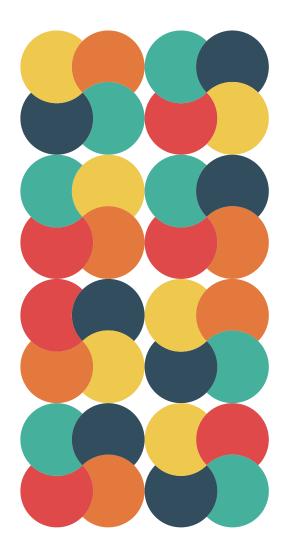


Irish **Probable Suicide Deaths**Study - IPSDS

2015-2018

HSE National Office for Suicide Prevention (NOSP)





November 2022

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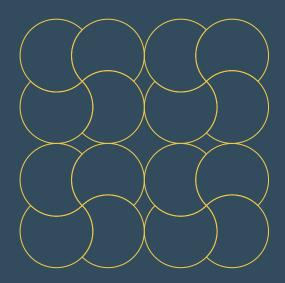
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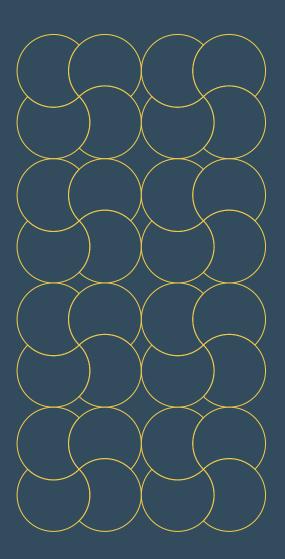
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The authors of this study and the HSE would like to acknowledge that behind every number, graph, and table of findings reported in this study, are real lives that were lived and that have been lost.

The experiences of any one person cannot be fully represented by a statistic. This is something we have tried to bear in mind when writing this report. Our ultimate goal is to prevent suicide by providing a wider understanding of suicidal behaviour in Ireland, with a view to influencing policy and practice intended to save lives in the future.

We know that families, friends and communities who have been bereaved by suicide may find some of the data reported in this study sensitive, upsetting or triggering. We encourage readers to be mindful of this, and to be aware of their own needs and self-care in this space.

Please remember:



Listening support is available anytime day or night, from Samaritans on Freephone 116 123, visit www.samaritans.ie.



More information on mental health, services and supports is available at www.yourmentalhealth.ie.



If you are a journalist or media professional covering a suicide-related issue, please consider the Samaritans Ireland Media Guidelines for Reporting Suicide because of the potentially damaging consequences of irresponsible reporting. In particular, the guidelines advise on terminology to use and to include links to sources of support for anyone affected by the themes in any coverage.



Information on crisis supports and helplines in over 50 countries, is also available from the International Association for Suicide Prevention (IASP).



Do not let the nature of the death of your loved one define their life.

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We would like to thank Dr. Stephen McHugh for providing his lived experience review of an earlier draft of this report.

Finally, we would like to acknowledge the work of coroners, emergency responders, health professionals and bereaved family and friends of those who died by suicide in Ireland.

List of abbreviations

| CfL | Connecting for Life | NOSP | National Office for Suicide Prevention |
|--------|---|---------|--|
| CSO | Central Statistics Office | NSRF | National Suicide Research Foundation |
| DOH | Department of Health | RSA | Road Safety Authority |
| HRB | Health Research Board | SCOTSID | Scottish Suicide Information Database |
| HSE | Health Services Executive | TAG | Technical Advisory Group |
| ICD-10 | International Classification of Disease – Version 10 | UCC | University College Cork |
| ICGP | Irish College of General Practitioners | UCD | University College Dublin |
| IPSDS | Irish Probable Suicide Deaths Study | UK | United Kingdom |
| NDRDI | National Drugs-Related Death Index | | |

Introduction

On behalf of the HSE National Office for Suicide Prevention, I am very pleased to introduce this National Report from the Irish Probable Suicide Deaths Study (IPSDS), covering the years 2015 to 2018.

The HSE has longstanding commitments to the improvement of suicide-related data, and the development of the IPSDS is a significant milestone in this regard. These commitments mainly stem from strategic goal 7 of Connecting for Life, Ireland's National Strategy to Reduce Suicide (2015–2024), which is "to improve surveillance, evaluation and high quality research relating to suicidal behaviour". There is also a very strong consensus among the international community that thorough and robust data are necessary to inform effective public health approaches and models of suicide prevention.

The IPSDS uses an innovative approach – it looks back and examines completed coronial investigation files through a new lens, i.e. using a broader definition of suicide than what is used in official mortality statistics. In doing so, more comprehensive and detailed information has been accessed for the first time. This will augment our current knowledge base and significantly improve our understanding of the demographic, social and clinical characteristics of people who have died by probable suicide in Ireland. Above all else, we hope it will help people working in suicide prevention, to better understand and identify risk factors for suicide, therefore preventing more tragedies in the future and enabling more targeted suicide prevention approaches.

The development of the IPSDS and its subsequent analysis and presentation of findings have involved significant efforts from a wide range of contributors. On behalf of our office, I would like to thank all those who have contributed to and supported this work, in particular: the network of coroners in Ireland; the Health Research Board (HRB); the National Suicide Research Foundation (NSRF); and the School of Public Health, University College Cork (UCC). The entire project has benefitted from expert guidance of members of the Connecting for Life Technical Advisory Group (now the Data and Intelligence Advisory Group, DIAG), for which we are immensely grateful.

Finally, I would like to thank the HSE NOSP Team for advancing this programme of work over recent years – in particular, our Research and Evaluation staff who initiated and implemented this significant project with remarkable leadership and skill. I have no doubt that our understanding of suicide in Ireland will evolve substantially as a result of this project. In turn, this will strengthen our collective ability to meaningfully plan suicide prevention efforts, and ultimately realise the vision of Connecting for Life, of an Ireland where fewer lives are lost to suicide.

John Meehan

HSE Assistant National Director

Mental Health Planning and Head of the National Office for Suicide Prevention (NOSP)

Executive Summary

The Irish Probable Suicide Deaths Study (IPSDS) is a collaborative project involving the HSE National Office for Suicide Prevention (NOSP), Irish coroners and the Health Research Board (HRB). It was established under Connecting for Life (CfL), Ireland's National Strategy to Reduce Suicide (2015–2024), in order to improve surveillance, evaluation and high-quality research relating to suicidal behaviour.

The HSE NOSP funds the project and manages the dataset. It uses death-investigation and administrative data, collected as part of the coronial process, to generate a detailed description of the characteristics of those who die by 'probable suicide' in Ireland. The definition of 'probable suicide' used in this report includes deaths with a coronial suicide verdict and deaths that are more likely than not, based on the weight of evidence, to have been a suicide. Data are collected across all coroners' districts in Ireland through the existing methodology and logistics of the HRB's National Drugs-Related Death Index (NDRDI).

This report from the IPSDS contains information on 2,349 deaths that occurred during the period 2015–2018 (referred to the IPSDS cohort from hereon). The aims of the IPSDS are to:

- Improve understanding of the demographic, social and clinical characteristics of those who die by probable suicide in Ireland, using a broad definition of a suicide death
- Identify risk factors for probable suicide and
- Inform the planning, implementation and evaluation of suicide prevention measures in Ireland.

An overview of the key findings from the IPSDS report is presented in the following pages. It is important to highlight here that all the secondary data analysis contained within the IPSDS has been based on anonymised information: no individual person can be, or has been, identified by the authors of this report.

In addition, it is important to note that this is the secondary analysis of existing data: the available data were not originally collected to address particular research questions. Therefore, information that might be relevant for a better understanding of the characteristics of those who died will not necessarily be recorded as part of the death investigation. Consequently, some of the prevalence data presented in the following pages may be underestimates and should be interpreted with caution.

Sociodemographic risk factors

- Over the four-year period 2015–2018, men accounted for three in four IPSDS cohort deaths: 76% of the IPSDS cohort deaths involved men, 24% involved women.
- 2% of the IPSDS cohort were identified as being homeless at the time of death (this includes sleeping rough and staying in hostels or supported accommodation).
- 30% of the IPSDS cohort deaths occurred in a public location.
- In 29% of IPSDS cohort deaths there was evidence of recent (i.e. immediately preceding death) communication of intent to take their own life, through a suicide-related note (physical or digital).
- The mean and median age at death was 44 years.
- The highest numbers of IPSDS cohort deaths were in those aged between 35–54 years of age. The age group with the largest number of IPSDS cohort deaths were those aged 40–44 years among men and those aged 35–39 years among women.
- 50% of the IPSDS cohort were single at the time of their death: 51% of men compared with 45% of women.
- A higher proportion of women (6%) in the IPSDS cohort were widowed compared with men (2%).
- 38% of the IPSDS cohort were known to be parents. It should be noted that the parental status was unknown for 46% of the IPSDS cohort.



The age demographic is quite high and highlights a need to get middle aged men, in particular, to talk about mental health issues and suicide.

Lived experience reviewer of the IPSDS

Clinical risk factors

- 66% of the IPSDS cohort (79% of women compared with 62% of men) had a history of a mental health condition. The most commonly occurring mental health conditions were mood or affective disorders, which includes recurring depressive episodes, bipolar affective disorders and depression.
- 51% of the IPSDS cohort were known to have been in contact with medical services prior to their death, of whom 49% were in contact with a general practitioner (GP).
- 38% of the IPSDS cohort were known to be in receipt of prescribed mental health medication(s) at the time of their death. More women than men were in receipt of prescribed mental health medication (53% vs. 33%, respectively).
- 23% of the IPSDS cohort had a history of prior self-harm. For those who died by drowning, hanging and poisoning, overdose was the most common method used in their prior self-harm episode.
- For 65% of the IPSDS cohort, it was unknown whether there was a history of self-harm.
- 33% of the IPSDS cohort had a lifetime substance use history. Of these, 41% had a history of alcohol dependency.



The conditions that may contribute to death by suicide are varied, complex and overlapping. This report presents findings from a specific time period and highlights some key at-risk groups. Just as the report has been a multi-year effort with input from a range of professionals, the actions to tackle suicide will also be over the long term and will involve many different professions and organisations.

Lived experience reviewer of the IPSDS

Adverse events

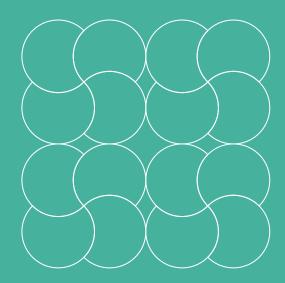
- In 79% of IPSDS cohort deaths there was evidence of past adverse life events or stressors.
- Reported adverse events included current mental health issues (43%), relationship difficulties (such as recent breakup and marital problems; 19%), employment issues (9%) and financial concerns (7%).
- Some differences between men and women were observed among those who experienced adverse life events. A higher proportion of women (50%) than men (40%) had current mental health issues. Conversely, a higher proportion of men (8%) than women (4%) had financial concerns.
- 33% of the IPSDS cohort were in paid employment at the time of their death and 26% were unemployed.

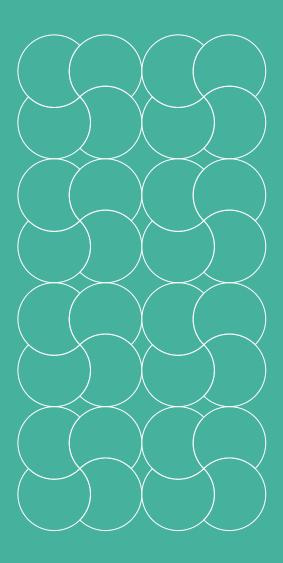
Method of death

- Hanging was the most common method of death in the IPSDS cohort: 61% of the IPSDS cohort (50% of women, 65% of men) died by hanging.
- 13% of the IPSDS cohort (24% of women, 10% of men) died by poisoning.
- 12% of the IPSDS cohort (17% of women, 8% of men) died by drowning. IPSDS cohort deaths by drowning increased across age groups, accounting for 23% of deaths among those aged 65 years and over compared with 7% of deaths among young people (aged 15–24 years).
- 4% of the IPSDS cohort died by shooting/firearms.

The coroner's verdict

- During the period 2015–2018 there was a change in the distribution of suicide verdicts in the IPSDS cohort. There was a temporal increase in the proportion of deaths with a suicide or equivalent verdict, from 62% of deaths in 2015 to 77% of deaths in 2018, and a reduction in the proportion of IPSDS cohort deaths with no formal verdict recorded, from 19% in 2015 to 11% in 2018.
- The IPSDS cohort aged 35–44 years old received the highest proportion of suicide verdicts (74%; beyond reasonable doubt) in comparison to the other age groups.
- In 12% of IPSDS cohort deaths, an undetermined or open verdict was returned by the coroner. A higher proportion of women (16%) than men (10%) received this verdict.
- A higher proportion of poisoning deaths (16%) received an accident/misadventure verdict compared with other methods of death.





