Surveillance and Treatment of Prisoners with hepatitis C (SToP-C)

Professor Andrew Lloyd | Wednesday 7th October 2015
Australian prison population

- Total population: 30,775
- Increase from 2012: 5%
- Median age: 34
- Male: 92%
- Born in Australia: 81%
- Aboriginal ethnicity: 25%
- Previously incarcerated: 58%
- Report injecting drug use: 50%
Current prevention strategies

- No preventative vaccine
- Harm reduction has limited effectiveness
- No needle and syringe programs

Hepatitis C Incidence and Transmission Study in prisons (HITS-p)
- 49% reported injecting drug use in follow-up
- 31% reported sharing apparatus
- HCV incidence – 14% per annum

Luciani F. et al. Addiction 2014
HCV antibody prevalence in prisoners

2013 National Prison Entrants’ BBV and Risk Behaviour Survey
HCV testing & treatment in Australian prisons

- Total number tested positive
- Estimate chronic infection
- Number commenced treatment

NSW Nurse-led model of care (NLMC)

Post-test counselling: chronic HCV

Protocol-driven investigations

Focused history & examination

Triage decision

Category A: Discussion & Rx prescription

Category B: Teleconference with patient & Rx prescription

Category C: Face-to-face review & Rx prescription

Clinical Nurse Consultants

Specialist

Clinical Nurse Consultants

Lloyd A, et al. Clinical Infectious Diseases 2013
SToP-C Goals

• To evaluate the impact of rapid scale-up of DAA treatment on incidence and prevalence of HCV infection in the prison setting

• To develop a translational framework for subsequent establishment of treatment-as-prevention programs in the prison sector
Study design

Primary end-point:
Reduction in HCV incidence in cohort across network of 4 SToP-C prisons
SToP-C network

Lithgow Correctional Centre
Lithgow

Goulburn Correctional Centre
Goulburn

Dillwynia (Womens) Correctional Centre
Sydney

Outer Metropolitan Multipurpose Correctional Centre
Sydney
Study components

HCV incidence and prevalence phase
• 6-monthly testing and risk behaviour interview

Treatment phase
• DAA therapy for all infected prisoners

Modelling
• Treatment sample size and epidemiological impact

Cost-effectiveness and budget impact
• Is DAA therapy in prisons good value for money and can we afford it?

Qualitative research
• Patient & provider attitudes & barriers towards DAA therapy in prisons

Implementation toolkit
• How can DAA therapy be scaled up across NSW and nationally?
### Current status - surveillance Phase (at 10 Sep 2015)

![Graph showing number of patients over time and site enrolments and follow-ups](image)

<table>
<thead>
<tr>
<th>Site</th>
<th>Enrolment (n)</th>
<th>Follow-up (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goulburn Correctional Centre</td>
<td>304</td>
<td>78</td>
</tr>
<tr>
<td>Lithgow Correctional Centre</td>
<td>55</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>359</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>
Treatment phase - 2016

- All prisoners with HCV infection eligible
- 12-week directly acting antiviral (DAA) therapy (sofosbuvir/velpatasvir)
- One fixed-dose tablet once daily
- >90% cure rate
- Minimal side-effects
- Monitor re-infection rates and re-treat
Education and promotion

• Prison staff (custodial & health) information sessions
• Resources for prisoners and family
  • Video
  • Posters
  • Booklet

Surveillance and Treatment of Prisoners with Hepatitis C (SToP-C)
Project partners and stakeholders

NSW Government | Justice Corrective Services
NSW Government | Health Justice Health & Forensic Mental Health Network
NSW Government | Health
UNSW Australia
Gilead
changing lives reducing crime
NSW Users and AIDS Association
Hepatitis NSW
Kirby Institute
Centre for Social Research in Health
Acknowledgements

SToP-C Protocol Steering Committee
Stuart Loveday (Chair)  Hepatitis NSW
Greg Dore  Kirby Institute, University of New South Wales
Andrew Lloyd  School of Medical Sciences, University of New South Wales
Jason Grebely  Kirby Institute, University of New South Wales
Tony Butler  Kirby Institute, University of New South Wales
Marianne Byrne  Kirby Institute, University of New South Wales
Carla Treloar  Centre for Social Research in Health, University of New South Wales
Lee Trevethan  Justice Health & Forensic Mental Health Network
Denise Monkley  Justice Health & Forensic Mental Health Network
Julia Bowman  Justice Health & Forensic Mental Health Network
Roy Donnelly  Justice Health & Forensic Mental Health Network
Luke Grant  Corrective Services NSW
Terry Murrell  Corrective Services NSW
Nicky Bath  NSW Health
Alison Churchill  Community Restorative Centre
Kate Pinnock  Community Restorative Centre
Mary Ellen Harrod  NSW Users and AIDS Association
Natasha Martin  University of California, San Diego
Peter Vickerman  University of Bristol, UK
Georgina Chambers  Centre for Big Data, University of New South Wales

SToP-C is supported by funding from the Commonwealth Department of Health and Ageing through a NHMRC Partnership Project grant, Gilead Sciences Inc, and in-kind support from all project partners.