



Final statistics

Statistical bulletin

# Review of Suicide Statistics in Northern Ireland, 2015 - 2020

Published: 26 May 2022

This report presents the background and findings to the review of NI Suicide Statistics, an exercise which was undertaken by the Northern Ireland Statistics and Research Agency (NISRA) and the Coroners Service for NI (CSNI) following the identification of a classification issue in published statistics for the period 2015-2020. It describes the issues, quantifies the impact of the revision of the previously published time series and outlines next steps.

In total, 467 cases have been part of this work as follows:

2015–2017: 318 cases formed the review which then led to process improvements described in this paper. A further 74 cases for 2015-2017 are outstanding so results for these years are provisional. Sensitivity analysis is presented for these years.

2018-2020: results are final, and the work included 84 review cases and the quality assurance of 65 cases in 2020 following the monitoring of the new processes as they were bedded in.

# Key points

- 84 per cent of all cases reviewed (2015 to 2020), out of 467 in total, moved from undetermined cause of death into accidental cause of death categories which fall outside the suicide definition, thus reducing the number of suicide deaths in NI between 2015 and 2020.
- The annual average reduction in suicides over the 3 year period 2015-2017 is almost 30 per cent compared with previously published figures. The later years of the review saw lower reductions in numbers; a 23 per cent fall in 2018 and a 17 per cent fall in 2020.
- Prior to the review it was believed that NI had the highest age-standardised rate in the UK (18-19 suicides per 100,000 population, next to Scotland at 13-

16 per 100,000). The revised figures show that NI had a lower suicide rate than Scotland in the last few years. For the latest year, 2020, NI had an agestandardised rate of 13.3 suicides per 100,000 population compared to Scotland at 15.0. The rate for England & Wales is lower at 10.0 suicides per 100,000 in 2020. It should be noted, however, that cross country comparisons will build in differences in different data collection and collation processes in the separate jurisdictions.

- Revised figures show that there were 219 suicides registered in NI in 2020. This is higher (by 14, 7 per cent) than 2019, and lower (by 17, 7 per cent) than the 2018 figure.
- The age-standardised suicide rate in NI increased from 12.4 deaths per 100,000 in 2019 to 13.3 deaths per 100,000 in 2020 (19.6 and 7.1 deaths per 100,000 population for males and females respectively).
- The Belfast Trust had the highest suicide rate at 18.8 deaths per 100,000 in 2020, followed by Southern Trust (14.2 deaths per 100,000). Northern Trust had the lowest suicide rate in 2020 at 9.4 deaths per 100,000.
- Northern Ireland's most deprived areas had a suicide rate that was almost twice that of the least deprived areas in 2020 (19.7 deaths per 100,000 in the most deprived areas, 10.8 per 100,000 in the least deprived).
- The most common method of suicide in NI in 2020 was hanging, suffocation or strangulation (68.0 per cent of all suicides and 70.6 per cent of all male suicides) followed by poisoning (19.6 per cent of all suicides and 61.0 per cent of all female suicides).

# Where to go for help

If you are struggling to cope, please call one of the organisations below. There is help available around the clock, every single day of the year, providing a safe place for anyone struggling to cope, whoever they are, however they feel.

**Minding Your Head** - find out more about mental health and the issues that can affect it; early warning signs that a mental health issue may be developing; tips on how to maintain good mental health.

Website http://www.mindingyourhead.info/

**Lifeline** - A Free 24 hour crisis response helpline for people who are experiencing distress or despair, where trained counsellors will listen and help immediately on the phone and follow up with other support if necessary.

Phone 0808 808 8000 Website http://www.lifelinehelpline.info

**Samaritans** – a registered charity aimed at providing emotional support to anyone in emotional distress, struggling to cope, or at risk of suicide throughout UK and Ireland, often through their telephone helpline or online chat.

Freephone 116 123

Website https://www.samaritans.org/

# Information for the media

There is strong evidence that sensationalist media reports about suicide and the nature of suicide deaths can lead to subsequent additional suicidal behaviours (suicides and suicide attempts) or indeed increase the likelihood of copycat deaths.

Media professionals should exercise caution in reporting on suicide, balancing the public's "right to know" against the risk of causing harm. It is therefore important that those reporting on suicide statistics adhere to the guidelines of safe reporting from <u>WHO/IASP</u> and <u>Samaritans</u>.

# Contents Suicide Deat

Suicide Deaths in Northern Ireland, 2015 - 2020	1
Key points	
What you need to know	5
Section 1: Results of the Review	
Section 2: New Statistical Series for Suicides in Northern Ireland	
Annex	26
Links to relevant publications	278
List of Tables	28
Contact Details	

# What you need to know

# **Background**

Suicide deaths in Northern Ireland are defined as deaths due to intentional self-harm as well as events of undetermined intent. This is consistent with the UK National Statistics definition, a fuller description of which is provided in Annex A.

Where a person has died from any cause other than natural illness, for which they have been seen and treated by a registered medical practitioner within 28 days prior to the death, the death must be referred to the Coroner. Such deaths can only be registered after the Coroner has completed his/her investigation.

The cause of death information provided by coroners at registration of the death is used to code the underlying cause of death. In some instances, it can be difficult to establish whether the cause of death was suicide or accidental. By convention, the word 'suicide' (or a synonym) does not appear on the death certificate; the cause of death text will however outline the direct, underlying and if relevant, contributory causes of death in medical terms. If it is not clear, or the Coroner has not specifically stated that it is a suicide or accidental death, these are coded as 'Undetermined'; in other words the Coroner was unable to establish the intent of the deceased. As there is still a possibility that a death where the intent could not be determined may be a suicide, they are therefore counted within the definition of suicide.