1.0 Background

Effectively addressing suicide as a public health issue requires the systematic collection, analysis and dissemination of accurate information about the number of people who die by suicide and the circumstances and determinants of their deaths. This report introduces the Irish Probable Suicide Deaths Study (IPSDS), which aims to provide a firm foundation for the planning, development, implementation and evaluation of suicide prevention strategies in Ireland, and presents data on the characteristics of 'probable suicides' (deaths with a coronial suicide verdict and deaths that are more likely than not, based on the weight of evidence, to have been a suicide) in the country during the period 2015–2018.

1.1 The strategic context

Connecting for Life, Ireland's National Strategy to Reduce Suicide (2015–2024), recognises that "effective suicide prevention strategies must be rooted in robust data" (page 34). The need for a more in-depth understanding of suicide and suicide prevention in Ireland is explicit in the strategy: Strategic Goal 7 aims to improve surveillance, evaluation and high-quality research relating to suicidal behaviours.

Two key objectives of Connecting for Life (CfL) are:

- Improve access to timely and high-quality data on suicide and self-harm (CfL Objective 7.2).
- Review (and, if necessary, revise) current recording procedures for deaths by suicide (CfL Objective 7.3).

In order to address these key objectives, the IPSDS has established a mortality dataset managed by the HSE National Office for Suicide Prevention (HSE NOSP). It uses death-investigation and administrative data, collected as part of the coronial process, to generate a detailed description of the characteristics of those who die by probable suicide in Ireland. The IPSDS and its corresponding dataset are the subject of the current report.

In the rest of this section the coronial process, the registration of deaths, the role of the Central Statistics Office (CSO), information provided by the CSO on deaths by suicide, and the potential value of information in coronial files for suicide prevention in Ireland, are described. Section 2.0 provides a detailed description of the IPSDS. Section 3.0 presents an analysis of the demographic, social and clinical characteristics of those who died by probable suicide in Ireland. Section 4.0 sets out the report's conclusions.



The number of lives lost to suicide in Ireland remains high. No suicide is inevitable. The aim of Connecting for Life, Ireland's National Strategy to Reduce Suicide, is to reduce this number through a better understanding of suicide and the implementation of suicide prevention plans. This study has made a significant contribution to understanding suicides in Ireland and will be used to inform actions going forward.

Lived experience reviewer of the IPSDS

1.2 How are suicide deaths determined by coroners in Ireland?

The coroner (an independent officer holder) has responsibility under the law for investigating the circumstances of all sudden, unexplained, violent and unnatural deaths in order to establish the who, when, where and how of the death¹. If a reported death is not immediately understood, the coroner orders an autopsy (post mortem examination) to help establish or clarify the cause of death. If, after the autopsy and any other tests, the manner of death is (or may be) considered unnatural, or the cause is not ascertained, the coroner proceeds to an inquest.

The inquest is an inquiry in public by a coroner, with or without a jury², to establish the identity of the deceased, how, when and where the death occurred, and the circumstances in which the death occurred; and to make findings in respect of those matters and return a verdict. Figure 1 sets out coronial death investigation and death-registration process in Ireland, from the medico-legal death investigation by a coroner to the issue of the death certificate by the Registrar of Births, Marriages and Deaths.

The range of verdicts open to a coroner are accident/misadventure death, suicide, open verdict³, narrative verdict⁴, natural causes (if so found at inquest) and, in certain circumstances, unlawful killing. The current legal test for a coroner's verdict of suicide has three core components:

- The deceased killed herself/himself
- The deceased intended to do so
- The self-killing and intention are proved beyond reasonable doubt.

For a verdict of suicide, the coroner must be satisfied 'beyond reasonable doubt' that the deceased intended to take their own life. While this standard of proof ensures that there are few, if any, 'false positives' (i.e. non-suicide deaths classified as suicide) among deaths classified by a coroner as suicide, the number of suicide deaths is likely to be underestimated. It is possible that:

- Some deaths classified as 'misadventure', 'accident' or 'open' would be classified as suicide if the standard
 of proof were less stringent.
- Coroners may give different verdicts about the same type of sudden/unexplained death when
 information about intent is limited or inconsistent. This may impact on the scale and pattern of suicide
 deaths reported by different coronial services.

Classifying a death as suicide requires a judgement about the intention of the deceased. This, in turn, inevitably involves a degree of subjectivity among those making such judgements. For example, a study of coronial practice in the United Kingdom (UK) reported that some coroners are reluctant to return a suicide verdict [1]. This reluctance may be due to the difficulties of satisfying burden-of-proof requirements, and also due to factors such as sympathy with the feelings and needs of family members and understanding of the stigma potentially associated with suicide. The standard of proof ('beyond reasonable doubt') required for a suicide verdict (and unlawful killing) is equivalent to the standard of proof in a legal trial. Once the coroner establishes the cause of death, the decision is recorded on the coroner's certificate.

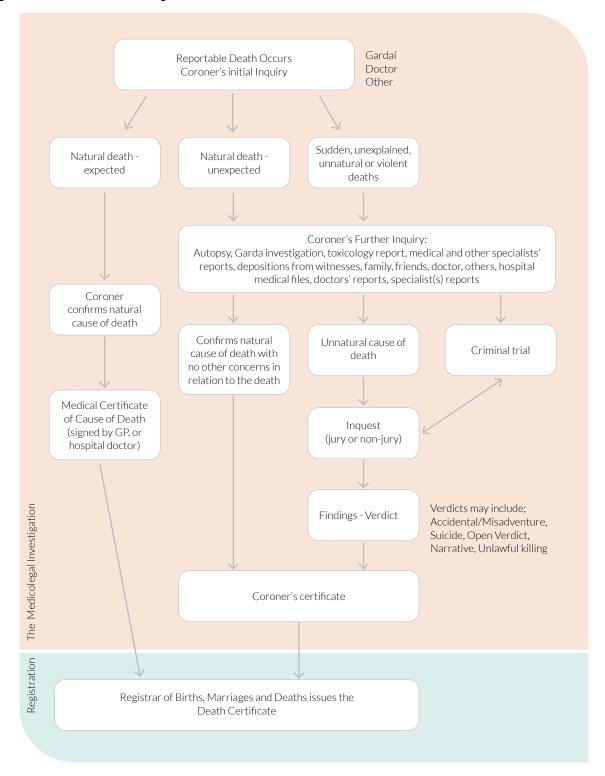
¹ Coroners (Amendment) Act 2019: http://www.irishstatutebook.ie/eli/2019/act/29/enacted/en/html

² Coroners have both discretionary powers and obligations when it comes to having a jury at inquest. A jury is obligatory for a limited number of defined situations, including murder, infanticide or manslaughter, for a death in custody or a work related death, or if the circumstances of the death are potentially prejudicial to public safety or health.

³ An open verdict is returned if there is insufficient evidence to record any other specified verdict.

⁴ A narrative verdict may be given in order to expand on the conclusion and give a more detailed explanation of the key issues. This may be given instead of, or in addition to, one of the conclusions listed.

Figure 1: The Coronial Death Investigation Process



1.3 Registration of deaths in Ireland

All deaths in Ireland must be registered with the General Register Office (Registrar of Births, Marriages and Deaths). In cases requiring an inquest, the death is registered by means of the coroner's certificate, generally when the inquest concludes. The inquest procedure can be lengthy, with implications for the timely compilation of suicide statistics. Once a death has been registered, a Death Certificate is issued by the General Register Office (see Figure 1).

1.4 The Central Statistics Office (CSO)

Data on suicide are published by the Vital Statistics Section of the Central Statistics Office (CSO), which has responsibility for the collation and dissemination of mortality statistics in Ireland. Files of deaths registered in the previous week are sent electronically every week from the General Register Office to the CSO.

The CSO cause-of-death coders classify the underlying cause of death, according to the International Classification of Diseases, Version 10 (ICD-10)⁵. ICD-10 was designed to promote international comparability in the collection, processing, classification and presentation of official cause-of-death statistics. All deaths involving an inquest are coded manually.

The coding process is less complex when the cause of death is clear. When the cause of death is not clear, the CSO can ask An Garda Síochána to provide supplementary information (see Appendix 1: Form 104) on the circumstances/location of the death. Information in Form 104 contributes to the determination of the final ICD-10 code (see Figure 1). Information provided via this form⁶ is strictly confidential.

When the CSO receives an opinion from An Garda Síochána (via Form 104) that the cause of a death is suicide, the CSO classifies that death as suicide, regardless of the coroner's ruling⁷. CSO automatically classifies all deaths due to hanging as suicide, unless it is the death of a child⁸ (which would nearly always be classified as an accident) or there is evidence that it was an accident.

The CSO publishes mortality data in two forms: (i) year-of-registration data and (ii) year-of-occurrence data. Usually, within six months of the year's end, figures are released that relate to the number of deaths that were registered by the CSO in the previous year (see Figure 2). These are year-of-registration figures and, because of the timeliness of the data, often receive media attention [2]. There is generally a two-year time lag for the publication of suicide statistics by year of occurrence?

⁵ An Underlying Cause of Death Code is determined from the four lines on the medical certificate concerning the cause of death. The ICD-10 codes to classify deaths as suicide relate to intentional self-harm in which there was a "purposefully self-inflicted injury".

⁶ This form is sent to the Divisional Inspector of the relevant location where the death occurred and is then redirected to the Garda who attended the scene of the death. The Garda completing Form 104 provides an opinion as to whether the death was due to an accident, homicide, suicide or undetermined cause.

⁷ Correspondence with the CSO Vital Statistics Section.

⁸ In Ireland, under the Child Care Act 1991, the Children Act 2001 and the United Nations Convention on the Rights of the Child, a child is defined as anyone under the age of 18.

⁹ A suicide death cannot be registered until after the inquest occurs; approximately 12-13% of all registered deaths in the country are subject to a coroner's inquest.

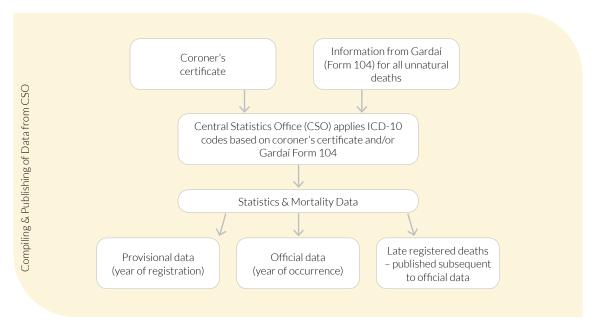


Figure 2: The Central Statistics Office Process

1.5 Information released by the CSO concerning those dying by suicide in Ireland

CSO data on suicide are presented by sex and age group, and the most common methods of death are reported. Age-standardised rates for males and females are also presented. Data are analysed geographically and published as numbers and rates per 100,000 population. The CSO maintains the PxStat¹⁰ Data Dissemination Management System, where the data on suicides are dynamic and updated annually, as is necessary if new suicide deaths are registered late. Late registration of death typically results from the protracted length of time required to complete the coroner's investigation which can occur for various reasons, including obtaining medical reports, health and safety reports and engineer's report, and the involvement of the Director of Public Prosecutions. The published tables disaggregate suicide data by sex, year of occurrence and year of registration.¹¹

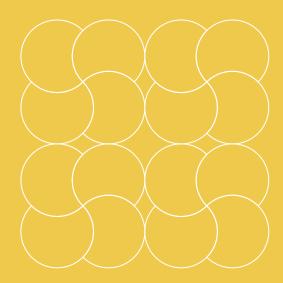
1.6 The potential value of information held in coronial files for suicide prevention in Ireland

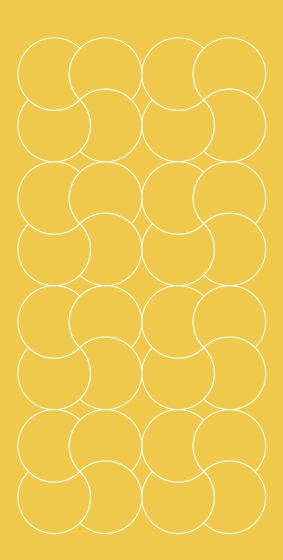
All coronial files, both those with and those without suicide verdicts, include in-depth information relating to the demographic, social and clinical characteristics of those who die in Ireland. The contents of these files have considerable potential to enhance our understanding of deaths by probable suicide and support the development and delivery of more effective suicide prevention, intervention and postvention [3] services in Ireland. The importance of the coronial files, and the information contained within them, is described in the next section.

¹⁰ Formerly known as StatBank.

