NATIONAL SELF-HARM REGISTRY IRELAND

ANNUAL REPORT 2014

EVE GRIFFIN

ELLA ARENSMAN

PAUL CORCORAN

CHRISTINA B DILLON

EILEEN WILLIAMSON

IVAN J PERRY

National Suicide Research Foundation

Suggested Citation:
Griffin, E, Arensman, E, Dillon, CB, Corcoran, P, Williamson, E and Perry, IJ (2014).
National Self-Harm Registry Ireland Annual Report 2014.
Cork: National Suicide Research Foundation.

Published by:
National Suicide Research Foundation, Cork.

ISSN 1649 4326

Hard copies of the Annual Report 2014 are available from:
National Suicide Research Foundation
4th Floor
Western Gateway Building
University College Cork
Ireland

Tel: +353 21 4205551
Email: info@nsrf.ie

Electronic copies of the Annual Report 2014 are available from the website of the National Suicide Research Foundation: www.nsrf.ie

N S R F

Contents

Foreword

Professor Ivan Perry

Department of Epidemiology and Public Health, University College Cork

Director, National Self-Harm Registry Ireland

Professor Ella Arensman

Director of Research, National Suicide Research Foundation

Adjunct Professor Department of Epidemiology and Public Health, University College Cork

President, International Association for Suicide Prevention

Over twelve years ago, we established in Ireland the world's first national registry of cases of intentional self-harm presenting to hospital emergency departments. The registry was established at the request of the Department of Health and Children by the National Suicide Research Foundation working in collaboration with the Department of Epidemiology & Public Health, University College Cork. It is funded by the Health Service Executive's National Office for Suicide Prevention.

The Registry provides a unique opportunity to determine and monitor the incidence and repetition of self-harm presentations to hospital emergency departments in Ireland with the aim of identifying high-incidence groups and areas, and informing services and practitioners concerned with the prevention of suicidal behaviour.

The Registry has provided important evidence for strategic goals and actions in the new National Strategy to Reduce Suicide, *Connecting for Life*, 2015-2020, which was launched in June of this year. In addition, Registry data will form a key component of the Strategy's Outcomes Framework to monitor progress and to examine the impact of implemented actions over the next five years.

Western Gateway Building,
University College Cork

One of the benefits of such a monitoring system is in examining trends of self-harm rates over time. Ireland was profoundly affected by the global financial crisis, and experienced five years of economic recession, as detailed in the 2013 annual report. Data collected by the Registry during this time reflected the impact of the recession on suicidal behaviour in Ireland, and we saw a 12% increase in rates of self-harm during the period 2007-2012. These data mirrored a significant increase in suicide rates during this period. These findings have now been published in an international peer-reviewed journal (International Journal of Epidemiology).

Information obtained by the Registry contributes to strategic planning of services and interventions. For example, information on geographic variation in the incidence of self-harm and extent of repeated self-harm has been used to inform the national implementation and evaluation of Dialectical Behaviour Therapy. The Registry data consistently shows increased risk of self-harm associated with alcohol use and misuse on specific days of the year and mostly bank holidays. These outcomes have informed the strategic planning and implementation of the '*Little Things*' Positive Mental Health Awareness Campaign.

The findings from the Registry have provided an informed basis for a successful five-year research programme, funded by the Health Research Board: *Individual and area level determinants of self-harm and suicide in Ireland: Enhancing prediction, risk assessment and management of self-harm by health services*. This programme aims to improve the care for people who engage in self-harm, and to reduce repeated self-harm and suicide.

Internationally, the Registry is being recommended by the World Health Organisation as a template for surveillance of hospital treated self-harm at global level, with NSRF staff providing training programmes and guidance to health professionals and researchers who are currently in the process of establishing a self-harm registry.

We would like to acknowledge the on-going commitment and dedication of the data registration officers in ensuring the high quality operation of the Registry. We would also like to commend the hospital staff for their diligence and dedication in meeting the needs of individuals who present to hospital as a result of self-harm.

"The Registry provides insight into longitudinal patterns of care for self-harm patients."

Executive Summary

This is the thirteenth annual report from the National Self-Harm Registry Ireland. It is based on data collected on persons presenting to hospital emergency departments as a result of self-harm in 2014 in the Republic of Ireland. The Registry had near complete coverage of the country's hospitals for the period 2002-2005 and, since 2006, all general hospital and paediatric hospital emergency departments in the Republic of Ireland have contributed data to the Registry.

Since 2004 the Registry has recorded 101,904 self-harm presentations, involving 63,457 individuals. Such data provides a unique opportunity to establish, at a national level, the patterns of aftercare in hospitals involving non-fatal suicidal behaviour. The Registry data also provides a robust insight in to longitudinal patterns of care for self-harm patients. Therefore, the 2014 Registry report includes a section which provides an overview of trends of self-harm in Ireland between 2004-2014, with a specific focus on aftercare of self-harm.

In 2014, the Registry recorded 11,126 presentations to hospital due to self-harm nationally, involving 8,708 individuals. Taking the population into account, the age-standardised rate of individuals presenting to hospital following self-harm in 2014 was 200 per 100,000. Thus, the self-harm rate was essentially unchanged from 2013. This levelling-off follows three successive decreases in the rate of persons presenting to hospital following self-harm in Ireland from 2011 to 2013. However, the rate in 2014 was still significantly higher (+6%) than the pre-recession rate in 2007 (188 per 100,000).

A recent study (*Corcoran et al, 2015*) including data from the National Self-Harm Registry, found that during the period 2008-2012, there was a negative impact of the recession on national rates of both suicide and self-harm in Ireland. It was found that the rate of male suicide was 57% higher than it would have been had the economic recession not occurred. The rate of male and female self-harm was respectively 37% and 26% higher. In absolute numbers, there were an additional 476 male suicides during 2008-2012 than we would have expected to see had the recession not occurred. There was also an excess number of self-harm presentations (males: 5,029 and females: 3,833). The impact of the economic recession on self-harm was most evident in 15-44 and 45-64 year-old men.

In 2014, the national male rate of self-harm was 185 per 100,000, 2% higher than in 2013. The female rate of self-harm in 2014 was 216 per 100,000, virtually unchanged from 2013. Since 2007, the male rate has increased significantly, by 14%, whereas the female rate is less than 1% higher than in 2007.

In 2014, the only significant change in the rate of hospital-treated self-harm by age was among boys aged 10-14 years, where the self-harm rate increased by 44% from 34 to 49 per 100,000. Rates of self-harm for other age groups remained similar to 2013. This is particularly worrying considering the higher lethality of self-harm methods among males (*Mergl et al, 2015*) and the greater risk of suicide following self-harm among males compared to females (*Carroll et al, 2014*).

As in previous years, the female rate was higher than the male rate but the gender difference has narrowed from 37% in 2004-2005 to 16% in 2014. The peak rate for women was in the 15-19 years age group, at 678 per 100,000, whereas the peak rate among men was in 20-24 year-olds at 544 per 100,000. These rates imply that one in every 147 girls in the age group 15-19 and one in every 184 men in the age group 20-24 presented to hospital in 2014 as a consequence of self-harm.

There was widespread variation in the male and female self-harm rate when examined by city/county of residence. The male rate varied from 127 per 100,000 for Clare to 394 per 100,000 for Cork City. The lowest female rate was recorded for Monaghan (133 per 100,000) with the highest rates recorded for Limerick City residents at 380 per 100,000. Relative to the national rate, high rates of self-harm were recorded for male and female city residents and for men living in Kerry, Sligo and South Dublin and for women living in South Dublin, Carlow, Westmeath and Clare. In 2014 high rates for both men and women were seen in Cork City, where the male rate was more than twice the national average and the female rate was 50% higher. In Limerick City the male rate was 87% higher than the national average and the female rate was 76% higher.

The only significant decrease in the male rate of self-harm was observed in Carlow (-37%). The most notable decreases for women included Tipperary North and South (-37% and -35%, respectively) and Limerick City (-33%). Significant increases in the male rate of self-harm were observed in Roscommon (+72%), Cavan (+69%), Kerry (+25%) and Cork County (+17%). A significant increase in the female rate of self-harm was observed in Kilkenny (+33%).

The proportion of acts accounted for by repetition in 2014 (22.0%) was similar to the years 2003-2009 (range: 20.5-23.1%) and 2013 (21.0%). Of the 8,708 self-harm patients treated in 2014, 1,264 (14.5%) 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. The person-based rate of repetition was broadly similar in men and women (14.9% vs. 14.2%). Repetition varied significantly by age. Approximately 12% of self-harm patients aged less than 15 years re-presented with self-harm in 2014. The proportion who repeated was highest, at 17%, for 25-54 year-olds.

Within the calendar year 2014, at least five self-harm presentations were made by 138 individuals, accounting for just 2% of all self-harm patients in the year but 10% of all self-harm presentations recorded. As in previous years, self-cutting was associated with an increased level of repetition. Almost one in five (17.6%) of those who used cutting as their main method of self-harm in their index act made at least one subsequent self-harm presentation in the calendar year compared to over one in ten (13.7%) of those who took an intentional drug overdose. Risk of repetition was greatest in the days and weeks following a self-harm presentation to hospital and the risk increased markedly with each subsequent presentation.

While overall the rate of repetition in one year was similar for men and women, repetition rates by gender did vary by Local Health Office (LHO) area. The largest gender differences in the rate of repetition were observed in those LHO areas with the highest repetition rates. Repetition of self-harm is a strong predictor of future suicide (*Carroll et al, 2014*), and therefore the correlation between rates of repetition and suicide rates by region warrants further investigation.

Intentional drug overdose was the most common method of self-harm, involved in 66% of all acts registered in 2014. Minor tranquillisers, paracetamol-containing medicines and anti-depressants/mood stabilisers were involved in 37%, 28% and 21% of drug overdose acts, respectively. The number of self-harm presentations to hospital involving drug overdose

in 2014 (7,314) represented a slight decrease on the numbers recorded in 2013 (-2%). This was also true when examined by type of drug. Most notably, there was a reduction in the number of self-harm presentations involving minor tranquilisers by 8% from 2013. Further decreases were observed in the use of Nonsteroidal Anti-inflammatory Drugs (NSAIDs) (-13%), opiate medication (-9%) and paracetamol-compound medication (-9%). In 2014, the number of self-harm presentations to hospital involving street drugs increased by 11% from 2013 (following annual decreases in 2012 and 2013) to 466, which is similar to the level recorded in 2008 (n=466).

Attempted hanging was involved in 7% of all self-harm presentations (10% for men and 4% for women). At 786, the number of presentations involving attempted hanging has increased by 7% from 2013 (7% for men and 9% for women). Overall, the proportion of self-harm presentations involving hanging increased by 77% between 2007 and 2014. Increasing trends in highly lethal self-harm methods are associated with higher suicidal intent (*Bergen et al, 2012; Beautrais et al, 2001*) and with higher risk of subsequent suicide (*Runeson et al, 2010*), and can therefore be considered a true increase in self-harm that occurred during the recessionary period in Ireland. Whilst during 2007-2010 in particular there was a steep increase in self-harm involving highly lethal methods among both men and women, the proportion of cases involving highly lethal methods among men has begun to level off. However, this should be interpreted with caution.

Cutting was the only other common method of self-harm, involved in 26% of all episodes. Cutting was significantly more common in men (28%) than in women (24%). In 89% of all cases involving self-cutting, the treatment received was recorded. Just under two-thirds (29%) received steristrips or steribonds, 43% did not require any treatment, 18% required sutures while 3% were referred for plastic surgery. The treatment following self-cutting was similar for both men and women.

Similar to 2013, alcohol was involved in just over one third of all cases (35%). Alcohol was significantly more involved in male episodes of self-harm than female episodes (37% versus 33%, respectively). Alcohol may be one of the factors underlying the pattern of presentations with self-harm by time of day and day of week. Presentations peaked in the hours around midnight and almost one-third of all presentations occurred on Sundays and Mondays.

In 2014, 67% (n=6,878) of patients were assessed by a member of the mental health team in the hospital. This is in line with figures from 2013. Assessment was most common following attempted drowning (78%) and attempted hanging (77%). Overall, 74% of those not admitted to the presenting hospital received a psychiatric assessment prior to discharge. However, only 13% of patients who left before recommendation/medical advice received an assessment.

Next care varied significantly by HSE hospital group. The proportion of self-harm patients who left before a recommendation was made varied from <1% in the Children's hospital group, to 13% in the University of Limerick and 18% in the RCSI hospital groups. Across the hospital groups, inpatient care (irrespective of type and whether patient refused) was recommended for 16% of the patients treated in the University of Limerick, 25% in the RCSI, 29% in the Ireland East, 31% in the Dublin Midlands, 34% in the South/ South West, 39% in the Saolta University and 68% in the Children's hospital groups. In addition, general and psychiatric admissions following treatment in the emergency department also varied significantly by hospital group. The variation in recommended next care is likely to be due to variation in the availability of resources and services but it also suggests that assessment and management procedures with respect to self-harm patients are likely to be variable and inconsistent across the country.

There has been a changing pattern in the aftercare of self-harm over the ten-year period, 2004-2014 Since 2004, the proportion of patients admitted to a general ward following a self-harm presentation has declined by 45% (48% for men, 42% for women). This decline was most pronounced in the period 2007-2014, where general admissions decreased by 35%. Over this ten-year period, there has been no improvement in the proportion of patients leaving the ED without being seen or without a recommendation (range 12-15%).

In 2013 the Registry began recording referrals for patients discharged from the emergency department following self-harm. In 2014, 71% of patients discharged from the presenting emergency department were provided with a referral. In 30% of episodes, an out-patient appointment was recommended as a next care step for the patient. 16% of patients were discharged with a recommendation to attend their GP for a follow-up appointment. 11% of those not admitted to the presenting hospital were transferred to another hospital for treatment. Other services (e.g. psychological services, community-based mental health teams and addiction services) were recommended in 14% of episodes.

"The significant increase in self-harm among boys aged 10-14 years underlines the need for evidence based mental health awareness programmes."

Recommendations

Following successive increases in self-harm in Ireland during the period 2007-2010, the 2014 Annual Report of the National Self-Harm Registry Ireland shows a stabilisation of the Irish self-harm rate. However, the 2014 national self-harm rate is still 6% higher than the national rate in 2007, and the national male self-harm rate is still 14% higher than the equivalent rate in 2007. The 2014 Registry outcomes underline an on-going need for prevention and intervention programmes to be implemented at national level. Increased and continued support should be provided for evidence-based and best practice prevention and mental health promotion programmes in line with relevant strategic goals and actions in the new Irish National Strategy to Reduce Suicide, 2015-2020, Connecting for Life.

A number of the recommendations following from the 2014 report findings are consistent with those proposed in recent years, and a number of key outcomes indicate on-going priorities.

The Registry consistently provides evidence for different types of self-harm patients presenting to Emergency Departments (EDs), such as those engaging in highly lethal acts of self-harm with high risk of subsequent suicide and those using methods with low lethality but who may be at risk of non-fatal repetition. While it is strongly recommended that all self-harm patients presenting to the ED should receive a comprehensive risk and psychosocial-psychiatric assessment, recommended treatment should be tailored according to the patient's needs and risk of subsequent suicidal behaviour (*MacHale et al, 2013; Knesper, 2011; NICE, 2011*). This links in directly with Strategic Goal 4 of *Connecting for Life*, i.e. to enhance accessibility, consistency and care pathways of services for people vulnerable to suicidal behaviour and associated actions:

- Improve psychosocial and psychiatric assessment and care pathways for people vulnerable to suicidal behaviour (Action 4.1),
- Improve access to effective therapeutic interventions (e.g. counselling, Dialectical Behaviour Therapy, Cognitive Behaviour Therapy) for people vulnerable to suicidal behaviour (Action 4.2).

In this context, it is encouraging that as part of the National Clinical Care Programme for Mental Health (NCCP-MH), at least 30 self-harm specialist nurses have taken up their position in different hospitals in the country since the start of 2014. It is also encouraging to see the first indications of the proportion of patients receiving a mental health assessment – of those cases where this information was available (92%), 67% of patients were assessed in the ED following a presentation of self-harm. Enhancing assessment and management of self-harm in hospital EDs should be an on-going priority of

the NCCP-MH and the *Connecting for Life* Strategy. The Health Research Board (HRB) recently awarded the NSRF's application for a five-year research programme, which aims to enhance psychosocial and psychiatric assessment of patients presenting to hospital following self-harm.

Considering that in 2014 the rate of self-harm was still 6% higher than in 2007, before the economic recession, this underlines the need for continued implementation and evaluation of programmes to increase awareness of mental health issues among the general public and professionals involved in supporting people who are unemployed and those experiencing financial difficulties. This is particularly true for young and middle aged men in Ireland, who showed a significant increase in both self-harm and suicide during the economic recession (*Corcoran et al, 2015*). There is growing evidence for the effectiveness of multi-level community based self-harm and suicide prevention programmes in addressing self-harm risk among people who face socio-economic challenges and who are vulnerable in terms of varying mental health issues (*Hegerl et al, 2013; Szekely et al, 2013; Mann et al, 2005*). With regard to further research into the interaction between mental health difficulties and work related risk factors associated with self-harm and suicide, in 2014, the NSRF is conducting a three-year study (SSIS-ACE), which will be conducted in collaboration with the UCC Department of Epidemiology and Public Health, and the Department of General Practice. The SSIS-ACE study is funded by the Irish Health Research Board.

The significant increase of self-harm among boys aged 10-14 years underlines the need for evidence based mental health awareness programmes geared to young boys, and aimed at reducing stigma related to mental health and help seeking behaviour. At the same time, further research is required to examine the effectiveness of interventions, such as Cognitive Behaviour Therapy for self-harm in males while so far the positive effects of treatment studies are based on females.

A positive outcome is the significant reduction in the use of minor tranquillisers (benzodiazepines) and SSRIs among self-harm patients in 2014, which may be related to pro-active monitoring of prescribing patterns in primary care services since 2012. Considering that since the start of the Registry in 2003, minor tranquillisers have been the most frequently used type of drug involved in intentional overdoses, reducing access to minor tranquillisers should be an ongoing priority in line with the strategic action of the Connecting for Life strategy, to reduce access to frequently used drugs in intentional drug overdose (Action 6.1).

The increase in self-harm acts involving attempted hanging in 2014 underline the importance of suicide risk assessment combined with psychiatric and psychosocial assessment considering the high risk of subsequent suicide. In line with previous research (*Mergl et al, 2015; Baker et al, 2012; Gunnell et al, 2005*), more innovative and intensified efforts should be made to reduce self-harm and suicide by hanging. Further research into risk factors associated with highly lethal self-harm acts will be undertaken by the SSIS-ACE study. The NSRF five-year research programme, awarded by the HRB, will enable short-term and long-term follow-up of people presenting to hospital due to highly lethal self-harm.

In line with previous years, misuse or abuse of alcohol is one of the factors associated with the higher rate of self-harm presentations on Sundays, Mondays and public holidays, around the hours of midnight. These findings underline the need for continued efforts to:

- Enhance health service capacity at specific times and to increase awareness of the negative effects of alcohol misuse and abuse such as increased depressive feelings and reduced self-control (*NICE, 2011*).
- Intensify national strategies to increase awareness of the risks involved in the use and misuse of alcohol, starting at pre-adolescent age and intensify national strategies to reduce access to alcohol and drugs (*CDC, 2010*).
- Educate self-harm patients and their families about the importance of reduced use of and access to alcohol (*CDC, 2010*).
- Arrange active consultation and collaboration between the mental health services and addiction treatment services in the best interest of patients who present with dual diagnosis (psychiatric disorder and alcohol/drug abuse) (*NICE, 2011*).

Based on recommendations of the Steering Group Report on the National Substance Misuse Strategy, in October 2013 a number of measures were proposed for inclusion in a Public Health Bill to target alcohol misuse and to reduce alcohol consumption (including minimum pricing, regulation of marketing and advertising, and health labelling) (Department of Health, 2013).

The current report shows ongoing evidence that self-cutting is the method most strongly associated with high-risk of repeated self-harm following a presentation to an ED (*Arensman et al, 2013; Larkin et al, 2013*). The Registry further illustrates the 'dose-response relationship' between the number of self-harm presentations and risk of repetition (*Perry et al, 2012*). There is need for continued efforts to prioritise national implementation of evidence-based treatments shown to reduce risk of repetition, such as cognitive behavioural and dialectical behavioural interventions (*Daigle et al, 2011; Binks et al, 2006*).

