



## Increased risk of HIV and other drug-related harms associated with injecting in public places

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# Conflicts of interest

- None to declare

# 1. Background

# Context: Scotland

- Population ~ **5 million**
- 14 Health Boards
- ~ **15,000 - 20,000 PWID**
- **Widespread availability harm reduction**
  - ~ 4.4 million needle/syringes distributed in 2017/18
  - ~ 78% current PWID received OST (in the last 6 months) in 2017/18
  - ~ 46,000 naloxone kits distributed between 2011-2018
- **Devolved Scottish Government**
  - Drugs law is reserved for UK Parliament



# Scottish anthrax outbreak 'worst in UK in 50 years'

5 January 2012

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An outbreak of anthrax among drug users in Scotland between 2009 and 2010 was the largest in the UK for 50 years, according to an official report.

Health Protection Scotland (HPS) said there were 119 cases of anthrax and a total of 14 deaths during the outbreak.



## Botulism outbreak grows in Scotland, linked to contaminated heroin from Glasgow

### Drug-related deaths in Scotland more than double in 10 years

Calls for Holyrood to go it alone and reform law after data shows rate of death two and half times that of UK as a whole



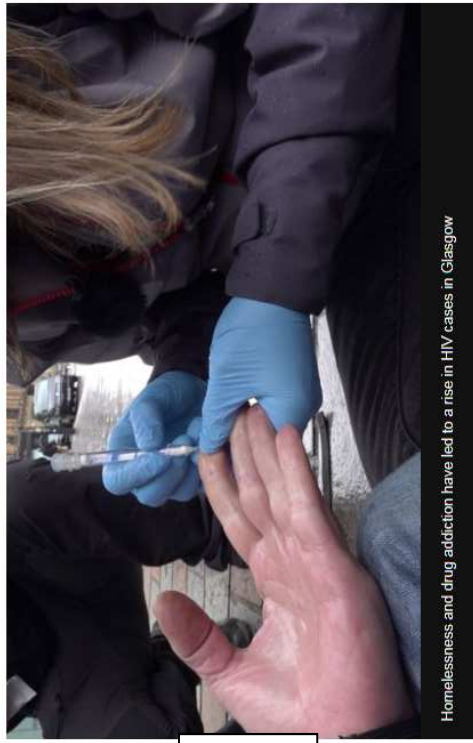
Heroin was the most lethal single drug, contributing to 55% of the 867 drug-related deaths in Scotland in 2011. Photograph: PA

## The city in the eye of an HIV 'perfect storm'

By James Cheyne  
BBC Scotland

18 August 2019

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Homelessness and drug addiction have led to a rise in HIV cases in Glasgow

Glasgow has seen the UK's worst outbreak of HIV in 30 years, according to the city's health workers, and the problem is still getting worse.

# Scotland has highest drug death rate in EU

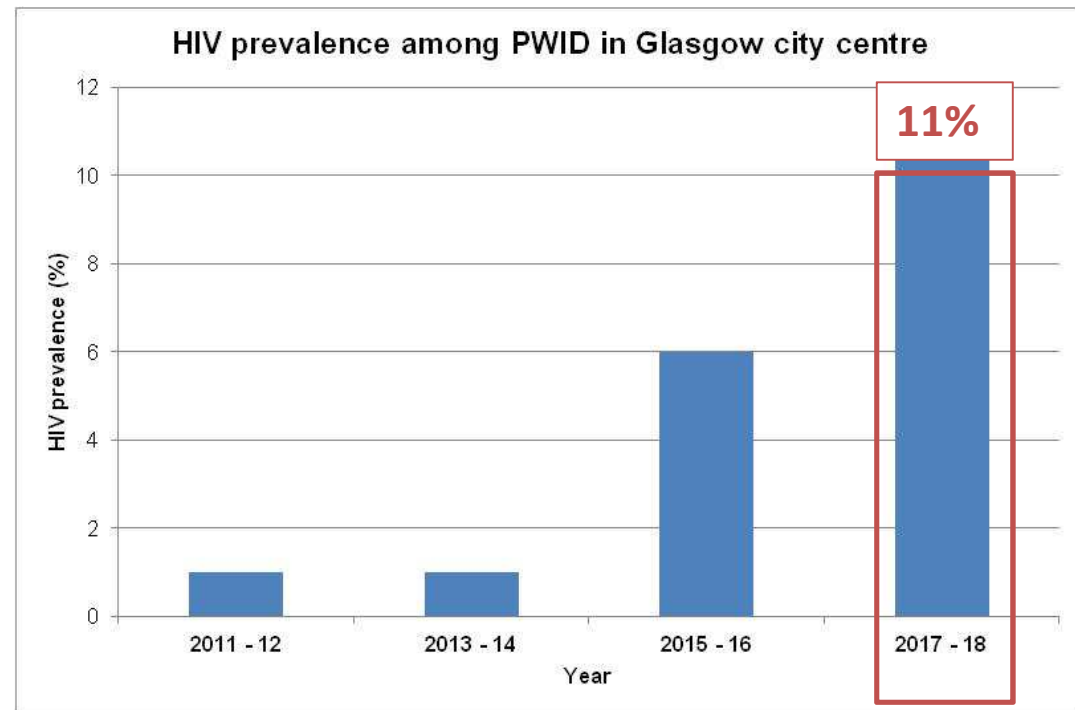
# Glasgow HIV outbreak

- Largest documented HIV outbreak in the UK for over 30 years
  - Ongoing since 2015 with over **160 cases associated with the outbreak**
  - Concentrated in **Glasgow city centre**
  - **Homelessness and cocaine injecting** identified as important risk factors
- **Dramatic change in HIV prevalence** in Glasgow city centre



## Cocaine and homelessness 'behind HIV rise'

University researchers say Glasgow city centre has seen a 10-fold increase in HIV infection among drug users.



