

National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (NPEBBVS)

Tony Butler PhD
Justice Health Research Program



Presentation

- Background to the NPEBBVS
- Selected findings from the NPEBBVS
- Recommendations/future directions



Prisoner facts and figures

- Australian full-time adult prisoner population ~30,000
- ~60,000 flow through prisons each year
- 126 prisons in Australia
- 25% Australian prisoners are Indigenous
- Indigenous imprisonment rate - 2,309 per 100,000 vs. 131 per 100,000
- 94% men, 6% women
- Average age 33 years
- \$85,000 per year in NSW (\$230 per day)



Background to the NPEBBVS

- Prisoners excluded from all national surveys (including surveys of drug use e.g. IDRS, National Drug Household Survey, ANSPS)
- Extreme at risk population with poor health outcomes
- Ad hoc surveys valuable but systematic information important
- Attempt to collect systematic information from this population
- 2002 discussions with the National Centre in HIV Epidemiology and Clinical Research
- Decided to model the survey on the Australian Needle and Syringe Program Survey (ANSPS)
- One-off funding from NSW Health (for NSW component)
- Approached states and territories and 4 agreed to participate
- Screen on reception to prison

National Prison Entrants Bloodborne Virus Survey (NPEBBVS)

- Triennial: 2004 (NSW, WA, Tas, Qld)
2007 (NSW, WA, Tas, Qld, Vic, ACT, SA)
2010 (NSW, WA, Tas, Qld, Vic, ACT, SA, NT)
- Consecutive sample of prison entrants over a 2 week period
- 29 reception sites across Australia
- 'New' prison entrants (not transfers)
- Conducted as part of the prison reception process
- Survey completed by reception nurses
- Multiple ethics approvals required
- Informed consent required
- 76% of all receptions screened (2010)
- 76% response rate (86% for Indigenous; 69% women)
- Number screened at each reception prison ranges from 1 to 200+



- Funding model

Methodology

- Whole blood sample taken to test for the following BBVs & STI:
 - HIV antibody and antigen
 - Hepatitis C antibody
 - Hepatitis B core-antibody
 - Hepatitis B surface-antigen (e-antigen and e-antibody)
 - Hepatitis B surface-antibody
 - *Treponema pallidum* (syphilis) antibody (2010)
- Urine specimen taken to screen for (2010) :
 - *Chlamydia trachomatis*
 - *Neisseria gonorrhoea*
- Short risk behaviour survey (demographic, criminographic, drug use, tattooing, body piercing, sexual behaviour)
- Findings presented in terms of IDU & non-IDU



2010 National Prison Entrants Bloodborne Viruses & Sexually Transmissible Infections Survey Questionnaire

[Research nurse to fill in all sections]

State Prison

MNI ID: T O M S / O T S / J O I S T / 1800 / C R N / L I S

D.O.B.

First two letters of LAST NAME

First two letters of FIRST NAME

1. Sex

☐ 1. Male

☐ 2. Female

☐ 3. Transgender

2. Are you Aboriginal or Torres Strait Islander?

☐ 1. Aboriginal

☐ 2. Torres Strait Islander

☐ 3. Both Aboriginal and Torres Strait Islander

☐ 4. Neither Aboriginal nor Torres Strait

3. Is this your first ever time in prison?

☐ 1. Yes → go to Q5

☐ 2. No

4. If not first time in prison then:

4a. How many times in prison in last 12 months (exclude current episode)

4b. How many times have you been in prison (include current episode)

5. Country of birth

☐ 1. Australia

☐ 2. Other (specify)

6. Main language spoken at home by parents

☐ 1. English

☐ 2. Other (specify)

6a. Legal marital status

☐ 1. Never married

☐ 2. Married

☐ 3. Divorced

☐ 4. Separated

☐ 5. Widowed

7. In the last 12 months before coming into prison, where did you spend the most time? (complete all applicable boxes)

State or territory

and Suburb (post code)

or Suburb/town (spell)

or Town (spell)

or Overseas country

7a. Where were you living just before prison? (Tick one only)

☐ Private rental (including shared rental)

☐ Home owner or purchaser

☐ Public housing/Community housing

☐ Sleeping rough/qualifong grass

☐ Shifting between relatives, friends

☐ Crisis accommodation (refuge)

☐ Drug/alcohol detox or treatment facility

☐ Boarding house or hostel

☐ Caravan park

☐ Backpackers/hostel/motel

☐ Other (specify)

8a. Have you ever smoked a full cigarette?