The National Office for Suicide Prevention (NOSP) has funded the national implementation of dialectical behaviour therapy for people diagnosed with Borderline Personality Disorder, which is guided by the proportion of frequently repeating self-harm patients presenting to hospitals in Ireland.

In line with previous years, there was considerable variation in the next care recommended to self-harm patients, and the proportion of patients who left hospital before a recommendation. While the Registry recorded that in 2014 nearly three-quarters of patients discharged from the ED following a self-harm presentation were provided with a referral, variations in the referral pathway for patients was seen according to HSE hospital group. A subgroup of the National Mental Health Clinical Programme Steering Group produced National Guidelines for the Assessment and Management of Patients presenting to Irish Emergency Departments following self-harm (*MacHale et al, 2013*). It is recommended that these guidelines be implemented nationally as a matter of priority. In addition, the NOSP has funded a pilot project to implement and evaluate suicide and self-harm awareness training for all ED staff and improving assessment procedures for self-harm patients in Cork and Kerry, which is a collaborative initiative between Cork University Hospital and the NSRF.

On-going work is being undertaken by the NSRF to link the Registry data with suicide mortality data obtained through the Suicide Support and Information System in Cork and the Central Statistics Office data. Linking the Registry self-harm data with the SSIS suicide mortality data revealed that self-harm patients were over 42 times more likely to die by suicide than persons in the general population. Evidence of the association between self-harm and suicide is further supported by recent UK-based research showing a significant association between self-harm involving self-cutting and suicide among both adults and young people (*Bergen et al, 2012; Hawton et al, 2012*). In addition, there are indications that increasing rates of self-harm in men are likely to be followed or paralleled by increasing suicide rates among men. It is therefore recommended that self-harm data be linked with suicide mortality data at a national level in order to enhance insight into predictors of suicide risk.

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

Ella Arensman
Director of Research, National Suicide Research Foundation, Cork
Adjunct Professor, Department of Epidemiology and Public Health, University College Cork

Christina B Dillon
Data Manager, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

Paul Corcoran
Senior Lecturer, Department of Epidemiology and Public Health and Department of Obstetrics and Gynaecology, University College Cork

Eileen Williamson
Executive Director, National Suicide Research Foundation, Cork

Ivan J Perry
Professor of Epidemiology and Public Health, University College Cork
Director, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork.

Contribution of the Registry

Contribution of the Registry to implementation and evaluation of self-harm intervention and prevention programmes in Ireland

Information from the Registry on self-harm trends, demographic and clinical characteristics, has guided the development and implementation of recommendations and specific interventions, such as:

1

The evidence base for the new National Strategy to Reduce Suicide in Ireland, *Connecting for Life*, 2015-2020 – Outcomes of the Registry informed strategic goals and priorities the new strategy, and Registry data will form a key component of the Strategy's Outcomes Framework to monitor progress and to examine the impact of implemented actions.

2

Guiding and informing the development of self-harm information systems internationally in the context of the first global report on suicide by the World Health Organisation: *Preventing Suicide: a Global Imperative*, which was launched in September 2014. The report underlines the importance of self-harm surveillance as a core component of national suicide prevention programmes and it highlights exemplars of best practice in different countries, including the National Self-Harm Registry Ireland.

3

The findings from the Registry have provided an informed basis for a successful five-year programme, funded by the Health Research Board, Individual and area level determinants of self-harm and suicide in Ireland: Enhancing prediction, risk assessment and management of self-harm by health services. This research programme aims to improve care for people who engage in self-harm, and to reduce repeated self-harm and suicide.

4

The implementation of self-harm specialist nurses in hospital emergency departments in Ireland as part of the National Clinical Care Programme for Mental Health (NCCP-MH, 2013-2014). The allocation of the nurses is taking place according to a stepped approach and hospitals will be prioritised according to the number of self-harm presentations. Currently, at least 30 of the allocated 37 self-harm specialist nurses have taken up their position in different hospitals across the country.

5

The National Implementation of Dialectical Behaviour Therapy (DBT) in Ireland (2013-2015) - Following the successful implementation of DBT for individuals with Borderline Personality Disorder and repetitive self-harm behaviours across multiple sites in Cork, DBT is currently being implemented nationally using a stepped approach and prioritising areas with high rates of repetitive self-harm. To date, 16 teams have been trained to deliver DBT and have subsequently implemented the standard DBT programme in their local services. A further eight teams will receive DBT training in late 2015.

6

Implementation of guidelines for assessment and management of self-harm patients presenting to Irish Emergency Departments (2014-2015) – The Registry data underlined the need to implement uniform evidence based guidelines for the assessment and management of self-harm patients presenting to EDs.

7

Alcohol related self-harm informing awareness campaign – The Registry data consistently shows increased risk of self-harm associated with alcohol use and misuse on specific days of the year and mostly bank holidays. These outcomes have informed the strategic planning and implementation of the '*Little Things*' Positive Mental Health Awareness Campaign.

8

NOSP working group on restricting access to benzodiazepines (2012-2014) – The Registry consistently shows that intentional drug overdose involving benzodiazepines is high in Ireland. This information contributed to establishing a working group on restricting access to benzodiazepines by the NOSP.

9

Limerick working group on reducing suicide and self-harm by drowning (2012-2014) – In recent years, the Registry identified a significant increase in attempted suicidal drownings in Limerick, which was paralleled by an increase in fatal suicidal drownings. This information contributed to establishing a working group in reducing suicide and self-harm by drowning by the local Suicide Resource Officer and other stakeholders.

Recent publications from the Registry (2014-2015)

IMPACT OF THE ECONOMIC RECESSION AND SUBSEQUENT AUSTERITY ON SUICIDE AND SELF-HARM IN IRELAND: AN INTERRUPTED TIME SERIES ANALYSIS

Corcoran P, Griffin E, Arensman E, Fitzgerald A, and Perry IJ. International Journal of Epidemiology, 2015, 1–9.

Background: The recent economic recession has been associated with short-term increases in suicide in many countries. Data are lacking on the longer-term effect on suicide and on the impact on non-fatal suicidal behaviour.

Methods: Using interrupted time series analyses, we have assessed the impact of economic recession and austerity in Ireland on national rates of suicide mortality and self-harm presentations to hospital in 2008–12.

Results: By the end of 2012, the male suicide rate was 57% higher [+8.7 per 100,000, 95% confidence interval (CI), 4.8 to 12.5] than if the pre-recession trend continued, whereas female suicide was almost unchanged (+0.3 per 100,000, 95% CI, 1.1 to 1.8). Male and female self-harm rates were 31% higher (+74.1 per 100,000, 95% CI, 6.3 to 154.6) and 22% higher (+63.2 per 100,000, 95% CI, 4.1 to 122.2), respectively.

Conclusions: Five years of economic recession and austerity in Ireland have had a significant negative impact on rates of suicide in men and on self-harm in both sexes.

THE ICEBERG OF SUICIDE AND SELF-HARM IN IRISH ADOLESCENTS: A POPULATION-BASED STUDY

McMahon EM, Keeley H, Cannon M, Arensman E, Perry IJ, Clarke M, Chambers D, Corcoran P. Social Psychiatry and Psychiatric Epidemiology, 49, 1929-1935.

Background: Suicide is a leading cause of death among adolescents. Self-harm is the most important risk-factor for suicide, yet the majority of self-harm does not come to the attention of health services.

Methods: Annual suicide rates were calculated for 15–17 year-old in the Cork and Kerry region in Ireland based on data from the Central Statistics Office. Rates of hospital treated self-harm were collected by the Irish National Registry of Deliberate Self-Harm. Rates of self-harm in the community were assessed using a survey of 3,881 adolescents, the Child and Adolescent Self-harm in Europe study.

Results: The annual suicide rate was 10/100,000. Suicide was six times more common among boys than girls. The annual incidence rate of self-harm was 344/100,000, with the female rate almost twice the male rate. The rate of self-harm in the community was 5,551/100,000, with girls almost four times more likely to report self-harm. For every boy/girl who died by suicide, 16 /162 presented to hospital with self-harm and 146/3, 296 reported self-harm in the community respectively.

Conclusions: Gender differences in relative rates of self-harm and suicide are very large, with boys who have harmed themselves at particularly high risk of suicide. Knowledge of the relative incidence of self-harm and suicide in adolescents can inform prevention programmes and services.

CHARACTERISTICS OF SMALL AREAS WITH HIGH RATES OF HOSPITAL-TREATED SELF-HARM: DEPRIVED FRAGMENTED AND URBAN OR JUST CLOSE TO HOSPITAL? A NATIONAL REGISTRY STUDY

O'Farrell IB, Corcoran P, Perry IJ. Journal of Epidemiology Community Health 2015; 69:162–167.

Background: Previous research has shown an inconsistent relationship between the spatial distribution of hospital treated self-harm and area-level factors such as deprivation and social fragmentation. Furthermore, no previous research has investigated if travel time to hospital services can explain the area-level variation in the incidence of hospital treated self-harm.

Methods: From 2009 to 2011, the Irish National Registry of Deliberate Self Harm collected data on self-harm presentations to all hospital emergency departments in the country. The Registry uses standard methods of case ascertainment and also geocodes patient addresses to small area geographical level.

Results: Deprivation, social fragmentation and population density had a positive linear association with self-harm, with deprivation having the strongest independent effect. Furthermore, self-harm incidence was found to be elevated in areas that had shorter journey times to hospital. A subgroup analysis examining the effect of travel time on specific methods of self-harm, found that this effect was most marked for self-harm acts involving minor self-cutting.

Conclusion: Self-harm incidence was influenced by proximity to hospital services, population density and social fragmentation; however, the strongest area-level predictor of self-harm was deprivation.

CHARACTERISTICS OF HOSPITAL-TREATED INTENTIONAL DRUG OVERDOSE IN IRELAND AND NORTHERN IRELAND

Griffin E, Corcoran P, Cassidy L, O'Carroll A, Perry IJ, Bonner B. BMJ Open 2014;4:e005557.

Objectives: This study compared the profile of intentional drug overdoses (IDOs) presenting to emergency departments in Ireland and in the Western Trust Area of Northern Ireland between 2007 and 2012. Specifically the study aimed to compare characteristics of the patients involved, to explore the factors associated with repeated IDO and to report the prescription rates of common drug types in the population.

Methods: We utilised data from two comparable registries which monitor the incidence of hospital treated self-harm, recording data from deliberate self-harm presentations involving an IDO to all hospital emergency departments for the period 1 January 2007 to 31 December 2012.

Results: Between 2007 and 2012 the registries recorded 56, 494 self-harm presentations involving an IDO. The study showed that hospital-treated IDO was almost twice as common in Northern Ireland than in Ireland (278 vs 156/100,000, respectively).

Conclusions: Despite the overall difference in the rates of IDO, the profile of such presentations was remarkably similar in both countries. Minor tranquillisers were the drugs most commonly involved in IDOs. National campaigns are required to address the availability and misuse of minor tranquillisers, both prescribed and non-prescribed.

"The Registry is a national system of population monitoring for the occurrence of hospital-treated self-harm."

Methods

Background

The National Self-Harm Registry Ireland is a national system of population monitoring for the occurrence of hospital-treated self-harm. It was established, at the request of the Department of Health and Children, by the National Suicide Research Foundation and is funded by the Health Service Executive's National Office for Suicide Prevention.

The National Suicide Research Foundation was founded in November 1994 by the late Dr Michael J Kelleher and currently operates under the Medical Directorship of Dr Margaret Kelleher, the Research Directorship of Dr Ella Arensman and Professor Ivan J Perry as Director of the National Self-Harm Registry Ireland. Ms Eileen Williamson is the Executive Director.

Definition and Terminology

The Registry uses the following as its 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 self-harm 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 e.g., an individual who takes additional medication in the case of illness, without any intention to self-harm.
- Alcohol overdoses alone where the intention was not to self-harm.
- Accidental overdoses of street drugs i.e., drugs used for recreational purposes, without the intention 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 Registry has undertaken a cross-checking exercise in which pairs of data registration officers independently collected data from two hospitals for the same consecutive series of attendances to the emergency department. Results indicated that there is a very high level of agreement between the data registration officers. Furthermore, the data are continuously checked for consistency and accuracy.

Data recording

Since 2006, the Registry has recorded its data onto laptop computers and transferred the data electronically to the offices of the National Suicide Research Foundation. Data for all self-harm presentations made in 2014 were recorded using this electronic system.

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 system to avoid duplicate recording and to recognise repeat acts of self-harm by the same individual, they ensure that it is impossible to identify an individual on the basis of the data recorded.

Initials

Initial letters from an individual self-harm patient's name are recorded in an encrypted form by the Registry data entry system 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 gender 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, 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

Brought to hospital by ambulance

Method(s) of self-harm

The method(s) of self-harm are recorded according to the Tenth Revision of the WHO's International Classification of Diseases 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, this is taken as the most lethal method employed. For acts involving self-cutting, the treatment received was recorded when known.

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 a review or assessment by the psychiatric team in the presenting hospital emergency department is recorded.

Recommended next care

Recommended next care following treatment in the hospital emergency department is recorded.

Confidentiality

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 and the Irish Data Protection (Amendment) Act of 2003. Only anonymised data are released in aggregate form in reports. The names and addresses of patients are not recorded.

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 the relevant hospitals and Health Service Executive (HSE) ethics committees.

Registry coverage

In 2014, self-harm data were collected from each HSE region in the Republic of Ireland (pop: 4,609,500): the HSE Dublin/ Mid-Leinster Region (pop:

1,340,302), HSE Dublin/ North East Region (pop: 1,022,885), HSE South Region (pop: 1,178,200), and HSE West Region (pop: 1,068,114).

There was complete coverage of all acute hospitals in the Republic of Ireland. For this 2014 report, the new HSE hospital grouping will be used.

There was complete coverage of all acute hospitals in the Ireland East Hospital Group – Mater Misercordiae University Hospital, Midland Regional Hospital, Mullingar, Our Lady's Hospital Navan, St. Columcille's Hospital, Loughlinstown, St. Luke's Hospital, Kilkenny, St. Michael's Hospital, Dun Laoghaire, Wexford General Hospital and another hospital whose ethics committee stipulated that it should not be named in Registry reports.

There was complete coverage of all acute hospitals in the Dublin Midlands Hospital Group – Midland Regional Hospital, Portlaoise, Midland Regional Hospital, Tullamore, Naas General Hospital, St. James's Hospital and Adelaide and Meath Hospital Tallaght Hospital (adults).

There was complete coverage of all acute hospitals in the RCSI Hospital Group – Beaumont Hospital, Cavan General Hospital, Connolly Hospital, Blanchardstown and Our Lady of Lourdes Hospital, Drogheda.

There was complete coverage of all acute hospitals in the South/ South West Hospital Group – Bantry General Hospital, Cork University Hospital, Kerry General Hospital, Mallow General Hospital, Mercy University Hospital, Cork, South Tipperary General Hospital and University Hospital, Waterford.

There was complete coverage of all acute hospitals in the University of Limerick Hospital Group – Ennis Hospital, Nenagh Hospital, St. John's Hospital, Limerick and University Hospital, Limerick.

There was complete coverage of all acute hospitals in the Saolta University Health Care Group – Galway University Hospital, Letterkenny General Hospital, Mayo General Hospital, Portiuncula Hospital, Ballinasloe and Sligo Regional Hospital.

There was complete coverage of all hospitals in the Children's Hospital Group – Children's University Hospital at Temple Street, National Children's Hospital at Tallaght Hospital and Our Lady's Children's Hospital, Crumlin.

In total, self-harm data were collected for the full calendar year of 2014 for all 36 acute hospitals that operated in Ireland during this year. As mentioned previously, since 2006 the Registry has had complete coverage of all acute hospitals in Ireland.

In 2013, a number of hospital emergency departments 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 emergency department and others operating on reduced hours. The hospitals which continue to have emergency departments on reduced hours include: Bantry General Hospital, Ennis Hospital, Mallow General Hospital, Nenagh Hospital, St. Columcille's Hospital Loughlinstown and St. John's Hospital Limerick. Data from these hospitals continue to be recorded by the Registry for 2014.

Population data

For 2014, 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 2014 regional authority population estimates and the equivalent National Census 2011 figures were calculated and applied to the National Census 2011 population figures for Irish cities, counties and HSE region figures in order to derive population estimates for 2014. For urban and rural district populations and HSE Local Health Office areas, National Census 2011 population data were utilised.

Calculation of rates

Self-harm rates were calculated based on the number of persons resident in the relevant area who engaged in self-harm irrespective of whether they were treated in that area or elsewhere. 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 7 cases of self-harm for which patient initials, gender or date of birth were unknown. These 7 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 2014.

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 $n +/- 2\sqrt{n}$. For example, if 25 self-harm presentations are observed in a specific region in one year, then the 95% confidence interval will be $25 +/- 2\sqrt{25}$ 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.

Acknowledgements

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 Dublin/Midlands Region
Liisa Aula
James Buckley
Edel McCarra
Diarmuid O'Connor
Laura Shehan

HSE Dublin/North East Region
Agnieszka Biedrycka
Alan Boon
Grace Boon
Rita Cullivan

HSE South Region
Ursula Burke
Tricia Shannon
Karen Twomey
Una Walsh

HSE West Region
Ailish Melia
Catherine Murphy
Mary Nix
Eileen Quinn

Mr Sean Cronin, Millennium Software:
Database development

We would like to acknowledge the assistance of staff of 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 Registry.

We would also like to acknowledge receipt of a grant from ESB ElectricAID in December 2010 which enabled the upgrading of the IT equipment used for the operation of the Registry.

"The Registry recorded 11,126 self-harm presentations to hospital that were made by 8,708 individuals."

SECTION I:

Hospital Presentations

For the period from 1 January to 31 December 2014, the Registry recorded 11,126 self-harm presentations to hospital that were made by 8,708 individuals. Thus, the number of self-harm presentations and the number of persons involved were similar to those recorded in 2013. Table 1 summarises the changes in the number of presentations and persons since the Registry reached near national coverage in 2002.

	PRESENTATIONS		PERSONS	
YEAR	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%

Table 1: Number of self-harm presentations and persons who presented in the Republic of Ireland in 2002-2014 (2002-2005 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 2014 was 200 (95% Confidence Interval (CI): 196 to 204) per 100,000. There was virtually no increase on the rate of 199 (95% CI: 195 to 203) per 100,000 in 2013. This follows three successive decreases between 2011 and 2013. The incidence of self-harm in Ireland is examined in detail in Section II of the Annual Report.

The numbers of self-harm episodes treated in the Republic of Ireland by HSE region, hospital group, age and gender are given in Appendix 1. Of the recorded presentations in 2014, 46% were made by men and 54% were made by women. Self-harm episodes were generally confined to the younger age groups. Just under half of all presentations (47%) were by people under 30 years of age and 85% of presentations were by people aged less than 50 years.

In most age groups the number of self-harm acts by women exceeded the number by men. This was most pronounced in the 10-14 year age group where there were 3.4 times as many female presentations. The number of self-harm presentations made by men was slightly higher than the number made by women (1.1%) in the 20-34 year age group.

In line with 2013, 514 (5%) of all self-harm presentations were by residents of homeless hostels and people of no fixed abode and 33 (0.3%) were made by hospital inpatients.

Self-harm by HSE Hospital Group

Based on provisional figures acquired from the HSE Business Intelligence Unit, self-harm accounted for 0.91% of total attendances to general emergency departments in the country. This percentage of attendances accounted for by self-harm varied by HSE hospital group from 0.27% in the Children's, 0.76% in the Saolta University, 0.86% in the University of Limerick, 1.01% in the Ireland East, 1.02 in the South/South West, 1.04% in the RCSI and 1.11% in the Dublin Midlands hospital groups.

The proportion of self-harm presentations treated in each hospital group in 2014 ranged from 3% in the Children's and 7% in the University of Limerick, to 13% in the Saolta University, 16% in the RCSI, 19% in the Dublin Midlands, 20% in the South/ South West and 24% in the Ireland East hospital group.

The gender balance of recorded episodes in 2014 (at 46% men to 54% women) varied by hospital group (Figure 1). Self-harm presentations by women outnumbered those by men in all but one of the seven hospital groups.

