

# A NOVEL TESTING MODALITY TO ADDRESS BARRIERS TO HEPATITIS C TESTING AND TREATMENT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE IN NEW SOUTH WALES, AUSTRALIA: THE NSW DBS PILOT STUDY

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**Background:** Over-representation of Aboriginal and Torres Strait Islander people in HCV notifications in Australia is an urgent public health priority. Dried Blood Spot (DBS) provides an alternative testing modality that may circumvent intersecting stigmas experienced by this population when accessing HCV healthcare. This study examined characteristics of Aboriginal and Torres Strait Islander people enrolled in a state-wide DBS pilot.

**Methods:** The NSW DBS Pilot is an interventional cohort study of people testing for HIV and/or HCV in NSW, Australia. Participants received RNA testing via: 1) self-registration online with postal DBS kit, home-based sample collection, and postal delivery to the laboratory; or 2) assisted registration online and sample collection at 36 community health sites (including drug treatment clinics, needle and syringe programs and sexual health services) and prisons. Participants completed an online survey and received results via text (negative) or healthcare provider (positive). Logistic regression identified factors associated with positive result and treatment initiation for Aboriginal and Torres Strait Islander people within the study population.

**Results:** Between November 2016 and December 2020, 7,392 unique people tested: 28.9% Aboriginal and Torres Strait Islander (n=2,137: 71% men, 56% recently injected drugs, 63% tested in prison) and 71.1% non-Indigenous (n=5,255: 81% men, 41% recently injected drugs, 37% tested in prison). Among Aboriginal and Torres Strait Islander people tested for HCV (n=2,103), 17% (n=349) received a positive result. Positive result was associated with male gender (aOR 1.36, 95%CI 1.04-1.79) and recently injecting drugs (aOR 2.50, 95%CI 1.91-3.28). Of those who received a positive result, 47% (n=164) initiated treatment within six months. Testing in prison compared to community site was strongly associated with treatment initiation (aOR 8.46 95%CI 4.37-16.37).

**Conclusions:** DBS provides an accessible testing alternative that can improve testing and treatment uptake for Aboriginal and Torres Strait Islander people, particularly in key settings like prisons.

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