



NATIONAL SELF-HARM  
REGISTRY IRELAND

ANNUAL REPORT 2020

MARY JOYCE  
SHELLY CHAKRABORTY  
GEORGIE O'SULLIVAN  
PAWEL HURSZTYN  
CAROLINE DALY  
NIALL McTERNAN  
SARAH NICHOLSON  
ELLA ARENSMAN  
EILEEN WILLIAMSON  
PAUL CORCORAN



National Suicide Research Foundation

Suggested Citation:

Joyce, M, Chakraborty, S, O'Sullivan, G, Hursztyn, P, Daly, C, McTernan, N, Nicholson, S, Arensman, E, Williamson, E, Corcoran, P (2022). National Self-Harm Registry Ireland Annual Report 2020. Cork: National Suicide Research Foundation.

Published by:

National Suicide Research Foundation, Cork.  
© National Suicide Research Foundation 2022

ISSN 1649 4326

This report has been commissioned by the Health Service Executive's National Office for Suicide Prevention.

Hard copies of the Annual Report 2020 are available from:

National Suicide Research Foundation  
4th Floor  
Western Gateway Building  
University College Cork  
Ireland

Tel: +353 21 4205551  
Email: [infonsrf@ucc.ie](mailto:infonsrf@ucc.ie)

Electronic copies of the Annual Report 2020 are available from the website of the National Suicide Research Foundation: [www.nsrif.ie](http://www.nsrif.ie)

N

S

R

F

## Contents

Foreword	3
Executive Summary	4
Recommendations	6
2020 Statistics at a Glance	8
Recent publications from the Registry (2020-2021)	9
Impact of the Registry at Global Level	10
Methods	11
<b>Section I: Hospital Presentations</b>	<b>14</b>
<b>Section II: Incidence Rates</b>	<b>31</b>
<b>Appendix A:</b> Self-Harm Presentations to Hospitals in the Republic of Ireland	34
<b>Appendix B:</b> Recommendations for Next Care Following Self-Harm Presentation	36
<b>Appendix C:</b> Self-Harm Repetition for Individuals who presented to Hospital with Self-Harm in 2020	38
<b>Appendix D:</b> Number and Rate of Persons with Hospital-Presenting Self-Harm in 2020	41
<b>Appendix E:</b> Data briefing 'Hospital-presenting Self-Harm during January-December 2020'	42

## DATA REGISTRATION OFFICERS

The following is the team of people who collected the data that formed the basis of this Annual Report. Their efforts are greatly appreciated.

### HSE West Region

**Eileen Quinn**

Letterkenny University Hospital

**Ailish Melia**

Sligo University Hospital

**Mary Nix**

Mayo University Hospital/ Portiuncula University Hospital/ University Hospital Galway

**James Camien McGuiggan**

Mayo University Hospital

**Catherine Murphy**

University Hospital Limerick/ Ennis Hospital

### HSE South Region

**Karen Twomey**

University Hospital Kerry

**Una Walsh & Ursula Burke**

Bantry General Hospital/ Cork University Hospital/ Mercy University Hospital, Cork

**Tricia Shannon**

University Hospital Waterford/ Wexford General Hospital/ St Luke's General Hospital, Kilkenny/ South Tipperary General Hospital

### HSE Dublin/ North East Region

**Agnieszka Biedrycka & James Camien McGuiggan**

Mater Misericordiae University Hospital, Dublin

**Alan Boon**

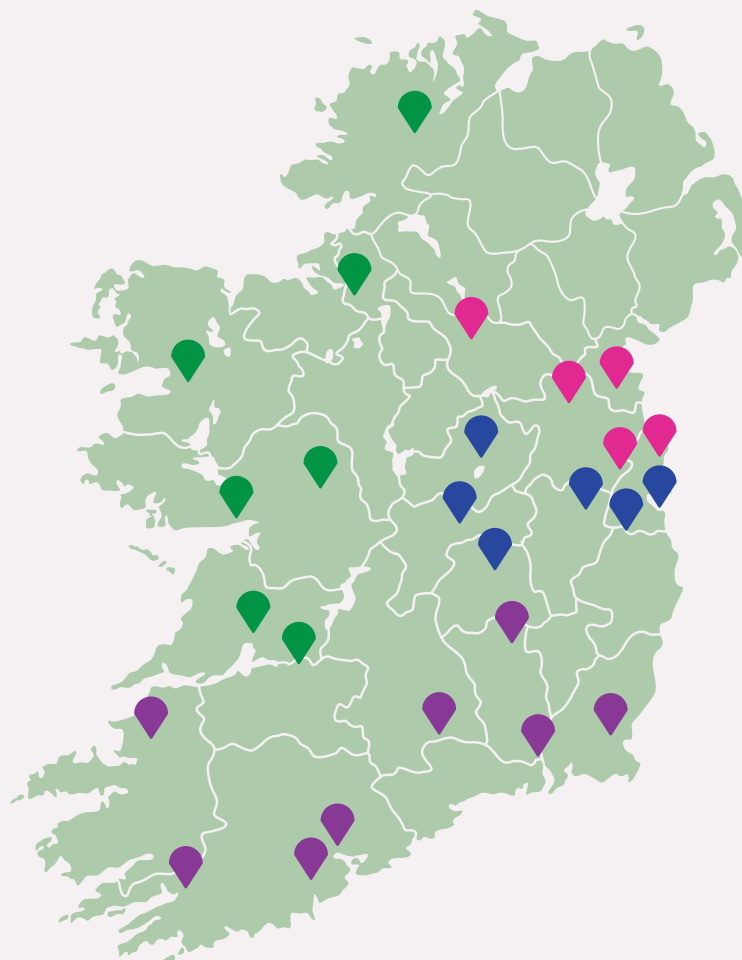
Beaumont Hospital/ Connolly Hospital Blanchardstown/ Children's Health Ireland at Temple Street

**Rita Cullivan**

Cavan General Hospital/ Our Lady of Lourdes Hospital, Drogheda/ Our Lady's Hospital, Navan

**Ciaran Cluskey-Kelly**

Our Lady of Lourdes Hospital, Drogheda



### HSE Dublin/ Midlands Region

**Diarmuid O'Connor**

Midland Regional Hospitals (Mullingar, Portlaoise, Tullamore)/ Naas General Hospital/ Tallaght University Hospital/ Children's Health Ireland at Tallaght University Hospital

**Liisa Aula**

St Michael's Hospital, Dun Laoghaire/ St Vincent's Hospital, Dublin

**Ciaran Cluskey-Kelly**

St Michael's Hospital, Dun Laoghaire

**James Camien McGuiggan**

St Vincent's Hospital, Dublin

**Laura Shehan**

St James's Hospital, Dublin

**Edel McCarra & Alan Boon**

Children's Health Ireland at Crumlin

## Acknowledgements

**Alan O'Shea**, aosdesign Graphic Design  
**Leon Fan**, NSRF Technical Support  
**Eileen Hegarty** Administration & Finance

We would like to acknowledge the assistance of staff at the Department of Health, the HSE National Office for Suicide Prevention, the respective HSE regions and the individual hospitals that have facilitated the work of the National Self-Harm Registry Ireland.





Western Gateway Building, University College Cork

## Foreword

The National Self-Harm Registry Ireland was established in 2000 at the request of the Department of Health and Children, by the National Suicide Research Foundation working in collaboration with the School of Public Health, University College Cork. It is funded by the Health Service Executive's National Office for Suicide Prevention. It is the World's first national registry of cases of intentional self-harm presenting to hospital emergency departments.

The Registry fulfils a major objective in providing timely data on trends and groups at high risk of self-harm in Ireland. The Registry has been able to assess the impact of the COVID-19 pandemic in 2020 and its associated restrictions on hospital-presenting self-harm, and has provided regular updates to the Department of Health and relevant decision makers.

This report relates to hospital-presenting self-harm in 2020. For the first time, the data were recorded on an upgraded data entry system that was developed based on the Castor electronic data capture software. We have sought to increase the range of data items being captured by the Registry in order to provide more valuable information. Some of the extra data collected, relating to the current care being received by the person who presented to hospital, are described in this report.

The year 2020 saw the publication of 'Sharing the Vision: A Mental Health Policy for Everyone'.

Sharing the Vision is the successor to 'A Vision for Change' which was launched in 2006. As the new national mental health policy, it aims to enhance the provision of mental health services and supports across a broad continuum from mental health promotion, prevention and early intervention, to acute and specialist mental health service delivery during the period 2020-2030. This policy development is very welcome and with successful implementation, it will deliver a mental health service that meets the needs of those who avail of it, which includes some of the individuals who present to hospital as a result of self-harm.

This report is being published approximately 12 months later than usual. Restrictions associated with the COVID-19 pandemic suspended access to most hospitals for our data registration officers. The cyberattack on the Health Service Executive in May 2021 caused further delays in data collection. The pandemic and the cyberattack have led to changes within hospitals, some of which have impacted on the work practices of Registry staff. I am especially grateful for the on-going commitment and dedication of the data registration officers and to the hospital staff for facilitating the operation of the Registry during such challenging times.

### **Dr Paul Corcoran**

Head of Research,  
National Suicide Research Foundation, Cork.

# Executive Summary

This is the nineteenth annual report from the National Self-Harm Registry Ireland. It is based on data collected on hospital presentations of self-harm in the Republic of Ireland in 2020. Data are reported on 31 hospitals including 28 of the 29 Emergency Departments (ED) which also cover three Children's Health Ireland hospitals. In addition, data are reported for three Level 2 hospitals. Data for the full calendar year were not available for one hospital in the Dublin region which is not presented in this report. The data presented in this report provide a unique opportunity to compare the first year of the COVID-19 pandemic to pre-pandemic years.

## Main findings

In 2020, the National Self-Harm Registry Ireland recorded 11,932 presentations to hospitals as a result of self-harm, involving 9,063 individuals. These figures do not include presentations to one hospital. We estimated the number of presentations and presenters to this hospital using data from the previous year in order to provide national figures of 12,553 self-harm presentations by 9,550 individuals. From here onwards, all rates refer to those calculated using this estimate. The age-standardised rate of individuals presenting to hospital following self-harm in 2020 was 200 per 100,000. This was 3% lower than the rate in 2019, and 10% lower than the peak rate recorded by the Registry in 2010 (223 per 100,000).

In 2020, the national female rate of self-harm was 224 per 100,000, 1% lower than 2019. The male rate of self-harm in 2020 was 176 per 100,000, 6% lower than 2019. Consistent with previous years, the peak rate for females was in the 15-19 years age group at 779 per 100,000. The peak rate for males in 2020 was in 25-29 year olds at 430 per 100,000. This is different to 2019 where the peak rate was recorded in 20-24 year old males at 485 per 100,000. These rates imply that one in every 128 girls in the age group 15-19 years, and one in every 233 males in the age group 25-29 years presented to hospital in 2020 as a consequence of self-harm.

There were 899 presentations made by residents of homeless hostels and people of no fixed abode in 2020, accounting for approximately 7.5% of all presentations recorded

by the Registry. This is an increase from 2019 when presentations by these individuals accounted for 5.4% of all presentations.

The number of monthly presentations varied over the course of the year with fewer presentations in March, April and December, coinciding with COVID-19 restrictions. The lower than expected number of presentations during these months was most pronounced in April (-22%). In some instances, ED closures during the COVID-19 pandemic accounted for changes in the number of presentations to individual hospitals. An example of this was the temporary relocation of acute paediatric services including ED at Tallaght to the children's hospitals at Crumlin and Temple Street from March to September 2020.

Consistent with previous years, intentional drug overdose was the most common method of self-harm, involved in almost two-thirds (62%) of self-harm presentations in 2020. Minor tranquilisers were the most common drug type used which is the same as previous years. Self-cutting was the other most common method, recorded in 31% of all presentations. Attempted hanging was involved in 9% of all self-harm presentations (12% for males, 6% for females). Attempted drowning was involved in 4% of presentations and although rare as a method of self-harm, self-poisoning was involved in 2% of presentations. Alcohol was involved in 33% of all presentations and was more often involved in male than female presentations (38% and 28% respectively). In general, the type of method used in self-harm was similar to recent years.

In 2020, for 68% of presentations, the patient was assessed by a member of the mental health team in the presenting hospital (n = 7,289). For a further 7%, an assessment was arranged in the presenting hospital (n = 701). Most commonly, in 49% of presentations, individuals were discharged following treatment in the ED. For the majority of these individuals, 80% were provided with a recommended referral or follow-up appointment. In 2020, in 11% of presentations, the individual left the ED before a next care recommendation could be made. There was considerable variation in the recommendations for next care across hospital groups, particularly in relation to the proportions of patients



admitted to the presenting hospital, leaving before a recommendation, or receiving a mental health assessment. For example, inpatient care (irrespective of type and whether the patient refused) was recommended for between 22% and 40% of adult presentations across six hospital groups while the proportion of adult patients who left before a recommendation could be made ranged from 9% to 13%. Similarly, the proportion of adults discharged following emergency treatment ranged from 38% in the RCSI Hospital Group to 59% in the University Limerick Hospital Group. This observed variation is likely to be due to variation in the availability of resources and services, but it also indicates that assessment and management procedures for self-harm patients are likely to vary across the country.

In 2020, for the first time in the history of the Registry, we sought to gather information on the current care for individuals presenting to hospital with self-harm. For one quarter of presentations (25%; n = 2,988), it was noted that the individual was currently engaged with

HSE mental health services. In a further 2% of presentations, it was noted that the patient had previously been referred and was awaiting an appointment with mental health services (n = 277). For 5% of presentations, individuals were either attending counselling or addiction services. Individuals were engaged with homeless services in 3% of cases.

There was a slight increase in the proportion of presentations accounted for by repetition in 2020 in comparison to 2019 (24% vs 22%). Of the 9,063 self-harm patients who presented to hospital in 2020, 1,421 (15.7%) made at least one repeat presentation to hospital during the calendar year. Therefore, repetition continues to pose a major challenge to hospital staff and family members involved. In 2020, at least five self-harm presentations were made by 144 individuals. These patients account for 1.6% of all self-harm patients. As in previous years, self-cutting was associated with an increased level of repetition whereby one in five individuals who used this method had a repeat presentation in 2020.

#### **Mary Joyce**

Manager, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Shelly Chakraborty**

Data Analyst, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Georgie O'Sullivan**

Data Manager (from April 2021), National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Pawel Hursztyn**

Research Officer, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Caroline Daly**

Postdoctoral Researcher, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Niall McTernan**

Data Manager (until April 2021), National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Sarah Nicholson**

Data Protection Officer/ Quality Manager, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

#### **Ella Arensman**

Chief Scientist, National Suicide Research Foundation, Cork.  
Professor of Public Mental Health, School of Public Health, University College Cork

#### **Eileen Williamson**

Chief Executive Officer, National Suicide Research Foundation, Cork

#### **Paul Corcoran**

Head of Research, National Suicide Research Foundation, Cork

# Recommendations

## Clinical management of self-harm

The proportion of patients that received a mental health assessment (or for whom an assessment was arranged) in the presenting hospital (75%) remains similar to 2019, yet it is higher than that reported in other countries. The reported variation across hospital groups in the provision of mental health assessments and recommended next care underlines the importance of the implementation of a standardised and evidence-informed approach to the assessment and treatment of patients who present to hospital following self-harm. The National Clinical Programme for Self-Harm and Suicide-Related Ideation has been implemented across 24 adult EDs in Ireland. One of the aims of the programme is to improve the response received by every individual presenting with self-harm, regardless of the self-harm involved. The Programme provides the following evidence-based recommendations on the management of self-harm in EDs:<sup>1</sup>

- All patients should receive an empathic, compassionate and timely response within the ED.
- All patients receive an expert biopsychosocial assessment and an assessment of needs and risks.
- In all cases every effort should be made to encourage the patient to call a relative/supportive friend to assist in the assessment and management.
- All patients should receive follow up and connecting to next appropriate care.

The 2020 findings from the Registry indicate that there remains considerable variation in recommended next care across hospitals, and that on average, one in nine patients leave the ED without being seen by a clinician or without a next care recommendation. Ongoing support is warranted to optimise the implementation of the National Clinical Programme and the application of measures to standardise the provision of care for people who engage in self-harm.

## Self-harm among young people

Over the past 19 years, the highest rates of self-harm have consistently been observed in young people. Therefore, there is a need to ensure timely and appropriate child and adolescent mental health services in Ireland. This year's Registry findings support the priorities identified by the HSE's National Service Plan 2021<sup>2</sup> and the National Strategy to Reduce Suicide in Ireland, 2015-2024, *Connecting for Life: Goal 3, Action 3.3*.<sup>3</sup> Specifically, evidence-based mental health programmes as well as appropriate referral and treatment options are crucial to address the needs of young people in the key transition stages between childhood and adolescence into adulthood. Increases in self-harm among children aged 10-14 years indicate that the age of onset of self-harm is decreasing. These trends underline the need for preventative interventions such as school-based universal mental health programmes that have been found to be effective in preventing suicide attempts in young adolescents.<sup>4</sup> Programmes in primary and post-primary settings are required, and these should focus on preventing suicidal behaviour as well as building resilience.

## Self-harm among persons experiencing homelessness

In 2020, there was a further increase in the proportion of presentations by persons experiencing homelessness. This group of individuals is a particularly vulnerable population, at high risk of repetition and mortality from all causes.<sup>5</sup> Further work to examine the specific risk and protective factors associated with self-harm among persons experiencing homelessness is required. In accordance with Goal 3, Action 3.1 of *Connecting for Life*, these findings underline the need for targeted suicide prevention interventions among this group.

<sup>1</sup>Health Service Executive (2016). National Clinical Programme for the Assessment and Management of Patients Presenting to the Emergency Department following Self-Harm. [www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/national-clinical-programme-for-the-assessment-and-management-of-patients-presenting-to-emergency-departments-following-self-harm.pdf](http://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/national-clinical-programme-for-the-assessment-and-management-of-patients-presenting-to-emergency-departments-following-self-harm.pdf)

<sup>2</sup>Health Service Executive (2021). National Service Plan 2021. [www.hse.ie/eng/services/publications/serviceplans/national-service-plan-2021.pdf](http://www.hse.ie/eng/services/publications/serviceplans/national-service-plan-2021.pdf)

<sup>3</sup>Health Service Executive (2015). *Connecting for Life: Ireland's National Strategy to Reduce Suicide 2015-2020*. [www.hse.ie/eng/services/list/4/mental-health-services/nosp/preventionstrategy/connectingforlife.pdf](http://www.hse.ie/eng/services/list/4/mental-health-services/nosp/preventionstrategy/connectingforlife.pdf)

<sup>4</sup>Wasserman, D, et al. (2015). School-based suicide prevention programmes: The SEYLE cluster-randomised, controlled trial. *The Lancet*, 385:136-44.

<sup>5</sup>Haw, C., Hawton, K., & Casey, D. (2006). Deliberate self-harm patients of no fixed abode. *Social Psychiatry and Psychiatric Epidemiology*, 41(11), 918-925.



## Restricting access to means

Restricting access to means has been highlighted internationally as an effective strategy in reducing the incidence of self-harm or suicide.<sup>6</sup> An example of this is the positive impact shown for measures to reduce access to sites where people frequently engage in attempted or fatal drowning.<sup>7</sup> Initiatives to reduce access to means continue to be critical to reduce the incidence of self-harm in Ireland. Intentional drug overdose (IDO) is the most common method of self-harm recorded by the Registry. Given the ongoing high incidence of paracetamol-related IDO, and research which indicates that most individuals who engage in IDO with paracetamol purchase these drugs from non-pharmacy outlets,<sup>8</sup> restricting the sale of paracetamol to pharmacy outlets only may have a positive impact on reducing rates of paracetamol-related IDO as seen in other countries.<sup>9,10</sup> A similar positive effect was reported for codeine-related IDO whereby a reduction of 20% was observed following the implementation of guidance on restricted use of codeine-containing products in Ireland in 2010.<sup>11</sup> Measures to reduce access to drugs frequently used in IDO are in line with *Connecting for Life*, Goal 6.

The high incidence of attempted hanging identified in this report signifies the need for innovative and intensified efforts to reduce self-harm and suicide by hanging. These should include monitoring of media and social media platforms which increasingly have portrayed suicide by hanging and other highly lethal methods.<sup>12</sup> Such findings also underline the need for more in-depth research into self-harm method escalation, from low to high lethality, especially among children and adolescents.

