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Trends in drug use and harms from the Needle Exchange Surveillance Initiative (NESI)

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SDF conference

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University for the Common Good



Overview

- What is the Needle Exchange Surveillance Initiative (NESI)?
- Participant demographics
- Trends in drugs injected in the last six months
- Trends in drugs smoked/snorted or ingested in the last six months
- Trends in injecting risk behaviours
- Trends in injecting-related harms

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What is NESI?

NESI is a national, cross-sectional survey of people who inject drugs (PWID) in Scotland.

Setting

Sites that provide sterile injecting equipment in mainland Scotland

Eligibility:

Ever injected drugs
(but 70-80% injected in the last 6 months)

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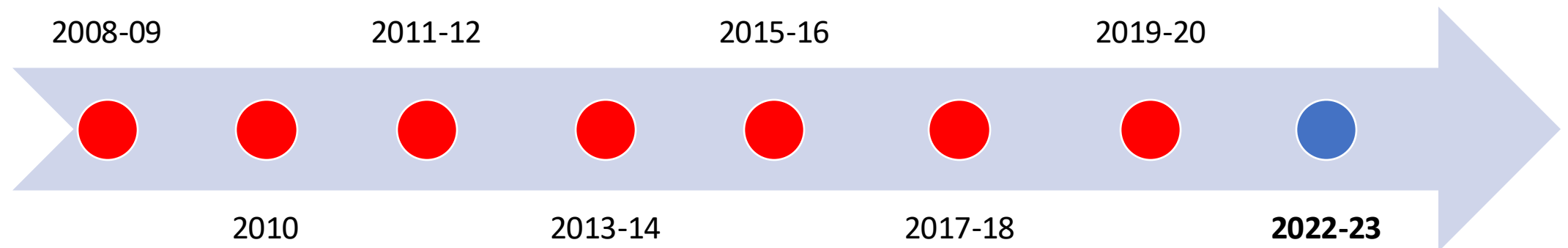
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Eight sweeps of NESI have been undertaken to date:



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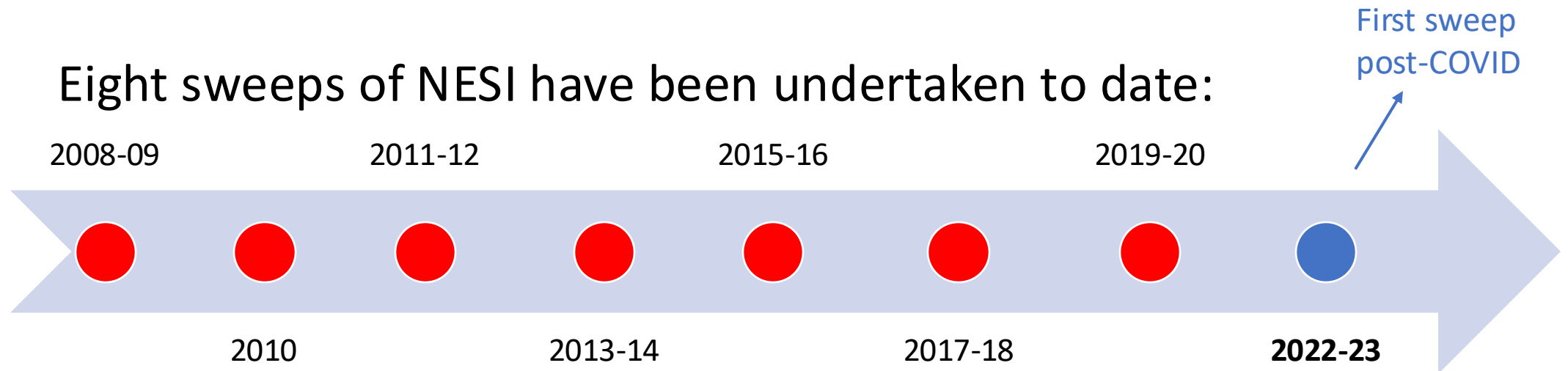
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Ever injected drugs
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Eight sweeps of NESI have been undertaken to date:



What is NESI?

Participants
complete a
questionnaire



	
Needle Exchange Surveillance Initiative NESI 2022-23	
Q1 Have you ever injected drugs?	Yes <input type="checkbox"/> No <input type="checkbox"/> → If yes, REJECT
Q2 Have you participated in this study before?	Yes <input type="checkbox"/> → If yes when was the last time you participated in this study? No <input type="checkbox"/> <input type="text" value="YYYY"/> If interviewed during 2022-2023 REJECT
Q3 What is the main reason for your visit today? Please tick all that apply	Needle exchange <input type="checkbox"/> Wound care <input type="checkbox"/> Substance use <input type="checkbox"/> HIV testing <input type="checkbox"/> Other <input type="checkbox"/> → Please specify <input type="text"/>
Time interview starts: <input type="text" value="HH:MM:SS"/>	
Site No: <input type="text"/> Interviewer code: <input type="text"/> Date: <input type="text" value="DD/MM/YYYY"/>	

What is NESI?

Participants complete a **questionnaire**



and provide a **blood spot sample**



NHR
NESI
GACU
Public Health Scotland

**Needle Exchange Surveillance Initiative
NESI 2022-23**

Q1 Have you ever injected drugs?
Yes No → If No, REJECT

Q2 Have you participated in this study before?
Yes No → If yes when was the last time you participated in this study?
[] / [] / [] Y, Y, Y
If interviewed during 2022-20REJECT

Q3 What is the main reason for your visit today?
Please tick all that apply

Needle exchange
Wound care
Substance use
HIV testing
Other → Please specify []

Time interview started: [] / [] / [] [] : [] : []

Site No: [] [] [] Interviewer code: [] [] [] [] Date: [] / [] / [] Y Y

What is NESI?

Participants complete a **questionnaire**



NHR | National Health Research
NESI | National Evidence for Safer Injective Use
CAU | Centre for Alcohol and Drug Use
Public Health Scotland

**Needle Exchange Surveillance Initiative
NESI 2022-23**

Q1 Have you ever injected drugs?
Yes No → If No, REJECT

Q2 Have you participated in this study before?
Yes No → If yes when was the last time you participated in this study?
[]/ []/ [] Y Y Y
If interviewed during 2022-SHREJECT

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Needle exchange
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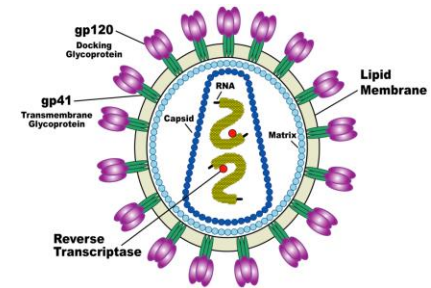
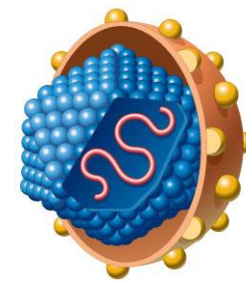
Time interview started: []/ []/ [] []: []: []

Site No: [] [] [] Interviewer coded: [] [] [] Date: []/ []/ [] Y Y Y

and provide a **blood spot sample**



Samples are tested for **HCV** and **HIV**



What is NESI?

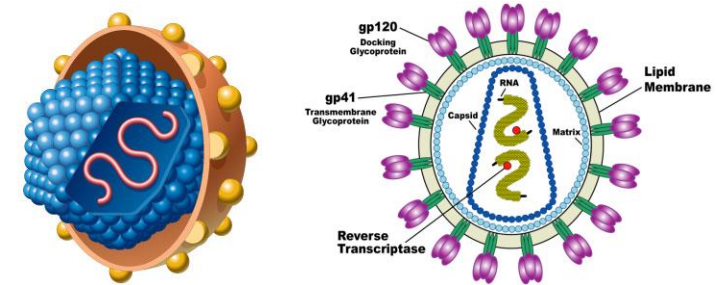
Participants complete a **questionnaire**

A screenshot of the 'Needle Exchange Surveillance Initiative NESI 2022-23' questionnaire. The form includes logos for NHR, NESI, CAU, and Public Health Scotland. It contains several questions with checkboxes and text boxes for answers, such as 'Have you ever injected drugs?' and 'What is the main reason for your visit today?'. At the bottom, there are fields for 'Time interview started', 'Site No.', 'Interviewer code', and 'Date'.