 $^{{\}tt 11} \quad https://statbank.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=VSD34\&PLanguage=0$

¹² Postvention comprises activities developed by, with, or for suicide survivors, in order to facilitate recovery after suicide, and to prevent adverse outcomes including suicidal behaviour.





2.0 The Irish Probable Suicide Deaths Study (IPSDS)

The over-arching purpose of the Irish Probable Suicide Deaths Study (IPSDS) is to provide information on the demographic, social and clinical characteristics of 'probable suicides' in Ireland using a broad definition of suicide. This approach brings Ireland closer to the definition used in jurisdictions such as Scotland and England, where the broader 'balance of probabilities' standard for identifying suicide deaths is applied, despite marked differences in death ascertainment procedures between the two countries. The IPSDS also incorporates a wide range of information about precipitating events and risk factors, in addition to sociodemographic information, about each death. In that respect, it is similar in content to the Scottish Suicide Information Database (ScotSID) [4].

The aims of the IPSDS are to:

- Improve understanding of the demographic, social and clinical characteristics of those who die by probable suicide in Ireland, using a broad definition of a suicide death
- Identify risk factors for probable suicide
- Inform the planning, implementation and evaluation of suicide prevention measures in Ireland.

The IPSDS works in collaboration with Irish coroners, who facilitate access to their completed 'investigation files' for the collection and analysis of death investigation and administrative data used in the coronial process. Data from the IPSDS are not intended to replace the high-level Central Statistics Office's (CSO) suicide data. Rather, the purpose of the IPSDS is to provide important additional information, unavailable elsewhere, on the characteristics of people who die by probable suicide in Ireland. It is important to highlight here that all the secondary analysis contained within the IPSDS has been based on anonymised information: no individual can be, or has been, identified by the authors of this report.

2.1 Background to the IPSDS dataset

The Health Research Board (HRB), a statutory agency under the aegis of the Department of Health (DOH), has responsibility for managing the National Drug-Related Deaths Index (NDRDI). Data collection for the NDRDI involves an annual census of deaths due to drug and/or alcohol poisoning, and deaths among people who use drugs and people who are alcohol dependent. Coronial data are a key data source for the NDRDI. Since 2005, the HRB has worked closely with Irish coroners, resulting in the establishment of a robust coronial data collection system, which enables the HRB to report authoritatively on alcohol- and drug-related deaths in Ireland. In addition, in collaboration with other state agencies (Road Safety Authority (RSA), Department of Housing, Local Government and Heritage, and Department Of Housing, Planning and Local Government), the HRB has extended its coronial data collection beyond the remit of the NDRDI to include all deaths due to road traffic collisions and all fire fatalities.

In March 2016, the HSE NOSP, in partnership with the HRB, undertook a study to assess the feasibility of using the existing methodology and logistics of the HRB NDRDI coronial data collection process to identify deaths by 'probable suicide', i.e. deaths with a coronial suicide verdict and deaths that are more likely than not based on the

weight of evidence, to have been suicide. The study concluded that this was technically, operationally and financially feasible ¹³. Following the successful outcome of the feasibility study, in August 2017 the HSE NOSP entered into a three-year contract with the HRB to undertake three (additional) annual censuses of completed investigation files (for 2016, 2017 and 2018) across all coroners' districts in Ireland ¹⁴. This contract was then extended in 2020 to allow for the collection of two additional years of data (2019 and 2020).

2.2 Research governance

Given the sensitivity and complexity of the work, and on a recommendation arising out of the feasibility study, a Technical Advisory Group (TAG) was convened "to provide expert advice and guidance to the HSE NOSP on matters relating to the HRB coronial study on deaths ... and on any other 'technical issues' that might arise". The TAG also functions as a peer-review mechanism, with both methodological and subject matter expertise. Results and analyses are regularly presented to the TAG, which advises on confidentiality and appropriate use of information that is collected as part of the IPSDS, and seeks to ensure methodological rigour and sound interpretation supported by reliable data.

In order to validate the operational criteria guiding the selection of probable suicide deaths to be included in the first wave of data collection (i.e. 2015 deaths) and to minimise the risk of bias in the dataset, two suicide research expert members of the CfL Technical Advisory Group (TAG; Emeritus Professor Stephen Platt and Professor Kevin Malone) conducted a double-blind review validation process in January 2019. The purpose of the exercise was to observe, document and understand any inter-rater variation in data classification and to help define and/or refine the scope and range of inclusion criteria. The exercise validated both the inclusion criteria employed during data collection and the method employed for the inclusion and exclusion of deaths brought to the HSE NOSP Expert Review Group for consideration. It was recommended that two experts should assess the probability of suicide in all deaths that do not have a coroner's verdict of suicide and have been brought for review by the data collectors. To this end, the HSE NOSP Expert Review Group was established.

2.3 HRB data collection

The HRB undertakes an annual census (commencing in August each year) of all completed coronial investigation files for the selected year of death. They have an existing arrangement with coroners through the NDRDI to collect data from coronial files. In 2017 the HRB were requested by the HSE NOSP to extend the remit of this coronial data collection to include deaths by 'probable suicide'. Permission was given by the coroners society of Ireland for this specific data to be collected. Researchers¹6 visit all coroners' districts throughout Ireland, examine coronial files in their entirety, identify 'probable suicide' deaths (see Section 2.6), and extract and enter relevant data into a database on laptops secured by encryption. The coronial files contain all relevant documentation furnished to, and compiled by, the coroner as part of the death-investigation process (see Figure 1).

 $^{13 \}quad \text{https://www.hse.ie/eng/services/list/4/mental-health-services/connecting-for-life/publications/report-on-the-outcome-of-a-feasibility-study-hrb-nosp.pdf} \\$

¹⁴ Prior to signing the contract, the HSE NOSP and the HRB sought and received consent and support for the study from the Coroner's Society of Ireland (via the then President, Mr Eugene O'Connor).

Each reviewer independently reviewed 21 deaths. This total included deaths that met the IPSDS inclusion criteria only (n=7); deaths that met the NDRDI inclusion criteria but not the IPSDS inclusion criteria (n=7); and deaths that were included or excluded based on HSE NOSP Expert Review (n=7). The reviewers indicated whether a particular death should or should not be included in the IPSDS dataset. The quality assurance procedure showed a moderate level of agreement between the two reviewers. The reviewers were in agreement on inclusion/exclusion of 15 deaths and in disagreement on inclusion/exclusion of 6 deaths. Complete agreement was achieved between the reviewers after discussion of discrepant decisions and near-complete agreement (20/21) between the reviewers' consensus recommendation and the original inclusion/exclusion decision by the HRB team.

 $^{16 \}quad \text{Researchers in the HRB team have a range of skills, including qualifications in, for example, nursing and psychology.} \\$

The files include (when relevant) an autopsy report, a toxicology report, inquest files, a record of the verdict, and the coroner's certificate (see Appendix 2: Copy of a coroner's certificate). Text box 1 lists the sources of data that may be found in a coronial file. The time between date of death and conclusion of inquest varies. Data collection is conducted between one and two years after the death, depending on the date of completion of the inquest. Validation checks are completed on the data, and each researcher's data are checked and verified by different members of the HRB team.

Text box 1: Sources of data in coronial files

Death report to coroner: An Garda Síochána Report to Coroner (Form. C.71), other reports, e.g. telephone reports from doctors.

Autopsy report: Details of the post-mortem examination by the pathologist, which should contain:

- o Basic demographic details
- A brief clinical summary
- Description of external and internal examinations
- o A report of histology or other investigations, where appropriate
- A summary of findings
- A concluding commentary
- A cause of death, ideally in the standard international form for the 'Medical Certificate of Cause of Death'.

Toxicology report: Identifies and quantifies substances present in the body (including prescription medications, illicit drugs and/or alcohol).

Inquest files: These may include the following additional documents:

- Witness statements/depositions
- Exhibits (including photographs and maps), if relevant
- o Professional reports, e.g. medical reports
- Forensic collision investigation report (for road traffic collisions)
- Health and Safety Authority report on workplace incidents
- o Medical records, e.g. hard copy or digital copy of hospital records
- Other reports or medical correspondence, such as general practitioner (GP) letters, psychiatrist reports.

Record of verdict: A summary of the findings and circumstances of death, including identification, date and place of death, and a conclusion on the cause and means by which the death occurred (e.g. accident, suicide). A recommendation (in the public interest) arising from the inquest designed to prevent further fatalities may also be included.

 $\textbf{Coroner's certificate:} \ \textbf{Official document required to register the death}.$

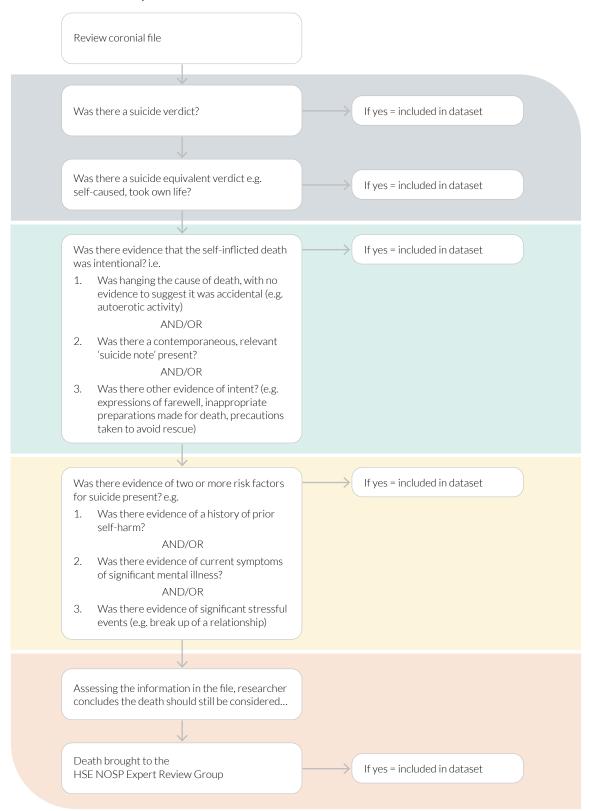
2.4 Data transfer process to HSE NOSP

The HRB transfer the data to the HSE NOSP data officers through password-protected encrypted data files. Data files are de-identified and anonymised by the HRB researchers prior to sending to the data manager and officers of the HSE NOSP.

2.5 Ethics statement

Ethical approval for extension of the coronial data collection through the NDRDI methodology was obtained from the Ethics Committee of the Irish College of General Practitioners (ICGP) in 2016. All analysis in the IPSDS report is based on the secondary analysis of data which has been anonymised. It is therefore not possible for any HSE NOSP staff member to identify any individual or data from the dataset. The methodology, data analysis and report writing have been overseen by the TAG (see Section 2.2).

Figure 3: The IPSDS classification process



2.6 IPSDS definition of 'probable suicide'

All deaths which are sudden, unexpected or traumatic are considered for inclusion in the IPSDS dataset (see Figure 3). The IPSDS dataset includes two sets of deaths: those with a coronial suicide verdict (which, by definition, are considered to be suicide 'beyond reasonable doubt'); and deaths that are more likely than not, based on the weight of evidence, to have been a suicide (based on the first two core components of the coroner's verdict (see Section 1.2): that the deceased engaged in a deliberate act, which caused his/her own death, intending the outcome to be fatal). These latter deaths are included in the IPSDS dataset 'on the balance of probabilities'. The collective term used to describe all deaths included in the IPSDS dataset is 'probable suicide'.

Criteria for inclusion of a death in the IPSDS dataset are based on the coroner's verdict and international expert consensus concerning the identification of suicidal intent through direct and indirect evidence, supported by guidance from the TAG. These criteria are:

- A coroner's verdict of suicide or equivalent. Deaths identified by the coroner as suicide, and deaths with a suicide-equivalent description, such as 'took own life', 'self-inflicted' or 'self-caused', are automatically included in the IPSDS dataset.
- **Evidence of intent.** Determining intent is one of the key challenges in conceptualising and measuring suicide. Intent requires that the deceased knew or had in mind that a specific act would result in death. Deaths that do not have a verdict of suicide or equivalent are included in the dataset if there is evidence that, at the time, the deceased intended to take his/her own life or wished to die and that he/she understood the consequences of his/her actions [5]. To this end, the following are included:
 - Deaths due to hanging, unless there is evidence to suggest it may have been an accident (e.g. autoerotic activity).
 - Deaths where there is a contemporaneous suicide communication (e.g. note, SMS, email), as this final act of communication is considered evidence that the deceased intended/wished to take his/her own life and understood the probable consequences of his/her actions.
 - Deaths where there is other evidence of suicidal intent, for example, where the deceased made explicit or implicit verbal expressions of an intention to take his or her own life. This includes, but is not limited to, expressions of farewell or the desire to die, expressions of hopelessness, expressions of great emotional or physical pain or distress, efforts to procure or learn about means of death or to research fatal behaviour, precautions taken to avoid rescue, and evidence that the deceased recognised the potential lethality of the chosen means of death.
 - Deaths where multiple risk factors for suicide are present. These risk factors [6] include previous self-harm episode, previous suicide communication, stressful events and significant losses.
- HSE NOSP Expert Review Group. Particularly complex deaths or deaths where the researcher
 considers, after a thorough reading of the contents of the coronial file, that the death should be
 considered for inclusion as probable suicide, are brought to the HSE NOSP Expert Review Group for
 review.

