

Needle sharing remains the major risk factor for hepatitis C infection

Hepatitis C incidence appears to be decreasing, but in a cohort of people who inject drugs in Melbourne, Australia, needle sharing is a significant risk factor for hepatitis C infection and remains an important target for harm reduction measures.

THE ISSUE

Hepatitis C is prevalent amongst people who inject drugs in Australia. The number of people being diagnosed with the infection is declining¹, but the reasons for this are unclear. Contributing factors may include harm reduction measures such as opioid substitution therapy and needle-and-syringe programs.

WHAT OUR WORK FOUND

Burnet Institute researchers determined the incidence rate of hepatitis C and its relationship to use of opioid substitution therapy and needle sharing in a large, ongoing observational study of people who inject drugs (PWID) in Melbourne, Australia. Data from 231 eligible participants were analysed. The research showed that:

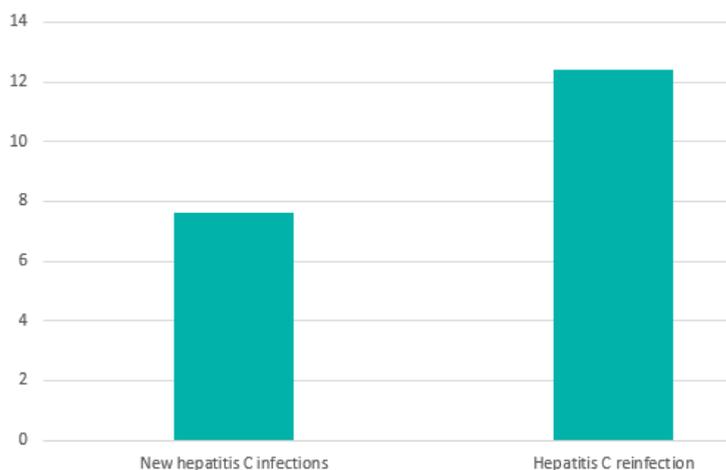
- ▶ the incidence of hepatitis C infection is declining in this cohort of PWID
- ▶ hepatitis C reinfection is more common than new infection (see graph at right)
- ▶ of those with new hepatitis C infections, people who reported recently sharing needles are nearly five times more likely to become infected than those who do not report needle sharing
- ▶ no association between infection rates and engagement with an opioid substitution program.

CONCLUSION

The number of new hepatitis C infections is declining in this group of PWID, but needle sharing remains the major risk factor for disease transmission

References

1. Iversen J, et al. American Journal of Public Health 2013; 103: 1436–1444



Incidences of new hepatitis C infections and reinfections (per 100 person-years) amongst people who inject drugs.

Policy Implications

- ▶ Harm reduction measures to reduce needle sharing are crucial to maintain the decline in hepatitis C incidence.
- ▶ Greater access to hepatitis C health services (including testing, prevention and treatment) could accelerate the decline in incidence and limit reinfection.

For complete details, contact Professor Paul Dietze (paul.dietze@burnet.edu.au).

Full publication: Aitken C, Agius P, Higgs P, Stoové M, Bowden D, Dietze P. The effects of needle-sharing and opioid substitution therapy on incidence of hepatitis C virus infection and reinfection in people who inject drugs. *Epidemiology and Infection* 2017; 145(4): 796–801. doi: 10.1017/S0950268816002892