

# EVALUATION OF THE PILOT PROVISION OF SINGLE USE PLASTIC WATER AMPOULES TO PEOPLE WHO INJECT DRUGS IN GLASGOW

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# 1 INTRODUCTION

## 1.1 *Background*

Greater Glasgow and Clyde (GG&C) has an estimated injecting population of **8862**.<sup>1</sup> There are **74** Injecting Equipment Provision (IEP) outlets across the area to meet the paraphernalia needs of this population. Over the past year the NEO IEP data collection system recorded **67,586** transactions, with over 1 million needles issued. Heroin is the main drug injected followed by Performance and Image Enhancing Drugs (PIEDs) and cocaine, respectively.

Since 2009 GG&C has provided a comprehensive package of paraphernalia, including needle choice, spoons, filters, citric acid and swabs. However, until the start of this pilot, water for injecting (WFI) was not available from any of the **62** pharmacy outlets. In fact prior to the pilot only **3** outlets provided WFI and this was in a glass ampoule form.

## 1.2 *Rationale for Providing WFI*

Water is an essential component in the injecting process. Primarily, it is used as a diluting agent to dissolve powder forms of drugs into an injectable solution.

Water can also be used 'post injection' to flush out the needle and syringe. This is in an attempt to stop the needle blocking and to provide some level of cleansing. Water used in this way is termed 'flush water'. This flush water is often kept and used to prepare multiple injections.

Water that is used to prepare drugs for injection is often shared or obtained from non-sterile sources. Injectors have reported using kettle water, tap water, bottled water, toilet water and puddle water. In 2004 a Scottish Drugs Forum study found that **86%** of the Glasgow injectors they interviewed had shared water at some point.<sup>2</sup> Many of the respondents in the study also viewed sterile water for injection as a 'priority item' which they would like to see supplied. More recently, the Needle Exchange Surveillance Initiative (NESI) suggested the proportion of current injectors in GG&C who reported sharing water in the previous 6 months was **28%**.<sup>3</sup>

Water which is shared amongst injectors may pose a risk of transmitting blood-borne viruses<sup>4</sup>. In addition to blood-borne virus risks, unsterile sources of water often carry bacteria

that can cause serious infections when injected. The annual Shooting Up Report suggests that bacterial infections remain very common amongst intravenous drug injectors.<sup>5</sup>

WFI is a specially prepared, cleaned and purified form of water which contains no chemicals or bacteria.

### **1.3 Legal Position**

Since 2003, changes to the Misuse of Drugs Act 1971 have allowed the supply of “*ampoules of water for injection, only when supplied or offered for supply in accordance with the Medicines Act 1968 (4) and of any instrument which is in force there under.*”

In 2005 amendments were made to the Medicines Act 1968 which facilitated the provision of water for injection. Part II of Schedule 5 to the Prescription Only Medicine Order (Exemptions from the restriction on supply), inserted the following new clauses providing exemptions for:

- *3a: Persons employed or engaged in the provision of lawful drug treatment services.*
- ***3b: Ampoules of sterile water for injection containing not more than 2 ml of sterile water.***
- *3c: The supply shall only be in the course of provision of lawful drug treatment services*

Effectively, these changes to both Acts make the distribution of ampoules of water for injection legal, subject to the above size restrictions.

### **1.4 Current Provision**

Since WFI became legal to provide in 2005, the licensed product that has been readily available comes in the form of a 2ml glass ampoule. The company that supplies these also developed an ‘amp snapper’ to reduce the likelihood of accidental cuts. However, despite the availability of these ampoules and snappers there has been a dearth in provision, with the most recent IEP report stating provision by only **10%** (27/ 269) outlets in 2010/11.<sup>6</sup>

For those who choose not to offer the glass ampoules, the following reasons are often cited:

- Glass ampoules pose a ‘cutting risk’ when opening and this may further increase the risk of blood-borne viruses;
- Glass ampoules may create more hazardous drug litter; and

- The cost per ampoule is prohibitive.

Pharmaceutical and medical supply companies have been trying exhaustively to establish a supplier of 2ml plastic ampoules without much success; however, in a recent development, Frontier Medical Supplies (the current Scottish tender contractors) have identified a manufacturer of 2ml plastic ampoules and managed to bring this to market at the same price as glass ampoules.