• The review process involves two suicide research experts ¹⁷, who are independent of the data collection procedure, examining the evidence. The experts developed an 'Assessment of Certainty for Probable Suicide' decision-making matrix, specifically designed for the review, to help ensure the consistency and reliability of the process (see Appendix 3: HSE NOSP Expert Review Group – assessment of certainty for probable suicide). The review meetings, facilitated by the HSE NOSP, take place regularly to ensure complex deaths are reviewed and added to the dataset for a particular year in a timely manner.

2.7 Variables included in the IPSDS dataset

Information for the IPSDS is collected (if/when available in the coronial files) on the following variables:

- **Sociodemographic characteristics:** Sex, age, relationship status, living arrangements, parental status, occupation and socio-economic status.
- **Clinical risk characteristics:** Mental health condition, type of mental health conditions experienced, mental health medication, substance use disorder, prior self-harm, contact with medical services, and adverse events.
- Death detail: Coroner's verdict, method of death, place of incident, evidence of suicidal intent.

It is important to note that coroners do not use a standard approach to data collection when carrying out their death investigations. The information recorded in the IPSDS is not routinely collected for all deaths entered into the dataset. As a result, information is not available for some variables.

2.8 Data analysis

A descriptive analysis, based on numbers and percentages and/or proportions, is presented in this report. Cross-tabulation was conducted when data are presented by year, sex, age group and clinical population. Chi Square statistics (χ^2) are used to test the association between categorical variables, and the means (for interval data, e.g. age) between two groups are compared via T-tests. The standard deviation (SD), which describes the spread of data in relation to the mean, is also presented. The statistical significance for all analyses was set at p < 0.01. This means that there is less than a 1% chance that the differences observed were due to random chance. Unless otherwise stated, only statistically significant results (p<0.01) are presented in the text and tables throughout this report. Greyed out percentages (%) in tables relate to sub-categories of a main category (e.g. 'in paid employment' and 'unemployed' are sub-categories of the main category 'In the labour market') and add up to 100% of the main category to which they are related.

Every effort has been made to protect the anonymity of the people who died by probable suicide and who form the IPSDS cohort. Counts of fewer than 10 probable suicide deaths are not presented in tables or text and are instead replaced by < 10. Some total persons data may have been removed from table columns, in sections of this report, in order to rule out the possibility of identifying specific individuals.

¹⁷ The current HSE NOSP Expert Review Group members are Professor Kevin Malone, who is a member of the CfL Technical Advisory Group, and Professor Philip Dodd, Clinical Advisor to HSE NOSP (2019-Present). Dr. Justin Brophy, former Clinical Advisor to HSE NOSP, sat on the group from 2016–2019.

2.9 Strengths of the IPSDS

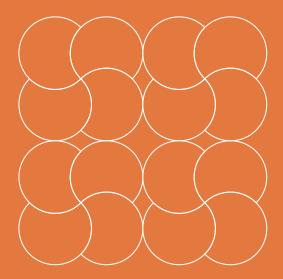
A key strength of the IPSDS is its access to, and use of, existing coronial death investigation and administrative data. Coroners investigate all suspicious deaths in Ireland based on legislation, and therefore provide a convenient data source with national coverage. Access to coronial files also reduces the cost of establishing and maintaining the IPSDS dataset. Since the HRB was already working with the coroners and extracting data from coronial files for the NDRDI database, additional costs to the IPSDS have been kept to a minimum.

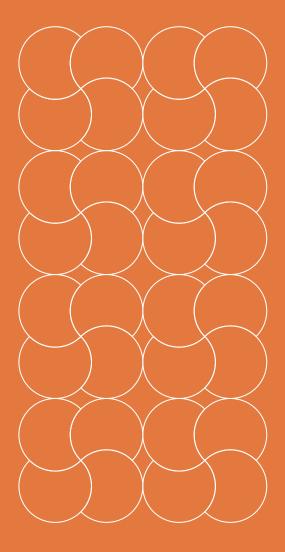
2.10 Limitations of the IPSDS

- 1. One of the limitations of the IPSDS is that coronial data are time-lagged. There may be lengthy delays between the occurrence of a death and data extraction from the coronial investigation files. The coronial investigation must be completed before data can be extracted. As a result, the IPSDS is unsuitable for planning the allocation of resources in the short term (e.g. for the next year) to specific priority groups and/or suicide prevention interventions. It is also unable to support rapid responses to emerging events (e.g. COVID-19 pandemic) or emerging suicide clusters (among specific cohorts of persons).
- 2. A second limitation relates to the secondary analysis of data which have not been originally collected to address a particular research question. Coroners collect data in order to assist them in their investigation of a death, not for research purposes. Data of interest for research (e.g. relating to a particular priority or vulnerable group), therefore, may not be available for all (or even any) deaths in the coronial file. One such example is ethnic identifiers, which are not described consistently across all deaths. Consequently, it has not been possible to include this variable in the current analysis. The fact that important variables may not be available can in turn create residual confounding effects if omitted variables are crucial covariates in secondary analysis [7].
- 3. A third limitation of the methodology is that the researchers who analyse the data are not the same individuals as those involved in the data collection process. They may not be aware of study-specific nuances or glitches in data collection that may be important for data interpretation [7]. However, as the HRB are represented on the TAG and have maintained very close working relationships with the HSE NOSP, this risk is considered to be minimised.

2.11 Summary

The IPSDS is intended to inform and enhance effective suicide prevention in Ireland. The IPSDS dataset can be used to examine and uncover new risk factors, test hypotheses about stability or change in suicide incidence among specific subgroups of people, and identify suicide clusters (albeit retrospectively). It provides information to decision-makers who are responsible for planning, funding, delivering and evaluating interventions included under the CfL umbrella. Coronial files are important sources of information and are expected to make an important contribution to the understanding of the nature of suicide in Ireland. Similar records have proven useful for research and surveillance in other jurisdictions, including New Zealand [8] and Australia [9] [10].





3.0 Social and clinical characteristics of those included in the IPSDS dataset 2015–2018

The following sections present information from the IPSDS dataset about people who died by probable suicide in Ireland during 2015–2018. The data presented here are extracted from documentation contained within 'completed' coronial investigation files, including, for example, An Garda Síochána reports to the coroner, autopsy and toxicology reports, witness statements, depositions and coroner's certificates.

Despite the comprehensiveness and wide range of information included in the IPSDS, it is important to reiterate that this is secondary analysis of existing data; the available data were collected as part of the coronial death-investigation and administrative processes and were not originally collected to address particular research questions. Therefore, information that might be relevant for a better understanding of the characteristics of people who died will not necessary be recorded as part of the death investigation. Consequently, some of the prevalence data presented in this report may be underestimates and should be interpreted with caution.

The following sections present information on **2,349** deaths in the IPSDS dataset, over the four-year period 2015–2018:

- Section 3.1 presents sociodemographic characteristics, including age, sex and employment status.
- Section 3.2 focuses on the clinical risk factors, examining, for example, the mental health history of the IPSDS cohort, history of substance use and their history of prior self-harm.
- Section 3.3 examines the prevalence of adverse stressful life events that may have affected the person who died.
- Section 3.4 presents data on method and place of death.
- Section 3.5 presents descriptive analyses of coroners' verdicts.

3.1 Sociodemographic characteristics

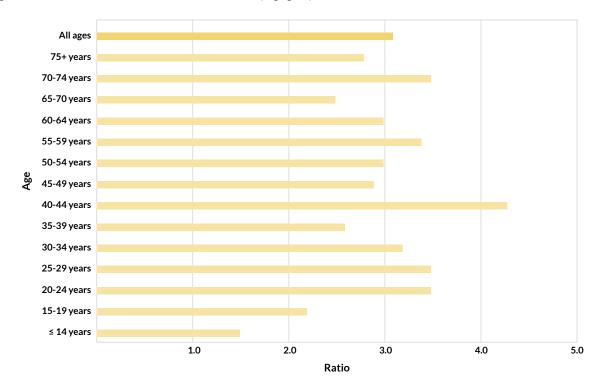
Certain sociodemographic and clinical characteristics are associated with an increased risk of suicide. For example, available evidence indicates that middle-aged men have the highest rate of suicide of all age groups in Ireland [11]. In addition, the literature indicates that unemployment [12], lower socio-economic status [13], living alone [14], ethnicity [15] and migrant status [16] are also associated with increased risk of suicide.

Therefore, the profile of the Irish Probable Suicide Deaths Study (IPSDS) cohort 2015–2018 starts with a focus on sociodemographic characteristics.

Sex

- 76% (n=1,776) of the IPSDS cohort deaths involved men, while 24% (n=573) involved women.
- Over the four-year period, three times more men than women died of probable suicide (see Figure 3.1.1).
- The lowest male: female ratios were in those below 20 years of age (1.5:1).

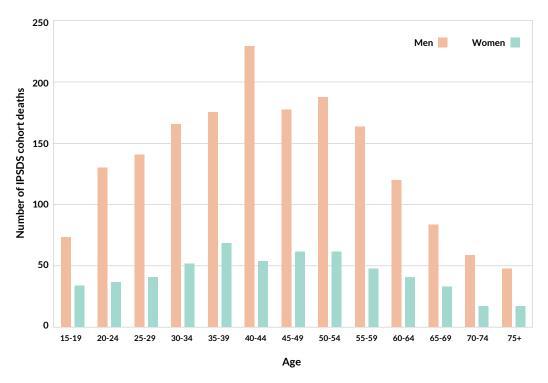
Figure 3.1.1: Male: female sex ratio in the IPSDS cohort, by age group, 2015-2018, N=2,349



Age

- The mean and median age at death was 44 years (SD=15.77). There were no differences in mean or median age between men and women.
- 1% (n=15) of IPSDS cohort deaths were among young people aged 14 years and under (information about these deaths by sex are not presented in tables and figures).
- The highest number of IPSDS cohort deaths were in those aged between 35–54 years of age (see Figure 3.1.2).
 - 12% (n=69) were among women aged 35–39 years. This was the age group with the highest number of deaths for women.
 - 13% (n=231) were among men aged 40–44 years. This was the age group with the highest number of deaths for men.
- 9% (n=213) of the IPSDS cohort deaths were in those aged 55–59 years old.
- 7% (n=162) of the IPSDS cohort deaths were among adults aged 60–64 years. Similar proportions of men and women died by probable suicide in this age group (7%).
- 5% (n=117) of the IPSDS cohort deaths were among those aged 65–69 years of age.
- The 70–74 and 75+ age groups had the lowest number of IPSDS cohort deaths for both men and women.

Figure 3.1.2: Number of IPSDS cohort deaths by age and sex, 2015-2018, N=2,349



Relationship status

- Significant differences were found between sex and relationship status (see Table 3.1.1).
 - 51% (n=913) of men in the IPSDS cohort were single at the time of their death, compared with 45% (n=259) of women.
 - o 11% (n=62) of women compared with 7% (n=128) of men were divorced or separated.
 - A higher proportion of women (6%, n=35) were widowed compared with men (2%, n=39).

Table 3.1.1: Relationship status of IPSDS cohort by sex, 2015-2018, N=2,349

| | Men | | Women | | Persons | |
|---------------------|------|-------|-------|-------|---------|-------|
| Relationship status | N | (%) | N | (%) | N | (%) |
| Married* | 539 | (30) | 159 | (28) | 698 | (30) |
| Cohabiting | 103 | (6) | 36 | (6) | 139 | (6) |
| Single | 913 | (51) | 259 | (45) | 1172 | (50) |
| Separated/divorced | 128 | (7) | 62 | (11) | 190 | (8) |
| Widowed | 39 | (2) | 35 | (6) | 74 | (3) |
| Unknown** | 54 | (3) | 22 | (4) | 76 | (3) |
| Total | 1776 | (100) | 573 | (100) | 2349 | (100) |

^{*} Includes civil partnership; χ^2 =33.3, df=5, p < 0.001. ** It was not possible to make an assessment based on data available. Note: Percentages have been rounded and may not total to 100.