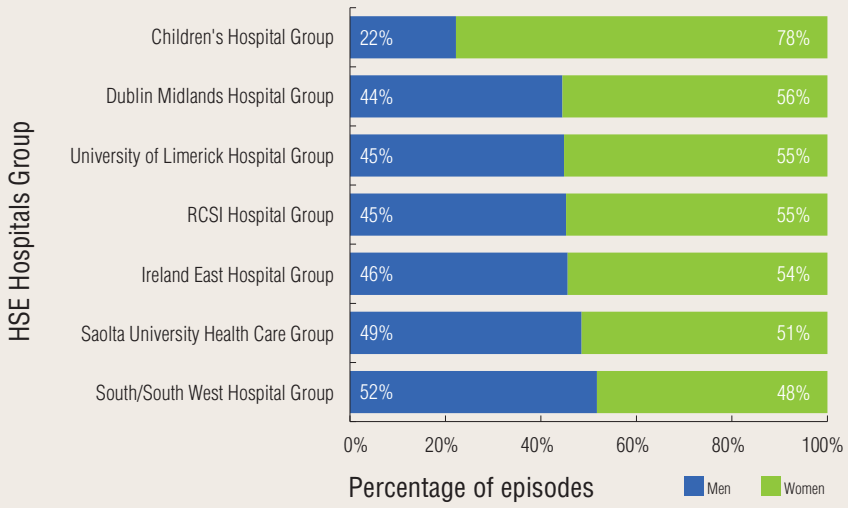


Figure 1: Gender balance of self-harm presentations by HSE hospital group.

Annual change in self-harm presentations to hospital

While the national number of self-harm presentations to hospital in 2014 was similar to that in 2013, there were some relatively large changes in the number of presentations at the level of the individual hospitals (Figures 2a and 2b). Overall, 18 general hospitals saw an increase in self-harm presentations between 2013 and 2014, while 15 general hospitals saw a decrease during the same period. Overall, the most pronounced changes were in small hospitals, where four hospitals saw decreases of more than 35%. This change in self-harm presentations is thought to reflect the re-designation in 2013 of a number of hospitals as Model 2 status hospitals, with emergency departments closing or working on reduced hours for 2013 and 2014. It should be noted that in small hospitals, large percentage changes are based on relatively small numbers.

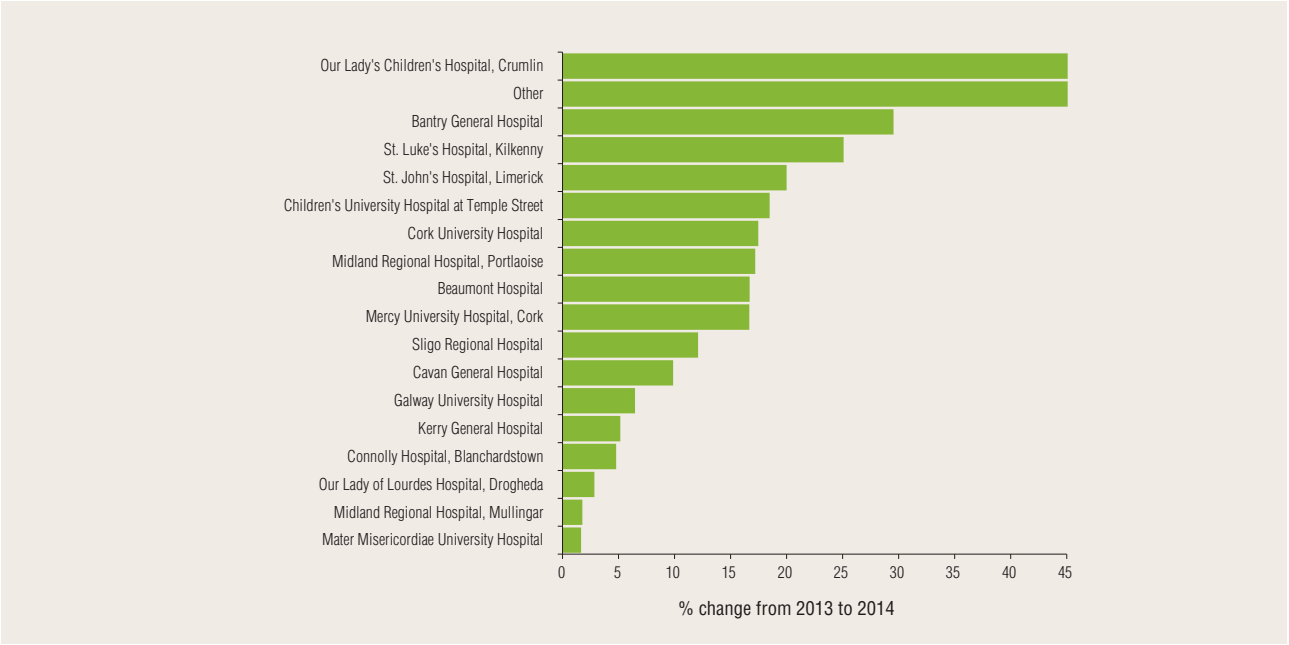


Figure 2a: Hospitals receiving more self-harm presentations in 2014.

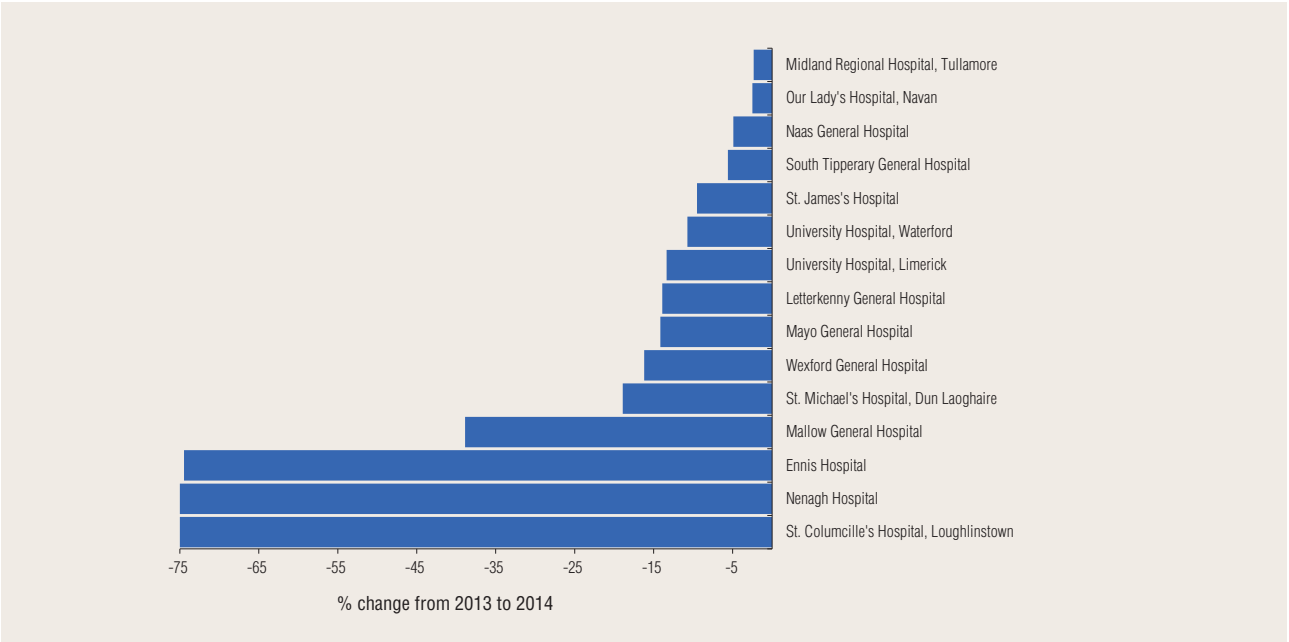


Figure 2b: Hospitals receiving fewer self-harm presentations in 2014.

Episodes by time of occurrence

Variation by month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Men	411	355	422	441	474	409	456	474	450	462	396	393	5143
Women	536	452	478	487	492	486	494	519	537	490	530	482	5983
Total	947	807	900	928	966	895	950	993	987	952	926	875	11126

Table 2: Number of self-harm presentations in 2014 by month for men and women.

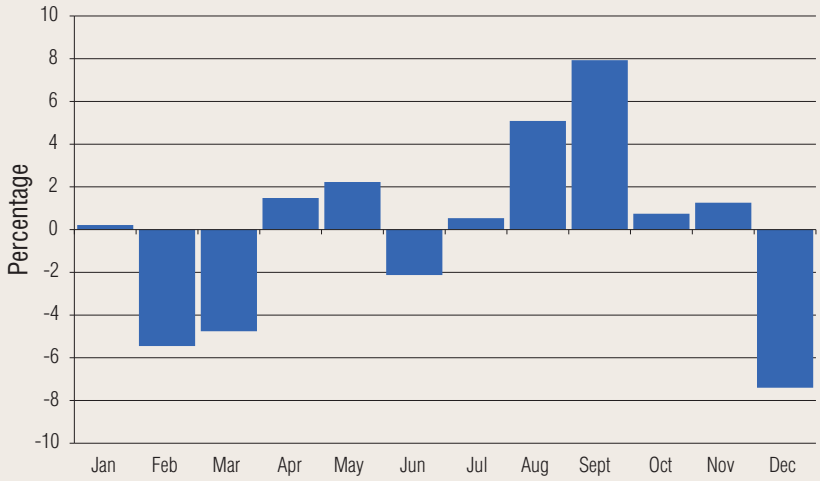


Figure 3: Percentage difference between the observed and expected number of self-harm presentations by month in 2014.

The monthly average number of self-harm presentations to hospitals in 2014 was 927. Figure 3 illustrates the percentage difference between observed and expected number of presentations, accounting for the number of days in each calendar month. In 2014, August and September saw more self-harm presentations than might be expected (5% and 8%, respectively). February and March both saw fewer presentations than might be expected (-5%). The end of year fall in presentations was less pronounced than in previous years, with just December recording fewer presentations than might be expected (-7%).

Variation by day

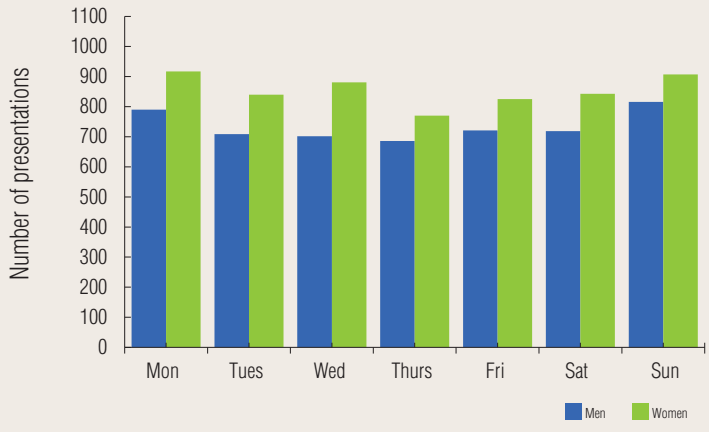


Figure 4: Number of presentations by weekday, 2014.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Men	790	709	702	686	721	719	816	5143
	(15.4%)	(13.8%)	(13.6%)	(13.3%)	(14%)	(14%)	(15.9%)	(100%)
Women	917	840	881	770	825	843	907	5983
	(15.3%)	(14%)	(14.7%)	(12.9%)	(13.8%)	(14.1%)	(15.2%)	(100%)
Total	1707	1549	1583	1456	1546	1562	1723	11126
	(15.3%)	(13.9%)	(14.2%)	(13.1%)	(13.9%)	(14%)	(15.5%)	(100%)

Note: On average, each day would be expected to account for 14.3% of presentations.
Table 3: Self-harm presentations in 2014 by weekday.

As in previous years, the number of self-harm presentations was highest on Mondays and Sundays. These days accounted for 31% of all presentations. Numbers fell after Monday to a level that was similar from Tuesday to Friday before rising again on Saturday. This pattern of the number of presentations by day of the week was more pronounced in men than women.

During 2014, there was an average of 31 self-harm presentations to hospital each day. There were just two dates in the year on which 50 or more self-harm presentations were made, including: January 1st, New Year's Day (n=58). The association between self-harm increases and public holidays has been a consistent pattern over many years, although this was not strongly reflected in patterns for 2014.

Variation by hour

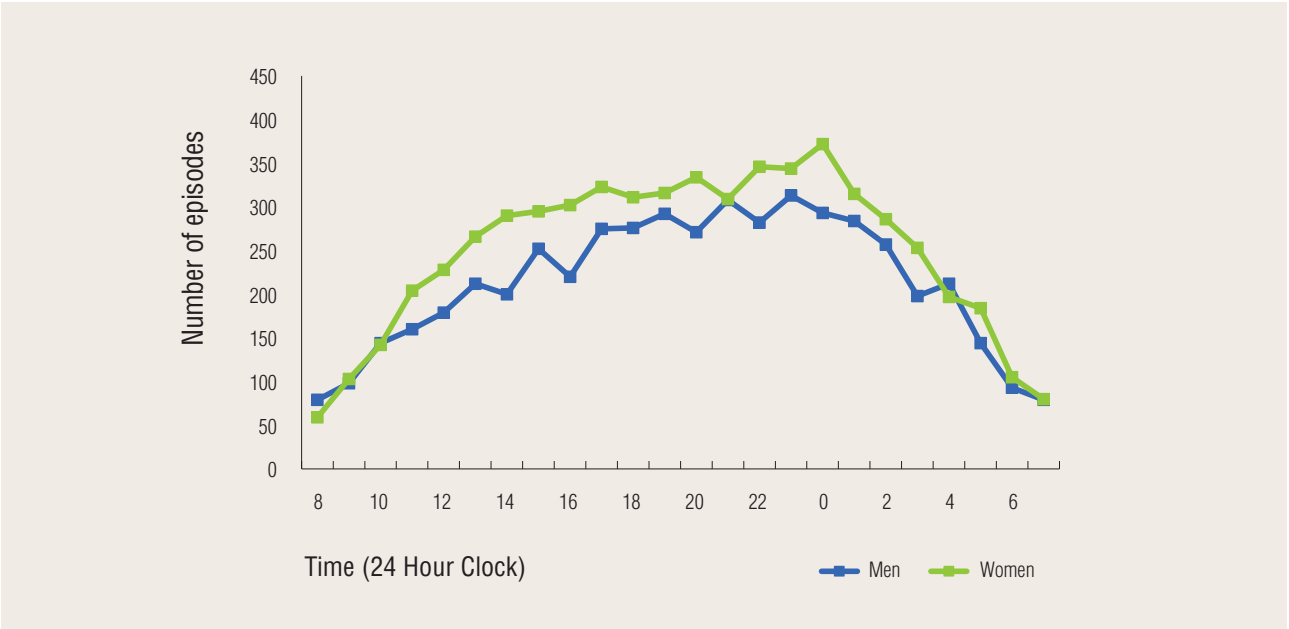


Figure 5: Number of presentations by time of attendance.

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 11pm and for women was 12am. Almost half (44%) of the total number of presentations were made during the eight-hour period 7pm-3am. This contrasts with the quietest eight-hour period of the day, from 5am-1pm, which accounted for just 19% of all presentations.

The majority of patients (55%) were brought to hospital by ambulance and a further 3% were brought by other emergency services such as An Garda Siochana. The proportion brought by ambulance or other emergency services varied over the course of the day from 45% for presentations between noon and 4pm to 70% for those who presented between midnight and 8am.

Method of self-harm

	Overdose	Alcohol	Poisoning	Hanging	Drowning	Cutting	Other	Total
Men	2992	1909	109	536	200	1431	346	5143
	(58.2%)	(37.1%)	(2.1%)	(10.4%)	(3.9%)	(27.8%)	(6.7%)	(100%)
Women	4322	1951	106	250	140	1459	198	5983
	(72.2%)	(32.6%)	(1.8%)	(4.2%)	(2.3%)	(24.4%)	(3.3%)	(100%)
Total	7314	3860	215	786	340	2890	544	11126
	(65.7%)	(34.7%)	(1.9%)	(7.1%)	(3.1%)	(26%)	(4.9%)	(100%)

Table 4: Methods of self-harm involved in presentations to hospital in 2014.

Almost three quarters (66%) of all self-harm presentations involved an overdose of medication. Drug overdose was more commonly used as a method of self-harm by women than by men. It was involved in 58% of male and 72% of female episodes. Alcohol was involved in 35% of all cases. Alcohol was significantly more often involved in male episodes of self-harm than female episodes (37% and 33%, respectively).

Cutting was the only other common method of self-harm, involved in 26% of all episodes. Cutting was significantly more common in men (28%) than in women (24%). In 89% of all cases involving self-cutting, the treatment received was recorded. Just under two-thirds (29%) received steristrips or steribonds, 48% did not require any treatment, 20% required sutures while 3% were referred for plastic surgery. The treatment following self-cutting was similar for both men and women.

Attempted hanging was involved in 7% of all self-harm presentations (10% for men and 4% for women). At 786, the number of presentations involving attempted hanging has increased by 7% from 2013 (7% for men and 9% for women). Overall, the number of self-harm presentations involving hanging increased by between 2007 and 2014 from 444 to 786.

The greater involvement of drug overdose as a female method of self-harm is illustrated in Figure 6. Drug overdose also accounted for a higher proportion of self-harm presentations in the older age groups, in particular for women, whereas self-cutting was less common. Self-cutting was most common among young people – in 31% of presentations by girls under 15 years, 45% of presentations by boys under 15 years and 25% of presentations by men aged under 25 years.

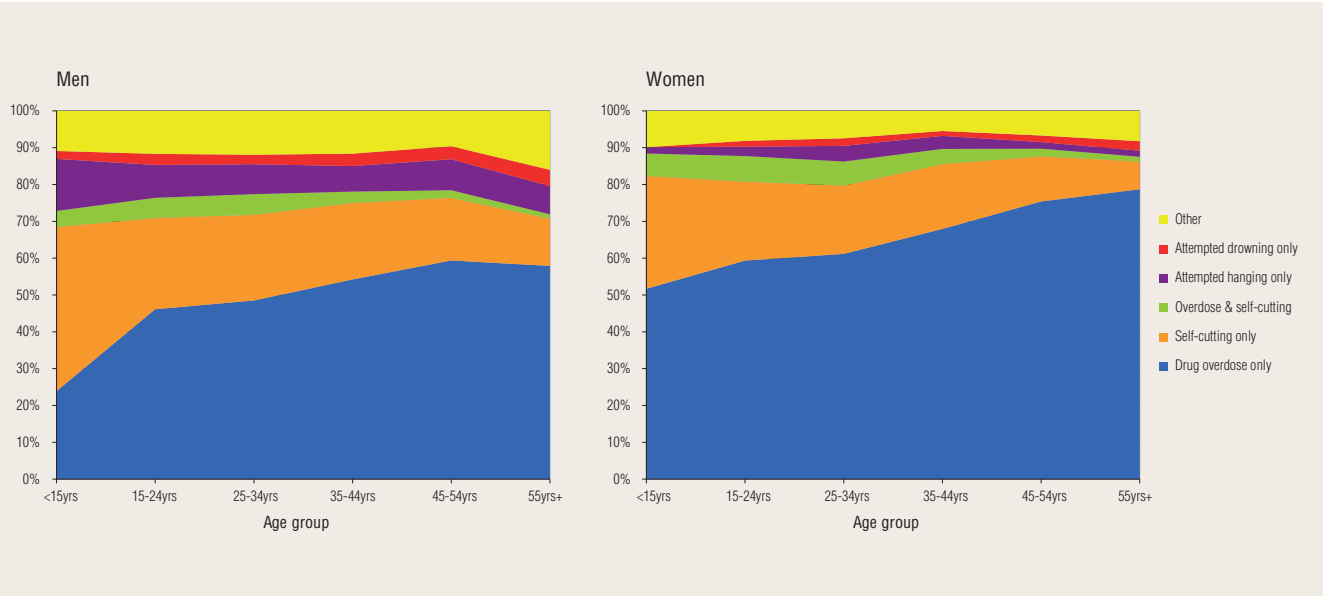


Figure 6: Method of self-harm used by gender and age group, 2014.

Drugs used in overdose

The total number of tablets taken was known in 70% of all cases of drug overdose. On average, 28 tablets were taken in the episodes of self-harm that involved drug overdose. Three-quarters of drug overdose acts involved less than 36 tablets, half involved less than 20 tablets and one quarter involved less than 12 tablets. On average, the number of tablets taken in overdose acts was fairly similar for both men and women (mean: 30 vs. 28). Figure 7 illustrates the pattern of the number of tablets taken in drug overdose episodes for both genders. Half (51%) of female episodes and 47% of male episodes of overdose involved 10-29 tablets.

