

# Finding a Needle in a Haystack

Take-Home Naloxone in England 2017/18

**Release**  
Drugs, the Law & Human Rights

# Release

The national centre of expertise on drugs and drugs law - providing free and confidential specialist advice to the public and professionals. The organisation campaigns directly on issues that impact on our clients - it is their experiences that drive the policy work that Release does. Release believes in a just and fair society where drug policies should reduce the harms associated with drugs, and where those who use drugs are treated based on principles of human rights, dignity and equality.

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A digital copy of the report and the interactive map of take-home naloxone in local authorities and prisons can be accessed online at:

<https://www.release.org.uk/naloxone-2017-18>

# Introduction

One of the most important and pressing challenges in UK drug policy today is preventing drug-related death. Drug-related deaths have increased significantly in recent years and the United Kingdom now has one of the highest rates of drug-related deaths in Europe (70 per million).<sup>1</sup> Many of these deaths are due to fatal opioid overdose – more than half (1,829) of the drug poisoning deaths registered in 2017 across England (3,482) involved an opiate, such as heroin.<sup>2</sup> It is therefore crucial that efforts to prevent drug-related deaths in the UK include specific interventions aimed at preventing fatal opioid overdoses, such as Take-Home Naloxone (THN) programmes.

Naloxone is an essential<sup>3</sup> life-saving medication that counteracts the effect of opioids and is used to reverse opioid overdose. THN programmes make naloxone available for people to take home, typically without a prescription, and include training on overdose management and naloxone administration. THN programmes are widely endorsed,<sup>4</sup> as evidence has shown that THN programmes reduce fatal opioid overdose<sup>5</sup> and are cost-effective.<sup>6</sup> THN programmes can operate in both community and custodial settings, such as prisons.<sup>i</sup> People released from prison are particularly vulnerable to opioid overdose; the risk of relapse and weakened tolerance levels makes the immediate post-release period fatal. Estimates suggest that there is a “three- to eightfold increased risk of drug-related death in the first 2 weeks after release from prison compared with the subsequent 10 weeks”<sup>7</sup> and “of prisoners with a previous history of heroin injecting who are released from prison, 1 in 200 will die of a heroin overdose within the first 4 weeks”.<sup>8</sup>

In October 2015, regulations were introduced permitting naloxone to be supplied without a prescription,<sup>ii</sup> with the aim of making naloxone more widely available across the UK.<sup>9</sup> Scotland,<sup>10</sup> Northern Ireland<sup>11</sup> and Wales<sup>12</sup> all have national naloxone programmes and report on THN provision, whereas in England the responsibility to provide THN is devolved to local authorities and there is no requirement to report on THN provision at the national level. This report updates Release’s previous reporting on ‘Take-home Naloxone in England: 2016/17’, which was the first independent analysis of take-home naloxone provision in England since the October 2015 regulations. In addition to updating the findings on THN provision in community settings, novel findings are presented on THN provision in custodial settings, such as in prisons, across England.

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i Prison THN programmes are operational in: Scotland, Northern Ireland, Wales, the United States, Canada, Estonia, and Norway.

ii The Human Medicines (Amendment) (No. 3) Regulations 2015, Regulation 10 enabled naloxone to be supplied by drug treatment services for the purpose of saving life in an emergency. “Drug treatment services” includes a wide range of people that can supply naloxone without a prescription – further guidance on this is available at: <https://www.gov.uk/government/publications/widening-the-availability-of-naloxone/widening-the-availability-of-naloxone>

# Take-home naloxone in community settings:

The availability of THN in England has notably improved since the last report, as nine local authorities have since introduced THN programmes,<sup>iii</sup> and THN was available in almost every local authority in England. However, there is still ample room to improve THN programmes in community settings. THN was still not available in Bracknell Forest,<sup>iv</sup> Darlington and North East Lincolnshire. Of the 152 local authorities in England, 145 reported dispensing a total of 40,033 THN kits in community settings in 2017/18 for an estimated 244,457 people using opiates in these areas.<sup>v</sup> On this basis, the estimated national coverage of THN among people who use opiates in 2017/18 was 16 per cent, which suggests that the amount of THN given out across England in 2017/18 was limited. If we take into account THN kits dispensed in previous years which have not yet expired, the estimated national coverage among people who use opiates was 28 per cent over the last two years and 34 per cent over the last 3 years. However, national coverage estimates in previous financial years are less reliable because of lower response rates from local authorities: 95 per cent (145) of local authorities provided data for THN kits supplied in 2017/18, compared to 71 per cent (108) for cumulative THN kits supplied between 2016/17 and 2017/18 and 63 per cent (95) for cumulative THN kits supplied between 2015/16 and 2017/18. Looking at coverage in treatment specifically, a total of 15,279 clients in community drug treatment received THN and training in 2017/18, which is limited given that there were 141,189 opiate clients in treatment. On this basis, the estimated coverage of THN among opiate clients in community drug treatment was only 11 per cent in 2017/18 (Table 1).<sup>vi</sup>