and provide a **blood spot sample**



Samples are tested for **HCV** and **HIV**



Lab data



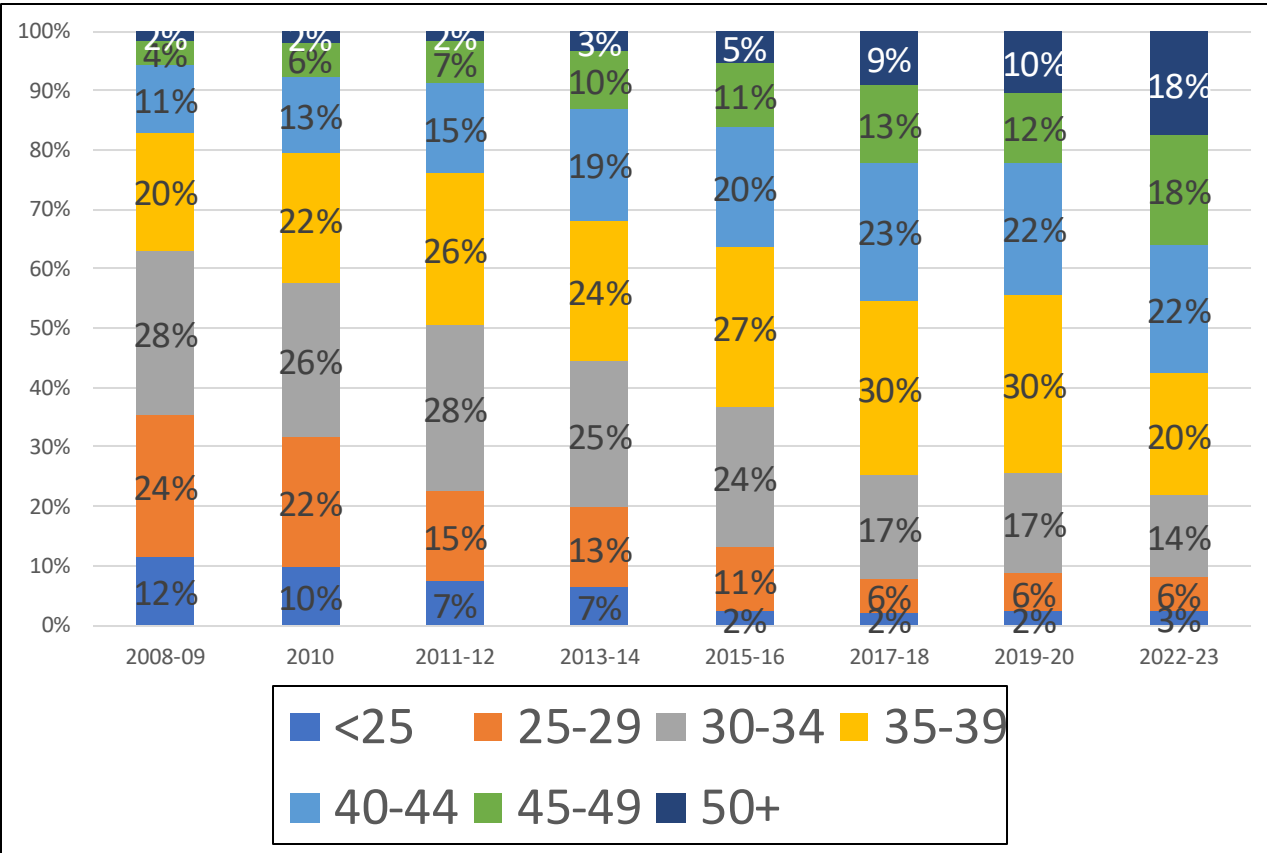
Self-report data

Overview

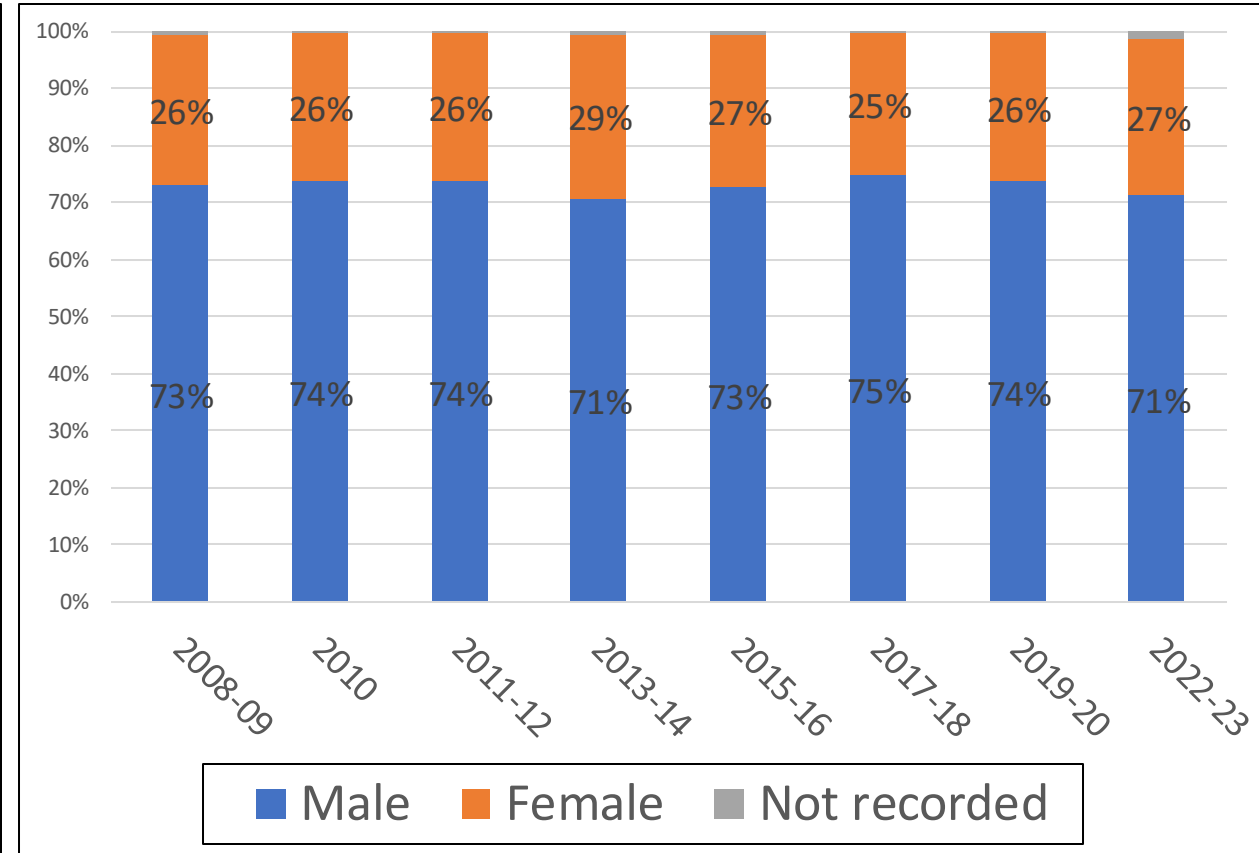
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Demographics of participants*

