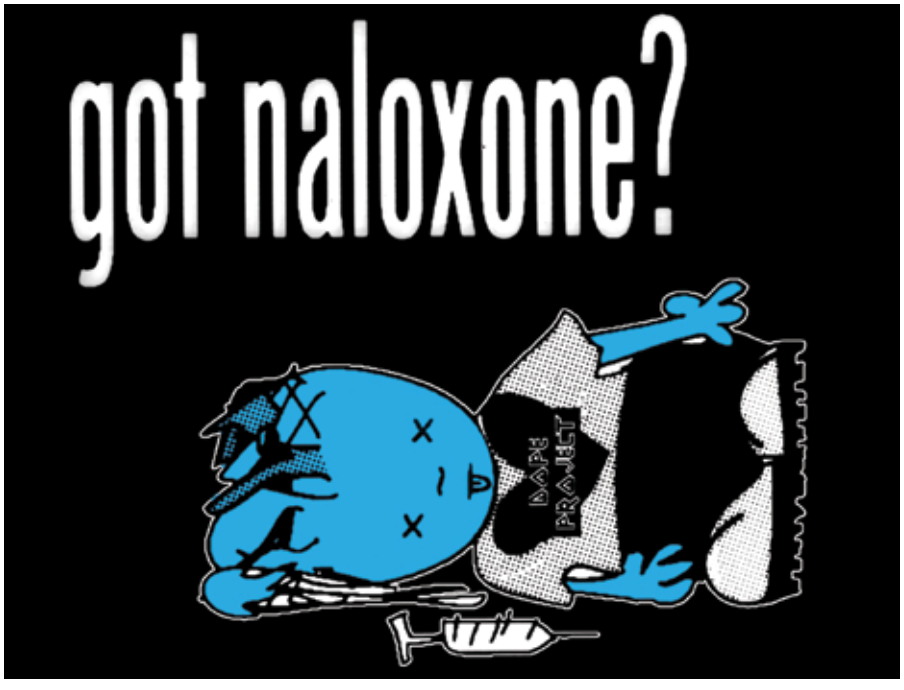
# CITIZEN MEDICS

More than one in 20 heroin overdose emergency kits handed out to drug users has been used to counteract an overdose, a study has found. **Rosie Mundt-Leach**, **Siobhan Jackson**, **Francis Keaney** and **Alun Morinan** report on a unique naloxone kit experiment in south London.

The ability of opioid drugs to reduce the rate and depth of breathing to dangerously low levels is the cause of most illicit drug fatalities. A rapid response is required to avoid death and disability resulting from the prolonged lack of oxygen.

Take-home naloxone, an opioid antagonist, was first seriously proposed in an editorial in the British Medical Journal in 1996. Dr John Strang and colleagues suggested that naloxone might be given to high-risk opioid users and more controversially, to all users receiving treatment. They concluded: 'The distribution of naloxone should be seriously considered for trial and evaluation. Home-based supplies of naloxone would save lives.'




In the intervening years, a lot has happened in this field, most significantly the change in the law that came into effect in June 2005 enabling any third party to administer naloxone in an emergency situation. Two recent National Addiction Centre publications have reported on the training needs and opportunities for the emergency administration of naloxone by opioid users and family carers. In June last year the NTA announced that 16 pilot sites across England would start providing naloxone kits to family members and carers of opiate users.

Over the last three years, at the South London & Maudsley NHS Foundation Trust's Beresford Project in Woolwich, staff had become aware of the importance of giving out naloxone directly to service users. Staff were keen to increase the low take-up rate amongst clients, whilst also monitoring the subsequent use of the drug.

One of the early problems encountered was with the flimsy cardboard packaging and low dose of naloxone. Instead, we started giving out a 2mg dose in a pre-filled syringe, in a tough plastic box, to which we taped a hypodermic needle. Any possible drawback from using an increased dose of naloxone was outweighed by the ease of assembly of the equipment.

We also changed our policy from an opt-in to an opt-out system and offered the training to all opioid users, not just injectors who were at a higher risk of overdose. This reduced any stigma associated with giving the drug to a particular subgroup of clients and also ensured that naloxone dispensing and training became a routine feature of the clinical care.

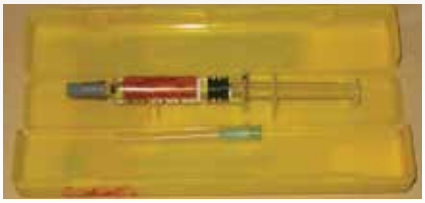
Training for clients became an integral part of each key worker's job and covered recognising the signs of an overdose, how to inject naloxone into the thigh muscle and how to manage an ambulance call. Signed prescriptions were prepared for each client and placed, with easy-to-read overdose education leaflets, in their individual script folders.

