

### National Registry of Deliberate Self Harm Ireland

# **ANNUAL REPORT 2011**

#### Suggested Citation:

National Suicide Research Foundation. National Registry of Deliberate Self Harm Annual Report 2011. Cork: National Suicide Research Foundation, 2012.

Published by:

National Suicide Research Foundation, Cork. © National Suicide Research Foundation 2012

ISSN 1649 4326

Hard copies of the Annual Report 2011 are available from: National Suicide Research Foundation 1 Perrott Avenue College Road Cork Ireland

Tel: +353 21 4277499 Email: info@nsrf.ie

Electronic copies of the Annual Report 2011 are available from the website of the National Suicide Research Foundation: www.nsrf.ie

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# **Executive Summary and Recommendations**

This is the tenth annual report from the National Registry of Deliberate Self Harm. It is based on data collected on persons presenting to hospital emergency departments as a result of deliberate self harm in 2011 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.

In 2011, the Registry recorded 12,216 presentations to hospital due to deliberate self harm nationally, involving 9,834 individuals. Taking the population into account, the agestandardised rate of individuals presenting to hospital following deliberate self harm in 2011 was 215 per 100,000, a significant 4% decrease on the rate in 2010. This decrease follows four successive increases in the rate of persons presenting to hospital following deliberate self harm in Ireland.

In 2011, the national male rate of deliberate self harm was 205 per 100,000, 3% lower than in 2010. The female rate of deliberate self harm in 2011 was 226 per 100,000, 4% lower than in 2010. Despite the decrease in 2011, the male rate has increased by 27% since 2007 and the female rate has increased by 5% over the same period.

In recent years, the increases in deliberate self harm were most pronounced among 20-24 year olds. Among women, there was an increase of 30% in this age group between 2009 and 2010, whereas among men, the rate increased by 21% in 2009 and a further 22% in 2010. However, the male rate of hospital-treated deliberate self harm for this age group decreased by 11% in 2011, from 641 to 568 per 100,000. The female rate saw

a smaller decrease of 4% in 2011, from 556 to 534 per 100,000.

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 10% in 2011. The peak rate for women was in the 15-19 years age group, at 589 per 100,000, whereas the peak rate among men was in 20-24 year-olds at 568 per 100,000. These rates imply that one in every 171 girls in the age group 15-19 and one in every 176 men in the age group 20-24 presented to hospital in 2011 as a consequence of deliberate self harm.

There was widespread variation in the male and female deliberate self harm rates when examined by city/county of residence. The male rate varied from 104 per 100,000 for Leitrim to 484 per 100,000 for Cork City. The lowest and highest female rate was recorded for Roscommon and Limerick City residents at 136 and 416 per 100,000, respectively. Relative to the national rate, a high rate of deliberate self harm was recorded for male and female city residents. The rate of deliberate self harm among men in Cork City and Limerick City was more than twice the national rate. For women, the rate of deliberate self harm in Limerick City was 84% higher than the national rate. While these differences are striking, they are smaller than those observed in 2010.

As in 2010, 20% of presentations to hospital in 2011 were due to repeated deliberate self harm. This is lower than 2003-2009 (21-23%), but repetition continues to pose a major challenge to hospital staff and family members involved. At least five deliberate self harm presentations were made by 112 individuals in 2011, accounting for just 1% of all deliberate self harm patients in the year but 7% of all deliberate self harm presentations recorded.





Self-cutting was associated with an increased level of repetition. Almost one in five of those who used cutting as their main method of self harm in their index act made at least one subsequent deliberate self harm presentation in the calendar year compared to one in eight of those who took a drug overdose. Risk of repetition was greatest in the days and weeks following a deliberate self harm presentation to hospital and the risk increased markedly with each subsequent presentation.

Drug overdose was the commonest method of self harm, involved in 69% of all acts registered in 2011, and more so in women (75%) than in men (62%). Minor tranquillisers, paracetamolcontaining medicines and anti-depressants/ mood stabilisers were involved in 43%, 26% and 22% of drug overdose acts. The number of deliberate self harm presentations to hospital involving drug overdose in 2011 (8,409) was a slight decrease on the numbers recorded in 2010 (8,538) and 2009 (8,504). This was also true when examined by type of drug. The exceptions were major tranquillisers and barbiturates which saw rises of 10% and 11% on 2010 figures. The number of deliberate self harm presentations to hospital involving street drugs fell by 27% from 657 to 479, which is similar to the level recorded in 2008.

Attempted hanging was involved in 6% of all deliberate self harm presentations (9% for men and 3% for women). At 734, the number of presentations involving attempted hanging increased by 20% since 2010 (n=614), and is the greatest number of deliberate self harm presentations involving attempted hanging recorded by the Registry.

Cutting was the only other common method of self harm, involved in 25% of all episodes and more by men (27%) than women (22%). Men who cut themselves more often required intensive treatment. Respectively, 24% received sutures and 4% were referred for plastic surgery compared to 21% and 3% of women who cut themselves.

Alcohol was involved in 39% of all cases. Alcohol involvement was similar across male and female episodes of self harm (40% and 38%, respectively). Alcohol may be one of the factors underlying the pattern of presentations with deliberate 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 addition, the Registry identified an increased number of self harm presentations to hospital associated with some public holidays.

Next care varied significantly by HSE hospitals group. The proportion of deliberate self harm patients who left before a recommendation was made varied from 8% in the Southern Hospitals Group to 24% in the Dublin North East Hospitals Group. The variation in recommended next care is likely to be due to variation in the availability of resources and services and these findings highlight the challenge involved in providing comprehensive assessment and follow-up for deliberate self harm patients.

#### RECOMMENDATIONS

Following successive increases in deliberate self harm in Ireland over the past four years, the 2011 Annual Report of the National Registry of Deliberate Self Harm shows a decrease. This first reduction in five years should be interpreted with caution since it would be premature to conclude that this indicates a decreasing trend. The 2011 Registry outcomes underline an ongoing need for prevention and intervention programmes to be implemented at national level. Increased support should be provided for evidence-based and best practice prevention and mental health promotion programmes in line with priorities in Reach Out, National Strategy for Action on Suicide Prevention (2005-2014), the reports of the Houses of the Oireachtas on the high level of suicide in Irish society and Vision for Change, the Report of the Expert Group on Mental Health Policy.

Since the advent of the economic recession, significant increases have been observed in self harm in Ireland between 2007-2011, with a more than 20% increase for male self harm in 19 counties/cities, ranging from 23% in Tipperary South to 117% in Cork County. During the same period, a more than 20% increase in self harm among women was observed in 12 counties/cities, ranging from 21% in Meath to 76% in Leitrim. The extent of these increases is likely to be related to mental health and socioeconomic problems associated with the recession in Ireland. These findings strongly underline the need to prioritise implementation and evaluation of programmes to increase awareness of mental health issues among the general public and professionals involved in services supporting people who are unemployed and people experiencing financial difficulties.

In Limerick city, an area which has long been associated with high levels of self harm, a significant decrease was observed in self harm rates among both men and women in 2011. This may be related to an intensified intervention and prevention programme which has been implemented as a collaborative initiative between the National Suicide Research Foundation (NSRF) and the Suicide Prevention Office in Limerick between April 2010 and December 2011. This initiative, Optimising Suicide Prevention Programmes and their Implementation (OSPI) is a multi-level intervention programme which consists of 1) workshops on depression and suicidal behaviour for GP's, 2) depression and suicidal behaviour awareness training sessions for community facilitators such as social workers, counsellors, gardai, teachers, priests and media, 3) public awareness campaign on depression and suicidal behaviour, 4) interventions for high-risk groups (i.e. people who engaged in self harm) and supporting self-help activities, and 5) restricting access to lethal means (*Hegerl et al, 2009*). It would therefore be recommended to continue the implementation of intensified multi-level intervention programmes.

The Registry consistently provides evidence of 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. We would recommend this as a key priority of the National Mental Health Clinical Programme.

In 2011, a significant increase was observed in attempted hanging (+20%) from 2010, and in particular among men. In terms of next care, 12.4% of those who had engaged in attempted hanging left the hospital before receiving a recommendation. Considering the high risk of subsequent suicide among people using highly lethal methods of self harm, suicide risk assessment combined with psychiatric and psychosocial assessment should therefore be incorporated in the standard care for self harm patients presenting to hospital EDs.

As in previous years, minor tranquillisers (benzodiazepines) were by far the most common type of medication involved in intentional acts of drug overdose, accounting for 3,611 presentations to hospital in 2011. The second and third most frequently used drugs in intentional drug overdoses were paracetamol containing medication and Selective Serotonin Reuptake Inhibitors (SSRIs)/ mood stabilisers respectively. In January 2012, the National Office for Suicide Prevention (NOSP) established a National Working Group on Restricting Access to Means with a priority on restricting access to minor tranquillisers. We would recommend that this working group review the implementation of the paracetamol legislation and prescribing patterns of SSRIs as additional priorities.

Compared to 2010, a significant reduction was observed in the involvement of street drugs in intentional drug overdose acts which fell by 27% in 2011. This reduction is likely to be associated

## National Suicide Research Foundation



with the ban on head shop drugs from August 2010 onwards. This finding would be in line with nationally and internationally consistent effects of strategies aimed at restricting access to means on reducing self harm and suicide (Arensman, 2010; Corcoran et al, 2010; O'Driscoll et al, 2009; Mann et al, 2005).

In 2011, a significant increase was observed in deliberate self harm involving cutting (8%). The current report shows further evidence that selfcutting is associated with high-risk of repeated self harm following a presentation to an ED. The Registry also 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 NOSP has funded a pilot project to implement and evaluate dialectical behaviour therapy for people diagnosed with Borderline Personality Disorder in Cork. The NOSP has also funded a pilot project in Cork and Kerry with the aim to implement and evaluate a brief CBT programme for self harm patients presenting to EDs using a Train-The-Trainer model.

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 ongoing 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.
- Intensify national strategies to increase awareness of the risks involved in the use and misuse of alcohol, starting at pre-adolescent age.
- Intensify national strategies to reduce access to alcohol and drugs.
- 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).