Age

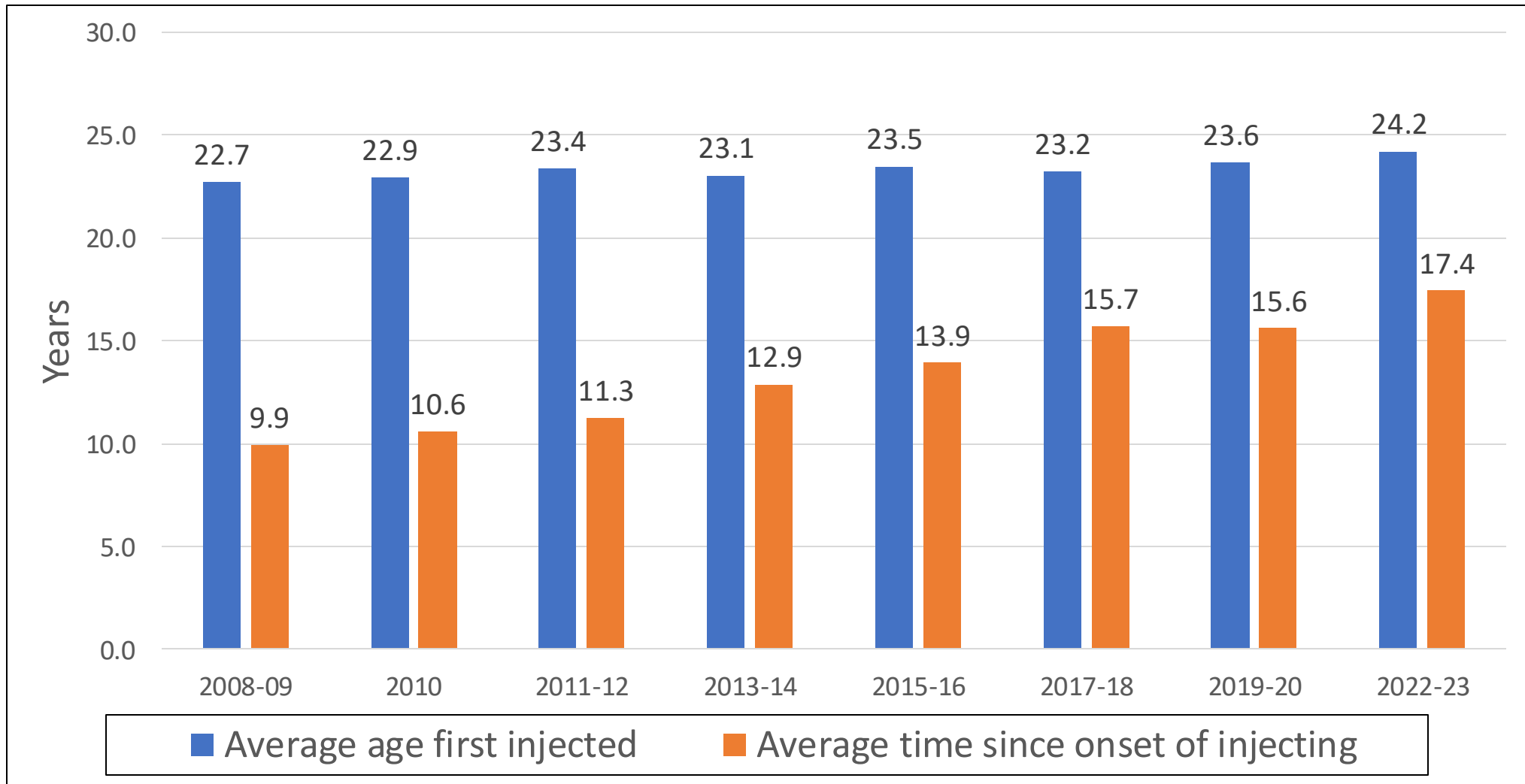


Sex



*restricted to those who reported injecting in the last 6 months

Age first injected and duration of injecting*

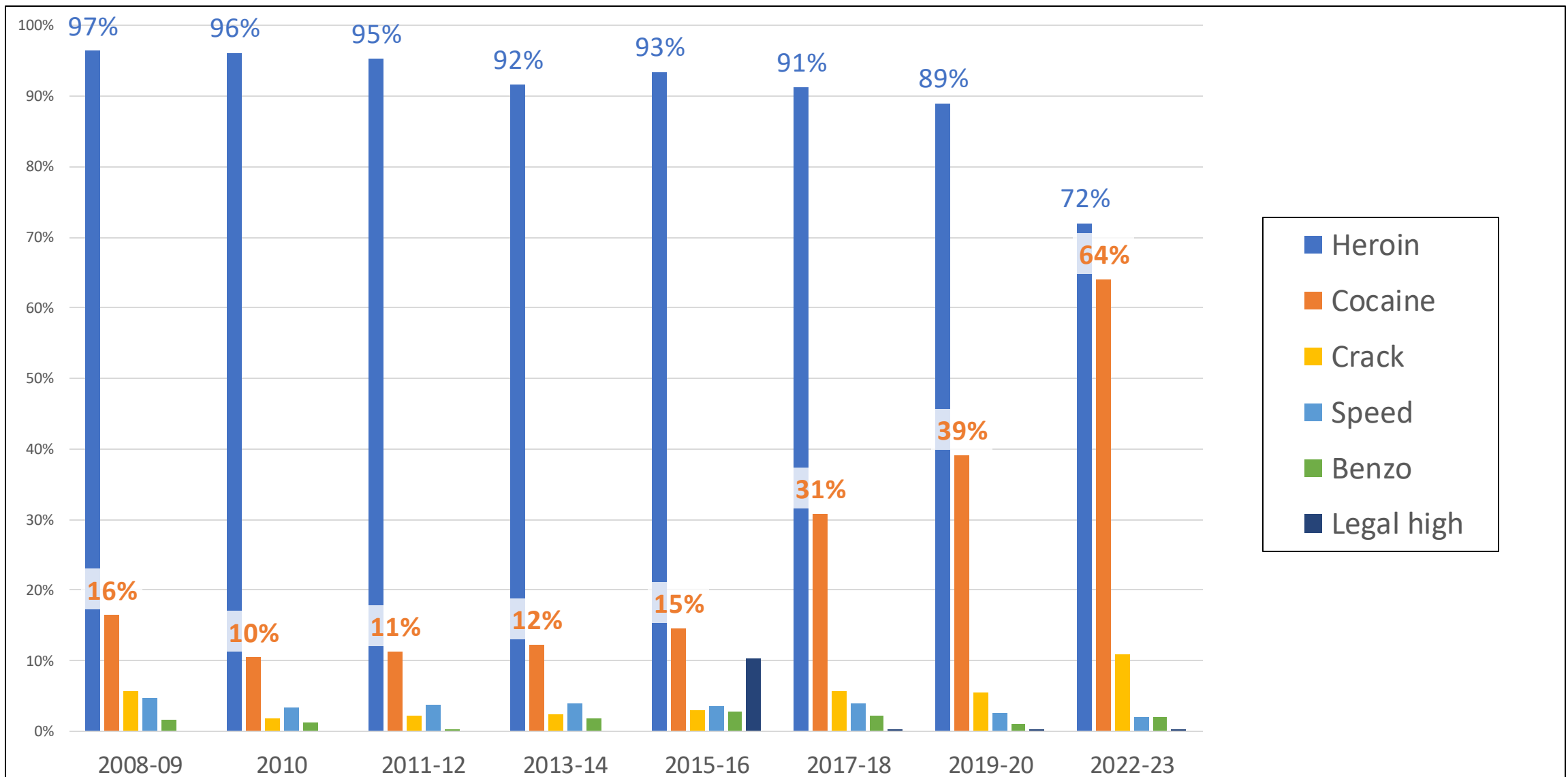


*restricted to those who reported injecting in the last 6 months

Overview

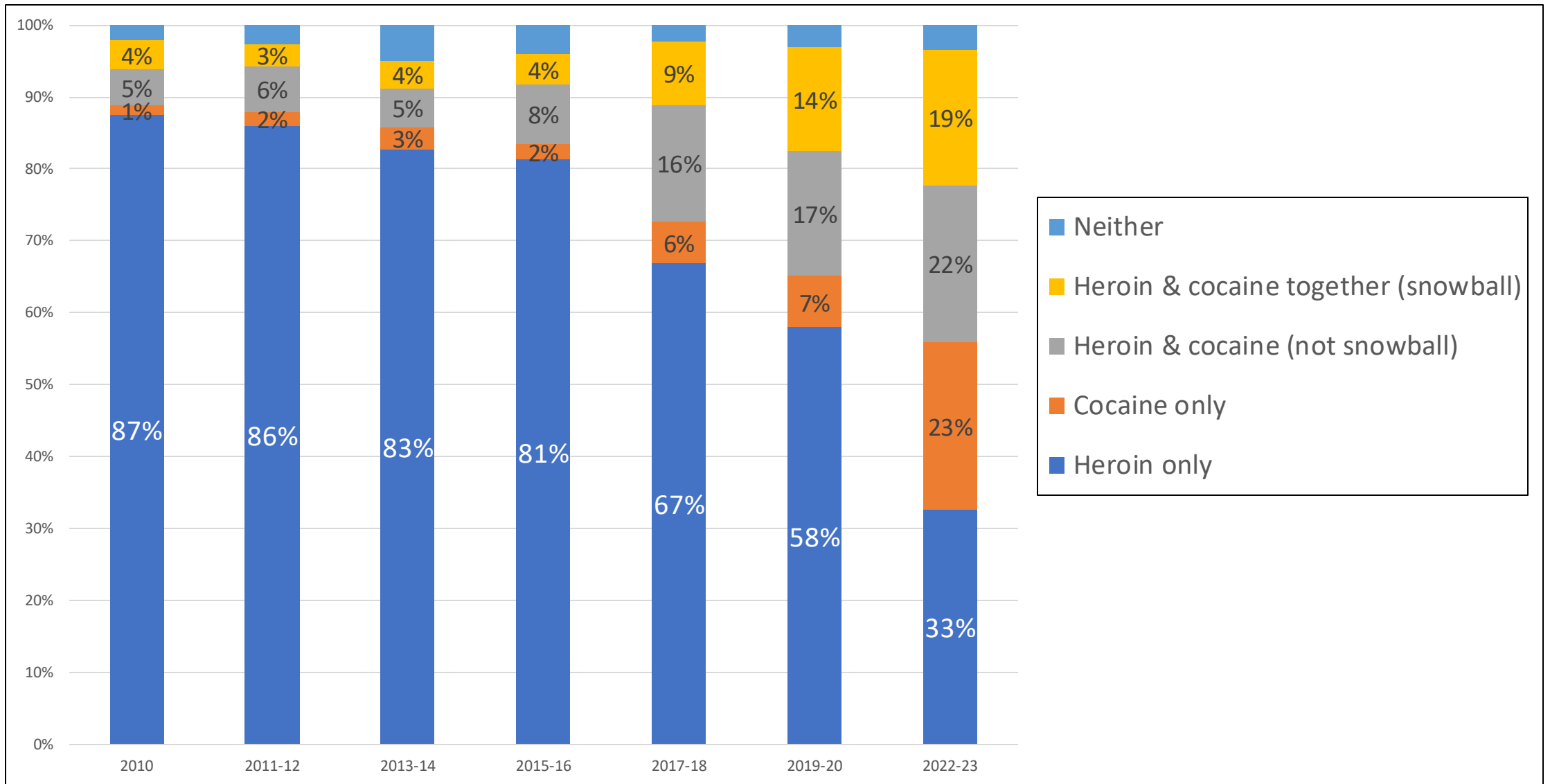
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Drugs injected in the last 6 months*



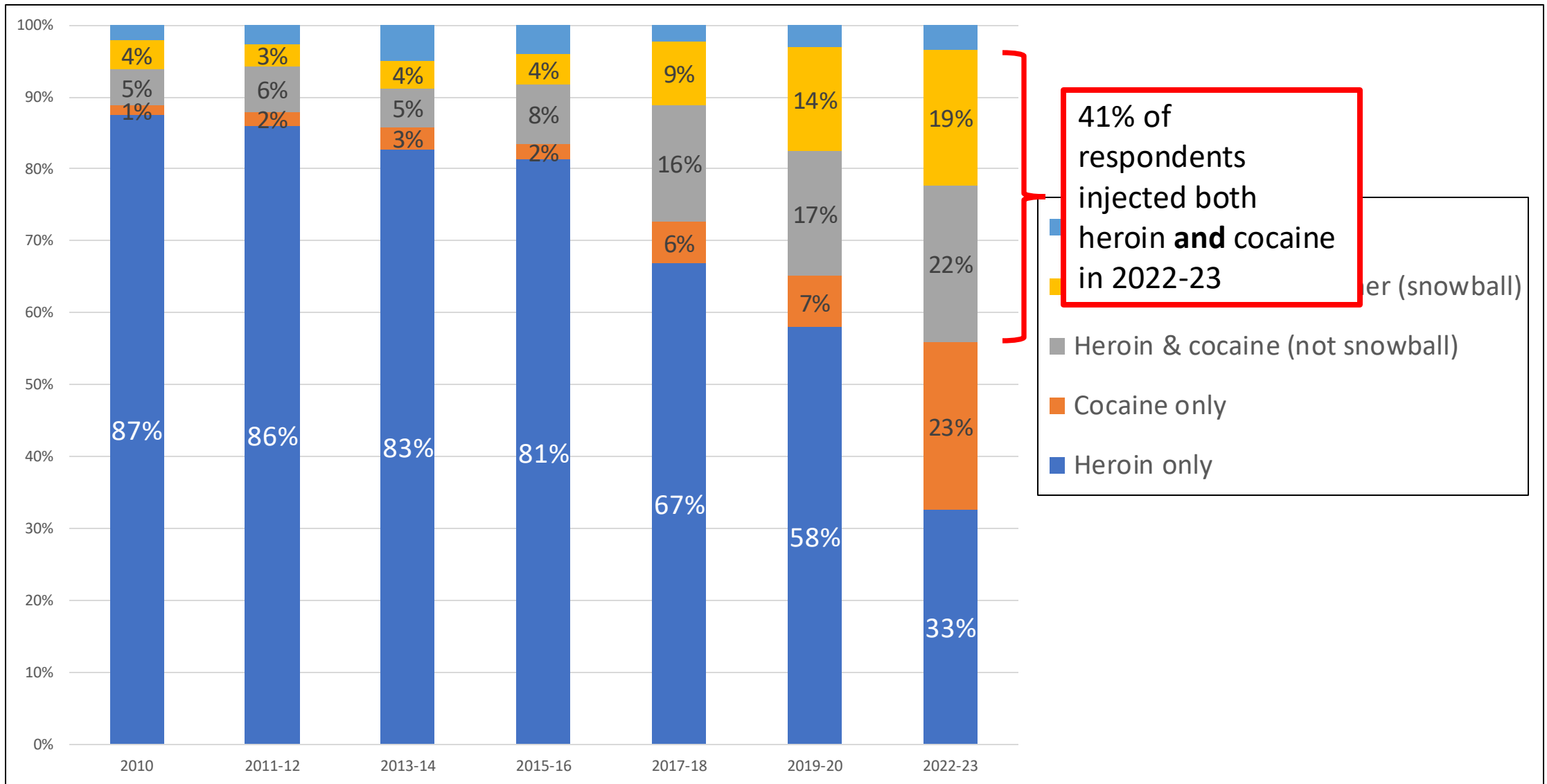
*among those who reported injecting in the last 6 months; respondents can choose multiple drugs