☐ 1. Yes

☐ 2. No → go to Q8a

8b. If yes, how old were you when you smoked your first full cigarette (yrs)

8c. Do you smoke now?

☐ 1. Yes

☐ 2. No → go to Q8a

8d. If yes, which of the following best describes your current use of tobacco? Select one only

☐ 1. I now smoke occasionally, but less than once a week.

☐ 2. I now smoke occasionally, not everyday, but at least once a week.

☐ 3. I now smoke regularly, every day or most days about

☐ 4. 1 to 10 cigarettes a day

☐ 5. 11 to 20 cigarettes a day

☐ 6. 21 to 30 cigarettes a day

☐ 7. Over 30 cigarettes a day

9a. Do you have any body or ear piercings?

☐ 1. Yes

☐ 2. No → go to Q10a

9b. Do you have any piercing other than an ear piercing?

☐ 1. Yes

☐ 2. No

9c. If yes, to 9a or 9b, were any of these piercings done in the last 12 months?

☐ 1. Yes

☐ 2. No → go to Q10a

9d. If pierced in the last 12 months, who did them for you? (Tick all that apply)

☐ Chemist/hairdresser/beauty salon

☐ Professional piercer/studio

☐ Tattooist/Parlour

☐ Friend

☐ Prison inmate

☐ Self

☐ Family member

☐ Other (specify)

9e. If pierced by friend, inmate, self or family member in the last 12 months had anyone else used the needle before you?

☐ 1. Yes

☐ 2. No

☐ 3. Don't know

10a. Do you have any tattoos?

☐ 1. Yes

☐ 2. No → go to Q10d

10b. If yes, were any done in the last 12 months?

☐ 1. Yes

☐ 2. No → go to Q10d

10c. If tattooed in the last 12 months, who did your tattoo(s)? (Tick all that apply)

☐ Parlour / professional

☐ Friend

☐ Prison inmate

☐ Self

☐ Family member

☐ Other (specify)

10d. If yes, what was the last drug you injected? (One only)

☐ 1. Heroin

☐ 2. Heroin + Cocaine together

☐ 3. Cocaine

☐ 4. Amphetamine (speed, ice)

☐ 5. Methadone

☐ 6. Morphine

☐ 7. Steroids

☐ 8. Suboxone / buprenorphine

☐ 9. Other (specify)

11. Have you ever injected drugs?

☐ 1. Yes

☐ 2. No → go to Q20

12. If yes, how old were you when you first injected drugs (years)?

13. What was the last drug you injected? (One only)

☐ 1. Heroin

☐ 2. Heroin + Cocaine together

☐ 3. Cocaine

☐ 4. Amphetamine (speed, ice)

☐ 5. Methadone

☐ 6. Morphine

☐ 7. Steroids

☐ 8. Suboxone / buprenorphine

☐ 9. Other (specify)

14a. How often did you inject in the last month?

☐ 1. More than 3 times most days

☐ 2. 2 to 3 times most days

☐ 3. Once a day

☐ 4. More than weekly, not daily

☐ 5. Less than weekly (1-4 times per month)

☐ 6. Did not inject in last month → go to Q15

Please contact Tony Butler (08) 9266 1616 or 041 111 4927 for enquires related to questionnaire. Ver: 10/6/10

2010 National Prison Entrants Bloodborne Viruses & Sexually Transmissible Infections Survey Questionnaire

14b. Which places did you inject in the last month? (Tick all that apply)

☐ Prison

☐ Own home

☐ Friend's home

☐ Dealer's home

☐ Street, park or beach

☐ Car

☐ Public toilet

☐ Commercial "shooting" room

☐ MSIC (KX injecting centre in Sydney)

☐ Squat

☐ Other (specify)

14c. How often did you use a new sterile needle and syringe in the last month?

☐ 1. All injections

☐ 2. Most of the time

☐ 3. Half of the time

☐ 4. Some of the time

☐ 5. None of the time

14d. Tick all equipment that you used after anyone else in the last month?

☐ Spoon

☐ Water

☐ Filter

☐ Tourniquet

☐ Drug solution / mix

☐ Did not share any or above last month

14e. How many times last month did someone else inject you after injecting themselves or others?