	Clients receiving THN and training (all substances)	Total opiate clients in treatment	Proportion of opiate clients receiving THN and training
All clients	15279	141189	11%
Male	10857	102803	11%
Female	4422	38386	12%

Table 1: Proportion of opiate clients in treatment in community settings across England that received take-home naloxone and training in 2017/18 by gender (National Drug Treatment Monitoring System)

The amount of THN given out for every person using opiates and for every opiate client in treatment varied substantially by local authority, with some local authorities achieving more than full coverage and others reporting hardly any coverage

iii THN is now available in: Hartlepool, Liverpool, Kirklees, Merton, North Yorkshire, Rotherham, St Helens, Stockport, and Wigan.

iv While THN was not available in Bracknell Forest at the time of the questionnaire, a THN programme may now be operational. Bracknell Forest Borough Council's questionnaire response stated: "We do not currently provide Naloxone in Bracknell Forest. Staff training is booked for w/c 12th October [2018] and once this has been completed we will initially provide Naloxone to all of our prescribing clients".

v Data on the number of THN kits dispensed in the community in the 2017/18 financial year was not available in: Durham, Lincolnshire, Norfolk, Oldham, Rochdale, South Tyneside and Stockport.

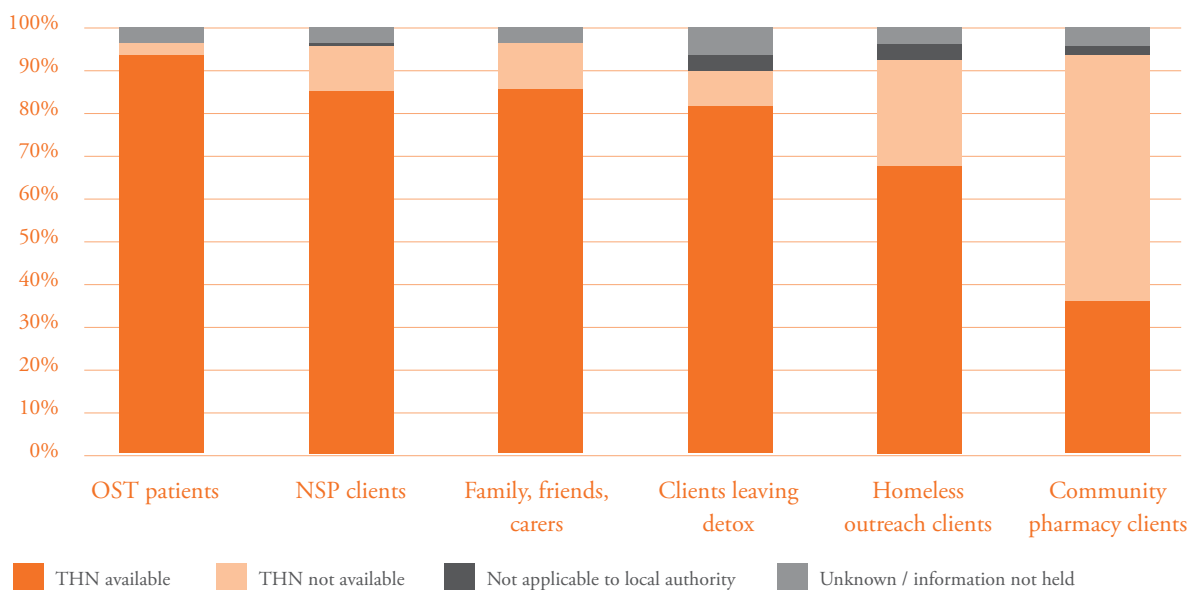
vi Clients receiving THN and training includes non-opiate clients. 97 per cent (148) of local authorities reported to the NDTMS on THN and training, with no reporting in Bracknell Forest, East Riding of Yorkshire, Rutland, and Milton Keynes. The amount of clients that received THN and training was reported as <5 in 11 local authorities – to estimate coverage in these areas, it was assumed that 4 clients received THN and training.

among these groups.<sup>vii</sup> More than full coverage among people who use opiates was achieved in Somerset, and Salford over the last three years, where coverage among this group was 116 per cent and 107 per cent respectively. Other local authorities with high coverage among people who use opiates over the last three years included Nottinghamshire (94 per cent), Swindon (91 per cent) and Peterborough (89 per cent). Interestingly, these local authorities did not also tend to have the highest coverage among opiate clients in treatment, which could indicate that high coverage among the general population of people using opiates was achieved by reaching people outside of treatment. In terms of coverage among opiate clients in treatment in 2017/18, the best performing local authorities were Bexley (57 per cent), followed by Croydon (52 per cent) and Lambeth (47 per cent). Conversely, in local authorities that did not have a THN programme in 2017/18,<sup>viii</sup> there was no coverage among people using opiates or opiate clients in treatment. Other local authorities with extremely poor coverage included Hartlepool, Bolton, and Sheffield, where coverage among people using opiates was 2 per cent, 3 per cent, and 5 per cent respectively over the last three years. This mirrored coverage among opiate clients in treatment, which was only 1 per cent in Hartlepool, 3 per cent in Bolton and fewer than 1 per cent in Sheffield in 2017/18.