# The review does not affect any information previously given to families by Coroners Service NI

#### Normal revisions

NISRA publishes provisional suicide figures each quarter via the <u>Registrar General</u> <u>Quarterly report</u>. These figures are based on deaths registered within the quarter and are usually published within 6-8 weeks of the quarter's end. They may be subject to some change throughout the year, for example, due to late registrations or additional information being made available from CSNI. Such revisions are, however, usually relatively small, with around a difference of +/-10 cases (less than 5% of annual suicide deaths) being reported in the final total via the Annual Report of the Registrar General.

# What do the findings mean?

The review of suicide statistics conducted by NISRA and CSNI started in 2019 and concluding in March 2022. It marks a major revision to this important statistical series and will have a significant impact on the existing NI narrative in relation to suicide rates compared with other nations. However, it is important to be clear from the outset that this is a *statistical* review, aimed at ensuring that the NI official figures

are as accurate as possible. This review has examined the processes involved in obtaining the relevant information pertaining to a death in order to allocate an accurate ICD 10<sup>1</sup> code to the cause of death to allow subsequent classification. The review does not have a bearing on what was recorded on individual death certificates nor does it change the original findings of the Coroner of which bereaved families would have previously been made aware in relation to these tragic deaths.

An added complexity in this review was the change in the **standard of proof** - the level of evidence needed by coroners to conclude whether a death was caused by suicide. The standard of proof for a verdict of suicide was changed from the criminal standard of "beyond all reasonable doubt", to the civil standard of "on the balance of probabilities" as a result of an English case in July 2018 and confirmed in NI in November 2018. The review was carried out on this new basis. This means that cases are classified as either intentional self-harm, an accident or as undetermined on the balance of probabilities. <u>The Office for National Statistics (ONS)</u> has since reported<sup>2</sup> that the change has led to the proportion of deaths in England and Wales with an underlying cause of intentional-self harm increasing, whereas the proportion coded to undetermined intent has decreased.

The review has resulted in more accurate figures which are lower than those previously reported, in the main due to the reclassification of previously 'undetermined' drugs deaths as accidental deaths and therefore not suicide. Despite this reduction, the government's commitment to reducing deaths by suicide remains unchanged and the key overarching message continues to be that one death by suicide is one too many.

# Description of the Issue

The publication (in June 2020) of the NI suicide total for 2019 (provisional figure of 209 and later finalised at 205) showed this to be significantly lower than previous years, as shown in Table 1, column B, below.

Between 2015 and 2018 the number of undetermined deaths (col. D) was found to be linked to the increasing number of drug related deaths (col. E) in terms of their classification at source, then within the CSNI system, and subsequently at the point of coding by NISRA. In the absence of the required level of detail these cases were classified as undetermined.

These discrepancies led NISRA and CSNI to carry out a full-scale review of individual cases and as the work evolved, a further number of *non-drug* related deaths (84 in total over 2015-2018) were identified as potentially similarly

<sup>&</sup>lt;sup>1</sup> www.who.int/classifications/icd/ICD-10 2nd ed volume2.pdf

<sup>&</sup>lt;sup>2</sup> <u>Change in the standard of proof used by coroners and the impact on suicide death registrations data in</u> <u>England and Wales - Office for National Statistics</u>

misclassified and these were incorporated within the review in its later stages [see section 1 below].

Α	В	С	D	E
Registration year	Total number of suicides	<i>Of which:</i> Self- inflicted	Undetermined intent	Proportion of undetermined deaths (col D) which are drug related
2011	289	220	69	81%
2012	278	203	75	81%
2013	303	243	60	78%
2014	268	191	77	82%
2015	318	204	114	96%
2016	298	149	149	71%
2017	305	173	132	78%
2018	307	184	123	93%
2019	197	187	10	88%
Provisional 2020	263	198	65	52%
Provisional 2021	233	220	13	

Table 1: Previously published Suicide totals by intent: 2011 - 2020

#### What changed to cause the issue

Prior to 2015, the coding of deaths to the International Classification of Diseases 10<sup>th</sup> Revision (ICD-10), was done within the NI General Register Office (GRO) by a dedicated coder, which included a process by which further verification could be sought from the CSNI (through long-term working relationships and local knowledge), where no indication of intent was given.

In 2015, following the loss of local experience through voluntary redundancy, the NISRA ICD-10 coding function transferred to the Office for National Statistics (ONS), (which has a dedicated deaths coding team) working in conjunction with the NISRA Vital Statistics Unit (VSU). At this point the GRO/CSNI verification procedure ceased and deaths were automatically coded by the ONS as 'accidental' in the absence of any other information in relation to intent. These cases were however subsequently overwritten by NISRA as 'undetermined' based on GRO's experience that the majority (around 99 per cent) of previous verification checks had resulted in cases being agreed with the Coroner as 'undetermined'. This was not an unreasonable assumption at the time, however the increasing trend in drug related deaths from around the same time disrupted the previous trend in ratio of undetermined to accidental deaths. As the change in the ratio was unknown to NISRA at that point, this then led to an overestimation of deaths of undetermined intent.