In line with previous years, there was considerable variation in the next care recommended to deliberate self harm patients, and the proportion of patients who left hospital before a recommendation, from 8% in the Southern Hospitals Group to 24% in the Dublin

North East Hospitals Group. In 2012, a sub group 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 (Cassidy et al, 2012). 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.

Continued 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. 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 deliberate self harm data be linked with suicide mortality data at a national level in order to enhance insight into predictors of suicide risk.

#### Paul Corcoran,

Deputy Director/Senior Statistician, National Suicide Research Foundation

#### Ella Arensman,

Director of Research, National Suicide Research Foundation

#### Eve Griffin,

Research Psychologist/Registry Co-ordinator, National Suicide Research Foundation

#### Ivan J Perry,

Professor of Epidemiology and Public Health, University College, Cork Director, National Registry of Deliberate Self Harm, National Suicide Research Foundation



## **Methods**

#### BACKGROUND

The National Registry of Deliberate Self Harm is a national system of population monitoring for the occurrence of deliberate 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 January 1995 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 Registry of Deliberate Self Harm. Ms Eileen Williamson is the Executive Director.

#### DEFINITION AND TERMINOLOGY

The Registry uses the following as its definition of deliberate 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 'deliberate 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 deliberate self harm act are included.

#### EXCLUSION CRITERIA

The following cases are NOT considered to be deliberate 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 deliberate self harm presentations made in 2011 were recorded using this electronic system.

#### DATA ITEMS

A minimal dataset has been developed to determine the extent of deliberate 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 deliberate 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 deliberate 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 deliberate 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 to the Census Enumeration Area, 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.

#### Seen by

For general hospital treated cases, this indicates the different disciplines involved in the initial treatment of the presentation.

#### 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 2011, deliberate self harm data were collected from each HSE region in the Republic of Ireland (pop: 4,588,252).

There was complete coverage of all acute hospitals in the HSE Dublin/ Mid-Leinster Region (pop: 1,321,464) which comprises two HSE National Hospitals Groups. Dublin/ Midlands Hospitals Group includes Adelaide & Meath incorporating the National Children's Hospital Tallaght, the Midland Regional Hospitals at Mullingar, Portlaoise and Tullamore, Naas General Hospital and Our Lady's Children's Hospital Crumlin. The Dublin South Hospitals Group includes St Columcille's Hospital Loughlinstown, St James's Hospital, St Michael's Hospital Dun Laoghaire 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 HSE Dublin/ North East Region (pop: 1,021,665). The region comprises the Dublin North East Hospitals Group and the North Eastern Hospitals Group. The Dublin North East Hospitals Group includes Beaumont Hospital, Children's University Hospital Temple Street, James Connolly Hospital Blanchardstown and Mater Misericordiae University Hospital. The North Eastern Hospitals Group includes Cavan General Hospital, Our Lady of Lourdes Hospital Drogheda and Our Lady's Hospital Navan.

There was complete coverage of all acute hospitals in the HSE South Region (pop: 1,162,112) which comprises the South Eastern and the Southern Hospitals Groups. The South Eastern Hospitals Group includes St Luke's Hospital Kilkenny, South Tipperary General Hospital, Waterford

Regional Hospital and Wexford General Hospital. The Southern Hospitals Group includes Bantry General Hospital, Cork University Hospital, Kerry General Hospital, Mallow General Hospital, Mercy University Hospital Cork and South Infirmary Victoria University Hospital Cork.

There was complete coverage of the acute hospitals in the HSE West Region (pop: 1,083,011) which comprises the Mid-Western and the West/ North Western Hospitals Groups. The Mid-Western Hospitals Group includes the Mid-Western Regional Hospitals at Ennis, Limerick and Nenagh and St John's Hospital Limerick. The West/ North Western Hospitals Group includes Letterkenny General Hospital, Mayo General Hospital, Portiuncula Hospital Ballinasloe, Roscommon County Hospital, Sligo General Hospital and University College Hospital Galway.

In total, deliberate self harm data were collected for the full calendar year of 2011 for all 37 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.

#### POPULATION DATA

For 2011, the population figures available from the National Census 2011 were utilised. For urban and rural district populations and HSE Local Health Office areas, National Census 2006 population data were utilised.

#### CALCULATION OF RATES

Deliberate self harm rates were calculated based on the number of persons resident in the relevant area who engaged in deliberate 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 deliberate 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 deliberate self harm rather than differences in the composition of the populations. EASRs were calculated as follows: For each fiveyear age group, the number of persons who engaged in deliberate 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, deliberate 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 15 cases of deliberate self harm for which patient initials, gender or date of birth were unknown. These 15 cases have been excluded from the findings reported here. In addition, a small number of deliberate 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 2011.

#### 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√n. For example, if 25 deliberate 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 +  $2\sqrt{(n_1 / p_1^2 + n_1 / p_1^2)}$ . 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.

# <u>Acknowledgements</u>

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/ Mid-Leinster Region

Liisa Aula James Buckley Lisa Byrne Diarmuid O'Connor

#### HSE Dublin/ North East Region

Agnieszka Biedrycka Grace Boon Laura Cosgrove Rita Cullivan

#### HSE South Region

Kate Brennan Ursula Burke Breda Heavey Karen Twomey Una Walsh

#### **HSE West Region**

Ailish Melia Catherine Murphy Mary Nix Kathleen O'Donnell We would like to acknowledge the assistance of staff of the Department of Health and Children, the HSE National Office for Suicide Prevention, the respective HSE regions and the individual hospitals who 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.

This report has been compiled by Paul Corcoran and Eve Griffin with support and input from Ella Arensman, Tony Fitzgerald, Helen S Keeley, Irene O'Farrell, Ivan J Perry and Eileen Williamson.

## National Registry of Deliberate Self Harm Ireland

# DELIBERATE SELF HARM IN THE REPUBLIC OF IRELAND





# I. Hospital Presentations

For the period from 1 January to 31 December 2011, the Registry recorded 12,216 deliberate self harm presentations to hospital that were made by 9,834 individuals. Thus, the number of deliberate self harm presentations was 1% lower than that in 2010 and the number of persons involved decreased by 0.5%. Table 1 summarises the changes in the number of presentations and persons since the Registry reached near national coverage in 2002.

The age-standardised rate of individuals presenting to hospital in the Republic of Ireland following deliberate self harm in 2011 was 215 (95% Confidence Interval (CI): 211 to 219) per 100,000. This rate, which accounts for the changing age distribution of the population, represents a significant decrease of 4% on the equivalent rate of 223 (95% CI: 218 to 227) per 100,000 in 2010. This decrease follows four successive increases in the Irish rate of persons presenting to hospital as a result of deliberate self harm. The incidence of deliberate self harm in Ireland is examined in detail in Part II of this section of the Annual Report.

The numbers of deliberate self harm episodes treated in the Republic of Ireland by HSE region, hospitals group, age and gender are given in Appendix 1. Of the recorded presentations in 2011, 48% were made by men and 52% were made by women. Deliberate self harm episodes were generally confined to the younger age groups. Almost half of all presentations (47%) were by people under 30 years of age and 88% of presentations were by people aged less than 50 years.

	Presen	tations	Pers	ons
Year	Number	% diff	Number	% diff
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%

Table 1: Number of deliberate self harm presentations and persons who presented in the Republic of Ireland in 2002-2011 (2002-2005 figures extrapolated to adjust for hospitals not contributing data).

In most age groups the number of acts by women exceeded the number by men. This was most pronounced in the 10-14 year age group where there were 3.1 times as many female presentations. However, in the 20-34 year age group, the number of self harm presentations made by men was marginally higher (4.0%) than the number made by women.

In 2011, 473 (4%) of all deliberate self harm presentations were by residents of homeless hostels and people of no fixed abode and 104 (0.9%) were made by hospital inpatients. The former represents a 53% increase on the number of self harm presentations to hospital made in 2010 by residents of homeless hostels and people of no fixed abode.

#### DELIBERATE SELF HARM BY HSE HOSPITALS GROUP

Based on figures acquired from the HSE Business Intelligence Unit, deliberate self harm accounted for 1.21% of total attendances to general emergency departments in the country. This percentage of attendances accounted for by deliberate self harm varied by HSE hospitals group from 0.83% and 0.94% in the Dublin/ Midlands and West/ North Western, to 1.03% in the North Eastern, 1.05% in the South Eastern, 1.12% in the Mid-Western, 1.49% in the Southern, 1.59% in the Dublin South and 1.74% in the Dublin/ North East.

The proportion of deliberate self harm presentations treated in each hospitals group in 2011 ranged from 8% in the North Eastern and Mid-Western, to 10% in the South Eastern, 13% in the Dublin/ Midlands, 14% in the Dublin South and West/ North Western, and 15% in the Southern and 17% in the Dublin/ North East.

The gender balance of recorded episodes in 2011 (at 48% men to 52% women) varied by hospitals group (Figure 1). Deliberate self harm presentations by women outnumbered those by men in five of the eight hospitals groups. There were equal numbers of self harm presentations by men and women in the Dublin South Hospitals Group and men accounted for a small majority of the cases treated in the Southern and North Eastern Hospitals Groups.

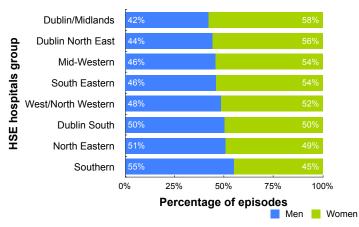


Figure 1: Gender balance of deliberate self harm presentations by HSE hospitals group.



# ANNUAL CHANGE IN DELIBERATE SELF HARM PRESENTATIONS TO HOSPITAL

While the national number of deliberate self harm presentations to hospital in 2011 was 1% lower to that in 2010, there were some relatively large changes in the number of presentations at the level of the individual hospitals (Figures 2a and 2b). A similar number of hospitals saw an increase in self harm presentations between 2010 and 2011 as saw a decrease. Two general hospitals saw an increase of over 30% in self

harm presentations between 2010 and 2011. Overall, the most pronounced changes were in small hospitals. It should be noted that in these hospitals, large percentage changes may be based on relatively small numbers. The closure of Roscommon General Hospital's Emergency Department in July 2011 would account for the large decrease in presentations there.