Effective THN programmes should ensure THN is accessible to people that are at risk of having, or are likely to witness someone having, an opioid-related overdose. THN was reportedly available to Opiate Substitution Therapy (OST) patients in the overwhelming majority of local authorities, which indicates significant improvement in this area since the previous report. Of the 152 local authorities (including the 3 local authorities that did not provide THN at the time of the survey):

- Only 2 per cent (3) did not provide THN kits to Opiate Substitution Therapy (OST) patients (or to anyone else in their area);
- 10 per cent (15) did not provide THN kits to clients accessing Needle and Syringe Programmes;
- 11 per cent (16) did not provide THN kits to family, friends, and/or carers of ‘at risk’ individuals;
- 9 per cent (13) did not provide THN kits to clients leaving community/residential/inpatient opioid detoxification;
- 25 per cent (38) did not provide THN kits to people in contact with outreach services for homeless populations; and
- 58 per cent (88) did not provide THN to clients accessing community pharmacies.

### Availability of take-home naloxone to target groups across local authorities in England, 2017/18



<sup>vii</sup> Information on THN provision, coverage and availability to target groups in each local authority can be accessed at: <https://www.release.org.uk/naloxone-2017-18>

<sup>viii</sup> Local authorities that did not have a THN programme in 2017/18 were: Bracknell Forest, Darlington, North East Lincolnshire, North Yorkshire, and Wigan.

Questionnaire responses also indicated that in many local authorities, THN was only available to the above groups through the main drug treatment provider. In addition, the National Probation Service confirmed that there are no arrangements in place to give THN to people under their supervision and each of the NHS Ambulance Trusts confirmed that first responders do not give THN kits to people after being treated for an opioid-related overdose. This suggests that THN is more accessible to people in contact with drug treatment services and is less accessible to people accessing low-threshold services. This is cause for concern, mainly because opiate-related death rates are higher among people not in contact with drug treatment services.<sup>13</sup> It is therefore crucial that THN is made available to people that are not in direct contact with drug treatment services, such as people accessing NSP and/or OST in community pharmacies, and people treated by ambulance services for opioid-related overdose.

Despite the limitations outlined above, there were nonetheless examples of good practice reported in many local authorities. Local authorities were given the opportunity to highlight 'Other' groups that were given THN in their area, which included:

- Hostels or housing services (35);
- People released from prison (23);
- Street outreach or satellite workers (13);
- Healthcare services, hospital liaison workers or GPs (9);
- Religious groups or street pastors (7);
- Police officers and people leaving police custody (6);
- Peer mentors (5);
- Soup kitchens, food banks or recovery cafes (4);
- Probation services (3);
- Domestic violence services or women's refuges (3);
- Women-only support groups (3);
- Mental health services or mental health admission wards (3);
- Street wardens or local park guards (3);
- Sex workers' services (2);
- Social services or social workers (2);
- Employment services (1); and
- Family support services (1).

It is therefore clear that, in some local authorities, innovative approaches to THN provision are being developed by making the life-saving medication available to a wide range of local groups.

Local authorities were also given the opportunity to highlight local initiatives that have been implemented to improve access to THN in the community. Local authorities reported implementing, or having concrete plans to implement, initiatives, such as:

- Delivering training sessions (68);
- Awareness raising (47);
- Additional distribution points for THN (40);
- Peer-led promotion of THN (20);
- Peer group training (19);
- Peer-led distribution of THN (14); and
- THN programme monitoring (8).

It is certainly encouraging to see that local authorities are taking steps to improve access to THN in their area, with many reportedly delivering training sessions and raising awareness in their communities. The establishment of additional distribution points is particularly welcome, given the concerns raised above around the accessibility of THN to people outside of treatment. However, it is a shame that fewer local authorities reported delivering peer group training or implementing peer-led initiatives to improve access to THN, such as peer-led promotion or distribution of THN. Peer-led initiatives, such as the Naloxone Peer Supply Model developed in Glasgow (Case Study 1), are a common-sense way of making THN more widely available to people likely to witness or experience an opioid-related overdose. Likewise, effective THN programme monitoring, such as in Change, Grow, Live (CGL) services (Case Study 2), is a crucial component of any THN programme.