# What the Review Covered

#### Drug related deaths classed within the undetermined sub-series

The review's initial remit was to revisit all drug related deaths which had been classified as 'undetermined' in 2015 to 2018 and thus counted in the suicide definition. Drug related deaths in NI have increased notably in recent years (from 144 in 2015 to 189 in 2018) and column E in Table 1 above shows the proportion of such deaths falling within the undetermined category. 2019 was not included in the review proper, as the issue was already being investigated and adjusted for drug related deaths in that year, helped by a new CSNI I.T. system which, for the purposes of official statistics, mandated all deaths not of natural causes to be assigned as either accidental, intentional self-harm or of undetermined intent, with no scope for this field to be left blank.

#### Review of non-drug related deaths of undetermined intent.

In its later stages, the review also broadened coverage to include 83 non-drug related deaths of undetermined intent during 2015-2019 which had been categorised in the absence of intent information in a similar way to the drug related deaths. The majority of these (74) related to the years 2015 and 2017. At the time of writing this report, the majority of these cases are not yet finalised; however, a sensitivity assessment is provided at section 1 to show the possible and most likely impacts these cases will have on final figures for 2015-2017. The small number (9) of non-drug related cases of concern in 2018-2020 have been reviewed at this stage so that figures for 2018-2020 are final. See Annex B for further details.

#### Improvements to Quality

The quality of statistics is important to ensure that they meet user needs and are fit for purpose. NISRA works hard to guarantee that our users have confidence in us as statistical producers by providing high quality data. We endeavour to ensure users have enough information on the quality of our statistics to support effective decisionmaking.

In addition to the improvements in the accuracy of suicide statistics brought about by this review, we have taken steps to improve other aspects of quality which enhance user assurance in the accuracy and reliability of this statistical series. There are 6 main areas of quality improvement going forward:

# Enhanced Scrutiny

NISRA has increased its scrutiny of the death coding process. In addition to well established routine checks on deaths data, death coding checks have been vastly enhanced as a result of this review, with clear audit trails in place.

#### Documenting how statistics are produced, from data collection to publication

NISRA has published additional documentation on the production process involved in the production of death statistics, from data collection through to publication. This comprises high-level mapping, identifying the critical steps of the production process and provided detailed supporting information<sup>3</sup>.

#### Enhanced Relationships

The review has strengthened the relationship between CSNI and NISRA, fostering mutual understanding of each organization's role in the production of death statistics in Northern Ireland.

#### System Improvements

Additional training has been incorporated into the induction process for newly appointed CSNI staff advising them of their role and the importance of recording the intent of the deceased within the death coding process.

In addition to this training, the list of categories to allow the coding of intent has been reviewed and enhanced within the new Coroner's IT System (CLEAR). This list was enhanced in consultation with NISRA's VSU and is cognisant of the statistical processes for which the data will be used by NISRA.

CSNI has developed a more robust administrative process for greater consistency between Coroners and supporting staff, with the consideration of recording of intent escalated to an earlier stage of the coronial decision making process. Also, initial discussions have commenced between CSNI, the NI Mental Health Champion and the research community on developing further methods of increasing clarity and consistency in relation to determining intent and identifying deaths by suicide in NI.

#### **Timely Outputs**

More timely checks on coroners' cases and ONS coding has improved accuracy of our provisional statistics as well as the final data, while reducing the production time and risk of errors.

<sup>&</sup>lt;sup>3</sup> <u>Quality Assurance of Administrative Data (QAAD) for Deaths Data in Northern Ireland</u> | <u>Northern Ireland</u> <u>Statistics and Research Agency (nisra.gov.uk)</u>

#### User Engagement

NISRA has adopted a more proactive approach to user engagement with the establishment of a Vital Statistics User Group and a themed Expert Group for Suicide Statistics, advising on both the production and development of death statistics. This approach has helped to target more users and to tailor messaging to suit each audience e.g. media, academia, policy officials and the general public.

In summary, it is widely recognised that due to the complex circumstances surrounding many sudden deaths, accurately determining the number of deaths by suicide is challenging, and in determining the intent behind the circumstances of a death, statisticians, researchers and Coroners are limited by the information made available to them. The review has not only set out to improve the accuracy of recorded drug and suicide deaths within the review years but has also set the future standard for more accurate statistics and stronger working relationships between those who rely on such statistics for the purposes of analyzing and preventing deaths by suicide, and deaths due to accidental drug overdose.

Those involved in the review would like to acknowledge that each death behind the statistics represents the loss of a loved person and valuable member of our society and we hope that the knowledge gained from the review will assist with the wider efforts of understanding and preventing such tragic losses in the future.

#### Section 1: Results of the Review

#### The Review Process

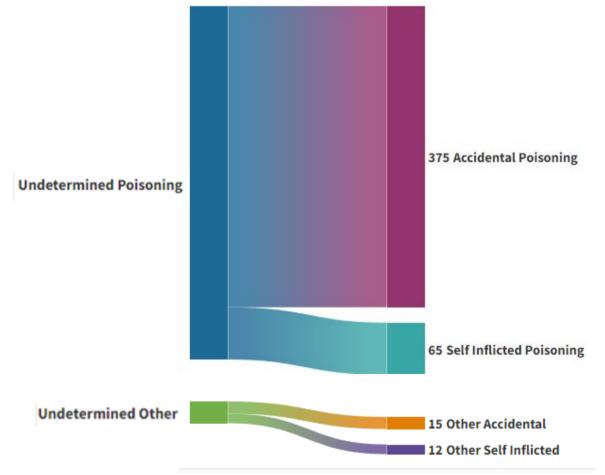
In total, **467** cases, previously classed as being of undetermined intent and therefore counted as suicides, have been revisited by the CSNI and a new or confirmed indication of intent provided. This information was anonymised and made available to the deaths coding team in ONS, along with cause of death details for each case to be recoded and a new underlying cause of death selected if appropriate.

