

# National Naloxone Programme Scotland

## Monitoring Report 2021/22 & 2022/23

An Official Statistics release for Scotland

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# Introduction

## Background

Accidental overdose is a common cause of death among users of heroin, morphine and similar drugs, which are referred to as opioids. Naloxone is a drug which reverses the effects of a potentially fatal overdose with these drugs. Administration of naloxone provides time for emergency services to arrive and for further treatment to be given. Following suitable training, 'take-home' naloxone kits (hereafter referred to as 'THN' or 'kits') are issued to people at risk of opioid overdose, their friends and family and service workers in order to help prevent overdose deaths.

Since 1997, statistics **published by National Records of Scotland (NRS)** have shown a long-term upward trend in the number of Drug Related Deaths (DRDs) in Scotland. Following a series of annual increases from 2014 onwards there were 1,339 DRDs registered in 2020. The number of DRDs in Scotland has since decreased to 1,051 deaths in 2022. Opioids have been implicated in 87% of DRDs registered since 2000, including 82% (867) of those registered in 2022 (NRS, 2023).

The overall aim of Scotland's National Naloxone Programme (NNP) is to prevent fatal opioid overdoses. Following the recommendations from two independent expert forums and the successful outcomes of local take-home naloxone (THN) pilots in Scotland, the Scottish Government supported the rollout of the NNP in Scotland from November 2010. This initiative, the first national programme of its kind in the world, has been in place since April 2011.

Since the beginning of the NNP, the Scottish Government has commissioned Public Health Scotland (PHS) to report annually on THN kit distribution using monitoring data supplied by NHS Boards. In August 2020, PHS began to publish **quarterly naloxone reports**, to provide more timely information on THN supply.

For further details about Scotland's National Naloxone Programme and information on the collection and definitions of reported data, please refer to **Appendix 1**.

## Developments in naloxone supply and reporting

During financial years 2021/22 and 2022/23, there were a number of developments in naloxone distribution, data collection, and reporting which may have influenced the trends described in this report:

- From April 2021, SDF developed a national peer network to maximise naloxone provision by people who have experience of drug use. A trained peer supply champion/mentor provides training and a THN kit to others who may witness an overdose. Peer supply is currently used as a 'method of supply' in both community and prison settings. Further information on the peer-to-peer supply project can be found on the [SDF website](#).
- In May 2021, the Medication Assisted Treatment (MAT) standards were launched (Scottish Government, 2021a). **MAT Standard 4** (harm reduction) states that services that support people who use opioids should supply service users with THN unless they 'opt-out' of being issued with a kit and that all staff should carry THN for use in an emergency.
- On 31 August 2021, the Scottish Government, and the Scottish Drugs Forum (SDF) launched a campaign to promote this THN carriage among members of the public, via Scottish Families affected by Alcohol and Drugs (SFAD). Details can be found at the [Scottish Government website](#) and at <https://www.stophedeaths.com/>.
- In October 2021, the Scottish Drug Deaths Taskforce (SDDT) published a summary of their [recommendations](#), which included proposals to increase distribution of naloxone.
- In June 2022, the Advisory Council on the Misuse of Drugs (ACMD) published a [report on UK naloxone implementation](#), and made a series of recommendations to optimise the use of naloxone. These included improving the quality of information on THN supply, establishing peer supply networks, promoting carriage among police officers and supply/training by all emergency care providers.

- From September 2022, PHS held a series of Short Life Working Group (SLWG) meetings, involving representatives of relevant user and stakeholder groups. The SLWG's recommendations to modernise data collection and reporting and improve understanding of the impact of naloxone can be found in the [SLWG Report](#), published in November 2023.

Although largely focusing on the post-COVID-19 'recovery' period, this report includes descriptions of changes in naloxone provision occurring in the initial stages of the pandemic. A timeline of COVID-19 events can be found on the Scottish Parliament Information Centre (SPICe) Spotlight [website](#).

## Report structure

This report presents information on the number of THN kits issued from 2011/12 to 2022/23 and contains two new years of information (2021/22 and 2022/23). Figures presented in this Official Statistics report may differ from comparable figures presented in the [quarterly monitoring bulletins](#), as the figures presented here include late data submissions and are subject to additional quality assurance checks.

Data are presented separately for kits issued from community outlets, kits issued in prisons at the point of prisoner release, kits dispensed via community prescription, and kits distributed by the Scottish Ambulance Service. It includes trends over time and breakdowns for NHS Boards. Where available, numbers of first and repeat supplies and reasons for repeat supply are reported. Age and gender breakdowns are also provided for individuals at risk of opioid overdose who were supplied with THN (where the person consented to the sharing of their personal data).

New data on the prevalence of recent prison custody release and/or hospital discharge among people who died an opioid-related death registered in calendar years 2021 and 2022 are also presented within this report.

The accompanying [data tables](#) provide further detailed breakdowns of the data described in this report.

## Main points

In 2022/23:

- 28,689 THN kits were issued in Scotland, which was a 1% decrease compared to 2021/22 (29,075). The annual number of kits supplied in 2021/22 and 2022/23 was substantially higher than in any year up to and including 2020/21 (22,378).
- 22,184 THN kits were issued from community outlets, 1,929 kits were issued in prisons upon release, 3,249 kits were dispensed via community prescription, and 1,225 kits were distributed by the Scottish Ambulance Service (SAS).
- The most common sources of community THN supply were drug treatment services (12,575, 57%); Scottish Families Affected by Alcohol and Drugs (SFAD) (5,042, 23%); and non-drug treatment services (such as homelessness services) (1,581, 7%).
- Of the 28,689 THN kits issued in Scotland, 20,918 (73%) were intramuscular Prenoxad<sup>®</sup> kits and 7,759 (27%) were intranasal Nyxoid<sup>®</sup> kits.
- 7,708 THN kits were distributed as repeat supplies. Of these, 2,013 (26%) were issued because the previous kit was reported as having been used to treat an opioid overdose.
- Of the 2,257 THN kits issued via peer-to-peer supply, 1,453 (64%) were distributed from community outlets and 804 (36%) were distributed from prisons.

At the end of 2022/23:

- A total of 151,944 THN kits had been supplied in Scotland.
- The 'reach' of THN (based on the number of people at risk of an opioid overdose supplied with kits between 2011/12 and 2022/23) was estimated to be 705 kits per 1,000 people with problematic drug use.



# Results and commentary

## 1. Take-home naloxone (THN) supply from community outlets

### 1.1: Introduction

This section presents information on the number of take-home naloxone (THN) kits issued from community outlets (specialist drug treatment services and non-drug treatment services, including Scottish Families Affected by Alcohol and Drugs (SFAD)) through the National Naloxone Programme (NNP) in Scotland.

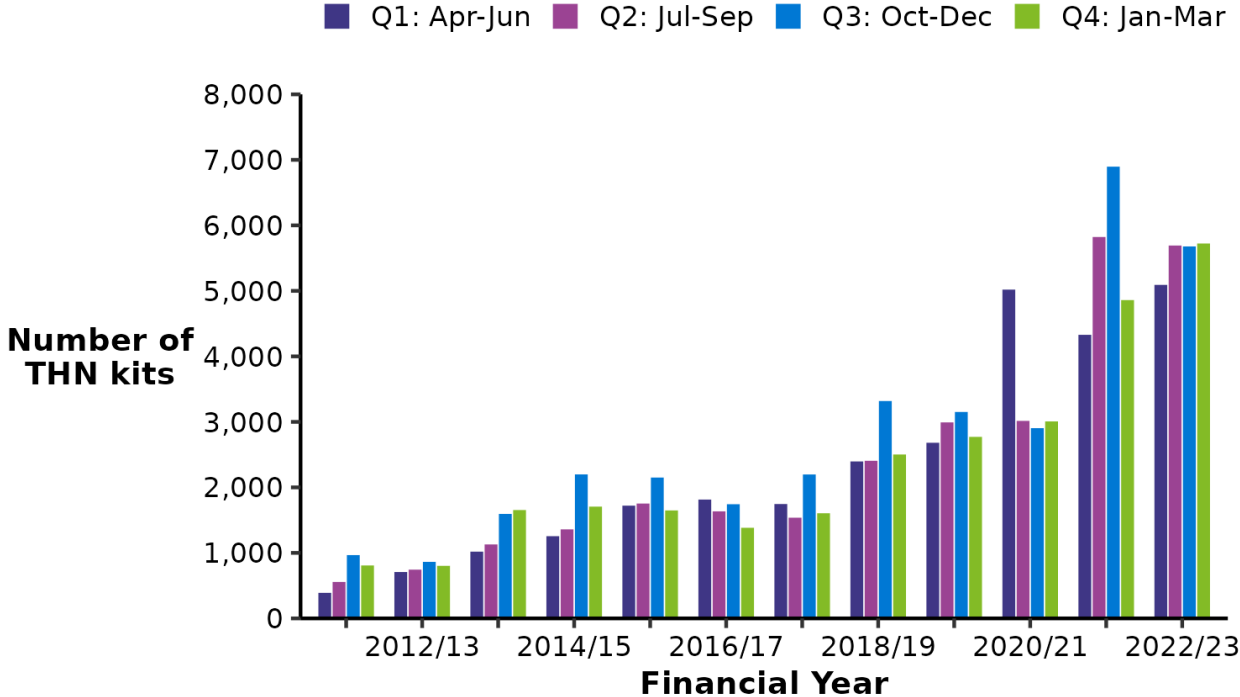
### 1.2: Number of kits issued from community outlets

In Scotland in 2022/23, there were 22,184 THN kits issued from community outlets. This was an increase of 278 kits (1%) compared with 2021/22 (21,906). There was a large increase (57%) in number of kits issued from 2020/21 (13,945) to 2021/22 (21,906). A total of 118,935 THN kits were issued from community outlets over the twelve years from 2011/12 to 2022/23 (Figure 1.1 and Table 1).

In most years since the start of the NNP, the supply of THN kits from community outlets peaked in November and December (part of quarter 3 of the financial year). Although a similar pattern was observed in 2021/22, the number of THN kits varied considerably between quarters, increasing from 4,329 kits in 2021/22 Quarter 1 to 6,896 in 2021/22 Quarter 3, and decreasing again to 4,859 in Quarter 4.

In 2022/23 the number of THN kits distributed increased between Q1 and Q2 but remained relatively stable otherwise (Figure 1.1 and Table 1).

**Figure 1.1: Number of THN kits supplied from community outlets from 2011/12 to 2022/23 by quarter (Scotland)**



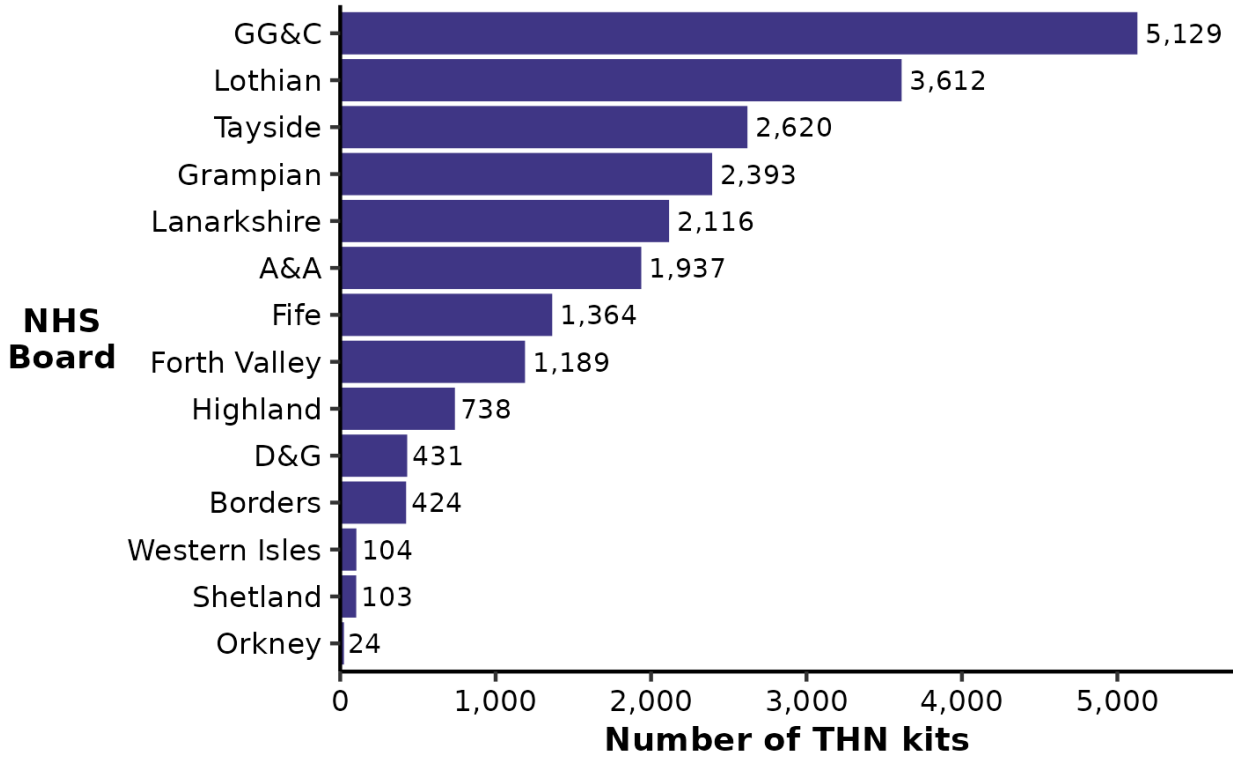
In 2021/22, two initiatives were launched which may have contributed to the increases and variations in supply observed over the past two years:

- On 31 August 2021, the Scottish Government, and the Scottish Drugs Forum (SDF) **launched a campaign** to promote the supply of THN kits to members of the public, via SFAD. By Quarter 4 2021/22, SFAD supplied around one fifth of all community supplies and over 91% of all supplies from non-drug treatment services, although this has since decreased to 65% in Quarter 4 2022/23.
- Although peer supply (where a trained peer supply champion/mentor with living/lived experience of drug use provides training and a THN kit to others who may witness an overdose) has been part of the NNP for several years, April 2021 saw the launch of a **national peer network** to enhance THN supply via this route. In 2021/22, there were 1,694 kits provided by peer supply within the community (7% of all kits issued from a community source of supply), with 1,453 kits supplied in 2022/23 (also 7% of all community supplies in 2022/23).

A breakdown of the number of community THN kits supplied by drug treatment services, SFAD, and non-drug treatment services (other than SFAD) is provided in Table 4.

Figure 1.2 (and Table 1) shows the number of THN kits issued from community outlets in each NHS Board in 2022/23.

**Figure 1.2: Number of THN kits supplied from community outlets, by NHS Board (Scotland; 2022/23)**



1. GG&C: Greater Glasgow and Clyde; A&A: Ayrshire and Arran; D&G: Dumfries and Galloway

NHS Greater Glasgow & Clyde (5,129) issued the highest number of kits in 2022/23, followed by NHS Lothian (3,612), NHS Tayside (2,620), and NHS Grampian (2,393). Collectively, these NHS Boards represented over 60% of all community THN kits issued in 2022/23.

For these NHS Boards, similar trends in community supplies were observed in 2021/22, with an increase of approximately 40% from quarter 1 to quarter 3 of 2021/22 (coinciding with an increase in supplies by SFAD), followed by substantial decreases in quarter 4 of 2021/22.

In 2022/23, community supply trends varied by NHS Board:

- NHS Greater Glasgow and Clyde: A decrease of 19% from 2021/22 (6,299) to 2022/23 (5,129).
- NHS Lothian: remained similar between 2021/22 (3,617) and 2022/23 (3,612).
- NHS Tayside: A decrease of 18% from 2021/22 (3,212) to 2022/23 (2,620).
- NHS Grampian: An increase of 41% from 2021/22 (1,703) to 2022/23 (2,393).

For further information see [Source and method of supply](#) section.

## **Naloxone type**

Until 2019, the only naloxone product licensed for lay use and therefore distributed as part of the National Naloxone Programme was administered by intramuscular injection (Prenoxad®)<sup>1</sup>. The first intranasal naloxone product, Nyxoid®, was licensed for lay administration in February 2019. Since then, the number of Nyxoid® kits distributed via the community has increased:

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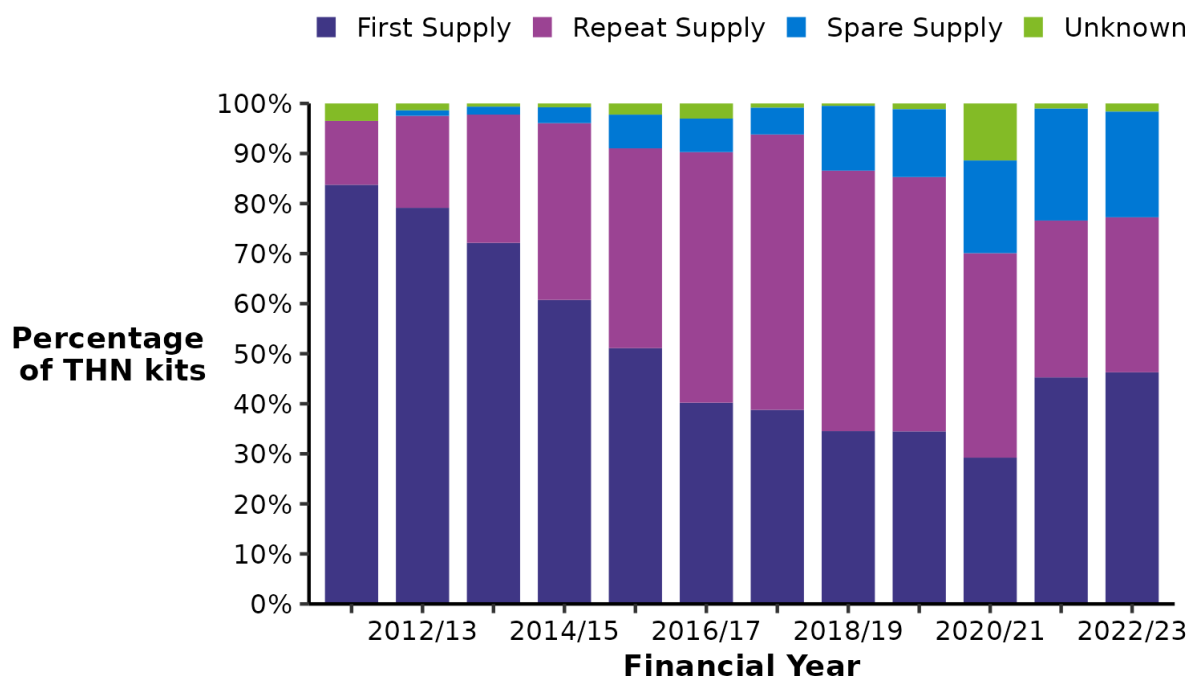
<sup>1</sup> Previously, NHS Highland distributed Prenoxad® kits with a nasal atomiser as part of a pilot scheme. As this was outwith the National Naloxone Programme these figures are excluded from NNP supply counts. NHS Highland ceased supplying these kits in Q1 2020/21. These figures are included as 'Other intranasal' within Table 1 of the [data tables](#).

- Of the 22,184 THN kits supplied from community outlets in 2022/23, 15,671 (71%) were Prenoxad<sup>®</sup> and 6,501 (29%) were Nyxoid<sup>®</sup> kits.
- By the end of 2022/23, 107,133 Prenoxad<sup>®</sup> kits and 11,790 Nyxoid<sup>®</sup> kits had been distributed by community outlets in total.

### Supply type

THN kits may be issued as a first, repeat or spare<sup>2</sup> supply. In 2022/23, of the 22,184 kits issued from community outlets, 46% (10,268) were reported as a first supply, 31% (6,871) as a repeat supply, 21% (4,682) as a spare supply, and 2% (363) as unknown. Comparable figures for 2021/22 were 45%, 31%, 22% and 1% respectively (Figure 1.3 and Table 3).

**Figure 1.3: Percentage of THN kits supplied from community outlets, by supply type and financial year (Scotland; 2011/12 to 2022/23)**



<sup>2</sup> Spare supply of take-home naloxone kits was first recorded in 2012/13.

Recording of a first supply indicates that a person received a THN kit (along with relevant training) for the first time and is the basis for the 'reach' calculations included in [Section 5](#). The percentage of THN kits issued as first supplies decreased from 2011/12 (84%) to 2020/21 (29%) - a pattern that would be expected following the roll out of a new initiative. However, since 2021/22 a large number of first supplies from community outlets have been made via SFAD and through peer supply, with the percentage of kits issued as first supplies increasing to 45% in 2021/22 and 46% in 2022/23. For SFAD alone, this included 3,841 kits distributed as first supplies in 2021/22 and 3,527 kits as first supplies in 2022/23.