## Case Study 1: Glasgow Naloxone Peer Supply Model

“Glasgow Naloxone peer supply was launched in Sep 2017 as a one year pilot. Ten peers were recruited for the purposes of the pilot and they received further training on the Naloxone framework and the NEO database for recording purposes. All peers receive support and supervision every 4 weeks from a NHS professional/ coordinator within Glasgow addiction services. The coordinator is also responsible for engaging with the various addiction and homeless services throughout Glasgow where the peers deliver the Naloxone training and supply. Peers are reimbursed for travel and lunch. During the pilot period (Sep 17-Aug 18) the peers managed to train 985 individuals and supplied 1,131 lifesaving Naloxone kits.”

*Stephen Kerr (North East Recovery Coordinator, Glasgow)*

## Case Study 2: Change, Grow, Live – Monitoring & Impact

“CGL regularly produce a ‘Naloxone distribution’ league table to display, by service, the rate of distribution based on opiate users in the system. This provides visibility, learning and healthy competition among our services. CGL produce an Information Dashboard for every service each month which is used to monitor performance and activity, including metrics such as waiting times, successful completions, missed appointment rates, staff sickness levels and many more. In August [2018] a TH Naloxone metric was included which displays the penetration rate based on the current opiate caseload.”

*Change, Grow, Live ‘Naloxone progress 2017/18’*

# Take-home naloxone in prisons and other custodial settings:

In contrast to THN provision in the community, where almost every local authority in England had a THN programme, only 51 per cent of the prisons in England had a THN programme in place (Table 2).<sup>ix</sup> Of the women’s prisons, 75 per cent had a THN programme in place. Furthermore, 62 per cent of prisons holding both young offenders and adults, and 46 per cent of adult establishments had a THN programme. Only 1 in 5 Young Offender Institutions (YOIs) did, which suggests that THN may be less accessible to young people being released from custody. However, due to the National Drug Treatment Monitoring System (NDTMS) not recording THN and training delivery to young people in treatment, it is not possible to assess THN provision to this group<sup>14</sup>; this is despite the October 2015 regulations permitting THN to be supplied to minors “on a case-by-case basis”.<sup>15</sup>

	THN programme in place	No THN programme in place
All Prisons (109)	51% (56)	49% (53)
Female prisons <sup>x</sup> (12)	75% (9)	25% (3)
Male prisons (98)	49% (48)	51% (50)
YOIs (5)	20% (1)	80% (4)
HMPs (57)	46% (26)	54% (31)
HMP/YOIs (47)	62% (29)	38% (18)

Table 2: Proportion of prisons in England that had a THN programme in place between September 2018 and January 2019, by category of prisons

Some survey respondents outlined explanations for not implementing a THN programme in their prison. The category of the prison or prison population characteristics were expressed as influencing factors for such decisions. For example, ‘Open’ establishments have a higher number of releases due to people serving shorter sentences for less serious crimes and transfers from high security prisons of people nearing the end of their sentences. Consequently, there is a small window of opportunity for custodial staff to identify those who are at risk of witnessing or experiencing an overdose. Conversely, high security prisons expressed that THN provisions were not implemented as inmates were rarely released directly back into the community increasing the risk of individuals not being in receipt of THN training or a THN kit upon release. Additionally, foreign nationals in prisons<sup>xi</sup> are likely to be deported back to their home country once sentences have been served, where

ix Survey responses from each prison were collected between September 2018 and January 2019. Information on THN provision in each prison can be accessed at: <https://www.release.org.uk/naloxone-2017-18>

x HMP Peterborough is a dual purpose prison for both women and men in custody.

xi Some prisons only accommodate non-UK passport holders serving a custodial sentence. Once sentences are completed foreign nationals can be automatically deported, transferred to an Immigration Removal Centre (IRC), or released.



the legal status of Naloxone will vary. Nonetheless, efforts could still be made to signpost people to services where they can access THN after release, either locally or in their home country where this is available. Harm reduction messages could also be encouraged through training and access to readily available information in a number of languages. There was also the assumption that young people released from YOIs would not generally benefit from THN because opiate use was not prevalent among this group. While there are certainly fewer young opiate clients in custodial settings,<sup>16</sup> it does not follow that a THN programme would not be beneficial for all young people released from custody. There is still the potential to save a life by making THN available to young people at risk of experiencing, or likely to witness, an opioid-related overdose.

		Releases of opiate clients where THN and training was delivered	Total releases of opiate clients	Proportion of releases of opiate clients where THN and training was delivered
Adult secure setting type	Prisons	2935	23820	12%
	YOIs (18-21)	36	220	16%
	IRCs	0	81	0%
Sentence status	Sentenced	2755	18675	15%
	Remand	214	5444	4%
Pharmacological intervention status	Pharmacological intervention for opiates	2636	19695	13%
	No pharmacological intervention for opiates	335	4426	8%
Time taken to exit secure setting (from triage assessment)	Less than 3 months	2238	17688	13%
	3-6 months	433	3442	13%
	6-12 months	211	1972	11%
	Over 12 months	89	1019	9%
Referral on release status	No onward referral	169	2713	6%
	Referral to structured treatment / recovery support	2802	21408	13%

Table 3: Proportion of releases of opiate clients in custodial settings across England that received take-home naloxone and training in 2017/18 by adult secure setting and client characteristics (National Drug Treatment Monitoring System).