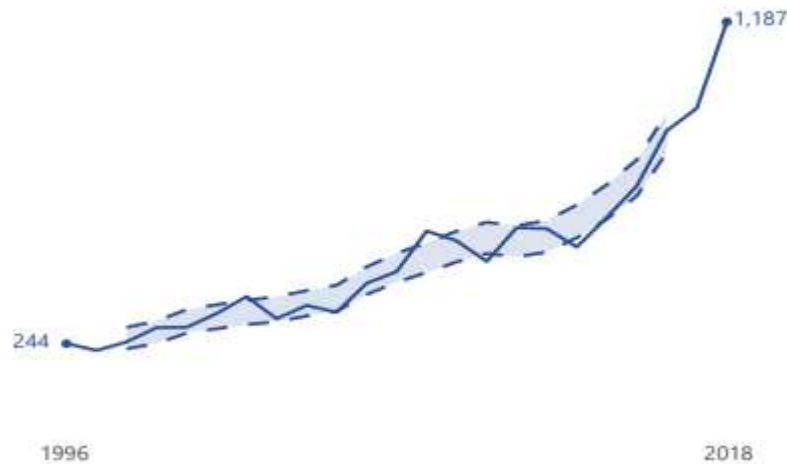
Pre-HIV outbreak

HIV outbreak

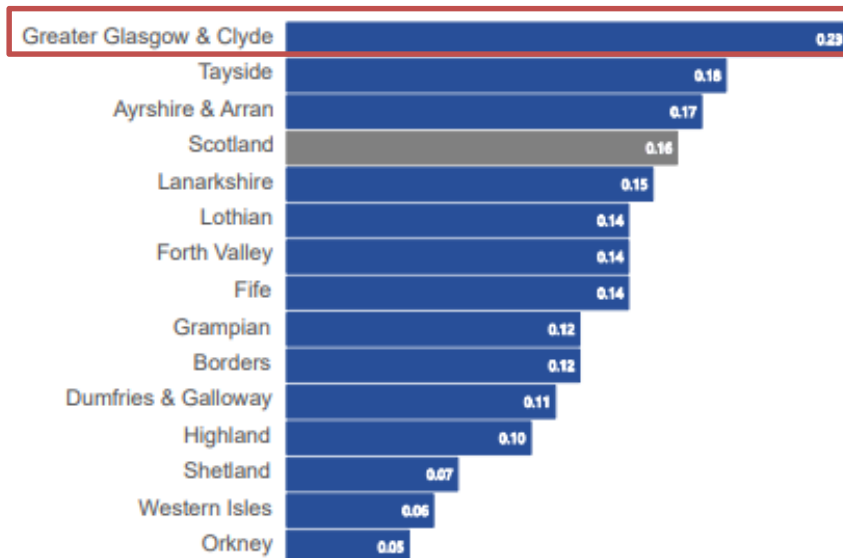
# Drug-related deaths



Trend in drug-related deaths, 1996 to 2018



Drug-related death rates by Health Board, 2014-2018



- **Highest number of deaths on record in 2018 (1,187 deaths)**
  - Rate 3x higher than the UK rate as a whole
  - Higher rate reported than any other EU country
- Complex aetiology but related to an **aging population of PWID, changing patterns of drug-use and poly-drug use**

# Why focus on public injecting?

- Defined as injecting in an area accessible by the general public (e.g. street, public toilet, car park, etc.) – **“street-based injecting”**
- **Identified as an important feature of the HIV outbreak** in Glasgow
- Needs assessment focused on public drug use resulted in **proposals to establish the UK’s first drug consumption room in Glasgow city centre**
- Limited evidence on the relationship between public injecting and multiple drug-related harms at a national level

## Drug consumption rooms ruled out by government

By David Rhodes  
BBC News

© 26 July 2017

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## 2. Aims

1. Estimate the **prevalence of public injecting in Scotland and associated risk factors**
2. Estimate the association between **public injecting and drug-related harms (HIV, chronic HCV, overdose and skin and soft tissue infections)**