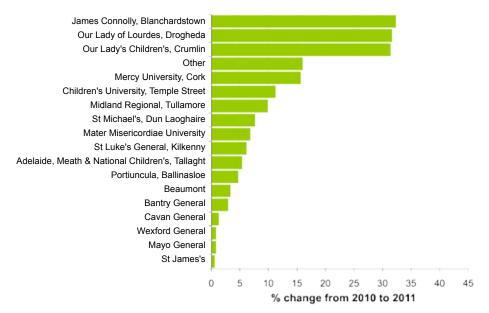


Figure 2a: Hospitals receiving more deliberate self harm presentations in 2011.

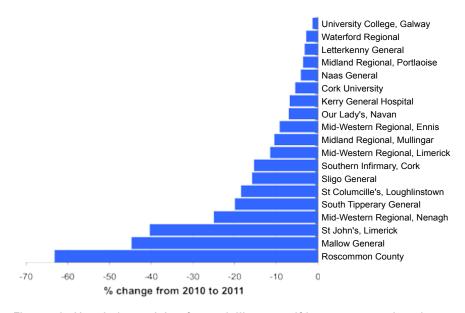


Figure 2b: Hospitals receiving fewer deliberate self harm presentations in 2011.

#### VARIATION BY MONTH

The monthly average number of deliberate self harm presentations to hospitals in 2011 was 1018. Figure 3 illustrates the percentage difference between observed and expected number of presentations, accounting for the number of days in each calendar month. Unlike previous years, 2011 saw more self harm presentations in January and February than might be expected (8% and 12%, respectively). The late Spring/Summer peak observed in 2010 was not present in 2011 and in fact there were 3% less presentations than expected in July and August. A more pronounced pre-end of year fall was observed in 2011 than in 2010. In November and December there were 5-7% fewer self harm presentations than might be expected.

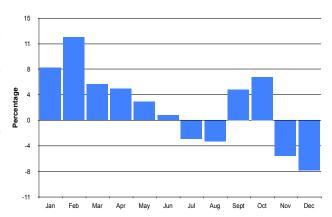


Figure 3: Percentage difference between the observed and expected number of deliberate self harm presentations by month in 2011.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec	Total
Men	511	479	519	479	495	500	480	471	503	514	437	442	5830
Wome	<b>n</b> 584	551	551	550	549	491	509	514	525	567	495	500	6386
Total	1095	1030	1070	1029	1044	991	989	985	1028	1081	932	942	12216

Table 2: Number of deliberate self harm presentations in 2011 by month for men and women.



#### VARIATION BY DAY

The number of deliberate 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 Saturday before rising again on Sunday. This pattern of the number of presentations by day of the week was more pronounced in women than in men.

During 2011, there was an average of 34 deliberate self harm presentations to hospital each day. There were seven dates in the year on which more than 50 self harm presentations were made, four of which were public holidays or the day after a public holiday: January 1st, New Year's Day (n=52); March 17th, Saint Patrick's Day (n=56) and the following day, March 18th (n=54); and, June 5th, the June Public Holiday (n=51).

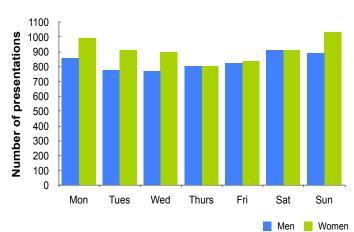


Figure 4: Number of presentations by weekday, 2011.

	Monday	Tuesday	Wed'day	Thursday	Friday	Saturday	Sunday	Total
Men	858	778	769	802	822	911	890	5830
	(14.7%)	(13.3%)	(13.2%)	(13.8%)	(14.1%)	(15.6%)	(15.3%)	(100%)
Women	992	911	898	803	838	912	1032	6386
	(15.5%)	(14.3%)	(14.1%)	(12.6%)	(13.1%)	(14.3%)	(16.2%)	(100%)
Total	1850	1689	1667	1605	1660	1823	1922	12216
	(15.1%)	(13.8%)	(13.6%)	(13.1%)	(13.6%)	(14.9%)	(15.7%)	(100%)
Note: On av	erage, each d	lay would be	expected to a	ccount for 14	.3% of preser	ntations.		

Table 3: Deliberate self harm presentations in 2011 by weekday.

#### VARIATION BY HOUR

There was a striking pattern in the number of deliberate 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 and women was around midnight. Almost half (46%) 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 (53%) 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 47% for presentations between noon and 4pm to 68% for those who presented between midnight and 8am.

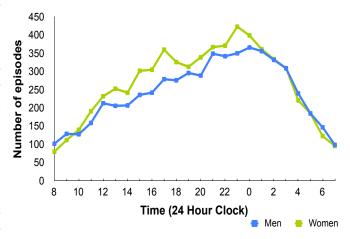


Figure 5: Number of presentations by time of attendance.

#### METHOD OF SELF HARM

More than two thirds (69%) of all deliberate 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 62% of male presentations and 75% of female episodes. Alcohol was involved in 39% of all cases. Alcohol involvement was similar across male and female episodes of self harm (40% and 38%, respectively).

Cutting was the only other common method of self harm, involved in 25% of all episodes. Cutting was significantly more common in men (27%) than in women (22%). In 83% of all cases that involved self-cutting, the treatment received was recorded. 34% received steristrips or steribonds, 23% did not require any, 22% required sutures while 4% were referred for plastic surgery. Men who cut themselves more often required intensive treatment. Respectively, 24% received sutures and 5% were referred for plastic surgery compared to 21% and 3% of women who cut themselves.

Attempted hanging was involved in 6% of all deliberate self harm presentations (9% for men and 3% for women). At 734, the number of presentations involving attempted hanging increased by 20% since 2010 (n=614), and is the greatest number of deliberate self harm presentations involving attempted hanging recorded by the Registry. This increase was wholly due to men.

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 whereas self cutting was less common. While relatively rare, the increased prevalence of attempted hanging among male deliberate self harm presentations is evident. This is most notable among the under 15 year-olds although it should be borne in mind that the number of male self harm episodes in this age group is relatively small.

	Overdose	Alcohol	Poisoning	Hanging	Drowning	Cutting	Other	All
Men	3603	2358	140	523	209	1581	333	5830
	(61.8%)	(40.4%)	(2.4%)	(9.0%)	(3.6%)	(27.1%)	(5.7%)	(100%)
Women	4806	2415	100	211	153	1432	224	6386
	(75.3%)	(37.8%)	(1.6%)	(3.3%)	(2.4%)	(22.4%)	(3.5%)	(100%)
Total	8409	4773	240	734	362	3013	557	12216
	(68.8%)	(39.1%)	(2.0%)	(6.0%)	(3.0%)	(24.7%)	(4.6%)	(100%)

Table 4: Methods of self harm involved in presentations to hospital in 2011.

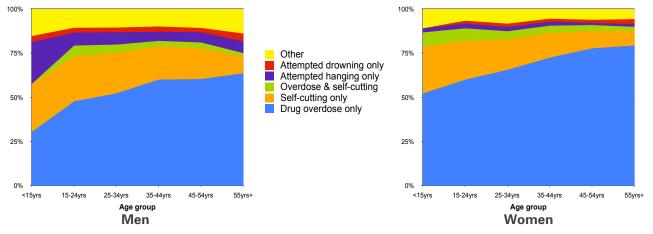


Figure 6. Method of self harm used by gender and age group, 2011.



#### DRUGS USED IN OVERDOSE

The total number of tablets taken was known in 73% of all cases of drug overdose. On average, 30 tablets were taken in the episodes of deliberate self harm that involved drug overdose. Three-quarters of drug overdose acts involved fewer than 40 tablets, half involved fewer than 21 tablets and one guarter involved fewer than 12 tablets. On average, the number of tablets taken in overdose acts was similar for both men and women (mean: 32 vs. 29). Figure 7 illustrates the pattern of the number of tablets taken in drug overdose episodes for both genders. Half (50%) of the female episodes and 45% of the male episodes of overdose involved 10-29 tablets. At least 50 tablets were taken by 19% of men compared to 16% of women.

Figure 8 illustrates the frequency with which the most common types of drugs were used in overdose. 43% of all overdoses involved a minor tranquilliser and such a drug was used marginally more often by men than by women. A major tranquilliser was involved in 10% of overdoses. 43% of all female overdose acts and 34% of all male acts involved an analgesic drug. Paracetamol was the most common analgesic drug taken, being involved in some form in

26% of drug overdose acts. Paracetamol was used significantly more often by women (30%) than by men (21%). More than one in five acts (22%) of deliberate 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 10% of male and 3% of female intentional drug overdose acts. 'Other drugs' were taken in one in four (25%) of all overdoses which reflects the wide range of drugs taken deliberately in acts of drug overdose.

The number of deliberate self harm presentations to hospital involving drug overdose in 2011 (8,409) was a slight decrease on the numbers recorded in 2010 (8,538) and 2009 (8,504). This was also true when the number of presentations involving each of the drug types described here was examined. The exceptions were major tranquillisers and barbiturates which saw rises of 10% and 11% respectively, on 2010 figures. The number of deliberate self harm presentations to hospital involving street drugs fell by 27% from 2010 to 479, which is similar to the level recorded in 2008.

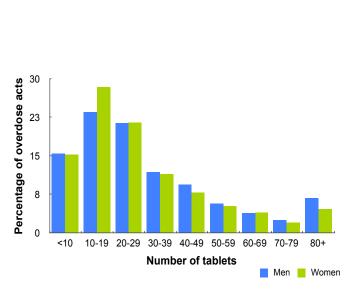


Figure 7: The pattern of the number of tablets taken in male and female acts of drug overdose.

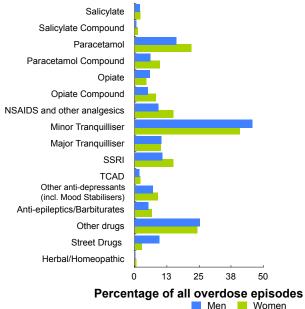


Figure 8: The variation in the type of drugs used. Note: Some drugs (e.g. compounds containing paracetamol and an opiate) are counted in two categories.