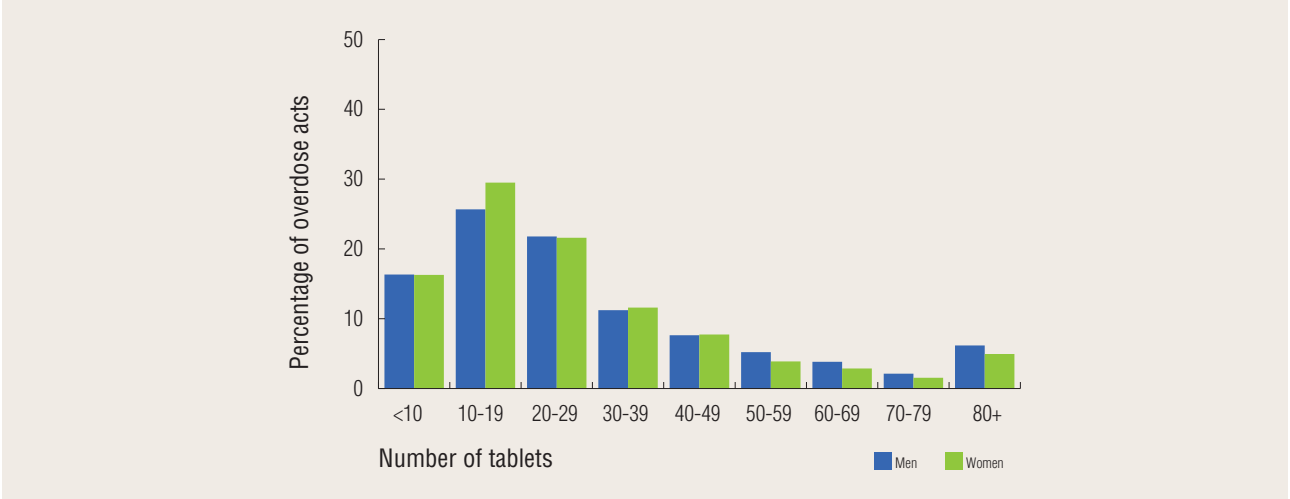
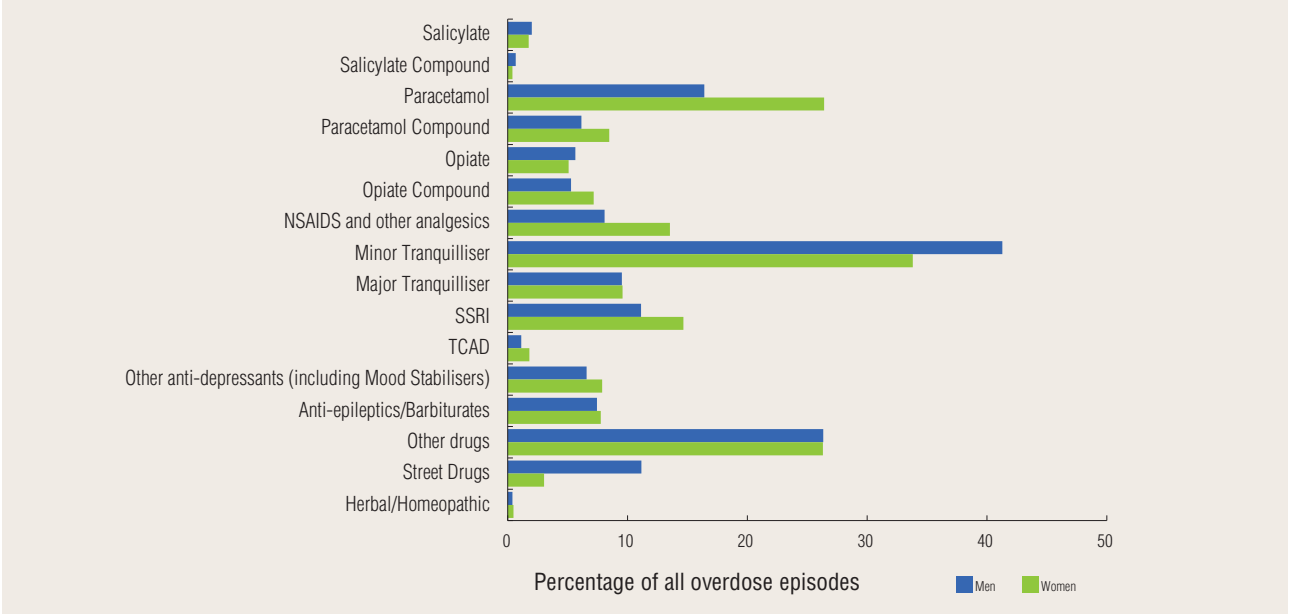


Figure 7: The pattern of the number of tablets taken in male and female acts of drug overdose.



Note: Some drugs (e.g. compounds containing paracetamol and an opiate) are counted in two categories.
Figure 8: The variation in the type of drugs used.

Figure 8 illustrates the frequency with which the most common types of drugs were used in overdose. Over one-third (37%) of all overdoses involved a minor tranquilliser and such a drug was used significantly more often by men than by women (41% vs. 34%, respectively). A major tranquilliser was involved in 10% of overdoses. In total, 45% of all female overdose acts and 33% of all male acts involved an analgesic drug. Paracetamol was the most common analgesic drug taken, involved in some form in 28% of drug overdose acts. Paracetamol-containing medication was used significantly more often by women (33%) than by men (22%). More than one in five acts (21%) of intentional

overdose involved an anti-depressant/ mood stabiliser. The group of anti-depressant drugs known as Selective Serotonin Reuptake Inhibitors (SSRIs) were present in 13% of overdose cases. Street drugs were involved in 11% of male and 3% of female intentional drug overdose acts. 'Other prescribed drugs' were taken in more than one in four (26%) of all overdoses which reflects the wide range of drugs taken deliberately in acts of drug overdose.

The number of self-harm presentations to hospital involving drug overdose in 2014 (7,314) was a slight decrease on the number recorded in 2013 (-2%). This was also true when the number of presentations involving each of the drug types described here were examined. Most notably, there was a reduction in the number of self-harm presentations involving minor tranquilisers by 8% from 2013. Further decreases were observed in the use of Nonsteroidal Anti-inflammatory Drugs (NSAIDs) (-13%), opiate medication (-9%) and paracetamol-compound medication (-9%).

In 2014, the number of self-harm presentations to hospital involving street drugs increased by 11% from 2013 (following annual decreases in 2012 and 2013) to 465, which is similar to the level recorded in 2008 (n=461).

Recommended next care

Overall, in 14% of 2014 cases, the patient left the emergency department before a next care recommendation could be made. Following their treatment in the emergency department, inpatient admission was the next stage of care recommended for 31% of cases, irrespective of whether general or psychiatric admission was intended and whether the patient refused or not. Of all self-harm cases, 22% resulted in admission to a ward of the treating hospital whereas 8% were admitted for psychiatric inpatient treatment from the emergency department. It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, direct psychiatric admission figures provided here may be underestimates. In addition, some of the patients admitted to a general hospital ward will subsequently be admitted as psychiatric inpatients. In 1% of cases, the patient refused to allow him/herself to be admitted whether for general or psychiatric care. Most commonly, 54% of cases were discharged following treatment in the emergency department.

	Overdose (n=7314)	Alcohol (n=3860)	Poisoning (n=215)	Hanging (n=786)	Drowning (n=340)	Cutting (n=2890)	Other (n=600)	All (n=11126)
General admission	27.9%	20.9%	32.6%	10.7%	9.7%	12.7%	13.5%	22.2%
Psychiatric admission	6.5%	6.2%	10.7%	22.3%	19.7%	7.2%	17.3%	8.4%
Patient would not allow admission	0.7%	0.7%	0%	1.7%	0.9%	0.6%	0.5%	0.7%
Left before recommendation	13.9%	18.7%	15.3%	11.1%	14.4%	16.8%	13.5%	14.4%
Not admitted	51.0%	53.5%	41.4%	54.3%	55.3%	62.8%	55.2%	54.3%

Table 5: Recommended next care in 2014 by methods of self-harm.

Next care recommendations in 2014 were broadly similar for men and women. Men more often left the emergency room before a recommendation was made (18% vs. 12%). Women were more often admitted to a ward of the treating hospital than men (25% vs. 19%).

Recommended next care varied according to the method of self-harm (Table 5). General inpatient care was most common following cases of self-poisoning and drug overdose, less common after self-cutting and least common after attempted hanging and attempted drowning. The finding in relation to self-cutting may be a reflection of the superficial nature of the injuries sustained in some cases. Of those cases where the patient used cutting as a method of self-harm, 63% were discharged after receiving treatment in the emergency department. The greater the potential lethality of the method of self-harm involved, the higher the proportion of cases admitted for psychiatric inpatient care directly from the emergency department.

Next care 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 hospital group, to 13% in the University of Limerick and 18% in the RCSI hospital groups. Across the hospital groups, inpatient care (irrespective of type and whether patient refused) was recommended for 16% of the patients treated in the University of Limerick, 25% in the RCSI, 29% in the Ireland East, 31% in the Dublin Midlands, 34% in the South/ South West, 39% in the Saolta University and 68% in the Children's hospital groups. As a corollary to this, the proportion of cases discharged following emergency treatment ranged from a low of 32% in the Children's group to a high of 72% in the University of Limerick group. The balance of general and psychiatric admissions directly after treatment in the emergency department differed significantly by hospital group. Overall, direct general admissions were more common than direct psychiatric admissions in all hospital groups.

Appendix 2 details the recommended next care for self-harm patients treated at every hospital. For each hospital group, there were significant differences between the hospitals in their pattern of next care recommendations.

	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=2620)	(n=2075)	(n=1746)	(n=2208)	(n=734)	(n=1432)	(n=311)	(n=11126)
General admission	22.9%	21.9%	18.2%	23.9%	8.2%	21.5%	66.9%	22.2%
Psychiatric admission	5.8%	8.5%	6.4%	9.9%	6.9%	15.8%	0%	8.4%
Patient would not allow admission	0.5%	0.5%	0.3%	0.2%	0.8%	2%	1.3%	0.7%
Left before recommendation	14.6%	14.5%	18.3%	13.9%	12.5%	14%	0.3%	14.4%
Not admitted	56.2%	54.6%	56.9%	52.1%	71.5%	46.6%	31.5%	54.3%

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 this table may be underestimates.

Table 6: Recommended next care in 2014 by HSE hospital group.

Self-harm cases discharged from emergency department

In 2013 the Registry began recording referrals for patients discharged from the emergency department following self-harm.

For 2014, referrals following discharge included the following:

- In 30% of episodes, an out-patient appointment was recommended as a next care step for the patient.
- 16% of patients were discharged with a recommendation to attend their GP for a follow-up appointment.
- 11% of those not admitted to the presenting hospital were transferred to another hospital for treatment (9% for psychiatric treatment and 3% for medical treatment).
- Other services (e.g. psychological services, community-based mental health teams and addiction services) were recommended in 14% of episodes.
- 29% of patients discharged from the emergency department were discharged home without a referral.

There was variation in referrals offered to self-harm patients according to HSE hospital group, with 70% and 73% of patients in the Children's and University of Limerick Groups referred for an out-patient appointment compared with 15% in the South/ South West and 16% in the Ireland East Groups. Referrals to community-based mental health teams were highest in Saolta University Group (21%), with referrals to general practitioners highest in the Dublin Midlands Hospital Group (23%).

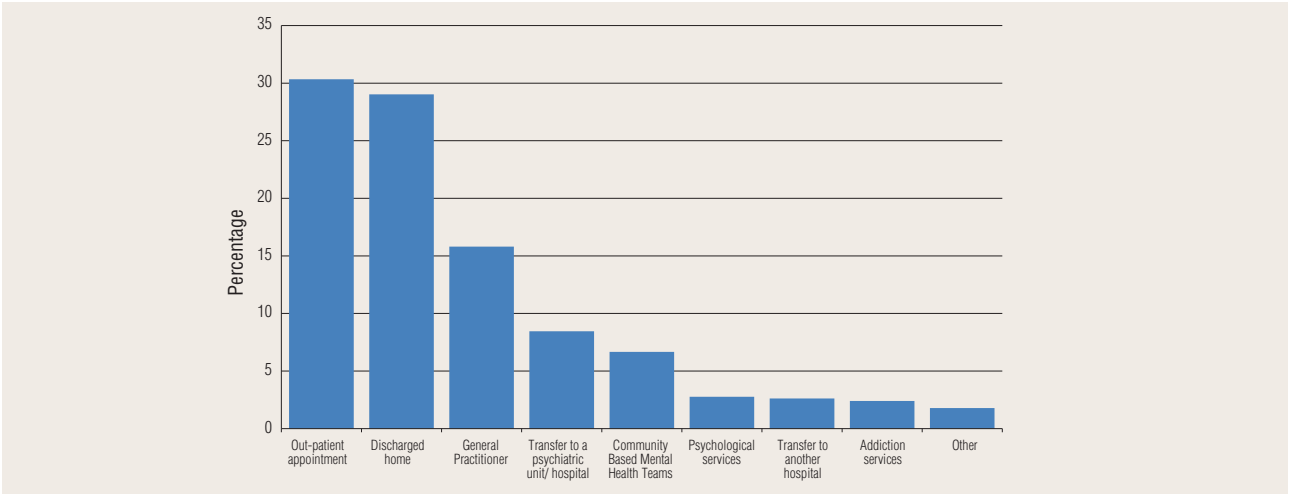


Figure 9: Referral of self-harm patients following discharge from the emergency department, 2014

Mental health assessment

Whether the patient had a mental health assessment in the presenting hospital was known in 92% of all cases. Of those known, 67% (n=6,878) of patients were assessed by a member of the mental health team in 2014 (69% for women, 64% for men). 81% of under 15 year-olds received a psychiatric assessment. Assessment was most common following attempted drowning (78%) and attempted hanging (77%).

74% of those not admitted to the presenting hospital received a psychiatric assessment prior to discharge. However only 13% of patients who left before recommendation/ medical advice received an assessment.

Psychiatric assessment varied according to time of the day in which the attendance occurred. 70% of presentations between 8am and 3pm received assessments.

Psychiatric assessment varied according to whether the self-harm attendance was a repeat presentation or not. 68% of first presentations of self-harm were assessed, compared with 53% of those with 5 or more presentations in 2014.

Repetition of self-harm

There were 8,708 individuals treated for 11,126 self-harm episodes in 2014. This implies that more than one in five (2,418, 22.0%) of the presentations in 2014 were due to repeat acts, which is similar to the years 2003-2009 (range: 20.5-23.1%) and 2013 (21.0%). Of the 8,708 self-harm patients treated in 2014, 1,264 (14.5%) made at least one repeat presentation to hospital during the calendar year. This proportion is higher than that recorded in 2013 (13.8%), and within the range reported for the years 2003-2012 (13.8-16.4%). At least five self-harm presentations were made by 138 individuals in 2014. They accounted for just 1.6% of all self-harm patients in the year but their presentations represented 9.6% of all self-harm presentations recorded.

The rate of repetition varied highly significantly with the method of self-harm involved in the self-harm act (Table 7). Of the commonly used methods of self-harm, self-cutting was associated with an increased level of repetition. Almost one in five (17.6%) who used cutting as a method of self-harm in their index act made at least one subsequent self-harm presentation in the calendar year.

	Overdose	Alcohol	Poisoning	Hanging	Drowning	Cutting	Other	All
Number of individuals treated	5861	3098	169	644	267	2068	401	8708
Number who repeated	804	464	19	101	33	365	60	1264
Percentage who repeated	13.7%	15%	11.2%	15.7%	12.4%	17.6%	15%	14.5%

Table 7: Repeat presentation after index self-harm presentation in 2014 by methods of self-harm.

The rate of repetition was broadly similar in men and women (14.9% vs. 14.2%). Repetition varied significantly by age. Approximately 12% of self-harm patients aged less than 19 years re-presented with self-harm in 2014. The proportion who repeated was highest, at 17%, for 25-54 year-olds.

There was variation in repetition rates when examined by HSE hospital group (Table 8). The lowest rate was among self-harm patients treated in the Children's and Saolta University hospital groups (11% and 12%, respectively) and the highest repetition rates were for the Dublin Midlands and RCSI (17%) and the Ireland East hospital groups (18%).

Risk of repetition was greatest in the days and weeks following a self-harm presentation. A total of 8,373 self-harm presentations were made to hospital emergency departments in the first nine months of 2014. For 18.6% of these (n=1,561) there was a repeat self-harm presentation made within three months (91 days). This proportion varied significantly by HSE hospital group: University of Limerick (13.2%), Children's (14.0%), South/ South West (14.5%), Saolta University (16.0%), RCSI (19.7%), Dublin Midlands (20.8%) and Ireland East (23.1%).

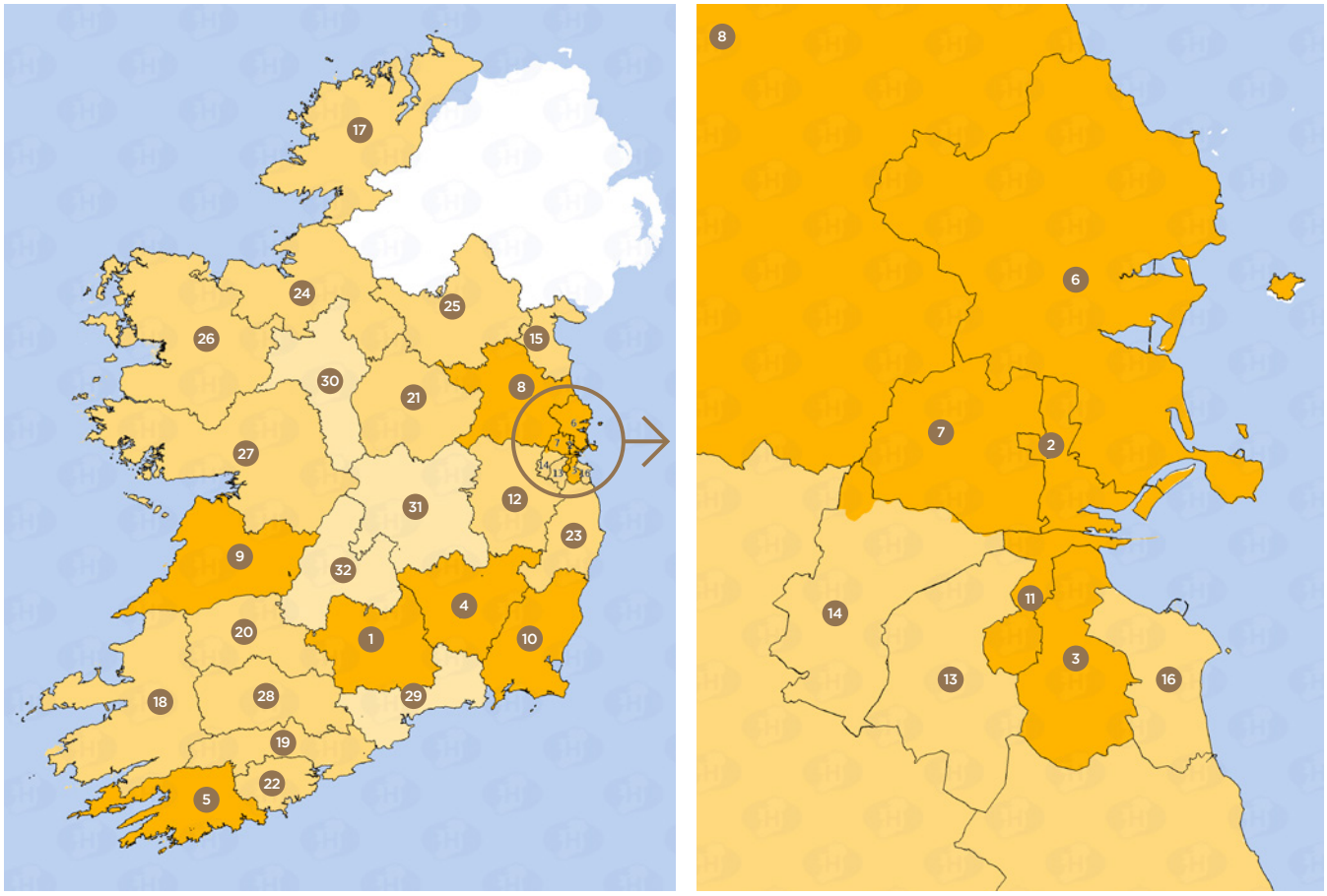
This proportion of self-harm presentations followed by a repeat presentation within three months was similar for men (19.3%) and women (18.1%) but did vary by age group. The proportion was lowest among those aged under 15 years (13.3%) and over 55 years (11.1%), compared with 16.9% among 15-24 year-olds, 21.7% among 25-44 year-olds and 18.8% among those aged 45-54 years. The proportion of self-harm presentations followed by a repeat presentation within three months also varied according to method of self-harm (14.1% following an attempted drowning, 14.8% following an attempted hanging, 16.2% following a drug overdose, 22.2% after an act involving drug overdose and self-cutting and 25.7% after an act of self-cutting only).