The 'luer slip' design of the ampoule allows for needles or barrels to be easily attached to the end and water drawn without spillage. The plastic is made from robust polypropylene and is tough enough to be carried in a bag or pocket without fear of breakage.

## **2 METHODS**

### ***2.1 Pilot Overview***

The new plastic ampoules of WFI were piloted in Glasgow's 3 city centre IEP outlets. These are the city's busiest outlets with over 2000 transactions per month to approximately 900 unique clients.

The pilot ran from the 1<sup>st</sup> of July 2012 until the 31<sup>st</sup> of August 2012

The plastic ampoules were made available to all clients using the service regardless of the drug they were injecting. A poster advertising the initiative was produced and displayed in each outlet (Appendix 1).

As the ampoules were supplied separately from injecting equipment packs, users could take as many or as few as they required. When handing over the water ampoules a demonstration was given on how to open the ampoules, insert the needle and draw up. The following information points were also relayed:

- These ampoules are single use;
- Do not share these ampoules with others; and
- Take as many as you need.

## ***2.2 Analysis of IEP service data***

The number of transactions and the number of needles/syringes and water ampoules distributed to clients during the WFI pilot period were extracted from the NEO system. All IEP outlets across Greater Glasgow and Clyde are linked to this central data collection system (called NEO). It is a comprehensive recording and monitoring system which collects and collates the core data set requested by ISD.

## ***2.3 Client survey methodology***

Clients attending the 3 pilot sites were routinely asked to take part in a short survey relating to WFI when presenting for a needle and syringe transaction. Only those clients who were aware that WFI was available were selected for the study. The outlets taking part in the pilot were Boots Queen St, Abbey Pharmacy Trongate and the Glasgow Drug Crisis Centre – The survey was undertaken between the 3<sup>rd</sup> and 7<sup>th</sup> of September. Clients were asked a series of interview questions relating to their choice of water in the past month and previous to this. Photographs of water sources were used to allow respondents to easily identify them. Overall the study aimed to assess the acceptability and uptake of single use WFI ampoules to people who inject drugs. A copy of the questionnaire can be found in Appendix 2.

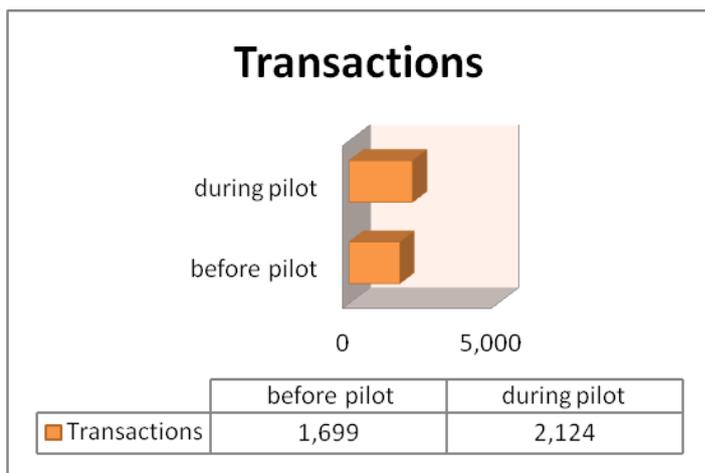
# **3 RESULTS**

## ***3.1 IEP service data***

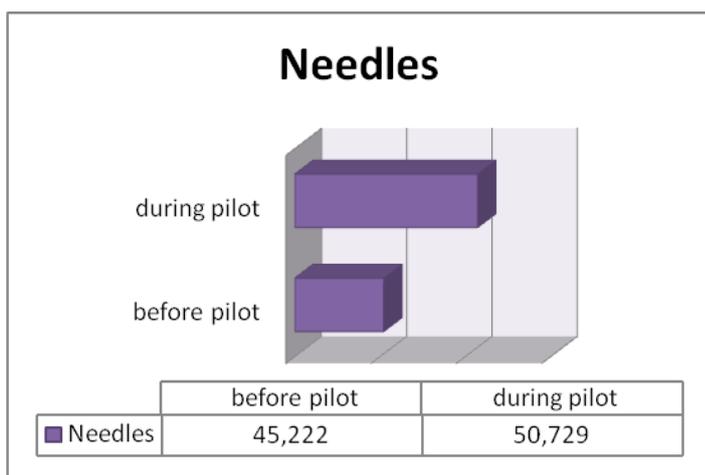
Over the 2 full months of the pilot **31,518** ampoules were provided across the 3 pilot sites. General IEP transactions increased by 25% across all of these outlets during this period, when compared to the preceding 2 months (Figure 1). This increase was not seen at other sites across GG&C, i.e. those not providing water. In these sites a decrease of 5% occurred.