It was anticipated that there would be an increasing demand for repeat supplies as THN kit supply and usage increased. The percentage of kits distributed as a repeat supply from community outlets increased each year from 13% in 2011/12 to 55% in 2017/18, but then decreased to 31% in 2022/23. In spite of the percentage decrease observed in recent years, the number of repeat supplies has increased over time and remains high. Repeat supplies increased from 2011/12 (347) to 2019/20 (5,892) and, in spite of a small decrease in 2020/21 (5,697), increased again in 2022/23 (6,871).

The provision of spare supplies has grown slowly over time, from 1% of supplies in 2012/13, to 21% in 2022/23, following recommendations and initiatives to increase provision and availability of THN.

Following the large increase in the number of kits reported as unknown during the early COVID-19 pandemic<sup>3</sup> (11% in 2020/21), the percentage of unknown kits has decreased (2% in both 2021/22 and 2022/23), returning to similar levels observed before the pandemic (see [Source and method of supply](#) section).

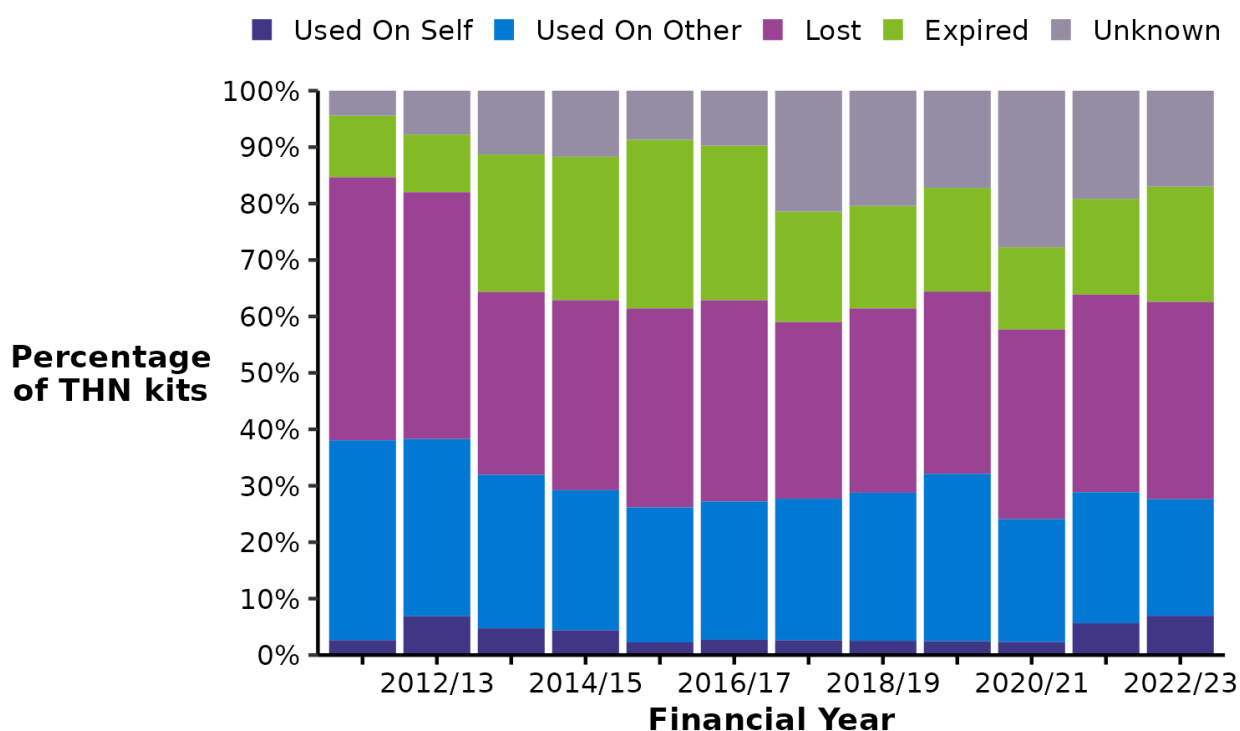
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<sup>3</sup> The large increase in the number of kits reported as being of unknown supply type in 2020/21 was primarily due to initiatives taken by NHS Fife in their response to the COVID-19 pandemic.

## Reasons for Repeat Supply

Figure 1.4 and Table 5 show the reasons for repeat supply of naloxone (based on self-reporting) from community outlets between 2011/12 and 2022/23, including breakdowns by recipient type.

**Figure 1.4: Percentage of THN kits supplied from community outlets as a repeat supply, by reason for repeat supply and financial year (Scotland; 2011/12 to 2022/23)**



In 2022/23, of the 6,871 THN kits noted as a repeat supply, the following responses were most common:

- 33% (2,255) were reported as due to 'previous kit lost';
- 19% (1,331) 'kit used on another';
- 19% (1,315) 'previous kit expired' (i.e. the pharmaceutical product (naloxone) had expired);
- 16% (1,097) 'unknown' reason for repeat supply;

- 7% (449) 'kit used on self';
- 6% (411) 'previous kit damaged'.

Throughout the programme, kit loss and use in treating overdoses have been the main reasons for issuing a repeat supply.

Since 2013/14 there has been little variation in the percentage of resupplies due to kit loss, which was stated as the reason for resupply for between 32% and 35% of cases.

In 2022/23, there were 1,780 cases where a community outlet repeat supply was made because the previous kit had been used to treat an opioid overdose<sup>4</sup>, a decrease compared to 2021/22 (1,882). The percentage of kits resupplied in 2022/23 due to use of the previous kit in treating an overdose decreased slightly to 26% (from 27% in 2021/22).

The percentage of repeat supplies due to kit expiry increased from 11% (37) in 2011/12 to 29% (836) in 2015/16 (THN kits have an expiry date of three years from the date of manufacture). From 2015/16, this percentage decreased to 19% in 2022/23 (1,315).

In 2022/23 there was a slight decrease in the number of repeat supplies where no reason for re-supply was provided (1,097, 17%), compared to 2021/22 (1,249, 19%). In spite of this decrease, the number of unknowns remained relatively high. This can impact data quality and may also explain some of the decreases observed in other categories. Particularly large numbers of repeat supplies for unknown reasons were seen in NHS Grampian (423, 53%), NHS Fife (117, 44%), and NHS Greater Glasgow & Clyde (316, 33%) in 2022/23.

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<sup>4</sup> Of the 1,780 kits in 2022/23 cases, 75% (1,331) were due to the 'kit used on another' and 25% (449) were due to 'kits used on self', i.e. administered to self.



## Recipient type

In response to a number of initiatives that promote THN supply and diversification in recipient type, further categories including 'member of the public' and 'professional' (those who do not work directly with people who use drugs, but carry naloxone as part of their work, e.g. public transport workers, bar/night club staff) have been added to the naloxone database.

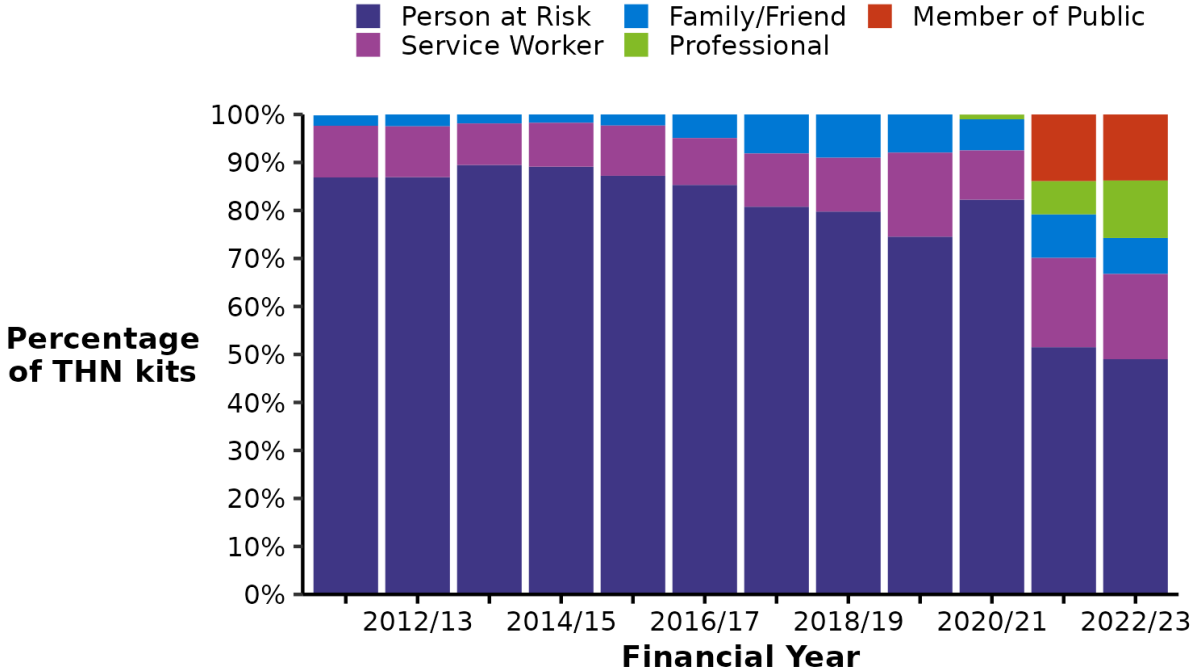
THN kits issued from community outlets may be supplied to:

- the person at risk of opioid overdose;
- to family/friends (with the recorded consent of the person at risk – the named patient);
- to a service worker;
- to a 'professional' person;
- to a member of the public.

Figure 1.5 shows that, of the 22,184 kits issued from community outlets in Scotland in 2022/23, almost half (10,872, 49%) were issued to people at risk of opioid overdose. A further 18% (3,939) were supplied to service workers, 14% (3,056) supplied to members of the public, 10% (2,653) to professionals, and 8% (1,664) to family/friends.

Table 3 provides a breakdown of community outlet kits supplied by recipient type for each financial year and quarter for Scotland and by NHS Board.

**Figure 1.5: Percentage of THN kits supplied from community outlets, by recipient type and financial year<sup>1</sup> (Scotland; 2011/12 to 2022/23)**



1. A small percentage of kits (<1%) recorded as "Unknown" recipient type in 2011/12 are not shown in the chart.

Since the beginning of the NNP, the majority of kits supplied from community outlets were to people at risk of an opioid overdose. The overall percentage of kits issued to people at risk was much larger between 2011/12 and 2021/22 (averaging 82%) but has since decreased to around 50% of kits in 2021/22 and 2022/23. However, the number of kits issued to people at risk has remained similar since 2020/21 at around 11,000 kits per year.

Apart from an increase to 18% in 2019/20, the percentage of THN kits issued to service workers remained broadly stable between 2011/12 and 2020/21, at an average of 11%. In 2021/22 and 2022/23 this percentage was higher at 19% and 18% respectively.

Supply to family/friends and other groups who may encounter an overdose (e.g. staff working with people who use drugs, 'professional' individuals, members of the public) has expanded considerably since 2015/16 (929 kits, 13%) to 2022/23 (11,302 kits, 51%)<sup>5</sup>. This diversification in recipient type has been further enhanced by recent developments in peer supply and distribution via SFAD, both of which have contributed to increased THN distribution to these groups since 2021/22 (10,623 kits, 48%).

### **Source and method of supply**

Given the substantial number of SFAD supplies (see [Introduction](#) for further information), and the resulting differences in the recipient type and supply type, the following provides a breakdown of THN provision by Drug treatment services; SFAD; and Non-drug treatment services (other than SFAD).

In 2022/23, of the 22,184 kits supplied from community outlets:

- 12,575 (57%) were distributed by drug treatment services;
- 5,042 (23%) were distributed by SFAD;
- 1,581 (7%) were distributed by non-drug treatment services (excluding SFAD);
- 652 (3%) were supplied directly by community pharmacy staff i.e. not dispensed against a prescription written by another healthcare professional;
- 107 (<1%) were distributed from police custody;

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<sup>5</sup> These increases were initially related to the use of powers granted in the 2015 revision to the 2012 Human Medicines Regulations (UK Government, 2015), which allowed injectable naloxone to be supplied directly to people likely to witness an overdose (see [Appendix A1.1](#) for further information).

- 68 (<1%) were distributed from A&E / Hospital<sup>6</sup>;
- 598 (3%) were supplied as 'other'<sup>7</sup>.

Not all NHS Boards were able to capture this information and 1,561 (7%) kits were of an unknown source of supply. Further information on source of supply figures can be seen within the [National Naloxone Programme Quarterly Monitoring Bulletin](#).

Method of supply was accurately recorded using categories such as 'face-to-face' (traditional method of supply), postal distribution (including mostly SFAD, but also continued use following COVID-19 pandemic), and supplied directly by community pharmacy staff. In 2022/23, of the 22,184 kits supplied from community outlets:

- 14,507 (65%) kits were distributed face-to-face;
- 4,077 (18%) kits were distributed by post; and
- 177 (1%) kits were supplied directly by community pharmacy staff;
- 31 (<1%) kits were supplied as 'other'<sup>7</sup>.

As with source of supply, not all NHS Boards were able to capture this information and 3,392 (15%) kits were of an unknown method of supply.

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<sup>6</sup> Kits recorded as A&E/Hospital are those issued from community services located within a hospital setting.

<sup>7</sup> 'Other' selected if the available categories were not suitable for recording.

### 1.3: Characteristics of at risk recipients of community outlet kits

In 2022/23, community outlets in Scotland supplied 10,872 kits to people at risk of opioid overdose. In 79% (8,637) of cases, the person consented to the sharing of their personal data for monitoring purposes (Table 6)<sup>8</sup>. This was a decrease from 2021/22 (84%).

In 2022/23, 67% (5,815) of THN kits supplied to a person at risk from a community outlet were to males, and 32% (2,797) were provided to females (Table 7). The percentage of kits supplied by sex has remained broadly similar since the beginning of the NNP (across all years in the time series combined, 67% of community outlet supplies were made to males).

Figure 1.6 and Table 7 shows the age distribution of people at risk supplied with a THN kit from a community outlet for years 2011/12 to 2022/23. The main points from this analysis are:

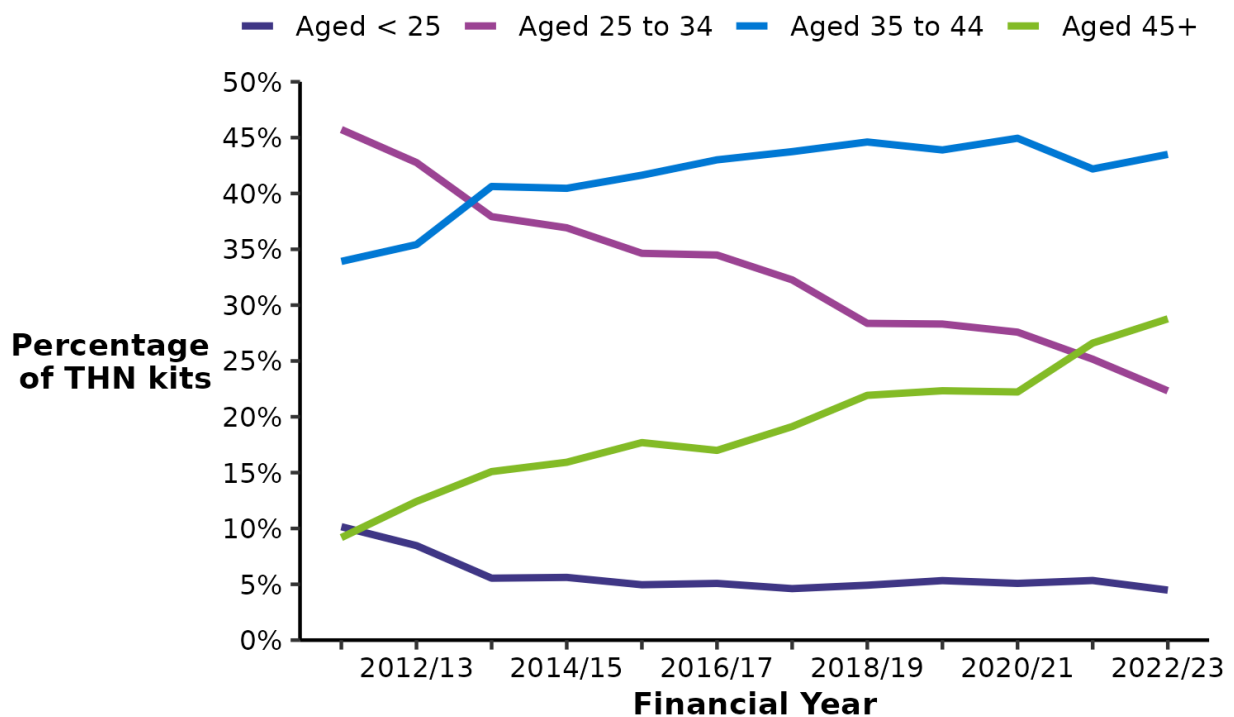
- Among people at risk supplied with THN, the most common age group was 35-44 years (43% (3,757) in 2022/23). The percentage in this age group has increased since the early years of the NNP (2011/12 (34%)) and has remained stable at around 45% since 2018/19.
- In 2022/23, 28% (2,485) of kits were supplied to people aged 45 years and over, making this the second most common age group. The percentage of people aged 45 years and over increased from 9% in 2011/12.
- In 2022/23, 22% (1,928) of kits were supplied to people aged 25-34 years, a decrease since 2011/12 (46%).

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<sup>8</sup> Whilst the naloxone dataset includes a number of data items that may aid the calculation of the number of 'individuals' who were supplied kits, due to gaps in data and/or variations in how data are recorded between records (e.g. recording of slightly different initials, postcode sector information and/or date of birth) it is not possible to conclusively identify the number of individuals involved.

- In 2022/23, 4% (387) of kits were supplied to people aged under 25 years. The percentage of people aged under 25 years decreased from 10% in 2011/12 to 5% in 2015/16, and has remained at this level since.

**Figure 1.6: Percentage of THN kits supplied to persons at risk from community outlets, by age group of recipient and financial year (Scotland; 2011/12 to 2022/23)<sup>1</sup>**



1. Between 0-1% of kits are recorded as unknown each year.

The overall change reflects a wider ageing trend among people who use drugs problematically (Scottish Drugs Forum, 2017 and Public Health Scotland, 2019). Comparable changes in the age of people admitted to hospital in Scotland for problematic opioid use can be seen in other PHS publications, such as [Drug Related Hospital Statistics](#) (Public Health Scotland, 2022a).

## 1.4: 'Reach' of community outlet THN supplies

Naloxone 'reach' is estimated by quantifying how many individuals at risk of opioid overdose have been supplied with THN. In order to calculate this, only first supplies (excluding repeat supplies and spare supplies) to people at risk of opioid overdose (excluding supplies made to service workers, family/friends, professionals and members of the public) are counted. See [Appendix A1.6](#) for further information.

Table 3 shows the number of THN kits issued from community outlets as a first supply to people at risk in each NHS Board from 2011/12 to 2022/23 (and the cumulative total over ten years).

Since the beginning of the NNP, the number of first supplies to persons at risk from community outlets has fluctuated, averaging approximately 2,550 kits. However, reflecting the various initiatives to encourage and diversify THN provision among other recipient types, as a percentage of overall kits, first supplies have decreased from 85% in 2011/12 to 22% in 2022/23.

In 2022/23, 2,299 people at risk received a first supply of naloxone from a community outlet in Scotland, a decrease of 580 kits (20%) from 2021/22 (2,879). NHS Greater Glasgow & Clyde supplied the largest number of community first supplies to people at risk in 2022/23 (543), followed by NHS Lothian (336) and NHS Lanarkshire (292).

## 2. Take-home naloxone (THN) supply in prisons

### 2.1: Introduction

Take-home naloxone (THN) kits are supplied to prisoners, along with their personal belongings, on release from custody<sup>9</sup>. The [data tables](#) present prison data by NHS Board of location throughout. In Table 1 (number of kits distributed by year and quarter) data are also presented by prison establishment.

### 2.2: Number of kits issued in prisons

In Scotland in 2022/23, there were 1,929 THN kits issued in prisons, a 14% increase compared with 2021/22 (1,690). A cumulative total of 12,412 THN kits were issued in prisons in Scotland from 2011/12 to 2022/23 (Figure 2.1 and Table 1).

The number of kits issued on release from prison custody has increased year-on-year since 2017/18 (664). A large increase in the number of kits supplied was observed in Quarter 3 2021/22, which may have partly been due to the increase in provision following the introduction of the peer-to-peer supply project<sup>10</sup>.

