

## Point-of-care Testing for Hepatitis C in Victorian Prisons: making progress towards elimination

### Authors:

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**Background:** Novel initiatives such as prison intake opt-out point-of-care testing programs and high-intensity testing campaigns have the potential to increase rates of HCV testing, diagnosis and treatment uptake to reach elimination goals. Using these testing methods, this study evaluated the prevalence of HCV infection, and treatment uptake among people with current HCV infection over an 18-month period in male prisons across Victoria, Australia.

**Methods:** This was an observational study of a nurse-led point-of-care testing program by the St Vincent's Hospital Melbourne Statewide Prison Hepatitis Program and GEO Healthcare over 18-months across four men's prisons in Victoria, Australia. Demographics, injecting history, and previous HCV diagnosis/treatment were collected. Point-of-care testing was performed by HCV antibody (INSTI) or, if previously diagnosed, HCV RNA (Xpert HCV Viral Load Fingerstick test). Prisoners with current HCV were prescribed DAA treatment.

**Results:** 2880 men (mean age, 36 years, 20% identified as Indigenous) were tested across four prison sites. Overall, 41% (n=1178) self-reported a history of injecting drug use, 20% (n=585) had a previous HCV diagnosis, with 78% (n=454) of those having previously received treatment. HCV antibody prevalence was 22% (n=627) and HCV RNA prevalence was 2% (n=56). Among people with a history of injecting drug use, HCV antibody prevalence was 48% (563/1178) and HCV RNA prevalence was 4.5% (53/1178). 98% (n=55) of men who had current HCV were commenced on DAA treatment.

**Conclusion:** Point-of-care testing was effective in achieving high uptake of HCV testing and estimating true HCV prevalence across four male prison sites in Victoria, Australia. A low proportion of people with current infection (2%) along with moderate HCV antibody prevalence (22%) suggests considerable progress towards elimination of HCV among people in prisons in Victoria. Further work is needed to understand whether the low prevalence of current HCV infection is observed across other prison settings in Victoria.

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