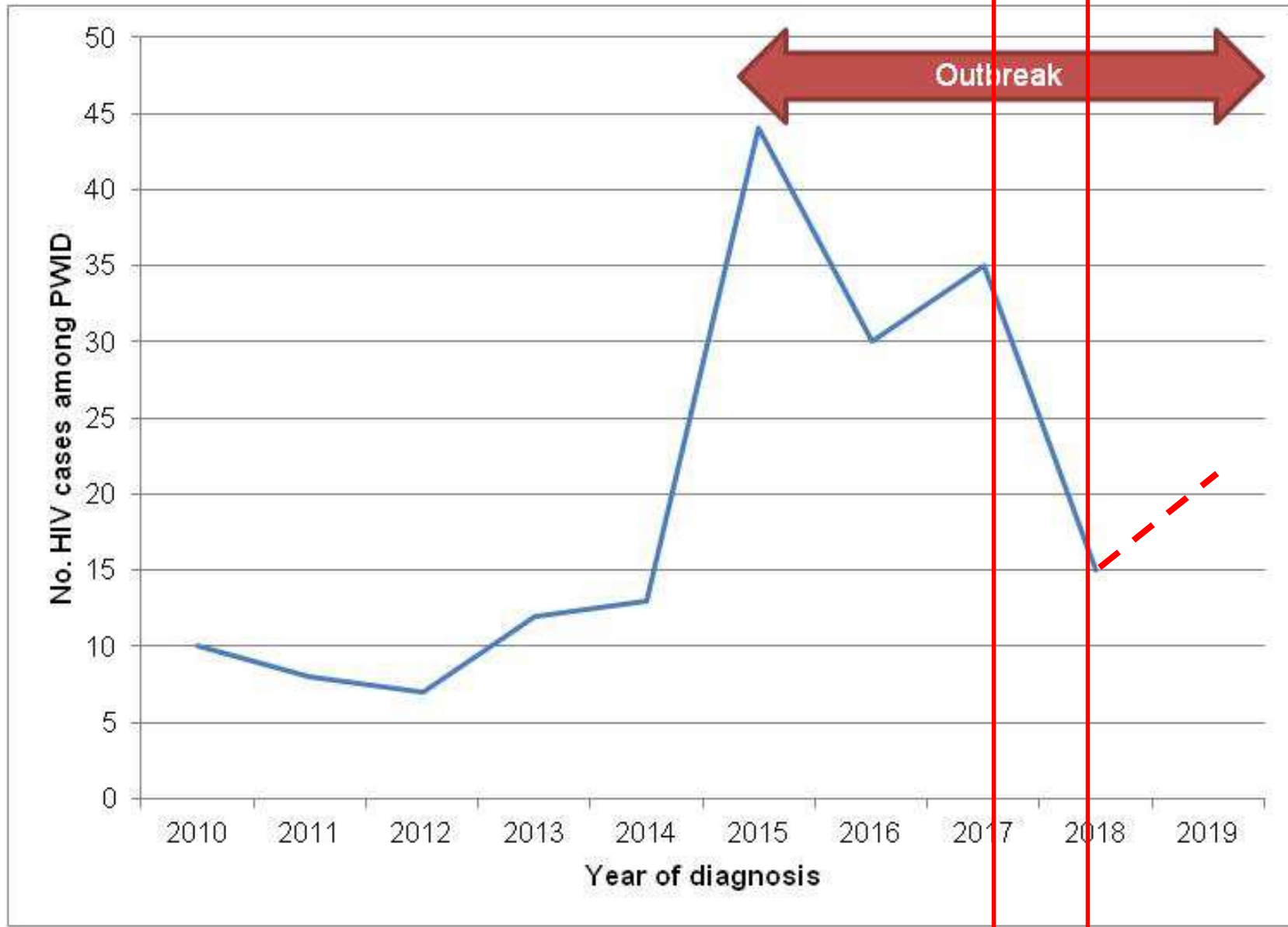


## 3. Methods



- **Data source: Needle Exchange Surveillance Initiative (NESI), 2017-18**
  - National bio-behavioural survey consisting of dried blood spot testing to test for BBVs and a questionnaire