A comprehensive suicide risk assessment, combined with psychiatric and psychosocial assessment, is vital for individuals who present with highly lethal self-harm considering the high risk of subsequent suicide for this group.<sup>13</sup>

## Using surveillance data to address misinformation

The COVID-19 pandemic and associated measures to address it led to an increase in individual and population level risk factors for self-harm and suicide (e.g. anxiety, social isolation, loneliness). As a result, there were concerns that the pandemic may result in an increase in self-harm and suicide. Ongoing surveillance is important to monitor the potential impact of the pandemic on such behaviours. During the COVID-19 pandemic, the Registry published periodic data briefings on the monthly number of self-harm presentations to a select number of hospitals during 2020. Hospitals included in data briefings were those that had real-time data available and were nationally-representative given they were spread across the country and located in the centre of large cities, in city suburbs and in large towns. These data briefings were able to accurately determine no significant increase in self-harm rates during the early stages of the pandemic. This is in line with subsequent international reports whereby suicide numbers remained unchanged or declined in the initial months of the pandemic.<sup>14</sup> The use of Registry data is fundamental in addressing misinformation, in particular during COVID-19. Ongoing surveillance is important, and the publication of data briefings remains a priority of the Registry to monitor the impact of the pandemic and concurrent public health emergencies on self-harm and suicide.

<sup>6</sup>Zalsman, G., Hawton, K., Wasserman, D., van Heeringen, K., Arensman, E., Sarchiapone, M., ... & Zohar, J. (2016). Suicide prevention strategies revisited: 10-year systematic review. *The Lancet Psychiatry*, 3(7), 646-659.

<sup>7</sup>Pirkis, J., Spittal, M. J., Cox, G., Robinson, J., Cheung, Y. T. D., & Studdert, D. (2013). The effectiveness of structural interventions at suicide hotspots: a meta-analysis. *International Journal of Epidemiology*, 42(2), 541-548.

<sup>8</sup>Simkin S, Hawton K, Kapur N, Gunnell D (2012) What can be done to reduce mortality from paracetamol overdoses? A patient interview study. *QJM* 105(1):41-51. <https://doi.org/10.1093/qjmed/hcr135>.

<sup>9</sup>Daly, C., Griffin, E., McMahon, E., Corcoran, P., Webb, R. T., Ashcroft, D. M., & Arensman, E. (2020). Paracetamol-related intentional drug overdose among young people: a national registry study of characteristics, incidence and trends, 2007-2018. *Social Psychiatry and Psychiatric Epidemiology*, 1-9.

<sup>10</sup>Morthorst, B. R., Erlangsen, A., Nordentoft, M., Hawton, K., Hoegberg, L. C. G., & Dalhoff, K. P. (2018). Availability of paracetamol sold over the counter in Europe: a descriptive cross-sectional international survey of pack size restriction. *Basic & Clinical Pharmacology & Toxicology*, 122(6), 643-649.

<sup>11</sup>Birchall, E., Perry, I. J., Corcoran, P., Daly, C., & Griffin, E. (2021). The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose. *European journal of public health*, 31(4), 853-858.

<sup>12</sup>Sinyor, M., Schaffer, A., Nishikawa, Y., Redelmeier, D. A., Niederkrotenthaler, T., Sareen, J., ... & Pirkis, J. (2018). The association between suicide deaths and putatively harmful and protective factors in media reports. *CMAJ*, 190(30), E900-E907.

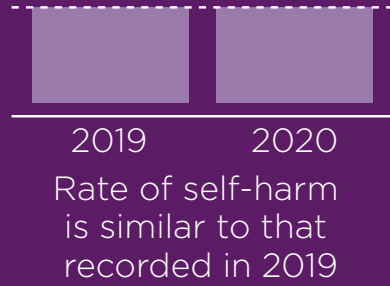
<sup>13</sup>Geulayov, G., Casey, D., Bale, L., Brand, F., Clements, C., Farooq, B., ... & Hawton, K. (2019). Suicide following presentation to hospital for non-fatal self-harm in the Multicentre Study of Self-harm: a long-term follow-up study. *The Lancet Psychiatry*, 6(12), 1021-1030.

<sup>14</sup>Pirkis, J., John, A., Shin, S., DelPozo-Banos, M., Arya, V., Analuisa-Aguilar, P., ... & Spittal, M. J. (2021). Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries. *The Lancet Psychiatry*, 8(7), 579-588.

# 2020 Statistics at a Glance

Presentations  
**12,553**

Persons  
**9,550**



## RATES:

**200**  
per 100,000

**1 in every 500**  
had a self-harm act



**Male:** 25-29 year-olds  
**1 in every 233**



**Female:** 15-19 year-olds  
**1 in every 128**

PEAK RATES WERE AMONG YOUNG PEOPLE

## TIME:



Peak time  
**9pm**



**Almost half**  
of presentations made between 5pm-1am



**12%**



**22%**



**11%**



There were fewer presentations in March, April and December coinciding with COVID-19 restrictions

## METHOD:

**2 in every 3**  
involved **overdose**



**1 in every 3**  
involved **alcohol**



**Men**



**Women**

**3 in every 10**  
involved **self-cutting**



## TREATMENT:

**68%** received an assessment in the presenting hospital

**80%** received a follow-up recommendation after discharge

**11%** left ED before a recommendation was made



**1 in 4**  
persons had a repeat attendance in 2020



**1 in 4**  
persons were attending HSE mental health services

## Recent publications from the Registry (2020-2021)

The Registry disseminates findings from the data we collect in various ways. One way in which data are disseminated is via peer-reviewed articles that are published in academic journals. Information on a selection of articles published in 2020 and 2021 is provided below. As a result of challenges to data collection during 2020 and subsequent delays with the publication of national data via our Annual Report, we looked at other ways to present findings from data collected by the Registry. In December 2020, we published

our first data briefing on the monthly number of self-harm presentations to a selection of hospitals during 2020. Hospitals included in data briefings were those that had data available and were nationally-representative given they were spread across the country and located in the centre of large cities, in city suburbs and in large towns. An example of one of these data briefings is provided in Appendix E. Data briefings are also available on our website: [www.nsrif.ie/findings/briefings/](http://www.nsrif.ie/findings/briefings/)

### Factors explaining variation in recommended care pathways following hospital-presenting self-harm: a multilevel national registry study

#### Background

People who present to hospital following self-harm are at high risk of suicide. Despite this, there are considerable variations in the management of this group across hospitals and the factors influencing such variations are not well understood. The aim of this study was to identify the specific hospital and individual factors associated with care pathways following hospital-presenting self-harm.

#### Method

Data on presentations to hospitals by those aged 18 years and over were obtained from the National Self-Harm Registry Ireland for 2017 and 2018. Factors associated with four common outcomes following self-harm (self-discharge, medical and psychiatric admission and psychosocial assessment before discharge) were examined using multilevel Poisson regression models.

#### Findings

Care pathways following self-harm varied across hospitals and were influenced by both hospital and individual factors. Individual factors were primarily associated with self-discharge (including male gender, younger age and alcohol

involvement), medical admission (older age, drug overdose as a sole method and ambulance presentations) and psychiatric admission (male gender, methods associated with greater lethality and older age). The hospital admission rate for self-harm was the only factor associated with all outcomes examined. The availability of psychiatric in-patient facilities and specialist mental health staff contributed to variation in psychiatric admissions and psychosocial assessments prior to discharge. Hospital factors explained the majority of observed variation in the provision of psychosocial assessments.

#### Conclusion

Characteristics of the presenting hospital and hospital admission rates influence the recommended care pathways following self-harm. Provision of onsite mental health facilities and specialist mental health staff has a strong impact on psychiatric care of these patients.

**Source:** Griffin E, Gunnell D, Corcoran P. Factors explaining variation in recommended care pathways following hospital-presenting self-harm: a multilevel national registry study. *BJPsych open*. 2020 Nov;6(6). <https://doi.org/10.1192/bjo.2020.116>

### Factors associated with psychiatric admission and subsequent self-harm repetition: a cohort study of high-risk hospital-presenting self-harm

#### Background

Individuals presenting to hospital with self-harm of high lethality or high suicidal intent are at high risk of subsequent suicide.

#### Aim

To examine factors associated with psychiatric admission and self-harm repetition following high-risk self-harm (HRSH).

#### Method

A cohort study of 324 consecutive HRSH patients was conducted across three urban hospitals (December 2014-February 2018). Information on self-harm repetition was extracted from the National Self-harm Registry Ireland. Logistic regression models examined predictors of psychiatric admission and self-harm repetition. Propensity score (PS) methods were used to address confounding.

#### Findings

Forty percent of the cohort were admitted to a psychiatric

inpatient setting. Factors associated with admission were living alone, depression, previous psychiatric admission, suicide note and uncommon self-harm methods. History of emotional, physical or sexual abuse was associated with not being admitted. Twelve-month self-harm repetition occurred in 17.3% of cases. Following inverse probability weighting according to the PS, psychiatric admission following HRSH was not associated with repetition. Predictors of repetition were recent self-harm history, young age (18-24 years) and previous psychiatric admission.

#### Conclusion

Findings indicate that psychiatric admission following HRSH is not associated with repeated self-harm and reaffirms the consistent finding that history of self-harm and psychiatric treatment are strong predictors of repetition.

**Source:** Cully G, Corcoran P, Leahy D, Cassidy E, Steeg S, Griffin E, Shiely F, Arensman E. Factors associated with psychiatric admission and subsequent self-harm repetition: a cohort study of high-risk hospital-presenting self-harm. *Journal of mental health*. 2021 Nov 2;30(6):751-9. <https://doi.org/10.1080/09638237.2021.1979488>

## The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose

### Background

Concerns about the misuse of codeine led to the introduction of guidance restricting the supply of over-the-counter (OTC) codeine-containing products in Ireland in 2010. The aim of this study was to examine the impact of this guidance on the national rate of hospital-presenting self-harm involving codeine-related intentional drug overdose (IDO).

### Methods

Presentations involving IDO to Irish general hospitals between 1 January 2007 and 31 December 2013, as recorded by the National Self-Harm Registry Ireland, were analyzed. Event-based rates per 100 000 were calculated using national population data. Poisson regression models were used to assess rate changes between pre- and post-guidance periods and to calculate excess presentations.

### Findings

Between January 2007 and December 2013, a total of 57 759 IDOs were recorded, with 4789 (8.3%) involving a

codeine-containing product. The rate of codeine-related IDOs was 20% lower in the period following implementation of the guidance (incidence rate ratio: 0.80; 95% CI: 0.75 to 0.85), representing a total of 509 (95% CI: 624, 387) fewer codeine-related IDOs in that period. Reductions were observed across all ages and were more pronounced for females (0.76, 0.71 to 0.82) than males (0.87, 0.79 to 0.97). The rate of IDOs involving other drugs decreased by 3% in the same period (0.97, 0.95 to 0.98).

### Conclusion

Our findings indicate that the rate of codeine-related IDOs was significantly lower in the period following the implementation of the guidance. There is a large body of evidence supporting the restriction of potentially harmful medication as an effective strategy in suicide prevention.

**Source:** Birchall E, Perry IJ, Corcoran P, Daly C, Griffin E. The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose. *European journal of public health*. 2021 Aug;31(4):853-8. <https://doi.org/10.1016/j.eclim.2020.100378>

## IMPACT OF THE REGISTRY AT GLOBAL LEVEL

### \*Multicentre Self-Harm Surveillance System in Russia

At the request of the World Health Organisation (WHO), in 2020/2021, the NSRF's WHO Collaborating Centre for Surveillance and Research in Suicide Prevention (WHOCC) continued to coordinate the development and implementation of the first multi-centre self-harm surveillance system in Russia, involving three regions: Stavropol Krai, Zabaykalsky Krai and Sverdlovsk Oblast.

### \*The National Suicide Research Foundation ceased all work with Russia in December 2021.

### Development of a self-harm surveillance system in Kazakhstan

At the request of the WHO, the NSRF supported the development of a self-harm surveillance system in two pilot regions in Kazakhstan: Kostanay and Turkistan.

In 2021, the NSRF coordinated first meetings with key representatives and delivered training workshops to enhance surveillance of hospital-presented self-harm on August 24th.

### Technical support for the establishment of self-harm surveillance systems in Guyana, Suriname and Trinidad Tobago

Since August 2021, the NSRF is providing technical support for the establishment of self-harm surveillance systems in Guyana, Suriname and Trinidad Tobago in collaboration with the Pan American Health Organisation (PAHO)/ WHO Office in Washington. The NSRF facilitated training workshops on developing and implementing self-harm surveillance systems in the three PAHO countries with key stakeholders on November 30th and December 16th.

The NSRF also contributed to a seminar on suicide prevention and self-harm surveillance in the Western Pacific Region in 2021 in collaboration with the Australian Institute for Suicide Research and Prevention, Griffith University and the WHO.

### Technical assistance for introducing a surveillance system in Poland

At the request of the WHO, the Ministry of Health and the Institute of Psychiatry and Neurology (IPIN), the NSRF provided technical assistance for introducing a surveillance system in Poland. In November 2021, the NSRF provided support in preparing an APW to provide expert advice to national partners on the practicalities of the establishment and start of the pilot implementation of a Multi-centre self-harm surveillance system in a pilot region.

# Methods

## Background

The National Suicide Research Foundation was founded in November 1994 by the late Dr Michael J Kelleher and is governed by a Board of Directors. The National Suicide Research Foundation team is led by Ms Eileen Williamson (Chief Executive Officer), Dr Paul Corcoran (Head of Research) and Professor Ella Arensman (Chief Scientist). Dr Paul Corcoran is also Head of the National Self-Harm Registry Ireland. Dr Mary Joyce is the Manager of the Registry.

## Funding statement

The National Self-Harm Registry Ireland is a national surveillance system which monitors the occurrence of hospital-presenting self-harm. It was established by the National Suicide Research Foundation at the request of the Department of Health and Children and is funded by the Health Service Executive's National Office for Suicide Prevention. This report has been commissioned by the National Office for Suicide Prevention.

## Definition and terminology

The Registry uses the following definition of self-harm: 'an act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour, that without intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences'. This definition was developed by the WHO/Euro Multicentre Study Working Group and was associated with the term 'parasuicide'. Internationally, the term parasuicide has been superseded by the term 'deliberate self-harm' and consequently, the Registry has adopted the term 'self-harm'. The definition includes acts involving varying levels of suicidal intent and various underlying motives such as loss of control, cry for help or self-punishment.

## Inclusion criteria

- All methods of intentional self-harm, as listed in the 10th Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) codes of X60-X84, are included i.e., drug overdoses, alcohol overdoses, lacerations, attempted drownings, attempted hangings, gunshot wounds, etc. where it is clear that the self-harm was intentionally inflicted.
- All individuals who are alive on admission to hospital following a self-harm act are included.

## Exclusion criteria

The following cases are **NOT** considered to be self-harm:

- Accidental overdoses of medicinal or illegal drugs e.g., an individual who takes additional medication in the case of illness or used drugs for recreational purposes, without any intention to self-harm.

- Alcohol overdoses alone where the intention was not to self-harm.
- Individuals who are dead on arrival at hospital as a result of suicide.

## Quality control

The validity of the Registry findings is dependent on the standardised application of the case-definition and inclusion/ exclusion criteria. The data are continuously checked for consistency and accuracy. In addition, the Registry also undertakes a cross-checking process in which pairs of Data Registration Officers independently collect data from two hospitals for the same consecutive series of attendances to the ED. While cross-checking was not conducted on 2020 data because of hospital access issues related to the pandemic, in previous years, results of the cross-checking process have indicated that there is a very high level of agreement between Data Registration Officers.

## Data recording

The Registry upgraded the data entry system in 2020 by moving to a cloud-based clinical data management platform, Castor Electronic Data Capture (EDC), which meets all European Union standards related to secure data storage of health research data. Data are available in real-time as Data Registration Officers input data to this electronic system. The move to Castor EDC for the electronic processing of Registry data was a positive and necessary update for several reasons including its modern design, user friendly interface, secure log-in, real-time access and ease of data upload. Castor EDC includes several new features such as data monitoring, query function, comment option, progress bar for each data entry, and audit trails. These new features have enhanced the way the Registry manages data and completes quality checks.

A separate software programme is used to generate an ID code for each patient based on specific data items including patient sex, data of birth and name. The generated ID code is then recorded in the Registry dataset via Castor EDC while patient identifiers are not.

All Data Registration Officers received intensive training on the use of Castor EDC and the code generator software before the implementation of these systems. Ongoing training and support are provided by the Registry team on a regular basis.

## Data items

A minimal dataset has been developed to determine the extent of self-harm, the circumstances relating to both the act and the individual, and to examine trends by area. While the data items below will enable the data processing system to avoid duplicate recording and to recognise repeat acts of self-harm by the same individual, it is impossible to identify an individual based on the data held in the Registry database.

**Initials**

Initial letters from an individual self-harm patient's name are recorded in an encrypted form via the code generator software programme for the purposes of avoiding duplication, ensuring that repeat episodes are recognised and calculating incidence rates based on persons rather than events.

**Gender**

Male or female is recorded when known.

**Date of birth**

Date of birth is recorded in an encoded format to further protect the identity of the individual. As well as being used to identify repeat self-harm presentations by the same individual, the date of birth is used to calculate age.

**Area of residence**

Patient addresses are coded to the appropriate electoral division and small area code where applicable.

**Date and hour of attendance at hospital**

The date of attendance and hour of attendance (in 24-hour format) is recorded.

**Mode of arrival**

The mode of arrival to hospital is recorded. Information is recorded about patients who were brought to hospital by Ambulance or Other Emergency Services (e.g. Garda) and by whom (e.g. family member), where known.

**Method(s) of self-harm**

The method(s) of self-harm are recorded according to the ICD-10 codes for intentional injury (X60-X84). The main methods are overdose of drugs and medicaments (X60-X64), self-poisonings by alcohol (X65), poisonings which involve the ingestion of chemicals, noxious substances, gases and vapours (X66-X69) and self-harm by hanging (X70), by drowning (X71) and by sharp object (X78). Some individuals may use a combination of methods e.g., overdose of medications and self-cutting. In this report, results generally relate to the 'main method' of self-harm. In keeping with standards recommended by the WHO/Euro Study on Suicidal Behaviour, the 'main method' is taken as the most lethal method employed. For acts involving self-cutting, the treatment received is recorded when known. From 2020, further detail is also recorded on certain self-harm methods such as X70 (whether it was hanging, strangulation or suffocation) and X78 (further information on wounds).

**Drugs taken**

Where applicable, the name and quantity of the drugs taken are recorded.

**Medical card status**

Whether the individual presenting has a medical card or not is recorded.

**Mental health assessment**

Whether the individual presenting had an assessment by the psychiatric team in the presenting hospital is recorded.

**Recommended next care**

Recommended next care following treatment in the hospital ED is recorded.

**Current care**

In 2020, coinciding with the move to the new data management platform, we added a new variable to gather information on the current care of the patient and whether they are engaged with hospital/community-based services i.e. mental health service supports, addiction services, homeless services etc.

**Confidentiality and data protection**

Confidentiality is strictly maintained. The National Suicide Research Foundation is registered with the Data Protection Agency and complies with the Irish Data Protection Act of 1988, the Irish Data Protection (Amendment) Act of 2003 and the General Data Protection Regulation (GDPR) 2018. All staff members are trained in GDPR and adhere to all GDPR guidelines when collecting and working on data. Only anonymised data are released in aggregate form in reports. The names and addresses of patients are not recorded in the Registry database. Individuals may request to access their information or to have their information withdrawn from the Registry at any time by contacting the Registry team.

**Ethical approval**

Ethical approval has been granted by the National Research Ethics Committee of the Faculty of Public Health Medicine. The Registry has also received ethical approval from individual hospital and Health Service Executive (HSE) ethics committees. In 2020, the Registry received approval from the Health Research Consent Declaration Committee to continue the operation of the Registry utilising a waiver of consent.

**Registry coverage**

In 2020, self-harm data were collected from all hospitals but one in the Republic of Ireland (pop: 4,977,400). The hospitals for which data are presented in this report are listed by hospital group in **table opposite**.

In total, self-harm data were collected for the full calendar year of 2020 for 28 of the 29 EDs that operated in Ireland during this year. This is inclusive of three children's hospitals.

In 2013, a number of hospital EDs were re-designated as Model 2 status hospitals as part of the HSE's *Securing the Future of Smaller Hospitals* framework, with some of these hospitals closing their ED and others operating on reduced hours. The hospitals included in this report which continue to have ED on reduced hours or provide an Urgent Care Centre as an alternative are: Bantry General Hospital, Ennis Hospital, and St. Michael's Hospital, Dun Laoghaire. These hospitals are referred to as Model 2 hospitals throughout this report. Data from these hospitals continue to be recorded by the Registry for 2020.

**Population data**

For 2020, the Central Statistics Office population estimates were utilised. These estimates provide age-sex-specific population data for the country and its constituent regional authority areas. Proportional differences between the 2020 regional authority



population estimates and the equivalent National Census 2016 figures were calculated and applied to the National Census 2016 population figures for Irish cities, counties and HSE region figures in order to derive population estimates for 2020.