**2015–2017**: **318** cases formed the review which then led to process improvements described in this paper. A further **74** cases for 2015-2017 are outstanding so results for these years are provisional. Sensitivity analysis is presented for these years.

**2018-2020**: results are final, and the work included **84** review cases and the quality assurance of **65** cases in 2020 following the monitoring of the new processes as they were bedded in.

#### Results

Figure 1 shows the out-workings of the review and the movement of deaths classed originally as undetermined intent to both accidental and self-inflicted categories.



#### Figure 1 Breakdown of 467 reviewed cases, 2015 to 2020

This resulted in 375 cases being re-categorised to accidental poisoning codes (ICD-10 Codes X40 – X49), with a further 15 cases coded as accidental non-poisoning codes (ICD-10 Codes W00-X59, *excl X40 – X49*). The remaining 77 cases were recoded to self-inflicted injury codes (ICD-10 Codes X60-X84).

This equates to 84% of the 467 undetermined cases moving instead into accidental categories which fall outside the suicide definition, thus reducing the number of suicide deaths in NI between 2015 and 2020 see Figure 2 below.

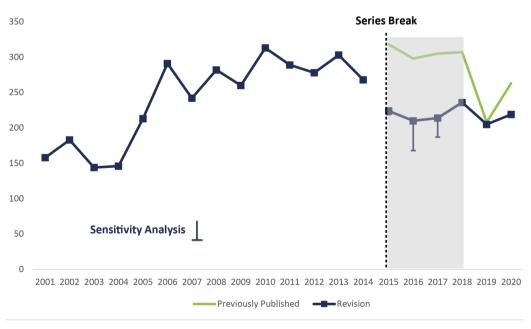
The remainder of this report examines the effect of this reduction on suicide data in NI and presents the new suicide statistical series.

#### Impact of revision on Suicide Deaths in NI

The overall impact of the review is a reduction in the total number of suicide deaths since 2015.

When data collected in a specific year(s) are not fully comparable to data of the previous and/or following years, there is a break in the time series. A break in this statistical series between 2014 and 2015 is due to the impact of both the classification correction described above and the change in the legal definition of the standard of proof, applied retrospectively to review cases.

Users should note that while figures for years prior to 2015 are presented here to indicate trend, figures before and after the break are not directly comparable<sup>4</sup>.



# Figure 2 Revised Number of Suicide Deaths Registered in Northern Ireland

<sup>&</sup>lt;sup>4</sup> Prior to April 2006, there were seven Coroner's districts in Northern Ireland. Following a review of the Coroner's Service, the separate districts were amalgamated into one centralised Coroner's Service. Along with centralisation came a clearing of long standing cases which coincides with the increase in suicide cases seen.

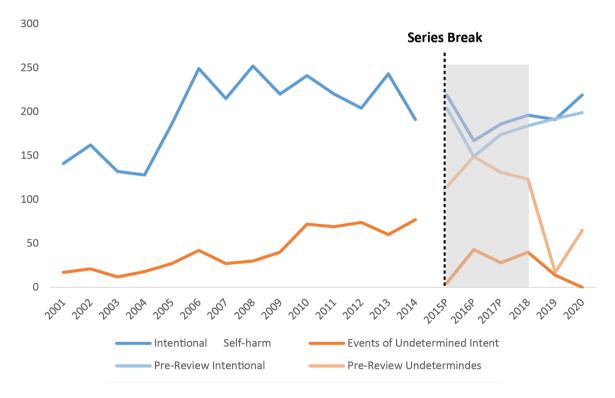
Figure 2 shows the effect the revisions have had on the total number of suicides in NI between 2015 and 2020. The annual average reduction in suicide numbers over the 3 year period 2015-2017 is almost 30 per cent compared with previously published figures.

Also shown in this chart is a sensitivity analysis of the 74 outstanding cases between 2015 & 2017; that is the maximum reduction that would be applied to this series if all 74 cases are found to be accidental and are thus moved outside the suicide definition.

The latter years of the review saw lower reductions in numbers compared with previously published figures; a 23 per cent fall in 2018 and a 17 per cent fall on the number previously published for 2020. These lesser differences reflect the improvements that were already being made to systems and procedures at that time.

#### Intent by Registration Year

Closer analysis of the effect these revisions have had on sub-categories within the suicide definition, namely self-inflicted injury and events of undetermined intent, (Figure 3), shows substantial falls in undetermined cases each year, and slight increases in self-inflicted injury cases.



#### Figure 3 Deaths due to Intentional Self Harm vs Undetermined by Registration Year

Final figures for 2018-20, show an increase of 6.5 per cent in 2018 and a 10 per cent increase in 2020, year on year. These increases may in part be explained by the lowering of the standard of proof, but the upwards trajectory since 2016 is clear.

#### **Drug Related Suicides by Registration Year**

As already discussed between 2015 and 2018 the number of undetermined deaths as originally coded was primarily a function of the increasing number of drug related deaths (light blue trend line, Figure 4).

