

HIGH-INTENSITY POINT-OF-CARE TESTING CAMPAIGNS ACROSS 11 PRISONS IN QUEENSLAND, AUSTRALIA

O'Flynn M¹, Cunningham EB², Barault M², Young M¹, Hawkes A³, Morales A³, Grimstrup D⁴, Markus C⁵, Matthews S⁵, Kahl L⁵, Dore GJ², Martinez M², Silk D², Comben S², Davey S², Smart K², Lafferty L², Hajarizadeh B², Grebely J^{2*}, O'Loan J^{1*}

¹Kombi Clinic, Brisbane, Australia, ²The Kirby Institute, University of New South Wales, Sydney, Australia, ³Hepatitis Queensland, Brisbane, Australia, ⁴Queensland Injector Health Network (QIHNN), Brisbane, Australia, ⁵Flinders University International Centre for Point-of-Care Testing, Flinders Health and Medical Research Institute, Flinders University, Adelaide, Australia

*contributed equally

Background:

High-intensity testing campaigns support enhanced testing and treatment for HCV infection in prisons. We assessed prevalence of current HCV infection and treatment initiation during high-intensity point-of-care testing campaigns in Queensland, Australia prisons between 2022–2025.

Methods:

In this observational study, we analysed data from high-intensity campaigns conducted across 11 prisons between 2022–2025 as part of the Australian HCV Point-of-Care Testing Program. We assessed the association between testing year and current HCV infection and treatment initiation within 12 weeks of testing using mixed-effects logistic regression with facility included as a random effect and adjustments for age and history of injecting drug use.

Results:

Between 2022–2025, 8,153 tests were conducted among 7,483 people. Median age was 34 years (IQR: 27–41), 58% reported injecting drug use history, and current HCV prevalence was 15.5% (95%CI: 14.7%–16.4%). Current HCV prevalence decreased from 24.2% (95%CI: 22.1%–26.5%) in 2022 to 10.9% (95%CI: 9.3%–12.7%) in 2025 ($p<0.001$). After adjusting for age and facility, a reduced odds of current HCV infection was observed in 2025 (OR 0.51, 95%CI: 0.37, 0.70) and 2024 (0.66, 95%CI: 0.52, 0.85) compared to 2022. Among people with injecting drug use history, current HCV prevalence decreased from 26.0% (95%CI: 22.5%–29.9%) in 2022 to 15.2% (95%CI: 13.0%–17.7%) in 2025 ($p<0.001$). Among people with injecting drug use history, after adjusting for age and facility, a reduced odds of current HCV infection was observed in 2025 (OR 0.37, 95%CI: 0.24, 0.56) and 2024 (0.51, 95%CI: 0.37, 0.72) compared to 2022. Treatment uptake within 12 weeks of testing was 90.2% (95% CI: 88.3%–91.9%), with 55% receiving sofosbuvir/velpatasvir and 40% glecaprevir/pibrentasvir (5% regimen missing). Age, injecting drug use history, and year of testing were not associated with treatment initiation.

Conclusion:

Among people receiving testing in high-intensity testing campaigns in Queensland prisons, a high treatment uptake has been observed and HCV prevalence is declining, providing evidence of progress towards HCV elimination.

Disclosure of Interest Statement:

GeneXpert machines and cartridges were provided through the National Australian Hepatitis C Point of Care Testing Program through funding support from the Commonwealth Department of Health, the National Health and Medical Research Council, Cepheid, Gilead Sciences, and AbbVie. JG is a consultant/advisor and has received research grants from AbbVie, Cepheid, Gilead, and Merck outside the submitted work.