☐ 1. More than 5 times

☐ 2. 3 to 5 times

☐ 3. Once or twice

☐ 4. None

14f. How many times last month did you reuse a needle & syringe after someone else (including sex partner) had used it (even if it was cleaned)?

☐ 1. More than 5 times

☐ 2. 3 to 5 times

☐ 3. Twice

☐ 4. Once

☐ 5. None → go to Q15

14g. How many different people (including your sex partner) have used a needle before you in the last month (even if cleaned)?

☐ 1. More than 5 people

☐ 2. 3 to 5 people

☐ 3. 2 people

☐ 4. 1 person

☐ 5. Don't know how many

14h. Who were these people? (Tick all that apply)

☐ Regular sex partner

☐ Other sex partners

☐ Close friend

☐ Acquaintance

☐ Other (specify)

15. How many times last month did you get needles & syringes from a needle exchange?

☐ 1. Daily or almost daily

☐ 2. A couple of times each week

☐ 3. Less than weekly (1-4 times per month)

☐ 4. Once last month

☐ 5. Not in the last month

16. How many times last month did you get needles & syringes from a pharmacy?

☐ 1. Daily or almost daily

☐ 2. A couple of times each week

☐ 3. Less than weekly (2 to 5 times)

☐ 4. Once last month

☐ 5. Not in the last month

17. When was the last time you re-used a needle after someone else?

☐ 1. Last month

☐ 2. In the last 2 to 6 months

☐ 3. More than 6 months ago

☐ 4. Never → go to Q19

18. Where was the last place you re-used a needle or syringe after someone else? (Tick one only)

☐ Prison

☐ Own home

☐ Friend's home

☐ Dealer's home

☐ Street, park or beach

☐ Car

☐ Public toilet

☐ Commercial "shooting" room

☐ MSIC (Kings Cross injecting centre Sydney)

☐ Squat

☐ Other (specify)

19. Have you ever participated in the yearly finger-prick survey at a needle exchange in the community?

☐ 1. Yes

☐ 2. No

☐ 3. Don't remember

20. Have you ever been on a methadone program?

☐ 1. Yes, on it now

☐ 2. Yes, in the past

☐ 3. No, never

21. Have you ever been on any other program (eg naltrexone, buprenorphine or LAAM)?

☐ 1. Yes, am on it now

☐ 2. Yes, in the past

☐ 3. No, never

22. Have you ever had any other therapies for drug use (e.g. detox, counselling, Narcotics Anonymous)?

☐ 1. Yes

☐ 2. No

23. Have you ever had hepatitis B infection?

☐ 1. Yes

☐ 2. No

☐ 3. Unsure

24a. Have you ever had hepatitis B vaccination?

☐ 1. Yes

☐ 2. No → go to Q25a

☐ 3. Unsure → go to Q25a

24b. If yes, how many injections have you had?

☐ 1. One

☐ 2. Two

☐ 3. 3 or more

25a. Have you ever been tested for HIV?

☐ 1. Yes, in the last year

☐ 2. Yes, more than a year ago

☐ 3. Never tested → go to Q26a

25b. If yes, what was the result of your last HIV test?

☐ 1. Did not have HIV

☐ 2. I have HIV infection

☐ 3. Don't know the result

☐ 4. Declined to answer

26a. Have you been tested for hepatitis C?

☐ 1. Yes, in the last year

☐ 2. Yes, more than a year ago

☐ 3. Never tested → go to Q27

26b. If yes, what was the result of your last hepatitis C test?

☐ 1. Did not have hepatitis C → go to Q27

☐ 2. I have hepatitis C

☐ 3. Don't know result → go to Q27

26c. What year did you find out you had hepatitis C?

19/20

25c. Have you ever had treatment for hepatitis C? (Tick all that apply)

☐ 1. No treatment → go to Q27

☐ 2. Yes, Interferon

☐ 3. Yes, Interferon + Ribavirin

☐ 4. Other (specify)

26e. If yes, are you having treatment for hep C now?

☐ 1. Yes, Interferon

☐ 2. Yes, Interferon + Ribavirin

☐ 3. No, not currently on treatment

☐ 4. Other (specify)

27. Have you had the cervical cancer vaccine (women only)?

☐ 1. Yes

☐ 2. No

☐ 3. Unsure

28. Do you identify as:

☐ 1. Heterosexual

☐ 2. Bisexual

☐ 3. Gay/lesbian

☐ 4. Unsure

29a. How many female partners have you had sex with in the last 3 months?