#### RECOMMENDED NEXT CARE

In 14% of 2011 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 37% of cases, irrespective of whether general or psychiatric admission was intended and whether the patient refused or not. Of all deliberate self harm cases, 27% resulted in admission to a ward of the treating hospital whereas 10% 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 just 1% of cases, the patient refused to allow him/herself to be admitted whether for general or psychiatric care. Most commonly, 49% of cases were discharged following treatment in the emergency department.

Next care recommendations in 2011 were broadly similar for men and women. Men more often left the emergency room before a recommendation was made (15% vs. 12%) and women were more often admitted to a ward of the treating hospital than men (29% vs. 25%).

Recommended next care varied according to the method of self harm (Table 5). General inpatient care was most common following cases of drug overdose and self-poisoning, less common after attempted drowning and hanging and least common after self-cutting. The latter finding may be a reflection of the superficial nature of the injuries sustained in some cases of self-cutting. Of those cases where the patient used cutting as a method of self harm, 59% 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.

	Overdose (n=8409)	Alcohol I (n=4772)	Poisoning (n=240)	Hanging I (n=734)	<b>Drowning</b> (n=362)	Cutting (n=3013)	<b>Other</b> (n=557)	<b>AII</b> (n=12216)
General admission	32.7%	26.4%	35.4%	15.7%	18.8%	14.2%	17.1%	26.9%
Psychiatric admission	7.9%	7.5%	12.1%	25.3%	19.1%	10.6%	16.9%	10.0%
Patient would not allow admission	1.0%	1.4%	1.3%	2.6%	1.9%	0.9%	1.4%	1.1%
Left before recommendation	12.9%	16.5%	9.6%	12.4%	12.7%	15.7%	11.1%	13.5%
Not admitted	45.5%	48.1%	41.7%	44.0%	47.5%	58.6%	53.5%	48.5%

Table 5: Recommended next care in 2011 by methods of deliberate self harm.



Next care varied significantly by HSE hospitals group (Table 6). The proportion of deliberate self harm patients who left before a recommendation was made varied from 8% in South Eastern Hospitals Group to 24% in Dublin North East Hospitals Group. Across the hospitals groups, inpatient care (irrespective of type and whether patient refused) was recommended for 19% of the patients treated in Dublin North East, 22% in North Eastern, 36% in Dublin South, 32% in Southern, 44% in Dublin/ Midlands and West/ North Western, 55% in the Mid-Western and two thirds (66%) in the South Eastern. As a corollary to this, the proportion of cases discharged following emergency treatment ranged from a low of 27% in South Eastern Hospitals Group to a high of 64% in

North Eastern Hospitals Group. The balance of general and psychiatric admissions directly after treatment in the emergency department differed significantly by hospitals group. Overall, direct psychiatric and general admissions were almost equally common in Dublin South and Dublin North East. In contrast, direct general admissions were far more common than direct psychiatric admissions in South Eastern, Mid-Western and Dublin/ Midlands Hospital Groups.

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

	HSE Dublin /	Mid-Leinster	HSE Dublin	/ North East	HSE S	South	HSE \	Vest	Republic of
	Dublin/ Midlands	Dublin South	Dublin North East	North Eastern	South Eastern	Southern	Mid- Western	West/North Western	İreland
	(n=1642)	(n=1752)	(n=2131)	(n=936)	(n=1273)	(n=1825)	(n=1015)	(n=1642)	(n=12216)
General admission	35.7%	16.2%	9.2%	18.3%	56%	22.4%	45.2%	28.9%	26.9%
Psychiatric admission	8.4%	18.9%	8.1%	3.5%	7.6%	8.8%	7.7%	12.7%	10%
Patient would not allow admission		0.6%	1.7%	0%	1.6%	0.5%	1.8%	2.1%	1.1%
Left before recommendation	13.2% on	13.8%	23.8%	14.7%	8%	10.2%	13%	7.7%	13.5%
Not admitted	1 42.4%	50.6%	57.3%	63.5%	26.7%	58.1%	32.3%	48.5%	48.5%

Table 6: Recommended next care in 2011 by HSE hospitals group.

#### REPETITION OF DELIBERATE SELF HARM

There were 9,834 individuals treated for 12,216 deliberate self harm episodes in 2011. This implies that one in five (2,382, 19.5%) of the presentations in 2011 were due to repeat acts, lower than the proportion of acts accounted for by repetition in the years 2003-2009 (20.5-23.1%) and similar to that of 2010 (19.9%). Of the 9,834 deliberate self harm patients treated in 2011, 1,343 (13.7%) made at least one repeat presentation to hospital during the calendar year. This proportion is just below the range reported for the years 2003-2010 (13.8-16.4%). At least five deliberate self harm presentations were made by 112 individuals in 2011. They accounted

for just 1.1% of all deliberate self harm patients in the year but their presentations represented 6.7% of all deliberate self harm presentations recorded.

The rate of repetition varied highly significantly with the method of self harm involved in the deliberate 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 (18%) who used cutting as a method of self harm in their index act made at least one subsequent deliberate self harm presentation in the calendar year.

	Overdose	Alcohol I	Poisoning	Hanging	Drowning	Cutting	Other	All
<b>Individuals treated</b>	6946	3880	187	589	281	2221	436	9834
No. who repeated	904	526	20	76	37	390	71	1343
% who repeated	13%	13.6%	10.7%	12.9%	13.2%	17.6%	16.3%	13.7%

Table 7: Repeat presentation after index deliberate self harm presentation in 2011 by methods of self harm.

The rate of repetition in men (14.2%) was a little higher than that in women (13.2%). Repetition varied significantly by age. Approximately one in eight (11.8%) deliberate self harm patients aged less than 15 years re-presented with self harm in 2011. The proportion who repeated increased with increasing age and was highest, at 15.9% for 45-54 year-olds. The repetition rate fell after that age to 5.3% among patients aged over 65 years.

There was variation in repetition rates when examined by HSE hospitals group (Table 8). The lowest rate was

among deliberate self harm patients treated in the Dublin/ Midlands Hospitals Group (10.2%) and the highest repetition rate, at 17.7%, was for patients treated in the Dublin North-East and Dublin South Hospitals Groups.

Appendix 3 details the repetition rate for male, female and all patients treated following deliberate self harm in 2011. 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 and hence percentages may be misleading.

	HSE Dublin /	Mid-Leinster	HSE Dublin	/ North East	HSI	E South	HSE	West	
	Dublin/ Midlands	Dublin South	Dublin North East	North Eastern	South Eastern	Southern	Mid- Western	West/North Western	Republic of Ireland
Number of individ	luals treate	d							
Men	583	691	750	387	485	849	376	657	4688
Women	841	698	915	422	567	687	423	684	5146
Total	1424	1389	1665	809	1052	1536	799	1341	9834
Number who repo	eated								
Men	58	123	142	63	70	100	61	93	666
Women	87	119	152	31	77	79	75	92	677
Total	145	242	294	94	147	179	136	185	1343
Percentage who	repeated								
Men	9.9%	17.8%	18.9%	16.3%	14.4%	11.8%	16.2%	14.2%	14.2%
Women	10.3%	17.0%	16.6%	7.3%	13.6%	11.5%	17.7%	13.5%	13.2%
Total	10.2%	17.4%	17.7%	11.6%	14.0%	11.7%	17.0%	13.8%	13.7%

Table 8: Repetition in 2011 by gender and HSE hospitals group.



Risk of repetition was greatest in the days and weeks following a deliberate self harm presentation. A total of 9,261 deliberate self harm presentations were made to hospital emergency departments in the first nine months of 2011. For 16.1% of these (n=1,492) there was a repeat self harm presentation made within three months (91 days). This proportion varied significantly by HSE Hospitals Group: North Eastern (12.3%), Southern (12.7%), Dublin/ Midlands (12.9%), South Eastern (14.3%), West/ North Western (17.0%), Mid-Western (18.1%), Dublin North East (19.7%) and Dublin South (19.7%).

This proportion of self harm presentations followed by a repeat presentation within three months was identical for men (16.0%) and women (16.2%) but did vary by age group (10-11% following presentations by under 15 year-olds and over 55 year-olds compared to 16-18% following presentations by 15-54 year-olds) and by method of self harm (10.1% following an attempted drowning, 11.5% following an attempted hanging, 13.6% following a drug overdose, 20.8% after an act involving drug overdose and self-cutting and 23.4% after an act of self-cutting only).

However, the factor having by far the strongest influence on likelihood of repetition was the number of self harm presentations made to hospital. One in ten (10.7%) first presentations in January-September 2011 was followed by a repeat presentation in the next three months. This proportion was 30.5% following second presentations, 44.8% following third presentations, 60.4% following fourth presentations and 75.1% following fifth or subsequent presentations. The full pattern of repetition in 2011 is illustrated in Figure 9 by gender, age group, method of self harm and number of self harm presentations.

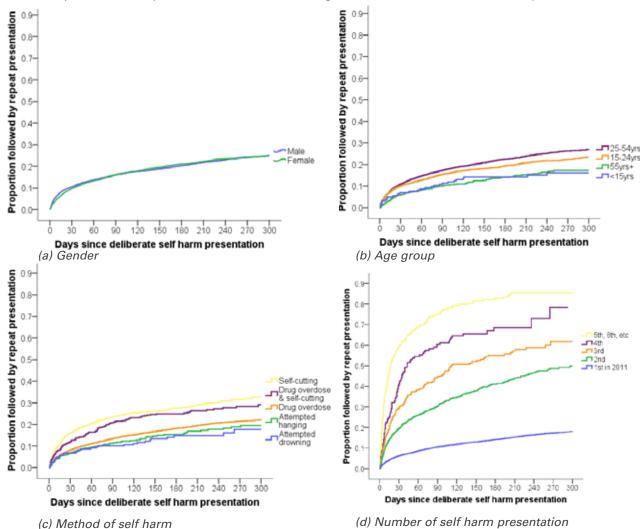


Figure 9: Rate of repeated presentation to hospital following a deliberate self harm presentation in 2011 by gender, age group, method of self harm and by the number of the self harm presentation.