Nationally, the amount of THN being given out to people released from custody in England is wholly inadequate, as THN and training was delivered to only 12 per cent of the releases of opiate clients<sup>xii</sup> in 2017/18 (Table 3).<sup>17</sup> Even more concerning, in the same year not one person in an Immigration Removal Centre (IRC) received naloxone training or a THN kit. It appears that THN is not available to those who are subject to immigration control despite there being 81 opiate clients released from IRCs in 2017/18 who could have potentially benefitted from THN. While THN was available to opiate clients in some prisons, it was dispensed at a lesser rate to those who did not receive a pharmacological intervention for opiates whilst in custody, such as Opioid Substitution Therapy. Receipt of THN was also less likely for opiate clients that spent lengthier times in custody following initial assessment with the drug treatment provider. The proportion of opiate clients on remand that received THN and training on release was also astonishingly low – just 4 per cent. A high proportion of those remanded into custody are ultimately acquitted or receive non-custodial sentences.<sup>18</sup> Consequently, a number of individuals remanded into custody are then released back into the community without being equipped with invaluable lifesaving information and medication. Even once an individual has been released from custody, they are unlikely to access THN via community drug services, as only 32.1 per cent of adults went on to engage with community drug treatment within three weeks of release in 2017/18.<sup>19</sup> It is therefore problematic that only 6 per cent of those that were not referred onto structured drug treatment, or recovery support in the community, had received THN.

xii As an opiate client could be released from prison several times in a given year, the number of times an opiate client was released is reported rather than the number of opiate clients released.

# Conclusion and Recommendations

Since the last report, there have been notable improvements in the availability of THN across local authorities in England, as nearly every local authority now has a THN programme and makes THN available to OST patients. However, local authorities need to urgently address concerns about the accessibility of THN to people outside of treatment, and adequate coverage among people who use opiates. Given the unique opportunity that prisons have to reduce opioid-related mortality among people released from their custody, THN programmes in prisons need to be scaled up as a matter of urgency.

**Recommendation 1** Every local authority in England should have a THN programme and should be giving out at least one THN kit to every person in the community who is using opiates.

**Recommendation 2** Local authorities should make THN available to any person requesting it, particularly to groups that are at risk of having, or are likely to witness someone having, an opioid-related overdose. People not in contact with drug treatment services should be able to easily access THN through other distribution points, such as: community pharmacies; GPs; ambulance services; and peer networks.

**Recommendation 3** Every adult prison in England should have a THN programme and should offer THN and training to every person prior to their release from custody under an ‘opt-out’ model of provision. Where an individual wishes to opt-out from THN, they should be signposted to services dispensing THN in the community.

**Recommendation 4** Prison-based THN programmes should make THN available to any person requesting it, particularly to groups that are at risk of having, or are likely to witness someone having, an opioid-related overdose; this should not be restricted to people that are identified as having lived or living experience of opioid use. THN programmes should also be extended to people in other secure settings and places of detention where people have been deprived of their liberty, such as Young Offender Institutions, Immigration Removal Centres and police custody suites.

**Recommendation 5** In the absence of a national naloxone programme, support and guidance for local authorities and prisons should be provided nationally, to assist in co-ordination and effective monitoring of THN programmes and in developing good practice across England.

# Methodological Appendix

## Monitoring and performance indicators

While recent evidence suggests that THN programmes are operating in at least 16 countries,<sup>xiii</sup> <sup>20</sup> the monitoring of such programmes has been sparse. Nevertheless, where there has been monitoring,<sup>21</sup> reporting has tended to focus on:

- Availability of THN across geographical areas and distribution points;
- Delivery of training and supply of THN;
- Coverage of THN within target populations; and
- Extent of THN use during drug poisoning events and outcomes.

This report sought to monitor the availability of THN across local authority areas in England and crucial distribution points, the scale of THN supply in community and custodial settings, and coverage of THN among people who use opiates. It was not possible to monitor the extent of THN use during drug poisoning events due to a lack of data.

## Data collection and validation

To assess THN provision in local authority areas across England, Release submitted Freedom of Information (FOI) requests to each of the 152 local authorities in the form of a questionnaire about THN in their area. Where a local authority did not hold requested information, additional requests were sent to public authorities or services that did hold the information for the local authority area. Questionnaire responses were collected between August 2018 and January 2019 and were obtained for every local authority area, although information on coverage<sup>xiv</sup> and target groups<sup>xv</sup> was not available in some areas. Additional information about THN in community settings was collected from each of the 11 NHS Ambulance Trusts, the National Probation Service (NPS), the NDTMS and CGL. Data on the number of THN kits dispensed in the community in each financial year between 2014/15 and 2016/17 was taken from the previous report.