29b. Did you use condoms with these partners?

☐ Never ☐ Sometimes ☐ Always

☐ Regular ☐ Casual

29c. How many male partners have you had sex with in the last 3 months?

29d. Did you use condoms with these partners?

☐ Never ☐ Sometimes ☐ Always

☐ Regular ☐ Casual

29e. Have you been paid for sex in the last 3 months? (include non-cash payments)

☐ 1. Yes

☐ 2. No → end of questionnaire

29f. If yes to Q29e, did you use condoms (or dams) the last time you were paid for sex?

☐ 1. Yes → end of questionnaire

☐ 2. No → end of questionnaire

Please contact Tony Butler (08) 9266 1616 or 041 111 4927 for enquires related to questionnaire. Ver: 10/6/10

Sample characteristics – 2010 NPEBBVS

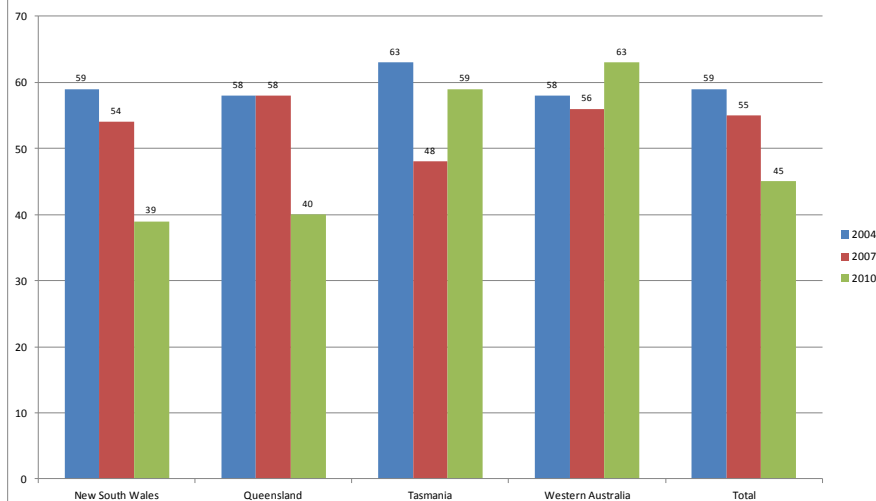
	N=811	
	IDU (N=353)	Non-IDU (N=458)
History of IDU	44%	56%
Injected in past month	57%	-
Sex (% male)	88%	93%
Median age	31 years	28 years
% Indigenous	26%	36%
Highly accessible/accessible area (ARIA)	89%	72%
Australian born	89%	81%
1 ^o homelessness*	2%	3%
First time in prison (% yes)	17%	41%
Participated in the community ANSPS	5%	-

* Sleeping rough, squat, long grass, car, boat.