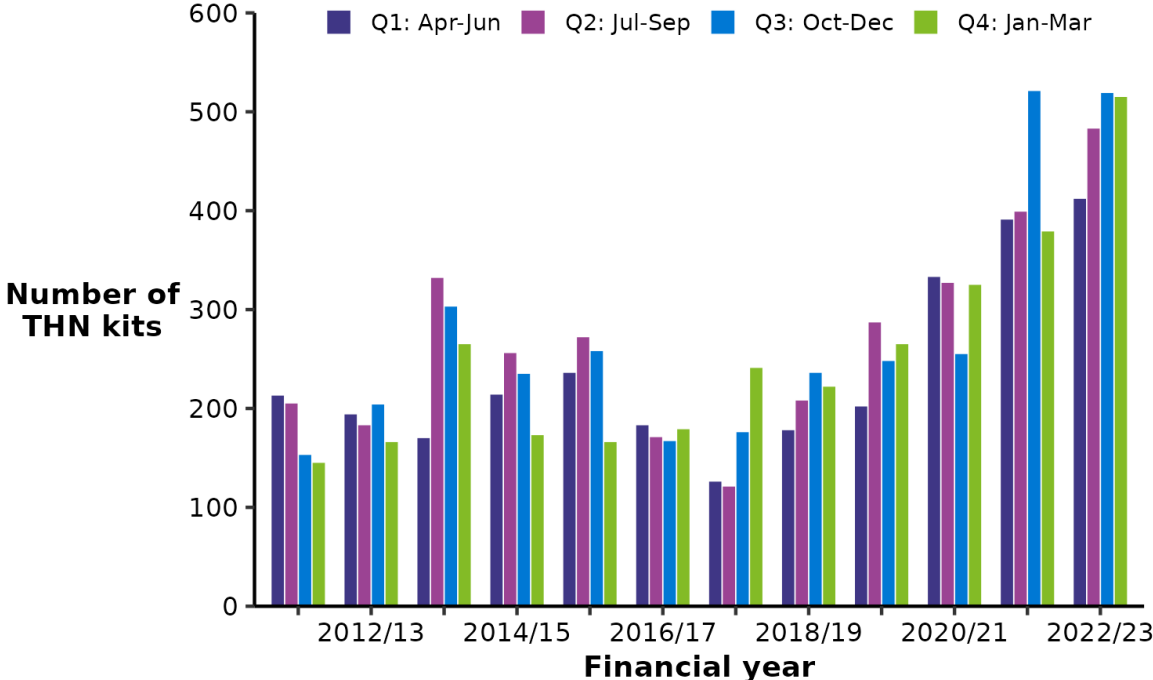
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<sup>9</sup> One exception to this is HMP Castle Huntly (an open prison), which provides training and THN to prisoners at risk who leave the establishment on home leave prior to their liberation.

<sup>10</sup> Developed as a further method of supplying THN. A trained peer supply mentor provides naloxone administration training at the point of liberation to all, irrespective of drug use, and if training is accepted a THN kit is provided. Peer supply currently operates within HMP Barlinnie, HMP Edinburgh, HMP Low Moss, HMP Greenock, and HMP Castle Huntly. Further information on the evaluation of the SDF project can be found on their [website](#).



**Figure 2.2: Number of THN kits supplied from prisons by quarter (Scotland; 2011/12 to 2022/23)**



Statistics on the number of kits supplied in each prison establishment by financial year and quarter are shown in Table 1. THN supply by establishment varied considerably from year to year. Compared with 2021/22, the number of THN kits supplied in 2022/23 had increased in seven prisons and decreased in eight prisons. HMP Barlinnie saw a notable increase in kits distributed, rising from 323 kits in 2020/21 to 627 kits in 2022/23.

HMP Barlinnie (627) issued the highest number of kits in 2022/23, followed by HMP Low Moss (452), HMP Grampian (166), HMP Polmont (152), and HMP Glenochil (139). Collectively, these five prisons represent 80% of all prison THN kits issued in 2022/23.

**Naloxone type**

Since the first intranasal naloxone product, Nyxoid®, was licensed for lay administration in February 2019, the number of Nyxoid® kits distributed via prisons has increased:

- In 2021/22, there were 1,690 kits supplied from prison outlets. Of these, 1,221 (72%) were Prenoxad<sup>®</sup> and 469 (28%) were Nyxoid<sup>®</sup> kits.
- In 2022/23, for the first time, more Nyxoid<sup>®</sup> kits were distributed via prisons than Prenoxad<sup>®</sup> kits. Of 1,929 kits supplied from prison outlets, 829 (43%) were Prenoxad<sup>®</sup> and 1,100 (57%) were Nyxoid<sup>®</sup> kits.
- By the end of 2022/23, 10,535 Prenoxad<sup>®</sup> kits and 1,877 Nyxoid<sup>®</sup> kits had been distributed in total.

## Supply type

Naloxone kits may be issued as a first, repeat or spare supply<sup>11</sup>. Where a repeat supply was made, this could be following an initial supply from a community outlet, or following supply on release from a previous stay in prison (i.e. issued in a prison). It is not possible, using the current naloxone monitoring dataset, to determine where the previous supply was made.

Of the 1,929 kits issued in prisons in 2022/23, 62% (1,192) were recorded as a first supply (an increase of 91% (625) from 2021/22)<sup>12</sup>, and 35% (666) were issued as a repeat supply. Both these supply types have increased since 2019/20, a trend which may have been influenced by the increase in peer supply in prisons as well as training being offered to those not at risk of opioid overdose. Status was unknown for 2% (47) of kits issued (Figure 2.2 and Table 3). The percentage of spare kits supplied in prisons in 2022/23 was 1% (24).

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<sup>11</sup> Spare supply of take-home naloxone kits was first recorded in 2012/13.

<sup>12</sup> Naloxone administration training is now offered at the point of liberation to all prisoners, irrespective of drug use, and if training is accepted a THN kit is provided, which likely accounts for this large increase in first supply kits issued.

**Figure 2.2: Percentage of THN kits supplied in prisons, by supply type and financial year (Scotland; 2011/12 to 2022/23)**

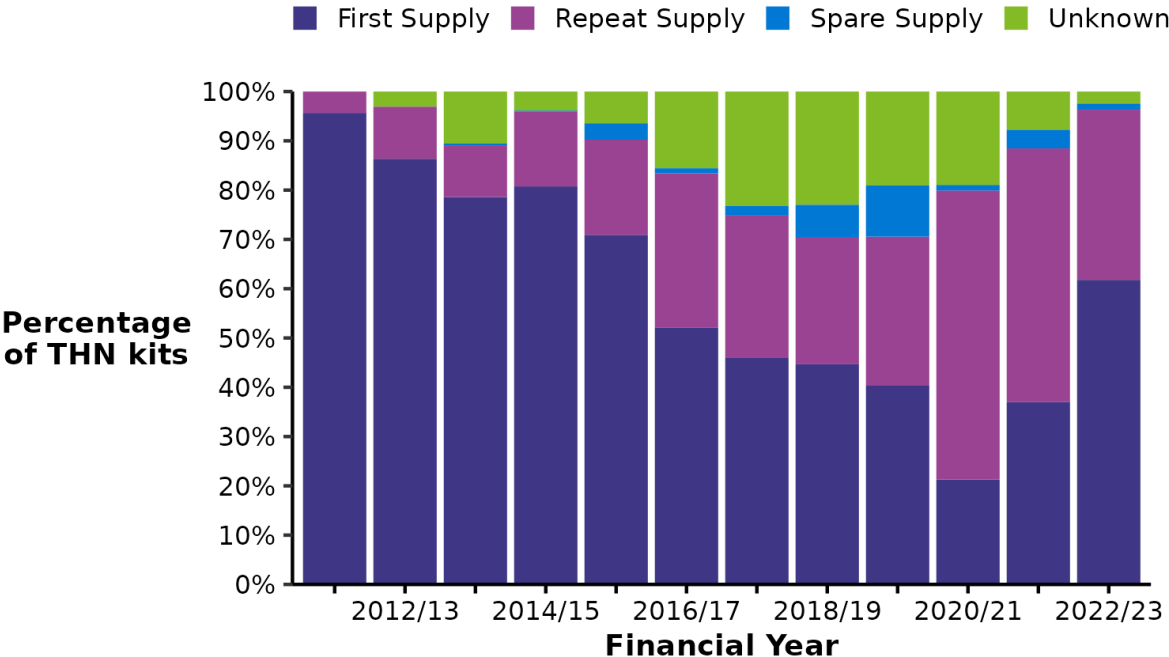


Table 5 provides a breakdown of the reasons for repeat supply of naloxone in prisons from 2011/12 to 2022/23. Of the 666 cases noted as a repeat supply in 2022/23, the most common reasons for replacement included ‘unknown’ in 40% (266) of cases, ‘previous kit lost’ in 30% (197) of cases<sup>13</sup>, and expired in 9% (62) of cases. In 2022/23, there were 126 (19%) cases where a repeat supply was reported as being made due to use of the previous kit on a person during an opioid overdose, the highest percentage since 2011/12 (32%).<sup>14</sup>

<sup>13</sup> Kits supplied in prisons are issued on prisoner release (or for home leave, in the case of Castle Huntly open prison), not ‘in prison’, therefore any reference to loss of the previous kit, use of the previous kit on self or on another, kit confiscated etc. would not have occurred ‘in prison’.

<sup>14</sup> Of these 126 cases, 75% (94) were for the ‘kit used on another’ and 25% (32) for ‘kits used on self’, i.e. administered to self.

## Recipient type

In 2022/23, of the 1,929 THN kits issued in prisons in Scotland, 57% (1,090) were supplied to people at risk of opioid overdose (Table 3). There was an increase in the percentage of kits provided to family/friends from 6% in 2020/21 to 20% in 2022/23. Additionally, since the beginning of 2022/23, 23% of kits (452) have been issued to 'other members of the public' (i.e. someone who may witness an overdose). These increases appear to have been associated with a change in the scope of the naloxone supply programme delivered in prisons and new initiatives introduced, such as the peer-to-peer supply programme.

### 2.3: Characteristics of at risk recipients of kits supplied in prisons

In 2022/23, there were 1,090 THN kits issued in prisons in Scotland to people at risk of opioid overdose. In 1,046 of these cases (96%) the recipient consented to the sharing of their personal data for monitoring purposes (Table 6).

In Scottish prisons, 89% of kits issued to people at risk of opioid overdose in 2022/23 were to males and 11% to females (Table 7). Since the beginning of the NNP, the percentage of prison THN kits supplied to females ranged from 11% (2022/23) to 32% (2011/12). According to the latest Annual Report by Scottish Prison Service (Scottish Prison Service, 2023); females accounted for 4% of the average daily sentenced prison population in Scotland in 2022/23.

Figure 2.4 and Table 7 describe the age distribution of persons at risk of opioid overdose receiving kits in prisons between 2011/12 and 2022/23. In 2022/23, people aged 35-44 years accounted for 39% (408) of kits supplied in prisons, followed by 33% (342) of those aged 25-34 years.

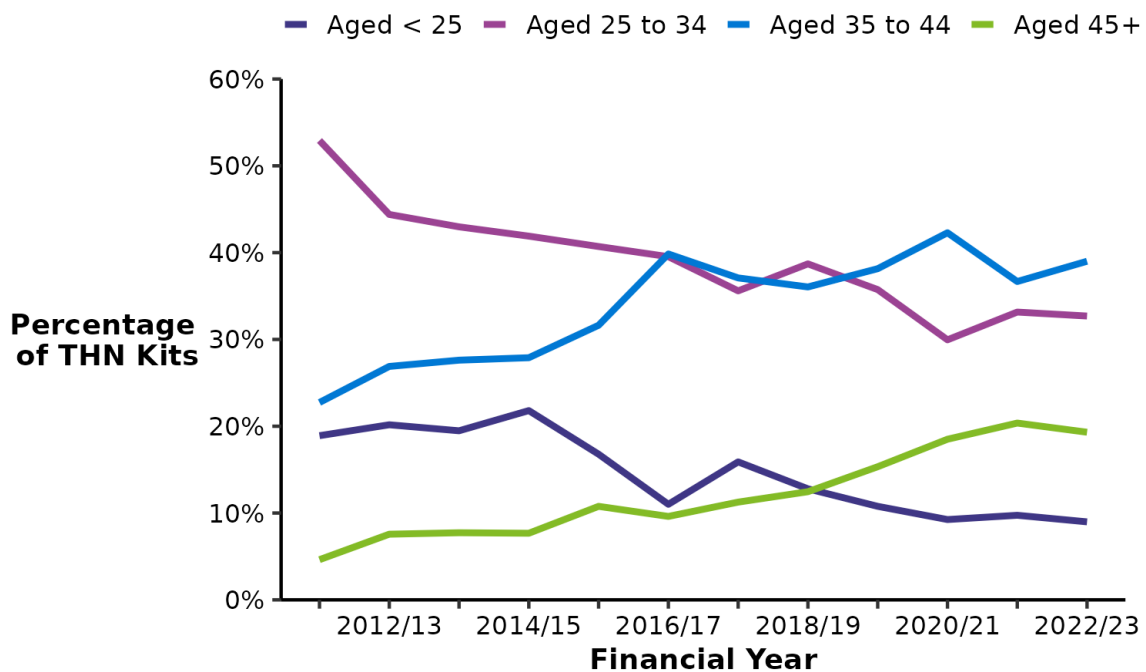
The age distribution of people who receive THN on prison release has changed since the beginning of the National Naloxone Programme (NNP):

- The percentage of recipients aged 35-44 years varied somewhat over time but has seen a general increase from 2011/12 (23%) to 2022/23 (39%).

- The percentage of recipients aged 25-34 years was lower in 2022/23, having seen a decrease from 2011/12 (53%) to 2022/23 (33%).
- The percentage of recipients aged 45 years and over has increased over time from 2011/12 (5%) to 2022/23 (19%).
- The percentage of recipients under 25 has varied over time but has seen a decrease from 19% in 2011/12 to 9% in 2022/23.

The overall change reflects a wider ageing trend among people who use drugs problematically and prison populations (Scottish Drugs Forum, 2017 and Scottish Government, 2023).

**Figure 2.3: Percentage of THN kits supplied to persons at risk in prisons, by age group of recipient and financial year (Scotland; 2011/12 to 2022/23)**



## 2.4: 'Reach' of prison THN supplies

Naloxone 'reach' is estimated by quantifying how many individuals at risk of opioid overdose have been supplied with THN. A general discussion of the rationale and interpretation of this measure can be found in the [community section](#).

In order that they can be counted alongside supplies from other sources and compared with the estimated at risk populations in each area, prison 'reach' figures are described on the basis of the NHS Board in which the prison is located. While most prisons accommodate individuals as close as possible to their area of residence (and therefore reflect the resident population), some establishments are national facilities, accommodating prisoners from across Scotland. Additionally, while all prisons except HMP Cornton Vale accommodate male prisoners, currently only five prisons accommodate female prisoners (HMP Cornton Vale, HMP Edinburgh, HMP Grampian, HMP Greenock, and HMP Polmont)<sup>15</sup>. This means that female prisoners may not be accommodated close to their area of residence. While prison 'reach' effectively describes an aspect of NHS Board harm reduction activity, inaccuracies may be introduced when comparing with local estimates of the number of people who use drugs problematically. There is zero prison 'reach' in areas with no establishments (NHS Borders, NHS Fife, NHS Orkney, NHS Shetland and NHS Western Isles), producing a potential underestimate of the numbers of resident at risk individuals with a THN supply. Prison 'reach' in areas with national facilities may lead to an overestimation of the numbers of resident at risk individuals with a THN supply. See [Appendix A1.6](#) for further information about the calculation of 'reach'.

Table 3 shows the number of THN kits issued by prisons as a first supply to people at risk of opioid overdose in each NHS Board from 2011/12 to 2022/23. In 2022/23, prisons issued 533 people with their first THN supply. By NHS Board, the highest number of prison first supplies to people at risk were made in NHS Greater Glasgow & Clyde (178), followed by NHS Grampian (124), and NHS Forth Valley (120).

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<sup>15</sup> HMP Inverness also has a Community Integration Unit (CUI) and can hold female prisoners but does not currently do so.

## 3. Take-home naloxone (THN) supply via community-dispensed prescriptions

### 3.1: Introduction

Prescribing take-home naloxone (THN) to people at risk of opioid overdose has always been technically possible via primary care or hospital prescriptions. However, the absence of a suitable product for administration by lay persons before 2013, along with central reimbursement of THN costs in the first five years of the National Naloxone Programme (NNP), meant that THN was rarely prescribed using this mechanism. Following changes in medicines regulation and government policy (see [Appendix A1.2](#)) some NHS Boards now prescribe THN which is then dispensed by community pharmacy on presentation of the prescription.

This section presents information from PHS's Prescribing Information System on the number of THN kits dispensed to people in this way. This is more accurate than reporting the number of THN prescriptions generated as 1) prescriptions may not be presented to a pharmacy and 2) multiple kits may be dispensed on the basis of a single prescription.

For comparability with other figures presented in this report, the data presented are restricted to the recommended THN products for administration by lay persons<sup>16</sup> (Prenoxad-inj-1mg/ml and Nyxoid-spray-1.8mg/0.1ml).

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<sup>16</sup> For the period reported, Prenoxad<sup>®</sup> and Nyxoid<sup>®</sup> are the only recommended products for administration by lay persons in the community (i.e. containing the correct patient information leaflet and dosage instructions). Technically, while other naloxone products could have been supplied, this was rarely done because relevant instruction leaflets were for medical professional use only. Reflecting this, a total of 175 generic Naloxone Hydrochloride-inj-1mg/ml supplies were excluded from the data in 2020/21.

THN kits may be dispensed in community pharmacies via four types of community/hospital prescription<sup>17</sup>:

- GP10 (GP Standard Prescription Form),
- GP10N (Nurse Prescription Form),
- GP10P (Pharmacist Prescription Form) and
- HBP/HBPA (Hospital Based Prescribers, and Hospital Based Prescribers in Addiction services).

### **3.2: Number of kits dispensed via community prescription**

Up to and including 2022/23, 17,812 kits were supplied via prescriptions dispensed by community pharmacy, with the majority (85%) of kits dispensed coming from either NHS Greater Glasgow and Clyde (9,899, 56%) or NHS Forth Valley (5,159, 29%). The number of kits distributed in this way remained relatively low until 2020/21, when a large increase was observed, coinciding with the beginning of the COVID-19 pandemic. This period included a particularly large number of THN kits provided within Quarter 1 (April to June) of financial year 2020/21 (2,685), during the first lockdown (Figure 3.1).

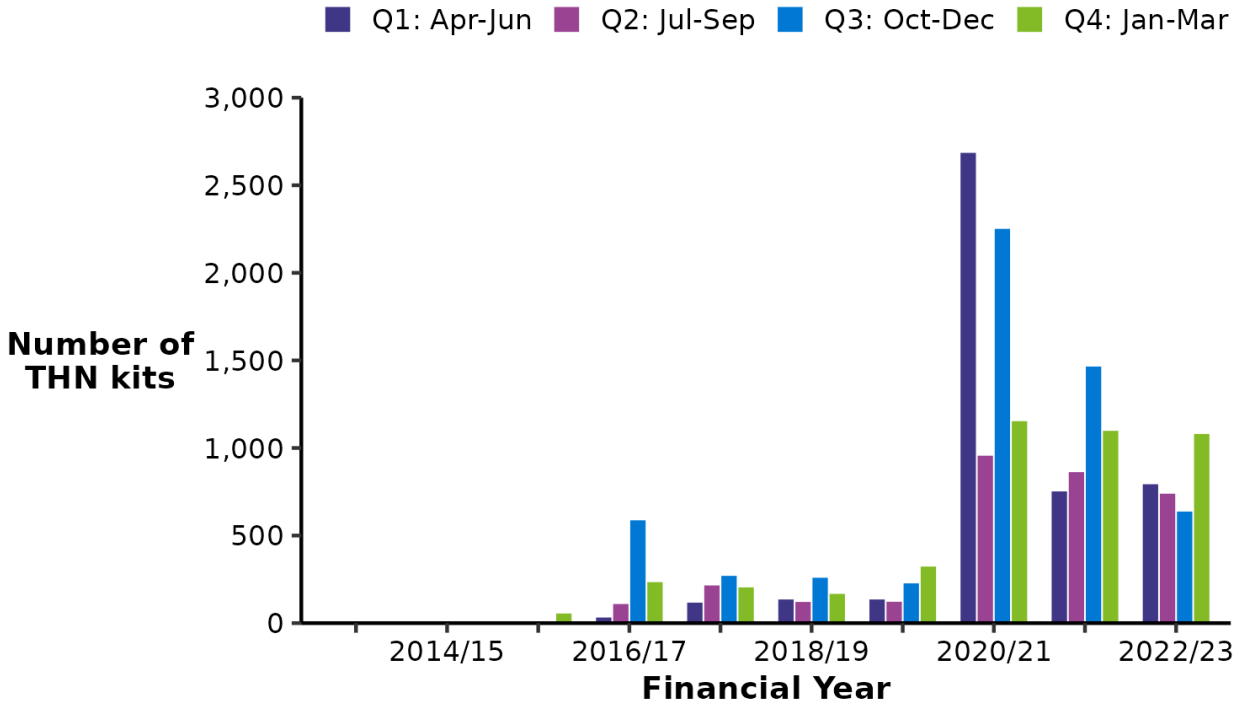
In Scotland in 2022/23, there were 3,249 THN kits dispensed via community prescription (Table 1). This was a decrease of 22% compared to the previous year (2021/22: 4,177).