The first supply of pre-filled syringes arrived in May 2008 and by September 2009, 416 kits had been dispensed. The local ambulance service and police force were informed of the programme and

## Kits for hits: two drug users explain how their naloxone packs saved lives

**Case study 1:** "This man had a dig, I was surprised how much he used, but the stuff wasn't very good and he put loads in to make up for it. Straightaway you could see his eyes roll back. His lips started going a blue colour. We couldn't wake him up. We knew he'd gone over. I slapped him a couple of times and nothing happened. He was making a groaning noise. I had the naloxone in my jacket zip up pocket where I usually keep it so it's handy. I know a lot of people who use, everyone I know uses, so I need to have it with me. I got the thing out of the box and put the needle on. I injected his behind – I thought that's the safest place. It worked and he came round in about two minutes. At first he was saying, "I was alright, you didn't need to do that", but I did need to, he was going to die. I felt great and the other people who were there with me said I did the right thing. I saved his life and hopefully, he won't be so stupid next time. I don't know him well, so I don't know if he had a family, but say he had a mum, she'd have been destroyed if he'd died."

**Case study 2:** "Someone got some gear and came back to the house where I was. He insisted on injecting it, even though he wasn't used to it. The amount he used was minute, I'd say £3 worth. Someone else gave him the hit. Straight away he was half gouching, really sleepy, his eyes were glazed. Then his lips started going mauvish and he was starting to fall asleep. He was slumping forwards where he was sitting. I grabbed hold of him, his breathing was really shallow. I told someone to get my rucksack with the kit in it. He was going mauver and mauver – his breathing was terrible and he made a noise like a death rattle. I took the kit out and put a needle on. I put it in the front of his thigh, right through his jeans. I pulled back a bit to make sure it was OK and then pushed it down. I undid his belt a bit so that he could breathe more easily and sat him up and lifted his head to straighten his airway. Then the colour started to come back into his lips and he was ok again. I wanted to call an ambulance, but he refused and said no. All the people there said I did well. One of them was his brother, he said 'Thank you for saving my brother's life'."



expressed their strong approval and support for it.

To date, we have first hand reports of a possible 24 lives saved by the administration of naloxone. The doses were given by 15 of our clients, three of whom made multiple saves of two, three and four lives. The average age of the person saved, known in 14 cases, was 39.5, with a range of 28 to 48 years.

In seven of the incidents an ambulance was called, although a number of those treated refused the offer, but in no case were the police informed. At least four of the overdose victims were clients of the project. Almost two-thirds of these incidents were reported to a member of the project staff within 24 to 72 hours.

The reactions to the injection of naloxone varied, with some overdose victims failing to recognise the potential life-threatening situation they had been in. One woman who had been brought round demanded £20 compensation from her rescuer for the wasted hit. However, many of the associates of the person saved expressed their gratitude to the rescuer.

One ambulance crew allegedly accused the rescuer of precipitating the overdose, mistakenly thinking it was heroin not naloxone that he had injected. The reactions of those administering the naloxone ranged from nonchalant, to enormous relief, to anger directed towards the victims for putting themselves at risk and the bystanders who were more interested in enjoying their hits rather than helping the person in distress.

We have tried to develop a culture of praise and recognition by putting up posters at the Beresford Project and producing leaflets describing the successful use of naloxone in the clients' own words. The publicising of significant landmarks of 100, 200 and 300 kits dispensed and each life saved have become cause for celebration. When interviewing clients after a save, we have commended their quick thinking and effective action and thanked them for what they did. The project staff have felt a sense of pride in providing a service which has saved lives and increased the sense of partnership between key workers and their clients.

It would be fitting to conclude with this endorsement from one young user who has already saved four lives with naloxone. Adam attended the project yesterday and said he used his naloxone two weeks ago on someone who had overdosed on a small amount of heroin after a six week break. He called an ambulance just as the victim suddenly started breathing again. It took some time to work and Adam was very shaken up, but said he learnt a lot from the situation. Another kit was issued and the training was repeated for him and a friend. Adam said: "I think it's brilliant they're giving out naloxone. I saw something on TV and they were saying that people shouldn't have it because it would make people take more drugs, but that's stupid. It's a good thing to have and it saves lives."

Perhaps, now is the time to consider extending training in the emergency administration of naloxone to staff working in day programmes, rehabilitation units and hostels – as well as the families of opioid users.

**The authors would like to thank Professor John Strang for his valuable comments.**

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