Variation in the proportion of self-harm presentations followed by a repeat presentation within three months was also observed based on recommended next care following the initial act. The proportion was lowest for those who were admitted to a general ward (14.1%), compared to 18.0% of those who were not admitted, 22.8% who were admitted to a psychiatric ward and 25.4% who left before a recommendation.

However, the factor having by far the strongest influence on likelihood of repetition was the number of self-harm presentations made to hospital. Just one in ten (11.4%) first presentations in January-September 2014 was followed by a repeat presentation in the next three months. This proportion was 30.7% following second presentations, 54.2% following third presentations, 62.2% following fourth presentations and 82.1% following fifth or subsequent presentations.

		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 treated	Men	907	733	633	963	281	583	60	4021
	Women	1119	899	778	867	346	590	209	4687
	TOTAL	2026	1632	1411	1830	627	1173	269	8708
Number who repeated	Men	165	127	112	131	40	74	8	600
	Women	208	142	125	115	40	68	22	664
	TOTAL	373	269	237	246	80	142	30	1264
Percentage who repeated	Men	18.2%	17.3%	17.7%	13.6%	14.2%	12.7%	13.3%	14.9%
	Women	18.6%	15.8%	16.1%	13.3%	11.6%	11.5%	10.5%	14.2%
	TOTAL	18.4%	16.5%	16.8%	13.4%	12.8%	12.1%	11.2%	14.5%

Table 8: Repetition in 2014 by gender and HSE hospital group



Map 1: Rate of repetition (within 1 year) in the Republic of Ireland 2014 by HSE Local Health Office area for all presentations (Numbers indicate rank from 1 for highest to 32 for lowest)

All Person Rate of Repetition

- Self-harm rate of repetition greater than 16%
- Self-harm rate of repetition between 10% and 15%
- Self-harm rate of repetition less than 9%

The country's 32 HSE Local Health Offices (LHOs) have been the central focus of all HSE primary, community and continuing care services.

For 2014, the thematic map provided illustrates the variation in the overall rate of repetition within one year by LHO area. Rates of repetition varied significantly by LHO area. Tipperary South, Dublin North Central and Dublin South East had the highest rates of repetition (20.8%, 20.1% and 19.6%, respectively). The lowest rates of repetition were seen in West Cork, Tipperary North/ East Limerick, Laois/ Offaly, Roscommon and Waterford (8.1%, 8.5%, 9.0% and 9.1%, respectively).

While overall the rate of repetition in one year was broadly similar for men and women (14.9% vs. 14.2%), repetition rates by gender did vary by LHO area. The largest differences in the rate of repetition by gender were generally observed in those LHO areas with the highest repetition rates. The female rate of repetition was higher in LHO Roscommon (12.5% vs. 5.3%), while the male rate of repetition was higher in Dublin North Central (26.4% vs. 16.3%). Caution should be taken in interpreting the repetition rates associated with the smaller hospitals as the calculations may be based on small numbers of patients.

Appendix 3 details the repetition rate for male, female and all patients treated following self-harm in 2014. Caution should be taken in interpreting the repetition rates associated with the smaller hospitals as the calculations may be based on small numbers of patients.

"The age-standardised rate of self-harm for men and women in 2014 was 185 and 216 per 100,000, respectively."

SECTION II:

Incidence Rates

For the period from 1 January to 31 December 2014, the Registry recorded 11,126 self-harm presentations to hospital that were made by 8,708 individuals. Based on these data, the Irish person-based crude and age-standardised rate of self-harm in 2014 was 189 (95% CI: 185 to 193) and 200 (95% CI: 196 to 204) per 100,000, respectively. Thus, there was virtually no change in the age-standardised rate in 2014, which accounts for the changing age distribution of the population, from 2013 (199 per 100,000). This follows three successive decreases between 2011 and 2013. However despite this, the rate in 2014 was still 6% higher than in 2007, the year before the economic recession.

	MEN		WOMEN		ALL	
YEAR	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%

Table 9: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2002-2014 (extrapolated data used for 2002-2005 to adjust for non-participating hospitals).

Population figures and the number and rate of persons treated in hospital following self-harm in 2014 are given in Appendix 4 by age and gender for persons residing in the Republic of Ireland and for the residents of each of the four HSE regions.

Variation by gender and age

The person-based age-standardised rate of self-harm for men and women in 2014 was 185 (95% CI: 180-191) and 216 (95% CI: 211-222) per 100,000, respectively. Thus, there was a 2% increase in the male rate of self-harm, although this wasn't significant. The female rate was essentially unchanged from 2013 to 2014. Taking recent years into account, the male self-harm rate in 2014 was 14% higher than in 2007 whereas the female rate was less than 1% higher.

The female rate of self-harm in 2014 was 17% higher than the male rate. This gender difference has been decreasing in recent years. The female rate was 37% higher in 2004-2005, 32-33% higher in 2006-2007, 24% higher in 2008, and 10-19% higher in 2009-2013.

There was a striking pattern in the incidence of self-harm when examined by age. The rate was highest among the young. At 678 per 100,000, the peak rate for women was among 15-19 year-olds. This rate implies that one in every 147 girls in this age group presented to hospital in 2014 as a consequence of self-harm. The peak rate for men was 544 per 100,000 among 20-24 year-olds or one in every 184 men. The incidence of self-harm gradually decreased with increasing age in men. This was the case to a lesser extent in women as their rate remained relatively stable, at about 226 per 100,000, across the 30 to 54 year age range.

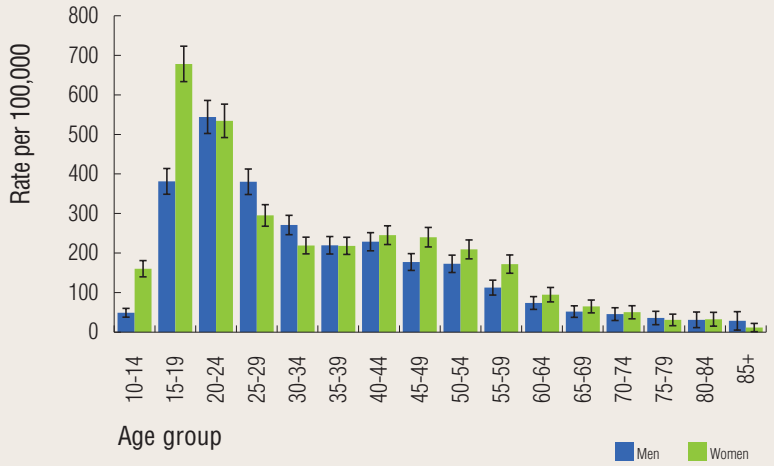
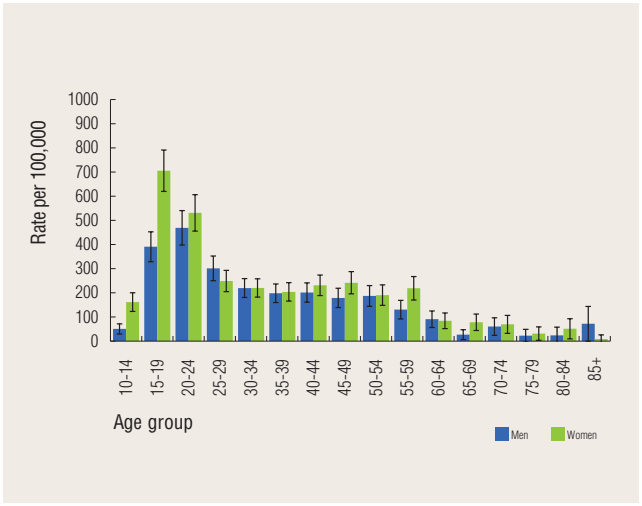


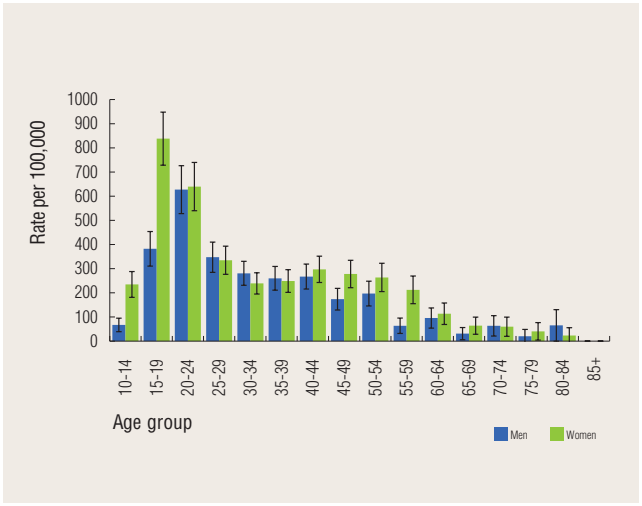
Figure 10: Person-based rate of self-harm in the Republic of Ireland in 2014 by age and gender.

Gender differences in the incidence of self-harm varied with age. The female rate was 3.5 times higher than the male rate in 10-14 year-olds and 78% higher than the male rate in 15-19 year-olds. The female rate of self-harm was again higher than the male rate across the 45-59 year age range. However, in 25-34 year-olds, the male rate was 26% higher than the female rate. Since 2009, the Registry has recorded a significantly higher rate of self-harm in men in this age group compared to women.

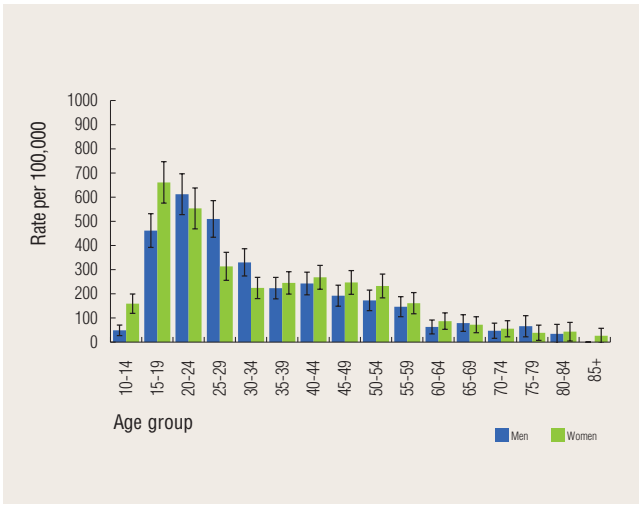
In 2014, the only significant change in the rate of hospital-treated self-harm by age were among boys aged 10-14 years, where the rate increased by 44% from 34 to 49 per 100,000.



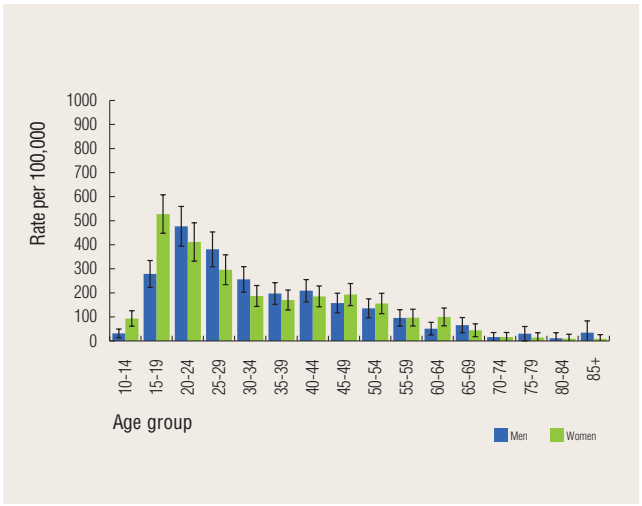
(a) HSE Dublin/Mid-Leinster



(b) HSE Dublin/North East



(c) HSE South



(d) HSE West

Figure 11: Person-based rate of self-harm in 2014 by residents of the four HSE regions by age and gender.

Figure 11 shows the incidence of self-harm by age and gender for the residents of each of the country's four HSE regions. The pattern was broadly similar to that at national level. The self-harm rate was highest among the young – among 15-24 year-olds for women and among 20-24 year-olds for men. Gender differences varied by HSE region. The male self-harm rate exceeded the female rate in the age group 20-24 years in HSE regions South and West. In all regions the peak self-harm rate was among women aged 15-19 years.

Self-harm was rare in 10-14 year-olds, particularly for boys. However, the incidence of self-harm increased rapidly over a short age range. This is illustrated in greater detail in Figure 12. In 12-18 year-olds and 20 year-olds, the female rate of self-harm was significantly higher than the male rate. The increases in the female rate in early teenage years were particularly striking. The peak rates among younger people were in 22-year old men and 16 year-old girls, with rates of 586 and 779 per 100,000, respectively.

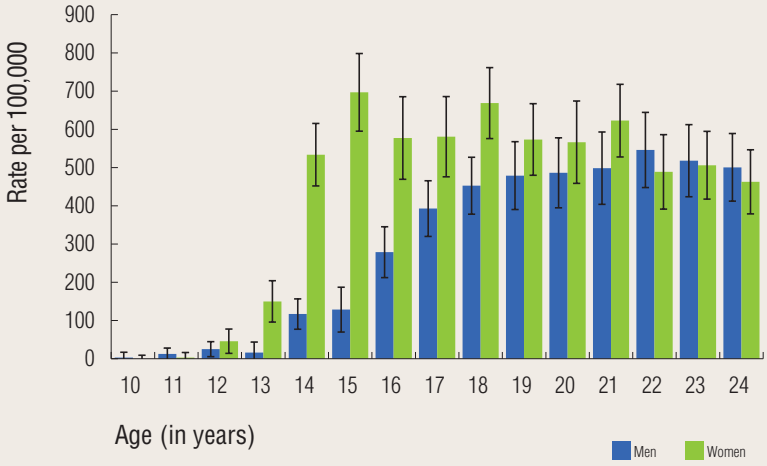


Figure 12: Person-based rate of self-harm in the Republic of Ireland in 2014 by single year of age for 10-24 year-olds.

Variation by HSE region

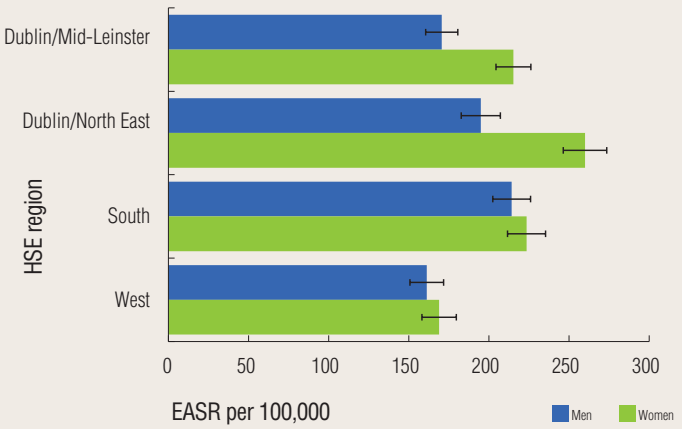


Figure 13: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 by HSE region of residence and gender.

The 17% higher incidence of self-harm for women compared to men varied by HSE region. The female rate of self-harm was significantly higher than the male rate in HSE Dublin/ North East by 33% and in HSE Dublin/ Mid-Leinster by 26%.

In 2014, the incidence of self-harm was significantly higher than the national rate for men in the HSE South region (+16%) and for women in the Dublin/ North East region (+20%). The rate was significantly lower in the HSE West and Dublin/ Mid-Leinster regions for men (-13% and -8%, respectively) and in HSE West for women (-22%).

The only significant decrease in the rate of self-harm by HSE region in 2014 was observed for the female rate in HSE West (-13%) (Table 11).

While at a national level the rate of hospital-treated self-harm in men according to age did not change, there were some changes in according to HSE regions. There was a 30% reduction in the female rate of self-harm among those aged 20-24 and 35-39 years in HSE West, and a 25% reduction among those aged 45-49 in HSE Dublin/ North East.

	Men					Women				
HSE region	Rate	95% CI*	Rate difference**	95% CI**	% difference	Rate	95% CI*	Rate difference**	95% CI***	% difference
Dublin/Mid-Leinster	170.6	(+/-12)	-15	(+/-11)	-7.9	215.3	(+/-14)	-1	(+/-12)	-0.5
Dublin/North East	194.9	(+/-12)	10	(+/-14)	5.3	259.9	(+/-12)	44	(+/-15)	20.2
South	214.2	(+/-11)	29	(+/-13)	15.7	223.5	(+/-11)	7	(+/-13)	3.3
West	161.2	(+/-10)	-24	(+/-12)	-12.9	168.9	(+/-11)	-47	(+/-12)	-21.9
Ireland	185.1	(+/-6)				216.3	(+/-6)			

*95% Confidence Interval for the HSE region self-harm rate.
**Rate difference = HSE region rate – national rate for men and women.
***95% Confidence Interval for self-harm rate difference.
Table 10: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 by HSE region of residence and gender with comparison to the national rate.

	Men					Women				
HSE region	2014	2013	Rate difference	95% CI*	% difference	2014	2013	Rate difference	95% CI*	% difference
Dublin/Mid-Leinster	170.6	172.5	-2	(+/-18)	-1.1	215.3	210.5	5	(+/-19)	2.3
Dublin/North East	194.9	203.0	-8	(+/-17)	-4.0	259.9	248.0	12	(+/-17)	4.8
South	214.2	203.0	11	(+/-15)	5.5	223.5	220.0	3	(+/-16)	1.6
West	161.2	152.0	9	(+/-14)	6.1	168.9	194.0	-25	(+/-15)	-12.9
Ireland	185.1	182.1	3	(+/-8)	1.7	216.3	216.5	0	(+/-8)	-0.1

*95% Confidence Interval for self-harm rate difference.
Table 11: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 and 2013 by HSE region of residence and gender.

Urban and rural district comparison by HSE region

Figure 14 illustrates the self-harm rate for residents of urban districts and rural districts in each of the four HSE regions. Nationally, the incidence of persons presenting to hospital with self-harm was 272 per 100,000 for residents of urban districts which was nearly twice (87%) the incidence rate of 145 per 100,000 among residents of rural districts. In each HSE region, except for HSE Dublin North East, the incidence of self-harm was significantly higher in the urban district population. Compared to rural district populations, the self-harm rate was 78%, 86% and 211% higher in the urban district populations of the HSE regions of Dublin/ Mid-Leinster, South and West, respectively. The self-harm rate was 3% lower in the urban district population of the HSE Dublin North East.