# Data collection time period



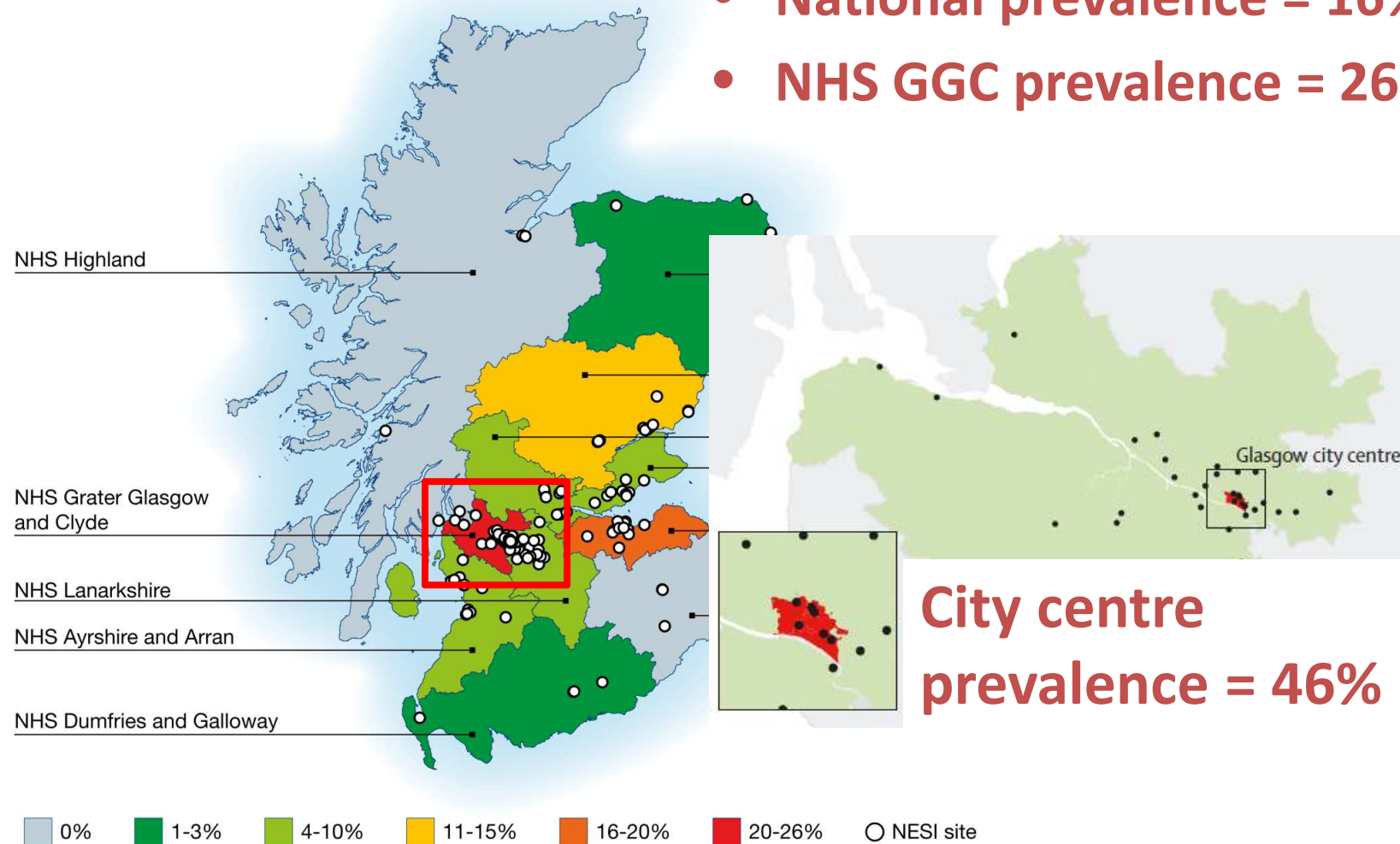
## 4. Results

# Participant characteristics

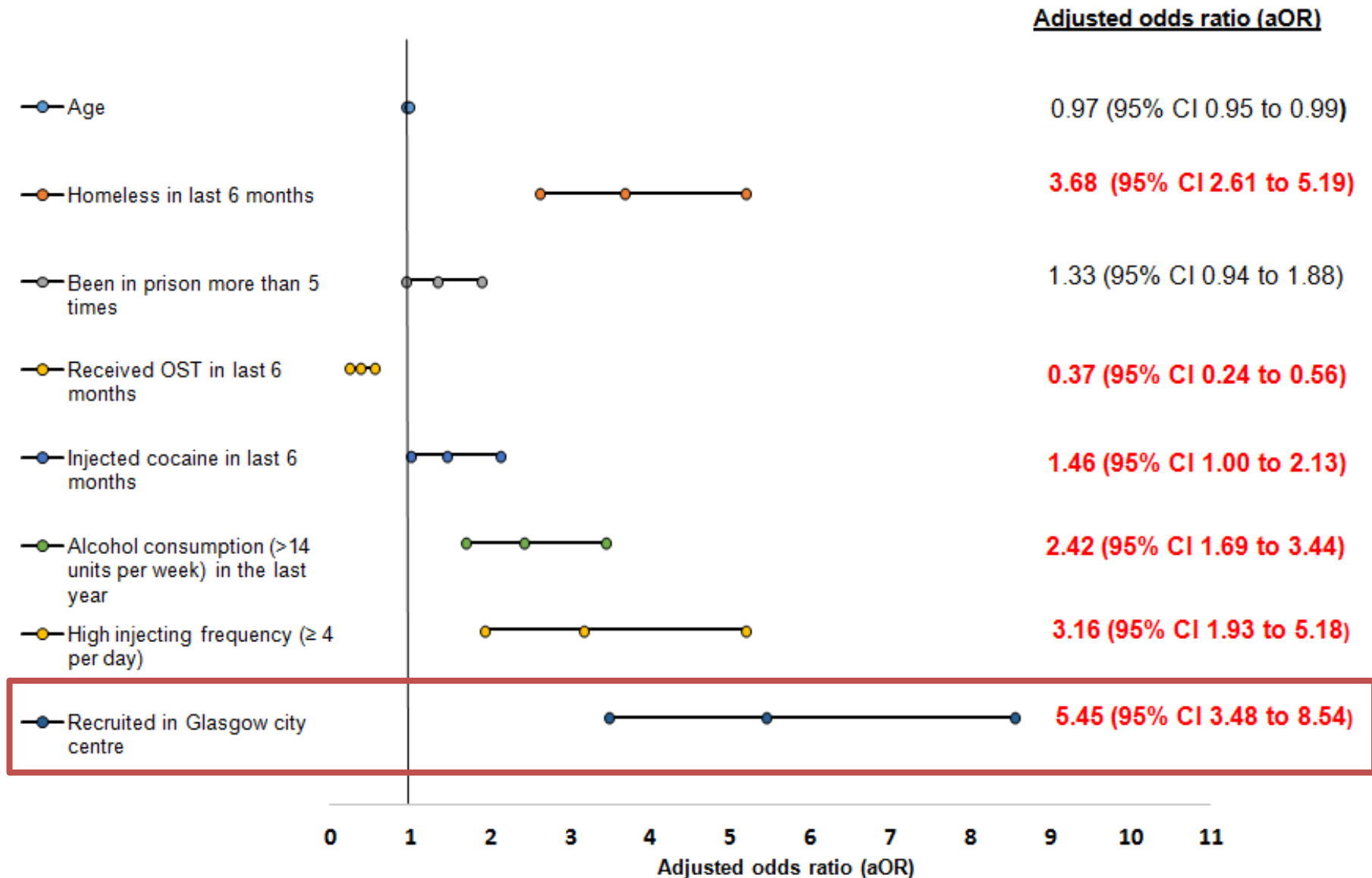
	N (%)	Reported public injecting (%)
<b>Total (injected in last 6 months)</b>	1469	240 (16)
<b>Age (mean)</b>	39.6	38.6
<b>Gender</b>		
Male	1095 (75)	196 (82)
Female	366 (25)	43 (18)
<b>Homeless in last 6 months</b>	401 (27)	148 (62)
<b>Injected heroin in last 6 months</b>	1345 (92)	221 (92)
<b>Injected cocaine in last 6 months</b>	452 (31)	129 (54)
<b>HIV infection</b>	42 (3)	17 (7)
<b>Active HCV infection</b>	402 (32)	99 (47)
<b>Overdose in the last year</b>	264 (18)	78 (33)
<b>SSTI in the last year</b>	401 (28)	87 (37)

