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# SIPP (Safe Inhalation Pipe Provision): A study on providing safe inhalation pipes to people who use crack cocaine in England to reduce health risks and encourage their participation in services

**Submission date**
09/03/2023

**Recruitment status**
No longer recruiting

**Registration date**
15/03/2023

**Overall study status**
Completed

**Last Edited**
26/05/2026

**Condition category**
Mental and Behavioural Disorders

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

## Plain English summary of protocol

Background and study aims
Over 180,000 people use crack cocaine in England. Crack which can be smoked or injected, can cause serious health harms. People who use crack (PWUC) are vulnerable to infectious diseases, acute injuries and long-term respiratory problems. Engagement with this marginalised population is a challenge as UK drug treatment services have little to offer PWUC. Although services for people who use drugs can provide the equipment needed for safe injecting, supply of equipment to reduce risk when smoking crack is prohibited by law. This means most PWUC make the pipes they use to smoke crack from unsafe materials (increasing respiratory harm), share their pipes (blood borne virus & COVID-19 transmission risk) or inject drugs rather than smoke them (high risk for HIV, hepatitis C,& bacterial infections). Research, from countries such as Canada where crack pipe provision is legal, show that safe inhalation interventions increase PWUC engagement with services and reduce pipe sharing, drug injecting and related health harms.

The SIPP (Safe inhalation pipe provision) intervention has been developed with PWUC and with input from service providers. It consists of a kit with heat-resistant glass pipe, risk reduction information, and tailored training for service providers. The SIPP kit will be provided to PWUC for six months in rural and urban locations in Avon & Somerset and Nottinghamshire. We will work with three drug treatment services and three peer-led networks to deliver SIPP. We have local police force support. We will train and support peers to conduct research with PWUC who don't access services and to ensure our methods and materials are acceptable.

We will use quantitative and qualitative methods to understand the needs of the local community and evaluate SIPP. We will conduct a survey at two time points (before and after SIPP provision), recruiting through peer networks and treatment services, including at three comparison sites where there will be no intervention. Every time someone receives a SIPP kit

they will complete a brief questionnaire so we can measure change over time in individual risk practices. We will conduct interviews with PWUC and SIPP providers to understand SIPP acceptability.

Our aim is to evaluate a safe crack inhalation intervention distributed to people who use crack via drug treatment services and peer networks in order to reduce crack-related health harms and inform legislative review. Our main outcome will be an assessment of whether SIPP reduces pipe sharing. Outputs will include: optimised SIPP intervention; protocols for service implementation; crack risk reduction resources co-produced with PWUC; evidence for legislative review.

We are a multi-disciplinary team with expertise in working to improve health outcomes for marginalised populations. The proposal is the product of an academic, community and industry collaboration: team members include service users and providers. SIPP has potential to reduce health harms, including COVID transmission, and engage a hard to reach population with drug treatment services. Exchange Supplies, a well-regarded social enterprise, will co-develop and provide SIPP kits for free. We have permission from Nottinghamshire and Avon & Somerset police for drug services to participate without risk of prosecution. We will provide training to peers and providers in research methods and crack risk reduction. PWUC alongside other stakeholders (police, commissioners, treatment providers) will be involved throughout the project to ensure our methods are ethical and acceptable and that our findings and outputs are relevant.

Who can participate?
People aged 18 years or older who have used crack in the last 28 days.

What does the study involve?
Safe inhalation crack cocaine pipes will be distributed for a period of 6 months through drug treatment services and peer networks of people who use crack. The impact of this distribution will be evaluated by a mixed-methods evaluation using qualitative and quantitative methods.

The quantitative evaluation will involve a pre- and post-intervention survey which will measure changes in outcomes at baseline and follow-up among participants. We will examine evidence of a dose-response relationship between intensity of exposure to SIPP and primary (crack pipe sharing in the past 28 days) and secondary outcome measures (drug treatment service engagement; reduced injecting; acute injuries; use of homemade pipes; use of ash, respiratory risk markers).

Survey participants will be recruited via drug treatment services and through peer networks of people who use crack cocaine. Participants will complete a 20-30 minute structured closed questionnaire that will be administered by drug treatment service staff or peer researchers, with consent-taking built into the survey platform.