## II. Incidence Rates

For the period from 1 January to 31 December 2011, the Registry recorded 12,216 deliberate self harm presentations to hospital that were made by 9,834 individuals. Based on these data, the Irish person-based crude and age-standardised rate of deliberate self harm in 2011 was 214 (95% CI: 210 to 219) and 215 (95% CI: 211 to 219) per 100,000, respectively. Thus, the age-standardised rate in 2011, which accounts for the changing age distribution of the population, was 4% lower than the equivalent rate in 2010 (223 per 100,000). This decrease follows four successive increases in the annual Irish rate of persons presenting to hospital as a result of deliberate self harm. The rate in 2011 was 14% higher than in 2007, the year before the economic recession.

		Me	n	Wo	men	A	/II
	Year	Rate	% diff	Rate	% diff	Rate	% diff
	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%

Table 9: Person-based European age-standardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2002-2011 (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 deliberate self harm in 2011 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 deliberate self harm for men and women in 2011 was 205 (95% CI: 199 to 211) and 226 (95% CI: 220 to 232) per 100,000, respectively. Thus, there was a 3% decrease in the male and a 4% decrease in the female rate of deliberate self harm from 2010 to 2011. Taking recent years into account, the male self harm rate in 2011 was 27% higher than in 2007 whereas the female rate was just 5% higher.

The female rate of deliberate self harm in 2011 was 10% 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 12-13% higher in 2009-2010.

There was a striking pattern in the incidence of deliberate self harm when examined by age. The rate was highest among the young. At 586 per 100,000, the peak rate for women was among 15-19 year-olds. This rate implies that one in every 171 girls in this age group presented to hospital in 2011 as a consequence of deliberate self harm. The peak rate for men was 568 per 100,000 among 20-24 year-olds or one in every 176 men. The incidence of deliberate 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 300 per 100,000, across the 25 to 49 year age range.

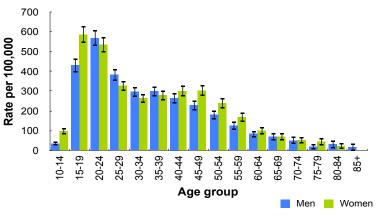


Figure 10: Person-based rate of deliberate self harm in the Republic of Ireland in 2011 by age and gender.



Gender differences in the incidence of deliberate self harm varied with age. The female rate was three times greater than the male rate in 10-14 year-olds and 36% higher than the male rate in 15-19 year-olds. The female rate of deliberate self harm was again higher than the male rate across the 40-64 year age range. However, in 20-34 year-olds, the male rate was 11% higher than the female rate. Since 2009, the Registry has recorded a significantly higher rate of deliberate self harm in men in this age group compared to women.

In recent years, the increases in deliberate self harm were most pronounced among 20-24 year olds. Among women, there was an increase of 30% in this age group between 2009 and 2010, whereas among men, the rate increased by 21% in 2009 and a further 22% in 2010. However, the male rate of hospital-treated self harm for this age group decreased by 11% in 2011, from 641 to 568 per 100,000. The female rate saw a smaller decrease of 4% in 2011, from 556 to 534 per 100,000.

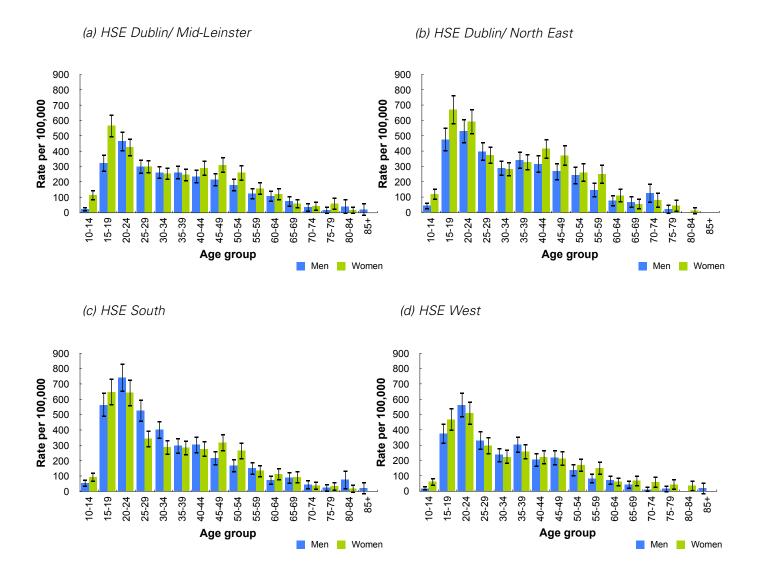


Figure 11: Person-based rate of deliberate self harm in 2011 by residents of the four HSE regions by age and gender.

Figure 11 shows the incidence of deliberate 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 deliberate 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. Among 15-19 year-olds, the female rate was significantly higher in HSE Dublin/ Mid-Leinster and Dublin/ North East, but only marginally higher in HSE South and West. With the exception of HSE Dublin/ North East, the male self harm rate exceeded the female rate in the age group 20-24 years.

Deliberate self harm was rare in 10-14 year-olds, particularly for boys. However, the incidence of deliberate self harm increases rapidly over a short age range. This is illustrated in greater detail in Figure 12. In 12-17 year-olds, the female rate of deliberate self harm was significantly higher than the male rate. The increases in the female rate in early teenage years were particularly striking. For 18-19 year-olds, the female rate of deliberate self harm was just over 650 per 100,000 and this was also the case for 20 year-old men.

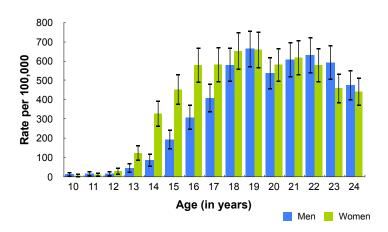


Figure 12: Person-based rate of deliberate self harm in the Republic of Ireland in 2011 by single year of age for 10-24 year-olds.



#### VARIATION BY HSE REGION

The 10% higher incidence of deliberate self harm for women compared to men varied by HSE region. The female rate of deliberate self harm was significantly higher than the male rate in the HSE regions of Dublin/ Mid-Leinster (+21%) and Dublin/ North East (+19%). It was only marginally higher in HSE West (+5%), and in HSE South, the male rate was 3% higher.

In 2011, the incidence of male and female deliberate self harm was significantly higher than the national rate in both HSE Dublin/ North East (+9% for men, +18% for women) and South (+21% for men, +7% for women; Table 10). The rate was significantly lower in the HSE Dublin/ Mid-Leinster (-14%) region for men, and in the HSE West region for both genders (-13% for men, -17% for women).

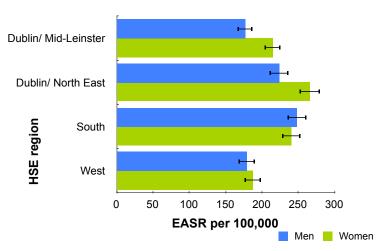


Figure 13: Person-based European agestandardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 by HSE region of residence and gender.

		M		Women						
HSE Region	Rate	95% CI*	Rate difference**	95% CI***	% difference	Rate	95% CI*	Rate difference**	95% CI***	% difference
Dublin/ Mid-Leinster	176.9	(+/-13)	-28	(+/-12)	-13.7	214.8	(+/-14)	-11	(+/-13)	-4.9
Dublin/ North East	223.9	(+/-13)	19	(+/-15)	9.3	266.1	(+/-13)	40	(+/-16)	17.8
South	248.2	(+/-11)	43	(+/-14)	21.1	240.5	(+/-12)	15	(+/-14)	6.5
West	179.0	(+/-11)	-26	(+/-13)	-12.6	187.6	(+/-11)	-38	(+/-13)	-17.0
Ireland	204.9	(+/-6)				225.9	(+/-6)			

<sup>\* 95%</sup> Confidence Interval for the HSE region deliberate self harm rate. \*\* Rate difference = HSE region rate – national rate for men and women. \*\*\* 95% Confidence Interval for deliberate self harm rate difference.

Table 10: Person-based European age-standardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 by HSE region of residence and gender with comparison to the national rate.

	Men					Women					
HSE Region	2011	2010	Rate difference	95% CI*	% difference	2011	2010	Rate difference	95% CI*	% difference	
Dublin/ Mid-Leinster	176.9	181.3	-4	(+/-19)	-2.4	214.8	221.7	-7	(+/-20)	-3.1	
<b>Dublin/ North East</b>	223.9	223.0	1	(+/-19)	0.4	266.1	268.0	-2	(+/-18)	-0.7	
South	248.2	256.4	-8	(+/-16)	-3.2	240.5	245.0	-4	(+/-17)	-1.8	
West	179.0	186.0	-7	(+/-15)	-3.8	187.6	216.9	-29	(+/-16)	-13.5	
Ireland	204.9	210.5	-6	(+/-9)	-2.7	225.88	236.2	-10	(+/-9)	-4.4	

<sup>\* 95%</sup> Confidence Interval for deliberate self harm rate difference.

Table 11: Person-based European age-standardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 and 2010 by HSE region of residence and gender.

The observed 4% decrease in the national female rate of deliberate self harm was primarily due to a 14% decrease in the HSE West region. The 3% decrease in the national male rate of deliberate self harm was observed in all but the HSE Dublin/ North East region (Table 11).

While the national rate of hospital-treated self harm for men aged 20-24 years decreased by 11% in 2011, this pattern was observed to varying degrees across the four HSE regions. There was a decrease of just 2% in the HSE Dublin/ Mid-Leinster, 6% in HSE South, 12% in HSE West and 23% in HSE Dublin/ North East.

#### URBAN AND RURAL DISTRICT COMPARISON BY HSE REGION

Figure 14 illustrates the deliberate 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 deliberate self harm was 341 per 100,000 for residents of urban districts which was more than twice (+108%) the incidence rate of 164 per 100,000 among residents of rural districts. In each HSE region, the incidence of deliberate self harm was significantly higher in the urban district population. Compared to rural district populations, the deliberate self harm rate was 104%, 132% and 116% higher in the urban district populations of the HSE regions of Dublin/ North East, South and West, respectively. The difference was far less pronounced in the HSE Dublin/ Mid-Leinster where the urban district population had a 59% higher rate.