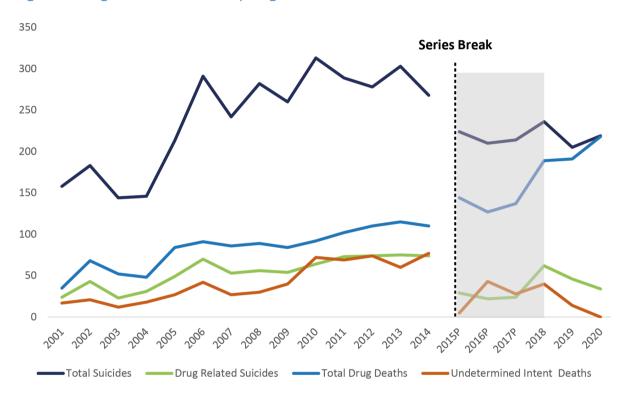


Figure 4 Drug Related Suicides by Registration Year

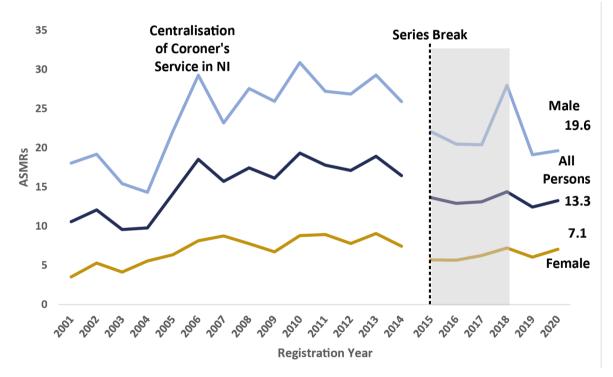
It should be noted that while undetermined deaths between 2010 and 2014 are mainly drug related (approximately 80 per cent) and look much higher than post review years, GRO had dedicated verification checks in place for this period. Part of the apparent change, however, is also due to the change in standard of proof, applied to suicides, enacted in 2018 and applied to the review years. It is likely that if the earlier years were reviewed against the civil standard (balance of probability rather than beyond reasonable doubt), the undetermined levels would reduce in a similar way. It is clear that while drug related deaths are clearly on an upward trajectory, the majority of these are accidental and not due to suicide.

#### Age-standardised Suicide Rate for NI

The age-standardised suicide death rate in NI increased from 12.4 deaths per 100,000 in 2019 to 13.3 deaths per 100,000 in 2020.

#### What are Age-Standardised Mortality Rates (ASMRs)?

Age-standardised mortality rates adjust for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time. In this bulletin, age-standardised mortality rates are presented per 100,000 people and standardised to the 2013 European Standard Population.



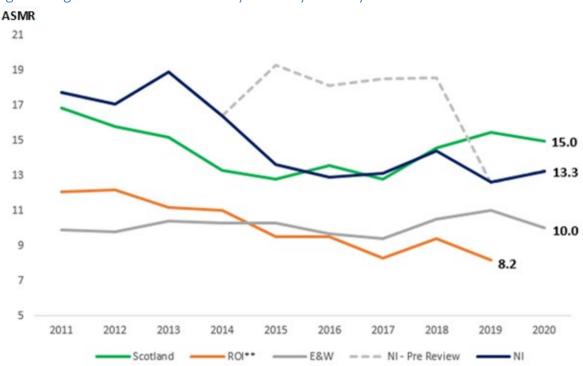
#### Figure 5 Age-standardised Suicide Rate by Sex, NI, 2001 to 2020

In 2020, the suicide rate for males was 19.6 deaths per 100,000, up from 19.1 deaths per 100,000) in 2019. The corresponding rates among females were 7.1 deaths per 100,000 in 2020, up from 6.0 deaths per 100,000 in 2019.

NISRA is not notified that a death has occurred until it is registered, therefore a significant number of suicide deaths registered in any year will have occurred in earlier years.

#### Age-standardised Mortality Rates by Country

ASMRs allow populations with different age structures to be compared more fairly. Suicides are more common in certain age groups, therefore it is important to adjust for age. Figure 6 shows that after taking into account the age structure of each country across the UK and Ireland, the suicide ASMRs following the review were lower for NI than had previously been estimated.



# Figure 6 Age-standardised Mortality Rates by Country

NI has gone from having the highest rate in the UK on the basis of the previously published figures (by quite a distance at 18-19 per 100,000 next to Scotland at 13-16 per 100,000) to having a lower rate than Scotland in the last few years.

For the latest year 2020, the NI rate was 13.3 suicides per 100,000 population and Scotland 15.0. England & Wales was lower at 10.0 suicides per 100,000 in 2020. It is important to note that the standard of proof change was only applied to E&W and NI so we can only reliably compare to E&W. The ROI suicide definition is not directly comparable as the coverage includes fewer ICD-codes and is based on date of occurrence and not date of registration. (More analysis on comparisons with ROI are available in Section 2).