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<sup>17</sup> Kits dispensed on the basis of GP10A (Stock Order Form) and CPUS (Community Pharmacy Urgent Supply) forms are not included.



**Figure 3.3: Number of THN kits supplied via community-dispensed prescription by quarter (Scotland; 2013/14 to 2022/23)**



In 2021/22 and 2022/23, increases in THN supply via community pharmacies were observed in a number of NHS Boards. Of the 3,249 kits supplied in 2022/23, which were dispensed by community pharmacy on receipt of a prescription;

- NHS Forth Valley provided 67% (2,191). Prior to 2020/21, only three naloxone kits were dispensed from a prescription in NHS Forth Valley.
- NHS Greater Glasgow & Clyde provided 14% (459) of kits in this way. This was a large decrease from 2020/21 (72%, 5,072) and 2021/22 (44%, 1,825).
- NHS Tayside provided 8% (257). Prior to 2020/21, only four naloxone kits had been dispensed in NHS Tayside.

## Prescription type

Of the 3,249 kits dispensed by community pharmacy from a prescription in 2022/23;

- 2,444 (75%) were issued on the basis of hospital-based drug treatment prescriptions (HBPA),
- 733 (23%) issued on the basis of a medical prescriber prescription (GP10),
- 71 (2%) on the basis of nurse prescriptions (GP10N),
- 1 (<1%) by hospital-based prescriptions (HBP), and
- zero kits by supplementary/independent pharmacist prescriptions (GP10P).

The number of kits dispensed using each type of prescribing form increased in 2020/21. While THN dispensing based on GP10, GP10N, HBP and GP10P forms has since decreased, the number of kits dispensed on the basis of hospital-based drug treatment prescriptions (HBPA) has continued to increase, from 1,600 kits (23%) in 2020/21 to 2,444 kits (75%) in 2022/23.

Among all THN kits prescribed between 2013/14 and 2022/23 (17,812), the majority of kits dispensed from a prescription (10,606, 60%) were dispensed on a primary care prescription (GP10), followed by hospital-based drug treatment prescriptions (HBPA: 6,336, 36%), nurse prescriptions (GP10N: 541, 3%), and supplementary/independent pharmacist prescriptions (GP10P: 192, 1%).

### 3.3: 'Reach' of THN prescriptions dispensed via community pharmacy

One of the purposes of prescribing THN is to expand the 'reach' of THN provision. This was particularly important during COVID-19 when less face-to-face appointments occurred, thus reducing opportunity for treatment services to give supplies directly to patients. It is therefore important to describe the contribution of these supplies to the 'reach' of the NNP. A general discussion of the rationale and interpretation of this measure can be found in the [community section](#).

Due to information on recipient type and supply type<sup>18</sup> not being available for THN dispensed via community prescription, it is assumed that the percentage of first supplies to people at risk of opioid overdose is approximately the same as that for community outlets. See [Appendix A1.6](#) for further information.

Table 3 shows the estimated number of THN kits issued as a first supply to people at risk via community prescription in each NHS Board from 2013/14 to 2022/23 (and the cumulative total over that period). Of the estimated 297 first supplies to people at risk of opioid overdose made via community prescribing in 2022/23, there were:

- 170 (57%) in NHS Forth Valley
- 59 (20%) in NHS Greater Glasgow & Clyde
- 34 (11%) in NHS Tayside
- 30 (10%) in NHS Lothian.
- All other NHS Boards each represent less than 1% of total first supplies to people at risk.

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<sup>18</sup> Data on THN dispensing via community prescription were collated from PHS's Prescribing Information System. Although this system includes the recipient's Community Health Index (CHI) number, due to the high number of THN prescriptions which did not include a valid CHI, it was not possible to perform person-level analysis to determine if individuals had previously been supplied with naloxone. Unlike community and prison data collected in PHS's agreed national dataset for NNP monitoring, prescribing records do not indicate recipient type (person at risk, friends/family, service worker).

# 4. Take-home naloxone (THN) supply from Scottish Ambulance Service

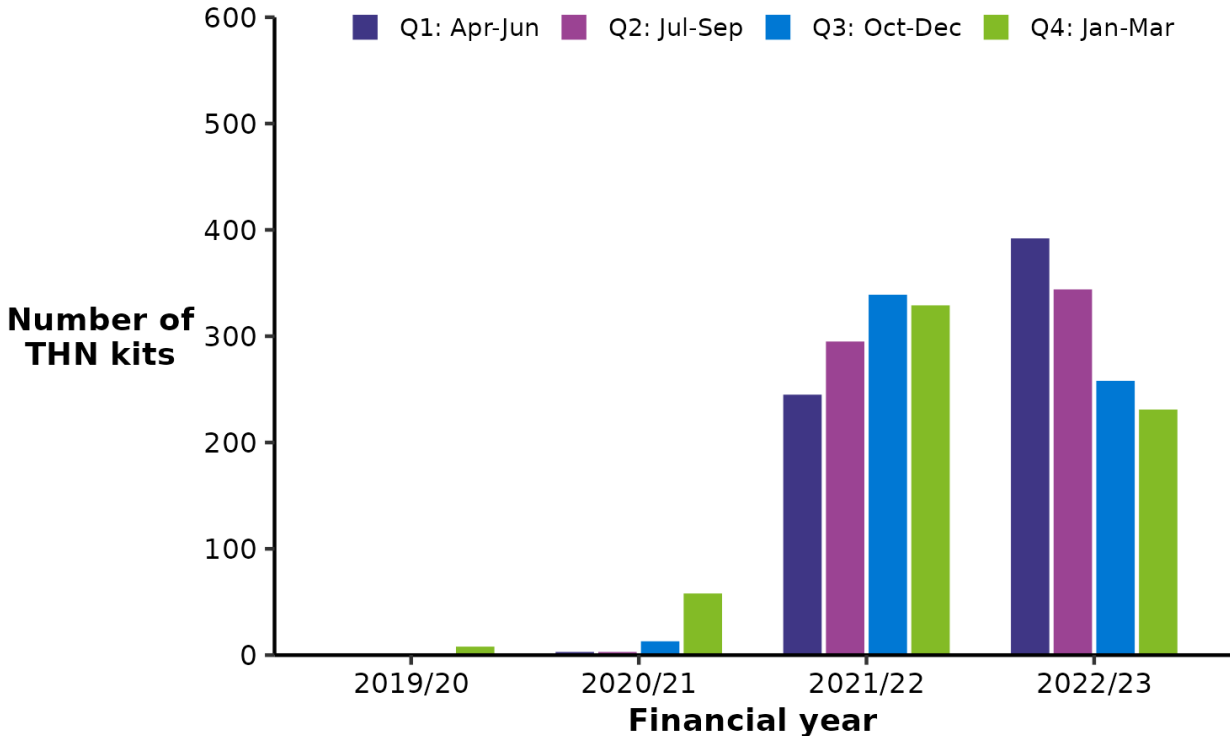
## 4.1: Introduction

In February 2020, Scottish Ambulance Service (SAS) initiated a pilot naloxone supply scheme from their Springburn facility, covering most of NHS Greater Glasgow and Clyde, and parts of NHS Lanarkshire. This pilot has now been expanded, with all areas able to supply intramuscular (Prenoxad®) THN kits to people when they attend incidents (including those incidents unrelated to opioid overdose). The [data tables](#) present SAS data by NHS Board of location of incident throughout.

## 4.2: Number of kits issued by the Scottish Ambulance Service

By the end of 2022/23, a total of 2,518 THN kits had been distributed by SAS (Figure 4.1).

**Figure 4.4: Number of THN kits supplied by SAS by quarter (Scotland; 2019/20 to 2022/23)**



Of the 1,208 kits distributed in 2021/22;

- 365 kits (30%) were issued to persons at risk, 472 (39%) kits were issued to family/friends of a person at risk, and 371 (31%) kits were issued to service workers.
- 689 (57%) kits were issued as 'first' supplies, 195 (16%) kits were issued as 'repeat' supplies, and 229 (19%) kits were issued as 'spare' supplies. A further 95 (8%) kits were of 'unknown' supply type.
- Of the 195 kits issued as repeat supplies, 139 (71%) kits were issued due to the previous kit having been used on a person at risk.

Of the 1,225 kits distributed in 2022/23;

- 260 kits (21%) were issued to persons at risk, 405 (33%) kits were issued to family/friends of a person at risk, and 560 (46%) kits were issued to service workers.
- 783 (64%) kits were issued as 'first' supplies, 171 (14%) kits were issued as 'repeat' supplies, and 194 (16%) kits were issued as 'spare' supplies. A further 77 (6%) kits were of 'unknown' supply type.
- Of the 171 kits issued as repeat supplies, 107 (63%) kits were issued due to the previous kit having been used on a person at risk.

The large increase in the percentage of kits supplied to service workers (from 31% in 2021/22 to 46% in 2022/23) was mainly associated with further joint initiatives, as part of the **SDF and Scottish Government campaign**, to promote the provision of THN carriage. This included carriage of THN among taxi drivers, branding of campaign related information on taxis within Edinburgh, and engagement work within ambulance stations and at community events<sup>19</sup>.

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<sup>19</sup> Further information on the initiative involving taxi drivers can be found here:

<https://www.sdf.org.uk/edinburgh-cabbies-to-carry-naloxone/>

## **5. Combined take-home naloxone (THN) supply from community outlets, in prisons, from Scottish Ambulance Service, and via community-dispensed prescriptions**

### **5.1: Introduction**

This section describes the combined number of take-home naloxone (THN) kits distributed/dispensed from:

- Community outlets and in prisons from 2011/12 to 2022/23;
- Community-dispensed prescriptions from 2013/14 to 2022/23; and,
- Scottish Ambulance Service from 2019/20 to 2022/23.

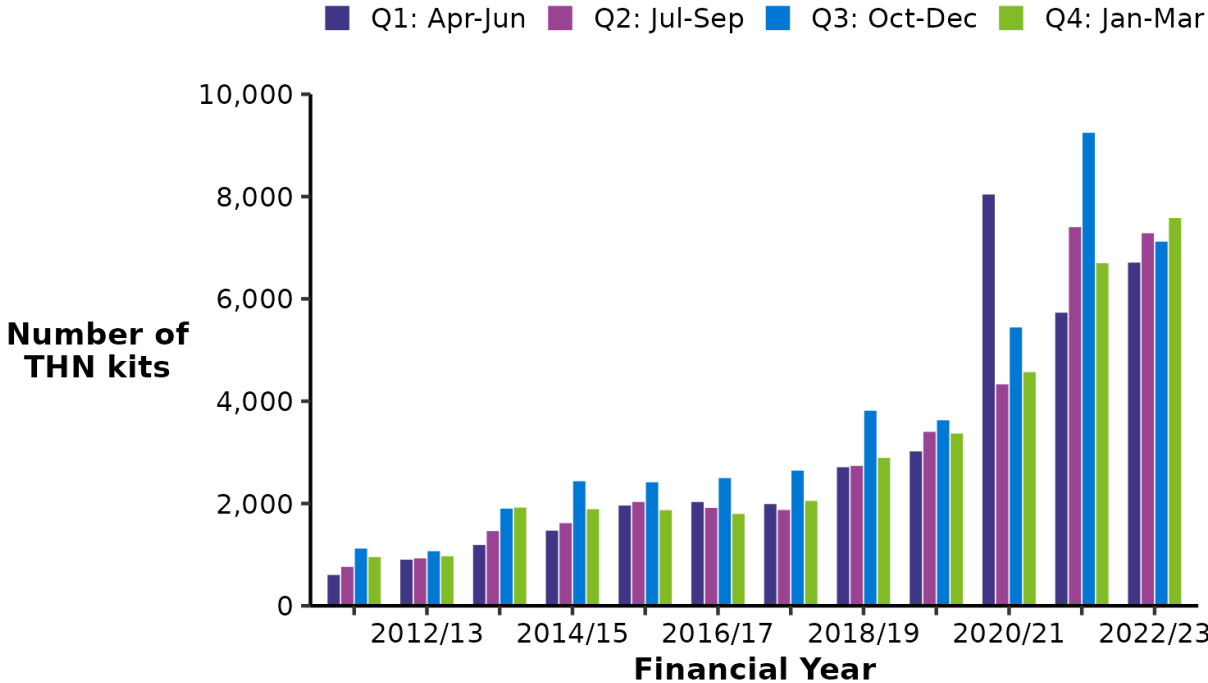
Estimates of the total number of kits and 'reach' per 1,000 adults with problematic drug use in each NHS Board are also presented.

### **5.2: Number of kits supplied (all sources)**

A total of 28,689 kits were issued in Scotland in 2022/23 (a 1% decrease compared with 2021/22 (29,075)). The annual number of kits supplied in 2021/22 and 2022/23 was substantially higher than in any year up to and including 2020/21 (22,378) (Figure 5.1 and Table 1).

In 2022/23, the largest number of kits were supplied between January 2023 and March 2023, with 7,579 kits dispensed. This consisted mainly of kits supplied from community outlets (5,723) and from prescribing (1,080). Further information on the quarterly figures can be seen within the [National Naloxone Programme Quarterly Monitoring Bulletin](#).

**Figure 5.5: Number of THN kits supplied via all sources by quarter (Scotland; 2011/12 to 2022/23)**



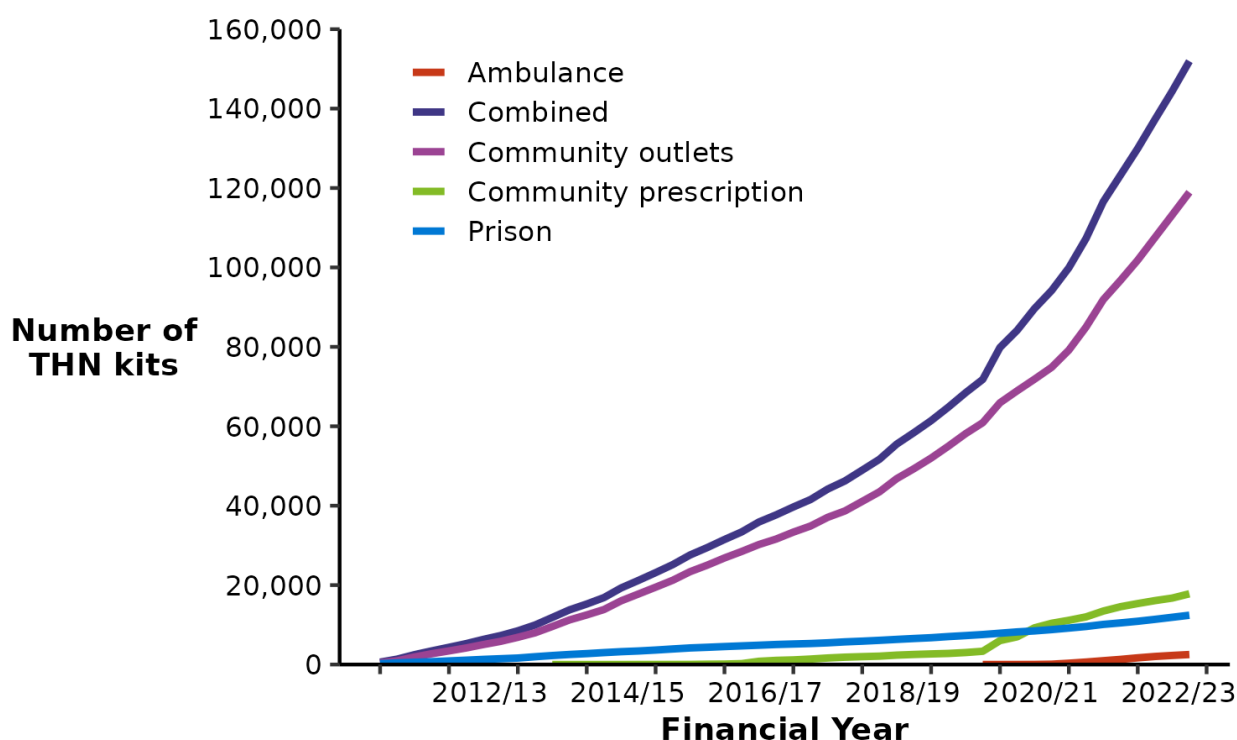
The National Naloxone Programme (NNP) issued a total of 151,944 kits over the twelve years from 2011/12 to 2022/23 (Figure 5.2 and Table 1). The majority of those kits (118,935, 78%) were supplied from community outlets, followed by kits dispensed via prescription by community pharmacies (17,812, 12%), kits issued in prisons at the point of prisoner release (12,412, 8%), and kits distributed by the Scottish Ambulance Service (2,518, 2%).

The percentages of THN kits provided by each service type have remained broadly stable since 2021/22:

- In 2021/22, of the 29,075 kits distributed, 21,906 (75%) kits were supplied from community outlets, 1,690 (6%) were supplied in prisons, 4,177 (14%) were community-dispensed prescriptions, and 1,208 (4%) from SAS.

- Of the 28,689 kits supplied in 2022/23, there were 22,184 (77%) supplied from community outlets, 1,929 (7%) supplied in prisons, 3,249 (11%) community-dispensed prescriptions, and 1,225 (4%) from SAS.

**Figure 5.2: Cumulative number of THN kits supplied, by source and financial year (Scotland; 2011/12 to 2022/23)**



### Naloxone Type

Figure 5.3 and Table 1 show the number of community outlet, prison, and SAS kits issued in Scotland from 2011/12 to 2022/23 according to the type of THN supplied.

Prior to 2019, the only naloxone formulation distributed as part of the NNP was administered by intramuscular injection (Prenoxad®). The first intranasal naloxone product, Nyxoid®, was licensed for lay administration in February 2019, and since then has been distributed from community outlets, community pharmacies, and prisons (SAS has only distributed Prenoxad®).

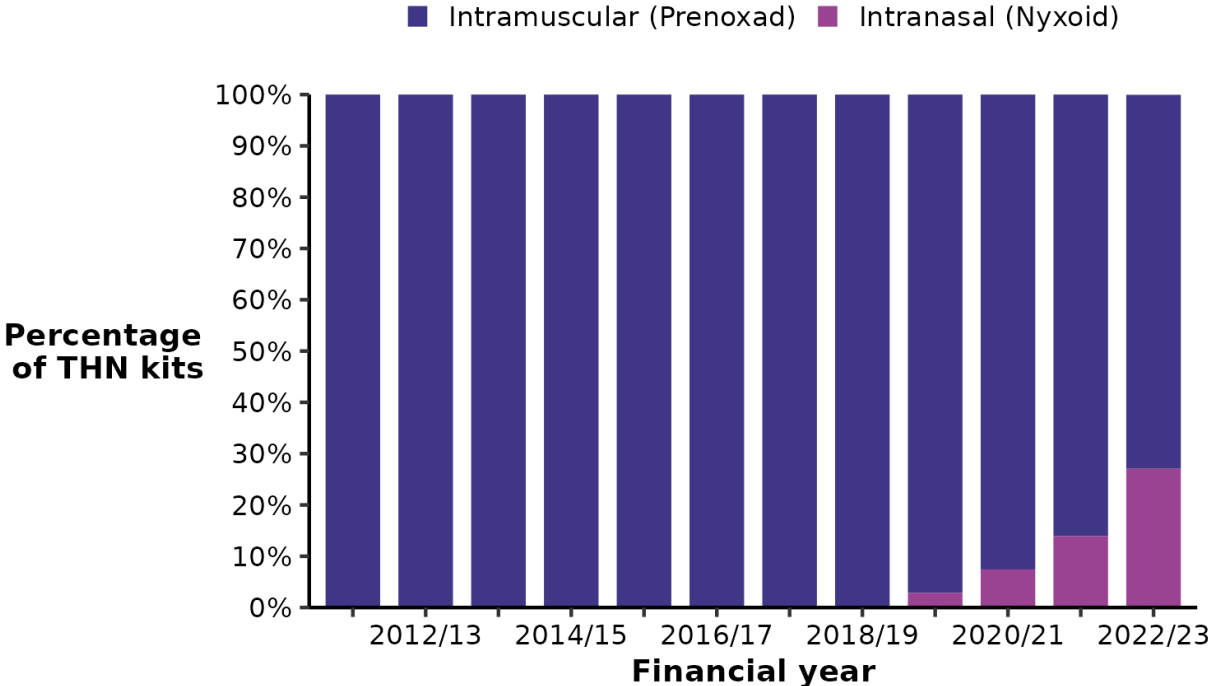
In 2022/23, of the 28,689 THN kits supplied, 73% (20,918) were Prenoxad® and 27% (7,759) were Nyxoid® kits. The percentage of Nyxoid® kits issued has consistently



increased since its introduction, from 3% of total kits supplied in 2019/20 to 27% in 2022/23.