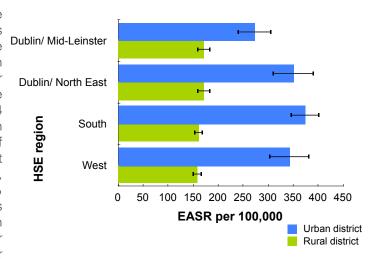


Figure 14: Person-based European agestandardised rate (EASR) of deliberate self harm in 2011 for urban and rural district residents by HSE region.



#### RATE BY CITY AND COUNTY

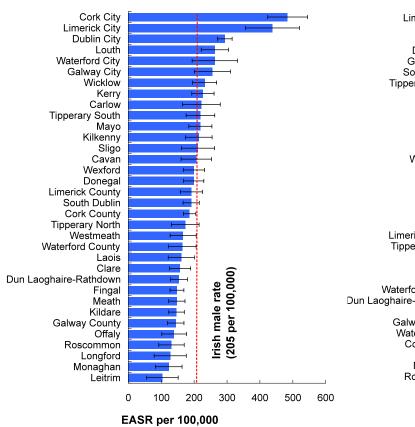


Figure 14a: Person-based European agestandardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 by city/county of residence for men.

There was widespread variation in the male and female deliberate self harm rate when examined by city/county of residence. The male rate varied from 104 per 100,000 for Leitrim to 484 per 100,000 for Cork City. The lowest and highest female rate was recorded for Roscommon and Limerick City residents at 136 and 416 per 100,000, respectively. Relative to the national rate, a high rate of deliberate self harm was recorded for male and female city residents and for men living in Louth and women living in Carlow and South Dublin. The rate of deliberate self harm among men in Cork City and Limerick City was more than twice the national rate. For women, the rate of deliberate self harm in Limerick City was 84% higher than the national rate. While these differences are striking, they are smaller than those observed in 2010.

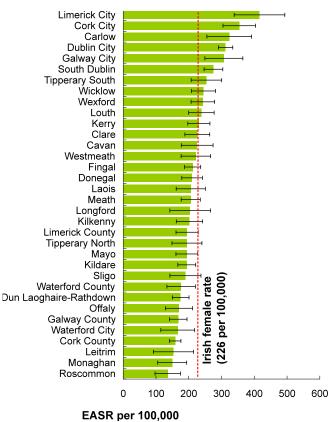


Figure 14b: Person-based European agestandardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 by city/county of residence for women.

At a national level, the female deliberate self harm rate exceeded the male rate by 10%. The magnitude of this gender difference varied by city/county. The female rate far exceeded the male rate in Fingal (+43%), South Dublin (+44%) and in counties Clare (+44%), Carlow (+46%), Leitrim (+48%) and Longford (+61%). The opposite pattern of a significantly higher male rate was observed in Cork City (-27%) and county (-15%) and in Waterford City (-37%).

Between 2010 and 2011, the national rate of hospital-treated deliberate self harm decreased by 3% for men and by 4% for women. The most notable decreases among men were observed in Roscommon (-32%), Sligo (-26%), Longford (-24%) and Laois (-20%). The rate in Cork and Limerick City decreased by 12% and 13%, respectively. The female rate fell significantly in Tipperary North (-37%), Longford (-36%), Waterford City (-39%), and Limerick City (-27%) and county (-18%).

There were significant year-to-year increases in the rate of hospital-treated deliberate self in Ireland since the advent of the economic recession in 2008. Despite the decrease in 2011, the overall rate has increased by 14% since 2007, from 188 to 215 per 100,000. The male rate has increased by 27% from 162 to 205 per 100,000 and the female rate has increased by 5% from 210 to 226 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 2011.

There has been an increase in the male rate of self harm in the vast majority of cities and counties. The most notable increase has been in Cork City and county. While most cities and counties have also seen an increase in the female rate of deliberate self harm, these increases have been less pronounced.

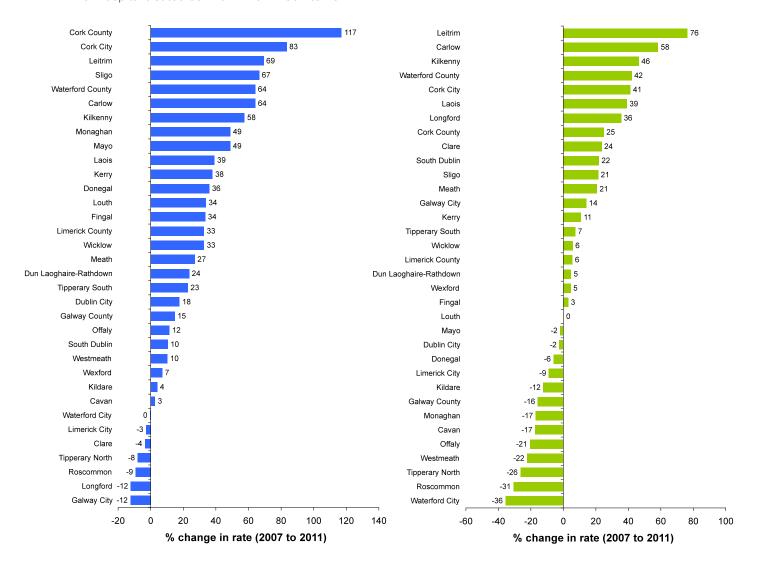


Figure 15a: Percentage change from 2007 to 2011 in the person-based European age-standardised rate of deliberate self harm in the Republic of Ireland by city/county of residence for men.

Figure 15b: Percentage change from 2007 to 2011 in the person-based European age-standardised rate of deliberate self harm in the Republic of Ireland by city/county of residence for women.



#### RATE BY HSE LOCAL HEALTH OFFICE

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

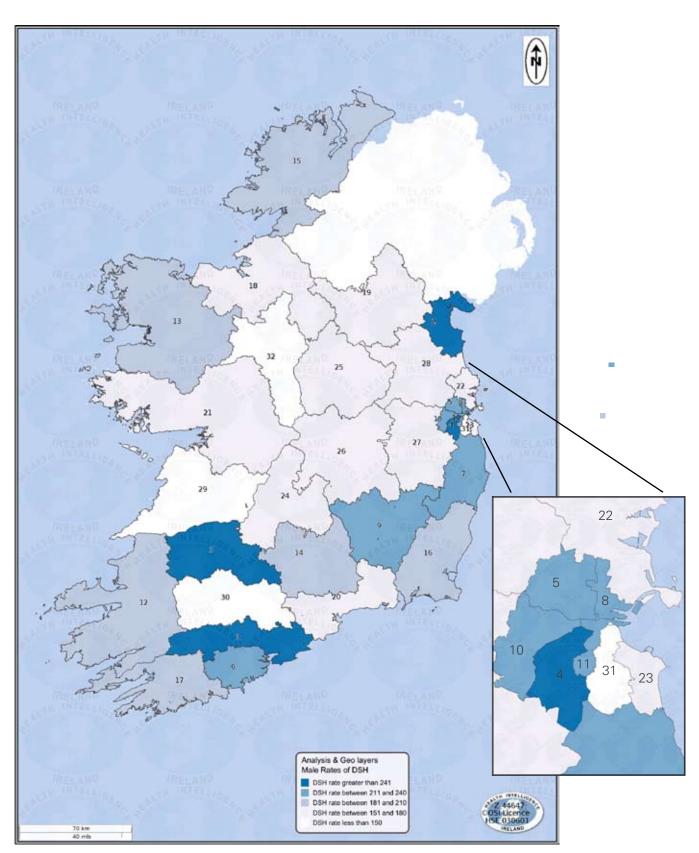
For 2011, Table 12 details the population (derived by the National Census 2006), number of men and women who presented to hospital as a result of deliberate self harm and the incidence rate (age-adjusted to the European standard population) for each LHO area. Thematic maps are also provided to illustrate the variation in the male and female incidence of hospital-treated deliberate self harm by LHO area.

There was approximately a threefold difference in the rate of deliberate self harm when examined by LHO area. The rate for men ranged from 108 per 100,000 in Roscommon to 313 per 100,000 in Cork North Lee and for women ranged from 145 per 100,000 in Cork North to 305 per 100,000 in Dublin South West. The male rate exceeded 240 per 100,000 for Cork North Lee, Dublin South West, Limerick and Louth. Four of the eight Dublin LHO areas (Dublin South West, Dublin West, Dublin North Central and Dublin North West) had the highest female rate of deliberate self harm.

	HSE Region and LHO	Men				Women				
		Population*	Delib Persons	Deliberate self harm Persons Rate** Rank		Population*	Deliberate self harm Persons Rate** Rank			
~	Dublin South City	66483	148	212	11	67861	168	229	13	
	Dublin South East	53042	72	118	31	57445	95	165	29	
DUBLIN MID LEINSTER	Dublin South West	72666	192	243	4	75696	238	305	1	
暠	Dublin West	66343	151	215	10	66737	218	303	2	
≘	Kildare/West Wicklow	102893	165	152	27	100434	215	203	22	
2	Laois/Offaly	70346	113	153	26	67581	140	209	19	
層	Longford/Westmeath	57392	94	156	25	56345	128	226	14	
	Dun Laoghaire	60055	99	158	23	66327	115	174	28	
	Wicklow	54202	129	226	7	55000	151	270	6	
ST	Cavan/Monaghan	60827	109	177	19	57964	117	204	21	
NORTH EAST	Dublin North	109346	190	164	22	112703	294	249	12	
屋	Dublin North Central	62639	157	224	8	63933	193	301	3	
	Dublin North West	91983	240	237	5	93917	279	287	4	
DUBLIN	Louth	55335	155	266	2	55932	142	251	10	
	Meath	82651	128	151	28	80180	178	223	17	
_	Carlow/Kilkenny	61065	138	216	9	59566	164	275	5	
	Cork North	41080	55	128	30	39689	56	145	32	
	Cork North Lee	84204	284	313	1	83497	225	266	7	
E	Cork South Lee	88297	230	237	6	90963	176	182	27	
SOUTH	Cork West	27233	48	184	17	26332	44	186	25	
S	Kerry	70641	148	210	12	69194	148	224	16	
	Tipperary South	44933	94	205	14	43508	106	250	11	
	Waterford	60058	110	177	20	59959	96	162	30	
	Wexford	66070	132	198	16	65679	168	259	9	
	Clare	56048	85	148	29	54902	120	226	15	
WEST	Donegal	73970	147	201	15	73294	155	218	18	
	Galway	116476	214	172	21	115194	249	205	20	
	Limerick	75891	208	252	3	75399	207	261	8	
	Mayo	62636	127	207	13	61203	117	200	24	
	Tipperary North/East Limerick	50357	85	157	24	48431	100	200	23	
	Roscommon Clina (Laitrin AMart Course	30178	32	108	32	28590	38	145	31	
	Sligo/Leitrim/West Cavan	45831	83	180	18	45222	82	182	26	