# Prevalence of public injecting

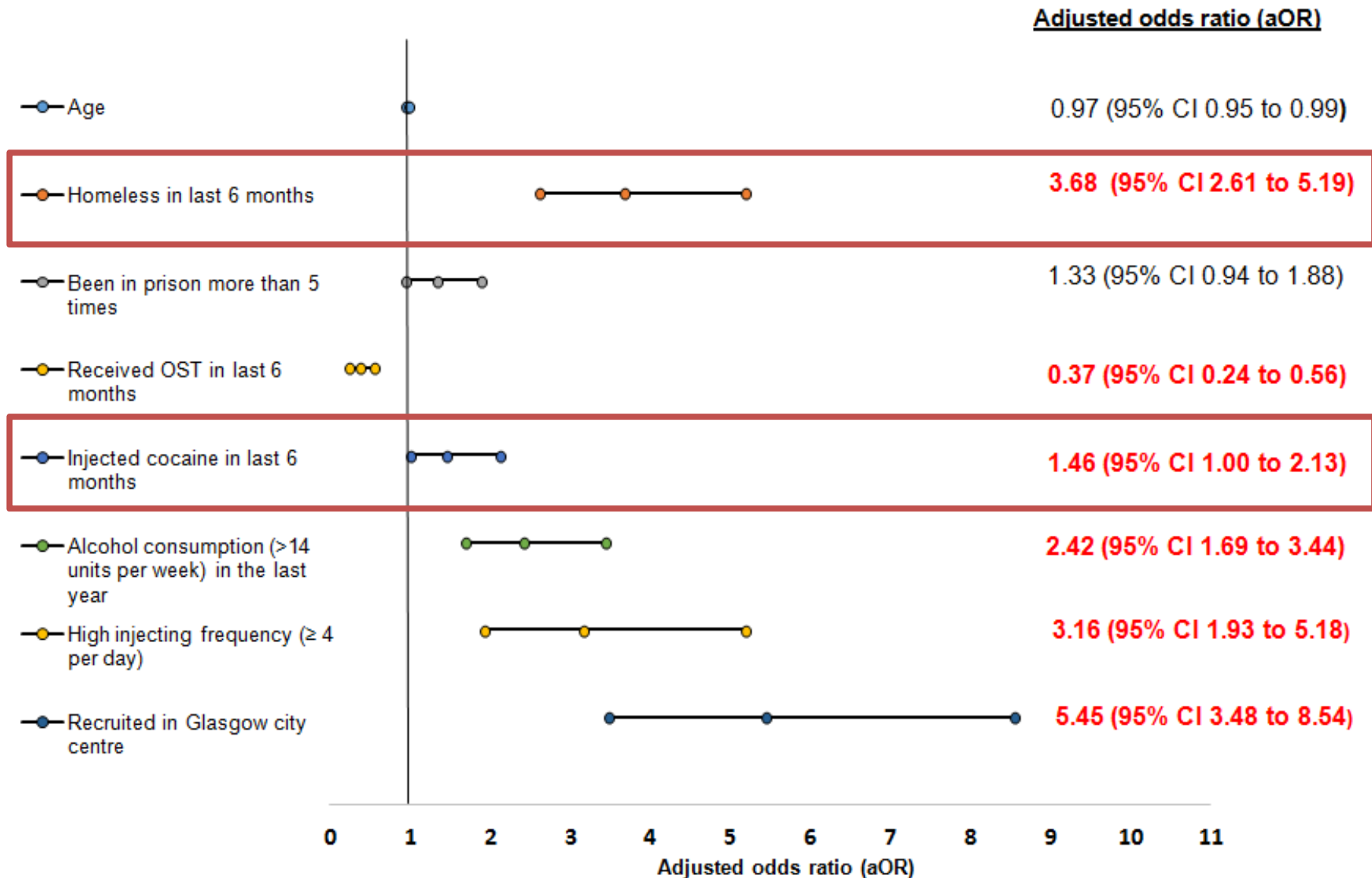
- National prevalence = 16%
- NHS GGC prevalence = 26%