By the end of 2022/23, 138,079 (91%) Prenoxad® kits and 13,853 (9%) Nyxoid® kits had been distributed in total.

**Figure 5.3: Percentage of THN kits supplied from community outlets, prescribing, prisons, and SAS combined, by naloxone type and financial year<sup>1</sup> (Scotland; 2011/12 to 2022/23)**



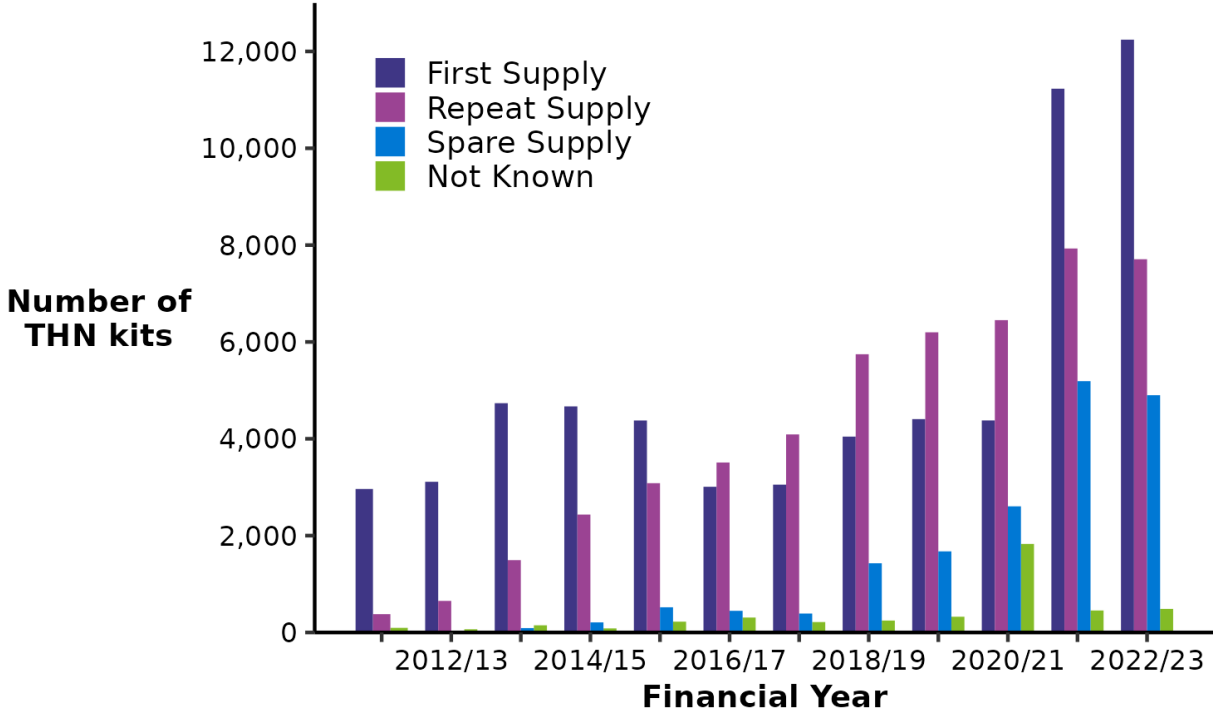
1. Between 2013 and 2020, NHS Highland distributed Prenoxad® kits with a nasal atomiser as part of a pilot scheme. As this was outwith the National Naloxone Programme, these kits are excluded from the chart but are included as 'Other intranasal' within Table 1 of the [data tables](#).

**Supply and recipient type**

Figure 5.4 and Table 3 show the number of community outlet, prison, and SAS kits issued in Scotland from 2011/12 to 2022/23 according to whether these were a first

or repeat supply (supply type and recipient type information is not available for kits dispensed via community prescription).

**Figure 5.4: Number of THN kits supplied from community outlets, prisons, and SAS combined, by supply type and financial year (Scotland; 2011/12 to 2022/23)**



In 2022/23 there were 12,243 kits issued as first supplies. There was a decrease in the percentage of first supplies from 86% (2,963) in 2011/12 to 20% (4,379) in 2020/21. Since then, the number of kits issued as first supplies increased to 39% in 2021/22 (11,230), and then to 43% in 2022/23 (12,243).

In 2022/23 there were 7,708 kits issued as repeat supplies. The percentage of community outlet, prison and SAS THN kits distributed as a repeat supply increased each year from 11% (378) in 2011/12 to 53% (4,090) in 2017/18, before decreasing to 30% (7,708) in 2022/23. Apart from a small decrease in 2022/23, there has been an increase in the number of repeat supplies issued since the NNP began.

In 2022/23 there were 4,900 kits issued as spare supplies. There was a notable increase in the number and percentage of spare supplies between 2017/18 (391, 5%) and 2022/23 (4,900, 17%). A number of NHS Boards have undertaken initiatives in recent years to ensure that people at risk of an opioid overdose have a spare THN supply.

Table 5 provides a breakdown of the reasons for repeat supply of naloxone from community outlets, ambulance services, and prisons from 2011/12 to 2022/23.

In 2022/23, there were 2,013 kits (26% of repeat supplies) issued due to the previous kit being used to reverse an opioid overdose<sup>20</sup>. Over the period 2011/12 to 2022/23, the number of community outlet, prison, or SAS repeat supplies made following use of the previous kit to reverse an opioid overdose was 13,066 (26% of repeat supplies).

Other information on the characteristics of combined community outlet, prison and SAS supplies<sup>21</sup> (2011/12 to 2022/23) is available in the [data tables](#):

- Table 6 shows the number of at risk recipients who consented to share their personal information.
- Table 7 shows the gender and age characteristics of at risk individuals receiving THN.

### 5.3: Kit expiry

The NNP has been operational for 12 years (starting in April 2011). However, as THN kits have an expiry date of three years from manufacture, supplies distributed more than 3 years ago will have now passed their expiry date. In addition, THN kits may be retained in the supply chain for varying periods before being received by

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<sup>20</sup> Includes resupplies due to use of previous kit on self or another person.

<sup>21</sup> THN kits dispensed via community prescription are not included as this type of information is not available for these supplies.

NHS Boards for onward supply. Taking this into account, along with advice from an expert short life working group, it was estimated that THN kits will have an average of two years before date of expiry at the time of supply. NHS boards will offer replacement THN for any supply that has passed its expiry date. The following analysis provides an indication of the numbers of THN kits potentially in circulation which are unexpired (i.e. supplied less than two years ago). See [Appendix A1.5](#) for further information.

Figure 5.5 takes account of expiry dates in relation to THN kits distributed to all recipients, showing the cumulative number of kits supplied since the beginning of the NNP and the cumulative total of THN kits supplied less than two years ago. Between 2016/17 Quarter 1 and 2017/18 Quarter 4, the total number of THN kits supplied less than two years ago ranged between 16,200 and 16,800 (Table 9). Since then, the number of THN kits supplied less than two years ago has risen to 57,764 in 2022/23 Quarter 4, reflecting increases in the overall number of kits supplied since 2018/19.

**Figure 5.5: Cumulative number of THN kits and number of THN kits supplied less than two years ago to all recipients (all supply types combined), by financial year (Scotland; 2011/12 to 2022/23)**

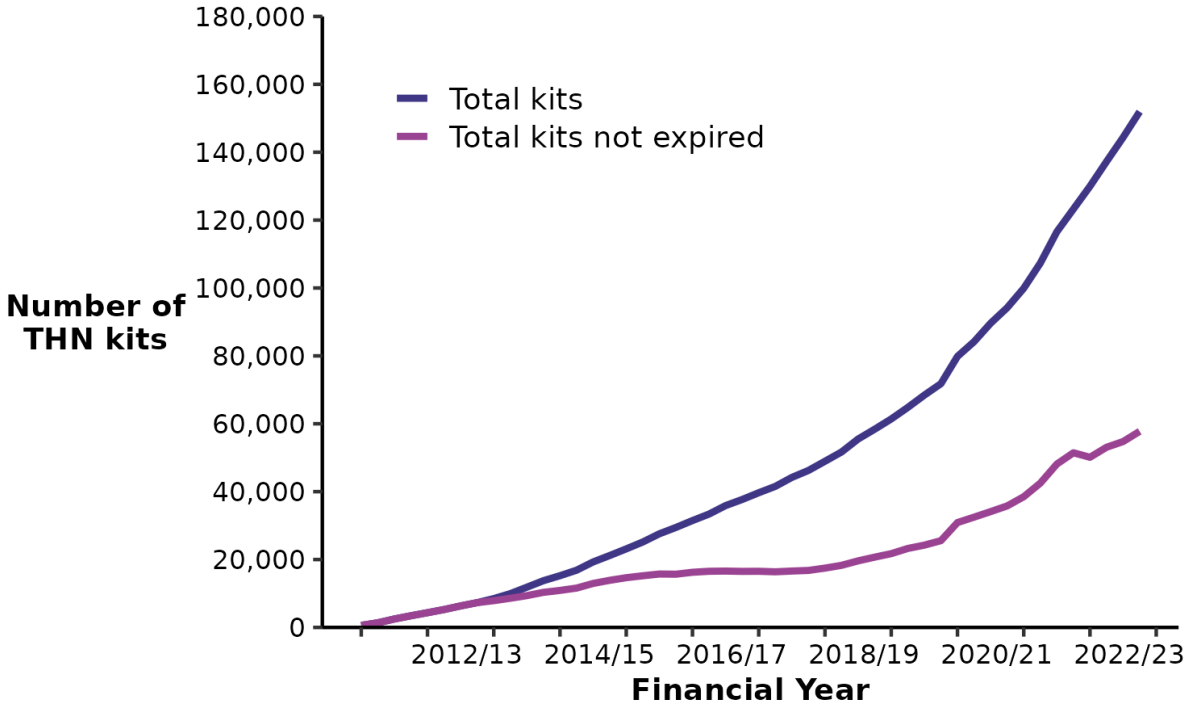
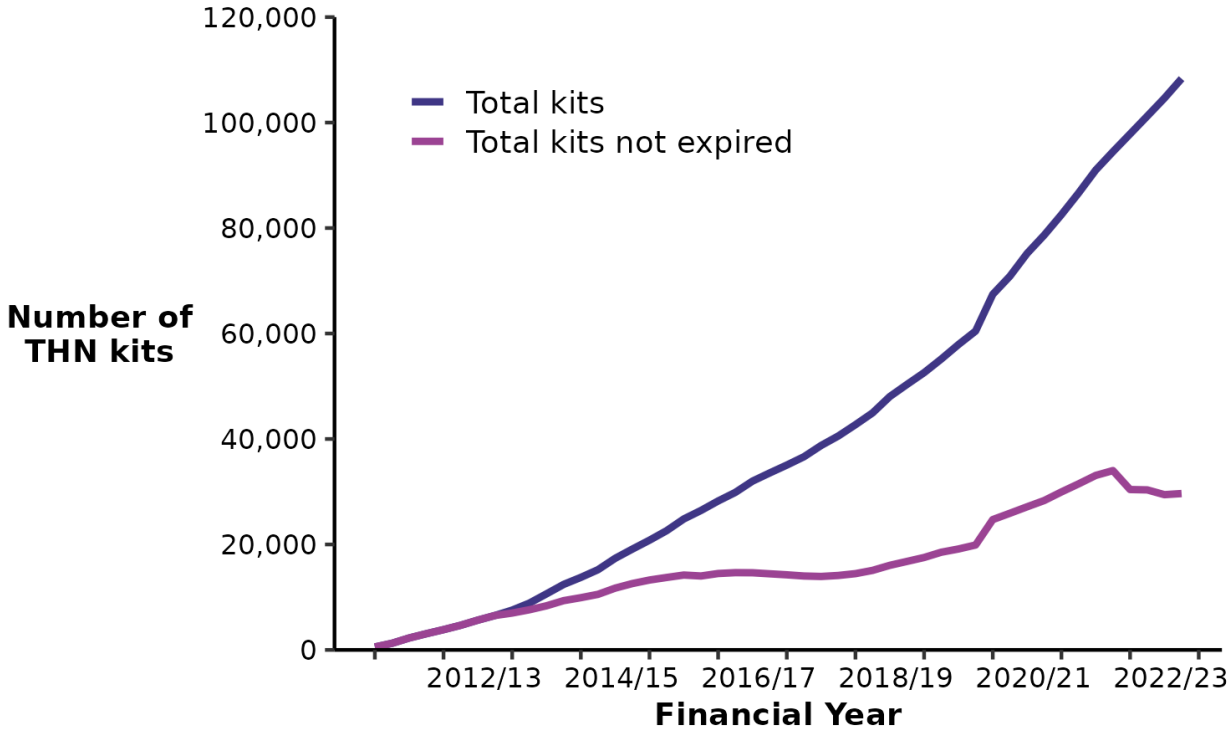


Figure 5.6 takes account of expiry dates in relation to THN kits distributed to people at risk of opioid overdose. Between 2015/16 Quarter 3 and 2017/18 Quarter 4, the total number of THN kits supplied less than two years ago was approximately the same, ranging between 14,000 and 14,650 (Table 8). Since then, the total number of THN kits supplied to people at risk less than two years ago has risen to 29,655 in 2022/23 Quarter 4. Again, this is a reflection of the large increase in kits supplied between 2018/19 and 2022/23.

**Figure 5.6: Cumulative number of THN kits and number of THN kits supplied less than two years ago to people at risk of opioid overdose (all supply types combined), by financial year (Scotland; 2011/12 to 2022/23)**



## 5.4: 'Reach' of THN supplies (all sources)

This section describes the overall 'reach' of the NNP, taking into account all supply sources. A general discussion of the rationale and interpretation of this measure can be found in the [community section](#).

Previous sections of this report have described the number of first supplies to people at risk of opioid overdose via specific supply routes. By combining these data and comparing with the estimated number of people who use drugs problematically, the overall 'reach' of THN supply among the population at risk of an opioid overdose can be estimated.

Due to a) the allocation of prison THN supplies to the NHS Board where the prison is located and b) the assumption that the percentage of first supplies to people at risk of opioid overdose dispensed via community prescription is similar to the percentage observed in community outlet supplies, some uncertainty is associated with these estimates. However, an estimate of numbers of people at risk who have been supplied with THN provides a better means of assessing 'reach' among the target population than the overall number of THN kits distributed. See [Appendix A1.6](#) for further information.

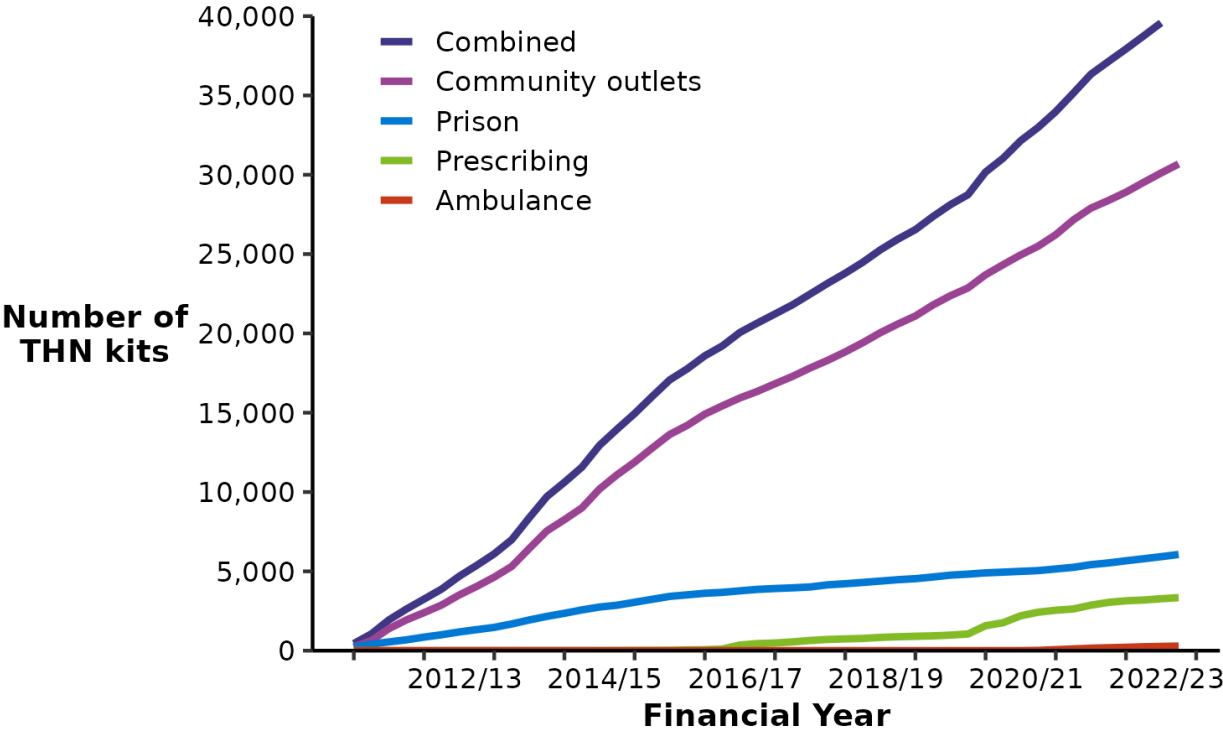
Figure 5.7 shows the estimated cumulative number of THN kits issued as a first supply to people at risk of opioid overdose from community outlets, prisons and community-dispensed prescriptions from 2011/12 to 2022/23. Table 3 provides a breakdown of these data by NHS Board.

An estimated total of 40,371 individuals at risk of opioid overdose were supplied with THN from 2011/12 to 2022/23<sup>22</sup>. Seventy-six per cent (30,679) of estimated first supplies to at risk individuals were from community outlets.

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<sup>22</sup> Due to the exclusion of repeat and spare supplies and kits supplied to family/friends and service workers, this was lower than the combined total number of kits supplied (see Figure 5.2 and Table 1).

**Figure 5.7: Cumulative number of THN kits distributed as first supply to people at risk, by source, financial year (Scotland; 2011/12 to 2022/23)**

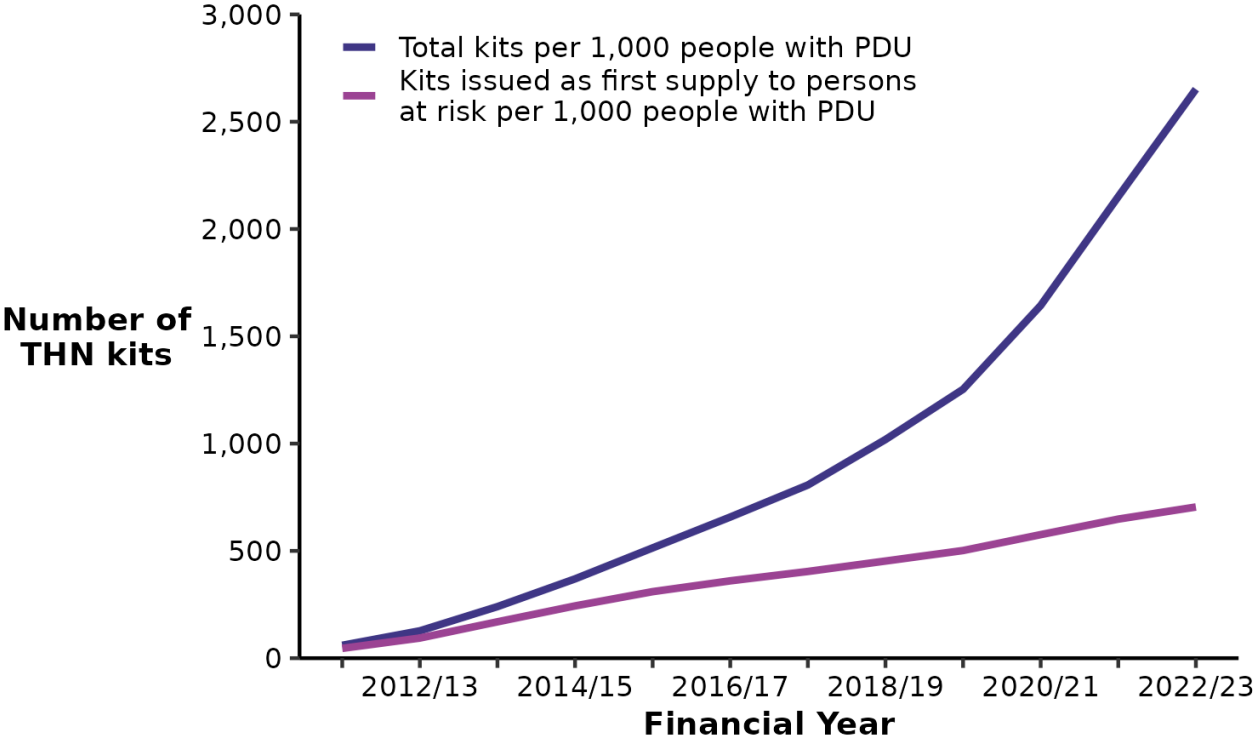


The cumulative ‘reach’ of the NNP among people at risk of opioid overdose has increased consistently over time. However, since the beginning of the NNP, the number of first supplies to persons at risk has fluctuated, averaging approximately 3,350 kits per year. In 2022/23, annual estimated numbers of first supplies to this group were 3,230.