## Calculation of rates

In 2020, as data were unavailable for one hospital, we estimated the number of presentations and presenters to this hospital using data from the previous year. These estimates were used to provide a national estimate of self-harm presentations and individuals who presented to hospital with self-harm. All rate calculations presented in this report are based on those national estimates.

Self-harm rates were calculated based on the number of persons who engaged in self-harm. Crude and age-specific rates per 100,000 population were calculated by dividing the number of persons who engaged in self-harm ( $n$ ) by the relevant population figure ( $p$ ) and multiplying the result by 100,000, i.e.  $(n / p) * 100,000$ .

European age-standardised rates (EASRs) are the incidence rates that would be observed if the population under study had the same age composition as a theoretical European population. Adjusting for the age composition of the population under study ensures that differences observed by gender or by area are due to differences in the incidence of self-harm rather than differences in the composition of the populations. EASRs were calculated as follows: for each five-year age group, the number of persons who engaged in self-harm was divided by the population at risk and then multiplied by the number in the European standard population. The EASR is the sum of these age-specific figures.

## A note on small numbers

Calculated rates that are based on less than 20 events may be an unreliable measure of the underlying rate. In addition, self-harm events may not be independent of one another, although these assumptions are used in the calculation of confidence intervals, in the absence of any clear knowledge of the relationship between these events.

The Registry recorded two cases of self-harm for which patient initials, gender or date of birth were unknown. These two cases have been excluded from the findings reported here. In addition, a small number of self-harm patients presented to hospital more than once on the same calendar day. This happened for a variety of reasons including being transferred to another hospital, absconding and returning, etc. These patients were considered as receiving one episode of care and were recorded once in the finalised Registry database for 2020.

## A note on confidence intervals

Confidence intervals provide us with a margin of error within which underlying rates may be presumed to fall on the basis of observed data. Confidence intervals assume that the event rate ( $n/p$ ) is small and that the events are independent of one another. A 95% confidence interval for the number of events ( $n$ ), is  $n \pm 2\sqrt{n}$ . For example, if 25 self-harm presentations are

observed in a specific region in one year, then the 95% confidence interval will be  $25 \pm 2\sqrt{25}$  or 15 to 35. Thus, the 95% confidence interval around a rate ranges from  $(n - 2\sqrt{n}) / p$  to  $(n + 2\sqrt{n}) / p$ , where  $p$  is the population at risk. If the rate is expressed per 100,000 population, then these quantities must be multiplied by 100,000.

A 95% confidence interval may be calculated to establish whether the two rates differ statistically significantly. The difference between the rates is calculated. The 95% confidence interval for this rate difference ( $rd$ ) ranges from  $rd - 2\sqrt{(n_1 / p_1^2 + n_2 / p_2^2)}$  to  $rd + 2\sqrt{(n_1 / p_1^2 + n_2 / p_2^2)}$ . If the rates were expressed per 100,000 population, then  $2\sqrt{(n_1 / p_1^2 + n_2 / p_2^2)}$  must be multiplied by 100,000 before being added to and subtracted from the rate difference. If zero is outside of the range of the 95% confidence interval, then the difference between the rates is statistically significant.

HOSPITAL GROUP	HOSPITALS IN THE GROUP
<b>Ireland East</b>	Mater Misericordiae University Hospital, Dublin
	Midland Regional Hospital, Mullingar
	Our Lady's Hospital, Navan
	St. Luke's Hospital, Kilkenny
	St. Michael's Hospital, Dun Laoghaire
	Other
	Wexford General Hospital
<b>Dublin Midlands</b>	Tallaght University Hospital
	Midland Regional Hospital, Portlaoise
	Midland Regional Hospital, Tullamore
	Naas General Hospital
	St. James's Hospital
<b>RCSI</b>	Cavan General Hospital
	Connolly Hospital, Blanchardstown
	Our Lady of Lourdes Hospital, Drogheda
<b>South/ South West</b>	Bantry General Hospital
	Cork University Hospital
	University Hospital, Kerry
	Mercy University Hospital, Cork
	South Tipperary General Hospital
<b>University of Limerick</b>	University Hospital, Waterford
	Ennis Hospital
	University Hospital, Limerick
<b>Saolta University Health Care</b>	University Hospital Galway
	Letterkenny University Hospital
	Mayo University Hospital
	Portiuncula University Hospital
	Sligo University Hospital
<b>Children's Health Ireland</b>	Children's Health Ireland at Temple Street
	National Children's Hospital at Tallaght Hospital
	Children's Health Ireland at Crumlin

## SECTION I:

# Hospital Presentations

### Hospital presenting self-harm in the Republic of Ireland

For the period from 1st January to 31st December 2020, the Registry recorded 11,932 self-harm presentations to hospital that were made by 9,063 individuals. These figures do not include presentations to one hospital. We estimated the number of presentations and presenters to this hospital using data from the previous year in order to provide national figures of 12,553 self-harm presentations by 9,550 individuals. Thus, the number of self-harm presentations and the number of persons involved were consistent with that reported in 2019. Table 1 summarises the changes in the number of presentations and persons since the Registry reached near national coverage in 2002.

YEAR	PRESENTATIONS		PERSONS	
	Number	% difference	Number	% difference
2002	10,537	-	8,421	-
2003	11,204	+6%	8,805	+5%
2004	11,092	-1%	8,610	-2%
2005	10,789	-3%	8,594	<-1%
2006	10,688	-1%	8,218	-4%
2007	11,084	+4%	8,598	+5%
2008	11,700	+6%	9,218	+7%
2009	11,966	+2%	9,493	+3%
2010	12,337	+3%	9,887	+4%
2011	12,216	-1%	9,834	<-1%
2012	12,010	-2%	9,483	-4%
2013	11,061	-8%	8,772	-8%
2014	11,126	+<1%	8,708	<-1%
2015	11,189	+1%	8,791	+1%
2016	11,445	+2%	8,876	+1%
2017	11,620	+2%	9,114	+3%
2018	12,588	+8%	9,785	+7%
2019	12,465	-1%	9,705	-1%
2020	12,553	+1%	9,550	-2%

**Table 1:** Number of self-harm presentations and persons who presented in the Republic of Ireland in 2002-2020 (2002-2005 and 2020 figures extrapolated to adjust for hospitals not contributing data).

The age-standardised rate of individuals presenting to hospital in the Republic of Ireland following self-harm in 2020 was 200 per 100,000 (95% Confidence Interval (CI): 196 to 204). This was a slight decrease (-3%) on the rate of 206 per 100,000 (95% CI: 202 to 210) from 2019. The incidence of self-harm in Ireland is examined in more detail in Section II of this report.

Of the recorded presentations in 2020, 43% were made by men and 57% were made by women. Self-harm presentations were higher among the younger age groups. Just over half of all presentations (51%) were by people under 30 years of age and 86% of presentations were by people aged less than 50 years. The number of self-harm presentations to hospitals in Ireland are provided by hospital group and by age and gender in Appendix A, Table A1. Presentations to individual hospitals by age and gender are also provided in Appendix A, Tables A2-A8.

In most age groups, the number of self-harm presentations by women exceeded the number by men. This was most pronounced in the 10-19 years age group where there were more than twice as many female presentations (2,042 vs 758). The number of self-harm presentations by men was marginally higher than the number by women in the 25-34 years age group only (1,450 vs 1,181).

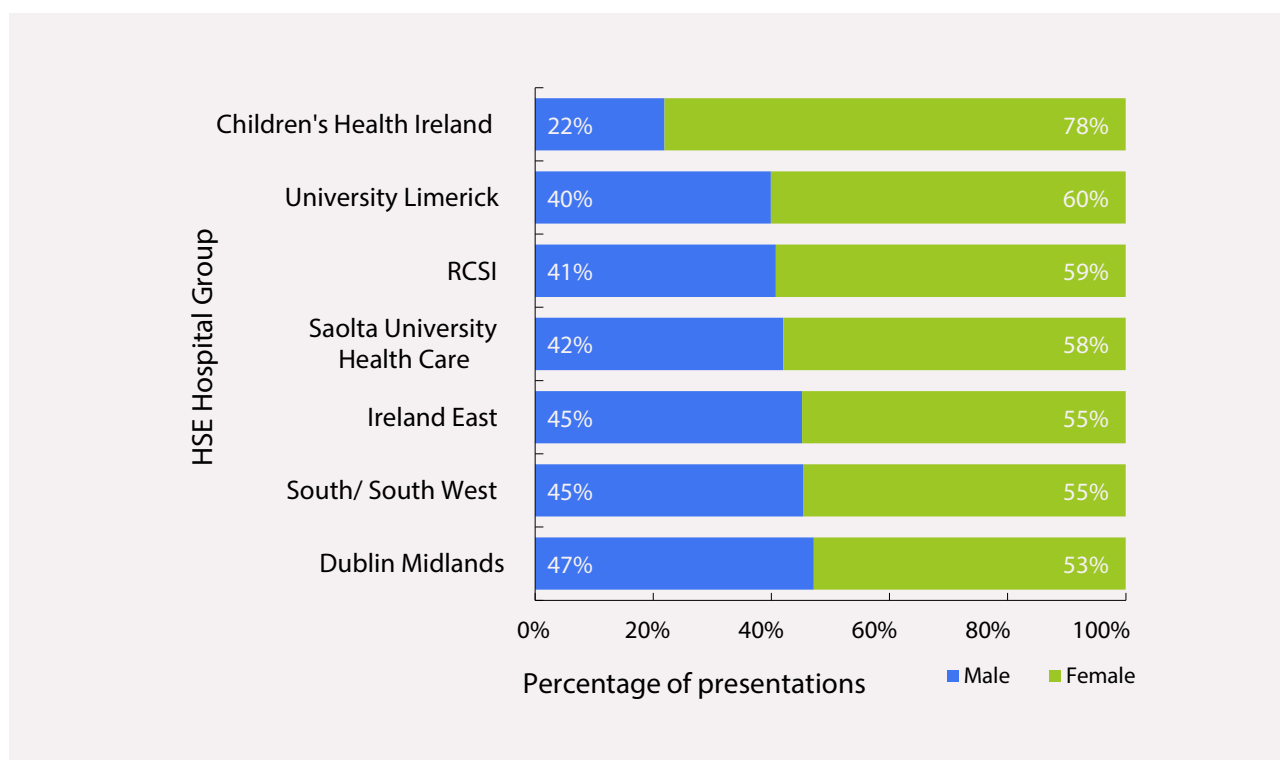
There were 1,338 presentations from non-household residents, accounting for 11.2% of all presentations. The number of self-harm presentations made by residents of homeless hostels and people of no fixed abode was 899, representing 7.5% of all presentations. This is an increase from 2019 when presentations by this group of individuals accounted for 5.4% of all presentations. Adolescents in Residential Care Units accounted for 132 (1.1%) presentations. A minority (n=55; 0.5%) of presentations were made by hospital inpatients.

## Self-harm by HSE hospital group

Based on preliminary figures acquired from the HSE Business Intelligence Unit, self-harm accounted for 1.07% of total attendances to Emergency Departments of hospitals included in this report. The percentage of attendances accounted for by self-harm varied by HSE hospital group from 0.57% in Children's Health Ireland and 0.76% in the Saolta University Health Care to 1.31% in the Dublin Midlands and 1.32% in the University Limerick Hospital Groups.

In terms of the overall number of self-harm presentations (n = 11,932; 100%), the proportion accounted for by hospital group ranged from 4% by Children's Health Ireland and 8% by University Limerick, to 11% by RCSI, 12% by Saolta University Health Care, 20% by the Dublin Midlands, 21% by the South/ South West and 24% by the Ireland East Hospital Groups.

In 2020, the proportion of male to female self-harm presentations nationally was 43% to 57% respectively and varied by hospital group. Self-harm presentations by women outnumbered those by men in all hospital groups (Figure 1).

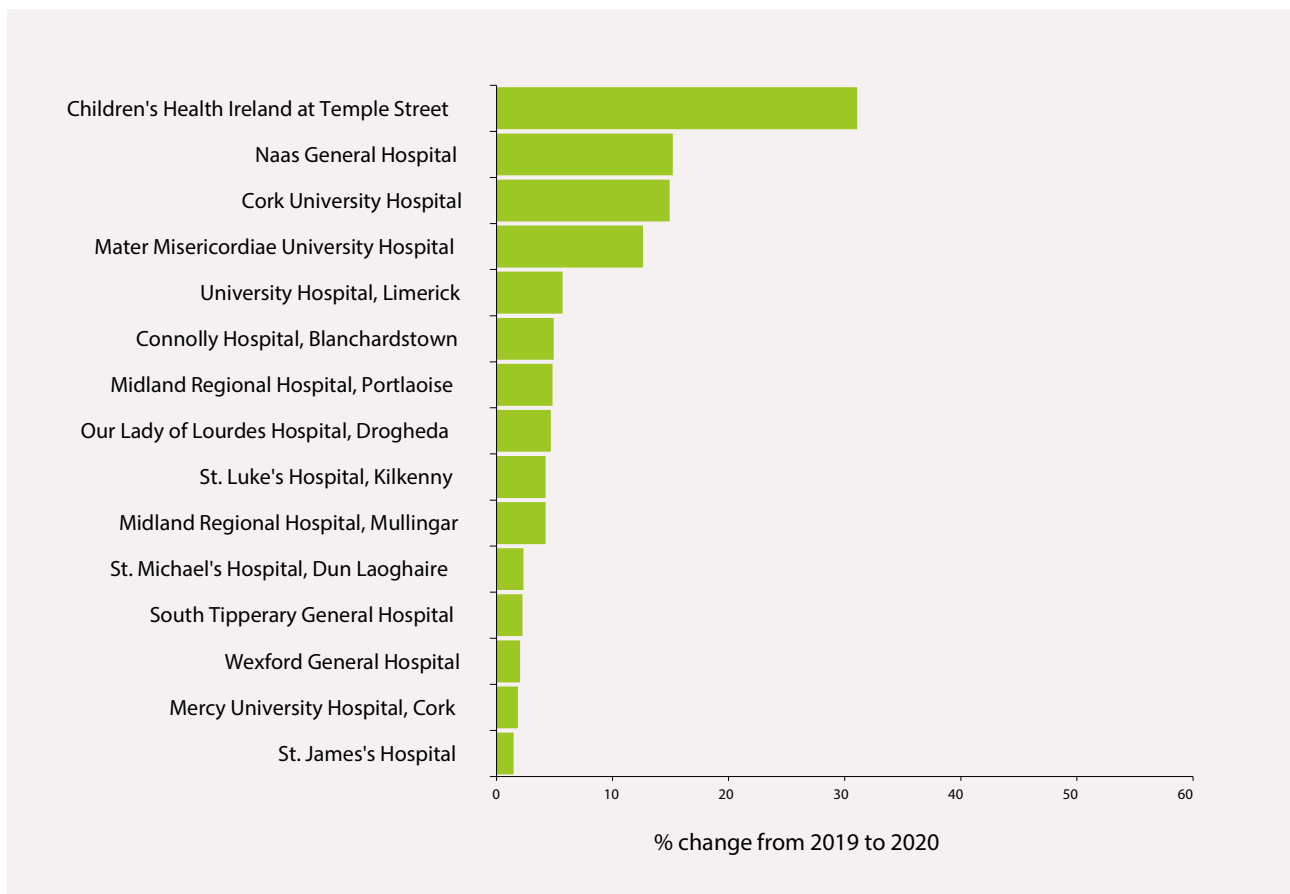


**Figure 1:** Gender balance of self-harm presentations by HSE hospital group, 2020

Note: The RCSI Hospital Group does not include data from one hospital.

## Annual change in self-harm presentations to individual hospitals

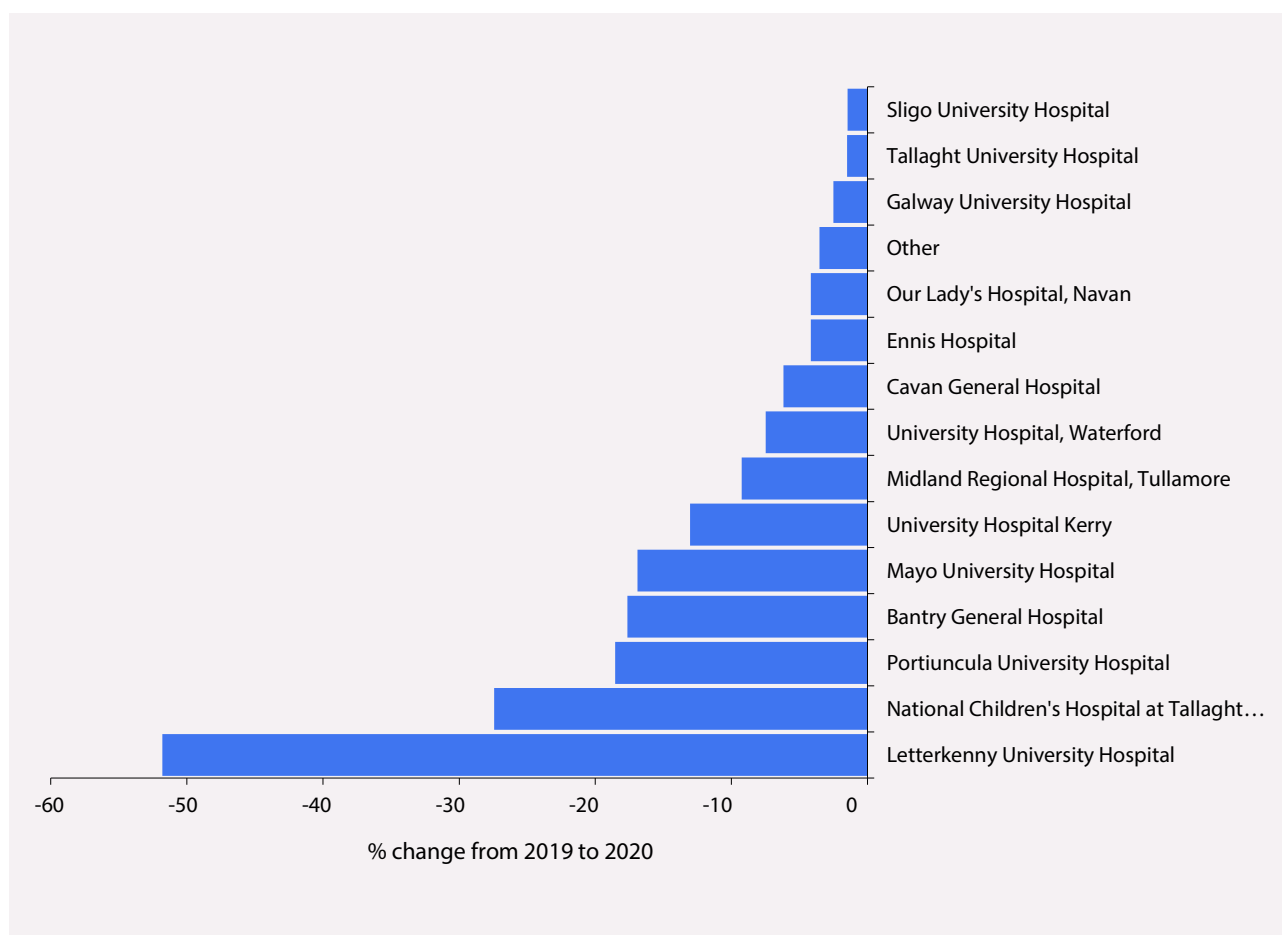
While the national number of self-harm presentations to hospital in 2020 was similar to that recorded in 2019, there were some relatively large changes in the number of presentations at the level of individual hospitals (Figures 2a and 2b). Overall, 16 hospitals saw an increase in self-harm presentations between 2019 and 2020 while a further 15 hospitals saw a decrease during the same time-period.



**Figure 2a:** Hospitals with a higher number of self-harm presentations in 2020 than in 2019.

Note: This figure excludes Children's Health Ireland at Crumlin for which an increase of 162% was observed between 2019 and 2020.

In some instances, ED closures during the COVID-19 pandemic were responsible for these changes. For example, there was variation in presentations to the Children's Health Ireland hospitals during 2020 resulting from the temporary relocation of acute paediatric services including ED at Tallaght to the children's hospitals at Crumlin and Temple Street from March to September 2020.



