTaPHBIP	POLIO	3		07/25/2003	2y 2m 10d	CLINIC1
IPV	POLIO	4		09/03/2003	2y 3m 19d	CLINIC1
DTP	DTP	1		07/15/2001	0y 2m 0d	TRANSCRIBEE
DTP	DTP	2		09/15/2001	0y 4m 0d	TRANSCRIBEE
DTP	DTP	3		11/15/2001	0y 6m 0d	TRANSCRIBEE
DTP	DTP	4		08/15/2002	1y 3m 0d	TRANSCRIBEE
DTaP	DTP			03/22/2003	1y 10m 7d	CLINIC1
DTaP	DTP			06/27/2003	2y 1m 12d	CLINIC3
DTaPHBIP	DTP			07/25/2003	2y 2m 10d	CLINIC1

Archived: 1 Options for Recommendations

Recommendations:
[DTP\(Td\)](#) 05/15/2012

Accelerated Schedule
 Had Chickenpox

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)

	CT/GC Tests		CT		GC	
	No. of tests	% tested	Positive	(%)	Positive	(%)
Overall*	627	98%	46	7.3%	51	8.1%
<i>Urine</i>	618	96.4%	18	2.9%	8	1.3%
<i>Pharyngeal</i>	604	94.0%	--	--	18	2.9%
<i>Rectal</i>	561	87.5%	37	8.6%	39	6.9%
At least 2 Sites**	614	95.8%	4	0.7%	12	2.0%
All 3 Sites***	542	84.6%	--	--	2	0.4%

*At least one anatomic site tested

Total inmates N=641

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

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

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
 - 2nd dose: 377 (58%)
 - 3rd 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



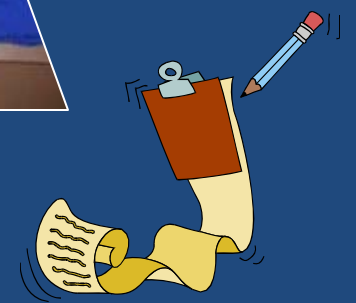
Leadership Buy-In



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

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