Local authority data on the number of THN kits dispensed in the 2017/18 financial year was compared to NDTMS and CGL datasets for validation. Although it was not possible to verify the datasets by direct comparison (as they relate to different populations), the comparison identified reporting errors in local authorities where either the number of THN kits dispensed in CGL services or the number of clients that received THN exceeded the total number of THN kits dispensed in the surrounding local authority area. Internal reviews of FOI responses were requested in each of these local authorities and the local authority data was corrected accordingly.<sup>xvi</sup> In the absence of an internal review response, discrepancies were

xiii Naloxone peer distribution operates in: Afghanistan, Australia, Canada, Denmark, Estonia, India, Italy, Mexico, Norway, UK, Ukraine and the US. THN is available in: Germany, Spain, France and Ireland.

xiv Data on the number of THN kits dispensed in the community in the 2017/18 financial year was not available in: Durham, Lincolnshire, Norfolk, Oldham, Rochdale, South Tyneside and Stockport. Partial data was available in Hounslow (April 2017 – February 2018) and data was recorded for different time periods in Middlesbrough (2017 calendar year), Lambeth (April 2017 – August 2018) and Leicester, Leicestershire and Rutland (July 2017 – August 2018).

xv Data on the availability of THN to target groups was not available in: Hertfordshire, Luton, Northamptonshire, Redcar & Cleveland and Torbay. Only partial data was available in: Central Bedfordshire, Bromley, Hampshire, Plymouth, Rochdale, Walsall and Wokingham.

xvi Data discrepancies were resolved, following internal reviews of FOI responses, in: Barnet, Bexley, Birmingham, Blackburn with Darwen, Bromley, Havering, Kensington and Chelsea, Manchester, Merton, North East Lincolnshire, Richmond upon Thames, Rotherham, Slough, West Sussex, Wigan and Wolverhampton.

resolved by assuming that the largest value was correct; if the greater value was NDTMS data, it was further assumed that each treatment client received 1 THN kit.<sup>xvii</sup> The data validation procedure outlined above was used to minimise reporting errors in the local authority data, thereby producing more reliable estimates of THN coverage. Given the assumptions within the data validation procedure, the number of THN kits dispensed may be over-reported in some local authorities, leading to liberal estimates of THN coverage in these areas.

To identify the prisons supplying THN to people released from their custody, Release initially submitted FOI requests to Her Majesty's Prison and Probation Service (HMPPS), Her Majesty's Inspectorate of Prisons (HMIP), the Independent Monitoring Boards' Secretariat, and NHS England. None of these public authorities held the information centrally and there was confusion around where this information was held. Information was therefore collected from HMIP and IMB reports (for inspections occurring between October 2015 and August 2018) and from staff within 109 prisons in England.<sup>xviii</sup> A member of staff within each prison, such as substance misuse, healthcare or pharmacy staff, confirmed whether THN was supplied on release and whether naloxone training was delivered prior to release; respondents were contacted via telephone or email between September 2018 and January 2019. Additional information about clients receiving THN and training in custodial settings was collected from the NDTMS.

## Estimating Coverage

Scotland's National Naloxone Programme estimates the "reach" of THN based on "the number of first supplies made to people 'at risk' of opioid overdose"<sup>22</sup> and assumes that "THN kits will have an average of two years remaining before date of expiry at the time of supply".<sup>23</sup> Due to insufficient recording of first supplies and of THN kits dispensed in previous financial years across local authorities, it was not possible to estimate coverage of THN in England as such; instead, coverage was estimated based on the number of THN kits supplied made to people 'at risk' of opioid overdose in 2017/18. As the shelf-life of Prenoxad (injectable formulation of naloxone) purchased for distribution is 36 months from the point of manufacture, cumulative supply over the last two and three years is reported. Estimated coverage in the community is reported for cumulative THN kits dispensed between 2016/17 and 2017/18, as well as between 2015/16 and 2017/18, but is less reliable at the national level due to lower response rates from local authorities in these years. If we assume that the take-home naloxone supplied has 36 months before expiry, we would expect full coverage to be at least 33 per cent within a given year, 66 per cent over two years, and 100 per cent over three years. The most recent opiate use estimates for 2014/15<sup>24</sup> were used as a measure of the 'at risk' population in the community and NDTMS data on the number of releases of opiate clients in 2017/18<sup>25</sup> was used as a measure of the 'at risk' population leaving custodial settings.

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xvii Data discrepancies were otherwise resolved in: Enfield, Essex, Halton, Hammersmith and Fulham, Knowsley, Lancashire, Nottinghamshire, North Yorkshire, Walsall, Waltham Forest, Wandsworth and Westminster.

xviii According to the 'Offender Management Statistics Quarterly: July – September 2018', there were 111 prisons in England in December 2018. Information was collected for 109 of the 111 prisons in England; information was not available and prison staff were unresponsive in HMP/YOI Swinfen Hall and HMP/YOI Hatfield.