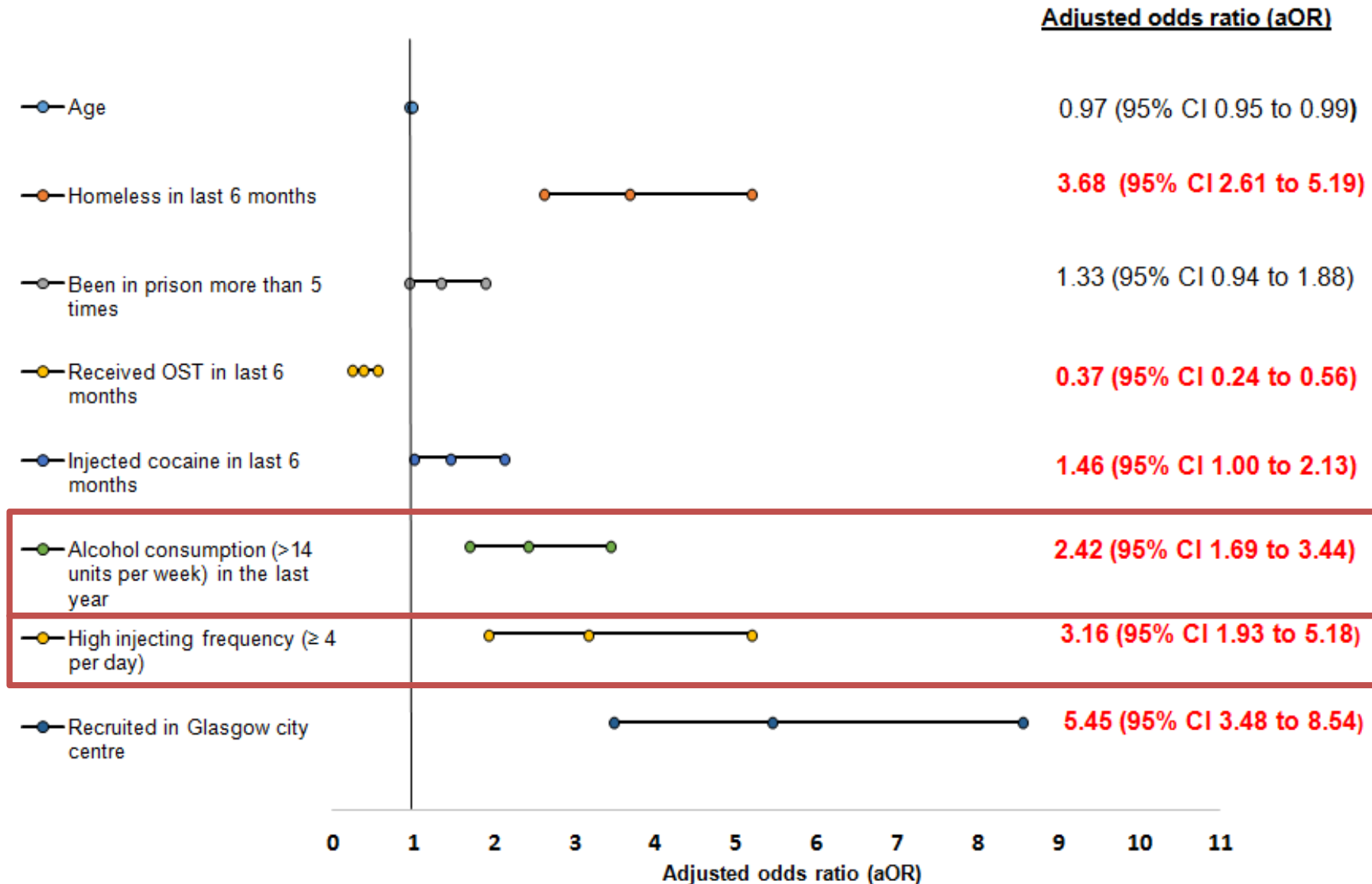
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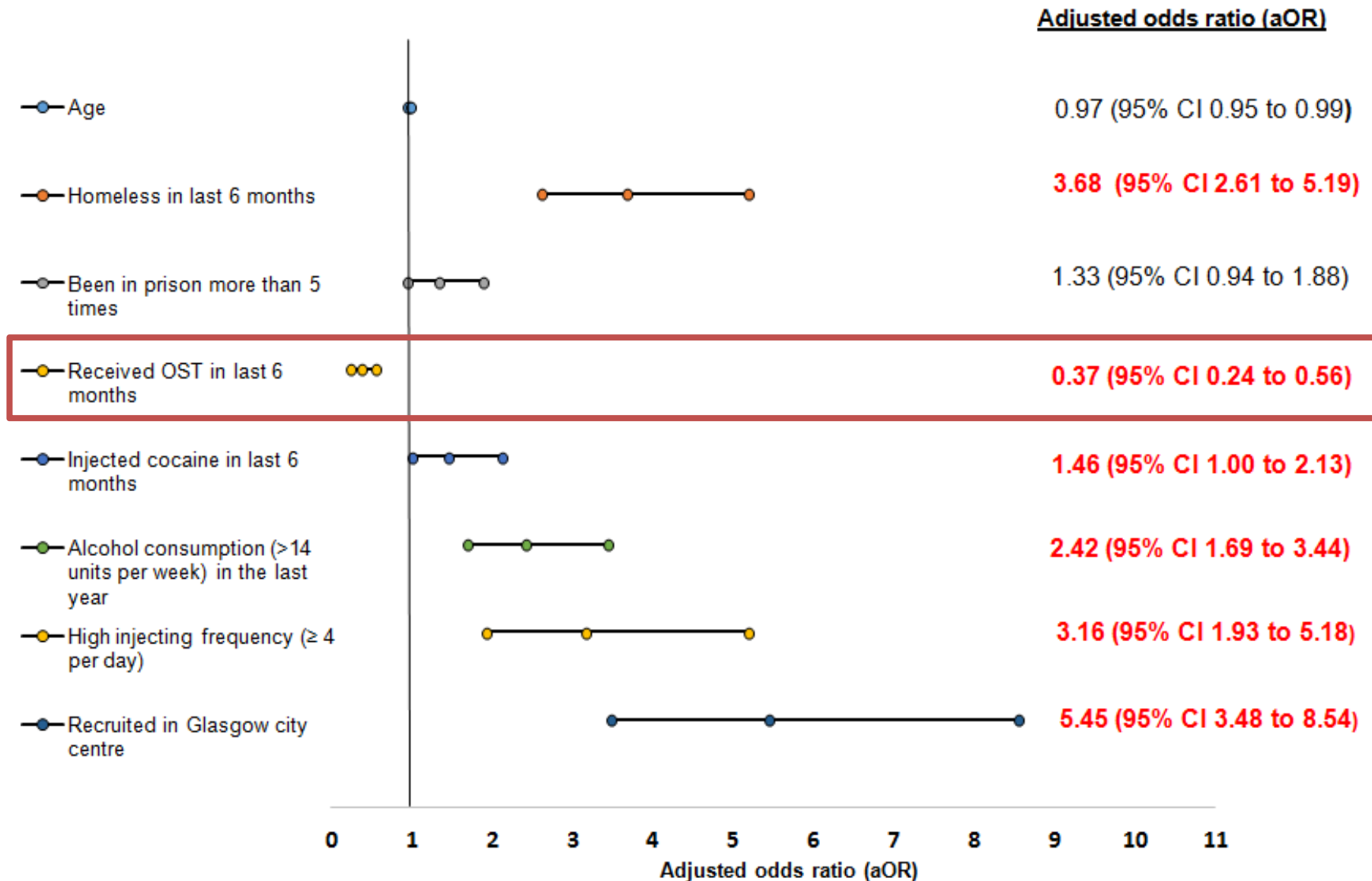


