Public Health Agency

Health and Social Care Board

Take Home Naloxone

Report on supply and use to reverse an overdose

2012-2016

Contents

1 Introduction

Naloxone is an opioid antagonist, which temporarily and rapidly reverses the effects of heroin and other opioids. Given on its own, naloxone produces very little effect, however, when given in higher doses it can reverse the effects of opioid overdose. Naloxone has been used world-wide and for many years to reverse opioid overdoses in emergency settings for users of illegal opiates by ambulance crews and other healthcare professionals.

Following overdose by heroin injection, death occurs within 1 to 3 hours, limiting the window of opportunity to intervene. Most drug overdose deaths occur in the company of others, with up to three-quarters of overdoses being witnessed by others. Therefore supplying "Take Home Naloxone" and training to people within the opioid using community can be an effective lifesaving intervention.
(http://www.prenoxadinjection.com/drug/use_naloxone.html)

Take Home Naloxone is a Prenoxad Injection (naloxone hydrochloride 1mg/1ml solution for injection) which is licensed for emergency use in the home or other non-medical setting by appropriate individuals for the reversal of respiratory depression induced by opioids. It is injected intramuscularly and can be administered by anyone in an emergency overdose situation.

Since 2012, the Public Health Agency has funded a Take Home Naloxone programme, which aims to supply Take Home Naloxone packs to those at risk of opioid overdose.

The programme is coordinated by the Public Health Agency, with support from the Health and Social Care Board. All packs are supplied by staff within individual Health and Social Care Trusts and the Prison Service. Service User representatives, Council for the Homeless NI and Extern have also played a major role in providing advice, support and training.

Throughout the programme, the PHA funded Council for the Homeless NI to provide opioid overdose response training (CPR and administering Take Home Naloxone), to enable relevant individuals (i.e. Community Addictions Teams or Drug Outreach Teams) to provide the above training to those at risk. CHNI also provided mentoring to further support staff post-training. The training programme was evaluated in 2014-15 and the evaluation described feedback on the training as "universally positive". (*GILLIAN SHORTER, TIM BINGHAM, 'Service Review: Take Home Naloxone programme in NI. Consultation with service users and service providers', [Report], Public Health Agency, 2016)*

2 How the Take Home Naloxone Programme works

Supply of naloxone is primarily made by staff from Community Addictions Team within each Health and Social Care Trust, but in some cases the supply is facilitated by other staff, e.g.

Outreach staff, who are well placed to engage with those not receiving Substitution Therapy and who may be at a very high risk of overdose. Outreach staff can provide the training to clients, and support them to access naloxone from their local Addictions Team, or where Outreach teams have a nurse who can supply either under the Patient Group Directive (PGD) or as a nurse prescriber, can supply naloxone directly to clients. In prisons, naloxone is supplied by a Consultant, while training of clients is provided by a voluntary sector service, ADEPT.

On 1st October 2015, legislation changed to allow staff working in Drug Treatment services / needle exchanges to supply naloxone even if they have no medical or nursing status. *(https://www.gov.uk/government/publications/widening-the-availability-of-naloxone/widening-the-availability-of-naloxone)* Systems are currently being put in place to enable the Public Health Agency to fund and support a number of service providers to expand availability and access to the service where appropriate.

3 How information is collected

The information collated in this report is from forms submitted to the Public Health Agency by staff within the 5 Health and Social Care Trusts, and by Northern Ireland Prison Service. In most cases the PHA requests only minimal information on supply so that clients cannot be identified. This means that while the number of times naloxone is supplied to clients is provided to the PHA, the number of individual clients supplied cannot be extracted from the data. When naloxone is resupplied to someone who has used it to reverse an overdose, the PHA requests additional information about the overdose, in order to build a better picture of how naloxone is used.

4 Patients supplied with naloxone 2012-2016

The figures provided in this report are based on forms received by the Public Health Agency. Figures are not included for occasions when naloxone was supplied but forms were not received by the PHA. The number of occasions on which naloxone was supplied may therefore be higher than those recorded here.

The number of times naloxone has been supplied has increased year on year since the programme began. Between 1st April 2015 and 31st March 2016, patients were supplied with naloxone on 247 occasions, a 31% increase on the previous year.

