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# Recent increases in crack injection and associated risk factors among people who inject psychoactive drugs in England and Wales.

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INHSU Conference October 2021

# Background and Objectives

- National data indicate a recent increase in the prevalence of crack injection in some parts of the UK <sup>[1]</sup>.
- Frequency of injection is often higher among those using stimulants, like crack cocaine, than that seen in those injecting opiates alone.
- Increased injecting frequency increases potential exposure to blood-borne viruses (BBVs) or injection site infections.
- Furthermore, availability of high purity cocaine increases the risk of fatal and non fatal overdose.
- **Aim:**
  - Analyse recent trends in crack injection among PWID (2010 - 2019)
  - Investigate factors associated with crack injection (2019)

1. Public Health England. Opiate and crack cocaine use: prevalence estimates by local area 2017 [Available from: <https://www.gov.uk/government/publications/opiate-and-crack-cocaine-use-prevalenceestimates-for-local-populations>]

# Methods

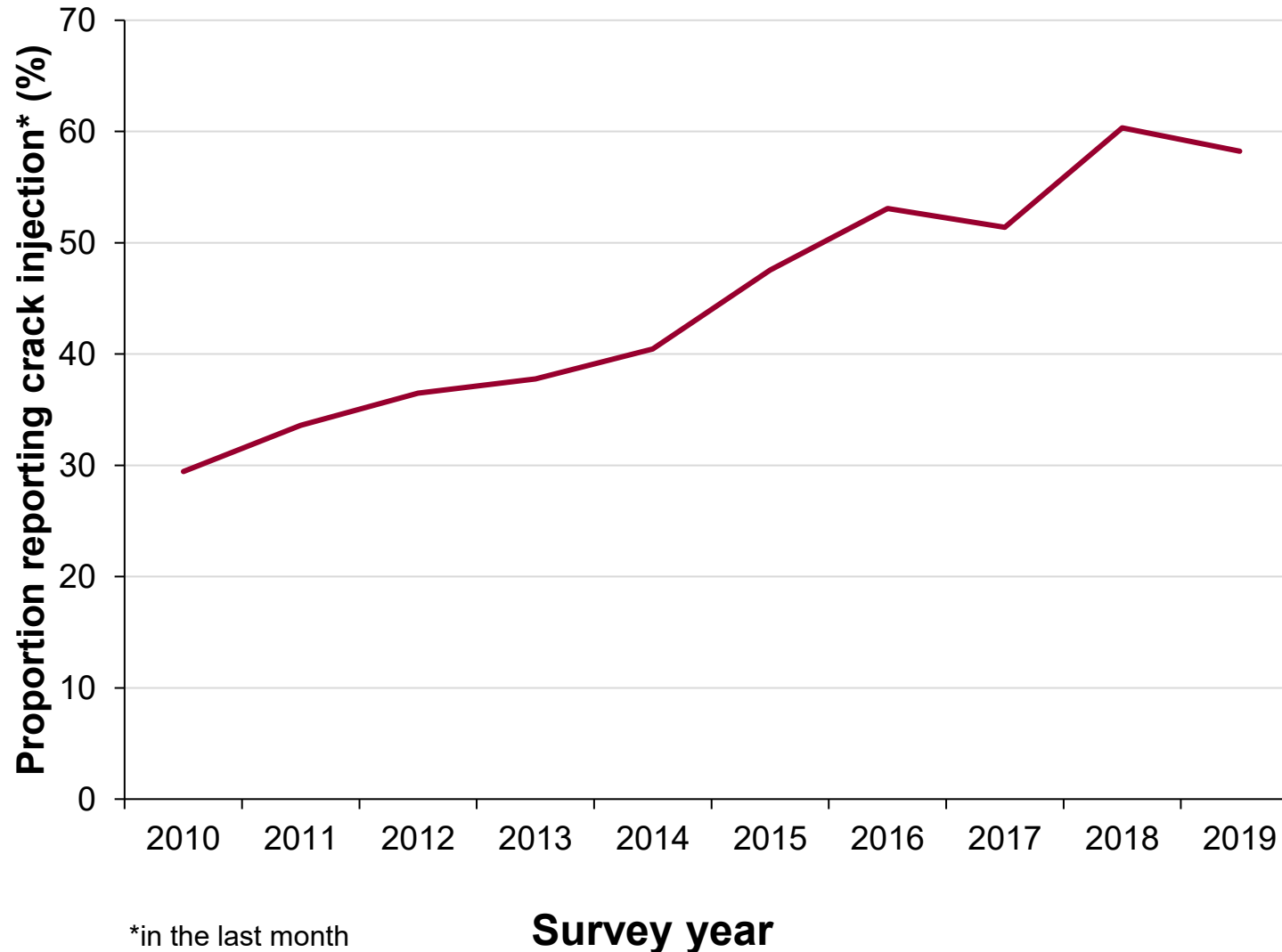
- Data analysed from the Unlinked Anonymous Monitoring Survey of People Who Inject Drugs (UAM Survey) – annual cross-sectional bio-behavioural survey.
- Participants are recruited through drug and alcohol services and are eligible to participate if they have ever injected a psychoactive drug.
- Sample limited to current injectors (injected in last month) recruited in England and Wales.