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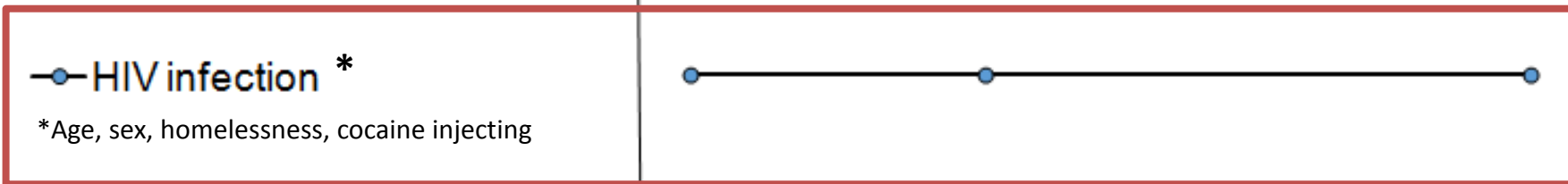




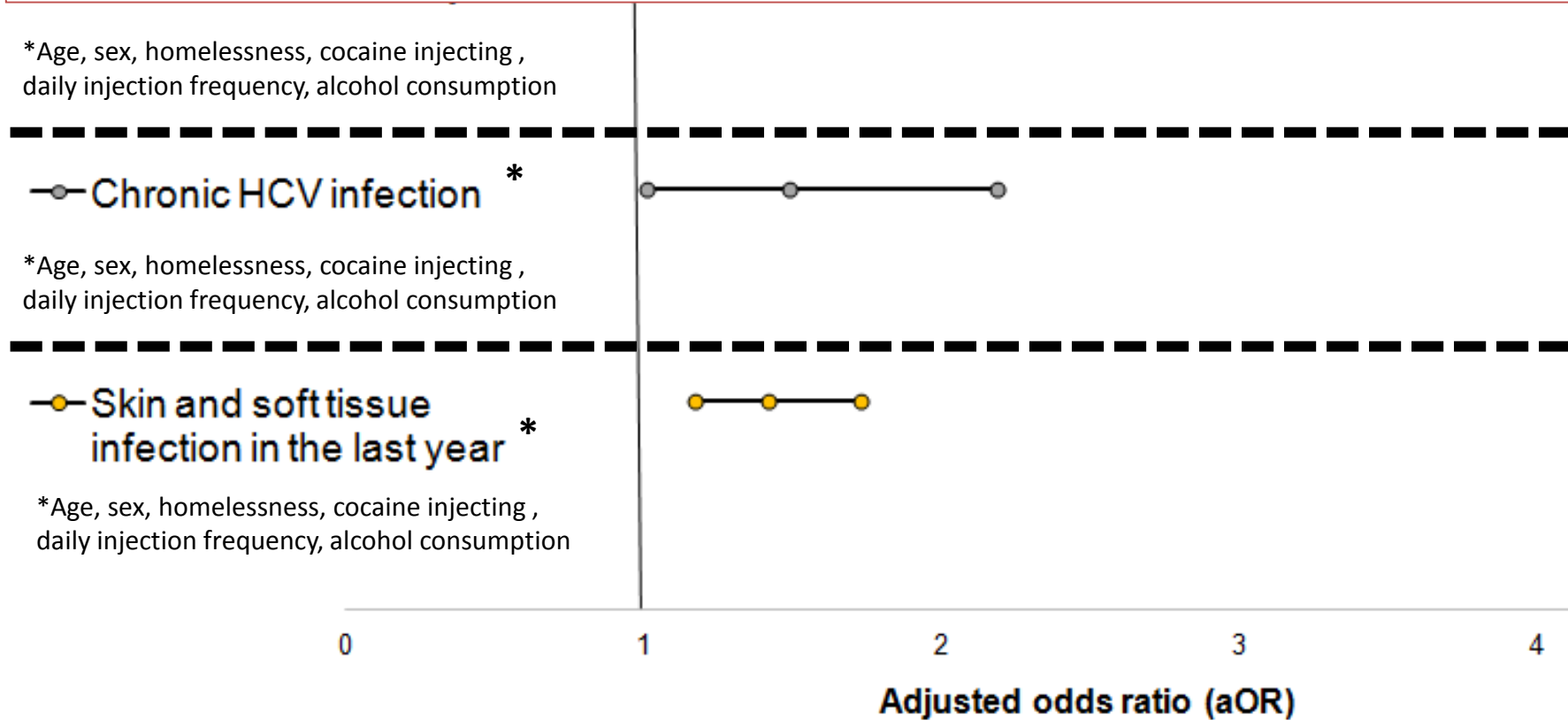
# Factors associated with public injecting among PWID in Scotland (n= 1464: 240 PWID reported public injecting)



# Public injecting and drug-related harms



**aOR = 2.11, 95% CI = 1.13 to 3.92, p-value = 0.019**



# Public injecting and drug-related harms

—●— HIV infection \*

\*Age, sex, homelessness, cocaine injecting



—●— Overdose in the last year \*

\*Age, sex, homelessness, cocaine injecting ,  
daily injection frequency, alcohol consumption



**aOR = 1.59, 95% CI = 1.27 to 2.01, p-value < 0.001**

\*Age, sex, homelessness, cocaine injecting ,  
daily injection frequency, alcohol consumption

—●— Skin and soft tissue  
infection in the last year \*

\*Age, sex, homelessness, cocaine injecting ,  
daily injection frequency, alcohol consumption