# References

- 1 European Monitoring Centre for Drugs and Drug Addiction (2018) *European Drug Report: Trends and Developments*, [http://www.emcdda.europa.eu/system/files/publications/8585/20181816\\_TDAT18001ENN\\_PDF.pdf](http://www.emcdda.europa.eu/system/files/publications/8585/20181816_TDAT18001ENN_PDF.pdf) [accessed 14/02/2019].
- 2 Office for National Statistics (2018) *Deaths related to drug poisoning in England and Wales: 2017 registrations*, <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deaths-relatedtodrugpoisoninginenglandandwales/2017registrations> [accessed 14/02/2019]; Office for National Statistics (2018) *Deaths by drug poisoning where any opiates were mentioned on the death certificate, local authorities in England and Wales, 2017*, <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/ad-hocs/008906deathsbydrugpoisoningwhereanyopiateswerementionedonthedeathcertificatelocalauthoritiesinenglandandwales2017> [accessed 14/02/2019].
- 3 World Health Organisation (2017) *WHO Model List of Essential Medicines: 20th List*.
- 4 World Health Organisation (2016) *HIV Prevention, Diagnosis, Treatment and Care for Key Populations: Consolidated Guidelines*; European Monitoring Centre for Drugs and Drug Addiction (2016) *Preventing opioid overdose deaths with take-home naloxone*; Department of Health and Social Care, Medicines and Healthcare products Regulatory Agency & Public Health England (2018) *Guidance: Widening the Availability of Naloxone*, <https://www.gov.uk/government/publications/widening-the-availability-of-naloxone/widening-the-availability-of-naloxone> [accessed 14/02/2019].; Advisory Council on the Misuse of Drugs (2016) *Reducing Opioid-related Deaths in the UK*; Independent Expert Working Group (2017) *Drug misuse and dependence: UK clinical guidelines on clinical management*, Department of Health.
- 5 McDonald, R. & Strang, J. 'Are Take-Home Naloxone Programmes Effective? Systematic Review Utilizing Application of the Bradford Hill Criteria', *Addiction*, 111: 7, 1177–87, <https://doi.org/10.1111/add.13326>.; Bird, S., et al. 'Effectiveness of Scotland's National Naloxone Programme for Reducing Opioid-related Deaths: A before (2006–10) versus after (2011–13) Comparison,' *Addiction*, 111: 5, 883–91, <https://doi.org/10.1111/add.13265>.; European Monitoring Centre for Drugs and Drug Addiction (2015) *Preventing fatal overdoses: a systematic review of the effectiveness of take-home naloxone*, <http://www.emcdda.europa.eu/publications/emcdda-papers/naloxone-effectiveness> [accessed 14/02/2019].
- 6 Langham, S., et al. (2018) 'Cost-Effectiveness of Take-Home Naloxone for the Prevention of Overdose Fatalities among Heroin Users in the United Kingdom', *Value in Health*, 21: 4, <https://doi.org/10.1016/j.jval.2017.07.014>.
- 7 Strang et al. (2013) 'Take-Home Emergency Naloxone to Prevent Heroin Overdose Deaths after Prison Release: Rationale and Practicalities for the N-ALIVE Randomized Trial', 90(5), *Journal of Urban Health*, 983-996.
- 8 Merral et al. (2010) 'Meta-analysis of drug-related deaths soon after release from prison', 105(9) *Addiction*, 1545.
- 9 Department of Health and Social Care, Medicines and Healthcare products Regulatory Agency & Public Health England (2018) Loc. cit.
- 10 Information Services Division (2018) *National Naloxone Programme Scotland: Monitoring Report 2017/18*, NHS National Services Scotland, <https://www.isdscotland.org/Health-Topics/Drugs-and-Alcohol-Misuse/Publications/2018-11-27/2018-11-27-Naloxone-Report.pdf> [accessed 14/02/2019].
- 11 Public Health Agency & Health and Social Care Board (2017) *Take Home Naloxone: Report on supply and use to reverse and overdose 2012-2016*, [http://www.publichealth.hscni.net/sites/default/files/Take%20Home%20Naloxone%20Report%202012-16\\_0.pdf](http://www.publichealth.hscni.net/sites/default/files/Take%20Home%20Naloxone%20Report%202012-16_0.pdf) [accessed 14/02/2019].
- 12 NHS Wales Substance Misuse Programme (2018) *Harm Reduction Database Wales: Take Home Naloxone*, <http://www.wales.nhs.uk/sitesplus/documents/888/Naloxone%20HRD%20report%202017-18.pdf> [accessed 14/02/2019].
- 13 Public Health England (2017b) *An evidence review of the outcomes that can be expected from drug misuse treatment in England*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/586111/PHE\\_Evidence\\_review\\_of\\_drug\\_treatment\\_outcomes.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/586111/PHE_Evidence_review_of_drug_treatment_outcomes.pdf) [accessed 14/02/2019]; Advisory Council on the Misuse of Drugs (2016) *Reducing Opioid-Related Deaths in the UK*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/576560/ACMD-Drug-Related-Deaths-Report-161212.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/576560/ACMD-Drug-Related-Deaths-Report-161212.pdf) [accessed 14/02/2019]; Cornish, R., et al. (2010) 'Risk of death during and after opiate substitution treatment in primary care: prospective observational study in UK General Practice Research Database', *BMJ*, 26: 341, 5475; White, M., et al. (2015) 'Fatal opioid poisoning: a counterfactual model to estimate the preventive effect of treatment for opioid use disorder in England', *Addiction*, 1.

