

## **RAISED RISK OF BLOOD BORNE VIRUS INFECTION AND OTHER DRUG-RELATED HARMS AMONG PEOPLE WHO INJECT DRUGS IN PUBLIC PLACES**

### **Authors:**

Trayner KMA<sup>1,2</sup>, McAuley A<sup>1,2</sup>, Palmateer N<sup>1,2</sup>, Goldberg D<sup>1,2</sup>, Shepherd SJ<sup>3</sup>, Gunson SN<sup>3</sup>, Hutchinson SJ<sup>1,2</sup>

<sup>1</sup> School of Health and Life Sciences, Glasgow Caledonian University, Glasgow, UK

<sup>2</sup> Health Protection Scotland, Glasgow, UK

<sup>3</sup> West of Scotland Specialist Virology Centre, Glasgow, UK

### **Background:**

The largest outbreak of HIV in 30 years among people who inject drugs (PWID) in the UK has been identified in Glasgow, Scotland. This was linked anecdotally to public injecting but research is required to determine the association between public injecting and HIV, hepatitis C (HCV) and other drug related harms (overdose and skin and soft tissue infections (SSTI)) in Scotland. We aimed to: 1) estimate the prevalence of public injecting in Scotland and associated risk factors; and 2) estimate the association between public injecting and related harms (HIV, HCV, overdose and SSTI).

### **Methods:**

Cross-sectional, bio-behavioral survey (including dried-blood spot (DBS) testing to determine HIV and HCV status) of 1478 PWID in Scotland during 2017-18. Multi-level logistic regression was undertaken.

### **Results:**

During 2017-18, 16% of participants reported public injecting in the last six months. Factors associated with public injecting were being recruited in Glasgow city centre (aOR=6.41, 95% CI 3.99 to 10.21, p<0.001), reporting recent homelessness (aOR=3.51, 95% CI 2.44 to 5.04, p<0.001), excessive alcohol consumption (>14 units per week) (aOR=2.49, 95% CI 1.72 to 3.61, p<0.001) and high injection frequency (>4 injections per day) (aOR 3.08, 95% CI 1.83 to 5.19, p<0.001). Public injecting was associated with an increased risk of being HIV positive (aOR 2.11, 95% CI 1.13 to 3.92, p=0.019), HCV positive (aOR 2.56, 95% CI 1.86 to 3.52, p<0.001), overdose (aOR 1.71, 95% CI 1.37 to 2.13, p<0.001) and SSTI (aOR 1.54, 95% CI 1.26 to 1.89, p<0.001).

### **Conclusion:**

This is the first study to demonstrate an increased risk of multiple harms (HIV, HCV, overdose and SSTI) associated with public injecting among a national sample of PWID. These findings highlight the need to address the additional harms evident among people injecting in public places and provide evidence to inform proposals in Scotland and elsewhere regarding the introduction of drug consumption rooms.

### **Disclosure of Interest Statement:**

SJH has received honoraria from Gilead, unrelated to this study. All remaining authors have nothing to disclose.