There was also a 10% increase in the number of needles/syringes provided during the pilot, from the 3 pilot sites (Figure 2).

The ratio of 'needles/syringes to water' distributed was 1.6 needles/syringes per ampoule of water. However, it should be noted that some clients were not injecting street drugs which would require dilution, i.e. oil based steroids.



**Figure 1. Number of transactions before and during the water for injecting pilot at the three pilot sites.**



**Figure 2. Number of needles/syringes distributed before and during the water for injecting pilot at the three pilot sites.**

### **3.2 Cost**

The cost for providing **31,518** ampoules at 18 pence per unit was **£6399**. No additional pharmacy fees were incurred as pharmacies are remunerated per transaction.

### **3.3 Client survey findings**

A total of **42** individuals were interviewed in the survey across the three pilot sites; 32 (69% were male and 10 (31%) female. Note that some of the totals below may not add up to 42 (or 100%) as respondents were allowed to select more than one answer, for example if they had used more than one water source in the past month.

Prior to the introduction of WFI, clients described their main sources of water for mixing with drugs as:

- **27** (64%) bottled water
- **13** (31%) tap water
- **4** (10%) kettle water
- **3** (7%) toilet water (from the bowl)
- **1** (2%) puddle water
- **1** (2%) cup from water from exchange

When preparing drugs for injecting during the pilot period clients reported that:

- **39** (93%) had used the plastic ampoules of WFI over the past month;
- **25** (60%) was their only water source when preparing drugs over the past month;
- **14** (33%) used WFI *and* another source of water over the past month; and
- **3** (7%) used *only* another source over the past month.

Among the 17 individuals who reported using sources of water, other than WFI, for mixing drugs over the past month, the most common were:

- **8** (19%) used bottled water
- **9** (21%) used tap water
- **5** (12%) used boiled kettle water

During the pilot period, **27** (64%) individuals reported flushing their needle and syringe out after injection in the past month. Of these, **21** (77%) reported that they used the remainder of the WFI to flush.

Other reported sources of water used to flush in the past month were:

- **10** (37%) bottled water
- **9** (33%) tap water
- **3** (11%) kettle water

In the past month, clients reported preparing and injecting their drugs:

- **8** (19%) Indoors only
- **0** Outdoors only
- **34** (81%) Both

**Thirty-five** clients felt that WFI had changed how they prepare and inject drugs. When asked both how it had changed their preparation process, and for general comments, the following answers were recorded without edit:

“I use my own water if I am in my house but I like the amps if I am out and about”

“It’s stopped a lot of people sharing water”

“It’s cleaner and there are lots of places you can’t get water”

“I am homeless so getting a hold of water has been a nightmare for me, things are much easier”

“It’s cleaner”

“I am going to use them all the time as they’re safer”

“It lowers my risk of getting a BBV”

“I find it easier with the amps”

“Its cleaner and it prevents contamination”

“Safer”

“It makes things more sterile”

“I think it’s safer as I don’t share water with people”

“It’s a lot less hassle for homeless guys like me”

“Helped, safer”

“Knowing everything is sterile is great”

“I’m being more careful now my water is sterile”

“Less risk as I no longer have to use toilets”

“It’s much less hassle. I don’t have to boil the kettle and wait for it to cool”

“I have used puddle water before as I had no money for bottled water. I don’t have to do this now”

“It takes longer to prepare my drugs but I no longer have to take a cup of water away with me from the exchange”

“Easier and safer”

“Safer”

“Easier”

“It’s not as sore to inject”

“Its much easier not having to get water from other places”

“I don’t have to go to public toilets and risk getting lifted”

“It’s made it safer for me”

“I always have a couple on me so I don’t get stressed about finding water”