The qualitative evaluation will involve a combination of 32 interviews with PWUC (lasting up to 60 minutes), and 8 focus groups (lasting up to 120 minutes) comprised of PWUC, service provider staff, and other relevant stakeholders such as the police. This qualitative work will be complemented by observations conducted during fieldwork visits. The qualitative workpackage will assess SIPP acceptability, fidelity, and contextual mechanisms of impact, and will focus on understanding implementation experience and impact on practice from the perspective of people who use crack and drug treatment service staff, and the process of implementation in context.

What are the possible benefits and risks of participating?
Long term potential benefits of this study include sustained harm-reduction support from drug treatment services throughout the United Kingdom. This includes the provision of safe inhalation equipment which international evidence suggests reduces some of the risks associated with crack cocaine use (reduced viral transmission; reduced respiratory damage), and sustained engagement with drug treatment services among a highly marginalised population providing an opportunity to address broader health and social harms associated with crack use.

We recognise that discussing drug use, drug treatment care, and the possible experience of stigma due to crack use can be difficult. We also recognise that there is a risk of pre-existing stigma and prejudice, which can be a barrier to research engagement with PWUC and staff. Interviews with people who use crack will concentrate on their experiences of the health consequences of smoking crack; care seeking practices (self-care/medical care/drug treatment services); barriers and facilitators to engagement with drug treatment services; barriers and facilitators to safe crack pipes; crack use (smoking techniques/practices, e.g. home-made pipe use; crack use management); perceptions of the SIPP intervention; what 'safe' crack smoking might look like for each participant. Being asked to discuss some of these topics may cause embarrassment or distress for participants.

Where is the study run from?
London School of Hygiene & Tropical Medicine (UK)

When is the study starting and how long is it expected to run for?
June 2022 to December 2025

Who is funding the study?
National Institute for Health and Care Research (NIHR) (UK).

Who is the main contact?
Aubrey.Ko@lshtm.ac.uk

# Contact information

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Scientific

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# Additional identifiers

### Integrated Research Application System (IRAS)
325186

### Central Portfolio Management System (CPMS)
55169

### National Institute for Health and Care Research (NIHR)
133118

# Study information

### Scientific Title
Safe inhalation Pipe Provision (SIPP): A mixed method evaluation of an intervention to reduce health harms and enhance service engagement among people who use crack cocaine in England

### Acronym
SIPP

### Study objectives
Study objectives:
1. Measure the effect and cost-effectiveness of SIPP on harms and risks associated with crack use (pipe sharing, presentation at drug services, using home-made pipes, cuts/burns, crack injecting).
2. Evaluate SIPP fidelity, reach and acceptability in diverse drug treatment and peer-network settings.
3. Explore the barriers and facilitators to SIPP uptake and service engagement among people who use crack.
4. Explore the mechanisms through which SIPP facilitates changes in health risks and access to services, to inform implementation at scale.
5. Build peer-network research capacity and explore whether the quality and impact of their SIPP engagement with PWUC differ in comparison with SIPP engagement through drug treatment services.

6. Co-develop a scalable SIPP toolkit and harm reduction resources to enhance PWUC engagement with drug treatment services and to facilitate crack-related risk reduction practices.
7. Translate evidence to policy and advocacy outputs,including to inform legislative review.

## Ethics approval required
Old ethics approval format

## Ethics approval(s)
Approved 22/11/2022, Research Ethics Committee of London School of Hygiene & Tropical Medicine (Keppel Street, London, WC1E 7HT, United Kingdom; +44 (0)20 7636 8636; ethics@lshtm.ac.uk), ref: 325186

## Primary study design
Observational

## Study design
Mixed methods cross-sectional

## Study type(s)
Prevention

## Health condition(s) or problem(s) studied
Drug use

## Interventions
This research study will evaluate a safe crack inhalation intervention distributed to people who use crack via drug treatments services and peer networks in order to reduce crack-related health harms and inform legislative review.

SIPP comprises of :
1. The SIPP kit: : A hard plastic case containing a straight stem borosilicate glass pipe; steel gauze filters/meshes; plastic mouth pieces and harm reduction information.
2. Provider training: an online crack harm reduction training module delivered to service providers prior to SIPP kit distribution.
3. Peer-to-peer training: a face-to-face risk reduction intervention developed by peers

We will employ a quasi-experimental design comprising of a pre-post comparison study with a non-equivalent control group and a nested qualitative study to identify impacts and predictors of SIPP use to inform intervention scale up and an assessment of its cost-effectiveness.