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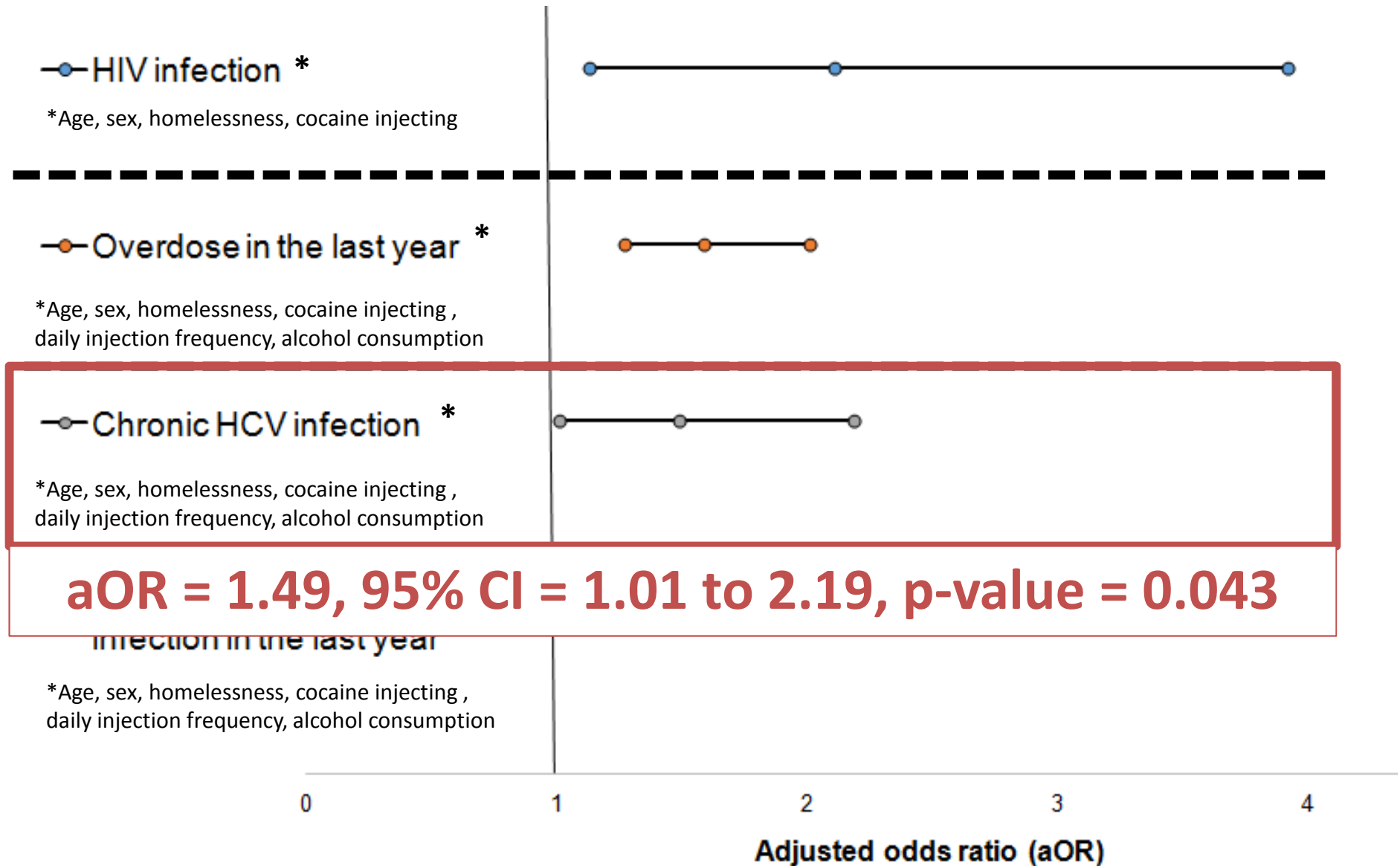
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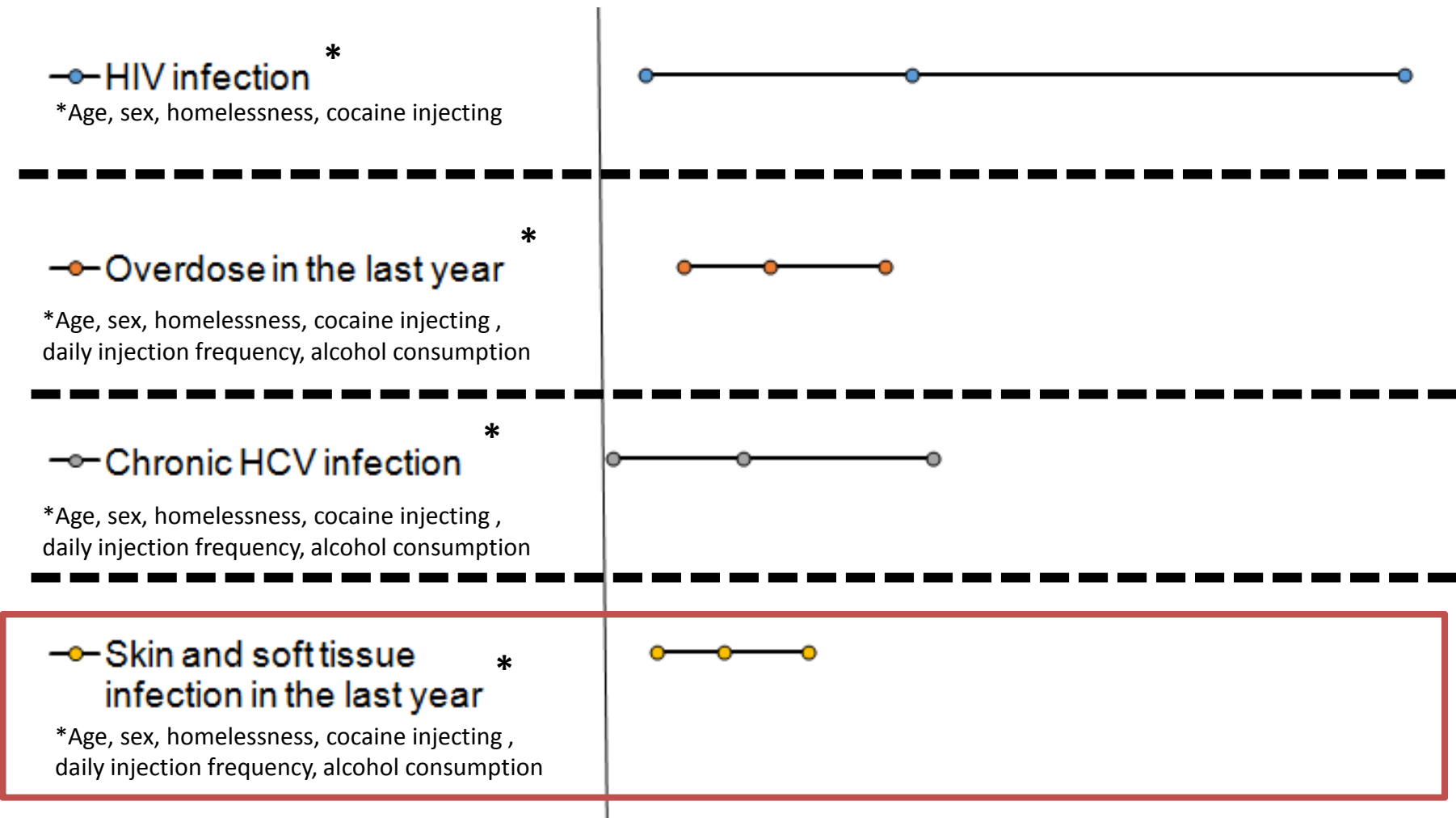
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Adjusted odds ratio (aOR)

# Public injecting and drug-related harms



# Public injecting and drug-related harms



**aOR = 1.42, 95% CI = 1.17 to 1.73, p-value < 0.001**

Adjusted odds ratio (aOR)

# Summary

- **National assessment of public injecting and multiple drug-related harms** in the context of a large ongoing HIV outbreak
- **Public injecting is independently associated with HIV** and was a contributing factor in the HIV outbreak in Glasgow
- Public injecting potentially **contributing to disproportionately high burden of drug-related harm (including drug-related death crises)**
- Provides **robust epidemiological evidence supporting the expansion of harm reduction services and the provision of drug consumption rooms**
- Highlights the need **to address upstream factors (including homelessness and poverty)** which increase risk of drug related harms



# Acknowledgements



## NESI team!

All study participants, recruitment sites and field workers

## Glasgow Caledonian University/Health Protection Scotland

Sharon Hutchinson, Andrew McAuley, David Goldberg, Chris Biggam



## West of Scotland Specialist Virology Centre

Rory Gunson, Sam Shepherd

University for the Common Good

## NHS Greater Glasgow and Clyde:

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**Thank you!**

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