Parental status

- 38% (n=887) of the IPSDS cohort were known to be parents (see Table 3.1.2).
- It must be noted that the parental status was unknown for a high proportion of the IPSDS cohort (46%, n=1,095).
- A higher proportion of women (22%, n=126) did not have child(ren) compared with men (14%, n=241).

Table 3.1.2: Parental status of IPSDS cohort by sex, 2015-2018, N=2,349

| | Men | | Women | | Persons | |
|----------------------------|------|-------|-------|-------|---------|-------|
| Parental status | N | (%) | N | (%) | N | (%) |
| Yes – Known to be a parent | 655 | (37) | 232 | (40) | 887 | (38) |
| No | 241 | (14) | 126 | (22) | 367 | (16) |
| Unknown* | 880 | (49) | 215 | (37) | 1095 | (46) |
| Total | 1776 | (100) | 573 | (100) | 2349 | (100) |

 $[\]chi^2$ =34.5, df=2, p<0.001. *It was not possible to make an assessment based on data available. Note: Percentages have been rounded and may not total to 100.

Living arrangements

- 25% (n=595) of the IPSDS cohort were living alone at the time of their death.
- There were some significant differences in living arrangements between men and women (see Table 3.1.3).
 - A higher proportion of men than women were living with their partner and child(ren) (14%, n=250 compared with 11%, n=64, respectively).
- 2% (n=57) of the IPSDS cohort were identified as being homeless at the time of their death. This includes sleeping rough and staying in hostels or supported accommodation.

Table 3.1.3: Living arrangements of IPSDS cohort by sex, 2015-2018, N=2,349

| | Men | | Women | | Persons | |
|---|-----|------|-------|------|---------|------|
| Living arrangements | N | (%) | N | (%) | N | (%) |
| Alone | 440 | (25) | 155 | (27) | 595 | (25) |
| Family | 516 | (29) | 148 | (26) | 664 | (28) |
| Partner/spouse | 240 | (13) | 86 | (15) | 326 | (14) |
| Partner and child(ren) | 250 | (14) | 64 | (11) | 314 | (13) |
| Children only | 16 | (<1) | 38 | (7) | 54 | (2) |
| Other shared (e.g. friends) | 74 | (4) | 21 | (4) | 95 | (4) |
| Hostel/homeless/supported accommodation | 46 | (3) | 11 | (2) | 57 | (2) |
| Other | 35 | (2) | 11 | (2) | 46 | (2) |
| Unknown* | 159 | (9) | 39 | (7) | 198 | (8) |

 $\chi^2 = 71.2, df = 8, p < 0.001. \quad {}^*$ It was not possible to make an assessment based on data available. Note: Percentages have been rounded and may not total to 100.



Being single and possibly isolated is also a key risk factor and something that can be targeted by community services.

Lived experience reviewer of the IPSDS

Employment status

- 60% (n=1,404) of the IPSDS cohort were in the labour market (i.e. in paid employment or unemployed) at the time of their death. There were significant differences observed between men and women (see Table 3.1.4).
 - 64% (n=1,137) of men were in the labour market, compared to 46% (n=267) of women.
- 25% (n=586) of the IPSDS cohort were not in the labour market (e.g. retired persons, students, those taking care of children and/or other family).
 - o 39% (n=218) of women were not in the labour market compared with 21% (n=368) of men.

Table 3.1.4: Employment status of IPSDS cohort by sex, 2015-2018, N=2,349

| | М | Men | | Women | | Persons | |
|--------------------------|------|-------|-----|-------|------|---------|--|
| Employment status | N | (%) | N | (%) | N | (%) | |
| In the labour market* | 1137 | (64) | 267 | (46) | 1404 | (60) | |
| In paid employment | 642 | (56) | 144 | (54) | 786 | (56) | |
| Unemployed | 495 | (44) | 123 | (46) | 618 | (44) | |
| Not in the labour market | 368 | (21) | 218 | (39) | 586 | (25) | |
| Unknown** | 271 | (15) | 88 | (16) | 359 | (15) | |
| Total | 1776 | (100) | 573 | (100) | 2349 | (100) | |

^{*} χ^2 = 74.1, df=2, p<0.001. ** It was not possible to make an assessment based on data available. Note: Percentages have been rounded and may not total to 100.

Socio-economic groups¹⁸

- 13% (n=306) of the IPSDS cohort were classified as professional workers at their time of death. These included 12% (n=207) of men and 17% (n=99) of women (see Figure 3.1.3).
- 9% (n=204) of the IPSDS cohort were classified as non-manual workers. 7% (n=128) of men compared with 13% (n=76) of women.
- 22% (n=524) of the IPSDS cohort were classified as skilled manual workers. 26% (n=462) of men compared with 11% (n=62) of women.
- 37% (n=655) of men and 54% (n=310) of women were classified as 'all others gainfully occupied and unknown'. Individuals in the IPSDS cohort were assigned to this CSO category when it was not possible to allocate them to a particular social class¹⁹.

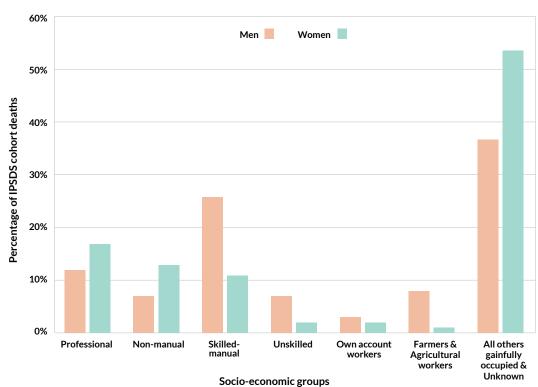


Figure 3.1.3: Socio-economic groups of IPSDS cohort by sex (%), 2015-2018, N=2,349

 $\chi^2 = 161.9$, df=6, p < 0.001.

¹⁸ When the CSO analyses population census data, the entire population is classified into one of seven social-class groups, ranked on the basis of occupation.

 $^{19 \}quad \text{https://www.cso.ie/en/media/csoie/census/documents/pser_appendix2.pdf}$

3.2 Clinical risk factors for IPSDS cohort deaths

Many clinical risk factors for suicide have been identified in the literature, including mental disorders [17], in particular major depressive disorders and substance use disorders [18]. There is also evidence that those who die by suicide have a higher rate of serious physical illness [19], including chronic pain [20]. The co-occurrence of mental and physical disorders is common [21]; specific conditions such as chronic pain often co-exist with mental health conditions, in particular depression and personality disorders [22]. Within suicide prevention strategies one of the main populations targeted with tailor-made interventions is those who are in contact with health services (often described as clinical populations), either due to mental and/or physical disease or due to self-harm. The most effective suicide prevention point for clinical populations is when they reach health services [23]. Therefore, most of the suicide prevention efforts of policymakers are directed towards clinical settings and health professionals' training.

This section presents a descriptive analysis of the available clinical information taken from a range of data sources in the coronial files, including medical records and depositions from family and/or friends (i.e. a non-medical person), otherwise known as 'collateral information'. The term 'mental health condition' is used throughout this section. It is a broader term that does not specifically indicate pathology (e.g. disease or disorder) but covers a range of conditions that can be medically assessed, self-reported or undiagnosed [24].



The drive to consistently reduce the numbers of suicides in Ireland will not be achieved solely through the actions of professional services. It will require the engagement of the population at large, to look out for each other and to be prepared to intervene and to talk about suicidal thoughts.

Lived experience reviewer of the IPSDS

History of mental health conditions

- 66% (n=1,543) of the IPSDS cohort had a history of a mental health condition; 79% (n=450) of women compared with 62% (n=1,093) of men (see Table 3.2.1).
 - 80% (n=1,233) of those with a mental health condition had evidence of a mood (affective) disorder; this includes recurring depressive episodes, bipolar affective disorders and depression.
 - Those with a mental health history were older with a mean age of 45.10 years (SD=14.91) in comparison with those with no recorded history of a mental health condition (mean age 42.50 years, SD=17.22; (t(2,347) = 3.87; p<0.001).
- For 26% (n= 618) of the IPSDS cohort it was unknown whether they had any mental health condition. A higher proportion of men (30%, n=526) than women (16%, n=92) had an unknown mental health history.
- In 8% (n=183) of the IPSDS cohort deaths, the deceased had no history of a mental health condition.

Table 3.2.1: History of mental health conditions of IPSDS cohort by sex, 2015-2018, N=2,349

| | Men | | Women | | Persons | |
|-------------------------------------|------|-------|-------|-------|---------|-------|
| History of mental health conditions | N | (%) | N | (%) | N | (%) |
| Yes | 1093 | (62) | 450 | (79) | 1543 | (66) |
| No | 157 | (9) | 31 | (5) | 188 | (8) |
| Unknown* | 526 | (30) | 92 | (16) | 618 | (26) |
| Total | 1776 | (100) | 573 | (100) | 2349 | (100) |

 χ^2 =55.5, df=2, p<0.001. *It was not possible to make an assessment based on data available. Note: Percentages have been rounded and may not total to 100.

Lifetime substance use

- 33% (n=783) of the IPSDS cohort had a history of substance use. There was no lifetime history of substance use recorded for 67% (n=1,566) of the IPSDS cohort. There were no differences between men and women. Of the IPSDS cohort with a history of substance use:
 - 41% (n=319) had a history of alcohol dependency only.
 - 77% (n=599) had a history of drug dependency/misuse (this drug dependency may have included alcohol).
 - The most commonly used illicit drugs were:
 - o Cocaine (21%, n=162).
 - o Cannabis (14%, n=112).
 - Heroin (7%, n=57).
- The IPSDS cohort with a history of substance use were younger (mean 39.21 years; SD=12.94) than those with no history of substance use (mean=46.70 years; SD=16.47; t(2,347) = 11.13, p<0.001).
- 73% (n=568) of those with a history of substance use, had co-occurring mental health conditions.

Contact with medical services

- 51% (n=1,200) of the IPSDS cohort were known to have been in contact with medical services prior to their death. There were differences between men and women: 62% (n=354) of women compared with 48% (n=846) of men (see Table 3.2.2).
- 8% (n=91) of the IPSDS cohort in contact with medical services were known to have expressed thoughts of suicide during their last service contact. No significant differences were found between men and women.
- Among those who had medical service contact, 49% (n=582) had been in contact with a general practitioner (GP).
- Among those in contact with medical services (n=1,200):
 - 83% (n=1,002) had a history of a mental health condition compared with 17% (n=198) who did not: $χ^2 = 338.1$, df=1, p < 0.001.
 - o 37% (n=446) had a substance use history compared with 63% (n=754) who did not: χ^2 = 16.2, df=1, p < 0.001.

Table 3.2.2: Last contact with medical services of IPSDS cohort by sex, 2015-2018, N=2,349

| | Men | | Women | |
|--|------|-------|-------|-------|
| | N | (%) | N | (%) |
| Known contact with medical services of any type* | 846 | (48) | 354 | (62) |
| GP | 404 | (48) | 178 | (50) |
| A & E | 36 | (4) | 14 | (4) |
| Mental health-related services | 151 | (18) | 67 | (19) |
| Drug/alcohol treatment | 13 | (2) | <10 | (3) |
| Acute hospital in-patient | 38 | (5) | 16 | (5) |
| Psychiatric in-patient | 49 | (6) | 23 | (7) |
| Counselling-related services | 58 | (7) | 14 | (4) |
| On-call doctor | 72 | (9) | 22 | (6) |
| Other | 25 | (3) | 11 | (3) |
| No known contact with medical services | 930 | (52) | 219 | (37) |
| Total | 1776 | (100) | 573 | (100) |

^{*} χ²=36.1, df=1, p<0.001.

Note: Percentages have been rounded and may not total to 100.

Prescribed mental health medication

- 38% (n=888) of the IPSDS cohort were known to be in receipt of prescribed mental health medication(s) at the time of their death.
 - There were differences between men and women: 53% (n=304) of women compared with 33% (n=584) of men (χ^2 = 74.9, df=2, p < 0.001).
- 55% (n=484) of those prescribed medication were prescribed antidepressants.
- For 46% (n=1,072) of the IPSDS cohort it was unknown whether they were prescribed any mental health medication.

Self-harm history

- 23% (n=536) of the IPSDS cohort had a history of self-harm (see Table 3.2.3).
- There were differences between men and women: 33% (n=188) of women compared with 20% (n=348) of men.
- For 65% (n=1,537) of the IPSDS cohort, it was unknown whether there was a history of self-harm. A higher proportion of men (68%, n=1,209) than women (57%, n=328) had an unknown history of self-harm.