**Trend over time:** Assessed if the proportion reporting crack injection in the past month increased significantly in 2019 compared with 2010, adjusting for age, gender and geographical region.

## **Factors associated with crack injection in 2019:**

- Univariable analyses –  $\chi^2$
  - All covariates significant in univariable analyses were added to a logistic regression model and removed if found non significant through a likelihood ratio test ( $p > 0.05$ ).
- All analyses were conducted using Stata 15.

# Trend in crack injection 2010 - 2019



- Among the UAM Survey participants, crack injection in the last month has increased significantly over the last decade.
- Participants in 2019 were **3.5** times more likely to report injecting crack in the last month than those participating in 2010.

# Factors associated with current crack injection in 2019

N= 1,417

Of which  
**58%**  
reported  
crack  
injection in  
the past  
month

\* those reporting  
injecting in the  
last month

^ bold when  
significant at  
p<0.05

| Among those reporting crack injection*                           |                   | Univariate |              | Multivariate |              |
|--|-------------------|------------|--------------|--------------|--------------|
|  |                   | OR         | 95% CI       | AOR^         | 95% CI       |
| Gender   | Female            | .          | .            | .            | .            |
|  | Male              | 1.33       | 1.05 - 1.68  | 1.61         | 1.20 - 2.18  |
| Geographical region  | North of England  | .          | .            | .            | .            |
|  | London            | 2.32       | 1.54 - 3.48  | 2.90         | 1.79 - 4.70  |
|  | Midlands          | 2.43       | 1.82 - 3.24  | 2.76         | 1.93 - 3.95  |
|  | South of England  | 3.47       | 2.54 - 4.73  | 4.08         | 2.77 - 6.01  |
|  | Wales             | 1.17       | 0.79 - 1.72  | 0.99         | 0.61 - 1.59  |
| Homeless in the last year  | No                | .          | .            | .            | .            |
|  | Yes               | 1.86       | 1.50 - 2.30  | 1.63         | 1.24 - 2.13  |
| Ever imprisoned  | No                | .          | .            | .            | .            |
|  | Yes               | 1.77       | 1.40 - 2.24  | 1.49         | 1.10 - 2.01  |
| Injected heroin*   | No                | .          | .            | .            | .            |
|  | Yes               | 6.63       | 3.97 - 11.06 | 6.54         | 3.49 - 12.26 |
| Sharing needles, syringes, spoons, filters or mixing containers* | No                | .          | .            | .            | .            |
|  | Yes               | 1.81       | 1.44 - 2.28  | 1.77         | 1.32 - 2.36  |
| Injecting frequency on last day injected                         | Once a day        | .          | .            | .            | .            |
|  | Two times or more | 1.87       | 1.46 - 2.40  | 1.78         | 1.33 - 2.38  |
| Groin injection*   | No                | .          | .            | .            | .            |
|  | Yes               | 2.12       | 1.69 - 2.67  | 2.39         | 1.79 - 3.20  |
| Overdose in last year  | No                | .          | .            | .            | .            |
|  | Yes               | 2.05       | 1.55 - 2.71  | 2.06         | 1.45 - 2.94  |
| Ever having a HCV infection (anti-HCV)                           | Negative          | .          | .            | .            | .            |
|  | Positive          | 1.82       | 1.46 - 2.26  | 1.68         | 1.27 - 2.21  |

# Conclusions

- The prevalence of crack injection among PWID in England and Wales has doubled over the past decade.
- PWID reporting crack injection are more likely to engage in risk behaviours such as injecting equipment sharing, groin injection, injecting more frequently and use of heroin and crack in combination.
- This is concerning as these behaviours could increase risk of BBV and skin and soft tissue infection acquisition.
- Also concerning is the increased risk of overdose among this group.
- Harm reduction and drug treatment services should adapt to support the needs of this growing population of stimulant injectors.

# Acknowledgements

We are grateful to the drug and alcohol workers who supported, as well as the participants of, the UAM survey, without whom these analyses would not have been possible.