Figure 5.8 compares both the total number of THN kits supplied and the estimated total number of first supplies to people at risk of opioid overdose with the estimated number of persons with problematic drug use. Both measures are presented as cumulative figures over time per 1,000 persons with problematic drug use<sup>23</sup>.

<sup>23</sup> These statistics are based on comparisons with estimates of the number of people with problematic drug use for 2009/10, 2012/13 and 2015/16 (Public Health

**Figure 5.8: Cumulative total number of THN kits and number of first THN supplies to people at risk of opioid overdose (all supply types combined) per 1,000 persons with problematic drug use aged 15-64, by financial year (Scotland; 2011/12 to 2022/23)**



1. PDU – Problematic Drug Use.

Cumulatively, a total of 151,944 THN kits (based on all sources, all recipient types) were supplied by the NNP up to the end of 2022/23. This was equivalent to 2,652 kits per 1,000 persons with problematic drug use aged 15-64 (Table 10).

Scotland, 2019). The historic nature of these figures is a potential source of inaccuracy. New prevalence estimates will be released in March 2024, and this report will be updated to use those figures in due course.



In 2022/23, there were 28,689 THN kits issued (based on all sources, all recipient types), which was equivalent to an annual rate of 501 kits per 1,000 persons with problematic drug use. This was the second highest annual rate observed since the beginning of the NNP; the highest being 2021/22 when 507 kits were issued per 1,000 persons with problematic drug use).

By the end of 2022/23, an estimated cumulative total of 40,371 kits (equivalent to 705 kits per 1,000 persons with problem drug use) had been issued/dispensed as a first supply to people at risk (Table 10)<sup>24</sup>.

In 2022/23, an estimated 3,230 THN kits were issued as a first supply to people at risk (equivalent to an annual rate of 56 kits per 1,000 persons with problematic drug use), a decrease from 2020/21. Since peaking at an estimated 71 kits per 1,000 persons with problematic drug use in 2013/14, there has been a general decrease in the annual number of people supplied with THN for the first time, with 2017/18 being the lowest annual 'reach' rate observed (44 kits per 1,000) since the start of the NNP (2011/12: 44 kits per 1,000).

As supply and 'reach' among people at risk increase over time it would be expected that the number of people at risk supplied with naloxone for the first time would decrease (as the number of people at risk who have not already been supplied reduces). Decreases in annual estimated 'reach' observed from 2013/14 to 2017/18 are likely to reflect this. The increase in annual estimated 'reach' in 2020/21 may

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<sup>24</sup> The Needle Exchange Surveillance Initiative (NESI) found that 63% of 2019/20 respondents had been supplied with THN in the previous year. However, NESI includes only people who inject drugs, a high overdose risk group with potentially higher rates of THN provision than people taking opioids by non-injecting routes e.g. oral medication. The estimate from this report was lower (575 kits per 1,000 persons with problem drug use, or 58%). This was based on comparison with a wider group of people with problematic drug use (including those taking opioids and benzodiazepines by non-injecting routes). It is not possible to determine whether individuals in the naloxone monitoring dataset were injecting or not.

reflect innovation in supply, such as the increase in the number of kits distributed via prescribing<sup>25</sup>.

Figure 5.9 shows the cumulative total number of THN kits and estimated number of first supplies to people at risk issued from community outlets, in prisons and dispensed via community prescription from 2011/12 to 2022/23 as a rate per 1,000 estimated persons with problem drug use in each NHS Board.

NHS Forth Valley issued the highest total number of kits (4,996 per 1,000 persons with problematic drug use)<sup>26</sup>. NHS Lanarkshire issued the lowest total number of kits per 1,000 persons with problematic drug use (1,386).

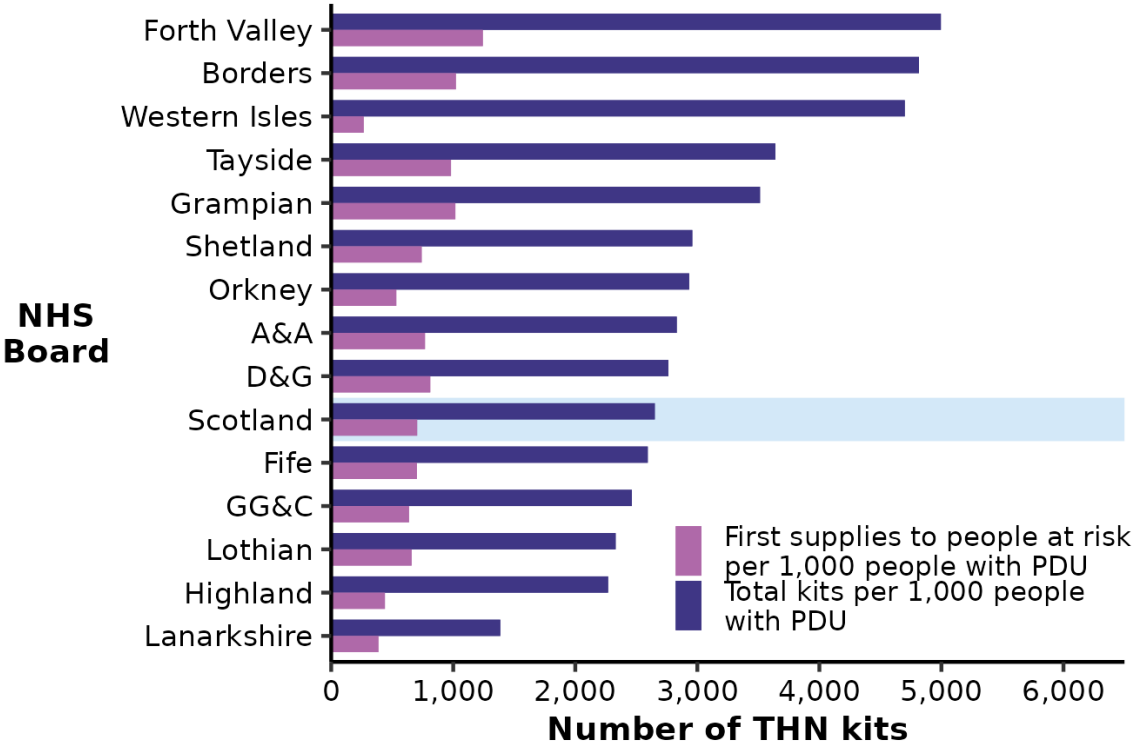
NHS Forth Valley issued the highest estimated number of THN kits as a first supply to people at risk (1,242 per 1,000 persons with problematic drug use) followed by NHS Borders (1,022). The high 'reach' rate in NHS Forth Valley may partly be associated with the presence of three prisons within the NHS Board area. NHS Western Isles had issued the lowest number of kits as first supply to people at risk (266 per 1,000 persons with problematic drug use), although it should be noted that this includes only 13 kits distributed as first supplies to persons at risk in total. This was followed by NHS Lanarkshire (387 per 1,000 persons with problematic drug use) and NHS Highland (440 per 1,000 persons with problematic drug use).

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<sup>25</sup> As discussed above, it is assumed that the percentage of first supplies to people at risk of opioid overdose dispensed via community prescriptions was similar to the percentage observed in community outlets. In 2020/21 this percentage (19.6%) was slightly lower than that in 2019/20 (22.2%). However, as the number of overall kits dispensed via prescription increased (from 809 in 2019/20 to 7,045 in 2020/21) the uncertainty associated with these estimates may have increased. For more information on this and other assumptions, please refer to Appendix.

<sup>26</sup> Estimates of the number of people with problematic drug use are taken from estimates for 2009/10, 2012/13 and 2015/16. The historic nature of these figures is a further potential source of inaccuracy.

**Figure 5.9: Cumulative number of THN kits and first supplies to people at risk of opioid overdose (all supply types combined) per 1,000 people with problematic drug use aged 15-64, by NHS Board<sup>1,2,3</sup> (Scotland; 2011/12 to 2022/23)**



1. PDU – Problematic Drug Use.
2. NHS Western Isles did not participate in the programme until 2017/18.
3. Intranasal naloxone kits distributed by NHS Highland are not included.

## 6. Comparison of take-home naloxone (THN) distribution with opioid-related deaths

### 6.1: Introduction

Findings from the National Drug-Related Deaths Database (NDRDD) report in 2018 showed that 76% of individuals who died of drug related death had been in drug treatment, in prison or police custody or discharged from hospital in the six months prior to death (Public Health Scotland, 2022b). Other research has shown that the risk of accidental overdose was substantially increased after release from prison (Bird & Hutchinson, 2003) or discharge from hospital (Merrall et al, 2013), in part because people may lose their tolerance of opioids during periods when drug use is reduced.

In addition to monitoring the supply of take-home naloxone (THN) kits in Scotland, the National Naloxone Advisory Group (NNAG) had agreed that the number and percentage of opioid-related deaths that occurred shortly after prison release or after hospital discharge would be used as measures of the impact of the National Naloxone Programme (NNP).

Changes since the implementation of the NNP are estimated by comparing the following time periods:

**Pre-implementation or 'baseline'**: the percentage of opioid-related deaths that occurred within four weeks of prison release or hospital discharge during the period 2006 to 2010<sup>27</sup>.

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<sup>27</sup> As per the definition used by National Records of Scotland (NRS), this is based on year of registration of death. In Scotland this is, for the most part, the same as year of death because all deaths must be registered within eight days of death having been ascertained.

**Post-implementation:** the percentage of opioid-related deaths that occurred within four weeks of prison release or hospital discharge in each year from 2011 to 2022.

The tables accompanying this report include annual data broken down by age and sex and comparable data on opioid-related deaths within 12 weeks of prison release and within 12 weeks of hospital discharge. These additional tables reporting on deaths after 12 weeks are included in this publication because of a NNAG recommendation that the timing of mortality risk throughout this longer timeframe should also be monitored. Details of how these data are collected are included at [Appendix A1.7](#).

While differences in the percentage of post-prison or post-hospital deaths between the baseline (pre-implementation) and post-implementation periods are described below, attributing any changes to the NNP is complex, in part because this type of 'before and after' comparison is not able to take account of other potential contributing factors such as changes in the size of the prison population or changes in drug treatment within prison over time. The comparison also assumes that the total number of people using opioids at risk of death and the number of people using opioids at risk of death during the four-week period following prison release or hospital discharge either do not change over time, or else show the same changes.

## 6.2: Opioid-related deaths post-prison release

This indicator is defined as:

**Numerator:** the number of drug-related deaths (including suicides) reported by National Records of Scotland (NRS) that were opioid-related<sup>28</sup> and occurred within the first four weeks following release from prison custody.

**Denominator:** the number of opioid-related deaths (defined as for the numerator).

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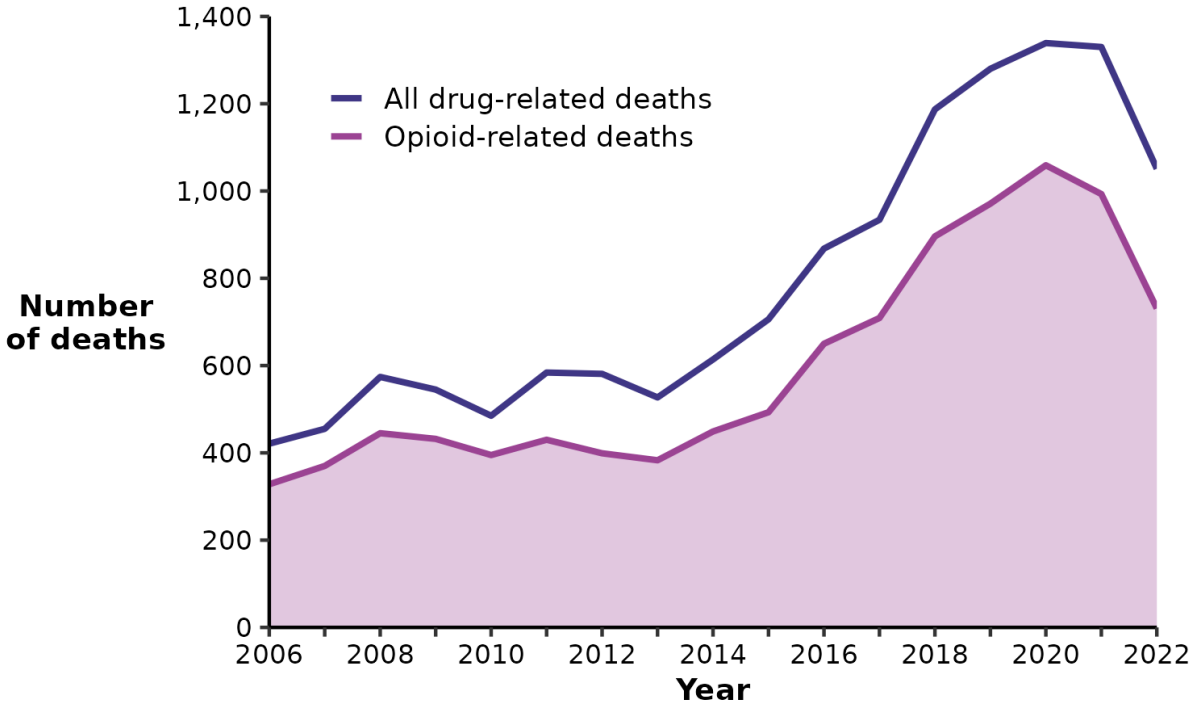
<sup>28</sup> That is, where one or more of heroin, morphine, methadone or buprenorphine was implicated in, or potentially contributed to death.

The baseline for this indicator is the percentage of opioid-related deaths that occurred within the first four weeks following release from prison custody during the period 2006-10 (based on year of registration of death).

**Results**

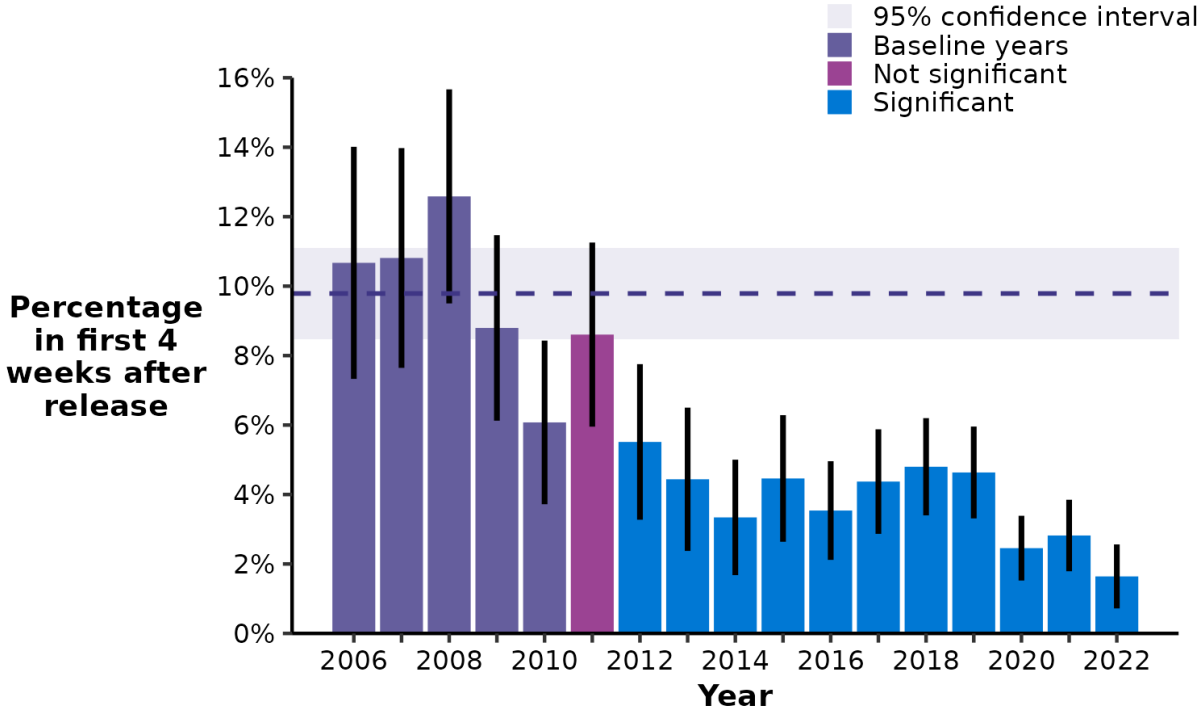
In 2022, there were 1,051 drug-related deaths (NRS, 2023), of which 731 were opioid-related (heroin/morphine, methadone and buprenorphine). The number of opioid-related deaths decreased by 26% from 2021 (993) (Figure 6.1 and Table 11).

**Figure 6.1: Number of drug-related deaths and opioid-related deaths registered by calendar year (Scotland; 2006 to 2022)**



Opioid-related deaths within four weeks of prison release are shown in Figure 6.2 and Table 11, along with the total number of opioid-related deaths. In 2022, the number and percentage of opioid-related deaths within four weeks of prison release reached their lowest levels since monitoring commenced. There were 12 such deaths in 2022, a decrease of 16 compared to 2021 (28). The percentage of opioid-related deaths that occurred within four weeks of prison release was 1.6% (compared to 2.8% in 2021).

**Figure 6.2: Percentage of opioid-related deaths within four weeks of prison release, by calendar year (Scotland; 2006 to 2010 (baseline) & 2011 to 2022<sup>1,2</sup>)**



1. 95% confidence intervals for the years and the calculated baseline are represented by the black error lines and the grey area respectively. The upper and lower bounds of these contain the range of values that represent 95% of expected estimated values<sup>29</sup>.
2. Blue bars indicate percentages in post-implementation period which are significantly below the baseline value (including the 95% confidence interval) from the pre-implementation period (purple line).

<sup>29</sup> Further information on confidence intervals can be found within the [Technical Briefing](#) published by the Association of Public Health Observatories (APHO).

The total number of opioid-related deaths during the baseline period 2006 to 2010 was 1,970 (an average annual number of 394), of which 193 (an average of 39 per year) occurred within four weeks of prison release. The average percentage of opioid-related deaths that occurred within four weeks of prison release during the baseline period 2006 to 2010 was 9.8%.

Since the implementation of the NNP in 2011, the annual number of opioid-related deaths in each year apart from 2013 (383), has been higher (in many years, significantly higher) than the average annual number of opioid-related deaths for the baseline period (394). Given the extent of the numerical increase in opioid-related deaths, it would be unsurprising if the number that occurred following prison release had also risen. However, with the exception of 2018 (43) and 2019 (45), the annual number of opioid-related deaths within four weeks of prison release has been lower since the implementation of the NNP than the average annual number in the baseline period (39).

Since 2012, the annual percentage of opioid-related deaths within four weeks of prison release has been substantially lower than the annual percentage observed during the baseline period (the 2022 percentage (1.6%) was approximately one sixth of that observed during the baseline period (9.8%)). In Figure 6.1, the blue bars indicate years in which the percentage figures were statistically significantly lower than the average percentage during the baseline period. It should be noted that these percentages are based on relatively small numbers and should therefore be treated with caution.