**Figure 2b:** Hospitals with a lower number of self-harm presentations in 2020 than in 2019.

## Presentations by time of occurrence

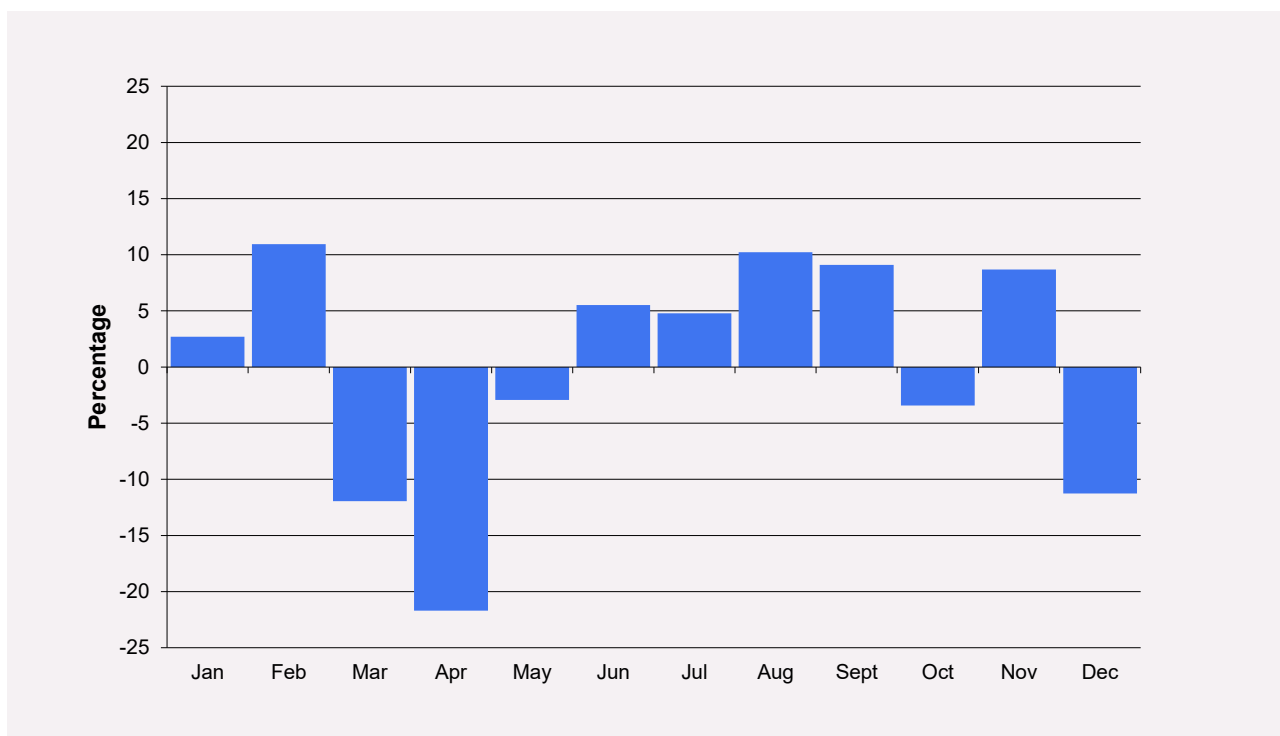
### Variation by Month

The number of self-harm presentations to hospitals in 2020 is presented by month for men and women in Table 2.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Men	448	444	350	375	445	417	501	526	460	418	447	351	5,182
Women	590	605	540	391	536	615	558	588	607	558	616	546	6,750
Total	1,038	1,049	890	766	981	1,032	1,059	1,114	1,067	976	1,063	897	11,932

**Table 2:** Number of self-harm presentations in 2020 by month for men and women.

The monthly average number of self-harm presentations to hospitals in 2020 was 994. The number of presentations was considerably less than the monthly average (>10%) in March, April and December coinciding with COVID-19 restrictions. Figure 3 illustrates the percentage difference between observed and expected number of presentations while accounting for the number of days in each calendar month.



**Figure 3:** Percentage difference between observed and expected number of self-harm presentations by month in 2020.

The lower than expected number of self-harm presentations during months of COVID-19 restrictions was most pronounced in April (-22%). There were more self-harm presentations than might be expected in months during which restrictions were eased, particularly in August (+10%), September (9%) and November (9%). Of note also is the >10% difference between observed and expected presentations in the month of February, prior to the onset of the COVID-19 pandemic.

### Variation by Day

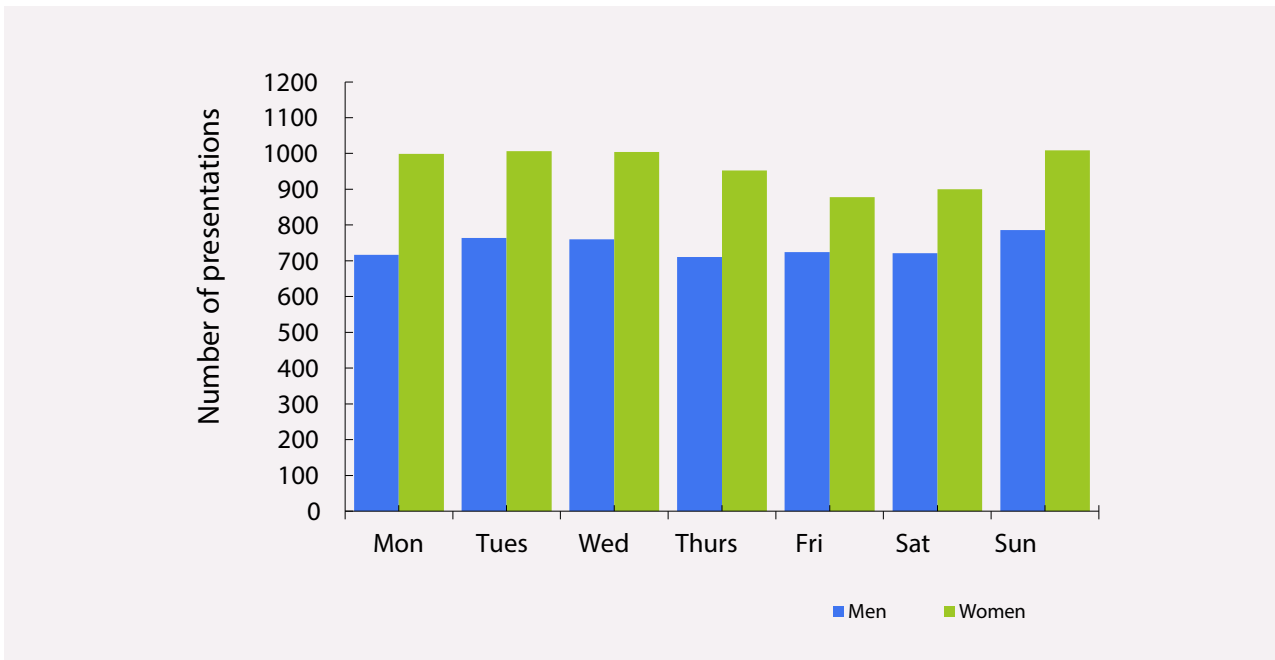
The number and percentage of self-harm presentations to hospitals in 2020 is presented by weekday for men and women in Table 3. On average, each day would be expected to account for 14.3% of presentations.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Men	716	764	760	711	723	722	786	5,182
	(13.8%)	(14.7%)	(14.7%)	(13.7%)	(14.0%)	(13.9%)	(15.2%)	(100%)
Women	999	1,007	1,004	953	878	900	1,009	6,750
	(14.8%)	(14.9%)	(14.9%)	(14.1%)	(13.0%)	(13.3%)	(14.9%)	(100%)
Total	1,715	1,771	1,764	1,664	1,601	1,622	1,795	11,932
	(14.4%)	(14.8%)	(14.8%)	(13.9%)	(13.4%)	(13.6%)	(15.0%)	(100%)

**Table 3:** Self-harm presentations in 2020 by weekday for men and women.

The number of self-harm presentations was highest on Tuesdays, Wednesdays, and Sundays. These days accounted for 45% of all presentations. The variation in weekday presentations by men and women is visually presented in Figure 4. The number of presentations by day of the week was consistently higher for women.



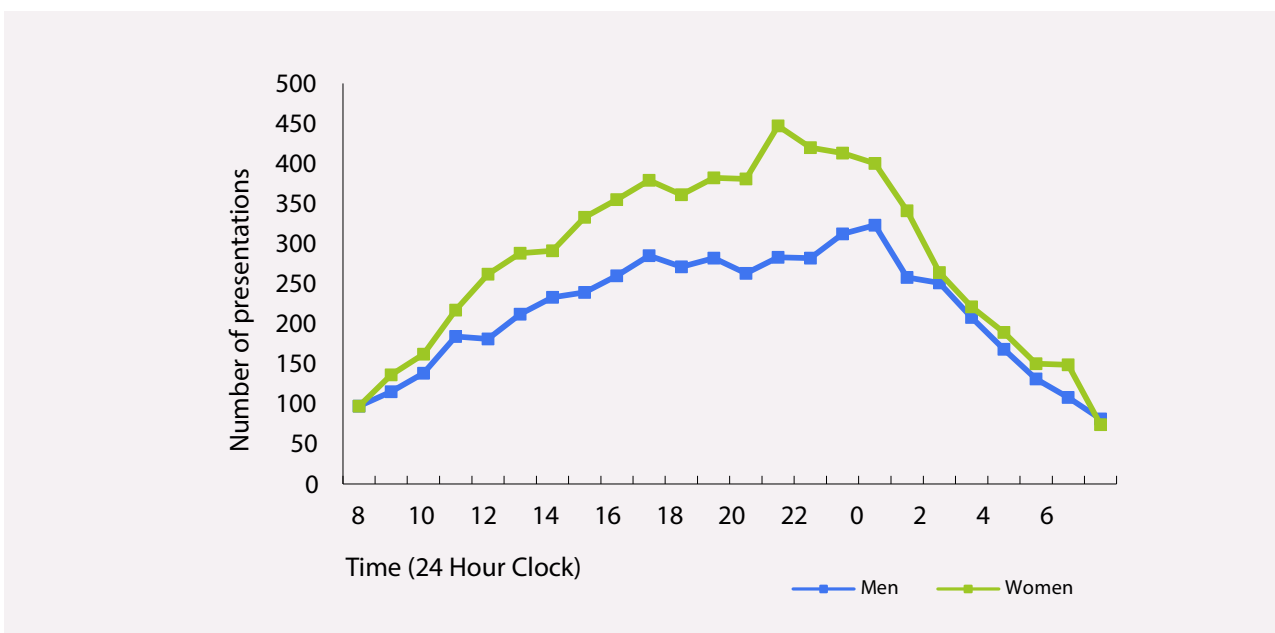


**Figure 4:** Number of self-harm presentations in 2020 by weekday for men and women.

During 2020, there was an average of 33 self-harm presentations to hospital each day. There were 23 days in 2020 on which 45 or more self-harm presentations were made including January 1st, New Year’s Day (n=52), August 9th (n=55) and November 9th (n=51). There were 18 days in 2020 on which 20 or fewer self-harm presentations were made including December 24th, Christmas Eve (n=17), December 25th, Christmas Day (n=19), and December 31st, New Year’s Eve (n=19). Days on which there were 20 presentations or less mainly occurred between March 23rd and April 13th (n=13) coinciding with the initial COVID-19 lockdown.

**Variation by Hour**

The number of self-harm presentations to hospitals in 2020 is presented by time of attendance for men and women in Figure 5.



**Figure 5:** Number of self-harm presentations in 2020 by time of attendance for men and women.

As in previous years, there was a striking pattern in the number of self-harm presentations seen over the course of the day. The numbers for both men and women gradually increased during the day. The peak for men was midnight while for women was 9 p.m. Almost half (46%) of the total number of presentations were made during the eight-hour period 5 p.m. – 1 a.m. This contrasts with the quietest eight-hour period of the day, 4 a.m. – 12 noon, which accounted for just 18% of all presentations.

In 2020, more than half (55%) of all presentations involved a transfer to hospital by ambulance and a further 4% were brought to hospital by other emergency services such as An Garda Síochána. For 15% of presentations, individuals were brought to hospital (or accompanied) by someone (i.e. a family member/friend). The proportion of cases brought to the ED by ambulance or other emergency services varied over the course of the day from 49% of presentations between midday and 4 p.m. to 75% of presentations between midnight and 8 a.m.

## Method of self-harm

The methods of self-harm<sup>1</sup> involved in presentations to hospital in 2020 are presented in Table 4.

	Intentional Drug Overdose	Alcohol	Self-poisoning	Attempted Hanging	Attempted Drowning	Self-cutting	Other
Men (n=5,182)	3,040	1,978	111	608	245	1,652	477
	(58.6%)	(38.2%)	(2.1%)	(11.7%)	(4.7%)	(31.9%)	(9.2%)
Women (n=6,750)	4,386	1,895	123	403	219	2,028	382
	(65.0%)	(28.1%)	(1.8%)	(6.0%)	(3.2%)	(30.0%)	(5.7%)
All	7,426	3,873	234	1,011	464	3,680	859
	(62.2%)	(32.5%)	(2.0%)	(8.5%)	(3.9%)	(30.8%)	(7.2%)

**Table 4:** Methods of self-harm involved in presentations to hospital in 2020 by gender.

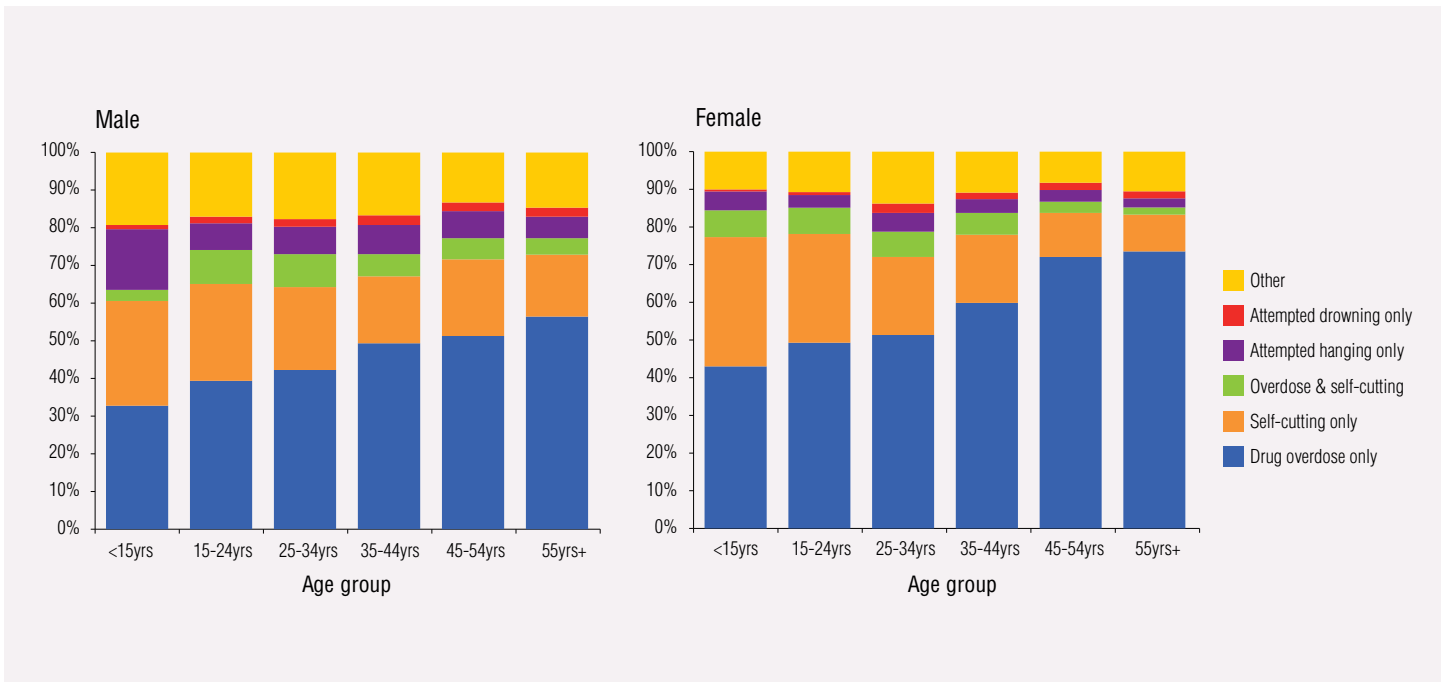
Approximately 62% of all self-harm presentations to hospitals in 2020 involved an intentional drug overdose (IDO). IDO was more commonly used as a method of self-harm by women than men, involved in 65% of female and 59% of male presentations. Alcohol was involved in 33% of presentations. Alcohol was more likely to be involved in male compared to female presentations (38% vs 28% respectively).

Self-cutting was the only other common method of self-harm, involved in 31% of all presentations. Self-cutting was more common for men (32%) than women (30%). In 99% of all cases involving self-cutting, the treatment received was recorded. The majority of presentations (51%) did not result in any treatment. Almost 18% of presentations resulted in the patient receiving steristrips or steribonds, 1% had the wound glued, 17% required sutures, and 3% were referred for plastic surgery. Men who engaged in self-cutting required more intensive treatment than women. Respectively, 20% of male presentations resulted in the receipt of sutures and 4% resulted in referral for plastic surgery compared to 14% and 1% of female presentations.

Attempted hanging was involved in 9% of self-harm presentations (12% for men and 6% for women). This is similar to the percentage reported in 2019 (8%) and whereby it was noted that the number of self-harm presentations involving attempted hanging had increased more than twofold between 2007 and 2019 (444 to 1,029). Attempted drowning was involved in 4% of presentations (n = 464) and although rare as a method of self-harm, self-poisoning was involved in 2% of presentations.

The greater involvement of IDO as a method of self-harm for women is illustrated in Figure 6. IDO also accounted for a higher proportion of self-harm presentations in the older age groups (45-54 years and 55 years+), in particular for women, whereas self-cutting was less common amongst these age groups. Self-cutting was most common among younger people, involved in 28% of presentations by boys and 34% of presentations by girls aged under 15 years.

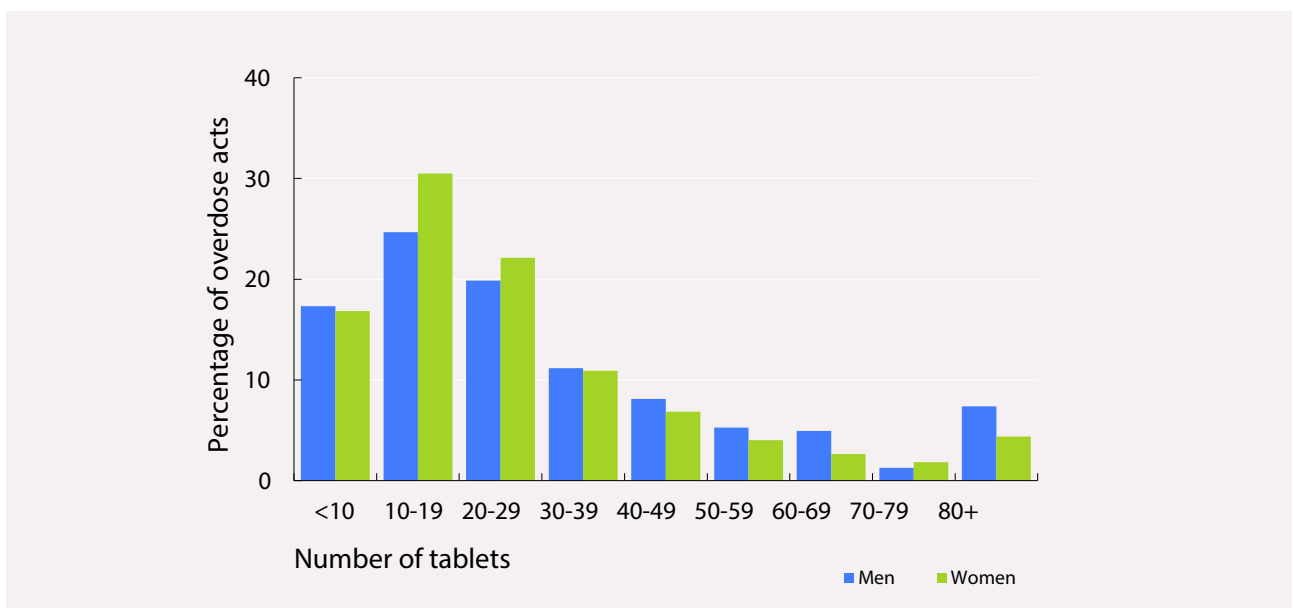
<sup>1</sup>Some presentations involved multiple methods of self-harm so the sum of the percentages per row exceeds 100%.