Drugs injected in the last 6 months: heroin & cocaine*



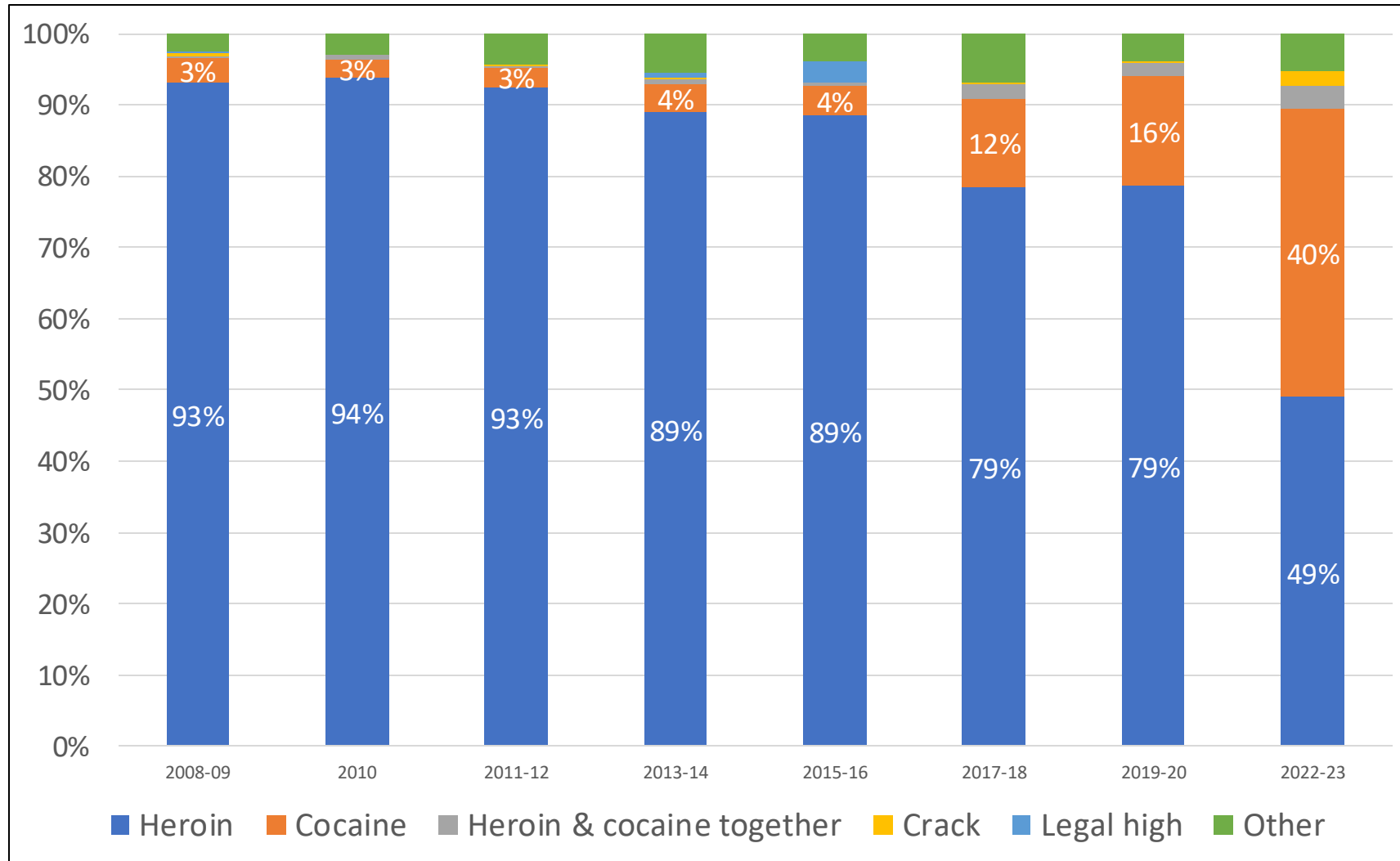
*among those who reported injecting in the last 6 months; individuals may have reported injecting drugs other than heroin or cocaine in the last 6 months

Drugs injected in the last 6 months: heroin & cocaine*



*among those who reported injecting in the last 6 months

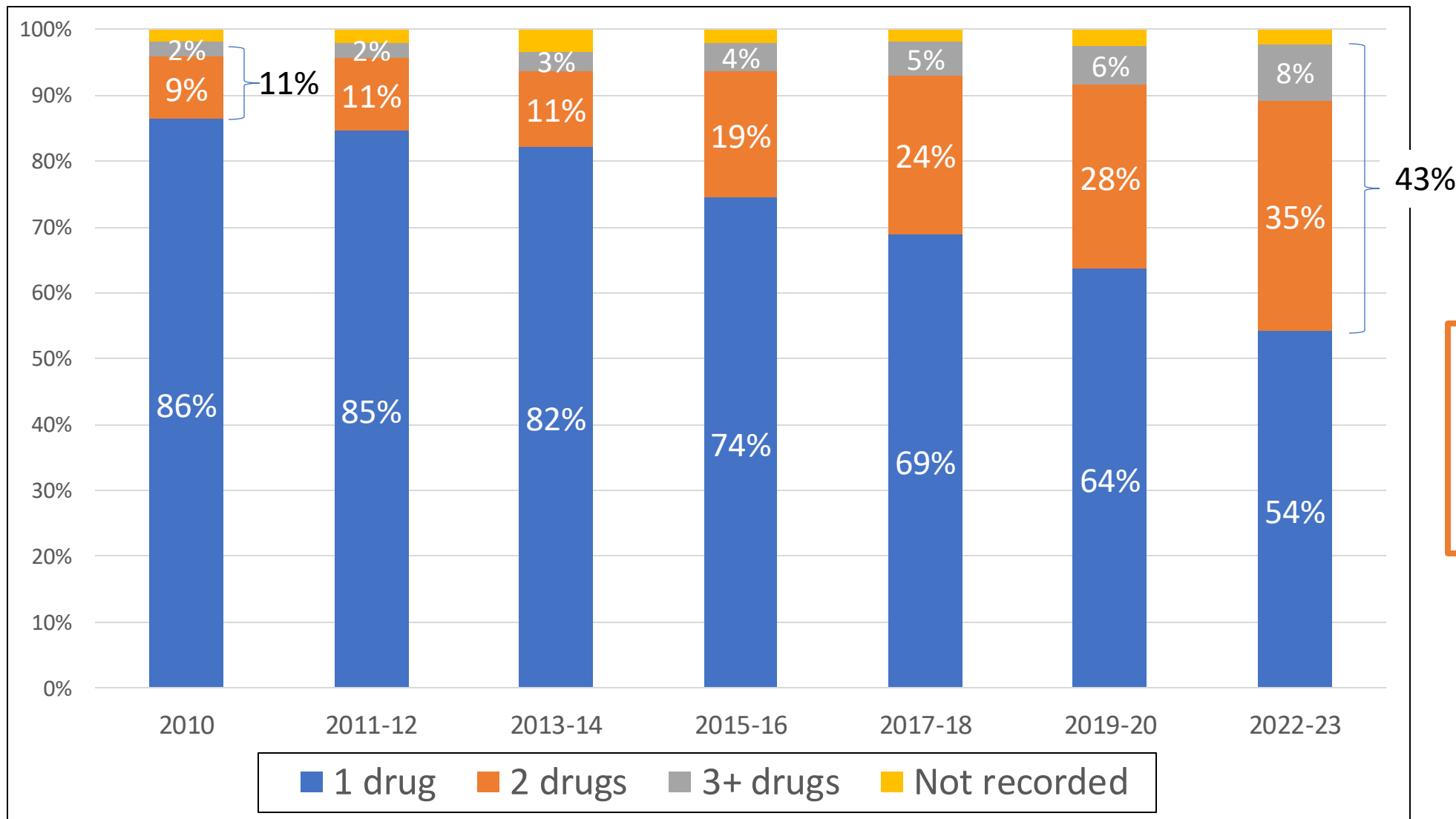
Drugs injected in the last 6 months: main drug injected*



*among those who reported injecting in the last 6 months

The % of participants who report cocaine as their main drug of injection has increased from 3% in 2008-09 to 40% in 2022-23

Drugs injected in the last 6 months: polydrug injection*



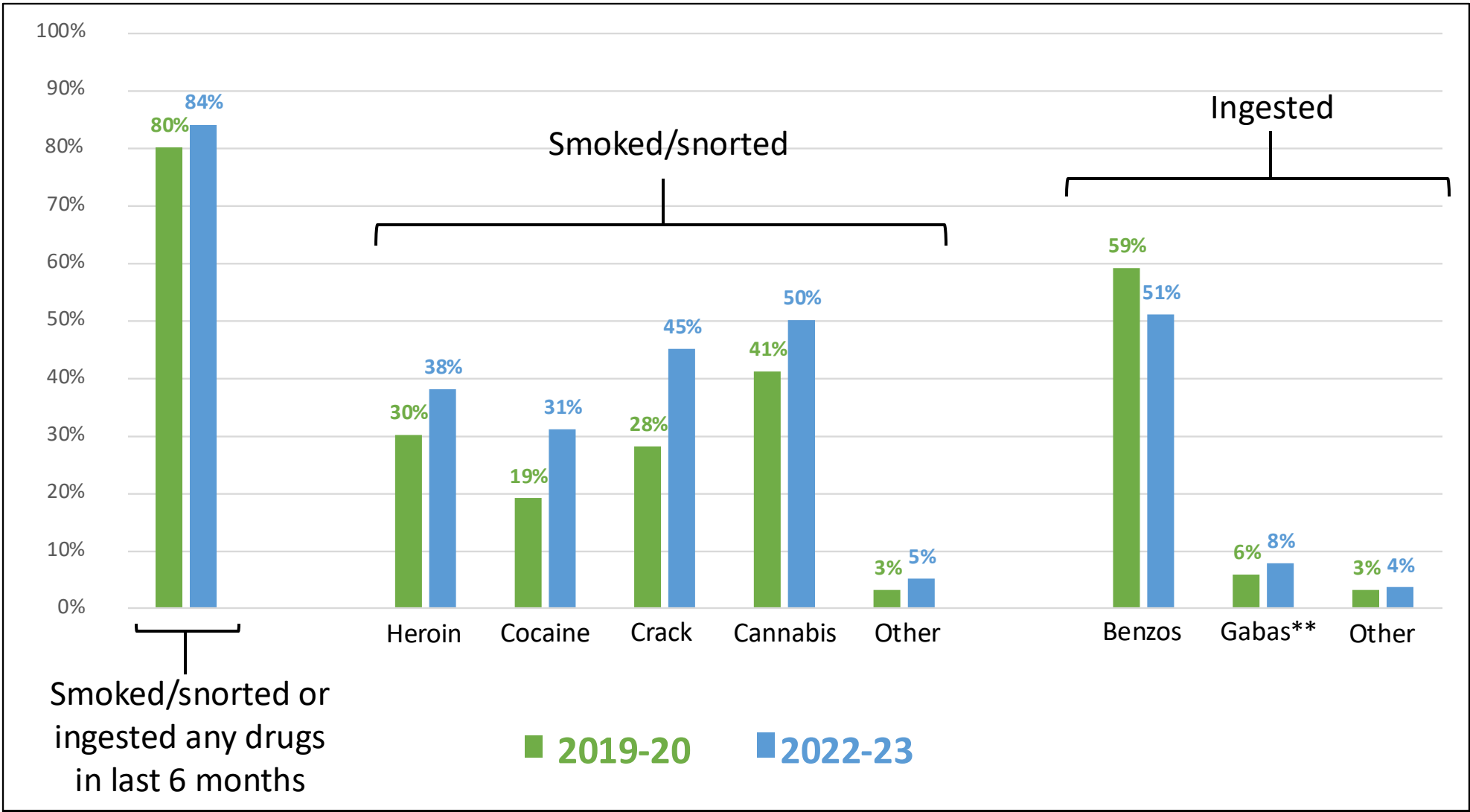
**Injection of 2+ drugs
(in the last six months)
has increased from
11% in 2009-09 to 43%
in 2022-23**