## Section 2: New Statistical Series for Suicides in Northern Ireland

#### Summary

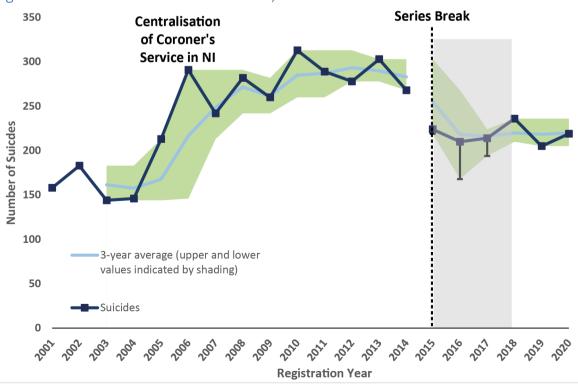
This review marks a major revision to this important statistical series and has had a notable impact on the existing narrative in relation to suicide rates compared with other nations.

Revised statistics show Northern Ireland does not have the highest suicide rate across the UK - it is second to Scotland. Male suicide, particularly between the ages of 35-39, remain the most prevalent.

#### Number of Suicide Deaths in NI, 2001 to 2020

There were 219 suicides registered in NI in 2020. This is an increase of 14 (7 per cent) since 2019, but represents a fall of 17 (7 per cent) on the 2018 figure. Suicides increased between 2016 and 2018, but have generally fallen since then.

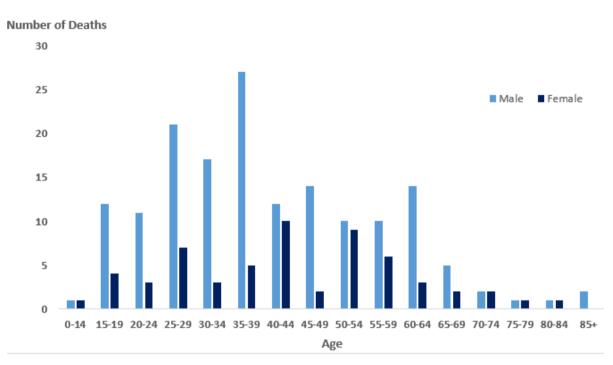
Fluctuations year on year are not necessarily an indication of a 'true' change and it is important to look at suicide trends over a longer period of time. The break in series and uncertainty surrounding the 2015 to 2017 years' estimates make this difficult at present, but a final 3-year time series for the most recent years (2018 to 2020) is presented below, along with a rolling 3-year average giving an indication of trend (Figure 7).



#### Figure 7 Number of Suicide Deaths in NI, 2001 to 2020

#### Age & Sex

In 2020, 59 females and 160 males died from suicide in NI (27 per cent female, 73 per cent male). In every year since 2001, more than 70% of people dying from suicide have been male.



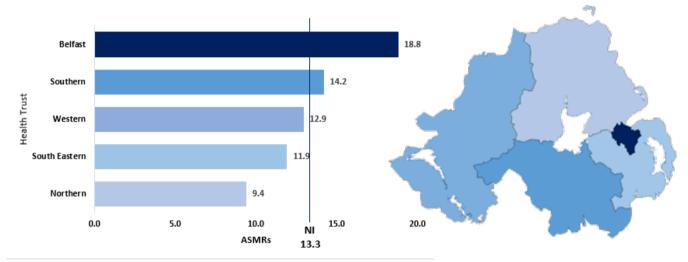
#### Figure 8 Number of Deaths from Suicide in NI, by Sex, 2020

In 2020, suicides were highest for men between the ages of 35 and 39, and for women the highest number of suicides were between the ages of 40 and 44. Overall, one in every four suicide deaths was to someone under the age of 30. This is similar to previous years.

#### Health Trust

Belfast Trust had the highest suicide rate at 18.8 deaths per 100,000 in 2020, followed by Southern Trust (14.2 deaths per 100,000). Both Belfast and Southern Trusts had suicide rates that were higher than the average for NI as a whole (13.3 deaths per 100,000).

The remaining three Trusts had suicide rates lower than the NI average (13.3 per 100,000). Western Trust had a rate of 12.9 deaths per 100,000, followed by South Eastern Trust with a rate of 11.9 deaths per 100,000. The Trust with the lowest suicide rate in 2020 was Northern Trust, with a rate of 9.4 deaths per 100,000.



#### Figure 9: Age-standardised suicide rates by NI Health Trust, 2020

#### Deprivation

Northern Ireland's most deprived areas (most deprived quintile) had a suicide rate that was almost twice that of the least deprived areas in 2020 (Figure 12), based on the NIMDM 2017 (see box below).

In 2020, the areas that comprised the most deprived 20% had an age-standardised suicide rate of 19.7 deaths per 100,000 people. In the 20% least deprived areas, the rate was 10.8 per 100,000.

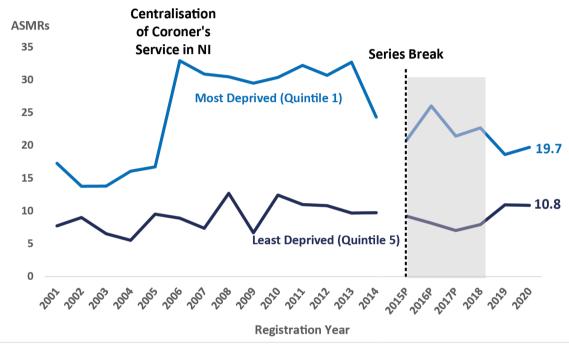


Figure 10: Age-standardised Suicide Rate by Index of Multiple Deprivation quintiles, NI, 2001 to 2020

#### What is Northern Ireland's Index of Multiple Deprivation?

This is a measure of how deprived an area is. A score is given to all of NI's small areas based on multiple indicators of deprivation. The areas are then ranked 1 to 4,537 based on their score. Subsequently, the rankings are split into 10 equally sized groups forming deciles and five groups for quintiles.