Table 11 provides comparable information for opioid-related deaths within 12 weeks of prison release. The number of opioid-related deaths within 12 weeks was 23 (a decrease of 28 compared to 2021 (51)) and the percentage of opioid-related deaths that occurred within 12 weeks of prison release was 3.1% (compared to 5.1% in 2021). Opioid-related deaths within 12 weeks also reached their lowest levels in 2022.

During the baseline period, 73% (193/265) of all opioid-related deaths within 12 weeks of prison release occurred in the first four weeks after release. This percentage decreased after implementation of the NNP, ranging between 48% and



58% from 2012 onwards, with the exception of 2018 (65% (43/66)). This percentage reduced further to 44% (26/59) in 2020, however has since increased to 55% in 2021 (28/51) and 52% in 2022 (12/23). The reduction in the percentage of deaths within four weeks of prison release may indicate that the risk of opioid-related death during this period has decreased (potentially due to THN supply at prison release). However, as around half of deaths within twelve weeks of prison release now occur after four weeks has elapsed, focusing on performance throughout the 12 weeks post prison release may provide a further focus for improvement.

### **6.3: Opioid-related deaths post-hospital discharge**

An additional indicator based on the percentage of opioid-related deaths within four weeks of hospital discharge (general acute/psychiatric) has been included in the naloxone monitoring report since 2013.

Until 2020/21, the NNP did not oversee distribution of THN kits from general acute or psychiatric hospitals and PHS did not receive separate monitoring data for hospital provision of THN kits. From 2020/21 Quarter 2, NHS Greater Glasgow & Clyde started to provide figures on the number of kits supplied on discharge from general acute hospitals and reported 267 kits being supplied since 2020/21, including 102 kits supplied in 2022/23. Supplies from all other sources (community, prison, SAS, and prescribing) for NHS Greater Glasgow & Clyde were 6,993 in 2022/23. The relatively small number of kits supplied from general acute hospitals on discharge suggests that use of THN for overdoses occurring after hospital discharge may therefore be largely dependent on kits supplied from community outlets, prisons, SAS, or dispensed on the basis of community prescriptions.

This indicator is defined as:

**Numerator:** the number of drug-related deaths (including suicides) reported by NRS that were opioid-related<sup>19</sup> and occurred within the first four weeks following discharge from general acute/psychiatric hospital.

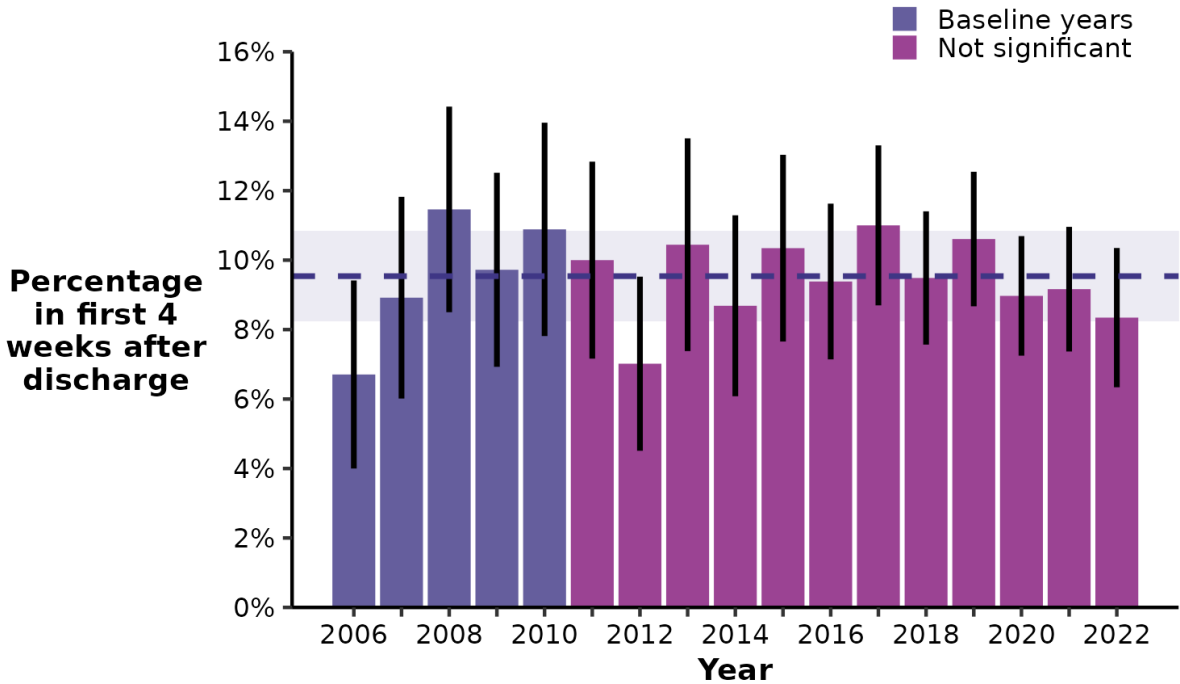
**Denominator:** the number of opioid-related deaths (defined as for the numerator).

The baseline for this indicator is the percentage of opioid-related deaths that occurred within the first four weeks following discharge from general acute/psychiatric hospital during the period 2006-10 (based on year of registration<sup>18</sup>).

**Results**

Opioid-related deaths within four weeks of hospital discharge are shown in Figure 6.3 and Table 11. The percentage of opioid-related deaths within four weeks of hospital discharge has fluctuated around the baseline since implementation of the NNP in 2011. There was no year where the percentage was significantly different from the baseline.

**Figure 6.3: Percentage of opioid-related deaths within four weeks of hospital discharge, by calendar year (Scotland; 2006 to 2010 (baseline) & 2011 to 2022<sup>1</sup>)**



1. Purple bars indicate the baseline years, and pink bars indicate post-implementation years. Purple dashed, horizontal line indicates baseline value from the pre-implementation period.

The total number of opioid-related deaths during the baseline period 2006 to 2010 was 1,970 (an average annual number of 394), of which 191 (an average of 38 per year) were within four weeks of hospital discharge. As a result, the percentage observed during the baseline period 2006 to 2010 was 9.7%. In 2022, the number of opioid-related deaths was 731, of which 61 were within four weeks of hospital discharge, resulting in a percentage of 8.3% of deaths that occurred within four weeks of hospital discharge.

Table 11 provides comparable information for the period within 12 weeks of hospital discharge. In 2022, 46% (61/134) of opioid-related deaths within 12 weeks of hospital discharge occurred within the first four weeks. While the percentage has varied over time (from 41% to 56%), the percentage has remained lower than the baseline (52%) since 2018 (49%).

It is noteworthy that the relative decrease in early deaths among one vulnerable population (ex-prisoners) has not been accompanied by a similar fall in early deaths among another vulnerable population (those discharged from hospital). Both of course are relative to changes in the number of opioid-related deaths. Given these differences, it would be worthwhile exploring the reasons for the different findings for hospitals and prisons.

# Glossary

## **ADP**

Alcohol and Drug Partnership. Multi-agency partnership formed to take strategic responsibility to address problems caused by substance use in each locality. This responsibility is devolved from the Scottish Government and includes commissioning evidence-based, person-centred and recovery-focused services, improving quality within these services based on outcomes for service users and developing policies to intervene early and prevent the development of problems related to substance use.

## **Community supply**

Community supply of take-home naloxone kits (including those supplied without a prescription under [legislative changes](#)). These kits usually come from specialist drug treatment services, but also includes supply from non-drug treatment services (such as mental health services, or homelessness services), community pharmacy supply (when not prescribed), Scottish Families Affected by Alcohol & Drugs (SFAD), A&E/Hospital supply, and from police custody. In Scotland services not classified under UK legislation are covered by the [Lord Advocate's guidelines in relation to the supply of naloxone during the COVID-19/Coronavirus pandemic](#) which remains in place at time of writing.

## **DRD**

Drug-Related Death

## **Intramuscular**

Intramuscular injection is a route of administration in which a drug is delivered by being injected into a muscle. This allows the drug to be absorbed into the bloodstream quickly. Until February 2019, the only naloxone product licensed for lay use was Prenoxad<sup>®</sup>, an intramuscular injection.

## **Intranasal**

Intranasal is a route of administration in which a drug is delivered via the nose. In February 2019, the intranasal product Nyxoid<sup>®</sup> was licensed for use as part of the National Naloxone Programme. Previously, NHS Highland distributed Prenoxad<sup>®</sup> kits

with a nasal atomiser as part of a pilot scheme. As this was outwith the National Naloxone Programme these figures are excluded from this series of reports.

## **NHS**

National Health Service

## **NNAG**

National Naloxone Advisory Group. The body responsible for oversight of the National Naloxone Programme during its first five years of operation (2011/12 to 2015/16).

## **NNP**

National Naloxone Programme

## **NRS**

National Records of Scotland

## **Opioids**

Drugs similar to heroin or morphine. Opioids include opiates (drugs derived from opium, including morphine and heroin (diamorphine)) and semi-synthetic and synthetic drugs such as hydrocodone, oxycodone and fentanyl. Opioids are most often used medically to relieve pain. The side effects of opioids may include itchiness, sedation, nausea, respiratory depression, constipation, and euphoria. Tolerance and dependence will develop with continuous use, requiring increasing doses and leading to a withdrawal syndrome upon abrupt discontinuation. Accidental opioid overdose can result in death from respiratory depression. This risk increases if opioids are used alongside other drugs, especially other depressant drugs, like other opioids, benzodiazepines and alcohol. Due to their association with addiction and fatal overdose, most opioid drugs are controlled substances.

## **PADS**

Partnership for Action on Drugs in Scotland. An expert group (with sub groups) responsible for advising the Scottish Government in relation to drug misuse. The PADS Harms subgroup was responsible for oversight of the National Naloxone Programme from 2016 to 2019.

**Peer supply**

Peer supply has been developed as a further method of supplying THN to people at risk of opioid overdose. A trained peer supply champion/mentor provides training and a THN kit to others who may witness an overdose. The Scottish Drugs Forum (SDF) have sought to maximise peer-to-peer naloxone supply by developing a national peer network to enhance the delivery of naloxone provision by people who have experience of drug use.

**PHS**

Public Health Scotland. Set up in April 2020 merging Information Services Division (ISD), Health Protection Scotland and Health Scotland into one organisation.

**SAS**

Scottish Ambulance Service

**SDF**

Scottish Drugs Forum

**SFAD**

Scottish Families Affected by Alcohol & Drugs

**SPS**

Scottish Prison Service

**THN**

Take-Home Naloxone

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# Appendices

## Appendix 1 – Background information

### A1.1: Policy context

Since 1997, there has been a long-term upward trend in the number of Drug-Related Deaths (DRDs) in Scotland. National Records of Scotland (NRS) reported that there were 574 DRDs in Scotland in 2008 (NRS, 2023). Against this context, Scotland's national drugs strategy **The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem** was launched in May 2008 and included specific actions required to address DRDs in Scotland.

In addition to the NRS reports on drug-related deaths, A National Drug-Related Deaths Database (NDRDD) was set up to aid understanding of the nature of, and circumstances surrounding DRDs and the individuals vulnerable to them. To date, Public Health Scotland have published seven NDRDD reports (for calendar years 2009 to 2018). Key findings from both reports show that:

- The majority of DRDs were among males, living in the most deprived areas, and aged 35 to 55 years (the average age increased from 32 in 2000 to 45 in 2022) (NRS, 2023).
- Someone else was present at the scene of death in 52% of DRDs in 2018, thus offering an important window of opportunity for someone to intervene and potentially save a life (Public Health Scotland, 2022b).
- Findings from the NDRDD for 2017 deaths show that 76% of individuals were in drug treatment, in prison or police custody or discharged from hospital in the six months prior to their death, demonstrating that in the majority of cases there may have been an opportunity to engage with and support those vulnerable to a DRD (Public Health Scotland, 2022b).



Such descriptions of the characteristics of individuals at risk of overdose and periods of high overdose risk have helped inform training for practitioners, service users and family/friends in how to identify and respond to overdose situations, with the goal of reducing the numbers of DRDs.

Following the recommendations from two independent expert forums and the successful outcomes of local take-home naloxone pilots in Scotland, the Scottish Government supported the rollout of the National Naloxone Programme (NNP) in Scotland from November 2010.

In addition to supporting the rollout of the NNP, between 2010 and 2016, Scottish Government funding was made available to support the continued delivery of the programme by Alcohol and Drug Partnerships and NHS Boards. Support to the programme included:

- Specific support to the Scottish Prison Service (where medical services are now provided by NHS Boards), in recognition of the increased risk of overdose following release from prison custody.
- A national naloxone training resource and information materials to support the development of local take-home naloxone programmes.
- A national coordinator and peer trainer based at the Scottish Drugs Forum.
- Reimbursement of THN kit costs.
- Independent and robust monitoring led by PHS.

The NNP was overseen by the National Naloxone Advisory Group (NNAG), a multi-disciplinary group including stakeholders from Scottish Government, NHS Boards, Scottish Prison Service, Information Services Division (ISD) of NHS National Services Scotland, voluntary sector organisations and academia. Oversight of the NNP passed to the Partnership for Action on Drugs in Scotland (PADS) Harms Group from March 2016 to March 2019. Since the PADS Harms group was disbanded, the NNP has operated without formal oversight.

The Scottish Government's new drug and alcohol treatment strategy **Rights, Respect and Recovery**, launched in November 2018, made a commitment (R5) to 'Improve access to key interventions which will reduce harm, specifically focusing on those who inject drugs.'

Following a series of annual increases, the number of DRDs in Scotland reached 1,187 in 2018 (the highest figure yet recorded at the time). As a response to the rising number of drug deaths, the Scottish Government established the Scottish Drug Deaths Taskforce (SDDT), which met from 2019 to 2022. The SDDT consistently supported the use of naloxone, encouraging joint working between stakeholders and fostering innovation in this area.

SDDT-related developments included:

- publishing '**Evidence-Based Strategies for Preventing Drug-Related Deaths in Scotland**' (January 2020) which suggested that naloxone distribution should be a key strategy in national and local responses to reduce drug-related deaths;
- overseeing the distribution of 10,000 THN kits from a pharmaceutical company via community peer supply networks;
- the national roll-out of a naloxone supply pilot by Scottish Ambulance Service;
- naloxone carriage pilots by Police Scotland and Scottish Fire & Rescue Service; and,
- enhancing the involvement of peer networks in THN supply.

The **SDDTs final report** 'Changing Lives' included a range of recommendations in relation to naloxone. Actions 43-57 include recommendations to ensure adequate supply and expand the scope of the NNP to establish consistent routes of supply through hospitals and GP practices, to change/clarify the legal status of naloxone, to appoint a National Naloxone Coordinator and for PHS to review the monitoring and evaluation of naloxone.

In response to a further increase in DRDs (which reached a high of 1,339 in 2020), in January 2021, the First Minister announced a new **national mission to reduce drug related deaths and harms** supported by an additional £50 million funding per year. One of the main priorities of the National Mission is to provide continued support for emergency life-saving interventions such as THN. The principal mechanism for achieving this has been via the launch of the Medication Assisted Treatment (MAT) standards in May 2021 (Scottish Government, 2021a). **MAT Standard 4** (harm reduction) states that services that support people who use opioids should supply service users with THN unless they 'opt-out' of being issued with a kit and that all staff should carry THN for use in an emergency.

Following the SDDT's recommendation that PHS review the monitoring and evaluation of naloxone, PHS and Scottish Government convened a Short Life Working Group (SLWG) on naloxone reporting. This met from September 2022 to March 2023 and was independently co-Chaired by a Specialist Pharmacist in Substance Use and a Senior Officer leading living experience engagement for a voluntary sector organisation. Membership included representatives from NHS Boards, voluntary sector organisations, emergency services, people with lived/living experience of drug use and academia.

The purpose of the SLWG was '...to examine Scotland's naloxone data collection and reporting in the wider context of drug harm prevention and to make recommendations on how these could be modified to ensure their continued sustainability and fitness for purpose' (Public Health Scotland, 2023).

The SLWG's recommendations to modernise data collection and reporting and improve understanding of the impact of naloxone can be found in the **SLWG Report**, published in November 2023. PHS are currently awaiting a Ministerial response to these recommendations and, where appropriate, will in due course consult with users of these statistics in relation to any proposed changes to reporting.

## **A1.2: Legal framework and supply routes**

Naloxone is a drug which can reverse the effects of a potentially fatal overdose with opioid drugs such as heroin or morphine. Administration of naloxone provides time

for emergency services to arrive and for treatment to be given. Under the NNP, naloxone was provided to those at risk of opioid overdose once they had undergone training in its use. This training was also available to family, friends and service workers.

In its first five years of operation (from April 2011 to March 2016), the NNP coordinated distribution of THN kits in two settings - community outlets (usually specialist drug treatment services) and prisons:

- During April 2011, Greater Glasgow & Clyde and Highland NHS Boards started THN distribution and piloted the data collection processes for the community-based element of the NNP. Rollout of the programme and associated data collection continued throughout Scotland from April 2011. By January 2012, 13 of 14 NHS Boards in Scotland participated in the NNP. NHS Western Isles started distributing Naloxone in 2017/18.
- The supply of THN in prisons was introduced incrementally from February 2011 and by June 2011 all Scottish prisons were participating in the programme. From 1 November 2011, responsibility for prisoner health care transferred from the Scottish Prison Service (SPS) to the NHS. Although this report refers throughout to 'THN kits provided in prisons', it should be noted that kits are provided by NHS staff in prisons to prisoners on liberation.<sup>30</sup>

In late 2015, THN supply in community pharmacies via prescription increased in some NHS Boards following a change in the regulatory framework:

- From 1 October 2015, changes to the 2012 Human Medicines Regulations came into force, allowing injectable naloxone to be supplied by lawful drug treatment services (defined as specialist secondary services, primary care

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<sup>30</sup> One exception to this is HMP Castle Huntly (an open prison), which provides training and THN to prisoners at risk who leave the establishment on home leave prior to their liberation.

addiction services, needle exchanges and community pharmacies) without the need for a prescription. This included non-clinical staff. These amendments aimed to make THN more widely available by allowing direct THN supply to family members or carers for administration in the event of opioid overdose.

- From 1 April 2016, central reimbursement of the cost of THN kits ceased and NHS Boards assumed responsibility for the funding of THN supplies to opioid users at risk of accidental overdose.

The practical effects of these changes were to a) increase the range of people eligible to make supply of naloxone (including non-clinical) b) facilitate THN supply to those not personally at risk but likely to witness opioid overdose and c) to facilitate NHS Board level diversification of THN supply routes. Data from PHS's Prescribing Information System are included in this report in order to count the number of THN kits dispensed via community prescriptions.

Until 2019, the only naloxone product licensed for lay use and therefore distributed as part of the National Naloxone Programme was administered by intramuscular injection (Prenoxad®). In February 2019, Nyxoid®, the first intranasal naloxone product was licensed for lay administration. The availability of Nyxoid® means that those preferring to carry an intranasal product can now be supplied with naloxone that is safe, effective and suited to their needs. Since its introduction in Scotland in 2019, this product has helped to remove the need for use of unlicensed intranasal kits in NHS Highland and encourage naloxone carriage among police, fire and rescue and prison officers in Scotland.

Scottish Ambulance Service (SAS) clinicians have been administering naloxone directly to patients experiencing symptoms of an opioid overdose since around 1998. Data on the numbers of naloxone administration incidents by SAS are provided to PHS and published within the [RADAR quarterly report](#). A pilot for THN supply by SAS was undertaken between February 2020 and June 2020. This initially operated from the Springburn centre/control room that centres on emergency call outs in the NHS Greater Glasgow & Clyde area and parts of NHS Lanarkshire. This pilot was

expanded throughout 2020/21, with all ambulance clinicians now able to supply naloxone.

A pilot study of THN carriage and administration by police officers was carried out in 2021 by Police Scotland. After evaluation of this it was agreed that naloxone carriage by police officers should be rolled out throughout Scotland, which commenced in August 2022. Police Scotland have now trained and equipped all operational officers up to and including the rank of Police Inspector with intranasal naloxone kits. Information relating to the number of incidents where naloxone was administered is published by Police Scotland and is available on their [website](#). Police Scotland will not supply THN as part of this initiative at present, so data will not be collected in future reports (Scottish Drug Forum, 2022a).

### **COVID-19 Pandemic**

In response to the COVID-19 pandemic, on 27 April 2020 the Lord Advocate allowed the supply of THN to be expanded to non-drug treatment services (COPFS 2020). The first supplies via non-drug treatment services in Scotland were made in the first quarter of financial year 2020/21.

The Coronavirus (Scotland) Act 2020 provided new powers for the early release of a specific class of prisoners held in Scottish prisons. Early Release was deemed necessary in order to provide Scottish Prison Service with additional operational capacity, allowing for a greater use of single cell occupancy and keeping prison staff and the people in their care safe. The first early releases as part of this scheme took place on 6 May 2020<sup>31</sup>. As part of this early release scheme, naloxone was distributed at the point of liberation.