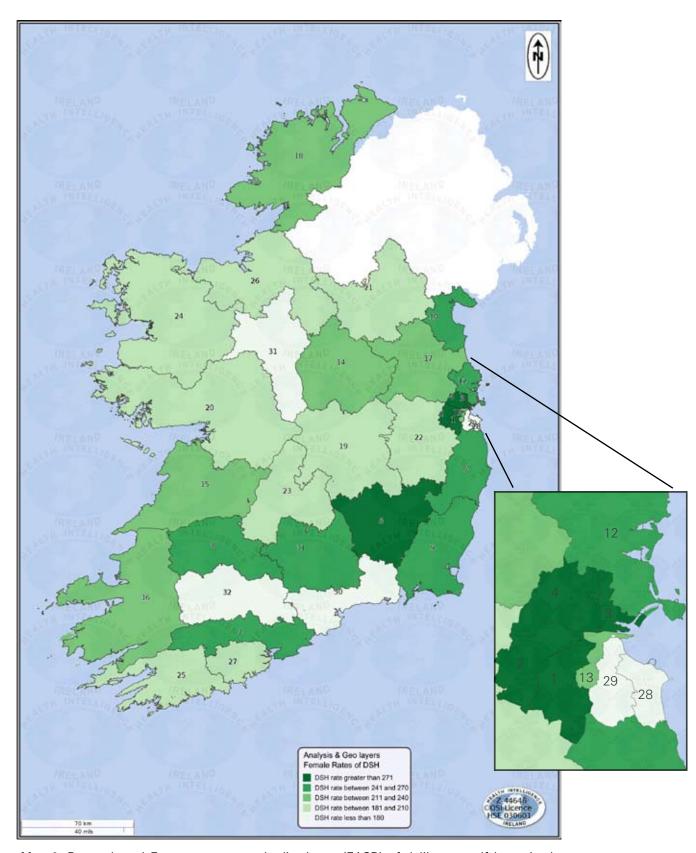
<sup>\*</sup> Population derived by the National Census 2006 \*\* Person-based European age-standardised rate per 100,000 population

Table 12: Deliberate self harm in 2011 by HSE Local Health Office (LHO) area of residence and gender



Map 1: Person-based European age-standardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 by HSE Local Health Office area for men (Numbers indicate rank of rate from 1 for highest to 32 for lowest)





Map 2: Person-based European age-standardised rate (EASR) of deliberate self harm in the Republic of Ireland in 2011 by HSE Local Health Office area for women (Numbers indicate rank of rate from 1 for highest to 32 for lowest)





APPENDIX 1: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM IN THE REPUBLIC OF IRELAND BY HSE REGIONAND HOSPITALS GROUP, 2011

HSE Region Hospitals	Dublin/	Dublin/ Mid-Leinster Dublin/ Midlands Dublin	d-Leinster Dublin South	South	Dublin Ne	Dublin/ North East Dublin North East North	orth East North Eastern	astern	South Eastern	South astern	th Southern	- un	Mid-Western	We	st West/ North Western	ı Western	Republic of Ireland	ic of d
Group																		
	Male	Female	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	0	0
5-9yrs	0	<5	0	0	<5	0	0	0	0	0	0	\$\sqrt{2}	0	0	<5	0	<5	< <del>2</del>
10-14yrs	13	55	0	<5	10	35	<5	6	7	6	16	24	<5	12	9	24	56	172
15-19yrs	86	158	77	134	122	143	69	74	79	108	144	133	26	78	106	148	751	976
20-24yrs	113	110	138	136	145	192	73	61	121	98	186	141	100	107	142	156	1018	1001
25-29yrs	85	125	104	66	156	160	61	63	74	69	156	120	75	74	105	82	816	792
30-34yrs	100	110	111	91	103	115	54	48	80	83	138	79	51	72	95	77	732	675
35-39yrs	76	77	119	90	114	120	65	44	51	71	104	92	46	53	115	92	069	626
40-44yrs	99	103	110	62	111	134	42	55	71	78	73	56	38	38	70	83	581	609
45-49yrs	49	98	76	103	78	115	36	42	42	78	67	76	35	48	70	53	453	601
50-54yrs	55	62	58	29	49	74	30	28	24	40	46	55	19	24	44	54	325	404
55-59yrs	16	35	36	27	21	56	19	19	17	19	32	28	21	21	17	35	179	240
60-64yrs	11	18	24	25	13	22	11	10	7	19	15	15	15	9	11	11	107	129
65-69yrs	9	2	16	22	2	11	9	<5	9	10	12	12	2	9	6	15	65	84
70-74yrs	< <del>2</del>	9	2	<b>\$</b>	െ	11	9	\ <u>\</u>	₹2	\$	7	\$	\$	\$	\ <u>\</u>	7	33	40
75-79yrs	0	<5	<5	7	\$	₹	0	< <del>2</del>	<5	< <del>2</del>	\$	\$	0	\$	< <del>2</del>	2	6	26
80-84yrs	0	0	<5	< <del>2</del>	0	0	0	<5	<5	0	<5	< <del>5</del>	0	\$	0	<5	6	6
85yrs+	0	0	<5	0	0	0	0	0	<5	0	0	0	0	0	<5	0	<5	0
Tota/	069	952	880	872	940	1191	474	462	585	889	1002	823	464	221	795	847	5830	9829

## APPENDIX 1A: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM INTHE HSE DUBLIN/MIDLANDS HOSPITALS GROUP, 2011

	Meath & Child	aide & National Iren's , Tallaght			Midl Regi Hosp Portla	onal ital,	Reg Hos	lland ional pital, imore	Ger	aas ieral spital	Child Hosp	ady's Iren's pital, mlin
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	5	24	<5	<5	0	<5	0	<5	0	<5	6	21
15-19yrs	35	71	8	16	14	17	9	12	27	28	5	14
20-24yrs	51	44	19	21	13	11	8	11	22	23	0	0
25-34yrs	78	108	22	26	23	26	20	16	42	59	0	0
35-44yrs	50	78	21	23	15	24	17	9	39	46	0	0
45-54yrs	58	50	13	18	7	25	10	13	16	42	0	0
55-64yrs	10	29	<5	7	<5	<5	<5	5	11	9	0	0
65yrs+	<5	7	<5	<5	<5	<5	0	0	<5	0	0	0
Total	290	411	88	117	77	111	65	68	159	210	11	35

# APPENDIX 1B: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM IN THE HSE DUBLIN SOUTH HOSPITALS GROUP, 2011

	Hos	ımcille's pital, instown		mes's pital	Hos	chael's pital, oghaire	Oth	ıer
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	<5	0	0	0	0	0	<5
15-19yrs	13	29	38	42	<5	9	25	54
20-24yrs	38	31	62	63	<5	<5	36	39
25-34yrs	49	44	118	95	<5	<5	46	49
35-44yrs	57	37	113	84	5	<5	54	28
45-54yrs	21	34	76	67	<5	8	34	61
55-64yrs	9	14	28	24	<5	<5	22	12
65yrs+	<5	5	14	10	<5	0	11	19
Total	188	195	449	385	15	27	228	265



## APPENDIX 1C: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM IN THE HSE DUBLIN NORTH EAST HOSPITALS GROUP, 2011

		umont spital	Child Unive Hospital, Str	ersity Temple	Но	Connolly spital, aardstown	Miser Univ	ater icordiae versity spital
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	<5	<5	11	34	0	0	0	0
15-19yrs	21	50	8	25	36	35	57	33
20-24yrs	40	55	0	0	46	50	59	87
25-34yrs	56	87	0	<5	82	70	121	117
35-44yrs	64	102	0	0	57	72	104	80
45-54yrs	25	56	0	0	42	62	60	71
55-64yrs	9	27	0	0	12	26	13	25
65yrs+	<5	11	0	0	<5	8	8	6
Total	220	389	19	60	279	323	422	419

## APPENDIX 1D: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM INTHE HSE NORTH EASTERN HOSPITALS GROUP, 2011

	Cavan G Hosp		Lourdes	ady of Hospital, Iheda		Lady's al, Navan
	Male	Female	Male	Female	Male	Female
<15yrs	<5	5	<5	<5	0	<5
15-19yrs	19	21	41	36	9	17
20-24yrs	10	19	52	27	11	15
25-34yrs	33	31	58	52	24	28
35-44yrs	17	25	58	53	32	21
45-54yrs	15	11	39	43	12	16
55-64yrs	10	9	10	15	10	5
65yrs+	6	<5	<5	<5	<5	7
Total	111	122	261	230	102	110

# APPENDIX 1E: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM IN THE HSE SOUTH EASTERN HOSPITALS GROUP, 2011

		s General , Kilkenny		ipperary Hospital	Wate Regional		Wexford Hosp	
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	<5	<5	<5	<5	<5	<5
15-19yrs	27	22	18	18	20	33	14	35
20-24yrs	38	25	16	22	42	25	25	26
25-34yrs	44	37	33	29	45	25	32	61
35-44yrs	21	47	32	38	34	26	35	38
45-54yrs	21	34	8	34	20	16	17	34
55-64yrs	9	10	<5	6	<5	10	10	12
65yrs+	6	<5	0	<5	<5	<5	<5	6
Total	166	179	112	153	166	142	141	214