- 14 Public Health England (2018a) *Adult and young people's drug and alcohol secure settings business definitions: Core dataset O*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/723157/NDTMS\\_adult\\_YP\\_secure\\_setting\\_treatment\\_business\\_definitions\\_\\_CDS-O\\_\\_V5.02.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/723157/NDTMS_adult_YP_secure_setting_treatment_business_definitions__CDS-O__V5.02.pdf) [accessed 25/02/2019]; Public Health England (2018b) *National Drug Treatment Monitoring System (NDTMS) Young people's treatment business definitions: Core dataset O*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/721324/NDTMS\\_YP\\_treatment\\_business\\_definitions\\_\\_CDS-O\\_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/721324/NDTMS_YP_treatment_business_definitions__CDS-O_.pdf) [accessed 25/-/2019].
- 15 Department of Health and Social Care, Medicines and Healthcare products Regulatory Agency & Public Health England (2018) Loc. cit.
- 16 Public Health England & National Drug Evidence Centre (2019) *Secure Setting Statistics from the National Drug Treatment Monitoring System (NDTMS): 1 April 2017 to 31 March 2018*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/771009/Secure-setting-statistics-from-the-national-drug-treatment-monitoring-system-2017-18.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/771009/Secure-setting-statistics-from-the-national-drug-treatment-monitoring-system-2017-18.pdf) [accessed 14/02/2019].
- 17 Public Health England & National Drug Evidence Centre (2019), Loc. cit.
- 18 Ministry of Justice (2019) 'Table Q4.4 - Defendants for trial by court type, type of remand and outcome of proceedings, 12 months ending June 2018', *Criminal justice system statistics quarterly: June 2018*, <https://www.gov.uk/government/statistics/criminal-justice-system-statistics-quarterly-june-2018> [accessed 19/02/2019].
- 19 Public Health England & National Drug Evidence Centre (2019), Loc. cit. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/771009/Secure-setting-statistics-from-the-national-drug-treatment-monitoring-system-2017-18.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/771009/Secure-setting-statistics-from-the-national-drug-treatment-monitoring-system-2017-18.pdf) [accessed 19/02/2019].
- 20 Stone, K. & Shirley-Beavan S. (2018) *The Global State of Harm Reduction 2018*, 6th edition, <https://www.hri.global/files/2019/02/05/global-state-harm-reduction-2018.pdf> [accessed 14/02/2019].
- 21 Information Services Division (2018) Loc. cit.; NHS Wales Substance Misuse Programme (2018) Loc. cit. Canadian Pharmacists Association (2017) *Environmental Scan: Access to naloxone across Canada*, [https://www.pharmacists.ca/cpha-ca/assets/File/cpha-on-the-issues/Environmental%20Scan%20-%20Access%20to%20Naloxone%20Across%20Canada\\_Final.pdf](https://www.pharmacists.ca/cpha-ca/assets/File/cpha-on-the-issues/Environmental%20Scan%20-%20Access%20to%20Naloxone%20Across%20Canada_Final.pdf) [accessed 14/02/2019]; Wheeler, E., et al. (2015) 'Opioid overdose prevention programs providing naloxone to laypersons – United States, 2014', *Centers for Disease Control and Prevention*, 64: 23, 631-5. [https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm?s\\_cid=mm6423a2\\_w](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm?s_cid=mm6423a2_w) [accessed 14/02/2019]; Horsburgh, K. (2018) *Naloxone-on-Release: Guidelines for naloxone provision upon release from prison and other custodial settings*, <http://www.sdf.org.uk/wp-content/uploads/2018/07/My-first-48-hours-out-Guidelines-for-naloxone-provision-upon-release-from-prison-and-other-custodial-settings.pdf> [accessed 14/02/2019].
- 22 Information Services Division (2017) *National Naloxone Programme Scotland: Monitoring Report 2016/17*, <http://www.sdf.org.uk/wp-content/uploads/2017/11/2017-11-07-Naloxone-Report.pdf> [accessed 14/02/2019].
- 23 Information Services Division (2018), Loc. cit.