*among those who reported injecting in the last 6 months

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Drugs smoked, snorted or ingested in the last 6 months*



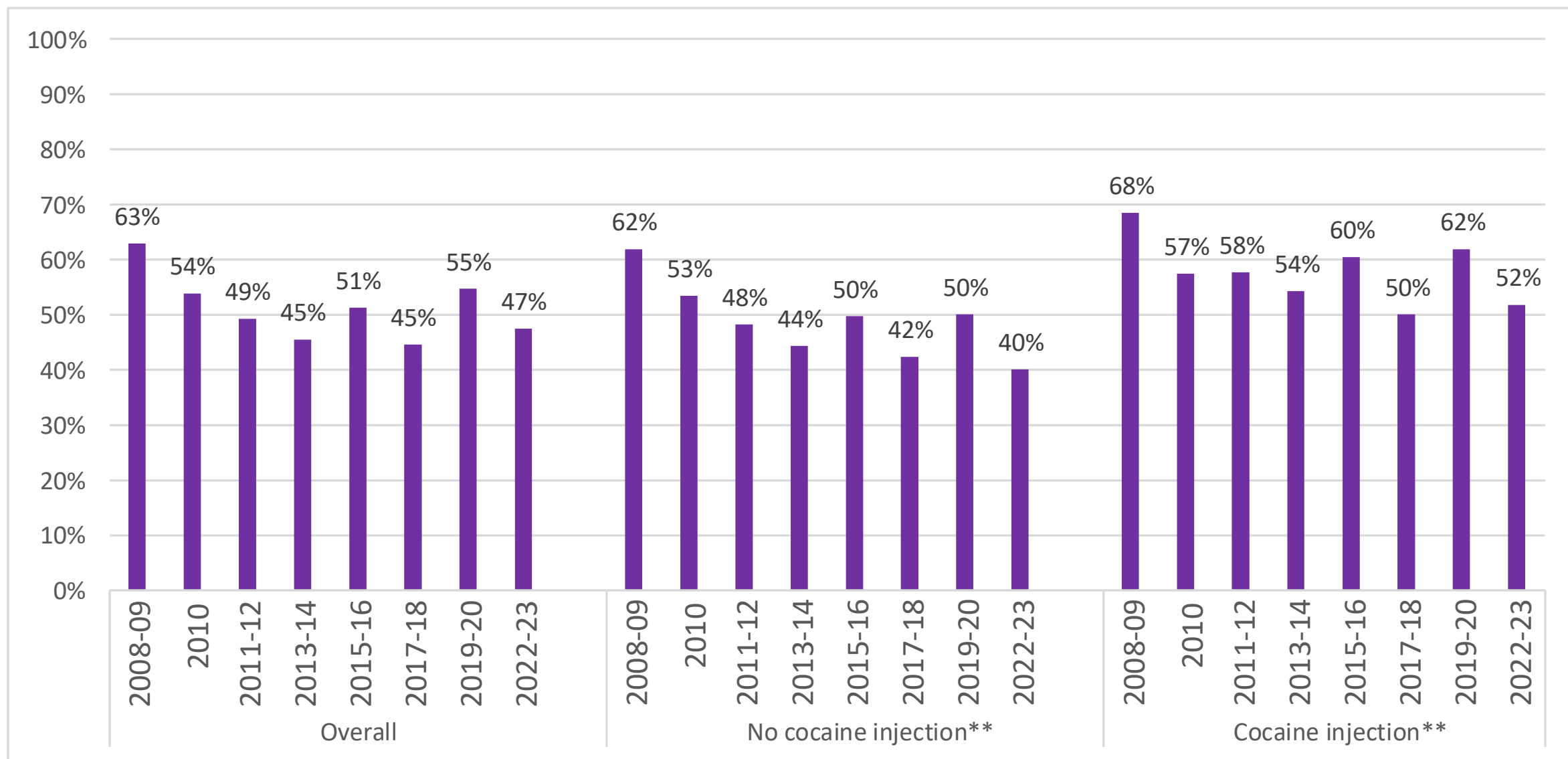
*among those who reported injecting in the last 6 months

**Gabapentinoids: gabapentin or pregabalin

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% who report injecting daily or more in the last six months*