**Figure 6:** Method of self-harm used by gender and age group in 2020.

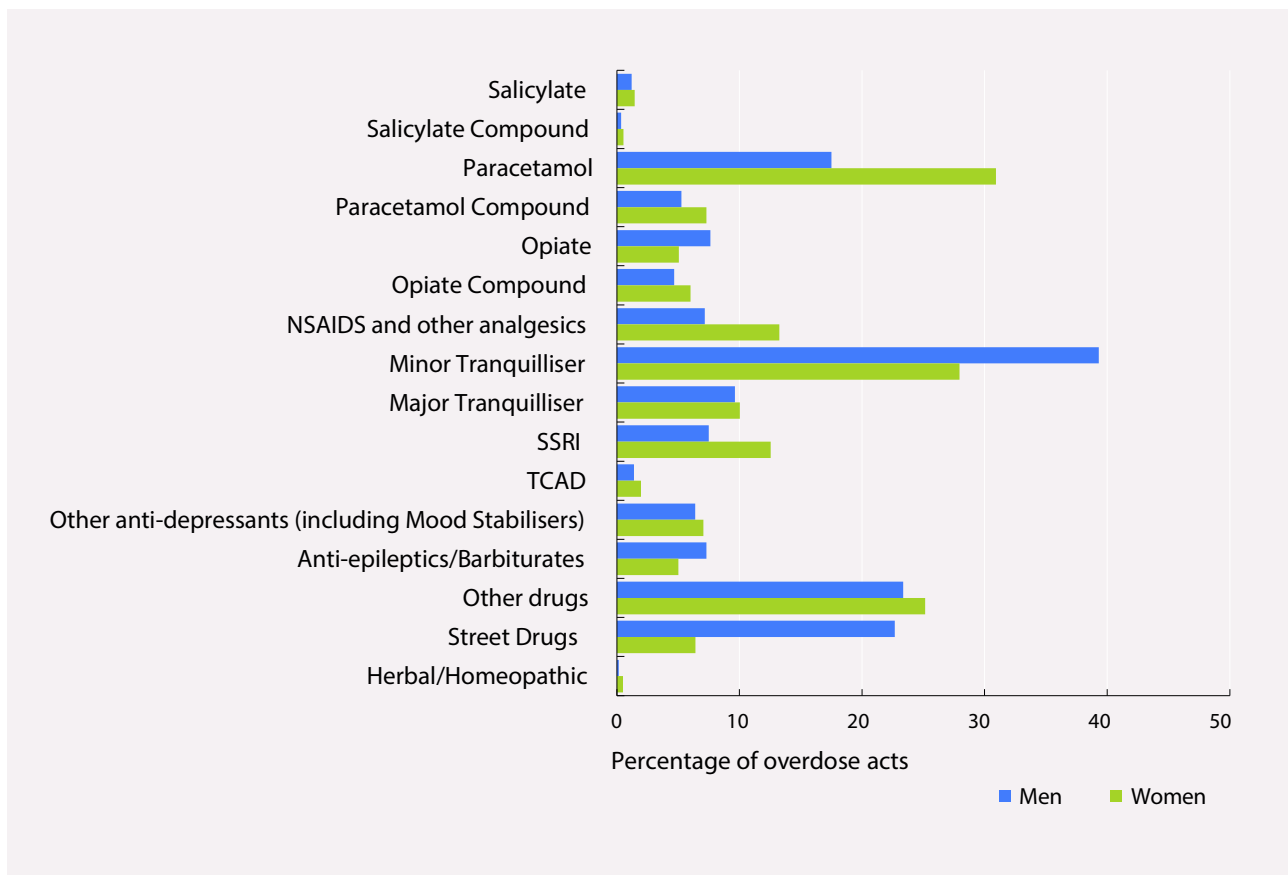
## Drugs used in intentional drug overdose

The total number of tablets taken was known for 66% of all presentations involving intentional drug overdose (IDO). On average, 28 tablets were taken in IDO presentations. Three-quarters of drug overdose acts involved less than 35 tablets, approximately half involved 20 tablets or less and one quarter involved 10 tablets or less. On average, the number of tablets taken in overdose acts was higher among men than women (mean: 32 vs. 27). Figure 7 illustrates the number of tablets taken in IDO presentations by gender. Over half (53%) of female presentations and 45% of male presentations of overdose involved 10-29 tablets.



**Figure 7:** Number of tablets taken in intentional drug overdoses for men and women in 2020.

Figure 8 illustrates the frequency with which the most common drug types were used by men and women in IDO.

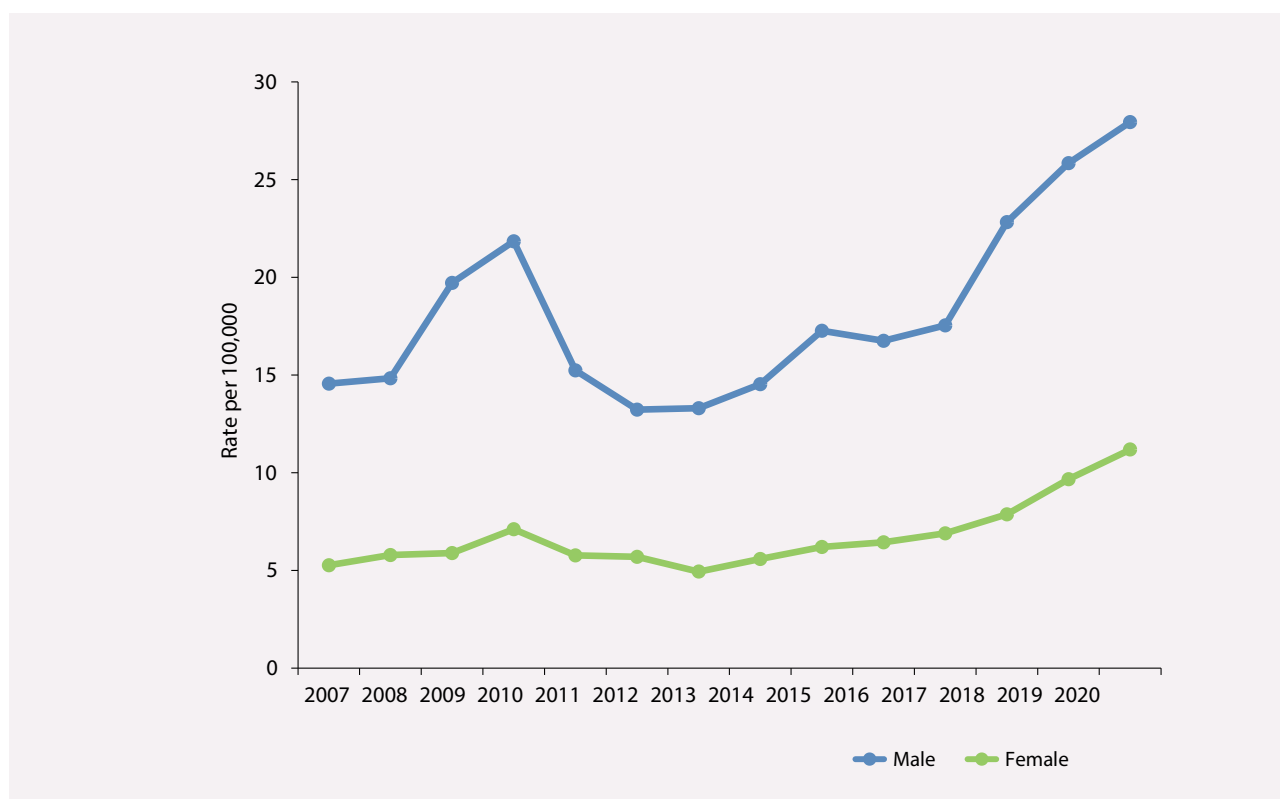


**Figure 8:** Variation in the type of drugs used by men and women in IDO presentations in 2020.

Note: Some drugs (e.g. compounds containing paracetamol and an opiate) are counted in two categories.

Approximately one-third (33%) of all IDO presentations involved a minor tranquilliser which were used more often by men than women (39% vs. 28%, respectively). A major tranquilliser was involved in 10% of overdoses. In total, 48% of female overdoses and 33% of male overdoses involved an analgesic drug. Paracetamol-containing drugs were the most common drug taken, involved in 31% of drug overdoses, significantly more so by women (37%) than by men (22%). Almost one fifth (18%) of overdose acts involved an anti-depressant/ mood stabiliser. The group of anti-depressant drugs known as Selective Serotonin Reuptake Inhibitors (SSRIs) were present in 11% of overdose cases. Illegal or street drugs were involved in 23% of male and 6% of female overdose acts. 'Other classified drugs' were taken in almost one quarter (24%) of all overdoses.

The proportion of self-harm presentations to hospital involving IDO in 2020 was similar to that recorded in 2019 (62%). However, there was some fluctuation in the proportion of presentations involving each of the drug types described here. Most notably, there were increases in self-harm presentations involving street/ illegal drugs. Since 2007, the rate per 100,000 of IDO involving illegal drugs has increased by 100% (from 9.9 to 19.6 per 100,000). The male rate has increased by 91% (from 14.6 to 27.9 per 100,000) while the female rate has increased by 111% (from 5.3 to 11.2 per 100,000; see figure 9).



**Figure 9:** Trends in the male and female rate of intentional drug overdose involving illegal drugs, 2007-2020.

Cocaine and cannabis were the most common illegal drugs recorded by the Registry in 2020, present in 8% and 4% of overdose acts, respectively. Cocaine was more common among men than women and was involved in 23% of overdose acts by 25-34 year-olds. Cannabis was most common among men aged 15-24 years - present in 11% of overdose acts.

## Recommended next care

In 2020, most commonly, in 49% of presentations, patients were discharged following treatment in the ED. An inpatient admission was the next care recommended for 34% of presentations after treatment in the ED. Inpatient admissions are classified as admissions to the Intensive Care Unit (ICU), both general and psychiatric admissions, and whether the patient refused admission or not. Of all self-harm presentations, 26% resulted in an admission to a general ward in the treating hospital, 6% were admitted for psychiatric inpatient treatment while 2% were admitted to the ICU. It may not always be recorded in the ED that a patient has been directly admitted to psychiatric inpatient care. In addition, some of the patients admitted to a general hospital ward will subsequently be admitted as psychiatric inpatients. Therefore, direct psychiatric admission figures provided here may be underestimated. For 6% of presentations, the patient was transferred to another hospital or psychiatric unit/ hospital. For 11% of presentations, the patient left the ED before a next care recommendation could be made and for 1% of presentations, the patient refused to be admitted for general or psychiatric care.

Next care recommendations in 2020 were similar for men and women. However, men more frequently left the ED before a recommendation was made in comparison to women (14% vs 8%). Conversely, women were more frequently admitted to a general ward of the treating hospital than men (29% vs 22%).

The recommendations for next care also varied according to the method of self-harm (Table 5).

	Intentional drug overdose (n=7,426)	Alcohol (n=3,891)	Self-poisoning (n=234)	Attempted hanging (n=1,011)	Attempted drowning (n=464)	Self-cutting (n=3,680)	Other (n=927)	All (n=11,932)
General admission	34.2%	22.6%	28.6%	12.5%	11.2%	13.4%	13.6%	25.8%
Psychiatric admission	4.1%	4.5%	4.7%	12.5%	11.4%	5.4%	9.9%	5.6%
Admission ICU	2.2%	1.5%	1.3%	2.4%	0.9%	0.3%	0.5%	1.6%
Patient would not allow admission	1.1%	1.1%	0.4%	2.0%	1.7%	0.8%	0.9%	1.0%
Transferred to another hospital/ psychiatric unit/ psychiatric hospital	4.5%	4.1%	11.1%	10.7%	11%	6.4%	3.8%	6.8%
Left before recommendation	10.2%	14.4%	8.1%	8.4%	13.1%	12.2%	10.0%	10.5%
Discharged from emergency department	42.5%	50.5%	44.4%	50.6%	50.2%	60.4%	54.3%	48.6%

**Table 5:** Recommended next care by method of self-harm in 2020.

Approximately 34% of presentations involving intentional drug overdose and 29% involving self-poisoning were admitted for general inpatient care. For other methods of self-harm, general inpatient care was recommended for 11% - 23% of presentations. Given that 13% of presentations involving self-cutting resulted in a general inpatient admission, this may be an indication of the superficial nature of the injuries sustained in some cases. Of the presentations where the patient used self-cutting, 60% were discharged after receiving treatment in the ED.

Highly lethal methods of self-harm including attempted hanging and attempted drowning were associated with a higher proportion of patients being admitted for psychiatric inpatient care directly from the ED (13% and 11% respectively). Admission to ICU was also highest for presentations involving attempted hanging (2.4%).

Recommendations for next care also varied significantly by HSE Hospital Group (Table 6). The proportion of self-harm patients who left before a recommendation was made varied from 1% in the Children's Health Ireland to 13% in the RCSI Hospital Groups. Across the hospital groups, inpatient care (irrespective of type and whether the patient refused) was recommended for 22% of presentations in the University Limerick, 29% in the Ireland East, 35% in the Saolta University and South/ South West, 36% in the Dublin Midlands, 40% in the RCSI, and 58% in the Children's Health Ireland Hospital Groups.

As a corollary to this, the proportion of cases discharged following emergency treatment ranged from a low of 38% in the RCSI Hospital Group to a high of 59% in the University Limerick Hospital Group. The balance of general and psychiatric admissions directly after treatment in the ED differed significantly by hospital group. Direct general admissions were more common than direct psychiatric admissions across all hospital groups.



	Ireland East Hospital Group	Dublin Midlands Hospital Group	RCSI Hospital Group	South/South West Hospital Group	University of Limerick Hospital Group	Saolta University Health Care Group	Children's Hospital Group	Republic of Ireland
	(n=2,889)	(n=2,350)	(n=1,320)	(n=2,498)	(n=992)	(n=1,413)	(n=470)	(n=11,932)
General admission	22.4%	28.8%	32.5%	26.3%	11.5%	20.7%	56.4%	25.8%
Psychiatric admission	3.2%	5.6%	5.6%	7.4%	6.3%	8.4%	0%	5.6%
Admission ICU	2.5%	0.3%	1.1%	0.8%	1.2%	4.1%	1.7%	1.6%
Patient would not allow admission	1.0%	0.8%	0.3%	0.5%	2.8%	1.8%	0%	1.0%
Transferred to another hospital/psychiatric unit/psychiatric hospital	8.1%	5.2%	9.1%	2.0%	9.3%	1.7%	0.4%	5.8%
Left before recommendation	12.1%	12.5%	12.8%	8.8%	9.8%	8.6%	0.9%	10.5%
Discharged from emergency department	48.5%	46.7%	37.9%	51.0%	59.0%	53.4%	40.0%	48.6%

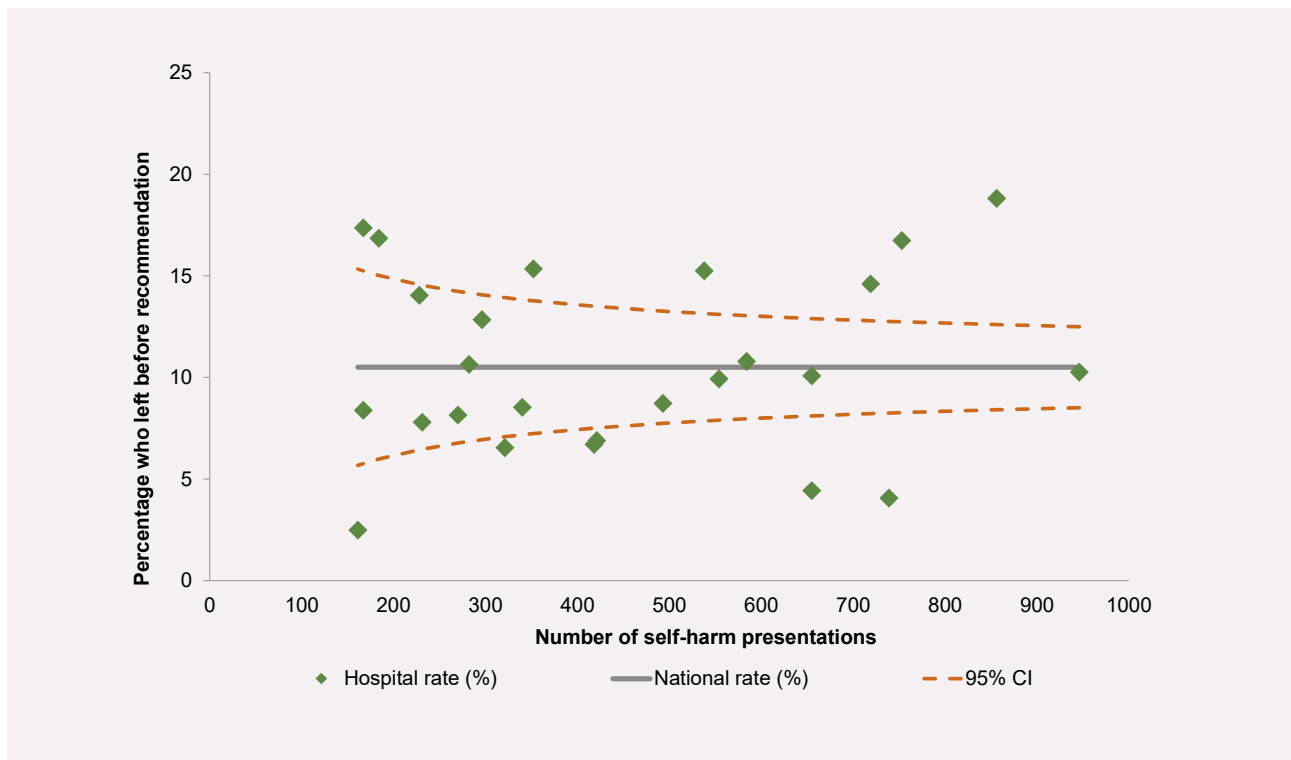
**Table 6:** Recommended next care in 2020 by HSE Hospital Group.

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. As a result, the figures for direct psychiatric admission detailed in this table may be underestimates.

Note: RCSI Hospital group does not include data from one hospital.

The recommended next care after a self-harm presentation is provided by hospital in Appendix B, Tables B1-B7. Within each hospital group, there were significant differences between the hospitals in their next care recommendations.

In 2020, 11% of patients left the ED before a recommendation could be made. The funnel plot in Figure 10 illustrates the percentage of presentations per hospital for which the patient left before a recommendation could be made. For half of all hospitals, the proportion was similar to the national rate. However, there were 13 hospitals falling outside of the dashed lines which indicates that their rate is different to the national rate. There is evidence of an association related to the location of a hospital whereby the proportion of patients leaving before recommendation is higher in inner city hospital EDs.



**Figure 10:** Funnel plot of the percentage of presentations in which the patient left before recommendation, by hospital, 2020.

Note: Due to small numbers, data for Children’s Health Ireland and Level 2 hospitals have been excluded.

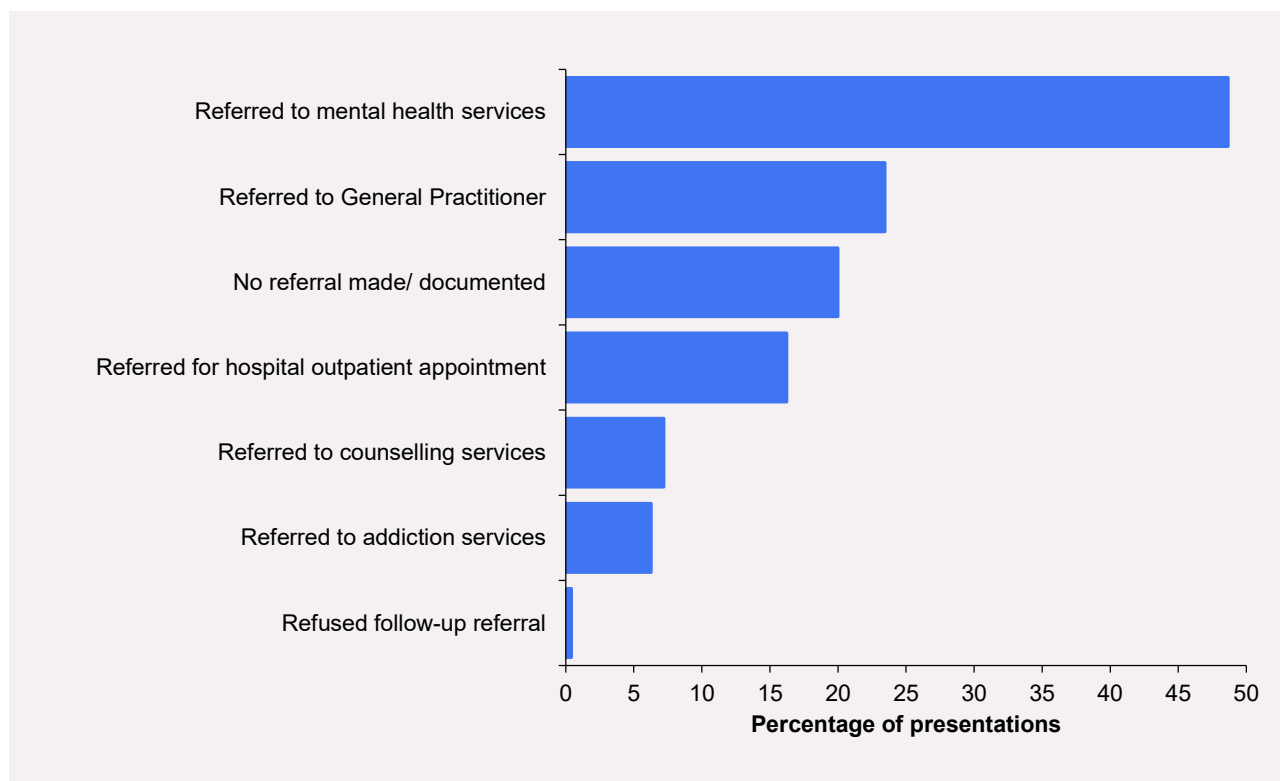
## Current Care

Data were collected about the current care of individuals who presented to hospital with self-harm in 2020. For one quarter of presentations (n = 2,988), it was noted that the patient was currently attending mental health services. In a further 2% of presentations (n = 227), it was noted that the patient had previously been referred and was awaiting an appointment with mental health services. For 3% of presentations (n = 310), individuals were currently attending counselling services while for a further 2% of presentations (n = 236), individuals were attending addiction services. For 3% of presentations (n = 313), the individual was engaged with Homeless Services. For the majority of cases however (58%; n = 6,890), information on current care was not documented.