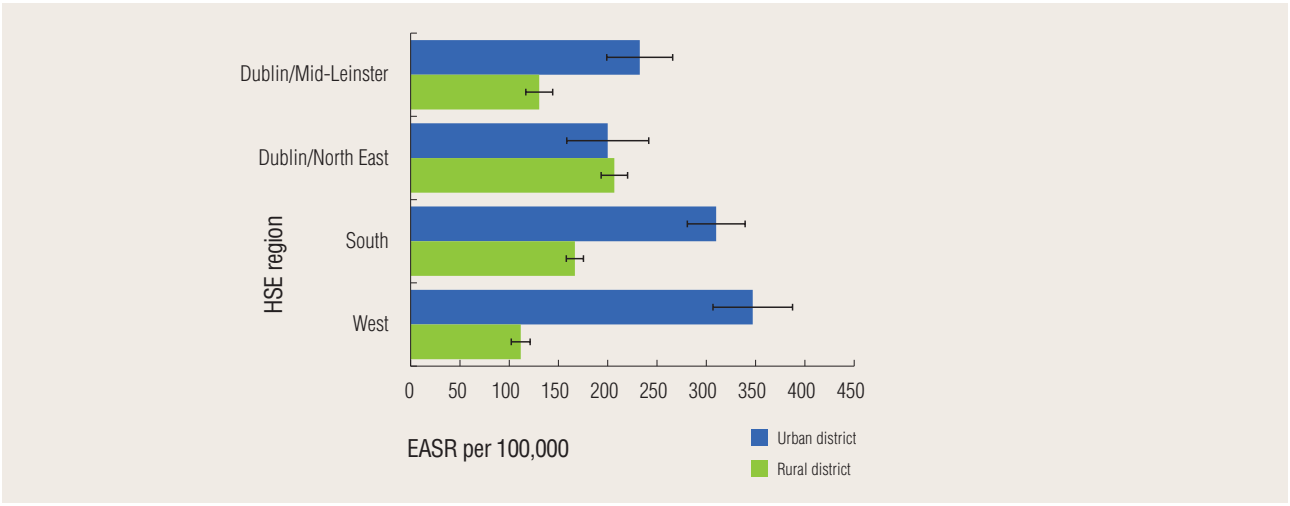
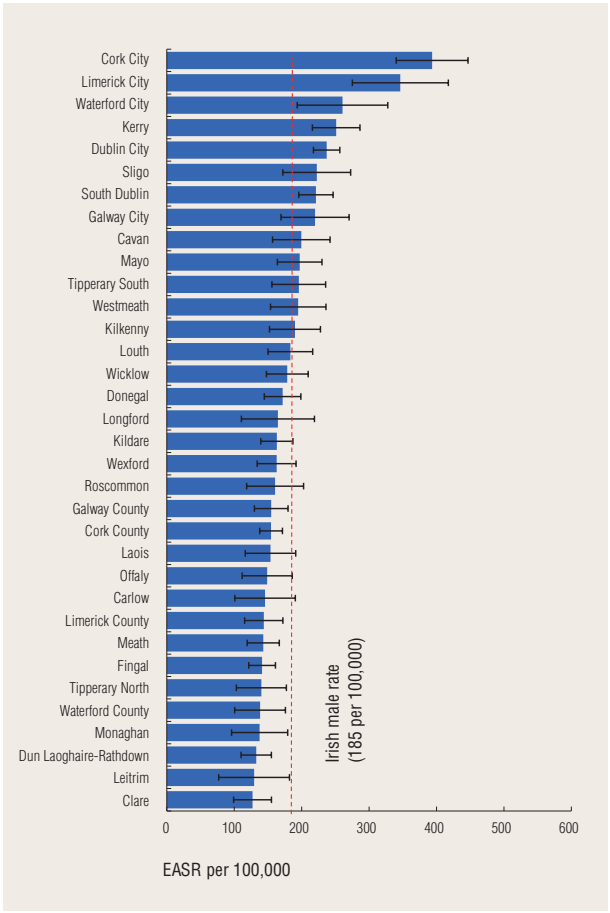


Figure 14: Person-based European age-standardised rate (EASR) of self-harm in 2014 for urban and rural district residents by HSE region.

Rate by city and county



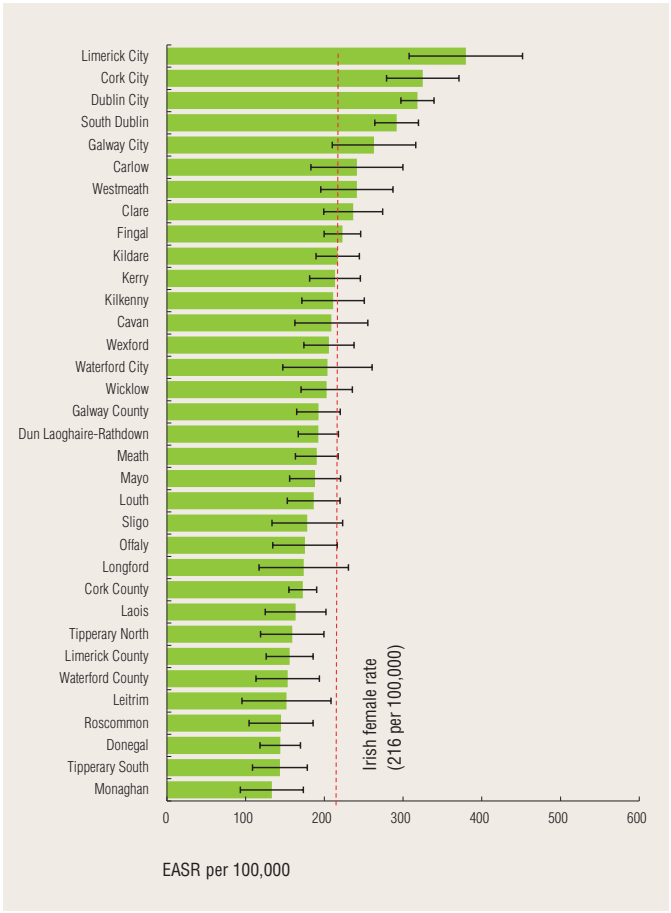


Figure 14a: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 by city/county of residence for **men**.

Figure 14b: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 by city/county of residence for **women**.

There was widespread variation in the male and female self-harm rate when examined by city/county of residence. The male rate varied from 127 per 100,000 for Clare to 394 per 100,000 for Cork City. The lowest female rates was recorded for Monaghan (133 per 100,000) with the highest rates recorded for Limerick City residents at 380 per 100,000. Relative to the national rate, a high rate of self-harm was recorded for male and

female city residents and for men living in Kerry, Sligo and South Dublin and for women living in South Dublin, Carlow, Westmeath and Clare. In 2014 high rates for both men and women were seen in Cork City, where the male rate was more than twice the national average and the female rate was 50% higher. In Limerick City the male rate was 87% higher than the national average and the female rate was 76% higher.

At a national level, the female self-harm rate exceeded the male rate by 17%. The magnitude of this gender difference varied by city/county. The female rate far exceeded the male rate in Clare (+86%), Carlow (+66%), Fingal (+58%) and Dun-Laoghaire Rathdown (+45%). The opposite pattern of a significantly lower female rate was observed in Tipperary South (-27%), Waterford City (-22%), Sligo (-20%) and Cork City (-17%).

The only significant decrease in the male rate of self-harm was observed in Carlow (-37%). The most notable decreases for women included Tipperary North and South (-37% and 35%, respectively) and Limerick City (-33%). Significant increases in the male rate of self-harm were observed in Roscommon (+72%), Cavan (+69%), Kerry (+25%) and Cork County (+17%). A significant increase in the female rate of self-harm was observed in Kilkenny (+33%).

There were significant year-to-year increases in the rate of hospital-treated self-harm in Ireland since the advent of the economic recession in 2008. Despite decreases in recent years, the overall rate has increased by 6% since 2007, from 188 to 200 per 100,000. The male rate has increased by 14% from 162 to 185 per 100,000 and the female rate has increased by less than 1% from 215 to 216 per 100,000. Figures 15a and 15b illustrate, for each county and city, the percentage change in the rate of hospital-treated self-harm from 2007 to 2014.

There have been notable increases in the male rate of self-harm in Leitrim, Cork County, South Dublin, Sligo and Monaghan. Increases in the female rate of self-harm were observed in Leitrim, South Dublin and Kilkenny.

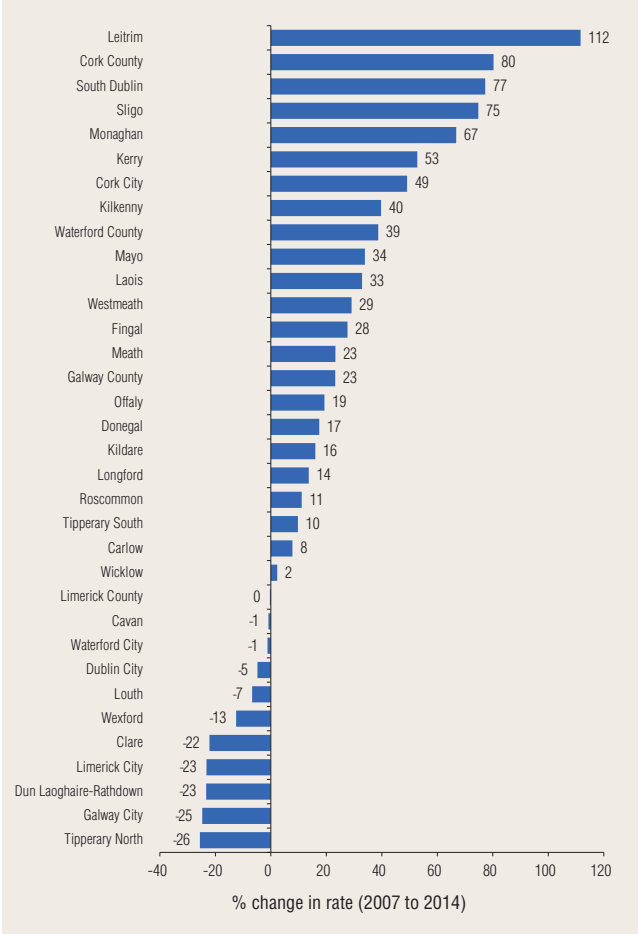


Figure 15a: Percentage change from 2007 to 2014 in the person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland by city/county of residence for **men**.

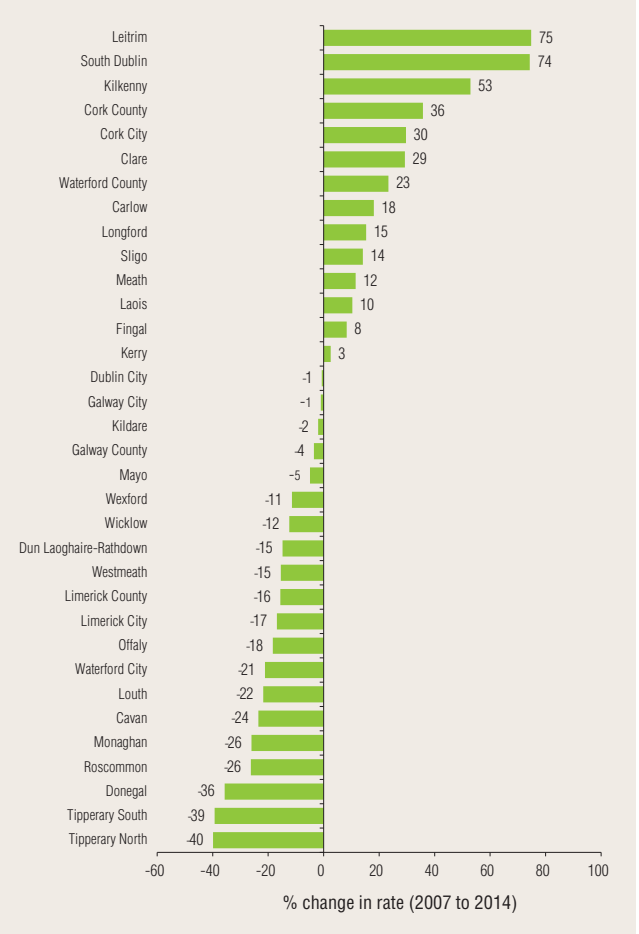


Figure 15b: Percentage change from 2007 to 2014 in the person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland by city/county of residence for **women**.

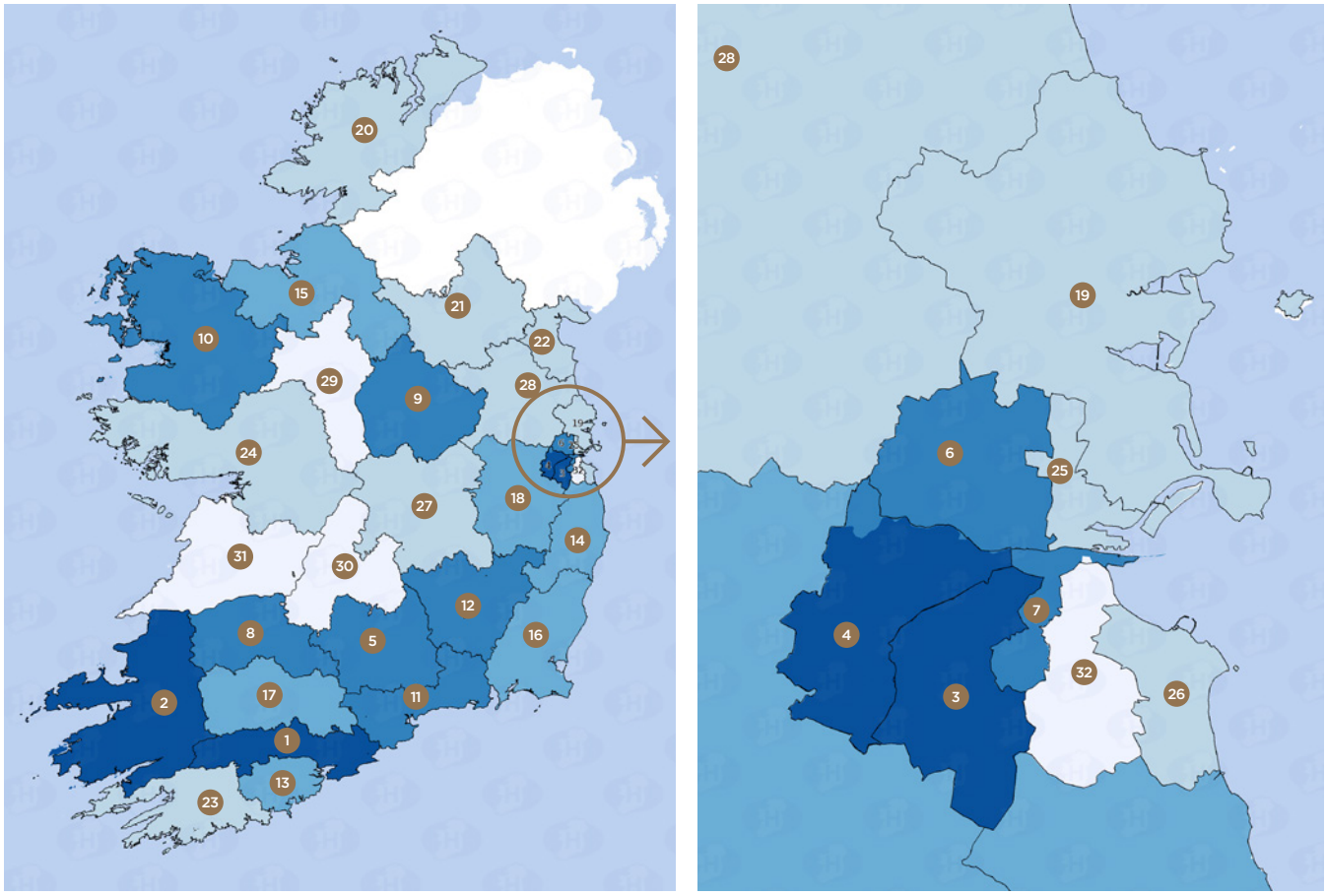
Rate by HSE Local Health Office (LHO)

For 2014, Table 12 details the population (derived by the National Census 2011), number of men and women who presented to hospital as a result of self-harm and the incidence rate (age-adjusted to the European standard population) for each LHO area. Thematic maps are also provided to illustrate the variation in the male and female incidence of hospital-treated self-harm by LHO area.

There was approximately a twofold difference in the rate of self-harm when examined by LHO area. The rate for men ranged from 77 per 100,000 in Dublin South to 259 per 100,000 in Cork North Lee and for women ranged from 126 per 100,000 in Cork West to 293 per 100,000 in Dublin West and 294 per 100,000 in Dublin South West. The female rate exceeded 240 per 100,000 for Dublin South West, Dublin West, Cork North Lee and Dublin North West and for Cork North Lee, Kerry and Dublin South West for the male rate.

HSE Region and LHO		MEN				WOMEN			
			SELF-HARM				SELF-HARM		
		Population*	Persons	Rate**	Rank	Population*	Persons	Rate**	Rank
DUBLIN MID LEINSTER	Dublin South City	69042	132	185	7	71143	153	201	15
	Dublin South East	57530	43	77	32	62502	95	155	25
	Dublin South West	75078	182	241	3	79393	224	294	1
	Dublin West	72067	160	220	4	74265	213	293	2
	Kildare/West Wicklow	113750	167	151	18	114660	245	219	9
	Laois/Offaly	79017	102	134	27	78229	125	173	21
	Longford/Westmeath	62432	111	182	9	62732	133	220	8
	Dun Laoghaire	62008	85	137	26	68555	111	165	22
	Wicklow	58450	95	166	14	60092	117	204	13
DUBLIN NORTH EAST	Cavan/Monaghan	66734	95	149	21	65639	101	162	24
	Dublin North	119057	181	150	19	125305	263	222	7
	Dublin North Central	66320	103	139	25	69059	171	239	5
	Dublin North West	98800	195	185	6	102945	256	257	4
	Louth	60763	89	148	22	62134	103	175	20
	Meath	91910	121	133	28	92225	170	196	16
SOUTH	Carlow/Kilkenny	65251	110	175	12	65064	147	234	6
	Cork North	44889	68	160	17	44642	58	139	28
	Cork North Lee	90708	234	259	1	91094	232	264	3
	Cork South Lee	93436	166	168	13	97733	180	184	18
	Cork West	28437	38	145	23	28093	33	126	32
	Kerry	72629	166	243	2	72873	141	209	11
	Tipperary South	47156	83	188	5	46980	62	137	29
	Waterford	63520	109	178	11	64287	99	163	23
	Wexford	71909	111	163	16	73411	141	204	14
WEST	Clare	58298	62	113	31	58898	115	211	10
	Donegal	80523	113	150	20	80614	104	136	30
	Galway	124758	181	145	24	125895	237	189	17
	Limerick	76749	143	184	8	77638	159	207	12
	Mayo	65420	112	180	10	65218	107	178	19
	Tipperary North/East Limerick	54406	64	116	30	53338	80	152	27
	Roscommon	32353	37	119	29	31712	40	134	31
	Sligo/Leitrim/West Cavan	49299	78	164	15	49185	70	152	26

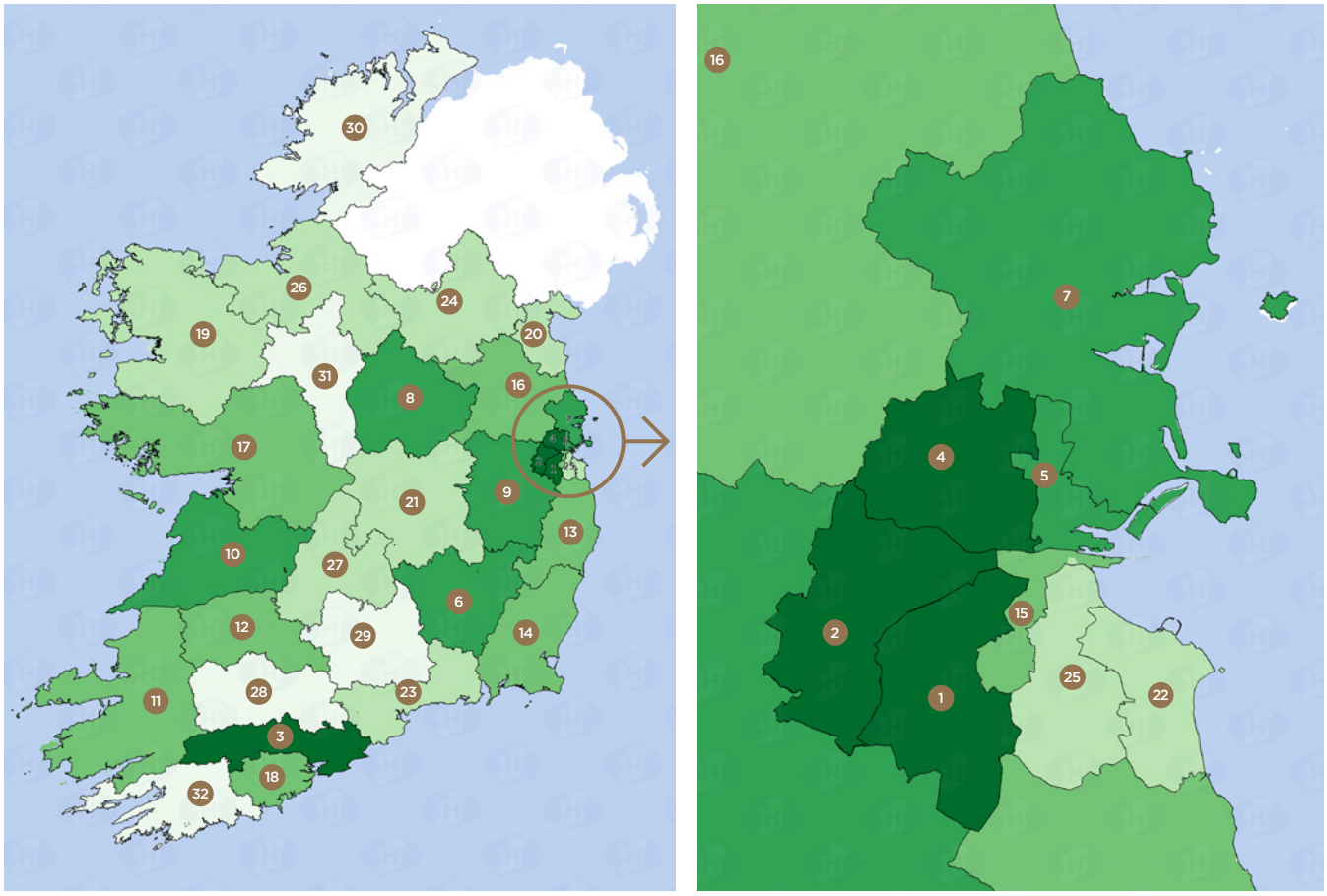
Table 12: Self-harm in 2014 by HSE Local Health Office (LHO) area of residence and gender
*Population derived by the National Census 2011
**Person-based European age-standardised rate per 100,000 population



Map 2: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 by HSE Local Health Office area for men (Numbers indicate rank of rate from 1 for highest to 32 for lowest)

Male rate of self-harm

- Self-harm rate greater than 201
- Self-harm rate between 171 and 200
- Self-harm rate between 151 and 170
- Self-harm rate between 121 and 150
- Self-harm rate less than 120



Map 3: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2014 by HSE Local Health Office area for women (Numbers indicate rank of rate from 1 for highest to 32 for lowest)

Female rate of self-harm

- Self-harm rate greater than 241
- Self-harm rate between 211 and 240
- Self-harm rate between 141 and 160
- Self-harm rate between 151 and 180
- Self-harm rate less than 150

"Since 2004, the proportion of patients admitted to a general ward following a self-harm presentation has declined by 45%."