Table 1: Number of times naloxone was supplied, by year	
April 2012-March 2013	139
April 2013-March 2014	163
April 2014-March 2015	188
April 2015-March 2016	247
Total supplied	746

Table 2: Number of times naloxone was supplied, by year and by Trust						
	Northern	**Southern**	**Belfast**	**Western**	**South eastern**	**Prison service**
April 2012-March 2013	79	20	0	10	0	30
April 2013-March 2014	19	15	84	27	15	<5
April 2014-March 2015	18	28	57	27	13	44
April 2015-March 2016	36	56	60	41	26	28
Total supplied	152	119	201	105	54	105

Overall, the highest number of times when patients were supplied with naloxone occurred in the Belfast Health and Social Care Trust, which supplied patients a total of 201 times. During the period 1st April 2015 and 31st March 2016, Belfast Trust supplied naloxone to clients on the highest number of occasions (60). The largest increases in supply between 2014-15 and 2015-16 were in the Southern, Northern and South Eastern Trust areas, where in all cases there was a 100% increase in the number of times naloxone was supplied.

Significant increases in supply during this period may be in part accounted for by changes in legislation, which previously allowed supply only to people at risk of opioid overdose, but from October 2015 allowed supply to anyone who comes into contact with someone at risks of opioid overdose (e.g. hostel staff, drugs workers or family members). Also during 2015, the PHA commissioned a number of new Low Threshold Services that provide outreach support to people who use substances harmfully. In some areas, outreach staff have been very active in supporting clients to access naloxone through their local Community Addiction Team, and this may also partially account for significant increases in naloxone supply.

5 Take Home Naloxone packs used to reverse an overdose

During the 4 year period between April 1st 2012 and March 31st 2016,[1] Naloxone was administered on 58 occasions and in 93% of these cases the patient survived.

Table 3: Number of times naloxone has been reported used to reverse an overdose, and number of cases in which patient survived.

	No. times has a pack been used to reverse an overdose	No. cases in which patient survived
April 2012-March 2013	<5	<5
April 2013-March 2014	<5	<5
April 2014-March 2015	16	15
April 2015-March 2016	34	31
Total	58	54

In 45 cases, the person who overdosed was male, in 5 cases they were female, and in 8 cases gender was not recorded.

The majority of overdoses happened to patients in their twenties (17 cases) or thirties (15 cases). Six overdoses happened to patients in their 40s and in 7 cases age was not recorded.

In 6 cases, immediate adverse reactions to naloxone administration were reported, mainly sickness/vomiting.

A very small number (<5) of the overdose patients were reported as having recently come out of prison, and/or were reported as having recently had detoxification treatment.

The most common place for the overdoses to occur was at someone else's house (22) or the patient's own home (19), with 5 cases reported taking place in a hostel, and 6 reported taking place elsewhere, e.g. car, squat, street or public toilet. In 6 cases, the location where the overdose took place was not reported.

Drugs taken

Out of 58 cases, the drugs believed to have been taken were reported in 51 cases. Out of these 51 cases:

- heroin was reported as taken in almost all cases;

[1] The programme began in July 2012

- 21 were reported to have taken 1 drug only, and in 20 of the cases this was reported to be heroin;
- In 30 cases, 2 or more drugs were reported taken. In 28 of these cases, heroin was one of the drugs.

Where patients had taken two or more drugs, other drugs were reported to have been taken in the following numbers of cases:

Table 4: Number of cases where substances additional to heroin had been taken, by substance.
2012-16

Substances taken	No. of cases
Benzodiazepines	14
Methadone	11
Pregabalin	6
Alcohol	6
Other opioids*	<5
Legal highs	<5
Buprenorphine	<5
Ketamine	<5
Methamphetamine	<5
Crystal meth	<5

* Includes codeine, dihydrocodeine and oxycodone

Of the very small number of cases (<5) where the overdose patient died, these were more likely to have reported to have taken other drugs as well as heroin.

Of the 54 cases where the overdose patient survived, drugs believed to have been taken were reported in 48 of the cases. In 47 of these, the patient was believed to have taken heroin.

Contact with emergency services

In 23 cases the ambulance service was contacted. Where reasons were given for not calling the ambulance service, the reason most commonly given was the patient had made a good or full recovery and it was felt that an ambulance was not needed. In a small number of cases other reasons were cited, including the patient refusing an ambulance, not wanting the "hassle", or being afraid of police coming.

In the small number of cases (<5) where the overdose patient died, the ambulance service was reported as having been called in half of these cases.

6 Conclusion

Based on the analysis of the use of Naloxone, it is clear that the service is an important lifesaving intervention. The PHA will continue to monitor in collaboration with the strong partnership that has made this service possible.