Women were more likely than men to be engaged with mental health services (66% vs 34%) and counselling services (72% vs 28%). Conversely, men were more likely than women to be attending addiction services (61% vs 39%) and homeless services (72% vs 28%).

## Self-harm cases discharged from Emergency Department

For presentations that resulted in the patient being discharged from the ED following treatment (n = 5,800), information on the type of follow-up care or referral offered is presented in Figure 11.



**Figure 11:** Self-harm presentation referral in 2020 following discharge from the Emergency Department.

- For 49% of presentations, patients were referred to mental health services.
- A referral to the patient's General Practitioner was given in 23% of presentations.
- For 16% of presentations, the patient was referred for a general hospital outpatient appointment.
- Other services including counselling support services (e.g. Pieta House) and addiction services were recommended for 14% of presentations discharged from the ED.
- For one in five presentations (20%), patients were discharged home from the ED with either no referral recommendation made or documented.

Referrals offered to self-harm patients following discharge from the ED varied according to HSE Hospital Group. As an example, 47% of presentations in the RCSI Hospital Group received a referral to a General Practitioner compared with 15% in the Saolta University Health Care Group. For 1% of presentations in the University Limerick and Children's Health Ireland Hospital Groups, a referral for a general hospital outpatient appointment was made compared with 39% in the Dublin Midlands Hospital Group. In terms of referral to local support services, 79% of presentations in the Saolta University Health Care Group received a referral to mental health services compared with 31% in the South/ South West Hospital Group. In the University Limerick and Ireland East Hospital Groups, 10% of presentations were referred to counselling support services such as Pieta House in comparison to 3% in the Saolta University Health Care Group.

## Mental health assessment

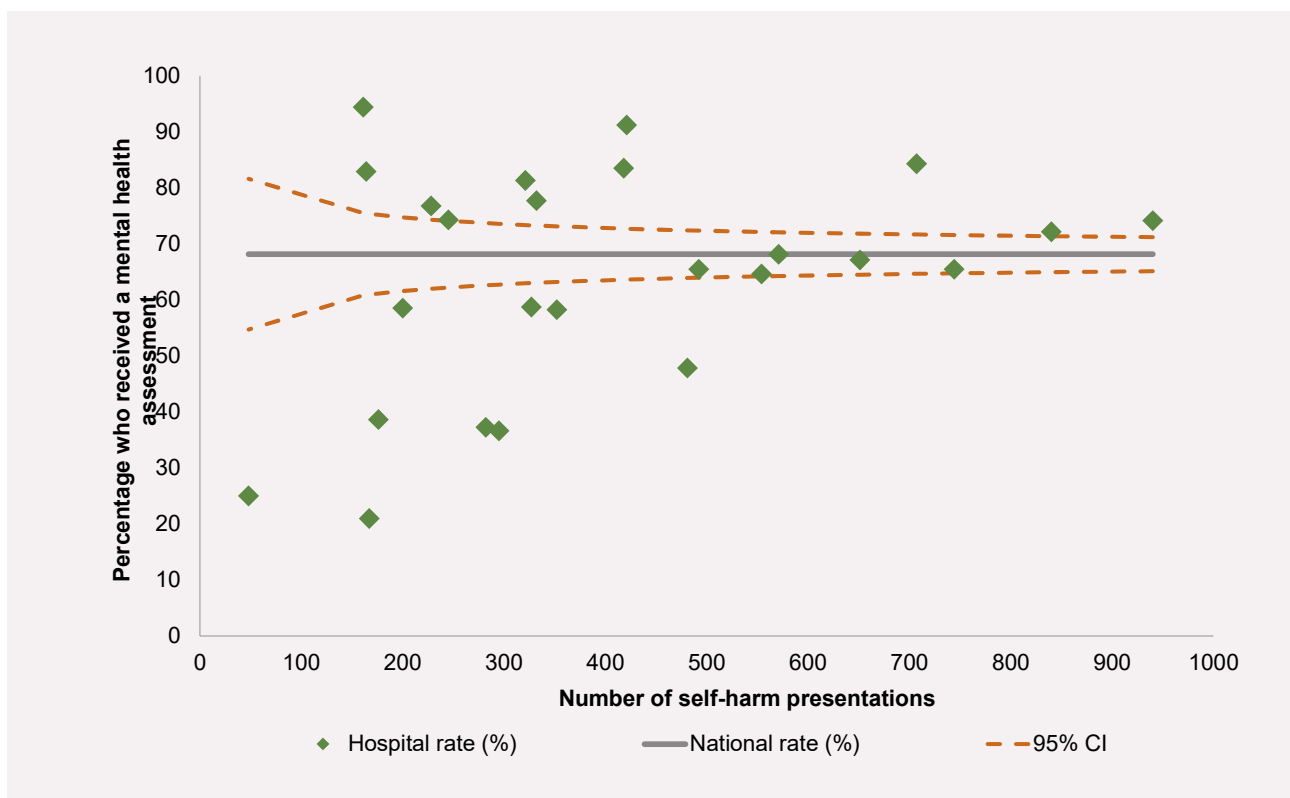
Information was recorded about whether the patient had a mental health assessment in the ED in 90% of presentations (n = 10,696). For 60% of presentations (n = 6,447), an assessment was completed in the ED. For 8% (n = 842) of cases, an assessment was later completed in the presenting hospital while for a further 7% (n = 701), an assessment was arranged in the presenting hospital. A minority of patients (5%) refused a mental health assessment at the time of presentation (n = 578).

Assessment was most common for presentations with methods involving attempted hanging (76%) and attempted drowning (75%). Those who presented with self-poisoning or with self-cutting were less likely to receive an assessment (63% and 66% respectively).

More than three-quarters (80%) of presentations that subsequently resulted in discharge from the ED received a mental health assessment prior to discharge. In contrast, only 7% of patients who left before recommendation received an assessment.

Provision of a mental health assessment varied according to whether the self-harm presentation was a repeat presentation or not. In 2020, 70% of first presentations of self-harm were assessed compared with 52% of those with 5 or more presentations.

The funnel plot in Figure 12 illustrates the proportion of presentations per hospital in which the patient received a mental health assessment. The majority of hospitals (n=18) fall outside of the dashed lines, indicating that their rate is different to that of the national rate.



**Figure 12:** Funnel plot of the percentage of presentations that receive a mental health assessment, by hospital, 2020.

Note: Due to small numbers, data for Children’s Health Ireland and Level 2 hospitals have been excluded.

## Repetition of self-harm

There were 9,063 individuals who presented to hospital with 11,932 self-harm presentations in 2020. This implies that almost one in four (n = 2,869; 24%) of the presentations in 2020 were due to repeat acts. Of the 9,063 self-harm patients who presented to hospital, 1,421 (15.7%) made at least one repeat presentation to hospital during the calendar year. This proportion is slightly higher than that reported in recent years (2014-2019:14.5-15.0%). At least five self-harm presentations were made by 144 individuals. These patients accounted for just 1.6% of all self-harm patients in the year but their presentations represented 10.2 % of all self-harm presentations recorded in 2020 (n = 1,217).

The rate of repetition varied according to the method of self-harm involved in the self-harm act (Table 7).

	Intentional Drug Overdose	Alcohol	Self-poisoning	Attempted hanging	Attempted drowning	Self-cutting	Other	All
Number of individuals who presented	5,798	3,050	172	802	354	2,552	622	9,063
Number who repeated	842	475	20	119	47	532	110	1,421
Percentage who repeated	14.5%	15.6%	11.6%	14.8%	13.3%	20.8%	17.7%	15.7%

**Table 7:** Number and percentage of individuals who had a repeat self-harm presentation in 2020 by method of self-harm.

Of the most common methods of self-harm, self-cutting was associated with an increased level of repetition. One in five individuals (20.8%) who used cutting as a method of self-harm in their index presentation made at least one subsequent self-harm presentation in the calendar year.

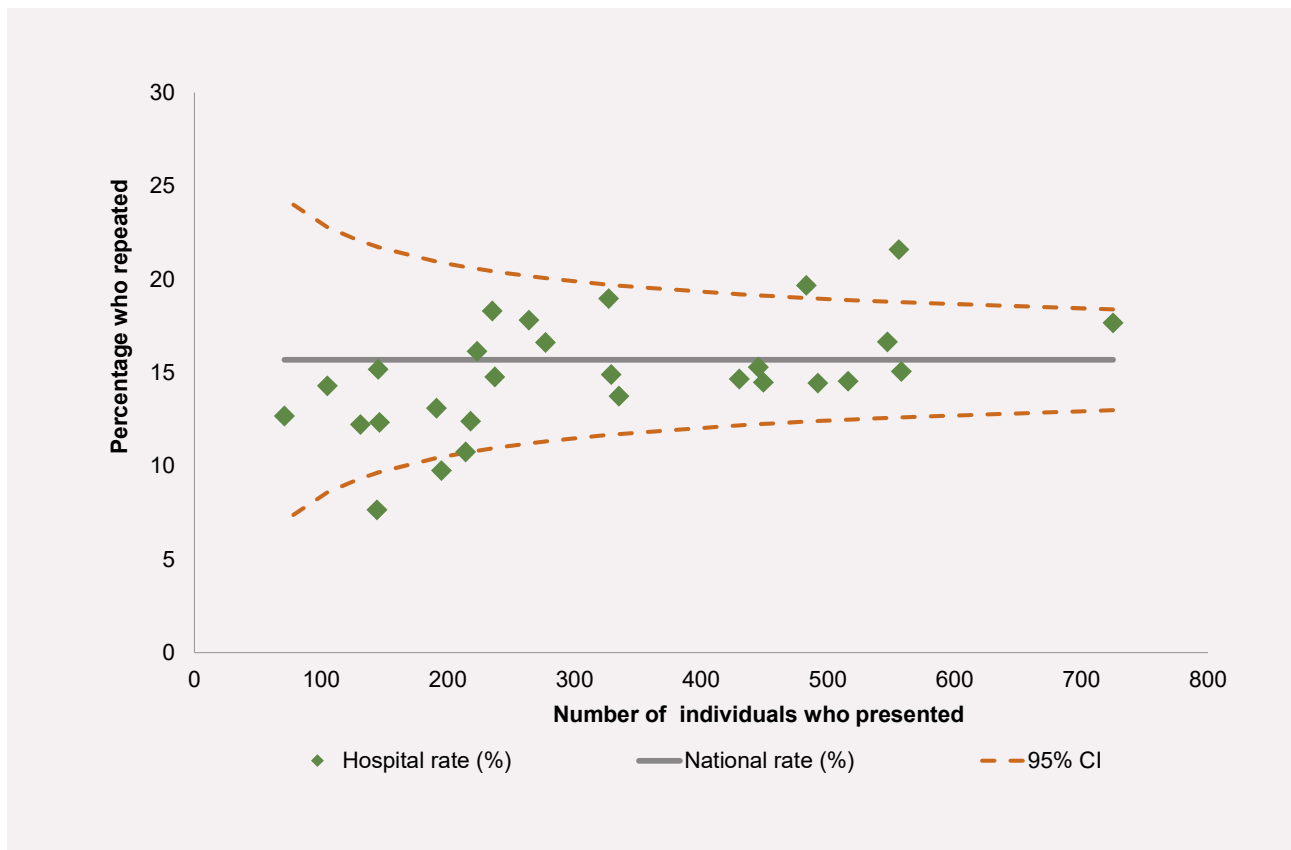
The rate of repetition nationally was broadly similar for men and women (15.2% vs. 16.1%). However, repetition varied significantly by age. The proportion of individuals who repeated was highest amongst young people aged 15-19 years (16.9%) and those aged 25-34 years (16.8%). Approximately 16.9% of all self-harm patients aged less than 20 years re-presented with self-harm.

There was little variation in repetition rates when examined by HSE hospital group (Table 8). The lowest rate was among self-harm patients presenting in the Saolta University Health Care Group (12.8%) while the highest was in the UL Hospital Group (18.1%). Rates of repetition ranged from 14.5% - 17.9% across the other groups.

		Ireland East Hospital Group	Dublin Midlands Hospital Group	RCSI Hospital Group	South/South West Hospital Group	University of Limerick Hospital Group	Saolta University Health Care Group	Children's Hospital Group	Republic of Ireland
Number of individuals who presented	Men	998	819	454	912	316	507	95	3,993
	Women	1,184	941	653	1,042	425	642	304	5,070
	TOTAL	2,182	1,760	1,107	1,954	741	1,149	399	9,063
Number who repeated	Men	161	156	70	137	51	63	9	605
	Women	230	159	90	173	83	84	51	816
	TOTAL	391	315	160	310	134	147	60	1,421
Percentage who repeated	Men	16.1%	19.0%	15.4%	15.0%	16.1%	12.4%	9.5%	15.2%
	Women	19.4%	16.9%	13.8%	16.6%	19.5%	13.1%	16.8%	16.1%
	TOTAL	17.9%	17.9%	14.5%	15.9%	18.1%	12.8%	15.0%	15.7%

**Table 8:** Number and percentage of men and women who made a repeat self-harm presentation in 2020 by HSE hospital group.

The funnel plot in Figure 13 illustrates the rate of repetition for each hospital. The average rate of repetition nationally was 15.7%. For the majority of hospitals, the rate of repetition was similar to the national rate suggesting little variation in the rate of repetition across hospitals.



**Figure 13:** Funnel plot of the rate of repetition according to hospital, 2020.  
 Note: Due to small numbers, data for Level 2 hospitals have been excluded.

The repetition rate by hospital for men, women and all patients who presented to hospital with self-harm are detailed in Appendix C, Tables C1 - C7. Caution should be taken in interpreting the repetition rates associated with smaller hospitals as the calculations may be based on a small number of patients.



## SECTION II:

# Incidence Rates

For the period from 1 January to 31 December 2020, the Registry recorded 11,932 self-harm presentations to hospital that were made by 9,063 individuals. These figures do not include presentations to one hospital. We estimated the number of presentations and presenters to this hospital using data from the previous year in order to provide national figures of 12,553 self-harm presentations by 9,550 individuals. Based on these estimates, the person-based crude and age-standardised rate of self-harm in 2020 was 192 (95% CI: 188 to 196) and 200 (95% CI: 196 to 204) per 100,000 respectively. The age-standardised rate, which accounts for the age distribution of the population, indicated that from 2019 to 2020 there was a 3% decrease in the rate of persons presenting to hospital as a result of self-harm. Population figures and the number and rate of persons who presented to hospital following self-harm in 2020 are given for males and females by age group in Appendix D.

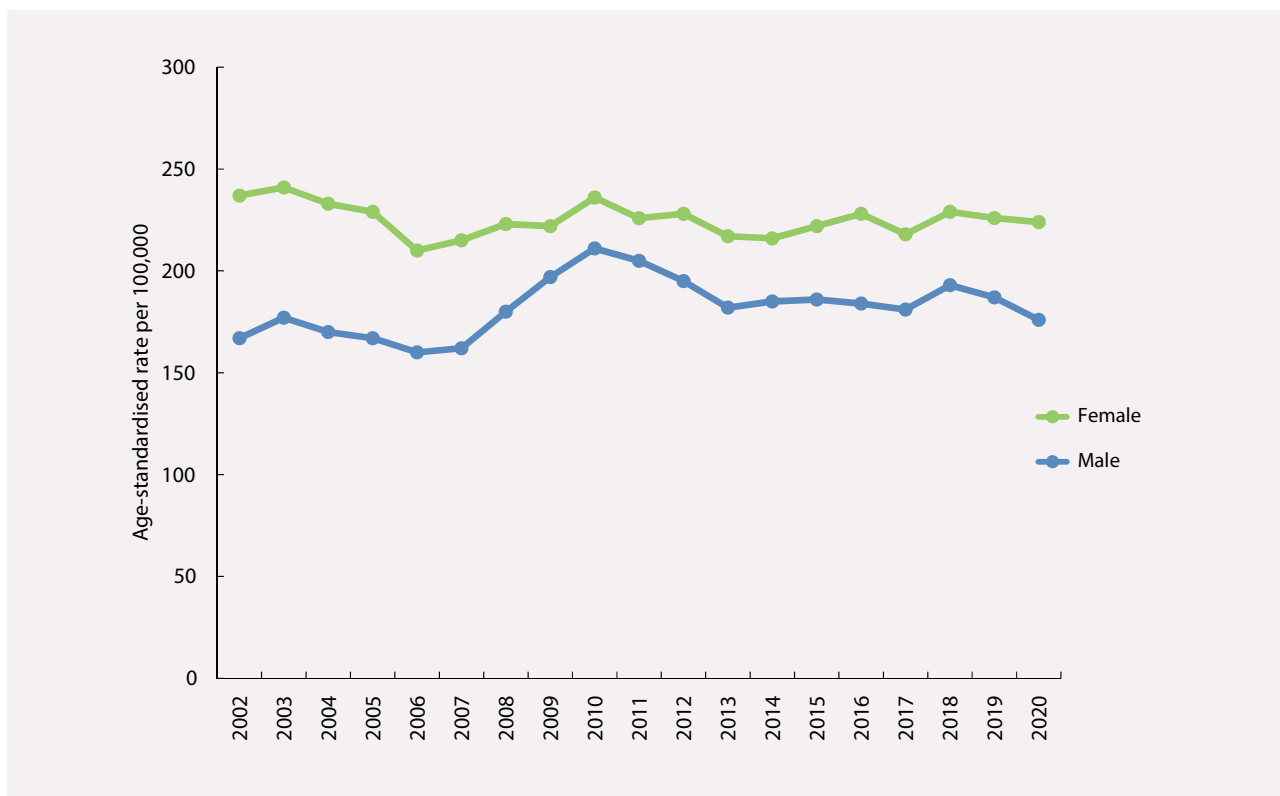
Table 9 presents the age-standardised rates for males and females and all persons, and the change in rates each year since the Registry reached near national coverage in 2002.

YEAR	MALE		FEMALE		ALL	
	Rate	% difference	Rate	% difference	Rate	% difference
2002	167	-	237	-	202	-
2003	177	+7%	241	+2%	209	+4%
2004	170	-4%	233	-4%	201	-4%
2005	167	-2%	229	-1%	198	-2%
2006	160	-4%	210	-9%	184	-7%
2007	162	+2%	215	+3%	188	+2%
2008	180	+11%	223	+4%	200	+6%
2009	197	+10%	222	-<1%	209	+5%
2010	211	+7%	236	+6%	223	+7%
2011	205	-3%	226	-4%	215	-4%
2012	195	-5%	228	+1%	211	-2%
2013	182	-7%	217	-5%	199	-6%
2014	185	+2%	216	-<1%	200	+1%
2015	186	+1%	222	+3%	204	+2%
2016	184	-1%	228	+3%	205	+<1%
2017	181	-2%	219	-4%	199	-3%
2018	193	+7%	229	+5%	210	+6%
2019	187	-3%	226	-1%	206	-2%
2020	176	-6%	224	-1%	200	-3%

**Table 9:** Person-based age-standardised rate of self-harm in the Republic of Ireland in 2002-2020 (extrapolated data used for 2002-2005 and 2020 to adjust for non-participating hospitals).

## Variation by gender and age

The person-based age-standardised rate of self-harm for males and females in 2020 was 176 (95% CI: 171 - 181) and 224 (95% CI: 218 - 230) per 100,000 respectively. This represents a 6% decrease in the male rate of self-harm from 2019 and a 1% decrease in the female rate. Figure 14 provides a visual overview of the age-standardised rates of self-harm for males and females from 2002 - 2020.