Table 3.2.3: History of self-harm of IPSDS cohort by sex, 2015-2018, N=2,349

| | Men | | Women | | Persons | |
|-----------------|------|-------|-------|-------|---------|-------|
| Prior self-harm | N | (%) | N | (%) | N | (%) |
| Yes | 348 | (20) | 188 | (33) | 536 | (23) |
| No | 219 | (12) | 57 | (10) | 276 | (12) |
| Unknown* | 1209 | (68) | 328 | (57) | 1537 | (65) |
| Total | 1776 | (100) | 573 | (100) | 2349 | (100) |

 $\chi^2 = 43.0, df = 2, p < 0.001. \quad {}^*\text{ It was not possible to make an assessment, based on the data available.}$

- Overdose (45%, n=239) was the most common prior self-harm method, followed by attempted hanging (14%, n=73) (see Figure 3.2.1).
- There were differences between men and women in self-harm method: 57% (n=107) of women had overdosed compared with 38% (n=132) of men, while 16% (n=57) of men attempted hanging compared with 9% (n=16) of women (χ^2 = 25.9, df=5, p < 0.001).
- For 26% (n=139) of the IPSDS cohort with a history of self-harm, information on the method used in their prior self-harm episode was unknown.
- Among those with a history of self-harm:
 - 90% (n=480) had a history of a mental health condition compared with 10% (n=56) who did not $(\chi 2=185,2,df=2,p<0.001))$
 - \circ 49% (n=262) had a substance use history compared with 51% who did not (n=274) ($\chi 2$ =75.5, df=1, p< 0.001)

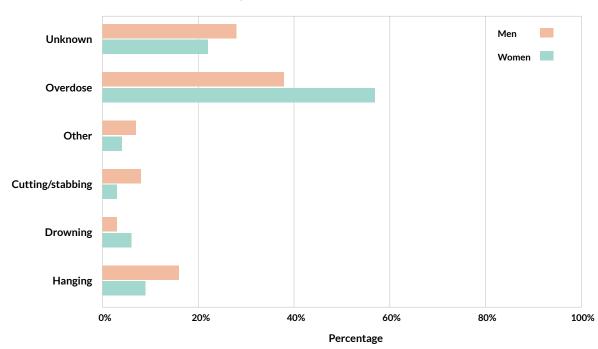


Figure 3.2.1: Prior self-harm method of IPSDS cohort by sex, 2015-2018, N=536

 χ^2 = 25.9, df=5, p < 0.001.

'Other' included for example, road traffic collisions, falling/jumping, rail incident, burns/fire, suffocation.

"

Enhanced suicide prevention measures in these [medical] services, including suicide intervention training for mental health service professionals, offers the possibility to address the single biggest at-risk group.

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3.3 Adverse events as contributory factors in IPSDS cohort deaths

There is evidence that past adverse life events or stressors contribute to an increased risk of suicide [25] and vulnerability to suicidal behaviour [26]. Adverse life events include [27] for example, death, a divorce or moving location, exposure to violence, financial issues and childhood adversity. Multiple adverse life events increase the risk of self-harm and suicide [28]. It is important to keep in mind that these factors may impact differently on individuals based on their current circumstances and the protective influences they have in their lives. Adverse events may be present at one point in a person's life and absent in another; they can be chronic (ongoing/recurrent) or acute (a one-off event) and can affect an individual by slowly increasing vulnerability. The adverse life events outlined in this section are not intended to be a predetermined set of risk factors for all individuals; they are merely factors that have been shown in the analysis to be more prevalent than others. Information on adverse life events came from a range of data sources within the coronial files, including depositions from family and/or friends and medical records. It is possible that not all adverse life events were known or evident as part of the review of these information sources.

Adverse life events

- 79% (n=1,853) in the IPSDS cohort had evidence of an adverse event(s) or stressors that may have affected the deceased's emotional state and vulnerability to suicide.
- A higher proportion of women (83%, n=476) than men (78%, n=1,377) had evidence of adverse events (see Table 3.3.1).
- Among the IPSDS cohort who had an adverse event, a greater proportion of men had a single event recorded (36%, n=494), and a smaller proportion had multiple events recorded (64%, n=883), compared with women (29%, n=140 and 71%, n=336 respectively) (χ 2 =6.5, df=1, p = 0.01).

Table 3.3.1: Adverse events that may have affected the IPSDS cohorts' emotional state by sex, 2015–2018, N=2,349

| | Men | | Women | | Persons | |
|--------------------------|------|-------|-------|-------|---------|-------|
| Adverse events | N | (%) | N | (%) | N | (%) |
| Yes* | 1377 | (78) | 476 | (83) | 1853 | (79) |
| 1 adverse event | 494 | (36) | 140 | (29) | 634 | (34) |
| 2 or more adverse events | 883 | (64) | 336 | (71) | 1219 | (66) |
| Unknown | 399 | (22) | 97 | (17) | 496 | (21) |
| Total | 1776 | (100) | 573 | (100) | 2349 | (100) |

^{*} χ^2 =7.9, df=1, p=0.005.

- Of the IPSDS cohort with reported adverse events (n=1,853):
 - o 43% (n=792) reported current mental health issues.
 - 19% (n=346) reported relationship difficulties (e.g. recent relationship breakup and marital problems) (see Table 3.3.2).

Significant differences were observed between men and women in respect of:

- Current mental health issues: 50% (n=239) of women compared with 40% (n=553) of men.
- Financial concerns: 4% (n=19) of women compared with 8% (n=112) of men.
- Death bereavement: 15% (n=73) of women compared with 11% (n=148) of men.

Table 3.3.2: Adverse events of IPSDS cohort by sex, 2015-2018, N=1,853

| | М | Men | | Women | | sons |
|--------------------------------|-----|------|-----|-------|-----|------|
| Groups of adverse events* | N | (%) | N | (%) | N | (%) |
| Current mental health issues** | 553 | (40) | 239 | (50) | 792 | (43) |
| Relationship difficulties | 270 | (20) | 76 | (16) | 346 | (19) |
| Death/grief*** | 148 | (11) | 73 | (15) | 221 | (12) |
| Employment issues | 136 | (10) | 31 | (7) | 167 | (9) |
| Conflict with family | 116 | (8) | 40 | (8) | 156 | (8) |
| Financial concerns**** | 112 | (8) | 19 | (4) | 131 | (7) |
| Health fears | 89 | (7) | 27 | (6) | 116 | (6) |

^{*} The adverse event groups are not mutually exclusive: a person could have experienced one or more of the adverse events presented.

^{**} χ^2 =14.6, df=1, p<0.001 *** χ^2 =7.0, df=1, p=0.008 **** χ^2 =9.2, df=1, p=0.002

3.4 Method and place of IPSDS death

International evidence indicates that trends observed in suicide deaths, including method of death, can vary from country to country and can be influenced by factors such as religion, cultural acceptance of different methods and ease of access to lethal means (e.g. firearms and pesticides) [29]. Worldwide, hanging is one of the most common method of death in suicides [30]. Research also notes some sex differences in the use of methods, with men more likely to adopt more lethal methods than women [31].

Having data on the methods of probable suicide deaths and where they happen is an important tool in restricting access to means, which is a key strategic goal of Connecting for Life. For example, deaths in public locations can attract harmful media attention and can have significant psychological consequences for those who witness the incident or those directly involved (such as a train driver). Importantly, a number of effective steps can be taken to prevent public places being used for self-harm attempts and increase the chances of last-minute intervention [32]. Similarly, measures can be introduced to help reduce the acceptability of particular suicide methods and to reduce (for example, occupational) access to lethal means, an important risk factor for suicide [33].

Method of death

- Over the four-year period, hanging was the most common method of death in the IPSDS cohort (see Figure 3.4.1).
 - 61% (n=1,443) of IPSDS cohort deaths were by hanging: 65% (n=1,157) of deaths among men compared with 50% (n=286) among women.
- 13% (n=313) of the IPSDS cohort died by poisoning: 24% (n=135) of women and 10% (n=178) of men.
- 12% (n=283) of the IPSDS cohort died by drowning: 17% (n=95) of women and 8% (n=147) of men.
- 4% of the IPSDS cohort died by shooting/firearms; the majority of these deaths were among men.
- There were no significant differences in the method of death across the period 2015–2018 (χ^2 = 17.6, df=12, p = 0.125).

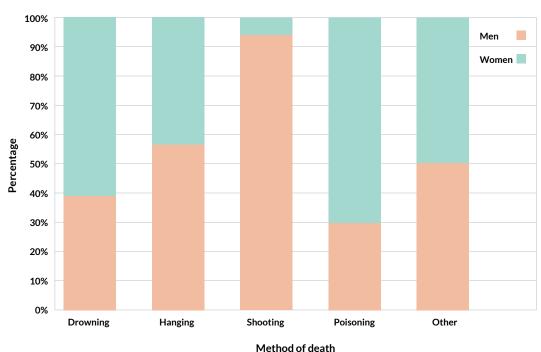


Figure 3.4.1: Method of death for IPSDS cohort by sex (%), 2015-2018, N=2,349

 $\chi^2=110.6, df=4, p<0.001;$ Other includes: jumping from a height, burning, stabbing, road traffic and railway accidents, other.

- IPSDS cohort deaths by drowning increased across age groups: Drowning accounted for 7% (n=19) of deaths among young people (aged 15–24 years) compared with 23% (n=60) of deaths among those aged 65 years and over (see Figure 3.4.2).
- The proportion of people in the IPSDS cohort who died by hanging reduced across age groups: 93% (n=15) among children 14 years and under were deaths by hanging, compared with 45% (n=115) of deaths among those aged 65 years and over.

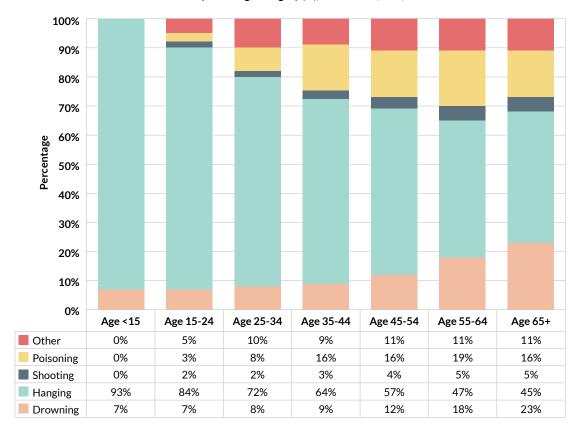


Figure 3.4.2: Method of death for IPSDS cohort by broad age category (%), 2015-2018, N=2,349

 $\chi^2 = 183.3$, df=24, p < 0.001

 $Other include: falling/jumping, stabbing/cutting, road traffic collision, rail incident, burns/fire, suffocation, other methods. \\ Note: Percentages have been rounded and may not total to 100.$



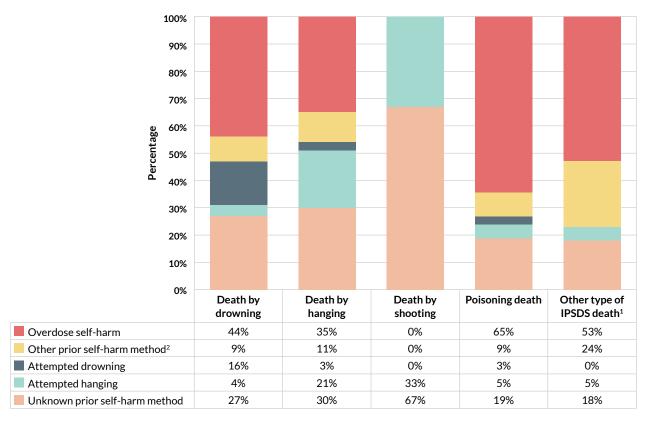
There is an opportunity to employ online intervention techniques whereby anybody searching for information on suicide will be signposted to support groups and information.

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Method of death and prior self-harm

23% (n=536) of the IPSDS cohort had a history of prior self-harm. For those who died by drowning, hanging and poisoning, overdose was the most common method used in their prior self-harm episode (see Figure 3.4.3).

Figure 3.4.3: Method of IPSDS cohort death by prior self-harm, 2015-2018, N=536



 $[\]chi^2$ = 96.6, df=20, p < 0.001.