SECTION III:

Trends over time: 2004-2014

Between 2007 and 2010 there was a significant increase in the rate of self-harm in Ireland, with a 19% increase during this period. The biggest increase was seen among men, where the rate increased from 162 per 100,000 to 211 per 100,000 (+27%). There was a less pronounced increase in the female rate during this period (+10%). While overall the female rate of self-harm in Ireland is higher than that of the male rate, this period has also seen the gender gap narrowing, with 2010 recording the smallest difference between these rates (10%).

Between 2011 and 2013 there were consecutive decreases in the Irish rate of self-harm (-4%, -2% and -6%, respectively). However, given the relatively small reductions, it would be premature to conclude that this indicates a decreasing trend. Despite these decreases, the male and female rate of self-harm remain respectively 14% and 1% higher, compared to the year 2007.

A recent study (*Corcoran et al, 2015*) including data from the National Self-Harm Registry Ireland found that during the period 2008-2012, there was a negative impact of the recession on national rates of suicidal behaviour in Ireland (table 13). In order to quantify the impact of this change, the study compared the observed rate of suicide and self-harm with the rate that would have been observed had the decreasing trend continued (if the rate of suicide and self-harm had continued to decline). It was found that the rate of male suicide was 57% higher than it would have been had the economic recession not occurred. The rate of male and female self-harm was respectively 37% and 26% higher. In absolute numbers, there were an additional 476 male suicides during 2008-2012 than would have been expected had the recession not occurred. There was also an excess number of self-harm presentations (males: 5029 and females: 3833).

Scenario		Rate by end 2012				Cumulative excess over 2008-2012
		Without recession	With recession	Difference (95% CI)	% difference	Number (95% CI)
A. If pre-recession trends continued	**Suicide**					**Deaths**
	Male	15.2	23.8	8.7*** (4.8, 12.5)	57%	476*** (274, 678)
	Female	4.5	4.8	0.3 (-1.1, 1.8)	7%	85 (-9, 180)
	Self harm					**Hospital presentations**
	Male	241.9	316.0	74.1 (-6.3, 154.6)	31%	5029* (626, 9432)
	Female	293.3	356.5	63.2* (4.1, 122.2)	22%	3833* (321, 7345)
B. If pre-recession trends levelled off	**Suicide**					**Deaths**
	Male	19.8	23.8	4.0** (1.1, 6.9)	20%	264*** (121, 407)
	Female	5.4	4.8	-0.6 (-1.5, 0.3)	-12%	41 (-24, 105)
	Self harm					**Hospital presentations**
	Male	255.4	316.0	60.6*** (26.3, 94.8)	24%	4426*** (2185, 6668)
	Female	332.5	356.5	24.0* (2.3, 45.6)	7%	2038* (275, 3800)

Table 13: Estimated impact of the economic recession and subsequent austerity on suicide and self-harm in Ireland, 2008–2012. Note: * p<0.05, ** p<0.01, *** p<0.001; Recession arrived in January 2008; Dependent variables were the quarterly rate of suicide and monthly rate of self harm presentations to hospital, age-standardised (>15 years) per 100 000; Adjustment was made for season (quarter year or calendar month) in the all models. The precision of estimates from the two scenarios cannot be directly compared because of differing model specifications. The model for scenario A has more parameters estimated and consequently yields wider confidence intervals than for scenario B.

The impact of the economic recession on self-harm was most evident in 15-64 year-old men, with 3064 (95% CI, 644 to 5484, p=0.014) and 881 (95% CI, 156 to 1605, p=0.018) excess self-harm presentations by 25-44 and 45-64 year-old men, respectively. The recession's impact on female suicidal behaviour was confined to self-harm among 15-24 year-olds for whom there were 1398 (95% CI, 122 to 2675, P=0.032) more presentations to hospital than if the pre-recession trends had persisted.

Recommended next care, 2004-2014

There has been a changing pattern in the recommended next care following a self-harm presentation over the ten-year period, 2004-2014 (figure 16). Since 2004, the proportion of patients admitted to a general ward following a self-harm presentation has declined by 45% (48% for men, 42% for women). This decline was most pronounced in the period 2007-2014, where general admissions decreased by 35%. Between 2004 and 2014, the proportion of patients leaving the emergency department without being seen or without a recommendation remained relatively stable (range: 12-15%). In particular, cases involving alcohol resulting in inpatient admision fell by 54% since 2004.

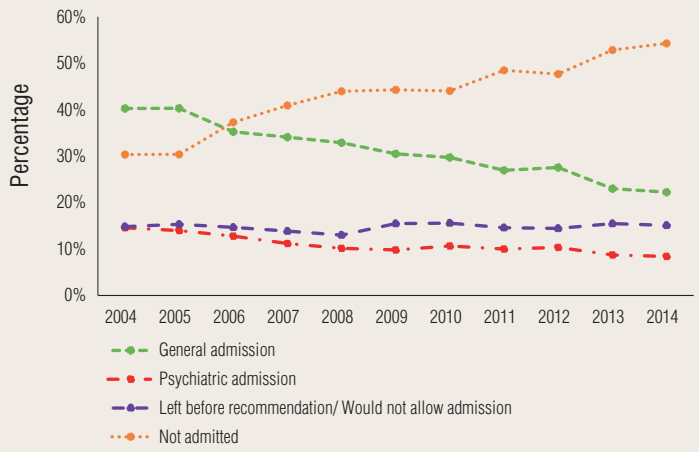


Figure 16: Patterns of recommended next care for self-harm patients 2004-2014 in Republic of Ireland

General inpatient admission was most common following cases of intentional drug overdose and where alcohol was involved (figure 17). Admission to a general ward was least common following self-cutting. Psychiatric admission was more common following attempted hanging and attempted drowning. However, given that highly lethal methods of self-harm were involved, a relatively high proportion left the emergency department without being seen (9% and 14%, respectively). In particular, the proportion of attendances leaving the emergency department without being seen was higher when self-cutting was involved.

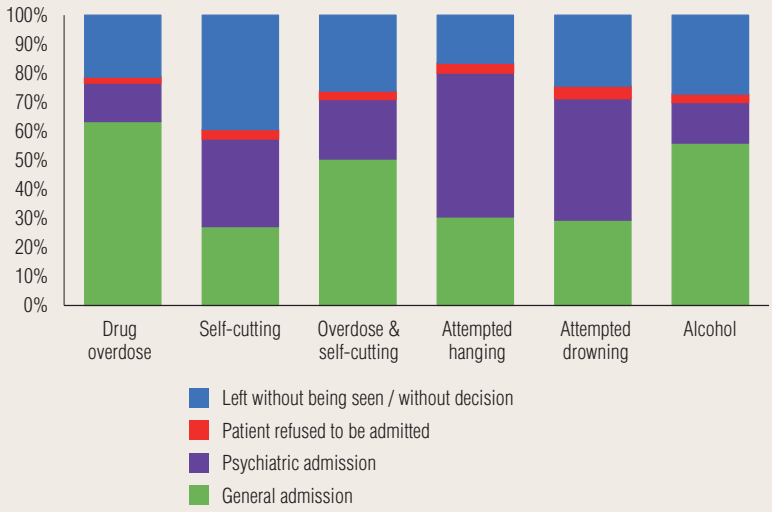


Figure 17: Recommended next care 2004-2014 by methods of self-harm

Next care varied according to time of attendance. Rates of general admission ranged from 41% to 54% during the day. The proportion of patients receiving psychiatric admission declined by 39% during the day. The proportion of those leaving the emergency department without being seen increased from 14% between 8am and 7pm to 27% between 4am and 7am. There was a peak in patients leaving without being seen late in the evening and into the night, when the number of self-harm attendances is highest. In particular, presentations made between 12am and 3am were most likely to leave emergency department without being seen.

Regional variation of next care

Next care also varied according to HSE hospital group (figure 18). The proportion of patients admitted to a general ward ranged from 12% in the Dublin North East to 56% in the South Eastern hospital groups. Admission to a psychiatric ward was lowest in the North East hospital group (4%) and highest in the Dublin South hospital group (18%). The highest proportion of patients leaving the emergency department without being seen was in the Dublin North East hospital group (18%), with the lowest in the South Eastern hospital group (9%).

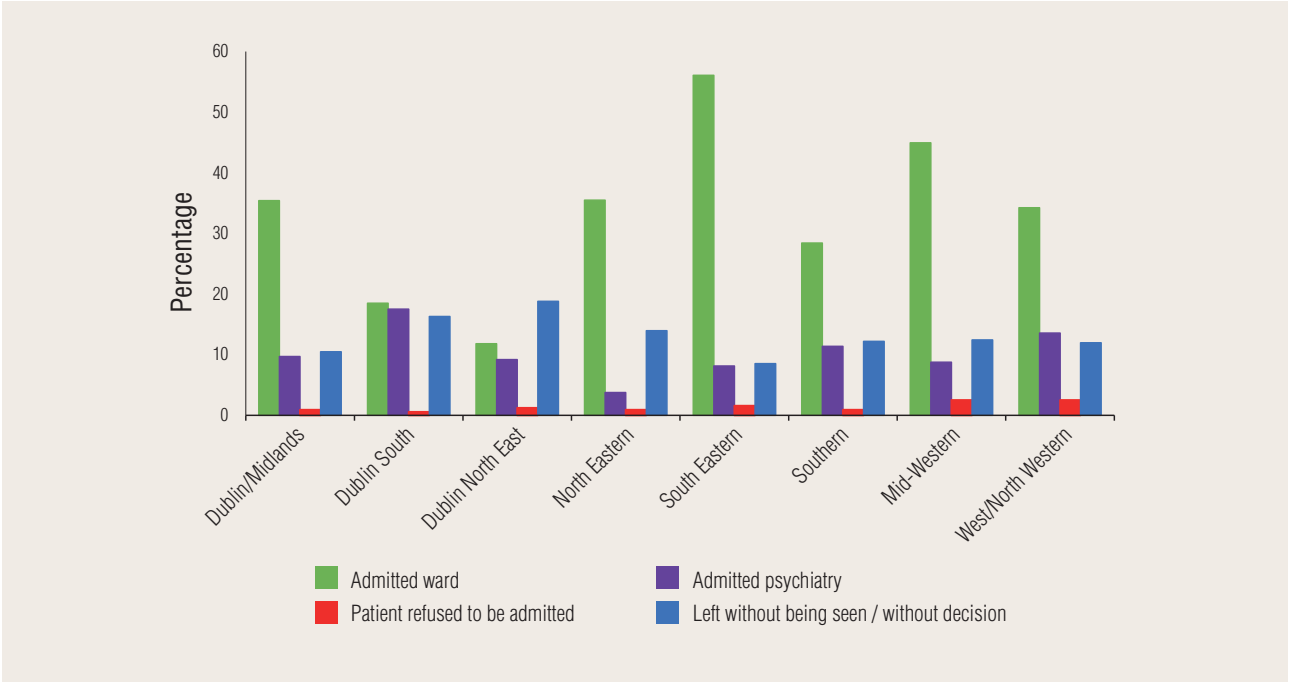


Figure 18: Recommended next care for self-harm patients in the Republic of Ireland 2004-2014 by HSE Hospital Group Area.
Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission may be underestimates.

"General inpatient admission was most common following cases of intentional drug overdose and where alcohol was involved."

APPENDIX I:

APPENDIX 1: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE REPUBLIC OF IRELAND BY HOSPITALS GROUP, 2014

HOSPITAL GROUP	IRELAND EAST		DUBLIN MIDLANDS		RCSI		SOUTH/ SOUTH WEST		UNIVERSITY OF LIMERICK		SAOLTA UNIVERSITY		CHILDREN'S		REPUBLIC OF IRELAND	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-9yrs	0	0	0	0	0	0	<5	<5	0	0	<5	0	<5	<5	6	<5
10-14yrs	7	25	<5	6	7	20	15	57	7	13	6	26	43	145	86	292
15-19yrs	146	199	124	190	100	173	158	181	40	73	91	156	25	96	684	1068
20-24yrs	212	220	135	175	132	123	199	153	57	61	114	90	0	0	849	822
25-29yrs	143	144	140	117	102	124	187	124	53	55	98	87	0	0	723	651
30-34yrs	152	147	114	141	99	94	147	90	45	36	87	62	0	0	644	570
35-39yrs	164	132	106	131	88	95	101	82	35	50	69	55	0	0	563	545
40-44yrs	114	151	81	118	112	103	102	109	34	28	62	81	0	0	505	590
45-49yrs	86	144	83	98	53	78	61	88	14	34	64	72	0	0	361	514
50-54yrs	83	103	61	73	50	73	57	70	22	27	43	38	0	0	316	384
55-59yrs	36	80	35	60	13	38	50	47	9	14	26	29	0	0	169	268
60-64yrs	27	30	23	22	15	13	28	22	<5	10	12	24	0	0	109	121
65-69yrs	9	23	6	8	9	12	14	17	5	<5	13	13	0	0	56	75
70-74yrs	10	14	7	9	6	6	10	11	<5	0	<5	<5	0	0	36	42
75-79yrs	<5	6	<5	<5	<5	<5	8	5	<5	<5	<5	<5	0	0	20	18
80-84yrs	<5	6	<5	<5	<5	<5	<5	6	<5	<5	<5	0	0	0	10	16
85yrs+	<5	<5	<5	0	0	0	0	<5	0	0	<5	<5	0	0	6	5
Total	1195	1425	923	1152	790	956	1142	1066	329	405	695	737	69	242	5143	5983

APPENDIX 1A: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE IRELAND EAST HOSPITAL GROUP, 2014

	MATER MISERICORDIAE UNIVERSITY HOSPITAL		MIDLAND REGIONAL HOSPITAL, MULLINGAR		OUR LADY'S HOSPITAL, NAVAN		ST. COLUMCILLE'S HOSPITAL, LOUGHLINSTOWN		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	Male	Female
<15yrs	0	0	0	7	0	<5	0	0	0	10	0	0	<5	<5	5	6
15-19yrs	28	58	19	13	15	13	0	<5	24	32	<5	<5	42	52	16	27
20-24yrs	88	69	10	21	16	12	<5	<5	29	28	<5	<5	46	70	19	15
25-34yrs	109	123	25	16	21	15	<5	<5	39	31	<5	<5	80	77	16	26
35-44yrs	119	66	21	29	25	30	<5	<5	22	48	<5	<5	67	63	18	43
45-54yrs	32	59	19	26	12	17	<5	<5	33	38	<5	6	52	70	18	30
55-64yrs	17	16	6	12	<5	7	<5	<5	<5	12	0	0	29	50	<5	12
65yrs+	<5	7	<5	<5	<5	7	<5	<5	<5	<5	0	<5	6	26	7	<5
Total	397	398	102	127	94	102	10	10	153	201	13	17	324	409	103	161

APPENDIX 1B: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2014

	ADELAIDE AND MEATH HOSPITAL, TALLAGHT		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
<15yrs	0	0	0	<5	0	<5	<5	<5	0	0
15-19yrs	33	63	9	27	11	14	32	36	39	50
20-24yrs	42	55	14	17	13	10	19	29	47	64
25-34yrs	83	80	28	14	15	10	34	43	94	111
35-44yrs	45	76	11	16	7	6	43	64	80	87
45-54yrs	44	53	16	20	9	7	27	46	48	45
55-64yrs	18	23	<5	<5	<5	14	6	18	28	23
65yrs+	<5	7	<5	<5	<5	<5	<5	5	11	6
Total	269	357	82	102	60	65	164	242	347	386

APPENDIX 1C: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE RCSI HOSPITAL GROUP, 2014

	BEAUMONT HOSPITAL		CAVAN GENERAL HOSPITAL		CONNOLLY HOSPITAL, BLANCHARDSTOWN		OUR LADY OF LOURDES HOSPITAL, DROGHEDA	
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	<5	<5	<5	0	<5	<5	17
15-19yrs	30	68	9	26	35	39	26	40
20-24yrs	39	41	13	10	55	51	25	21
25-34yrs	62	81	14	16	79	72	46	49
35-44yrs	68	58	29	18	50	85	53	37
45-54yrs	46	59	11	19	23	48	23	25
55-64yrs	7	23	<5	<5	8	9	9	17
65yrs+	9	9	<5	<5	7	8	<5	<5
Total	261	340	85	93	257	313	187	210

APPENDIX 1D: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE SOUTH/SOUTH WEST HOSPITAL GROUP, 2014

	BANTRY GENERAL HOSPITAL		CORK UNIVERSITY HOSPITAL		KERRY GENERAL HOSPITAL		MALLOW GENERAL HOSPITAL		MERCY UNIVERSITY HOSPITAL, CORK		SOUTH TIPPERARY GENERAL HOSPITAL		UNIVERSITY HOSPITAL, WATERFORD	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	<5	12	29	<5	5	0	0	<5	14	0	5	<5	<5
15-19yrs	<5	<5	55	62	21	35	0	0	40	42	17	14	22	24
20-24yrs	<5	<5	53	40	36	25	<5	<5	60	53	18	10	29	21
25-34yrs	10	<5	78	51	63	33	<5	<5	101	81	37	28	42	19
35-44yrs	<5	<5	43	42	37	29	<5	<5	63	61	26	23	30	31
45-54yrs	<5	7	34	36	30	35	0	<5	29	42	5	12	18	25
55-64yrs	6	<5	18	10	15	10	0	0	26	29	7	7	6	11
65yrs+	5	5	7	15	7	<5	<5	0	<5	11	5	5	5	<5
Total	30	27	300	285	211	176	7	<5	325	333	115	104	154	137

APPENDIX 1E: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE UNIVERSITY OF LIMERICK HOSPITAL GROUP, 2014

	ENNIS HOSPITAL		NENAGH HOSPITAL		ST. JOHN'S HOSPITAL, LIMERICK		UNIVERSITY HOSPITAL, LIMERICK	
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	0	0	0	0	7	13
15-19yrs	<5	<5	0	<5	0	0	38	71
20-24yrs	<5	<5	0	0	0	0	55	59
25-34yrs	<5	0	0	0	0	0	97	91
35-44yrs	<5	<5	0	0	0	0	68	76
45-54yrs	0	0	<5	0	0	0	35	61
55-64yrs	0	<5	0	0	0	0	13	23
65yrs+	0	0	0	0	0	0	9	<5
Total	6	6	<5	<5	0	0	322	398