**More information available at:** <u>Northern Ireland Multiple Deprivation Measure 2017</u> (NIMDM2017) | Northern Ireland Statistics and Research Agency (nisra.gov.uk)

#### Method of suicide

As in previous years, the most common method of suicide in NI was hanging, suffocation or strangulation. In 2020, this accounted for 68.0 per cent of all suicides (149 deaths) (see Figure 11).

The second most common method of suicide in 2020 was poisoning, accounting for 19.6 per cent of all suicides (43 deaths). The remaining 12.3 per cent were made up of drownings and other causes of death.

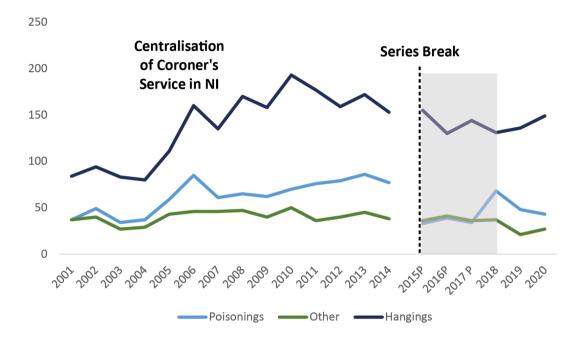


Figure 11: Number of suicide deaths by Method, Northern Ireland, 2001 to 2020

'Hanging, suffocation or strangulation' was the most prevalent method of suicide both before and after the break in series, accounting for 68.0 percent of suicides in 2020. Following the review, the number of poisonings went from the second most common method to the least common method between 2015 and 2017 and has fluctuated since, accounting for 19.6 per cent of suicides in 2020.

When looking further at analysis by sex (Figure 15), the number of hangings among males showed a general upward trend until its peak in 2010 at 149 suicide deaths. Since then the general trend has been downwards with 113 deaths of males from hanging registered in 2020.

In contrast, poisoning has been the most common method of suicide over time for females, peaking in 2012 at 32. Post review years have seen reductions in these numbers, with hanging overtaking poisoning in females in 2020 (36 deaths from hanging; 16 deaths from poisoning).

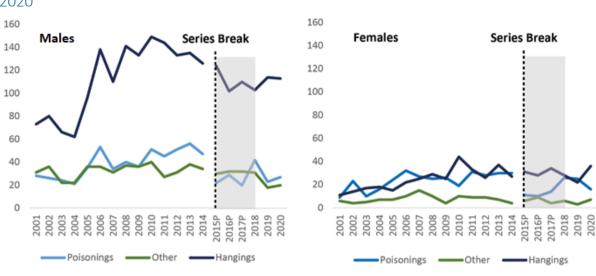


Figure 12: Number of suicide deaths by Method and Sex, Northern Ireland, 2001 to 2020

Other forms of suicide methods (e.g. drowning, alcohol-related, firearms etc.) remained relatively stable over time but have reduced in most recent years for both males (20 deaths in 2020) and females (7 in 2020).

# **Occurrence Year Analysis**

A death which is suspected to be suicide must be referred to the Coroner and can only be registered after the Coroner has completed his/her investigation. Registration of a suicide death can therefore take many months or even years.

NISRA is not notified that a death has occurred until it is registered, therefore a significant number of suicide deaths registered in any year will have occurred in earlier years. For example, of the 219 such deaths registered in 2020, 110 actually occurred in 2020, 103 occurred in 2019, 10 occurred in 2018, with the remaining 5 occurring in 2017 or earlier.

Suicide death statistics and mortality statistics more generally are published by NISRA as the number of deaths *registered* within a calendar year, as opposed to the number of deaths that actually *occurred* in that period. This method ensures timely data, but introduces a limitation to the statistics within a policy context.

Figure 13 presents a comparison of the number of deaths registered from suicide in NI and the number occurring. Fluctuations year on year are expected between these two series, given the median registration delay is constantly changing. The general trend however has remained consistent.

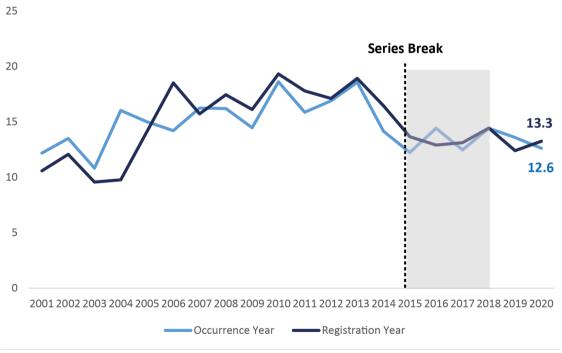


Figure 13: Age-standardised Suicide Rate for NI, Occurrence Based vs Registration Based, 2001 to 2020

While occurrence-based figures are accurate if enough time has lapsed, in more recent years they are incomplete. The majority of suicide deaths (98 per cent) are registered within 3 years of the death occurring, so for more recent statistics, registration-based figures are more reliable and will provide a strong indication of trend. Please note that when considering occurrence-based figures, cases included in the review may have occurred in years prior to 2015.

#### **ROI Definition**

Across the UK, the National Statistics definition of suicide includes deaths of 'undetermined intent', as well as deaths where the underlying cause is 'intentional self-harm'. However, in the Republic of Ireland (ROI) deaths of undetermined intent are not included in the national definition.