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<sup>31</sup> Details of the numbers of prisoners released as part of this scheme can be found [here](#).

On 31 August 2021, the Scottish Government, and the Scottish Drugs Forum (Scottish Government, 2021b) launched a campaign<sup>32</sup> to promote awareness of opioid overdoses and the uptake of THN kits by members of the public, via Scottish Families Affected by Alcohol and Drugs. This campaign has been supported by a number of initiatives such as TV and radio adverts, and billboards. In February 2022, more than 20 taxi drivers in Glasgow agreed to carry naloxone (Scottish Drug Forum, 2022b). From February 2022, Scottish Fire and Rescue Service began training staff to recognise the signs of an opioid overdose and administer naloxone (Scottish Drug Forum, 2022c). This means that the three main emergency services are now involved in the carriage of naloxone.

### **A1.3: National Naloxone Programme supply monitoring – dataset items**

The data items in the agreed national dataset for monitoring of the National Naloxone Programme are included as an appendix within the [data tables](#).

Kit supplies from community outlets, prisons, or SAS all record date of issue, and details of naloxone provision such as who it is provided to (person at risk, family/friend or service worker) and type of supply (first, repeat, or spare). In response to the developments within the period of this publication the naloxone database was also revised to ensure diversification in recipient type was accurately recorded, with categories added for who naloxone is provided to including ‘member of the public’ and ‘professional’ (those who do not work directly with people who use drugs, but carry naloxone as part of their work e.g. public transport workers, bar/night club staff), capturing supply of THN to these groups of people and settings.

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<sup>32</sup> Details can be found at <https://www.gov.scot/news/preventing-deaths-from-overdose/> and at <https://www.stopthedeaths.com/>.

If consent has been given to the sharing of the individual's personal data, then personal details are collected. This includes forename and surname (initials only are submitted to PHS), date of birth, age, postcode sector of residence and gender.

There are also further questions relevant only to each type of naloxone provider, such as source and method of supply within community supplies.

Data were submitted quarterly to PHS (six-monthly during 2012/13) via secure data transfer, from the Naloxone Lead in each NHS Board and a Lead Officer in each prison establishment. Data were supplied in the form of a completed Excel spreadsheet, for secure storage and analysis at PHS.

#### **A1.4: Prescribing Information System data on THN supply via prescriptions dispensed in community pharmacy**

Community-dispensed prescription data are supplied quarterly by the PHS Prescribing Team. Data on number of kits (Quantity) and number of prescriptions (Items) dispensed by financial year, quarter and NHS Board of dispensing are received by prescribable item name (Prenoxad- inj – 1mg/ml, Nyxoid –spray- 1.8mg/0.1ml and Naloxone Hydrochloride - inj - 1mg/ml) and prescription type:

- GP10 (GP Standard Prescription Form);
- GP10N (Nurse Prescription Form);
- GP10P (Pharmacy Prescription Form);
- HBP (Hospital Based Prescriber Form) and;
- HBPA (Hospital Based Prescriber in Addiction services Form).

While only Prenoxad-inj-1mg/ml data and Nyxoid-spray-1.8mg/0.1ml have been reported within the period of this publication, the number of prescriptions for Naloxone Hydrochloride-inj-1mg/ml are also monitored in order to identify inappropriate prescribing (as Prenoxad<sup>®</sup> and Nyxoid<sup>®</sup> are the only THN product for



administration by lay persons, all relevant prescriptions should specify this as the item to be dispensed).

Although no kits have been issued within this reporting period, an additional intranasal naloxone product (Accord: Naloxone-1.26mg/0.1ml-Nasal-Spray-Unit-Dose) has also been recently approved for use in early 2023.

### **A1.5: Calculation of kit expiry**

The National Naloxone Programme has been operational for 12 years (supply commenced in April 2011). However, as the pharmaceutical products supplied by the National Naloxone Programme have an expiry date from production of three years, supplies distributed more than three years ago will have now passed their expiry date. In addition, THN kits may be retained in the supply chain for varying periods and therefore there may be a reduction in the three-year lifespan period when supplies are received by NHS Boards for onward supply. Taking this into account, along with advice from an expert short life working group, it was estimated that THN kits will have an average of two years remaining before date of expiry at the time of supply. NHS Boards offer replacements for naloxone kits which have passed their expiry date.

This report includes, an analysis of a) the number of THN kits supplied less than two years ago and b) the number of THN kits supplied less than two years ago to people at risk of opioid overdose (i.e. the at risk population). Taking account of the duration of the National Naloxone Programme, this analysis estimates the numbers of THN kits in circulation which are unexpired.

In the analysis of kit expiry for both supplies to all recipients and to people at risk of opioid overdose, the following assumption was made:

- Prison data from 2011/12 Quarter 1 (213 THN kits) were submitted as an aggregate return by SPS and did not include information on date of supply. In order to include these data in the analysis, an assumed supply date of 1 April 2011 was used as the basis of calculating the kit expiry date.

In the analysis of kit expiry for supplies to people at risk of opioid overdose, the following assumptions were made:

- Prison data from 2011/12 Quarter 1 were submitted as an aggregate return by SPS and did not include information on supply type or recipient type. However, as this was the first quarter of National Naloxone Programme operation, it is assumed that all were first supplies to people at risk of opioid overdose and are therefore included in the analysis.
- Community prescribing data does not include information on recipient type. In order to include these kits in the analysis, it was assumed that the percentage of community prescribing THN kits supplied to people at risk of opioid overdose was the same as the percentage observed among community outlet supplies (Table A1.1). Community prescribing supplies to people at risk of opioid overdose was calculated by multiplying the observed number of THN kits dispensed in each financial year by a factor based on the percentage of community outlets supplies to people at risk of opioid overdose in the preceding 2-year period.

**Table A1.1: Percentage of kits supplied to persons at risk from community supplies (two-year average)**

<b>Financial Year that factor is applied to.</b>	<b>Percentage of kits supplied to persons at risk in community supplies, two-year average</b>
2013/14	88.5
2014/15	89.3
2015/16	88.1
2016/17	86.3
2017/18	83.0
2018/19	80.2
2019/20	77.0
2020/21	78.8

Financial Year that factor is applied to.	Percentage of kits supplied to persons at risk in community supplies, two-year average
2021/22	66.9
2022/23	50.3

## **A1.6: Calculation of THN ‘reach’**

Calculation of the ‘reach’ of the National Naloxone Programme is based on the number of first supplies made to people at risk of opioid overdose. The data items necessary to make these exclusions are available in the agreed national dataset for National Naloxone Programme monitoring of THN supplies from community outlets and prisons (see [Appendix A1.3](#)). However, some assumptions made during the calculation of community outlet and prison ‘reach’ require further elaboration. Also, as information on recipient type and supply type is not available for community-dispensed prescriptions, an alternative method for estimating ‘reach’ was used for this supply route. This approach is explained below, detailing relevant assumptions.

Please note it is not possible to combine analysis of kit expiry with the ‘reach’ analysis described below. As community outlet and prison THN supply data are not person identifiable, ‘reach’ analysis is based on the numbers of kits supplied to people at risk of overdose where supply type was indicated as ‘first’. As first supplies have decreased in number and prevalence over the course of the National Naloxone Programme, exclusion of kits supplied more than two years ago would entail the exclusion of the majority of first supplies to people at risk, resulting in a substantial underestimation of the proportion of the at risk population supplied with THN.

### **Community Outlet and Prison ‘reach’**

For both community outlet and prison supplies, ‘reach’ is based on the count of the number of THN kits issued as a first supply (excluding repeat supplies and spare supplies) to people at risk of opioid overdose (excluding supplies to service workers and family/friends). This functions as a proxy estimate of the number of at risk individuals supplied with THN and, as such, is a more suitable figure to compare with

the estimated number of persons with problem drug user than the total number of THN kits distributed (used in reports prior to 2017/18 and included in this report for comparison). By eliminating counts of repeat/spare supplies, and focusing on supplies to people at risk of opioid overdose (i.e. the target population for this intervention, who are most likely to witness an opioid overdose), this approach adds value by more robustly quantifying how many persons with problematic drug use have the opportunity, training and equipment to intervene and potentially save a life.

Whilst the naloxone dataset includes some demographic data that may aid the calculation of the number of 'individuals' who were supplied kits, due to gaps in data (not all people consent to sharing details) and/or variations in data recording (e.g. recording of slightly different initials, postcode sector information and/or date of birth) it is not possible to use these to conclusively identify the number of individuals involved. Instead, the details recorded on recipient type and supply type are used to determine the number of at risk individuals supplied.

In relation to 'first supply', it is assumed that individuals report accurately about previous THN supply and that that information is accurately recorded and submitted to PHS. This means that all records of first supplies are considered to be separate individuals. It is also assumed that individuals will seek or be offered a repeat supply when their initial supply is used, lost etc and that they continue to be exposed to the risk of opioid overdose (i.e. they do not die, they continued to use opioids) after initial supply was made.

In relation to the selection of at risk individuals, first supplies made to service workers are not included as it is assumed these staff would only witness opioid overdoses during their working hours and distributions to such staff could not be meaningfully compared with estimated numbers of persons with problem drug use. Community outlet supplies to friends/family are not counted because these are generally supplied in addition to an existing first supply to, and with the consent of, a specific individual at risk. There may be a small number of cases in which an individual at risk provides consent for friends/family members to receive a supply, but chooses not to accept a THN supply themselves, but it is not possible to identify these cases using the monitoring information supplied to PHS. Prior to 2020/21, prisons supplied very few THN kits to persons other than those at risk of opioid overdose (408 supplies from

2011/12 to 2020/21). However, this has since increased (an additional 1,028 supplies from 2021/22 to 2022/23) due to more kits being supplied to 'family/friends' as part of the peer supply programme.

Prison data from 2011/12 Quarter 1 were submitted as an aggregate return by SPS and did not include information on supply type or recipient type. However, as this was the first quarter of National Naloxone Programme operation, it is assumed that all were first supplies to people at risk of opioid overdose and are therefore included in the analysis of 'reach'.

As discussed in [Section 2](#), prison 'reach' estimates are based on the NHS Board where the prison was located in order that they can be counted alongside numbers of community outlet and community prescription supplies and compared with the estimated at risk populations in each area. While most prisons accommodate individuals as close as possible to their area of residence and therefore reflect the population resident in that area, some are national facilities, accommodating prisoners from across Scotland. There is zero prison 'reach' in areas with no establishments (NHS Borders, NHS Fife, NHS Orkney, NHS Shetland and NHS Western Isles), producing a potential underestimate of the numbers of resident at risk individuals with a THN supply (upon release, individuals may transport a prison THN supply to their area of residence). However, due to supply to non-residents, prison 'reach' in NHS Boards with national facilities may overestimate the numbers of resident at risk individuals with a THN supply.

### **Community prescription 'reach'**

For dispensing via community prescription, 'reach' is based on the count of the number of THN prescriptions fulfilled, rather than the number of kits dispensed (a single prescription may specify multiple kits to be dispensed, but would reflect one individual).

Information on recipient type and supply type are not available from PHS's Prescribing Information System. Prescribing data includes the recipient's Community Health Index (CHI) number which could be used to calculate the number of individuals to whom prescriptions were dispensed by excluding multiple prescriptions

to the same individual. However, due to the high number of THN prescriptions which did not include a valid CHI, it was not possible to perform person-level analysis for these data. Community prescription 'reach' estimates may be revised if person-level analysis is facilitated by future improvements in CHI capture. However, prescribing data do not indicate recipient type (person at risk, friends/family, service worker) and, due to the limited potential for linking community prescription CHIs to the personal identifiers collected in the national dataset, this is not considered a feasible future refinement.

Discussions with relevant NHS Board leads about the use of this supply route identified a need to modify an assumption made in reports prior to 2016/17, namely that all community prescriptions related to first supplies to persons at risk of opioid overdose. It is now assumed that the percentage of first supplies to people at risk of opioid overdose would be approximately the same as that for community outlet supplies ([Section 1](#)). Community prescribing 'reach' is calculated by multiplying the observed number of prescriptions in each financial year by a factor based on the percentage of first supplies to people at risk of opioid overdose from community outlets in the preceding 3-year period (Table A1.2). This assumption may be sensitive to changes in the number of kits being prescribed each year. For example, in 2020/21 while the number of kits supplied by community outlets increased by 20% compared to the 2019/20, the number of kits supplied via prescribing increased by 771%. Given this large increase in prescribed kits it is unclear if this may have been disproportionately due to spare and repeat supplies, rather than first supplies to persons at risk.

Other kits supplied on the basis of community prescriptions are assumed to be re-supplies to people at risk of opioid overdose or supplies to family members etc. It is assumed that all prescriptions were submitted to a pharmacy.

**Table A1.2: Percentage of kits supplied as first supplies to persons at risk from community supplies (three-year average)**

Financial Year that factor is applied to.	Percentage of kits supplied as first supplies to persons at risk in community supplies, three-year average
2013/14	67.2
2014/15	60.9
2015/16	52.9
2016/17	43.2
2017/18	34.5
2018/19	26.3
2019/20	22.2
2020/21	19.6
2021/22	17.2
2022/23	14.1

**Comparison with estimated numbers of persons with problematic drug use**

‘Reach’ of THN supplies among the target population is expressed as a rate per 1,000 estimated persons with problematic drug use. National and NHS Board estimates of the size of the problem drug use population based on 2009/10, 2012/13, and 2015/16 data, were published by PHS and have been used in reach estimates. These estimates are based on a definition of problem drug use as ‘the problematic use of opiates (including illicit and prescribed methadone use) and/or the illicit use of benzodiazepines’. Single-substance prevalence estimates (i.e. opioids only) are not published and therefore, a small number of individuals using only benzodiazepines are included in problem drug use estimates, leading to a potential overestimation of the size of the target population. However, the numbers of such individuals are

thought to be small and problematic drug use estimates remain the best comparator for estimating 'reach'.

### **A1.7: Comparison with opioid-related deaths – data collection**

Data for the analysis of opioid-related deaths within four or 12 weeks of prison release are collected as follows:

- National Records of Scotland (NRS) supply PHS with an extract of drug-related death records for each relevant year with 'opioid' deaths (defined by one or more of heroin/morphine, methadone and/or buprenorphine being implicated in, or potentially contributing to, the cause of death (rather than only being present) flagged. These are securely sent to PHS, matched with personal identifiers from the NRS deaths database held by PHS. A PHS analyst with clearance to access the Scottish Prison Service record system (PR2) then collects data on individuals who had an opioid-related death and who had a custody record on the Scottish Prison Service system. The results from this process are securely transferred to PHS, validated and analysed.

Data for the analysis of opioid-related deaths within four or 12 weeks of hospital discharge are collected as follows:

- The NRS drug-related deaths extract described above, having been securely sent to PHS is matched with personal identifiers from the NRS deaths database held by PHS. It is then further matched against the general acute inpatient and day case (SMR01) and mental health inpatient and day case (SMR04) datasets routinely submitted to PHS by NHS Boards to identify general acute or psychiatric discharges within the relevant time periods prior to death. The results from this process are then validated and analysed.

Relevant permissions are in place for these analyses, which are subject to oversight by the information governance teams within the relevant organisations.



## **A1.8: References**

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## Appendix 2 – Publication metadata

### Publication title

National Naloxone Programme Scotland, Monitoring Report 2021/22 and 2022/23

### Description

Data are presented on the supply of naloxone ‘take-home’ kits in Scotland. Data are presented separately for kits issued from community outlets, in prisons, dispensed via community prescription, and Scottish Ambulance Service, as well as combined totals.

Information presented includes the total number of kits issued each quarter, the number of kits issued in each ADP/NHS Board/prison establishment, who the kits have been issued to and whether the kit was issued as a first or a repeat supply (and reasons for repeat supply).

### Theme

Drugs, Alcohol, Tobacco, and Gambling

### Topic

Drugs

### Format

PDF Report and Excel tables

### Data source(s)

Community outlet and prison data are provided by services (community and prisons) to naloxone leads in NHS Boards and submitted to PHS’s Naloxone Monitoring database.

Data on dispensing via community prescription is part of PHS’s Prescribing Information System and are provided by the PHS Prescribing Team.

Data on THN kits supplied are collated by the Scottish Ambulance Service and submitted to PHS’s Naloxone Monitoring database.

**Date that data are acquired**

Community outlets and Prisons: November 2023

Community prescription: November 2023

Scottish Ambulance Service: November 2023

Opioid-related death prison release/hospital discharge data: October 2023

**Release date**

20 February 2024

**Frequency**

Biennial

**Timeframe of data and timeliness**

The timeframe for this publication is the financial year 2021/22 and 2022/23 (data for 2011/12 to 2020/21 are also shown). Note that some figures may have changed from previous years due to the late submission of data from NHS Boards.

**Continuity of data**

This is a series of annual reports, providing up-to-date information about THN supply in Scotland.

**Revisions statement**

None

**Revisions relevant to this publication**

None

**Concepts and definitions**

See section A1 in [Background Information](#).

**Relevance and key uses of the statistics**

The analyses presented in this report provide evidence of the number of 'take-home' naloxone kits supplied by the National Naloxone Programme in Scotland for financial year 2021/22 and 2022/23, reasons for supply and the characteristics of recipients.

Additionally, data on the number of first supplies to individuals at risk of opioid overdose provides information on the 'reach' of THN supply among the at risk population.

Data on the percentage of opioid-related deaths occurring within four or 12 weeks of prison release or hospital discharge provide important contextual information on deaths within periods of high opioid overdose risk.

### **Accuracy**

The naloxone lead in each NHS Board was given the opportunity to check their supply figures prior to publication.

For the section on opioid-related deaths, the accuracy of the data presented are dependent on the accuracy of the relevant National Records of Scotland and Scottish Prison Service datasets.

### **Completeness**

Community outlets and Prisons: Supply data were provided by the naloxone lead in each NHS Board. Not excepting the possibility of late data submission, following validation by NHS Board leads, all other information was assumed to be complete.

Scottish Ambulance Service: Supply data were provided by the Scottish Ambulance Service.

Community prescription: Data were provided by the PHS Prescribing Team. As this information is derived from a payment processing system, it is assumed to be a complete record of dispensed medicines. Any inaccuracies in reporting are likely to arise from the specific forms and products included within the definition, which was agreed in collaboration with expert pharmacists.

### **Comparability**

No comparable published data outwith Scotland.

### **Accessibility**

It is the policy of Public Health Scotland to make its websites and products accessible according to published guidelines. More information on accessibility can be found on the [PHS website](#).

### **Coherence and clarity**

This report is available as a PDF file.

**Value type and unit of measurement**

Counts, numbers and percentages.

**Disclosure**

The [PHS protocol on Statistical Disclosure Protocol](#) is followed.

**Official statistics accreditation**

Official statistics

**UK Statistics Authority assessment**

N/A

**Last published**

3 May 2022

**Next published**

Winter 2026

**Date of first publication**

31 July 2012

**Help email**

[phs.drugsteam@phs.scot](mailto:phs.drugsteam@phs.scot)

**Date form completed**

09 February 2024

## **Appendix 3 – Early access details**

### **Pre-release access**

Under terms of the 'Pre-release Access to Official Statistics (Scotland) Order 2008', PHS is obliged to publish information on those receiving pre-release access ('pre-release access' refers to statistics in their final form prior to publication). The standard maximum pre-release access is five working days. Shown below are details of those receiving standard pre-release access.

### **Standard pre-release access:**

Scottish Government Department of Health and Social Care (DHSC)

NHS board chief executives

NHS board communication leads

Scottish Prison Service lead

Scottish Ambulance Service lead

### **Early access for management information**

These statistics will also have been made available to those who needed access to 'management information', i.e. as part of the delivery of health and care:

### **Early access for quality assurance**

These statistics will also have been made available to those who needed access to help quality assure the publication:



## Appendix 4 – PHS and official statistics

### About Public Health Scotland (PHS)

PHS is a knowledge-based and intelligence driven organisation with a critical reliance on data and information to enable it to be an independent voice for the public's health, leading collaboratively and effectively across the Scottish public health system, accountable at local and national levels, and providing leadership and focus for achieving better health and wellbeing outcomes for the population. Our statistics comply with the [Code of Practice for Statistics](#) in terms of trustworthiness, high quality and public value. This also means that we keep data secure at all stages, through collection, processing, analysis and output production, and adhere to the ['five safes'](#).

Translations and other formats are available on request at:

[phs.otherformats@phs.scot](mailto:phs.otherformats@phs.scot) or 0131 314 5300.

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