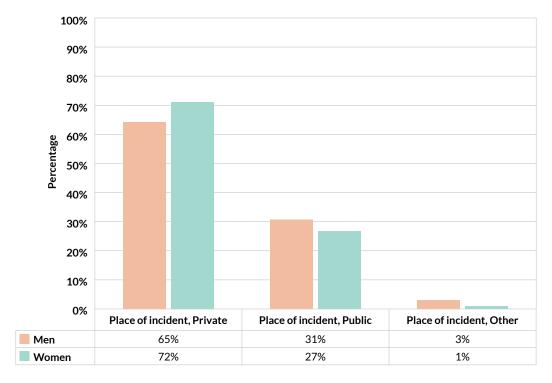
 $^{^1} other\ type\ of\ IPSDS\ cohort\ death\ includes:\ falling/jumping,\ stabbing/cutting,\ road\ traffic\ collision,\ rail\ accident,\ burns,\ suffocation,\ other.$

 $^{^2} other\ prior\ self-harm\ methods\ includes:\ cutting/stabbing,\ jump\ from\ a\ height\ or\ from\ a\ moving\ vehicle,\ burning,\ shooting,\ other.$

Place of the incident

- 67% (n=1,571) of IPSDS cohort deaths occurred in 'private locations'²⁰ (see Figure 3.4.4); most of these were within the deceased's private dwelling or home (n=1,211).
 - o 72% (n=409) of women died in a private location compared with 65% (n=1,162) of men.
- 30% (n=711) of IPSDS cohort deaths occurred in a public location²¹.
 - There was a difference between men and women: 31% (n=556) of men compared with 27% (n=155) of women died by probable suicide in a public location.

Figure 3.4.4: Place of incident that led to IPSDS cohort death (%), 2015-2018, N=2,349



 $\chi^2 = 10.2$, df=2, p = 0.006.

3.5 The coroner's verdict

As previously detailed, in Ireland, for a verdict of suicide, the coroner must be satisfied 'beyond reasonable doubt' that the deceased intended to take their own life. A coroner who is unable to conclude intent beyond reasonable doubt can return an undetermined or open verdict or a verdict of death by accident or misadventure. In other jurisdictions (e.g. the UK), deaths may be classified by coroners as suicide 'on the balance of probabilities' i.e. it is are more likely than not, based on the weight of evidence, that the death was a suicide.

Empirical evidence indicates that factors such as age of the deceased, method of death, a history of mental health condition(s) and whether or not a suicide note was left can influence the verdict given by a coroner [34]. In a UK study, deaths by poisoning, jumping and drowning were less likely to receive a verdict of suicide than other verdicts [35]. Given the importance of understanding how coroners use the verdicts available to them [36], this section presents a descriptive analysis of coroners' verdicts, along with information on the presence of a suicide note.

Coroners' verdicts

- 69% (n=1,622) of the IPSDS cohort deaths met the coroners' standard of evidence (beyond reasonable doubt) for a suicide or equivalent verdict (i.e. took own life, self-caused) (see Table 3.5.1).
 - o 71% of men (n=1,257) received a suicide or equivalent verdict compared with 64% (n=365) of women.
- In 12% (n=278) of IPSDS cohort deaths, an undetermined or open verdict was returned by the coroner: A higher proportion of women (16%, n=91) than men (10%, n=187) received this verdict.
- 3% (n=78) of IPSDS cohort deaths received an accident/misadventure verdict.
 - A higher proportion of women (6%, n=33) than men received this verdict (3%, n=45).
- In 16% (n=371) of all IPSDS cohort deaths, there was no formal verdict available/recorded.

Table 3.5.1: Coroner's verdict by sex, 2015-2018, N=2,349

| | | Men | | Women | | Persons | |
|--------------------------|-------------------------------|------|-------|-------|-------|---------|-------|
| Suicide classification | Coroner's verdict* | N | (%) | N | (%) | N | (%) |
| Beyond reasonable doubt | Suicide or equivalent verdict | 1257 | (71) | 365 | (64) | 1622 | (69) |
| Balance of probabilities | Undetermined/open verdict | 187 | (10) | 91 | (16) | 278 | (12) |
| | Accident/Misadventure | 45 | (3) | 33 | (6) | 78 | (3) |
| | No formal verdict recorded | 287 | (16) | 84 | (15) | 371 | (16) |
| Total | | 1776 | (100) | 573 | (100) | 2349 | (100) |

^{*} χ^2 = 27.8, df=3, p<0.001.

- The IPSDS cohort aged 35–44 years old received the highest proportion of suicide verdicts (74%, n=391; beyond reasonable doubt) compared with other age groups (see Figure 3.5.1).
- Children aged 14 years and under were less likely to receive a suicide verdict (40%) compared with those in other age groups. Suicide beyond reasonable doubt verdicts were similar across all other age groups, ranging from 66% to 72%.

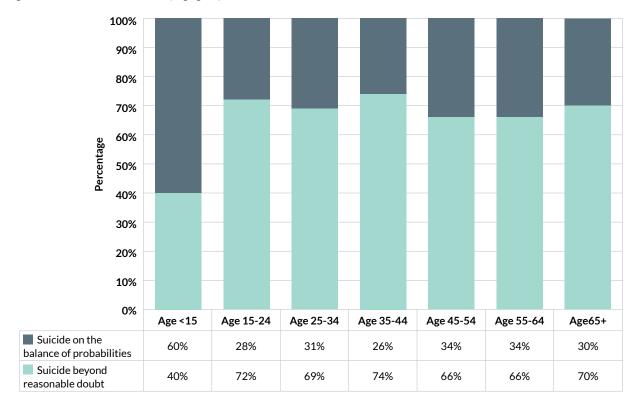


Figure 3.5.1: IPSDS classification by age group (%), 2015-2018, N=2,349

 $\chi^2 = 16.6$, df=6, p = 0.01

- A higher proportion of IPSDS cohort deaths by hanging (81%, n=1,176) and shooting (77%, n=64) received a suicide or equivalent verdict, compared with IPSDS cohort deaths by drowning (43%, n=122) and poisoning (46%, n=145; see Table 3.5.2).
- IPSDS cohort deaths by drowning (35%, n=98) were more likely to receive an undetermined/open verdict compared with other methods.
- A higher proportion of poisoning deaths (16%, n=49) received an accident/misadventure verdict compared with other methods.

Table 3.5.2: IPSDS classification/coroner's verdict, by method 2015-2018, N=2,349

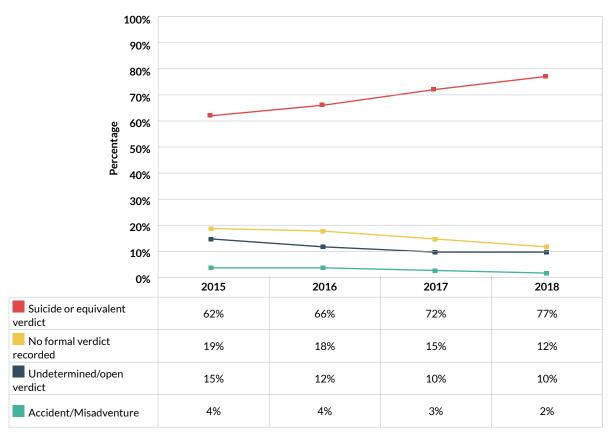
| | | Means by which death occured | | | | | | | | | |
|--------------------------|-------------------------------|------------------------------|-------|------|-------|------|-------|-------|-------|-----|-------|
| | | Drowning | | Han | ging | Shoo | oting | Poiso | oning | Ot | her |
| Suicide classification | Coroner's verdict* | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| Beyond reasonable doubt | Suicide or equivalent verdict | 122 | (43) | 1176 | (81) | 64 | (77) | 145 | (46) | 115 | (51) |
| Balance of probabilities | Undetermined/open verdict | 98 | (35) | 52 | (4) | <10 | (7) | 65 | (21) | 57 | (25) |
| | Accident/Misadventure | 11 | (4) | <10 | (≤1) | - | - | 49 | (16) | 16 | (7) |
| | No formal verdict recorded | 52 | (18) | 213 | (15) | 13 | (16) | 54 | (17) | 39 | (17) |
| Total | | 283 | (100) | 1443 | (100) | 83 | (100) | 313 | (100) | 227 | (100) |

^{*} χ^2 = 561.3, df=12, p<0.001.

Note: Percentages have been rounded and may not total to 100.

During the period 2015–2018 there was a change in the distribution of suicide verdicts. There was a temporal increase in the proportion of IPSDS cohort deaths with a suicide or equivalent verdict, from 62% (n=375) of deaths in 2015 to 77% (n=417) of deaths in 2018, and a reduction in the proportion of IPSDS cohort deaths with no formal verdict recorded, from 19% (n=114) in 2015 to 11% (n=62) in 2018 (see Figure 3.5.2).

Figure 3.5.2: Coroner's verdicts between 2015-2018 (%), N=2,349



 $[\]chi^2 = 41.6$, df=9, p < 0.001

Presence of a suicide-related note

In 29% (n=680) of IPSDS cohort deaths there was evidence of recent communication (i.e. at the time immediately preceding death) of intent to take one's life, through a suicide-related note (physical or digital). There were no differences between men and women, with similar proportions leaving a suicide note (men: 28%, n=505; women: 30%, n=175).

Type of suicide note left

- Among the IPSDS cohort who left a suicide note (n=680), the most common form of communication was a paper note or letter (79%, n=539), followed by text messaging (10%, n=68).
- 80% (n=542) of the IPSDS cohort deaths where a suicide-related note was present received a suicide or equivalent verdict (see Table 3.5.3).
- 14% (n=93) of the IPSDS cohort who left a suicide note did not receive any formal verdict.

Table 3.5.3: IPSDS classification/coroner's verdict, by suicide note 2015–2018, N=2,349

| | | Left suicide note | | Did not leave suicide note | | Unknown if a suicide note was left | |
|--------------------------|-------------------------------|----------------------|-------|----------------------------|-------|------------------------------------|-------|
| Suicide classification | Coroner's verdict* | N | (%) | N | (%) | N | (%) |
| Beyond reasonable doubt | Suicide or equivalent verdict | 542 | (80) | 500 | (68) | 580 | (62) |
| Balance of probabilities | Undetermined/open verdict | 39 | (6) | 101 | (14) | 138 | (15) |
| | Accident/Misadventure | <10 | (<1) | 40 | (5) | 32 | (3) |
| | No formal verdict recorded | 93 | (14) | 97 | (13) | 181 | (19) |
| Total | | 680 | (100) | 738 | (100) | 931 | (100) |

^{*} γ²= 83.1. df=6, p<0.001.

4.0 Conclusion

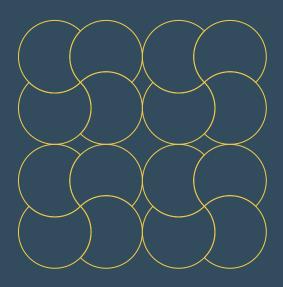
The Irish Probable Suicide Deaths Study (IPSDS) is founded on the availability of coroners' death investigation and administrative data and their relevance to suicide prevention. Secondary analyses of these data provide an in-depth understanding of the characteristics of people who die by probable suicide in Ireland. The IPSDS dataset contains a wealth of detailed retrospective suicide-related information that has not previously been available to policy planners and practitioners working in suicide prevention in Ireland. This study is intended to enhance our understanding of the circumstances and contexts in which suicide deaths occur, and to support our efforts to intervene successfully to prevent such deaths in the future.

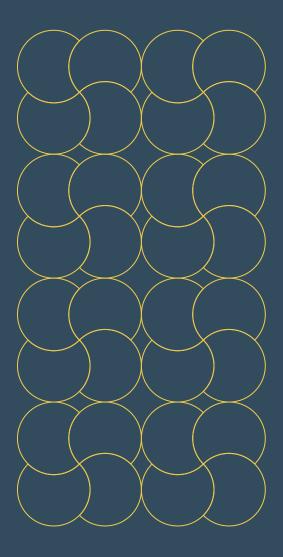
The IPSDS represents the lives of 2,349 individuals who died by probable suicide during 2015–2018, and the families, friends and communities that have been bereaved by their deaths. Without the co-operation of loved ones with coronial death investigations, the provision of detailed information about the deceased, and the hard work of coroners and allied health and legal professionals, the IPSDS would not have been feasible.

Findings arising from the current data analysis indicate that three times more men than women died by probable suicide. The highest number of IPSDS cohort deaths were in those aged between 35–54 years of age. In addition, half of the IPSDS cohort were single at the time of death, while a higher proportion of women (6%) were widowed in comparison with men (2%). In terms of clinical risk factors, 66% of the IPSDS cohort had a history of a mental health condition, 33% had a lifetime substance use history, and 23% had a recorded prior history of self-harm. Half of the IPSDS cohort were known to have been in contact with medical services prior to their death. Of these, 49% were in contact with their GP. For those in contact with medical services, 83% had a history of a mental health condition and 37% had a substance use history. For individuals with a prior history of self-harm, 90% had a history of a mental health condition and 49% had a substance use history. For 65% of the IPSDS cohort, it was unknown whether they had a history of self-harm.