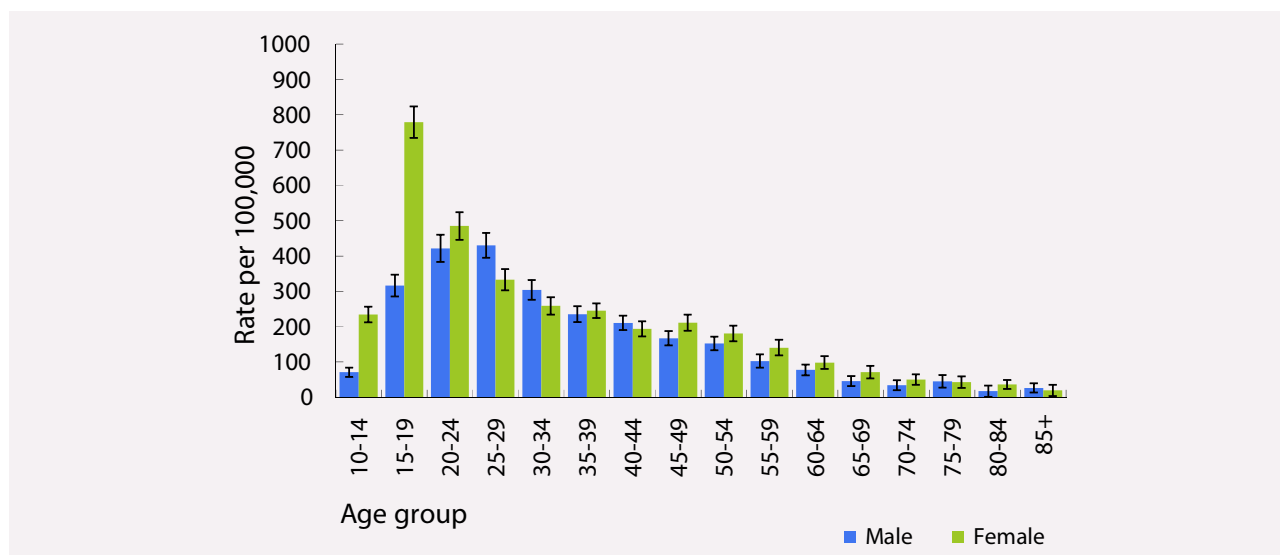


**Figure 14:** Person-based age-standardised rate of self-harm in the Republic of Ireland for males and females, 2002-2020.

The rate of self-harm for males has been mostly decreasing since 2010 when the peak rate of 211 per 100,000 was recorded. The rate for females has stayed relatively stable since 2010 with yearly rates varying by +/- 5%. Over the ten-year timeframe, the male self-harm rate in 2020 was 17% lower than in 2010 whereas the female rate was just 5% lower.

The female rate of self-harm in 2020 was 27% higher than the male rate. This is an increase from the 21% difference reported in 2019 and indicates a greater gender difference than what has been reported in recent years (10-24% during 2008-2018).

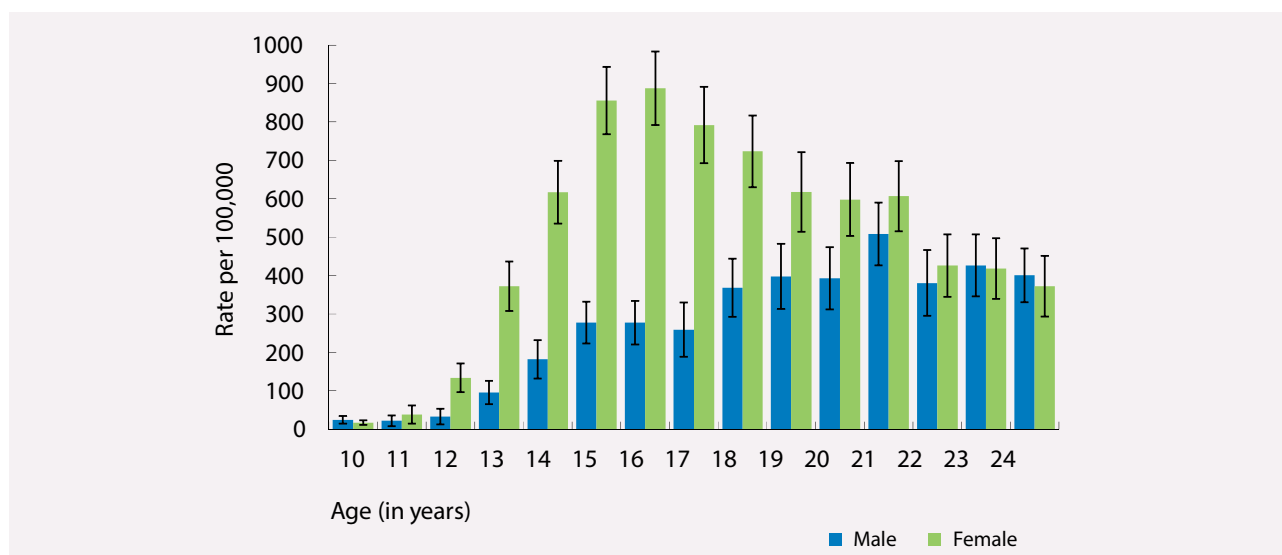
There was a striking pattern in the incidence of self-harm when examined by age. The rate was highest among younger age groups (see Figure 15). At 779 per 100,000, the peak rate for females was among 15-19 year-olds which is an increase of 7% from 2019. This rate implies that one in every 128 girls in this age group presented to hospital in 2020 following an episode of self-harm. The peak rate for males was 430 per 100,000 among 25-29 year-olds or one in every 233 males. The incidence of self-harm gradually decreased with increasing age for males. This was the case to a lesser extent in females as the rates were relatively similar in the 40 to 55 years age range (194 - 211 per 100,000 in the relevant 5 year age bands).



**Figure 15:** Person-based rate of self-harm for males and females in 2020 by 5-yr age group.

Gender differences in the incidence of self-harm varied with age. The female rate was more than three times the male rate in 10-14 year-olds (234 vs 71 per 100,000) and more than twice as high in 15-19 year-olds (779 vs 316 per 100,000) respectively. The female rate of self-harm was again higher than the male rate across the 45-75 years age range. However, the male rate was 29% higher than the female rate in 25-29 year-olds (430 vs. 333 per 100,000) and 17% higher in 30-34 year-olds (304 vs 259 per 100,000). Since 2009, the Registry has recorded a significantly higher rate of self-harm in males aged 25-29 years compared to females of that age.

In 2020, the rate of self-harm among 10-24 year-olds decreased by 14% for males (from 304 to 261 per 100,000) and increased by 2% for females (485 to 493 per 100,000). Self-harm was rare in 10-13 year-olds. However, the incidence of self-harm increased rapidly over a short age range thereafter. This is illustrated in Figure 16.



**Figure 16:** Person-based rate of self-harm for males and females aged 10-24 years in 2020 by single year of age.

Among 12-20 year-olds, the female rate of self-harm was significantly higher than the male rate. In particular, the female rate for 13 year-olds was almost four times that of males (372 vs 96 per 100,000). Similarly, the female rate for 14 and 15 year-olds was three times that of males (617 and 856 per 100,000 for females; 182 and 278 for males respectively). The increases in the female rate in early teenage years were particularly striking whereby the rate increased almost threefold between the ages of 12 and 13 years (from 134 to 372 per 100,000). The peak rates among younger people (<25 years) were in 16 year-old females and 21 year-old males with rates of 888 and 508 per 100,000 respectively. This represents a peak at a younger age for females (16 years in 2020 in comparison to 19 years in 2019) as well as an increase in the peak rate (888 vs 811 per 100,000 in 2020 and 2019 respectively).

# Appendices

## APPENDIX A: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE REPUBLIC OF IRELAND

**TABLE A1:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE REPUBLIC OF IRELAND<sup>1</sup> BY HOSPITAL GROUP, 2020

HOSPITAL GROUP	IRELAND EAST		DUBLIN MIDLANDS		RCSI		SOUTH/SOUTH WEST		UNIVERSITY OF LIMERICK		SAOLTA UNIVERSITY		CHILDREN'S HEALTH IRELAND		REPUBLIC OF IRELAND <sup>2</sup>		REPUBLIC OF IRELAND (Estimate) <sup>3</sup>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
10-14yrs	6	59	6	16	9	45	28	86	12	26	13	42	59	207	133	481	133	482
15-19yrs	142	316	111	224	65	189	139	345	52	128	73	202	43	157	625	1,561	662	1,647
20-24yrs	209	215	226	189	93	95	181	222	44	114	93	130	-	-	846	965	879	1,011
25-29yrs	246	161	169	143	69	57	206	132	62	64	77	74	-	-	829	631	872	659
30-34yrs	188	154	127	121	78	47	106	112	53	58	69	58	-	-	621	550	645	582
35-39yrs	149	148	127	132	60	92	129	101	49	46	72	73	-	-	586	592	607	652
40-44yrs	123	116	135	138	51	64	107	86	35	56	50	51	-	-	501	511	541	539
45-49yrs	94	127	67	97	39	72	79	84	29	26	39	62	-	-	347	468	366	489
50-54yrs	55	102	59	65	37	54	58	68	21	33	40	46	-	-	270	368	290	392
55-59yrs	42	62	35	60	16	26	47	46	10	19	30	32	-	-	180	245	187	254
60-64yrs	18	57	27	20	10	21	26	36	16	6	13	22	-	-	110	162	112	175
65-69yrs	9	18	9	21	5	*	8	12	6	10	14	12	-	-	51	78	54	87
70-74yrs	7	36	5	6	<5	6	6	17	<5	7	7	<5	-	-	32	74	35	77
75-79yrs	12	5	<5	5	<5	8	8	8	<5	<5	<5	5	-	-	29	33	33	34
80-84yrs	<5	*	<5	<5	<5	0	<5	<5	0	0	<5	7	-	-	6	18	7	20
85yrs+	<5	*	<5	<5	0	*	<5	<5	<5	<5	<5	<5	-	-	8	8	8	10
<b>Total</b>	<b>1,306</b>	<b>1,583</b>	<b>1,109</b>	<b>1,241</b>	<b>538</b>	<b>782</b>	<b>1,136</b>	<b>1,362</b>	<b>396</b>	<b>596</b>	<b>594</b>	<b>819</b>	<b>103</b>	<b>367</b>	<b>5,182</b>	<b>6,750</b>	<b>5,438</b>	<b>7,115</b>

<sup>1</sup>Presentations of persons aged <10 years are not included in this table to avoid risk of disclosure.

<sup>2</sup>Number of self-harm presentations for all except one hospital in the Republic of Ireland during 2020.

<sup>3</sup>Estimated number of self-harm presentations for all hospitals in the Republic of Ireland in 2020.

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A2:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE IRELAND EAST HOSPITAL GROUP, 2020

	MATER MISERICORDIAE UNIVERSITY HOSPITAL		MIDLAND REGIONAL HOSPITAL, MULLINGAR		OUR LADY'S HOSPITAL, NAVAN		ST. LUKE'S HOSPITAL, KILKENNY		ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE		OTHER		WEXFORD GENERAL HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	0	0	18	29	0	<5	9	29	0	<5	*	5	*	28
16-17yrs	*	31	5	*	<5	10	*	20	<5	<5	*	59	9	18
18-24yrs	80	68	23	24	14	22	61	44	<5	9	67	112	27	55
25-34yrs	155	118	40	24	14	14	88	35	6	<5	94	81	37	41
35-44yrs	113	81	15	24	16	44	26	*	6	5	61	72	35	26
45-54yrs	63	57	9	25	11	18	18	35	<5	5	33	60	13	29
55-64yrs	18	26	6	23	7	6	11	18	0	0	12	33	6	13
65yrs+	*	27	5	*	<5	<5	*	*	0	0	13	23	*	7
<b>Total</b>	<b>448</b>	<b>408</b>	<b>121</b>	<b>175</b>	<b>67</b>	<b>117</b>	<b>222</b>	<b>196</b>	<b>19</b>	<b>25</b>	<b>294</b>	<b>445</b>	<b>135</b>	<b>217</b>

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A3:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2020

	TALLAGHT UNIVERSITY HOSPITAL		MIDLAND REGIONAL HOSPITAL, PORTLAOISE		MIDLAND REGIONAL HOSPITAL, TULLAMORE		NAAS GENERAL HOSPITAL		ST. JAMES'S HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	0	0	*	23	0	<5	0	<5	0	*
16-17yrs	16	49	8	22	<5	8	<5	12	10	10
18-24yrs	73	80	28	26	18	29	70	82	107	85
25-34yrs	91	79	22	27	21	25	53	34	109	99
35-44yrs	71	76	30	34	13	18	46	79	102	63
45-54yrs	34	25	11	27	8	11	32	46	41	53
55-64yrs	10	26	8	*	<5	6	13	15	28	31
65yrs+	6	19	*	*	0	<5	<5	<5	9	*
<b>Total</b>	<b>301</b>	<b>354</b>	<b>116</b>	<b>166</b>	<b>65</b>	<b>102</b>	<b>221</b>	<b>272</b>	<b>406</b>	<b>347</b>

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A4:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE RCSI HOSPITAL GROUP, 2020

	CAVAN GENERAL HOSPITAL		CONNOLLY HOSPITAL, BLANCHARDSTOWN		OUR LADY OF LOURDES HOSPITAL, DROGHEDA	
	Male	Female	Male	Female	Male	Female
<16yrs	*	18	0	0	13	49
16-17yrs	6	17	*	36	10	44
18-24yrs	21	19	53	83	52	63
25-34yrs	31	8	64	60	52	36
35-44yrs	20	15	50	78	41	63
45-54yrs	14	31	32	47	30	48
55-64yrs	8	*	12	20	*	19
65yrs+	*	*	*	8	*	8
<b>Total</b>	<b>108</b>	<b>120</b>	<b>222</b>	<b>332</b>	<b>208</b>	<b>330</b>

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A5:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE SOUTH/ SOUTH WEST HOSPITAL GROUP, 2020

	BANTRY GENERAL HOSPITAL		CORK UNIVERSITY HOSPITAL		UNIVERSITY HOSPITAL, KERRY		MERCY UNIVERSITY HOSPITAL, CORK		SOUTH TIPPERARY GENERAL HOSPITAL		UNIVERSITY HOSPITAL, WATERFORD	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	0	0	20	54	*	22	12	25	<5	20	*	40
16-17yrs	<5	<5	10	46	10	20	13	*	6	26	11	32
18-24yrs	<5	7	76	109	22	45	72	73	26	51	52	60
25-34yrs	<5	6	66	58	52	27	122	72	21	41	48	40
35-44yrs	<5	6	58	51	33	20	90	65	26	24	26	21
45-54yrs	<5	<5	24	28	23	21	48	43	17	35	22	22
55-64yrs	<5	<5	16	20	14	12	24	25	6	7	10	16
65yrs+	<5	0	10	9	*	9	7	*	<5	7	*	13
<b>Total</b>	<b>17</b>	<b>25</b>	<b>280</b>	<b>375</b>	<b>164</b>	<b>176</b>	<b>388</b>	<b>331</b>	<b>110</b>	<b>211</b>	<b>177</b>	<b>244</b>

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A6:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE UNIVERSITY LIMERICK HOSPITAL GROUP, 2020

	ENNIS HOSPITAL		UNIVERSITY HOSPITAL, LIMERICK	
	Male	Female	Male	Female
<16yrs	0	0	23	44
16-17yrs	0	0	12	47
18-24yrs	0	26	73	151
25-34yrs	<5	*	114	115
35-44yrs	0	9	84	93
45-54yrs	0	*	50	57
55-64yrs	<5	0	25	25
65yrs+	0	0	13	20
<b>Total</b>	<5	44	394	552

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A7:** SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2020

	UNIVERSITY HOSPITAL GALWAY		LETTERKENNY UNIVERSITY HOSPITAL		MAYO UNIVERSITY HOSPITAL		PORTIUNCULA UNIVERSITY HOSPITAL		SLIGO UNIVERSITY HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	10	30	<5	12	*	14	<5	8	<5	7
16-17yrs	9	38	<5	18	7	*	<5	*	<5	10
18-24yrs	57	100	15	24	19	28	18	25	28	50
25-34yrs	61	53	21	15	18	30	14	16	32	18
35-44yrs	50	63	14	16	12	15	24	11	22	19
45-54yrs	31	33	6	12	12	32	8	8	22	23
55-64yrs	14	20	<5	<5	10	13	7	10	10	10
65yrs+	5	10	0	<5	*	*	7	*	9	<5
<b>Total</b>	237	347	62	99	86	145	80	87	129	141

\*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

**TABLE A8:** SELF-HARM PRESENTATIONS BY CHILDREN <16 YEARS TO HOSPITALS IN THE CHILDREN'S HEALTH IRELAND GROUP, 2020

	CHILDREN'S HEALTH IRELAND AT TEMPLE STREET		CHILDREN'S HEALTH IRELAND AT TALLAGHT		CHILDREN'S HEALTH IRELAND AT CRUMLIN	
	Male	Female	Male	Female	Male	Female
<16yrs	54	215	15	67	31	83

## APPENDIX B: RECOMMENDATIONS FOR NEXT CARE FOLLOWING SELF-HARM PRESENTATION

**TABLE B1:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE IRELAND EAST HOSPITAL GROUP, 2020

	MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. LUKE'S HOSPITAL, KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
	(n=856)	(n=296)	(n=184)	(n=418)	(n=44)	(n=739)	(n=352)
Admitted (General, Psychiatric, ICU)	16.0%	28.4%	31.0%	54.5%	38.6%	20.6%	38.9%
Patient would not allow admission	1.4%	0.3%	0%	0.7%	0%	1.5%	0.9%
Left before recommendation	18.8%	12.8%	16.8%	6.7%	15.9%	4.1%	15.3%
Not admitted	57.6%	44.6%	28.8%	37.1%	29.5%	60.4%	31.0%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

**TABLE B2:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2020

	TALLAGHT UNIVERSITY HOSPITAL (n=655)	MIDLAND REGIONAL HOSPITAL, PORTLAOISE (n=282)	MIDLAND REGIONAL HOSPITAL, TULLAMORE (n=167)	NAAS GENERAL HOSPITAL (n=493)	ST. JAMES'S HOSPITAL (n=753)
Admitted (General, Psychiatric, ICU)	33.1%	60.3%	29.9%	31.6%	29.6%
Patient would not allow admission	1.4%	0%	0%	1.2%	0.4%
Left before recommendation	10.1%	10.6%	17.4%	8.7%	16.7%
Not admitted	53.6%	27%	23.4%	57.0%	46.5%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

**TABLE B3:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE RCSI HOSPITAL GROUP, 2020

	CAVAN GENERAL HOSPITAL (n=228)	CONNOLLY HOSPITAL, BLANCHARDSTOWN (n=554)	OUR LADY OF LOURDES HOSPITAL, DROGHEDA (n=538)
Admitted (General, Psychiatric, ICU)	46.9%	37.5%	37.7%
Patient would not allow admission	0.9%	0.4%	0%
Left before recommendation	14.0%	9.9%	15.2%
Not admitted	34.6%	50.0%	26.8%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

**TABLE B4:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SOUTH/ SOUTH WEST HOSPITAL GROUP, 2020

	BANTRY GENERAL HOSPITAL (n=42)	CORK UNIVERSITY HOSPITAL (n=655)	UNIVERSITY HOSPITAL, KERRY (n=340)	MERCY UNIVERSITY HOSPITAL, CORK (n=719)	SOUTH TIPPERARY GENERAL HOSPITAL (n=321)	UNIVERSITY HOSPITAL, WATERFORD (n=421)
Admitted (General, Psychiatric, ICU)	42.9%	50.4%	32.1%	19.3%	47.0%	26.8%
Patient would not allow admission	2.4%	0.2%	0%	0.4%	0.6%	1.2%
Left before recommendation	16.7%	4.4%	8.5%	14.6%	6.5%	6.9%
Not admitted	35.7%	36.9%	59.1%	60.6%	36.4%	62.7%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

**TABLE B5:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE UNIVERSITY LIMERICK HOSPITAL GROUP, 2020

	ENNIS HOSPITAL (n=46)	UNIVERSITY HOSPITAL, LIMERICK (n=946)
Admitted (General, Psychiatric, ICU)	6.5%	19.6%
Patient would not allow admission	0%	3.0%
Left before recommendation	0%	10.3%
Not admitted	63%	58.8%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

**TABLE B6:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2020

	UNIVERSITY HOSPITAL GALWAY (n=584)	LETTERKENNY UNIVERSITY HOSPITAL (n=161)	MAYO UNIVERSITY HOSPITAL (n=231)	PORTIUNCULA UNIVERSITY HOSPITAL (n=167)	SLIGO UNIVERSITY HOSPITAL (n=270)
Admitted (General, Psychiatric, ICU)	25.5%	38.5%	40.7%	57.5%	25.2%
Patient would not allow admission	2.1%	0.6%	1.7%	1.8%	1.9%
Left before recommendation	10.8%	2.5%	7.8%	8.4%	8.1%
Not admitted	60.4%	56.5%	43.7%	24.6%	62.2%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

**TABLE B7:** RECOMMENDED NEXT CARE BY HOSPITAL IN THE CHILDREN'S HEALTH IRELAND GROUP, 2020

	CHILDREN'S HEALTH IRELAND AT TEMPLE STREET (n=270)	CHILDREN'S HEALTH IRELAND AT TALLAGHT (n=82)	CHILDREN'S HEALTH IRELAND AT CRUMLIN (n=118)
Admitted (General, Psychiatric, ICU)	38.9%	81.7%	85.6%
Patient would not allow admission	0%	0%	0%
Left before recommendation	1.5%	0%	0%
Not admitted	58.1%	18.3%	13.6%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 - B7 may be underestimates.