The ROI definition also differs from the UK definition in that it is based on the year that the death *occurred* and not the year that the death was *registered*.

Figure 13 below looks at the NI suicide rate calculated using both definitions and allows a direct comparison with ROI.

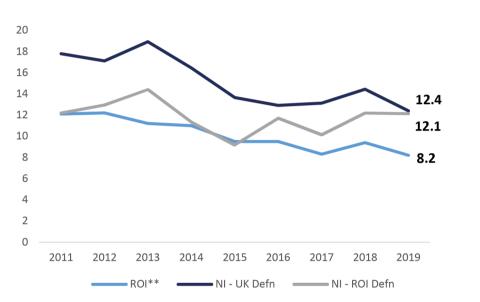


Figure 14: Age-standardised Suicide Rate based on Republic of Ireland Definition, 2011 to 2019

Regardless of the definition used for comparison, NI's crude suicide rate is higher than that in ROI. The suicide rate in ROI in 2019 (latest available) was 8.2 deaths per 100,000 and the comparative figure for NI was 12.1 deaths per 100,000.

#### Annex A

#### Definitions and further information

#### National Statistics definition of suicide deaths

The National Statistics definition of suicide was revised in January 2016 to include deaths from intentional self-harm in children aged 10 to 14 years. Previously, suicides in young children were not included due to the very small numbers involved. However, after discussions with public health agencies and the constituent countries of the UK, it was decided that it was appropriate to include them.

Deaths from an event of undetermined intent in 10 to 14-year-olds are not included in these suicide statistics, because although for older teenagers and adults we assume that in these deaths the harm was self-inflicted, for younger children it is not clear whether this assumption is appropriate.

ICD-10 Code	Description	Notes
X60-X84, Y87.0	Self-inflicted Injury	Persons aged 10 years and above
Y10-Y34, Y87.2	Events of Undetermined Intent	Persons aged 15 years and

**Underlying cause**: underlying cause of death is the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence that produced the fatal injury.

**Age-standardised mortality rates (ASMRs)** Age-standardised mortality rates adjust for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time. In this bulletin, age-standardised mortality rates are presented per 100,000 people and standardised to the 2013 European Standard Population.

**Urban/Rural** Eight Settlement Bands (A-H) based on the 2011 Census population were used to classify settlements<sup>5</sup>. Settlements with a population of greater than or equal to 5,000 people were classified as 'urban' while settlements with a population of less than 5,000 people were classified as 'rural'.

<sup>&</sup>lt;sup>5</sup> https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/settlement15-guidance.pdf

#### Annex B

# Breakdown of Cases Identified for Review

Registration Year	Drug related deaths classified as 'undetermined'	2020 deaths classified as 'undetermined'	Non-Drug related deaths classified as 'undetermined'	Total
2015	109	-	5*	114
2016	106	-	42*	148
2017	103	-	28*	159
2018	75	-	8	83
2019	-	-	1	1
2020	-	65	-	65
Total	393	65	84	542

\* denotes cases not yet finalised

Links to relevant publications
<u>Probable Suicides in Scotland</u>
<u>Suicides in England and Wales - Office for National Statistics (ons.gov.uk)</u>
<u>Suicide Statistics - CSO - Central Statistics Office</u>

#### List of Tables

Data accompanying this bulletin are available from the NISRA website in Excel format. The <u>spreadsheet</u> includes the following tables.

Table 1 Number of Suicides Registered in Northern Ireland by Sex, 2018-2020 Table 2 Number of Suicides Registered in Northern Ireland by Sex and Age, 2018-2020 Table 3 Suicide and Age-Standardised Rate per 100,000 Population in NI by Sex, 2011 to 2020 Table 4 Suicides by Year of Registration and Year of Occurrence, 2018-2020 Table 5 Number of Suicides Registered in Northern Ireland by Local Government Districts, 2018-2020 Table 6 Number of Deaths from Suicide Registered in NI by Health and Social Care Trust, 2018-2020 Table 7 Number of Deaths from Suicide Registered in NI by Parliamentary Constituency, 2018-2020 Table 8 Number of Deaths From Suicide Registered in NI by Urban Rural Classification, 2018-2020 Table 9 Number of Deaths From Suicide Registered in NI by NI MDM (2017), 2018-2020 Table 10 Number of Suicides Registered in NI by Method of Suicide and Sex, 2018-2020 Table 11 Number of Suicides Registered in NI by Method of Suicide and Age, 2018-2020 Table 12 Number of Suicides Registered in NI by Method of Suicide and Age, 2018-2020 Table 13 Number of Suicides Registered in NI by Method of Suicide and Trust, 2018-2020 Table 13 Number of Suicides Registered in NI by Method of Suicide and Trust, 2018-2020

27

#### This is a National Statistics publication.

National Statistics are produced to high professional standards set out in the <u>Code of</u> <u>Practice for Official Statistics</u>. They are produced free from any political interference.

The UK Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs
- are well explained and readily accessible
- are produced according to sound methods
- are managed impartially and objectively in the public interest

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

#### **Contact Details**

We welcome feedback from users, please contact: E-mail: <u>demography@nisra.gov.uk</u> Telephone: +44 (0)300 200 7836 Twitter: <u>@NISRA</u> <u>NISRA website</u> NISRA Vital Statistics, Northern Ireland Statistics and Research Agency, Colby House, Stranmillis Court, Belfast BT9 5RR