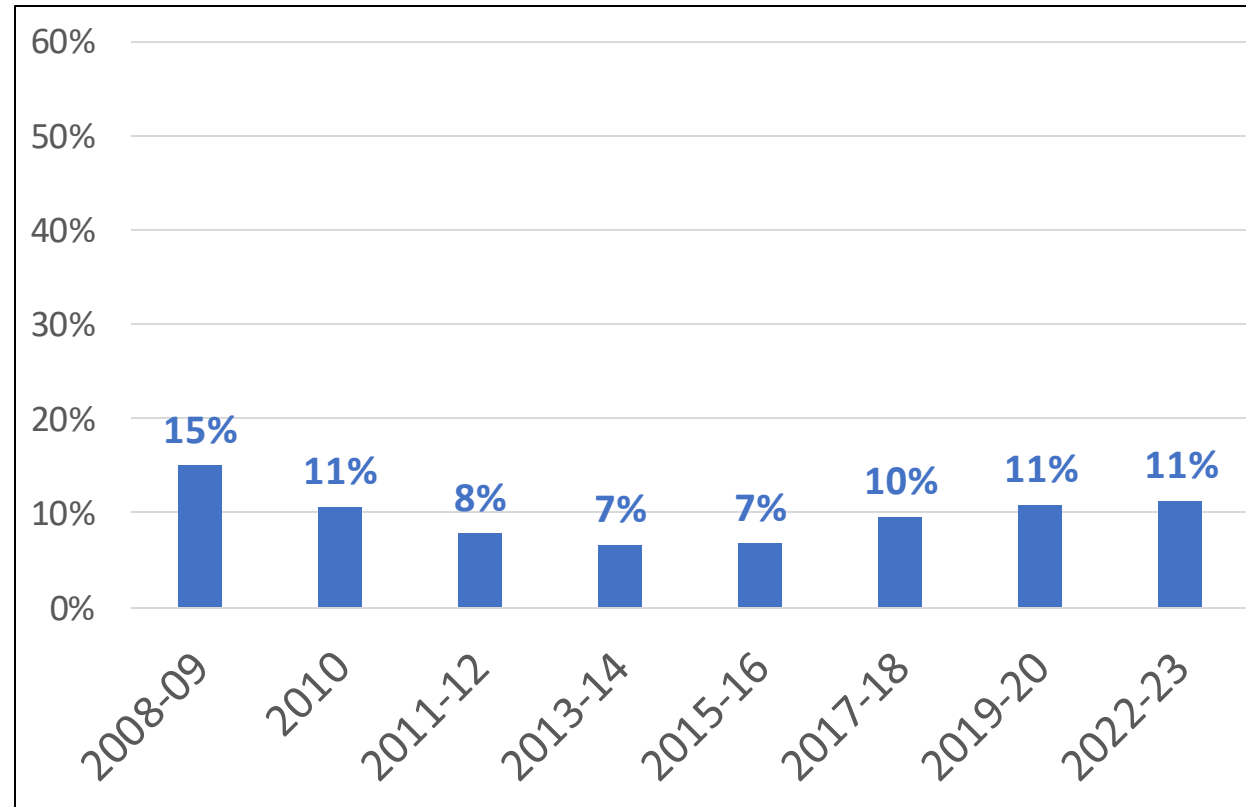


*among those who reported injecting in the last 6 months

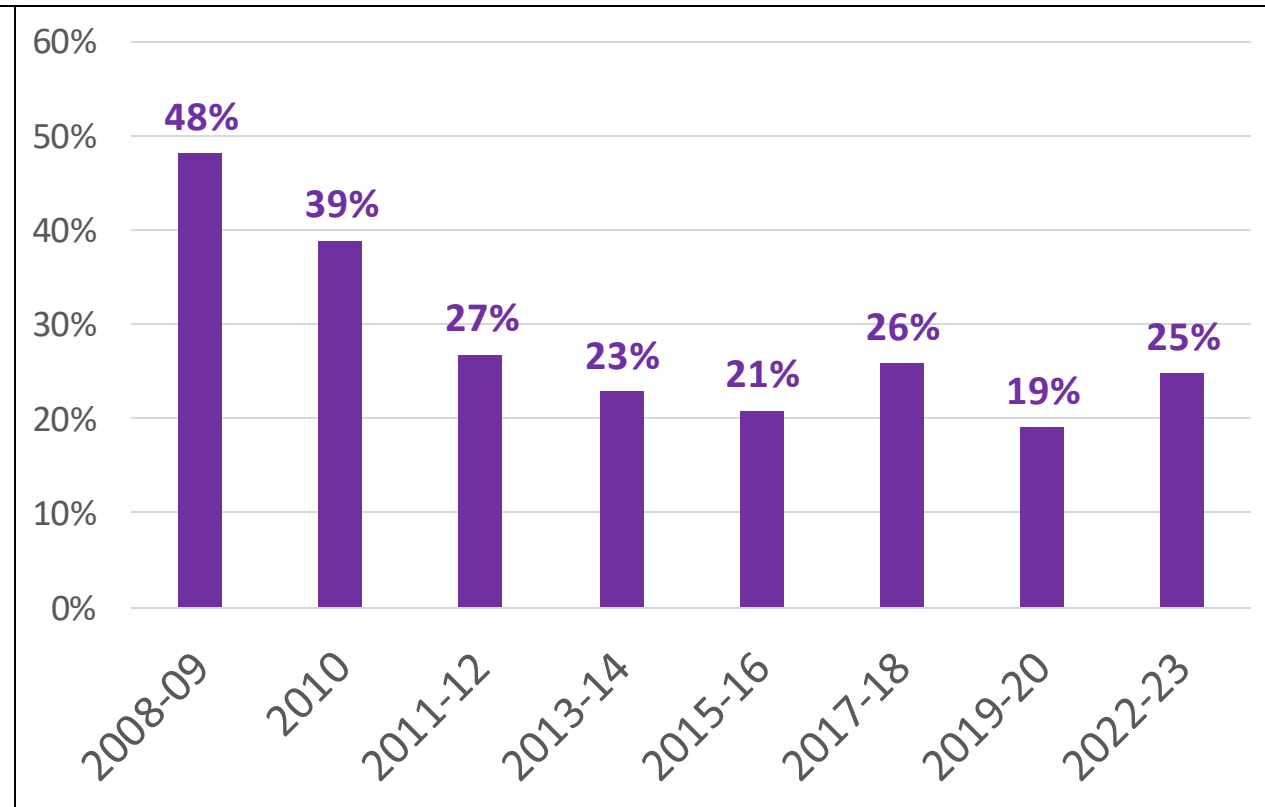
**in the last 6 months

Sharing equipment in the last six months*

Shared needles/syringes



Shared paraphernalia (cookers, filters, water)

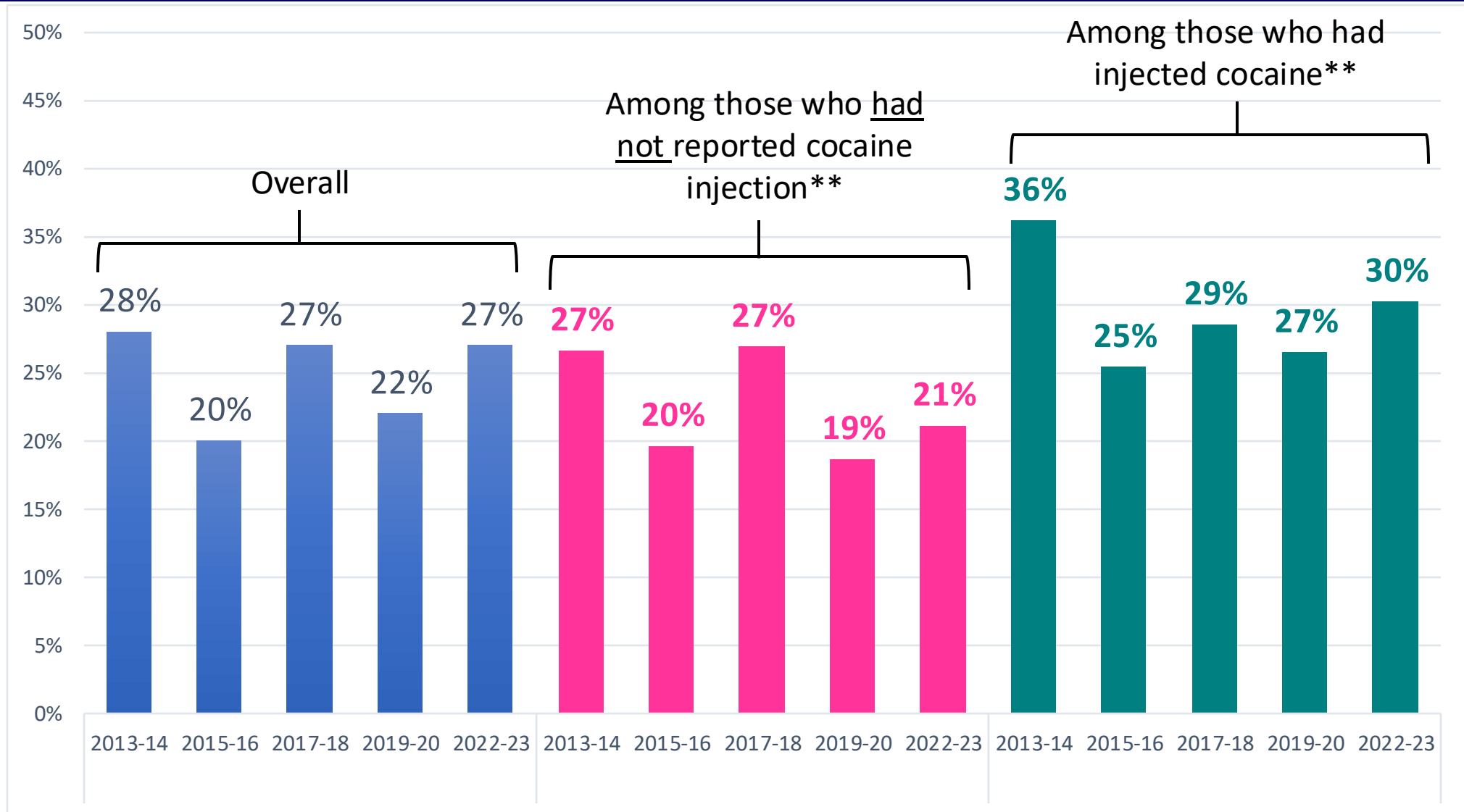


*among those who reported injecting in the last 6 months

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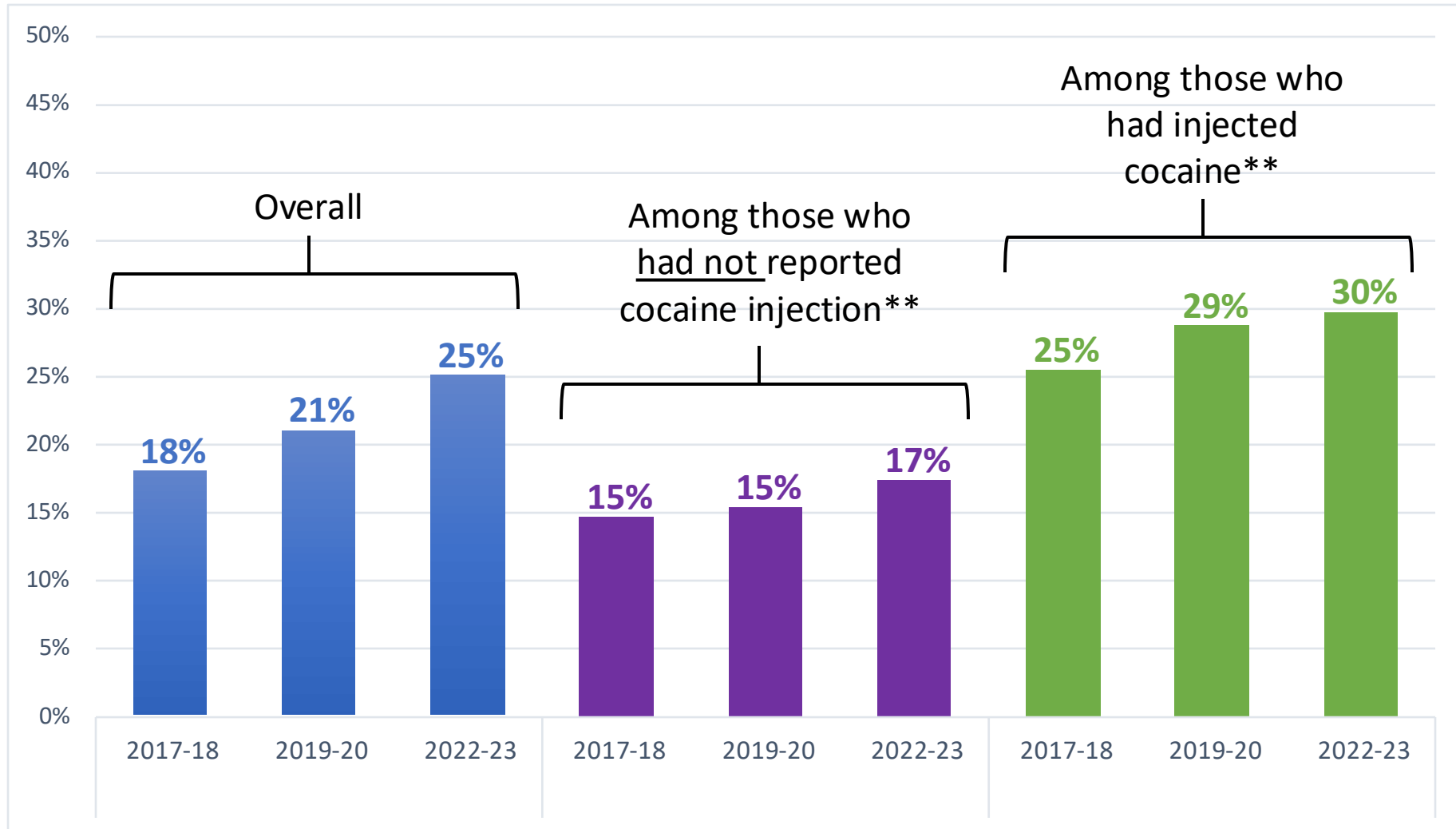
Harms: soft tissue infection in the last year (self-reported)*