Our primary outcome measures are:
1. Crack pipe sharing in the past 28 days
2. Drug treatment service engagement; reduced injecting; acute injuries (cuts, burns); use of homemade pipes; use of ash, respiratory risk markers (difficulty breathing, chest pain, coughing blood).
The intervention will be evaluated through a mixed-methods process evaluation which includes quantitative and qualitative methods.

The quantitative evaluation will see a pre-and post-intervention survey measure the changes in outcome measures at baseline and follow-up amongst participants in intervention and control sites. We will examine evidence of a dose-response relationship between the intensity of

exposure to SIPP and primary and secondary outcomes. Recruitment of participants will be via drug treatment services or through peer networks, and consent procedures will be built into the survey platform. Participants will receive £10 for participating in the survey.

The qualitative evaluation will consist of 32 interviews of PWUC which will last up to one hour each, and 8 focus groups lasting up to two hours comprised of PWUC, service provider staff, and other stakeholders such as the police. Interviews will also discuss the lived experience discuss drug use, drug treatment care, and stigma. Qualitative work will assess the acceptability, fidelity, and contextual mechanisms of impact of SIPP. They will also focus on understanding the experiences of implementing SIPP and the potential impact on practice from the perspectives of PWUC, drug treatment service staff and the process of implementation in context.

### Intervention Type
Other

### Primary outcome(s)
Number of participants self-reporting sharing of crack pipes in the past 28 days measured using questionnaire at baseline, then 6 months.

### Key secondary outcome(s)
Measured using questionnaire at baseline, then 6 months:
1. Number of new attendances at drug treatment service sites to obtain SIPP
2. Number of times injected in the last 28 days
3. Reporting of current acute injuries defined as cuts/burns to mouth or lips verified by interviewer observer
4. Number of participants who use homemade pipes in the last 28 days
5. Number of participants using ash as a crack suspension device
6. Number participants reporting respiratory risk markers defined as difficulty breathing, chest pain, coughing blood in the last 28 days

### Completion date
31/12/2025

## Eligibility

### Key inclusion criteria
1. People who use crack: self-reported crack cocaine inhalation or injection within the past 28 days
2. Aged >18 years
3. Capacity to consent

### Participant type(s)
Other

### Healthy volunteers allowed
No

### Age group
Mixed

**Lower age limit**
18 Years

**Upper age limit**
100 Years

**Sex**
All

**Total final enrolment**
1473

**Key exclusion criteria**
1. In secure services
2. Significant mental health problems

**Date of first enrolment**
27/03/2023

**Date of final enrolment**
30/06/2024

# Locations

**Countries of recruitment**
United Kingdom

England

**Study participating centre**
**Bristol Drugs Project Limited**
Bristol Drugs Project
11 Brunswick Square
Bristol
England
BS2 8PE

**Study participating centre**
**Pow**
16 Independent Street
Nottingham
England
NG7 3LN

**Study participating centre**

**Change Grow Live**
2 & 3 Sherwood Court
Sherwood St
Mansfield
England
NG18 1ER

**Study participating centre**
**The Health Shop Nottingham**
Nottingham Wellbeing Hub
73 Hounds Gate
Nottingham
England
NG1 6BB

# Sponsor information

**Organisation**
London School of Hygiene & Tropical Medicine

**ROR**
https://ror.org/00a0jsq62

# Funder(s)

**Funder type**
Government

**Funder Name**
NIHR Evaluation, Trials and Studies Co-ordinating Centre (NETSCC)

# Results and Publications

**Individual participant data (IPD) sharing plan**
All survey data are stored on LSHTM’s secure server. Personal identifiers have been removed from datasets and kept separately from the questionnaire. Study data will be stored for 10 years in line with LSHTM’s policy on research data retention. Deidentified datasets will be stored on LSHTM's data repository and requests for access will be considered and where appropriate made available (http://datacompass.lshtm.ac.uk).

## IPD sharing plan summary

Available on request

## Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|---|---|---|---|---|
| Results article | Respiratory harm | 09/05/2026 | 26/05/2026 | Yes | No |
| Protocol article | | 23/01/2024 | 24/01/2024 | Yes | No |
| Other publications | Qualitative findings | 28/01/2026 | 30/01/2026 | Yes | No |
| Study website | | 11/11/2025 | 11/11/2025 | No | Yes |