APPENDIX 1F: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2014

	GALWAY UNIVERSITY HOSPITAL		LETTERKENNY GENERAL HOSPITAL		MAYO GENERAL HOSPITAL		PORTIUNCULA HOSPITAL, BALLINASLOE		SLIGO REGIONAL HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	<5	8	0	<5	<5	8	<5	5	0	<5
15-19yrs	36	62	13	26	17	32	10	16	15	20
20-24yrs	43	34	27	22	21	15	12	8	11	11
25-34yrs	48	65	25	24	40	7	28	25	44	28
35-44yrs	47	42	27	34	23	28	9	23	25	9
45-54yrs	33	20	22	22	16	26	17	10	19	32
55-64yrs	8	10	7	8	8	14	<5	10	12	11
65yrs+	10	8	0	0	10	5	0	<5	<5	<5
Total	229	249	121	139	138	135	80	100	127	114

APPENDIX 1G: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE CHILDREN'S HOSPITAL GROUP, 2014

	CHILDREN'S UNIVERSITY HOSPITAL AT TEMPLE STREET		NATIONAL CHILDREN'S HOSPITAL AT TALLAGHT HOSPITAL		OUR LADY'S CHILDREN'S HOSPITAL, CRUMLIN	
	Male	Female	Male	Female	Male	Female
<15yrs	14	73	13	51	17	22
15-19yrs	8	46	12	37	5	13
20-24yrs	0	0	0	0	0	0
25-34yrs	0	0	0	0	0	0
35-44yrs	0	0	0	0	0	0
45-54yrs	0	0	0	0	0	0
55-64yrs	0	0	0	0	0	0
65yrs+	0	0	0	0	0	0
Total	22	119	25	88	22	35

APPENDIX II:

APPENDIX 2A: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE IRELAND EAST HOSPITAL GROUP, 2014

	MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. COLUMCILLE'S HOSPITAL, LOUGHLINSTOWN	ST. LUKE'S HOSPITAL, KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
	(n=795)	(n=229)	(n=196)	(n=20)	(n=354)	(n=30)	(n=733)	(n=264)
Admitted (general and psychiatric)	13.0%	60.3%	27.5%	30%	46.9%	26.7%	19.7%	51.1%
Patient would not allow admission	1.1%	0.9%	0%	0%	0%	0%	0.1%	0%
Left before recommendation	21.6%	7.9%	17.9%	10%	15.8%	10%	8.7%	12.5%
Not admitted	64.3%	31%	54.6%	60%	37.3%	63.3%	71.5%	36.4%

APPENDIX 2B: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2014

	ADELAIDE AND MEATH HOSPITAL, TALLAGHT	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
	(n=626)	(n=184)	(n=125)	(n=406)	(n=733)
Admitted (general and psychiatric)	26.9%	44.1%	37.6%	28.4%	29.9%
Patient would not allow admission	0.6%	0.5%	0%	0.7%	0.4%
Left before recommendation	9.1%	9.2%	8%	15%	21.3%
Not admitted	63.4%	46.2%	54.4%	55.9%	48.4%

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 Appendices 2A-2G may be underestimates.

APPENDIX 2C: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE RCSI HOSPITAL GROUP, 2014

	BEAUMONT HOSPITAL	CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
	(n=601)	(n=178)	(n=570)	(n=397)
Admitted (general and psychiatric)	13.8%	44.4%	31.6%	21.7%
Patient would not allow admission	0.2%	0%	0.9%	0%
Left before recommendation	14.6%	13.5%	19.8%	23.7%
Not admitted	71.4%	42.1%	47.7%	54.7%

APPENDIX 2D: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SOUTH/SOUTH WEST HOSPITAL GROUP, 2014

	BANTRY GENERAL HOSPITAL	CORK UNIVERSITY HOSPITAL	KERRY GENERAL HOSPITAL	MALLOW GENERAL HOSPITAL	MERCY UNIVERSITY HOSPITAL, CORK	SOUTH TIPPERARY GENERAL HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
	(n=57)	(n=585)	(n=387)	(n=11)	(n=658)	(n=219)	(n=291)
Admitted (general and psychiatric)	54.3%	47.7%	39.8%	18.2%	18.3%	33.8%	29.2%
Patient would not allow admission	0%	0%	1%	0%	0%	0.5%	0%
Left before recommendation	21.1%	10.1%	12.1%	0%	18.2%	12.3%	14.8%
Not admitted	24.6%	42.2%	47%	81.8%	63.5%	53.4%	56%

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 Appendices 2A-2G may be underestimates.

APPENDIX 2E: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE UNIVERSITY OF LIMERICK HOSPITAL GROUP, 2014

	ENNIS HOSPITAL	NENAGH HOSPITAL	ST. JOHN'S HOSPITAL, LIMERICK	UNIVERSITY HOSPITAL, LIMERICK
	(n=12)	(n=2)	(n=0)	(n=720)
Admitted (general and psychiatric)	0%	0%	0%	15.4%
Patient would not allow admission	8.3%	0%	0%	0.7%
Left before recommendation	8.3%	0%	0%	12.6%
Not admitted	83.3%	100%	0%	71.3%

APPENDIX 2F: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2014

	GALWAY UNIVERSITY HOSPITAL	LETTERKENNY GENERAL HOSPITAL	MAYO GENERAL HOSPITAL	PORTIUNCULA HOSPITAL, BALLINASLOE	SLIGO REGIONAL HOSPITAL
	(n=478)	(n=260)	(n=273)	(n=180)	(n=241)
Admitted (general and psychiatric)	29.5%	60.8%	34.4%	48.9%	22%
Patient would not allow admission	1.7%	1.2%	4.4%	1.1%	1.7%
Left before recommendation	18%	11.5%	12.8%	8.9%	14.1%
Not admitted	50.8%	26.5%	48.4%	41.1%	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 Appendices 2A-2G may be underestimates.

APPENDIX 2G: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE CHILDREN'S HOSPITAL GROUP, 2014

	CHILDREN'S UNIVERSITY HOSPITAL AT TEMPLE STREET	NATIONAL CHILDREN'S HOSPITAL AT TALLAGHT HOSPITAL	OUR LADY'S CHILDREN'S HOSPITAL, CRUMLIN
	(n=141)	(n=113)	(n=57)
Admitted (general and psychiatric)	56.7%	85%	56.1%
Patient would not allow admission	0%	0%	7%
Left before recommendation	0%	0%	1.8%
Not admitted	43.3%	15%	35.1%

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 Appendices 2A-2G may be underestimates.

APPENDIX III:

APPENDIX 3A: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE IRELAND EAST HOSPITAL GROUP, 2014

		MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. COLUMCILLE'S HOSPITAL, LOUGHLINSTOWN	ST. LUKE'S HOSPITAL, KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
Number of individuals treated	Men	253	93	82	10	121	11	265	93
	Women	288	115	85	10	159	16	331	134
	Total	541	208	167	20	280	27	596	227
Number who repeated	Men	67	9	19	1	24	3	44	11
	Women	63	12	19	1	31	5	54	25
	Total	130	21	38	2	55	8	98	36
Percentage who repeated	Men	26.5%	9.7%	23.2%	10%	19.8%	27.3%	16.6%	11.8%
	Women	21.9%	10.4%	22.4%	10%	19.5%	31.3%	16.3%	18.7%
	Total	24%	10.1%	22.8%	10%	19.6%	29.6%	16.4%	15.9%

APPENDIX 3B: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2014

		ADELAIDE AND MEATH HOSPITAL, TALLAGHT	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
Number of individuals treated	Men	223	66	54	141	274
	Women	293	86	60	181	295
	Total	516	152	114	322	569
Number who repeated	Men	38	8	5	23	62
	Women	46	8	5	33	63
	Total	84	16	10	56	125
Percentage who repeated	Men	17%	12.1%	9.3%	16.3%	22.6%
	Women	15.7%	9.3%	8.3%	18.2%	21.4%
	Total	16.3%	10.5%	8.8%	17.4%	22%

APPENDIX 3C: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE RCSI HOSPITAL GROUP, 2014

		BEAUMONT HOSPITAL	CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
Number of individuals treated	Men	218	75	204	148
	Women	265	87	252	183
	Total	483	162	456	331
Number who repeated	Men	39	10	38	32
	Women	53	8	43	24
	Total	92	18	81	56
Percentage who repeated	Men	17.9%	13.3%	18.6%	21.6%
	Women	20%	9.2%	17.1%	13.1%
	Total	19%	11.1%	17.8%	16.9%

APPENDIX 3D: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE SOUTH/SOUTH WEST HOSPITAL GROUP, 2014

		BANTRY GENERAL HOSPITAL	CORK UNIVERSITY HOSPITAL	KERRY GENERAL HOSPITAL	MALLOW GENERAL HOSPITAL	MERCY UNIVERSITY HOSPITAL, CORK	SOUTH TIPPERARY GENERAL HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
Number of individuals treated	Men	23	270	170	7	275	94	140
	Women	20	250	147	4	258	76	121
	Total	43	520	317	11	533	170	261
Number who repeated	Men	4	35	21	0	42	18	15
	Women	6	29	23	1	38	13	11
	Total	10	64	44	1	80	31	26
Percentage who repeated	Men	17.4%	13%	12.4%	0%	15.3%	19.1%	10.7%
	Women	30%	11.6%	15.6%	25%	14.7%	17.1%	9.1%
	Total	23.3%	12.3%	13.9%	9.1%	15%	18.2%	10%

APPENDIX 3E: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE UNIVERSITY OF LIMERICK HOSPITAL GROUP, 2014

		ENNIS HOSPITAL	NENAGH HOSPITAL	ST. JOHN'S HOSPITAL, LIMERICK	UNIVERSITY HOSPITAL, LIMERICK
Number of individuals treated	Men	6	1	0	277
	Women	6	1	0	340
	Total	12	2	0	617
Number who repeated	Men	2	0	0	38
	Women	1	0	0	39
	Total	3	0	0	77
Percentage who repeated	Men	33.3%	0%	0%	13.7%
	Women	16.7%	0%	0%	11.5%
	Total	25%	0%	0%	12.5%

APPENDIX 3F: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2014

		GALWAY UNIVERSITY HOSPITAL	LETTERKENNY GENERAL HOSPITAL	MAYO GENERAL HOSPITAL	PORTIUNCULA HOSPITAL, BALLINASLOE	SLIGO REGIONAL HOSPITAL
Number of individuals treated	Men	190	100	123	72	105
	Women	210	92	113	89	89
	Total	400	192	236	161	194
Number who repeated	Men	28	16	13	8	11
	Women	20	14	16	10	8
	Total	48	30	29	18	19
Percentage who repeated	Men	14.7%	16%	10.6%	11.1%	10.5%
	Women	9.5%	15.2%	14.2%	11.2%	9%
	Total	12%	15.6%	12.3%	11.2%	9.8%

APPENDIX 3G: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE CHILDREN'S HOSPITALS GROUP, 2014

		CHILDREN'S UNIVERSITY HOSPITAL AT TEMPLE STREET	NATIONAL CHILDREN'S HOSPITAL AT TALLAGHT HOSPITAL	OUR LADY'S CHILDREN'S HOSPITAL, CRUMLIN
Number of individuals treated	Men	21	23	18
	Women	103	75	35
	Total	124	98	53
Number who repeated	Men	3	3	4
	Women	10	12	0
	Total	13	15	4
Percentage who repeated	Men	14.3%	13%	22.2%
	Women	9.7%	16%	0%
	Total	10.5%	15.3%	7.5%

APPENDIX IV:

APPENDIX 4: SELF-HARM BY RESIDENTS OF THE REPUBLIC OF IRELAND, 2014

	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
Age group	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	184500	0	0	(+/-0)	177800	0	0	(+/-0)
5-9yrs	174300	5	3	(+/-3)	167300	2	1	(+/-2)
10-14yrs	159000	78	49	(+/-11)	152100	244	160	(+/-21)
15-19yrs	144000	549	381	(+/-33)	135200	917	678	(+/-45)
20-24yrs	124600	678	544	(+/-42)	119600	639	534	(+/-42)
25-29yrs	146200	556	380	(+/-32)	158900	469	295	(+/-27)
30-34yrs	181200	491	271	(+/-24)	196700	431	219	(+/-21)
35-39yrs	180700	397	220	(+/-22)	186000	406	218	(+/-22)
40-44yrs	173600	397	229	(+/-23)	174500	428	245	(+/-24)
45-49yrs	157300	279	177	(+/-21)	157400	378	240	(+/-25)
50-54yrs	143500	248	173	(+/-22)	146200	306	209	(+/-24)
55-59yrs	126900	143	113	(+/-19)	128400	221	172	(+/-23)
60-64yrs	112500	83	74	(+/-16)	113900	108	95	(+/-18)
65-69yrs	97900	51	52	(+/-15)	98400	64	65	(+/-16)
70-74yrs	70100	32	46	(+/-16)	73500	37	50	(+/-17)
75-79yrs	50200	18	36	(+/-17)	58100	18	31	(+/-15)
80-84yrs	32000	10	31	(+/-20)	42800	14	33	(+/-17)
85yrs+	21000	6	29	(+/-23)	42700	5	12	(+/-10)
Total**	2279500	4021	185	(+/-6)	2329500	4687	216	(+/-6)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4A: SELF-HARM BY RESIDENTS OF THE HSE DUBLIN/MID-LEINSTER REGION, 2014

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	53985	0	0	(+/-0)	52392	0	0	(+/-0)
5-9yrs	49357	1	2	(+/-4)	47727	1	2	(+/-4)
10-14yrs	45521	23	51	(+/-21)	43313	70	162	(+/-39)
15-19yrs	40713	159	391	(+/-62)	38421	271	705	(+/-86)
20-24yrs	36882	173	469	(+/-71)	37302	198	531	(+/-75)
25-29yrs	46144	139	301	(+/-51)	51436	128	249	(+/-44)
30-34yrs	57772	127	220	(+/-39)	61335	135	220	(+/-38)
35-39yrs	53492	106	198	(+/-38)	55913	114	204	(+/-38)
40-44yrs	50678	102	201	(+/-40)	51065	118	231	(+/-43)
45-49yrs	44701	80	179	(+/-40)	45506	110	242	(+/-46)
50-54yrs	40632	76	187	(+/-43)	42506	81	191	(+/-42)
55-59yrs	35300	46	130	(+/-38)	37023	81	219	(+/-49)
60-64yrs	30882	28	91	(+/-34)	32045	27	84	(+/-32)
65-69yrs	26002	7	27	(+/-20)	26899	21	78	(+/-34)
70-74yrs	18263	11	60	(+/-36)	20165	14	69	(+/-37)
75-79yrs	13240	3	23	(+/-26)	16052	5	31	(+/-28)
80-84yrs	8322	2	24	(+/-34)	11744	6	51	(+/-42)
85yrs+	5569	4	72	(+/-72)	11646	1	9	(+/-17)
Total**	657455	1087	171	(+/-10)	682491	1381	215	(+/-11)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4B: DELIBERATE SELF-HARM BY RESIDENTS OF THE HSE DUBLIN/NORTH EAST REGION, 2014

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	44227	0	0	(+/-0)	43235	0	0	(+/-0)
5-9yrs	39470	0	0	(+/-0)	37595	0	0	(+/-0)
10-14yrs	34316	23	67	(+/-28)	32821	77	235	(+/-53)
15-19yrs	29834	114	382	(+/-72)	27802	233	838	(+/-110)
20-24yrs	25518	160	627	(+/-99)	25637	164	640	(+/-100)
25-29yrs	35422	123	347	(+/-63)	39424	132	335	(+/-58)
30-34yrs	45596	128	281	(+/-50)	49389	118	239	(+/-44)
35-39yrs	43451	113	260	(+/-49)	45013	112	249	(+/-47)
40-44yrs	40026	107	267	(+/-52)	40041	119	297	(+/-54)
45-49yrs	34563	60	174	(+/-45)	34188	95	278	(+/-57)
50-54yrs	29975	59	197	(+/-51)	30720	81	264	(+/-59)
55-59yrs	25128	16	64	(+/-32)	25912	55	212	(+/-57)
60-64yrs	21960	21	96	(+/-42)	22929	26	113	(+/-44)
65-69yrs	19370	6	31	(+/-25)	20332	13	64	(+/-35)
70-74yrs	14225	9	63	(+/-42)	15093	9	60	(+/-40)
75-79yrs	9955	2	20	(+/-28)	12344	5	41	(+/-36)
80-84yrs	6140	4	65	(+/-65)	8695	2	23	(+/-33)
85yrs+	4130	0	0	(+/-0)	8360	0	0	(+/-0)
Total**	503308	945	195	(+/-12)	519529	1241	260	(+/-14)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4C: SELF-HARM BY RESIDENTS OF THE HSE SOUTH REGION, 2014

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	44600	0	0	(+/-0)	42700	0	0	(+/-0)
5-9yrs	43800	3	7	(+/-8)	43000	1	2	(+/-5)
10-14yrs	41000	20	49	(+/-22)	39600	63	159	(+/-40)
15-19yrs	37900	175	462	(+/-70)	36000	238	661	(+/-86)
20-24yrs	34300	210	612	(+/-84)	30900	171	553	(+/-85)
25-29yrs	35500	181	510	(+/-76)	37300	117	314	(+/-58)
30-34yrs	41500	137	330	(+/-56)	46400	104	224	(+/-44)
35-39yrs	45200	101	223	(+/-44)	45700	112	245	(+/-46)
40-44yrs	44100	107	243	(+/-47)	44000	118	268	(+/-49)
45-49yrs	40600	78	192	(+/-44)	40900	101	247	(+/-49)
50-54yrs	38200	66	173	(+/-43)	38300	89	232	(+/-49)
55-59yrs	34100	50	147	(+/-41)	33500	54	161	(+/-44)
60-64yrs	30300	19	63	(+/-29)	29900	26	87	(+/-34)
65-69yrs	26600	21	79	(+/-34)	26400	19	72	(+/-33)
70-74yrs	19100	9	47	(+/-31)	19900	11	55	(+/-33)
75-79yrs	13700	9	66	(+/-44)	15500	6	39	(+/-32)
80-84yrs	8800	3	34	(+/-39)	11600	5	43	(+/-39)
85yrs+	5500	0	0	(+/-0)	11300	3	27	(+/-31)
Total**	584800	1189	214	(+/-12)	592900	1238	223	(+/-12)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4D: SELF-HARM BY RESIDENTS OF THE HSE WEST REGION, 2014

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	41688	0	0	(+/-0)	39473	0	0	(+/-0)
5-9yrs	41673	1	2	(+/-5)	38978	0	0	(+/-0)
10-14yrs	38163	12	31	(+/-18)	36366	34	93	(+/-32)
15-19yrs	35553	99	278	(+/-56)	32977	174	528	(+/-80)
20-24yrs	27900	133	477	(+/-83)	25761	106	411	(+/-80)
25-29yrs	29134	111	381	(+/-72)	30740	91	296	(+/-62)
30-34yrs	36332	93	256	(+/-53)	39576	74	187	(+/-43)
35-39yrs	38556	76	197	(+/-45)	39374	67	170	(+/-42)
40-44yrs	38796	81	209	(+/-46)	39393	73	185	(+/-43)
45-49yrs	37436	59	158	(+/-41)	36806	71	193	(+/-46)
50-54yrs	34693	47	135	(+/-40)	34675	54	156	(+/-42)
55-59yrs	32372	31	96	(+/-34)	31966	31	97	(+/-35)
60-64yrs	29358	15	51	(+/-26)	29026	29	100	(+/-37)
65-69yrs	25928	17	66	(+/-32)	24769	11	44	(+/-27)
70-74yrs	18511	3	16	(+/-19)	18342	3	16	(+/-19)
75-79yrs	13305	4	30	(+/-30)	14205	2	14	(+/-20)
80-84yrs	8738	1	11	(+/-23)	10761	1	9	(+/-19)
85yrs+	5801	2	34	(+/-49)	11393	1	9	(+/-18)
Total**	533936	785	161	(+/-11)	534579	822	169	(+/-11)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

EVE GRIFFIN
ELLA ARENSMAN
PAUL CORCORAN
CHRISTINA B DILLON
EILEEN WILLIAMSON
IVAN J PERRY

4th Floor
Western Gateway Building
University College Cork
Ireland
Tel: +353 21 420 5551
Email: info@nsrf.ie
www.nsrf.ie