“My and my pals have used all sorts of water if we’re stuck. This is a good thing”  
“Much safer, no need to worry about cross infection”  
“They are good but I don’t do anything differently”  
“They’re brilliant”  
“I hope we can get them all the time”  
“Keep them going”  
“Could do with more water in them”  
“Good service, thanks”  
“Good but not enough in each one”  
“It helps promote safer injecting”  
“Safer than any other water. Handy to have in your pocket”  
“It should have been brought in sooner”  
“Happy they’re available”  
“I’m just out of prison and this is my first time collecting water”  
“Brilliant”  
“As I use at home I don’t need them”

## **4 CONCLUSIONS**

The main aim of this study was to assess the acceptability and uptake of the provision of ‘water for injecting’ in 2ml plastic ampoules, across 3 pilot sites in Glasgow City Centre.

Overall, the findings have been extremely positive. The vast majority of the respondents in this study reported not only using the ampoules, but also preferring them to all other available sources. Most of them also recognised the relative safety of using them compared with using other water sources and indeed reported that they had chosen to use them because of this.

This study confirmed that if sterile WFI is not available many injectors will use unsuitable sources of water, which may not be sterile or, if shared, present a risk of spreading blood-borne viruses.

The 2ml of water contained in each ampoule seems to be adequate for most people’s needs when preparing drugs for injection. Some injectors also used the remainder of the water left in the ampoule to flush their needle and syringe out for later use. However, this re-

use would indicate that there is also a need to further educate injectors about the importance of using a clean needle and syringe every time they inject.

It is known from NEO data that many injectors travel to Glasgow City Centre frequently and use the IEP outlets there. Therefore, if they are some distance from home they would not always have access to running water or facilities to sterilise water (such as boiling) for preparing drugs for injecting; these individuals may inject outdoors or in other public places. This is consistent with the large proportion of survey respondents here who reported injecting outdoors, and reinforces the need for a sterile water source in these situations.

A contemporaneous increase in the number of transactions and needles/syringes distributed was observed in the pilot sites after the provision of WFI began; it is possible that the provision of the ampoules, in addition to offering injectors a safe method of dissolving their drugs, attracts people who inject drugs into IEP outlets. This may offer services additional opportunity to engage with people who inject drugs.

## References

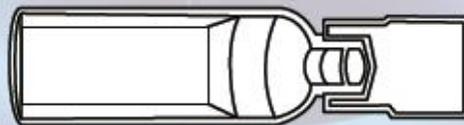
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## Appendix 1

**THE DROUGHT  
IS OVER -  
FREE WATER  
HERE!**

**You wouldn't share needles  
so don't share water**

**Many injectors are still getting blood borne  
viruses, infections and abscesses through sharing  
or reusing water.**



*We now provide 2ml amps of sterile water –  
Please take away as many as you need.*

**Ask staff for a demonstration**

## Appendix 2

### Water for injecting Survey

Name of IEP service: \_\_\_\_\_ NEO I/D \_\_\_\_\_ Male/female

**In all questions please circle all choices/answers that apply**

In the last month, where have you obtained your water for injecting from (i.e for mixing with drugs)?

**Pharmacy, GDCC, shop, home, public toilet or other (please specify).....**



A



B



C



D



E

F. Other (please specify):

.....  
 .....  
 .....

1. In the last month, which of the above sources of water did you mainly use for mixing with drugs?

**A. B. C. D. E. Other (please specify).....**

2. [If option E was selected] Have sterile water amps always been your main source of water for mixing with drugs? **Yes No**

3. [If No] What was your main source of mixing water before this ?  
**A. B. C. D. E. Other (please specify)**.....
4. In the last month, have you flushed your needle and syringe out after injecting? **Yes No**
5. [If Yes] In the last month what was your main source of water for flushing?  
**A. B. C. D. E. Other (please specify)**.....
6. [If option E was selected] Have sterile water amps always been your main source of flush water? **Yes No**
7. [If No] What was your main source of flush water before this ?  
**A. B. C. D. E. Other (please specify)**.....
8. In the last month, have you prepared your drugs for injecting:
- Indoors**
  - Outdoors**
  - Both**
9. In the last month have you obtained sterile water amps from a needle exchange ? **Yes No**
10. If No, were they available at that exchange? **Yes No**
11. Has the provision of sterile water amps changed your preparation and injecting practices?  
**Yes No**
12. If Yes, how?:
- 
13. Do you have any comments about the sterile water amps?
-