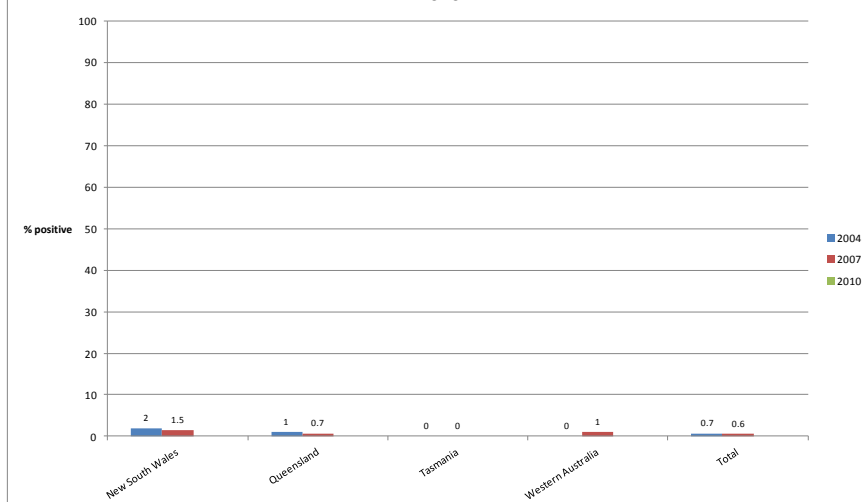
Sample characteristics - 2010 NPEBBVS

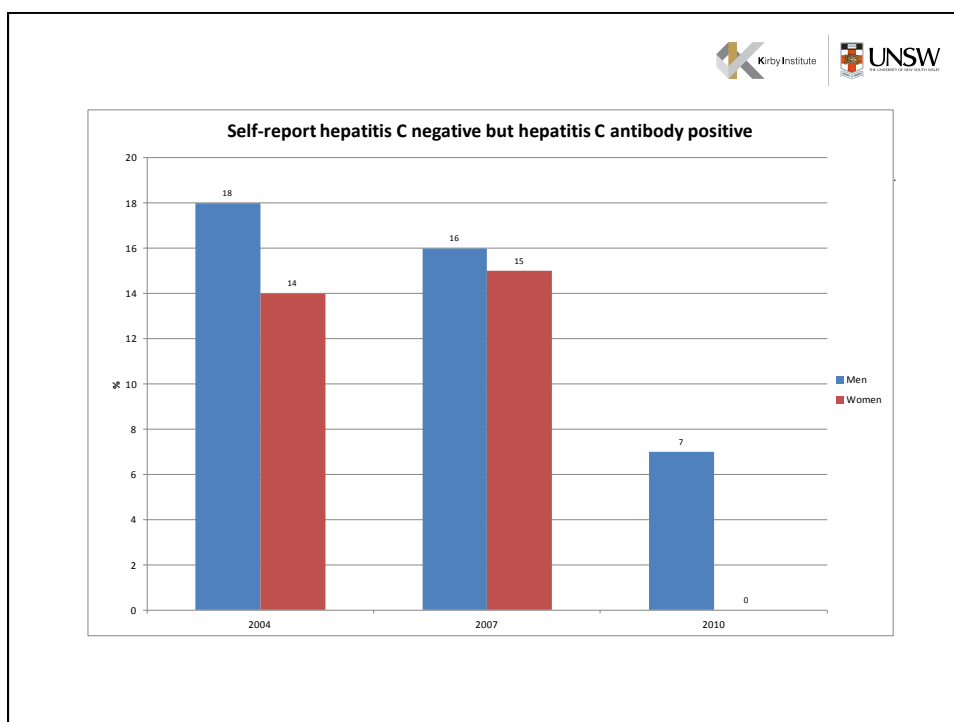
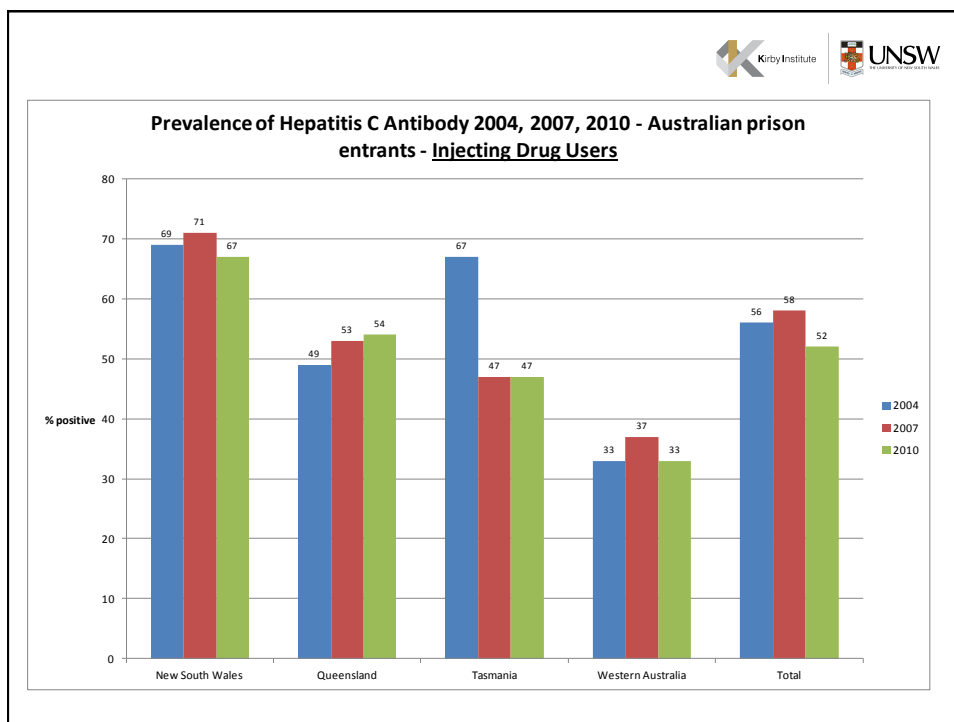
	N=811	
	IDU (N=353)	Non-IDU(N=458)
Median (range) age of first IDU	18 years (7-43)	-
Median (range) duration of IDU	13 years (<1-40)	-
Injected in past 4 weeks	57%	-
Most common drugs injected (past 4 weeks):		
Amphetamine	59%	-
Heroin	25%	-
Daily injections (%)	31%	
Sterile needles used past month (All + Most injections)	90%	-
No drugs in past 4 weeks	19%	52%
Any drug treatment (% no)	44%	87%
Condom <u>not</u> used last casual sex with female (%)	53%	37%
Sex work in past month (% yes)	3%	1%
Current smoker (%)	94%	86%