## APPENDIX C: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITAL WITH SELF-HARM IN 2020

**TABLE C1:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE IRELAND EAST HOSPITAL GROUP, 2020

		MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. LUKE'S HOSPITAL, KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
Number of individuals who presented	Males	316	99	63	175	17	237	107
	Females	282	127	88	166	24	348	169
	All	598	226	151	341	41	585	276
Number who repeated	Males	68	13	4	28	5	32	20
	Females	70	18	18	26	7	64	35
	All	138	31	22	54	12	96	55
Percentage who repeated	Males	21.5%	13.1%	6.3%	16%	29.4%	13.5%	18.7%
	Females	24.8%	14.2%	20.5%	15.7%	29.2%	18.4%	20.7%
	All	23.1%	13.7%	14.6%	15.8%	29.3%	16.4%	19.9%



**TABLE C2:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2020

		TALLAGHT UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
Number of individuals who presented	Males	250	111	54	165	264
	Females	297	133	85	176	270
	All	547	244	139	341	534
Number who repeated	Males	47	16	9	34	62
	Females	40	22	11	35	59
	All	87	38	20	69	121
Percentage who repeated	Males	18.8%	14.4%	16.7%	20.6%	23.5%
	Females	13.5%	16.5%	12.9%	19.9%	21.9%
	All	15.9%	15.6%	14.4%	20.2%	22.7%

**TABLE C3:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE RCSI HOSPITAL GROUP, 2020

		CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
Number of individuals who presented	Males	91	195	172
	Females	106	277	274
	All	197	472	446
Number who repeated	Males	11	33	27
	Females	9	40	42
	All	20	73	69
Percentage who repeated	Males	12.1%	16.9%	15.7%
	Females	8.5%	14.4%	15.3%
	All	10.2%	15.5%	15.5%

**TABLE C4:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE SOUTH/ SOUTH WEST HOSPITAL GROUP, 2020

		CORK UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL, KERRY	MERCY UNIVERSITY HOSPITAL, CORK	SOUTH TIPPERARY GENERAL HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
Number of individuals who presented	Males	237	136	303	95	157
	Females	290	142	269	148	198
	All	527	278	572	243	355
Number who repeated	Males	39	20	60	15	18
	Females	51	26	41	31	34
	All	90	46	101	46	52
Percentage who repeated	Males	16.5%	14.7%	19.8%	15.8%	11.5%
	Females	17.6%	18.3%	15.2%	20.9%	17.2%
	All	17.1%	16.5%	17.7%	18.9%	14.6%

Note: Due to small numbers, data on the number of patients who presented to Bantry Hospital are not included in this table to avoid risk of disclosure.

**TABLE C5:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE UNIVERSITY LIMERICK HOSPITAL GROUP, 2020

		ENNIS HOSPITAL	UNIVERSITY HOSPITAL, LIMERICK
Number of individuals who presented	Males	*	314
	Females	*	422
	All	11	736
Number who repeated	Males	*	51
	Females	*	81
	All	6	132
Percentage who repeated	Males	*	16.2%
	Females	*	19.2%
	All	54.5%	17.9%

Note: Due to small numbers, the numbers of males and females who presented to Ennis Hospital are masked to avoid risk of disclosure.

**TABLE C6:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2020

		UNIVERSITY HOSPITAL GALWAY	LETTERKENNY UNIVERSITY HOSPITAL	MAYO UNIVERSITY HOSPITAL	PORTIUNCULA UNIVERSITY HOSPITAL	SLIGO UNIVERSITY HOSPITAL
Number of individuals who presented	Males	196	57	78	68	112
	Females	257	90	114	80	105
	All	453	147	192	148	217
Number who repeated	Males	29	5	8	10	11
	Females	41	7	18	8	13
	All	70	12	26	18	24
Percentage who repeated	Males	14.8%	8.8%	10.3%	14.7%	9.8%
	Females	16.0%	7.8%	15.8%	10%	12.4%
	All	15.5%	8.2%	13.5%	12.2%	11.1%

**TABLE C7:** SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE CHILDREN'S HEALTH IRELAND GROUP, 2020

		CHILDREN'S HEALTH IRELAND AT TEMPLE STREET	CHILDREN'S HEALTH IRELAND AT TALLAGHT	CHILDREN'S HEALTH IRELAND AT CRUMLIN
Number of individuals who presented	Males	49	15	31
	Females	176	59	76
	All	225	74	107
Number who repeated	Males	5	0	*
	Females	33	11	*
	All	38	11	15
Percentage who repeated	Males	10.2%	0%	*
	Females	18.8%	18.6%	*
	All	16.9%	14.9%	14%

Note: Due to small numbers, the number of males and females who had a repeat self-harm presentation in Children's Health Ireland at Crumlin are masked to avoid risk of disclosure.

## APPENDIX D: NUMBER AND RATE OF PERSONS WITH HOSPITAL-PRESENTING SELF-HARM IN 2020

**TABLE D1:** ESTIMATED NUMBER AND RATE OF PERSONS<sup>3</sup> WITH HOSPITAL-PRESENTING SELF-HARM IN THE REPUBLIC OF IRELAND IN 2020

Age group	MALES				FEMALES			
	Population	SELF-HARM			Population	SELF-HARM		
		Persons	Rate	95% CI <sup>1</sup>		Persons	Rate	95% CI <sup>1</sup>
0-4yrs	158,200	0	0	(+/-0)	151,300	0	0	(+/-0)
5-9yrs	176,300	7	4	(+/-3)	167,800	5	3	(+/-3)
10-14yrs	179,400	127	71	(+/-13)	170,600	400	234	(+/-23)
15-19yrs	164,700	521	316	(+/-28)	159,300	1,241	779	(+/-44)
20-24yrs	156,000	658	422	(+/-33)	151,200	733	485	(+/-36)
25-29yrs	147,400	634	430	(+/-34)	144,800	482	333	(+/-30)
30-34yrs	157,500	479	304	(+/-28)	166,500	431	259	(+/-25)
35-39yrs	186,400	439	236	(+/-22)	200,100	491	245	(+/-22)
40-44yrs	193,800	408	211	(+/-21)	199,900	388	194	(+/-20)
45-49yrs	177,700	297	167	(+/-19)	180,800	382	211	(+/-22)
50-54yrs	157,400	240	152	(+/-20)	158,700	287	181	(+/-21)
55-59yrs	144,100	148	103	(+/-17)	148,600	209	141	(+/-19)
60-64yrs	128,000	99	77	(+/-16)	130,900	129	99	(+/-17)
65-69yrs	111,000	51	46	(+/-13)	113,300	81	71	(+/-16)
70-74yrs	93,500	32	34	(+/-12)	97,400	49	50	(+/-14)
75-79yrs	64,000	29	45	(+/-17)	70,100	30	43	(+/-16)
80-84yrs	40,100	7	17	(+/-13)	49,600	18	36	(+/-17)
85yrs+	30,200	8	26	(+/-19)	51,000	10	20	(+/-12)
<b>Total<sup>2</sup></b>	<b>2,465,600</b>	<b>4,184</b>	<b>176</b>	<b>(+/-5)</b>	<b>2,511,900</b>	<b>5,366</b>	<b>224</b>	<b>(+/-6)</b>

<sup>1</sup>95% Confidence Interval.

<sup>2</sup>The total rates are age-standardised rates per 100,000.

**TABLE D2:** NUMBER AND RATE OF PERSONS<sup>4</sup> WITH HOSPITAL-PRESENTING SELF-HARM IN THE REPUBLIC OF IRELAND IN 2020

Age group	MALES				FEMALES			
	Population	SELF-HARM			Population	SELF-HARM		
		Persons	Rate	95% CI <sup>1</sup>		Persons	Rate	95% CI <sup>1</sup>
0-4yrs	158,200	0	0	(+/-0)	151,300	0	0	(+/-0)
5-9yrs	176,300	7	4	(+/-3)	167,800	5	3	(+/-3)
10-14yrs	179,400	127	71	(+/-13)	170,600	399	234	(+/-23)
15-19yrs	164,700	498	302	(+/-27)	159,300	1,167	733	(+/-43)
20-24yrs	156,000	632	405	(+/-32)	151,200	693	458	(+/-35)
25-29yrs	147,400	600	407	(+/-33)	144,800	462	319	(+/-30)
30-34yrs	157,500	459	291	(+/-27)	166,500	409	246	(+/-24)
35-39yrs	186,400	422	226	(+/-22)	200,100	441	220	(+/-21)
40-44yrs	193,800	383	198	(+/-20)	199,900	367	184	(+/-20)
45-49yrs	177,700	281	158	(+/-19)	180,800	366	202	(+/-21)
50-54yrs	157,400	225	143	(+/-19)	158,700	268	169	(+/-21)
55-59yrs	144,100	143	99	(+/-17)	148,600	200	135	(+/-19)
60-64yrs	128,000	97	76	(+/-15)	130,900	120	92	(+/-17)
65-69yrs	111,000	48	43	(+/-12)	113,300	72	64	(+/-15)
70-74yrs	93,500	30	32	(+/-12)	97,400	47	48	(+/-14)
75-79yrs	64,000	27	42	(+/-16)	70,100	29	41	(+/-15)
80-84yrs	40,100	6	15	(+/-12)	49,600	17	34	(+/-17)
85yrs+	30,200	8	26	(+/-19)	51,000	8	16	(+/-11)
<b>Total<sup>2</sup></b>	<b>2,465,600</b>	<b>3,993</b>	<b>168</b>	<b>(+/-5)</b>	<b>2,511,900</b>	<b>5,070</b>	<b>212</b>	<b>(+/-6)</b>

<sup>1</sup>95% Confidence Interval.

<sup>2</sup>The total rates are age-standardised rates per 100,000.

<sup>3</sup>Estimated number and rate of persons based on extrapolated data from 2019.

<sup>4</sup>Number and rate of persons based on presentations to all except one hospital in the Republic of Ireland during 2020.

## APPENDIX E: DATA BRIEFING 'HOSPITAL-PRESENTING SELF-HARM DURING JANUARY-DECEMBER 2020'



National Self-Harm Registry Ireland

### Hospital-presenting self-harm during January-December 2020

Data Briefing, July 2021

The COVID-19 pandemic and associated measures to address it have led to an increase in individual and population level risk factors for self-harm and suicide. These include anxiety, social isolation, loneliness, sudden bereavement, job loss, economic uncertainty, substance misuse, fear of infection and restrictions on health activities and access to healthcare services (Burke et al., 2020; Fancourt et al., 2020; Niedzwiedz et al., 2020; O'Connor et al., 2020; Yang et al., 2020). As a result, there are concerns that the pandemic may result in an increase in self-harm and suicide. Recent data from 21 high- and middle-income countries show that suicide numbers remained unchanged or declined in the initial months of the pandemic (Pirkis et al 2021). Furthermore, research from England showed a 18% decrease in hospital-presenting self-harm during 12 weeks of lockdown from March 2020, compared to the equivalent period of 2019 (Hawton et al., 2021). Ongoing surveillance is important to monitor the impact of the pandemic on self-harm and suicide, as the long-term mental health and economic effects become clearer.

The National Self-Harm Registry Ireland (NSHRI), operated by the National Suicide Research Foundation (NSRF) and funded by the Health Service Executive National Office for Suicide Prevention, collects data on self-harm presentations to hospital emergency departments in the Republic of Ireland. This data briefing provides information on the monthly number of self-harm presentations to 15 hospitals during January-December 2020, compared to presentations made to the same hospitals in the equivalent months of 2018 and 2019.

These 15 hospitals provide nationally-representative data given they are spread across the country and are located in the centres of large cities, in city suburbs and in large towns, though only one Dublin hospital could be included. In 2018 and 2019, these hospitals accounted for 45% of the national number of self-harm presentations recorded by the NSHRI. It should be noted that the data presented for 2020 are provisional and subject to change.

The NSHRI recorded a total of 5,432 self-harm presentations to the 15 hospitals during January-December 2020, equivalent to 14.8 self-harm presentations per day. A total of 11,169 self-harm presentations to these 15 hospitals were recorded for the 24 months of 2018-2019, equating to a rate of 15.3 per day. Therefore, the rate of hospital-presenting self-harm was 3% lower during 2020 compared to 2018-2019 (Rate ratio=0.97, 95% confidence interval=0.94, 1.00).

There were significant reductions in hospital-presenting self-harm in March and April 2020 (Figure 1).



**Figure 1: Monthly self-harm presentations to 15 hospitals in Ireland during 2018-2019 and 2020**

In March 2020, the first month of the outbreak of COVID-19 in Ireland, there were 394 self-harm presentations to the 15 hospitals. The daily rate was 12.7, which is 15% lower than the rate of 14.9 per day in March 2018-2019 (see table 1).

The Irish government's stay-at-home restrictions came into force on March 27<sup>th</sup>. April 2020 saw 376 self-harm presentations to the 15 hospitals. The daily rate was 12.5 which is 22% lower than the daily rate of 16.0 in April 2018-2019. While the stay-at-home restrictions continued until mid-May 2020, the rate of self-harm presentations was close to usual levels that month – 6% lower at 15.0 per day compared to 15.9 per day in May 2018-2019.

As was the case in January 2020, the rate of self-harm presentations in the months from June to September 2020 was almost identical to the rate observed in the same months of 2018-2019. This pattern of a return to usual levels is similar to reports on the impact of COVID-19 on hospital-presenting self-harm in other high-income countries (John et al., 2020, Hawton et al., 2020).

During October 2020, the second wave of COVID-19 in Ireland reached its peak and the government increased restrictions culminating in the introduction of Level 5 restrictions on October 21<sup>st</sup>. The daily rate of hospital-presenting self-harm to the 15 hospitals during that month was just 5% lower than it was in October 2018-2019. The Level 5 restrictions lasted throughout November 2020 during which time the rate of hospital-presenting self-harm to the 15 hospitals was 4% higher than it was in the same month in 2018-2019. Restrictions were lifted for most of December and the rate of hospital-presenting self-harm to the 15 hospitals during that month was 6% lower than it was in December 2018-2019. The differences observed for October-December in 2020 versus 2018-2019 were not statistically significant.

**Table 1: Monthly self-harm presentations to 15 hospitals during 2020 and 2018-2019**

Month	Number (daily rate) in 2020	Average number (daily rate) in 2018-2019	Rate ratio (95% confidence interval)
January	503 (16.2)	999 (16.1)	1.01 (0.90, 1.12)
February	481 (16.6)	831 (14.8)	1.12 (1.00, 1.25)
March	394 (12.7)	925 (14.9)	0.85 (0.76, 0.96)
April	376 (12.5)	960 (16.0)	0.78 (0.70, 0.88)
May	464 (15.0)	988 (15.9)	0.94 (0.84, 1.05)
June	450 (15.0)	898 (15.0)	1.00 (0.89, 1.12)
July	465 (15.0)	920 (14.8)	1.01 (0.90, 1.13)
August	469 (15.1)	947 (15.3)	0.99 (0.89, 1.11)
September	490 (16.3)	952 (15.9)	1.03 (0.92, 1.15)
October	465 (15.0)	983 (15.9)	0.95 (0.85, 1.06)
November	475 (15.8)	915 (15.3)	1.04 (0.93, 1.16)
December	400 (12.9)	851 (13.7)	0.94 (0.83, 1.06)
<b>Total</b>	<b>5432 (14.8)</b>	<b>11169 (15.3)</b>	<b>0.97 (0.94, 1.00)</b>

Note: The rate ratio (RR) is the daily rate for a period in 2020 divided by the daily rate in the same period of 2018-2019. RRs equal or close to one indicate that the rate in 2020 was equal or similar to the rate in 2018-2019. RRs greater than one indicate that the rate in 2020 was higher than in 2018-2019. RRs less than one indicate that the rate was lower in 2020. The difference between the rate in 2020 and 2018-2019 is statistically significant if the 95% confidence interval for the RR does not include the value one, which is the case for March and April.

#### Key Findings


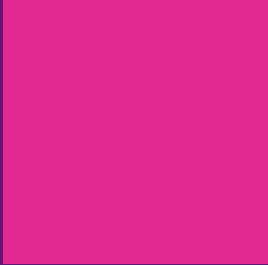

- Overall, the rate of hospital-presenting self-harm to the 15 hospitals with available data was 3% lower in 2020 than it was in 2018-2019.
- In March 2020, during the outbreak of COVID-19 in Ireland, the rate of hospital-presenting self-harm was 15% lower than in March 2018-2019.
- During the 'stay-at-home' month of April 2020, the rate was 22% lower than in April 2018-2019.

*For further information, please contact:*

Dr Paul Corcoran,  
 Head of Research,  
 National Suicide Research Foundation  
 E-mail: pcorcoran@ucc.ie

## References

- Burke, T.;** Berry, A.; Taylor, L.K.; Stafford, O.; Murphy, E.; Shevlin, M.; McHugh, L.; Carr, A. Increased Psychological Distress during COVID-19 and Quarantine in Ireland: A National Survey. *J. Clin. Med.* 2020, 9, 3481. [doi.org/10.3390/jcm9113481](https://doi.org/10.3390/jcm9113481)
- Fancourt D,** Steptoe A, Bu, F. Trajectories of anxiety and depressive symptoms during enforced isolation due to COVID-19: longitudinal analyses of 36,520 adults in England. *Lancet Psychiatry* 2020 [doi.org/10.1101/2020.06.03.20120923](https://doi.org/10.1101/2020.06.03.20120923)
- Hawton K,** Casey D, Bale E, Brand F, Ness J, Waters K, Kelly S, Geulayov G. Self-harm during the early period of the COVID-19 pandemic in England: comparative trend analysis of hospital presentations. *Journal of affective disorders.* 2021 Mar 1;282:991-5.
- John A,** Pirkis J, Gunnell D, Appleby L, Morrissey J. Trends in suicide during the covid-19 pandemic. *BMJ* 2020; 371 :m4352. doi: <https://doi.org/10.1136/bmj.m4352>
- Niedzwiedz CL,** Green MJ, Benzeval M, *et al.* Mental health and health behaviours before and during the initial phase of the COVID-19 lockdown: longitudinal analyses of the UK Household Longitudinal Study. *J Epidemiol Community Health* 2020. doi: [10.1136/jech-2020-215060](https://doi.org/10.1136/jech-2020-215060)
- O'Connor R,** Wetherall K, Cleare S, McClelland H, Melson A, Niedzwiedz C, *et al.* Mental health and wellbeing during the COVID-19 pandemic: Longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study. *The British Journal of Psychiatry* 2020: 1-17. doi:[10.1192/bjp.2020.212](https://doi.org/10.1192/bjp.2020.212)
- Pirkis J** *et al.* Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries. *Lancet Psychiatry* 2021 [https://doi.org/10.1016/S2215-0366\(21\)00091-2](https://doi.org/10.1016/S2215-0366(21)00091-2)
- Yang S,** Lin H, Zhu J, Chen Y, Wang N, Zhao Q, Fu C. Depression and anxiety symptoms among returning workers during the COVID-19 period in East China. *Soc Psychiatry Psychiatr Epidemiol.* 2020 Nov 24:1–8. doi: [10.1007/s00127-020-01983-w](https://doi.org/10.1007/s00127-020-01983-w)



MARY JOYCE  
SHELLY CHAKRABORTY  
GEORGIE O'SULLIVAN  
PAWEL HURSZTYN  
CAROLINE DALY  
NIALL McTERNAN  
SARAH NICHOLSON  
ELLA ARENSMAN  
EILEEN WILLIAMSON  
PAUL CORCORAN

4th Floor  
Western Gateway Building  
University College Cork  
Ireland

Tel: +353 21 420 5551  
Email: [info@nsrf.ie](mailto:info@nsrf.ie)  
[www.nsrf.ie](http://www.nsrf.ie)



National Suicide Research Foundation