*among those who reported injecting in the last 6 months

** in last 6 months

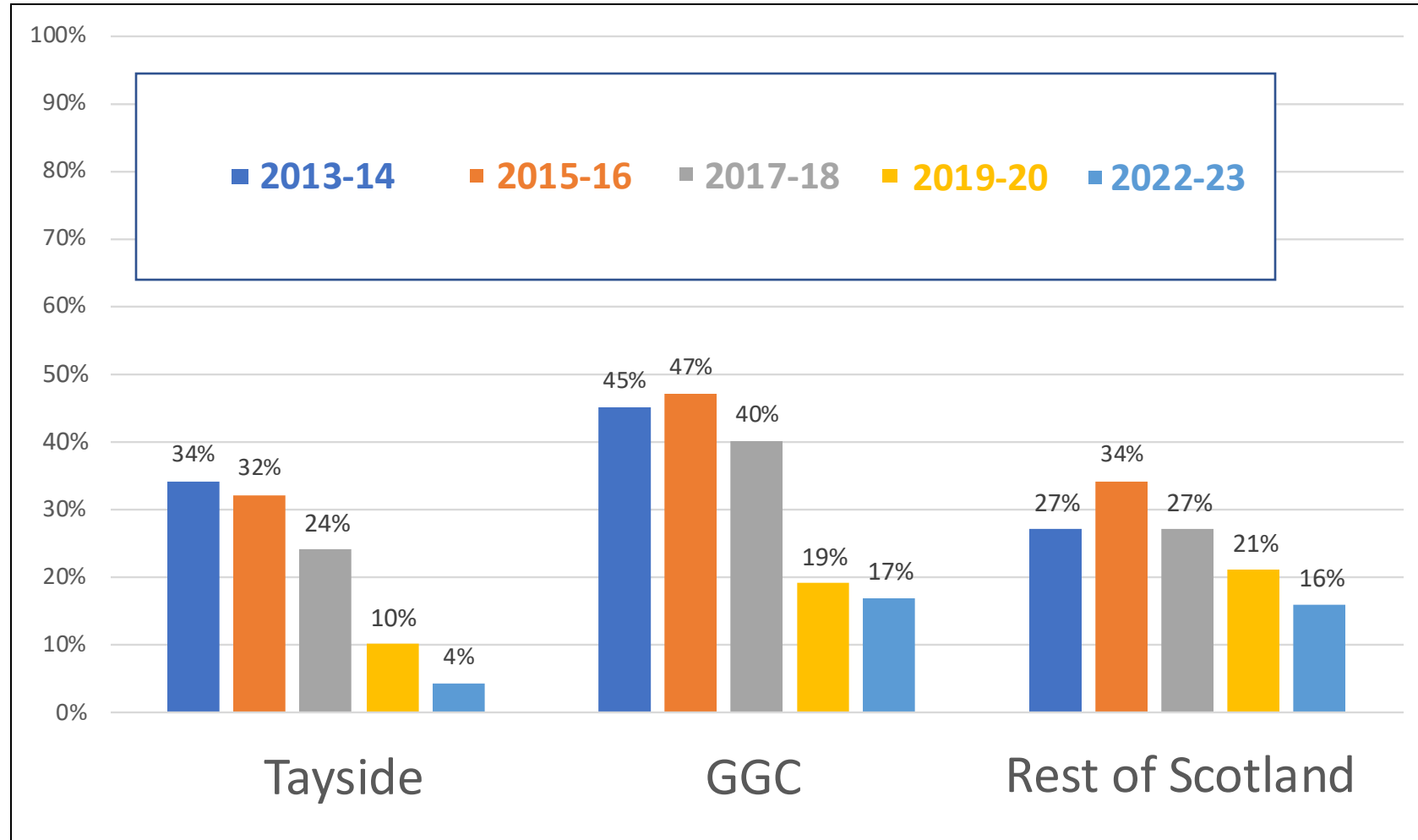
Harms: non-fatal overdose in the last year (self-reported)*



*among those who reported injecting in the last 6 months

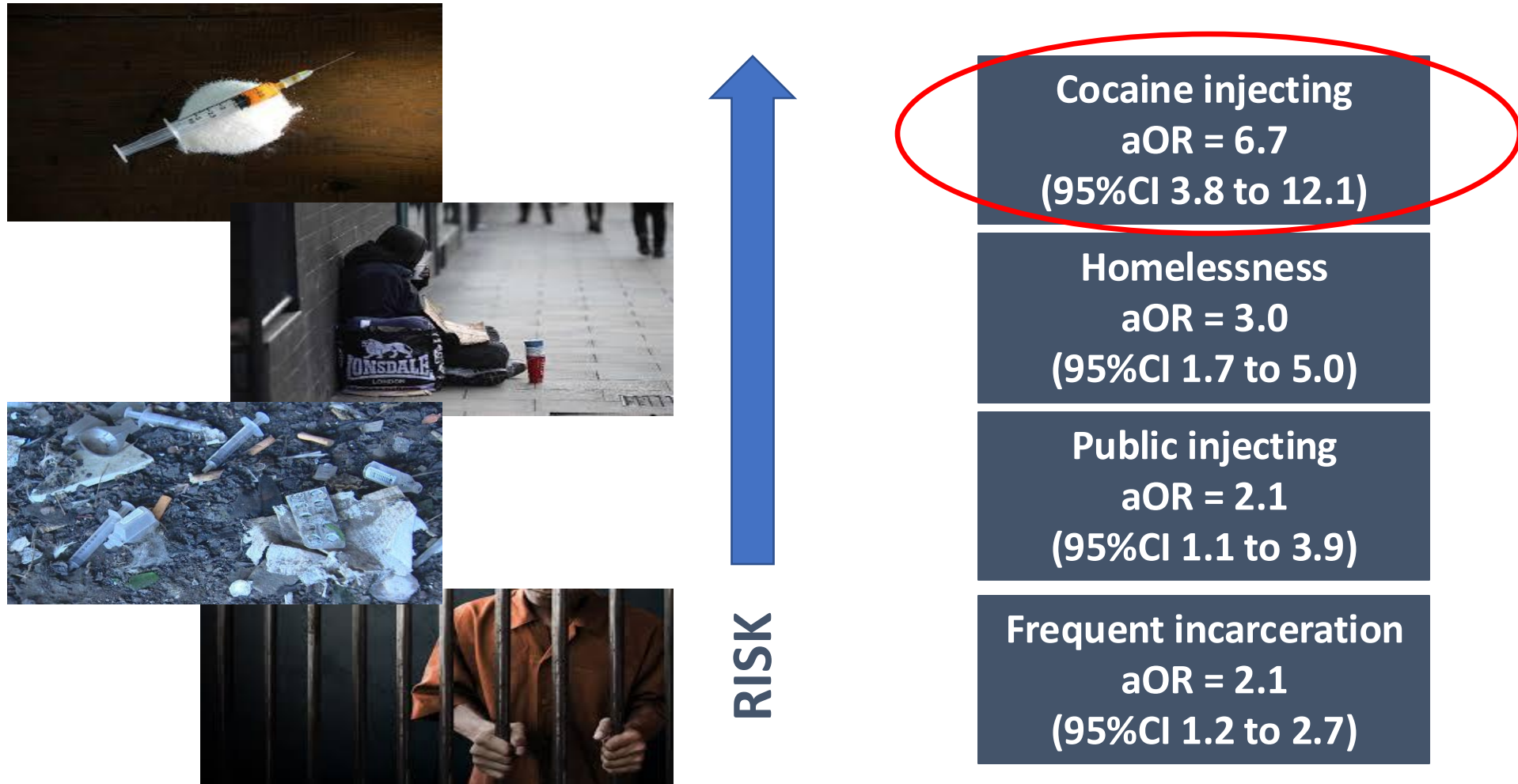
** in last 6 months

Harms: Prevalence of chronic HCV infection (from laboratory testing)*



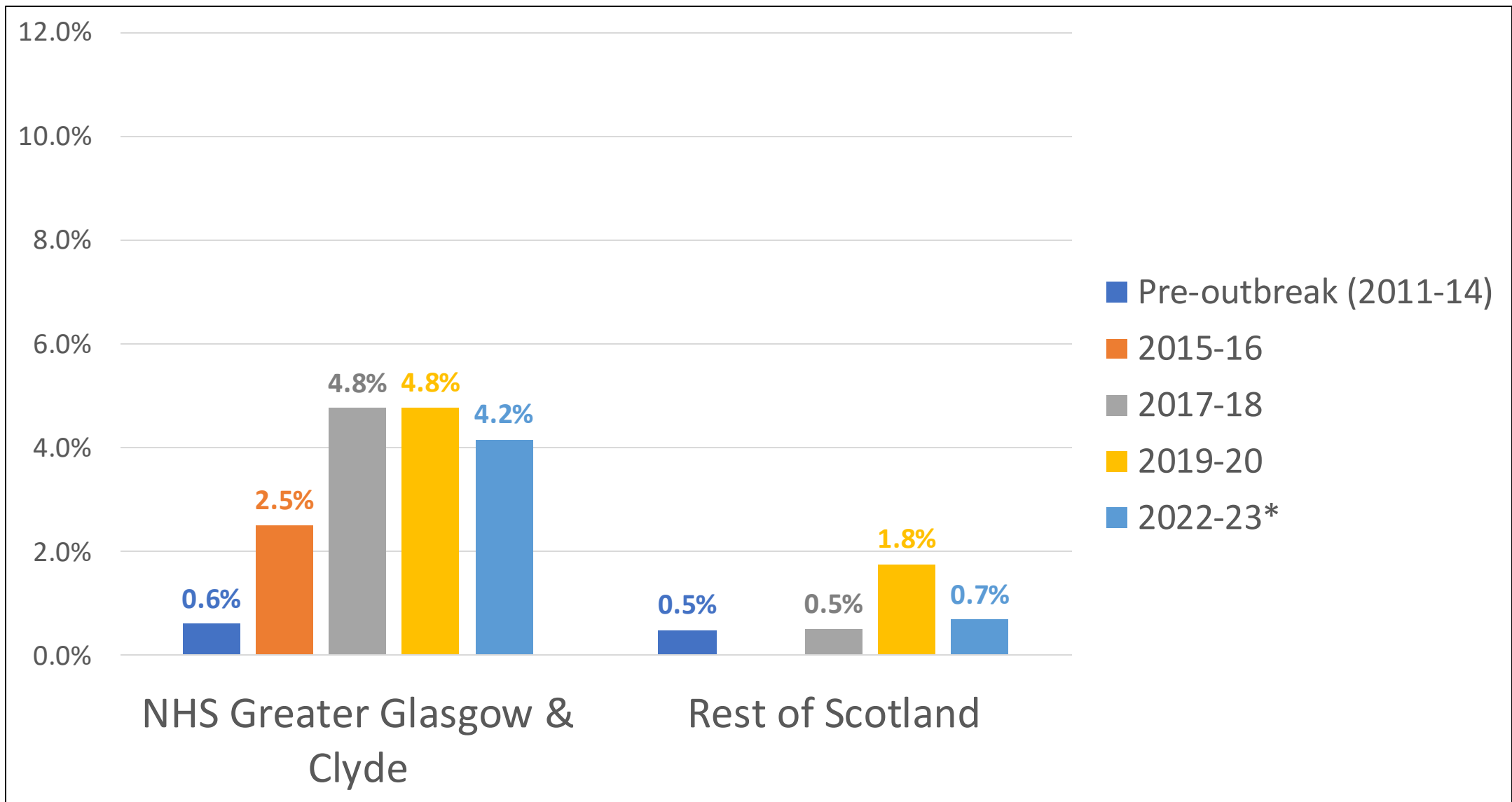
*data have been imputed for missing laboratory DBS results for 2013-14 to 2017-18; insufficient samples have been excluded from the denominator in 2019-20 and 2022-23. **2022-23 data are provisional.**