**Proportion of IDU among Australian prison entrants -
2004, 2007, 2010**

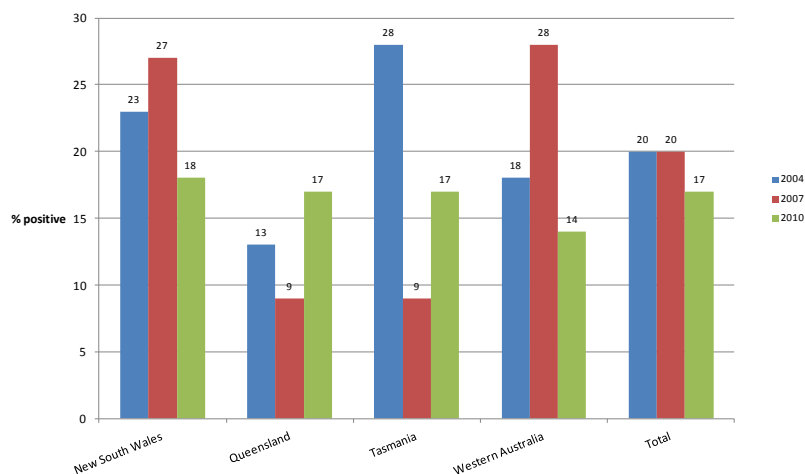


**Prevalence of HIV antibody among Australian Prison Entrants - 2004, 2007,
2010**

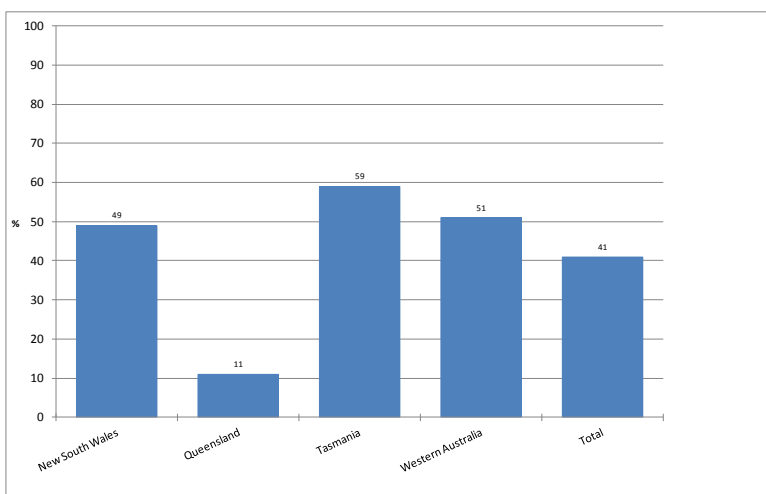


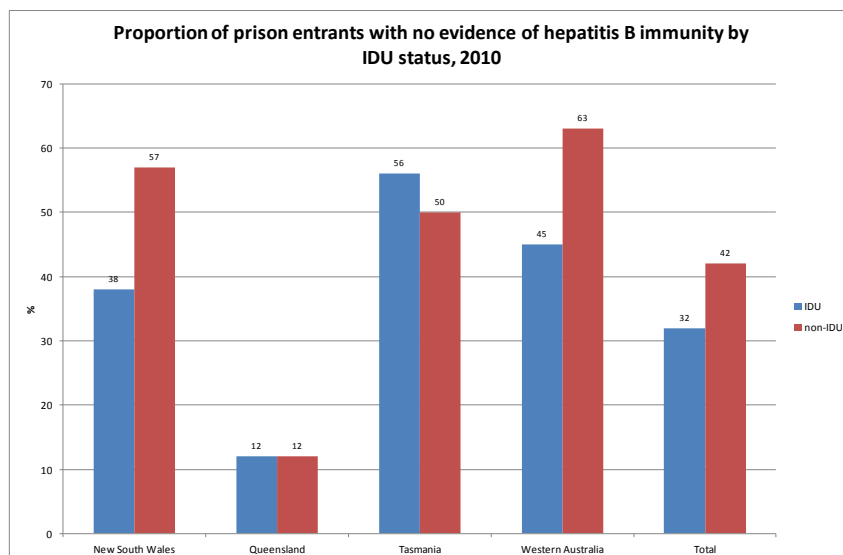


Prevalence of Hepatitis B core antibody among Australian prison entrants - 2004, 2007, 2010



Australian prison entrants with no evidence of hepatitis B immunity - 2010





HBV immunisation

Inmates and staff of long-term correctional facilities:

Inmates are at risk of hepatitis B because of the prevalence of homosexual intercourse, injecting drug use and amateur tattooing in some correctional facilities. Therefore, they should be screened upon incarceration, and vaccinated if susceptible.

Australian Immunisation Handbook 9th Edition, S3.6, p159

THE AUCKLAND STATEMENT
on viral hepatitis

Home
About
the Auckland Statement
Yes, I've Signed
News

Home | the Auckland Statement

the Auckland Statement

Viral hepatitis is an urgent health concern needing immediate action to prevent new infections and to prevent the rising burden of cirrhosis and liver cancer - and avoidable deaths.

In Australia and New Zealand alone, there are half a million stories of people living with hepatitis B and hepatitis C. Every single day 50 more New Zealanders and Australians are diagnosed with chronic viral hepatitis and more and more people are dying from cirrhosis and liver cancer each year. We have the capacity, knowledge and tools to tackle viral hepatitis head-on. We know what needs to be done. It is time for action and that is why we are calling on parliamentarians, responsible Ministers, health departments, and others to act now to prevent new infections and prevent avoidable deaths.

Our targets by 2016, are to:

- halve the incidence of new hepatitis C infections by doubling the amount of new injecting equipment distributed in the general community and implementing NSPs in prisons
- apply consistent approaches to funding hepatitis B vaccinations for all those at greatest risk
- ensure at least 80% of all people living with hepatitis B or hepatitis C are diagnosed
- guarantee that 5% of people living with hepatitis C receive antiviral treatment each year
- guarantee that 10% of people living with hepatitis B receive antiviral treatment.

Take Action!

Collected so far:

164 signatures

Goal:

2000 signatures

Stop new infections. Stop the rising death toll.

Sign Now!