A large number of the IPSDS cohort had adverse events or stressors that may have affected their emotional state. These stressors included, for example, current mental health issues (43%) and relationship difficulties (19%). Differences were observed between men and women in terms of adverse events, with current mental health issues affecting more women (50%) than men (40%), and financial concerns affecting more men (8%) than women (4%). Across the four-year period, 61% of IPSDS cohort deaths were by hanging, 13% were by poisoning, 12% were by drowning, and 4% were by shooting/firearms. IPSDS cohort deaths by drowning increased across age groups, accounting for 23% of deaths among those aged 65 years and over compared with 7% of deaths among young people (aged 15–24 years). There was a temporal increase in the proportion of IPSDS cohort deaths with a suicide or equivalent verdict between 2015 and 2018, from 62% of deaths in 2015 to 77% of deaths in 2018. The IPSDS cohort aged 35–44 years old received the highest proportion of suicide verdicts (74%; beyond reasonable doubt) compared with other age groups.

The importance of generating more timely data on suicide, especially during public health emergencies such as the COVID-19 pandemic, is increasingly recognised. While IPSDS data accessed via coronial files are unavoidably retrospective (deaths occurred more than four years prior to publication), information contained within this report has the potential to support the development of suicide prevention and intervention efforts in Ireland and the implementation of key relevant actions of Connecting for Life.





5.0 References

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6.0 Glossary

Adverse event: A negative past life event, that was experienced by the deceased, recorded in the coronial file and related to one of the following event categories: current mental health issues, relationship difficulties, death/grief, employment issues, conflict with family, financial concerns, health fears.

Central Statistics Office: The statistical agency responsible for the gathering of "information relating to economic, social and general activities and conditions" in Ireland, in particular the National Census which is held every five years.

Chronic pain: Persistent or chronic pain lasting three months or longer, recorded in the coronial file.

Contact with medical services: Evidence in the coronial file of the most recent contact of the deceased with medical services.

Coroner's verdict: A verdict returned by a coroner (usually) following an inquest, in relation to the means by which a death occurred. The range of verdicts open to a coroner or jury include accidental death, misadventure, suicide, open verdict, natural causes (if so found at inquest) and, in certain circumstances, unlawful killing.

Coroner's certificate: An official certificate issued by the coroner. It is the means by which a death is registered with The General Register Office (see below).

Evidence of intent: Where there is direct or indirect evidence of intent to take one's life.

Form 104: Form 104 is an official form issued by the Central Statistics Office (CSO) to the Gardaí if/when the cause of death is not clear. Form 104 collects additional information on the circumstances/location of the death. It helps to determine the final ICD-Code assigned to the death. The information returned on this form is strictly confidential, under the Statistics Act 1993.

General Register Office: The General Register Office (Registrar of Births, Marriages and Deaths) is the central repository for records relating to births, stillbirths, adoptions, marriages, civil partnerships and deaths in Ireland.

Health Research Board: A state body under the aegis of the Department of Health that supports and funds health research and provides evidence to inform policy and practice.

History of mental health conditions: Evidence provided in the coronial file that there was a personal history of a mental health condition. This information could be provided by formal medical records or testimony from family and friends.

HSE National Office for Suicide Prevention (NOSP): An office of the Health Service Executive (HSE) that provides strategic leadership on suicide prevention across the HSE, in collaboration with multiple sectors.

- **Inquest**: An inquest is an official, public enquiry, led by the coroner (and in some cases involving a jury), into the cause of a sudden, unexplained or violent death.
- **Lifetime substance use**: Evidence recorded in the coronial file that the individual had a history of substance use at some point in their lifetime. This information could be found in formal medical records or gathered via testimony from family and friends.
- National Drug-Related Deaths Index (NDRDI): The National Drug-Related Deaths Index (NDRDI) is a database managed by the Health Research Board. It records cases of death by drug and/or alcohol poisoning (such as those due to accidental or intentional overdose) and deaths among people who use drugs and those who are alcohol dependent (such as deaths due to hepatitis C and HIV).
- **Prescribed mental health medication**: Evidence provided in the coronial file that the individual was in receipt of a prescribed mental health medication, also referred to as psychotropic medication. This information could be found in formal medical records or toxicology reports or gathered via testimony from family and friends.
- **Prior self-harm**: Evidence provided in the coronial file that the individual had a history of self-harm. This information could be found in formal medical records or gathered via testimony from family and friends.
- **Substance use**: The term "substance use" refers to the use of drugs or alcohol, and includes substances such as illegal drugs, prescription drugs, inhalants and solvents.
- **Suicide on the balance of probabilities**: The civil standard of proof where it is determined that a death was more likely than not a suicide.
- **Suicide beyond reasonable doubt**: The legal standard of proof where it is determined that a death was suicide beyond any reasonable doubt.
- **Year-of-occurrence suicide data**: Official suicide data based on the year of occurrence of the death. There is generally a delay of approximately 24 months in publishing these data due to the time required for coroners' inquests and late registered deaths.
- Year-of-registration suicide data: Provisional suicide data based on the year a death was registered.

7.0 Appendices

Appendix 1: Form 104

Form 104 (98)

CONFIDENTIAL STATISTICAL RETURN IN RESPECT OF INQUEST

This return will be used solely for the purpose of supplementing the information on the Coroner's Certificate for the better classification of cause of death and will be treated as strictly confidential in accordance with the Statistics Act, 1993. It should be forwarded via the relevant Garda Inspector to the Director General, Central Statistics Office, Vital Statistics Section, Skehard Road, Cork on the adjournment or completion of the inquest

Please answer all relevant questions *

Reference Information:

| 1. Coroner's District * | 2. Date of adjournment or |
|---|---------------------------|
| | Completion of inquest * |
| 3. Member of An Garda Siochana and station Investigating the death: * | |

Information on the deceased:

| 4. Date on which death | occurred. | | | | | |
|------------------------------------|----------------------------------|--|--|--|--|--|
| 5. Address at which death occurred | | | | | | |
| (if not at home) | | | | | | |
| 6. Name, surname and h | nome address of | | | | | |
| deceased. | | | | | | |
| | | | | | | |
| 7. Sex: | | 8. Age at death: | | | | |
| | | Date of Birth: | | | | |
| 9. Marital Status | | | | | | |
| 10. *Most recent domes | stic living arrangement | s (e.g. living alone, with parents, with | | | | |
| spouse/partner etc.).> | | | | | | |
| | | | | | | |
| 11. *Employment | Employee | Unemployed for the last 12 months | | | | |
| status at time of | Self-employed | Unemployed for longer than 12 months | | | | |
| death | death Retired Worked in the home | | | | | |
| | Student | Other, specify | | | | |
| 12. Main occupation | | | | | | |
| (If person was unem | ployed or retired, | «.» | | | | |
| aive last previous occ | cupation) | | | | | |

Medical Details:

| 13. Medical evidence as to | |
|----------------------------|--|
| cause of death. | |
| | |
| | |
| | |

1

Appendix 1: Form 104

| adical details (cont'd): 14. *How injuries were sustained: Describe events surrounding death. (In case of a traffic accident, please state (i) whether deceased was a driver, passenger, cyclist or pedestrian and,> (ii) type of vehicles(s) involved etc)> 15. * Please state the place where the incident occurred. (For example, at home, residential institution, school, sports area, street/road, trade/service area, industrial/ construction area, |
|--|
| Describe events surrounding death. (In case of a traffic accident, please state (i) whether deceased was a driver, passenger, |
| (In case of a traffic accident, please state (i) whether deceased was a driver, passenger, cyclist or pedestrian and,> (ii) type of vehicles(s) involved etc)> 15. * Please state the place where the incident occurred. (For example, at home, residential institution, school, sports area, street/road, trade/service area, industrial/construction area, |
| (i) whether deceased was a driver, passenger, |
| cyclist or pedestrian and,> (ii) type of vehicles(s) involved etc)> 15. * Please state the place where the incident occurred. (For example, at home, residential institution, school, sports area, street/road, trade/service area, industrial/construction area, |
| (ii) type of vehicles(s) involved etc)> 15. * Please state the place where the incident occurred. (For example, at home, residential institution, school, sports area, street/road, trade/service area, industrial/ construction area, |
| 15. * Please state the place where the incident occurred. (For example, at home, residential institution, school, sports area, street/road, trade/service area, industrial/construction area, |
| institution, school, sports area, street/road, trade/service area, industrial/construction area, |
| |
| farm, other) > |
| 16. * Is there any evidence of deceased being alcohol Yes No |
| dependent? |
| * Is there any evidence of deceased being drug dependent? Yes No |
| If drug dependent please specify: |
| type of drug(s) |
| were the drugs prescribed? Yes No |
| |
| 17. * Deaths caused by poison: |
| Please state type of poison, |
| how and where stored. > |
| |
| ner information: |
| 18. * Cases of shooting: how was the firearm obtained? |
| (was it licensed/unlicensed?) > |
| 19. * Please state if any written note etc. was left at the scene |
| (for example, suicide note.) > |
| 20. * Any known medical history |
| (mental/physical, previous contact |
| with medical or social services). > |
| 21 * A ath and have been accompanied by the state of |
| 21. * Any other known contributing factors |
| (for example stress, family/relationship |
| problems, etc.). |
| 22. * Name and address of G.P., hospital doctor |
| or medical attendant (<i>if known</i>). > |
| 23. * Is Post Mortem report available? Yes No |
| 24. * Please state, in your opinion, whether accidental suicidal |
| death was: |
| homicidal undetermined |
| |
| Signature of Sergeant in Charge |
| Sub District |
| add District |
| Date |
| |
| |

Appendix 2: Copy of a coroner's certificate

CORONER'S CERTIFICATE

| Registration ID |
|----------------------------------|
| Registration Area |
| To be filled in by the Registrar |

| | Under Section 41 of the Civil Registration Act, 2004 | | |
|--|---|---------------------|-------------|
| To the Registrar of Births and Deaths f | for the Registration Area of | | |
| | uance of the above Act, I on the | | |
| | | | |
| (a) held an inquest | | | |
| STRIKE OUT (b) adjourned an inque | est at which evidence of identification and medical evidence as | to the cause of dea | ath were |
| WHICHEVER given | | | |
| TWO ARE | | | |
| | t of a post-mortem examination held on | | |
| | not to hold an inquest | | |
| on the dead body and I found as follo | y of | | |
| unu | JW3 | | |
| | | | |
| Date of Death | | | |
| Place of death (full address) | | | |
| Place of Birth of deceased Forename(s), surname, birth surname | and home address of deceased | | |
| rotelianie(s), surname, pir in surname | allu Hollie audi ess oli deceased | | |
| Sex of deceased | | | |
| Marital status of deceased S | | | |
| Personal Public Service Number of dec | ceased | | |
| Date of birth of deceased | | | |
| Age of deceased | | | |
| (in hours if under one day; in | | | |
| one month; in completed m | | | |
| Occupation of deceased (in full detail) | • | | |
| Occupation of deceased (in full detail) |) er 18 years give occupation(s) | | |
| | If deceased was retired, state | | |
| "retired" and give previous | | | |
| If deceased was married, the profession | • | | |
| Forename(s) and birth surname of Fat | · · · · · · · · · · · · · · · · · · · | | |
| Forename(s) and birth surname of Mo | | | |
| Cause of death and duration of last illn | ness | Approximate inter | rval |
| 1. | 1. | between onset an | d death |
| | ! | | |
| Disease or condition | (a) | | |
| directly leading to death. | due to (or as a consequence of) | | |
| | · | | |
| Antecedent causes. | (b) | | |
| Morbid conditions, if | due to (or as a consequence of) | | |
| any, giving rise to the above | ! | | |
| cause, stating the | (-) | | |
| underlying condition last. | (c) | | |
| 11. | 11. | | |
| Other significant | ! | | |
| conditions contributing | ! | | |
| to the death but not related | | | |
| to the disease or condition | | | |
| causing it. | ! | l | |
| | | | Registrar's |
| Witness my hand, this day of | | | Stamp |
| | Forename | | |
| | Surname Coroner for | | |
| | Coroner for | | |
| | Place of Business | | |

Appendix 3: HSE NOSP Expert Review Group – assessment of certainty for probable suicide

| More likely | | Less likely | |
|--|--|---|---|
| Definite* | Probable | Possible | Unlikely |
| Beyond reasonable doubt Coroner's verdict of | High lethality method | I Intermediate lethality method | No evidence suggestive of suicide (intent) |
| suicide Death Note Hanging Previous high lethality attempt Unequivocal intent Toxicology lethal | Method Toxicology Low possibility of rescue Not in treatment Prior self-harm attempt Sign of mental illness | Some evidence of intent In treatment (looking for help) Equivocal intent "Concealed" intent | Low lethality Absent - Any evidence of suicidal ideation Absent - Any evidence of self-harm |

^{*}This includes suicide and suicide equivalent verdicts (e.g. self-caused and took own life) which were not reviewed by the HSE NOSP Expert Review Group.