Factors associated with HIV infection



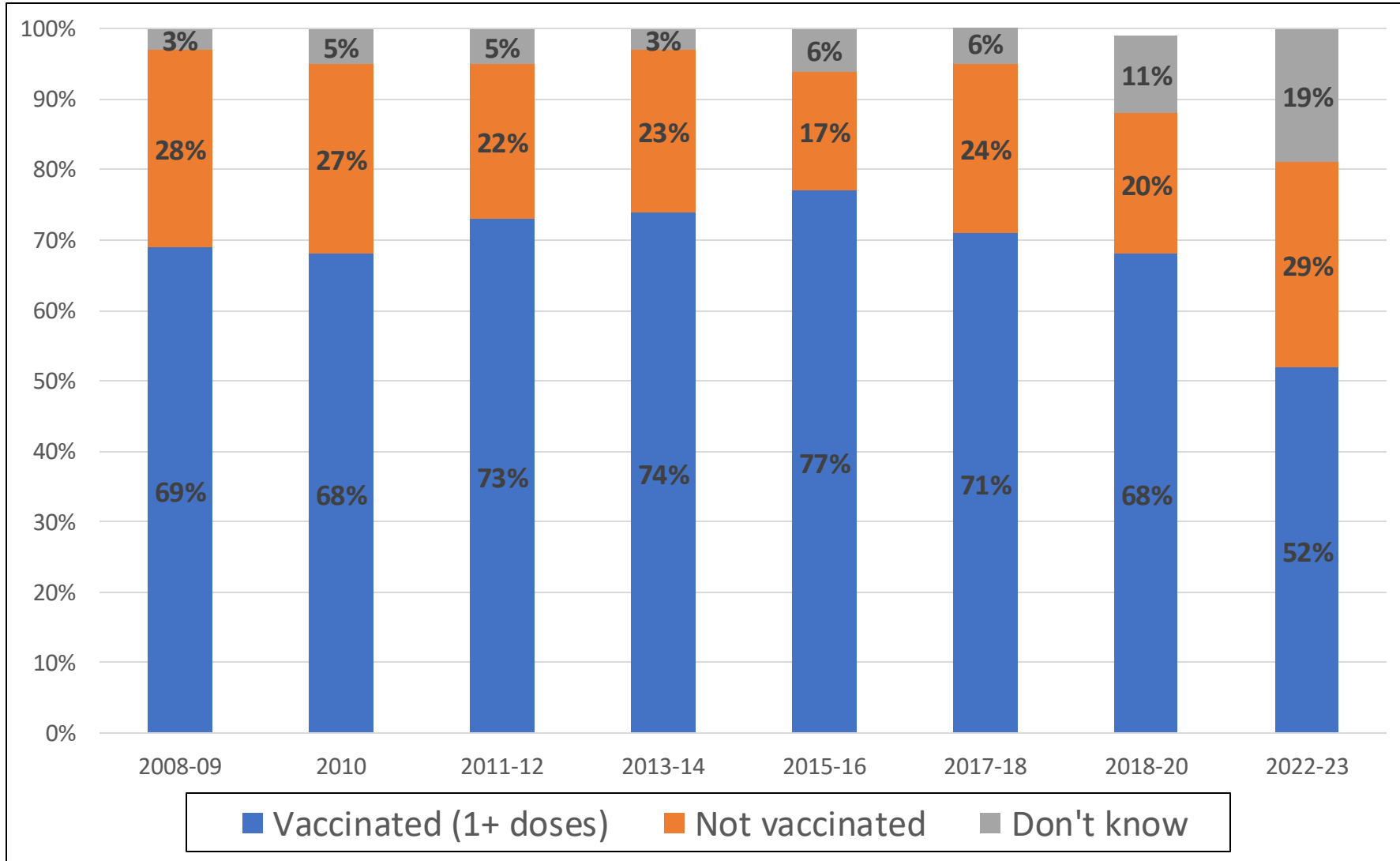
Source: McAuley et al, 2019; Trayner et al, 2020

Harms: HIV prevalence (from laboratory testing)

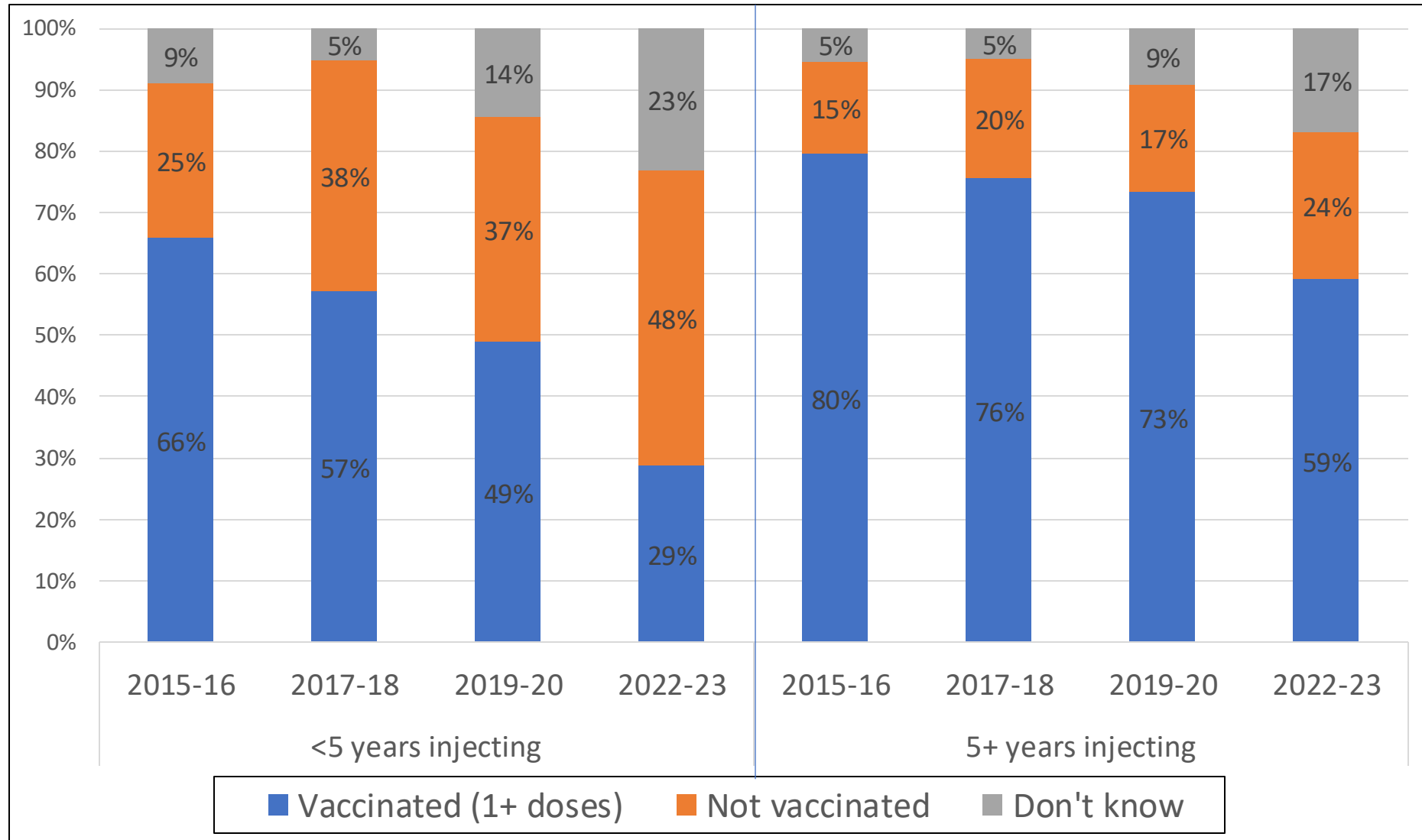


*2022-23 data are provisional

Proportion who reported having been vaccinated for HBV (at least one dose)



Proportion who reported having been vaccinated for HBV (at least one dose), by time since onset of injecting*



*and who reported injecting in the last six months

Summary

- 2022-23 was the first NESI sweep undertaken since the COVID-19 pandemic
- Cocaine injection has continued to rise dramatically
- Smoking/snorting and ingesting drugs is very prevalent (>80%) among people who are currently injecting
- There is no evidence of an overall increase in injecting frequency or sharing equipment, although people who report cocaine injection are more likely to report risk behaviours
- There is some evidence of an increase in self-reported harms (increase in NFOD and higher rates of STI compared to 2019-20)
- Progress towards HCV elimination slowed somewhat during the pandemic
- HIV prevalence does not appear to have increased, but risk factors are still prevalent

Acknowledgements



- NESI participants!
- NESI project team: Sharon Hutchinson, Andy McAuley, Chris Biggam, Samantha Shepherd, Rory Gunson, Kirsten Trayner
- NESI interviewers
- Participating services
- NESI Steering Group

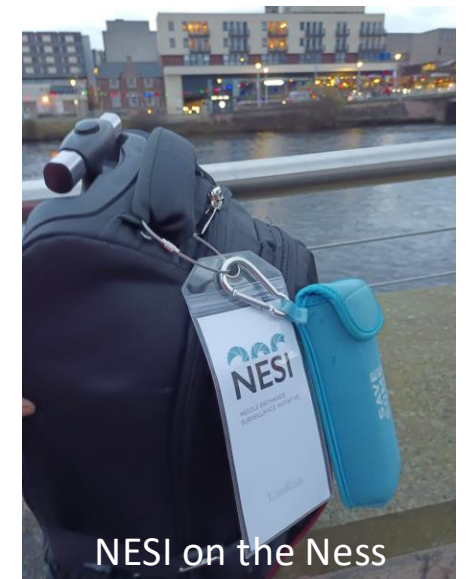


Photo credit: Gill Donnan