Spread the word

Hepatitis C Treatment

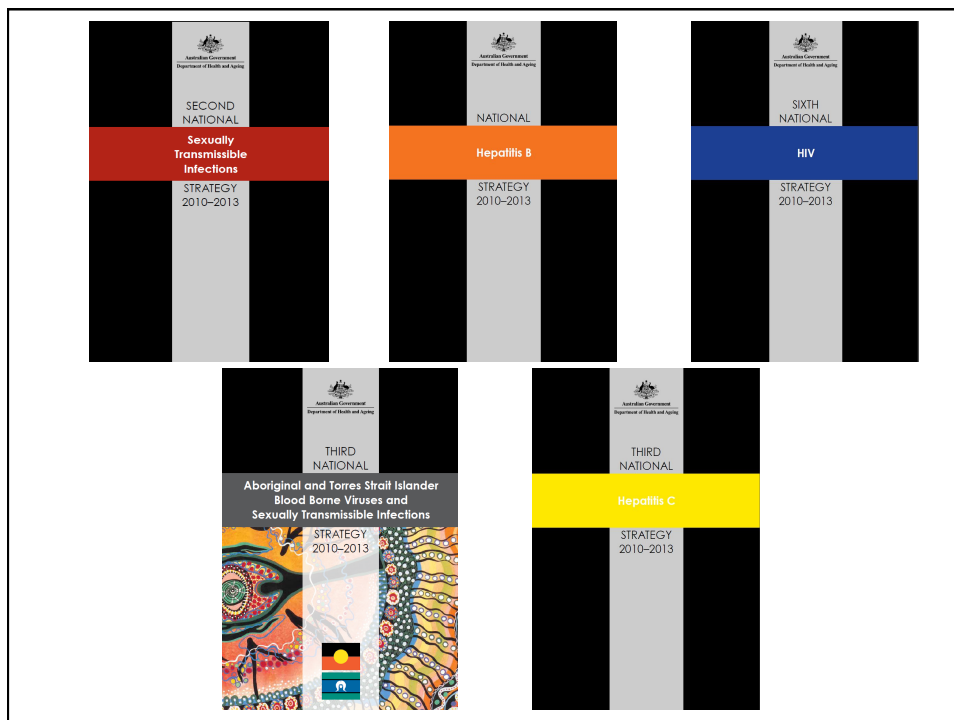
- 2004 – 2 individuals reported receiving HCV treatment
- 2007 – 2 individuals reported receiving HCV treatment
- 2010 – 7 individuals reported receiving HCV treatment
- 2010 - 1 Indigenous prisoner reported receiving treatment
- HePATO project → mixed methods study examining why so few prisoners are treated for HCV

Sexually transmissible infections

- Chlamydia – 5% men 2% women
- Gonorrhoea – 1% men; 0 women
- 2% had markers indicating possible current infection; 1 had an RPR level indicating current infection
- Rates no higher than the community
- 62% of eligible women had not received cervical cancer vaccine

Utility of the NPEBBVS

- Keeps prisoners on the national agenda
- One of only 2 national prisoner health projects
- Linked to the National Prisoner Health Indicator Project (NPHIP)
- Collects bio-behavioural data on non-IDU entering prison
- Provides a platform for collaboration across the states
- Potentially provides a means of benchmarking the jurisdictions e.g. immunisation coverage and HCV treatment
- Potential to add questions of topical interest e.g. cervical cancer vaccination
- Uses whole blood sample (not blood spot testing)
- Test results provided to participants (including community follow-up)



Future directions?

- Retest on exit from prison - measure incidence
- Increase sample size for key groups (e.g. women) and jurisdictions with small populations (e.g. ACT & Tas)
- Include juvenile offenders
- Conduct biennially
- Secure funding

Acknowledgements

Prisoner participants

Reference group:

ACT: Professor Michael Levy (ACT Corrections Health)

NSW: Dr Devon Indig (Justice Health NSW)

NT: Kiah McGregor, Simon Stafford, and Robyn Hopkins (NT Correctional Services)

Qld: Dr Alun Richards and Stacy Kambouris (Queensland Health)

SA: Dr Peter Frost and Karen Harlin (SA Prison Health Service)

Tas: Dr Chris Wake and Deborah Siddall (Tas Correctional Primary Health Services)

Vic: Fiona MacFarlane and Michele Gardner (Justice Health Victoria)

WA: Holly Beasley (WA Corrective Services).

Interviewers:

ACT: Jenny Kuzek.

NSW: Phe Affleck, Nicole Ang, Karen Aquilina, Vicki Archer, Shalin Kumar, Helen Pearce, Meredith Picker, Jing Prideaux, Elaine Robinson and Aleta Stevenson.

NT: Jenny Grimes and Gary Lucas.

Qld: Hillary Barrett, Judy Gallie, Lisa Imhoff, Stacy Kambouris, Janelle Kelly, Norma Lane, Shirley Petrie, Katherine Ransley, Jillian Rayfield and Sandra Wolfenden.

SA: Jo Andrews, Jackie Hughes, Robynne Lower, Joanne Peak, Jamie Reed, Sue Rex, Ronnie Richardson, Janice Scott, Catherine Whatson.

Tas: Matthew Chick.

Vic: Jackie Ayad, Nikki Bartolo, Evan Hill, Kelly O'Reilly, Krystyna Ramshaw, Sue Tran, Mel Tyson and Sarah Walsh.

WA: Holly Beasley, Shona Curri, Diane Delaney, Clyde DuBois, Beryl Joines, Gail Jones, Treena Martin, Ian Matthews, Suzanne Mill, Yvonne Morris and David Venables.