## APPENDIX 1F: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM INTHE HSE SOUTHERN HOSPITALS GROUP, 2011

	Ge	intry neral spital	Univ	ork ersity pital	Ke Gen Hos	eral	Mall Geno Hosp	eral	Univ	ercy ersity al, Cork	Victoria	nfirmary Hospital ork
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	10	13	<5	<5	<5	0	<5	8	<5	0
15-19yrs	6	<5	58	47	29	36	<5	<5	45	43	<5	<5
20-24yrs	9	<5	52	43	43	30	6	<5	66	60	10	<5
25-34yrs	13	10	103	77	52	43	6	<5	111	64	9	<5
35-44yrs	5	<5	70	38	28	30	6	<5	67	53	<5	6
45-54yrs	<5	<5	46	40	21	37	5	5	35	44	<5	<5
55-64yrs	5	<5	11	10	10	9	<5	<5	19	16	0	<5
65yrs+	<5	<5	9	10	7	<5	<5	0	7	<5	0	<5
Total	41	28	359	278	191	193	30	18	352	291	29	15



## APPENDIX 1G: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM IN THE HSE MID-WESTERN HOSPITALS GROUP, 2011

	Reg Hos	Western gional spital, nnis	Mid-We Regio Hosp Lime	nal ital,	Mid-W Regi Hosp Nen	onal ital,	Hos	ohn's pital, erick
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	<5	12	0	0	0	0
15-19yrs	<5	9	52	65	<5	<5	0	< 5
20-24yrs	<5	13	86	89	7	<5	<5	<5
25-34yrs	19	20	101	111	<5	13	<5	<5
35-44yrs	5	17	71	71	<5	<5	<5	<5
45-54yrs	<5	9	41	60	5	<5	5	<5
55-64yrs	<5	<5	31	22	0	5	<5	0
65yrs+	0	0	6	11	0	<5	0	0
Total	<i>37</i>	71	390	441	20	28	17	11

## APPENDIX 1H: HOSPITAL-TREATED EPISODES OF DELIBERATE SELF HARM IN THE HSE WEST/NORTH WESTERN HOSPITALS GROUP, 2011

	Gei	rkenny neral spital	Ma Gen Hos <sub>l</sub>	eral	Hos	ıncula pital, ıasloe	Coi	ommon unty pital		go eral pital H	Unive Coll ospital,	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	<5	<5	<5	<5	<5	<5	0	0	0	6	<5	13
15-19yrs	25	26	28	34	5	19	<5	0	14	10	33	59
20-24yrs	22	17	27	49	6	18	7	<5	38	27	42	44
25-34yrs	48	41	40	31	21	18	7	0	28	13	56	56
35-44yrs	42	42	41	39	14	24	<5	8	18	20	66	45
45-54yrs	18	20	27	15	8	12	7	0	14	29	40	31
55-64yrs	<5	12	<5	11	<5	<5	<5	<5	5	6	11	11
65yrs+	<5	<5	<5	8	<5	<5	<5	0	0	6	5	10
Total	165	163	170	190	59	95	30	13	117	117	254	269

## APPENDIX 2A: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN/MIDLANDS HOSPITALS GROUP, 2011

	Adelaide & Meath & National Children's Hospital, Tallaght	Midland Regional Hospital, Mullingar	Midland Regional Hospital, Portlaoise	Hospital,	Naas General Hospital	Our Lady's Children's Hospital, Crumlin
	(n=701)	(n=205)	(n=188)	(n=133)	(n=369)	(n=46)
General admission	28.5%	59.5%	33.5%	42.9%	28.7%	82.6%
Psychiatric admission	4.1%	9.8%	10.6%	15%	13.3%	0%
Patient would not allow admission	0.4%	0%	0%	0.8%	0%	0%
Left before recommendation	17.7%	5.9%	9%	12%	13%	0%
Not admitted	49.2%	24.9%	46.8%	29.3%	45%	17.4%

## APPENDIX 2B: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN SOUTH HOSPITALS GROUP, 2011

	St Columcille's Hospital, Loughlinstown	St James's Hospital	St Michael's Hospital, Dun Laoghaire	Other
	(n=383)	(n=834)	(n=42)	(n=493)
General admission	23.2%	17%	19%	8.9%
Psychiatric admission	12.3%	19.7%	31%	21.7%
Patient would not allow admission	0.8%	0.8%	0%	0%
Left before recommendation	10.4%	19.3%	9.5%	7.3%
Not admitted	53.3%	43.2%	40.5%	62.1%

## APPENDIX 2C: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN NORTH EAST HOSPITALS GROUP, 2011

	Beaumont Hospital	Children's University Hospital, Temple Street	James Connolly Hospital, Blanchardstown	Mater Misericordiae University Hospital
	(n=609)	(n=79)	(n=602)	(n=841)
General admission	8.9%	59.5%	8%	5.5%
Psychiatric admission	0%	0%	17.4%	8.1%
Patient would not allow admission	0%	0%	0.8%	3.7%
Left before recommendation	16.3%	2.5%	20.4%	33.7%
Not admitted	74.9%	38%	53.3%	49.1%

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-2I may be underestimates.



#### APPENDIX 2D: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE NORTH EASTERN HOSPITALS GROUP, 2011

	Cavan General Hospital	Our Lady of Lourdes Hospital, Drogheda	Our Lady's Hospital, Navan
	(n=233)	(n=491)	(n=212)
General admission	27.9%	8.8%	29.7%
Psychiatric admission	5.6%	1.2%	6.6%
Patient would not allow admission	n 0	0%	0%
Left before recommendation	18%	15.7%	9%
Not admitted	48.5%	74.3%	54.7%

#### APPENDIX 2E: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SOUTH EASTERN HOSPITALS GROUP, 2011

	St Luke's General Hospital, Kilkenny	South Tipperary General Hospital	Waterford Regional Hospital	Wexford General Hospital
	(n=345)	(n=265)	(n=308)	(n=355)
General admission	69.6%	47.2%	23.1%	78%
Psychiatric admission	4.6%	15.5%	11.7%	1.1%
Patient would not allow admission	0.9%	0.8%	2.9%	2%
Left before recommendation	7.2%	6%	11.7%	7%
Not admitted	17.7%	30.6%	50.6%	11.8%

# APPENDIX 2F: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SOUTHERN HOSPITALS GROUP, 2011

	Bantry General Hospital	Cork University Hospital	Kerry General Hospital	Mallow General Hospital	Mercy University Hospital, Cork	South Infirmary Victoria Hospital Cork
	(n=69)	(n=637)	(n=384)	(n=48)	(n=643)	(n=44)
General admission	39.1%	35.6%	20.1%	41.7%	8.2%	11.4%
Psychiatric admission	17.4%	0.5%	22.4%	2.1%	8.4%	11.4%
Patient would not allow admission	0%	0%	2.3%	0%	0%	0%
Left before recommendation	15.9%	6.4%	9.4%	0%	13.7%	22.7%
Not admitted	27.5%	57.5%	45.8%	56.3%	69.7%	54.5%

Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Appendices 2A-2I may be underestimates.

## APPENDIX 2G: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE MID-WESTERN HOSPITALS GROUP, 2011

	Mid-Western Regional Hospital, Ennis	Mid-Western Regional Hospital, Limerick	Mid-Western Regional Hospital, Nenagh	St John's Hospital, Limerick
	(n=108)	(n=831)	(n=48)	(n=28)
General admission	51.9%	43%	62.5%	57.1%
Psychiatric admission	15.7%	7%	6.3%	0%
Patient would not allow admission	0.9%	1.8%	4.2%	0%
Left before recommendation	10.2%	13.7%	6.3%	14.3%
Not admitted	21.3%	34.5%	20.8%	28.6%

## APPENDIX 2H: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE WEST/NORTH WESTERN HOSPITALS GROUP, 2011

	Letterkenny General Hospital	Mayo General Hospital	Portiuncula Hospital, Ballinasloe	County	Sligo General Hospital	University College Hospital, Galway
	(n=328)	(n=360)	(n=154)	(n=43)	(n=234)	(n=523)
General admission	38.1%	34.2%	50%	58.1%	14.5%	17.4%
Psychiatric admission	11.6%	12.8%	22.7%	11.6%	1.3%	15.7%
Patient would not allow admission	1.5%	3.3%	1.9%	7%	0%	2.3%
Left before recommendation	12.5%	5%	4.5%	7%	0.4%	10.7%
Not admitted	36.3%	44.7%	20.8%	16.3%	83.8%	53.9%

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-2I may be underestimates.



## APPENDIX 3A: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED INTHE HSE DUBLIN/MIDLANDS HOSPITALS GROUP, 2011

		Adelaide & Meath & National Children's Hospital, Tallaght	Midland	Midland Regional Hospital, Portlaoise	Midland Regional Hospital, Tullamore	Naas General Hospital	Our Lady's Children's Hospital, Crumlin
Number of individuals treated	Men	231	79	73	60	142	9
	Women	367	109	96	66	185	29
	Total	598	188	169	126	327	38
Number who repeated	Men	28	5	3	4	19	2
	Women	38	7	12	4	22	7
	Total	66	12	15	8	41	9
Percentage who repeated	Men	12.1%	6.3%	4.1%	6.7%	13.4%	22.2%
	Women	10.4%	6.4%	12.5%	6.1%	11.9%	24.1%
	Total	11%	6.4%	8.9%	6.3%	12.5%	23.7%

#### APPENDIX 3B: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE DUBLIN SOUTH HOSPITALS GROUP, 2011

		St Columcille's Hospital, Loughlinstown	St James's	St Michael's Hospital, Dun Laoghaire	s Other
Number of individuals treated	Men	154	355	15	190
	Women	173	330	15	196
	Total	327	685	30	386
Number who repeated	Men	23	73	3	36
	Women	24	57	5	42
	Total	47	130	8	78
Percentage who repeated	Men	14.9%	20.6%	20%	18.9%
	Women	13.9%	17.3%	33.3%	21.4%
	Total	14.4%	19%	26.7%	20.2%

## APPENDIX 3C: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE DUBLIN NORTH EAST HOSPITALS GROUP, 2011

		Beaumont Hospital	Children's University Hospital, Temple Street	James Connolly Hospital,	Mater Misericordiae University Hospital
Number of individuals treated	Men	192	17	238	326
	Women	318	52	267	309
	Total	510	69	505	635
Number who repeated	Men	31	3	44	73
	Women	38	7	52	70
	Total	69	10	96	143
Percentage who repeated	Men	16.1%	17.6%	18.5%	22.4%
	Women	11.9%	13.5%	19.5%	22.7%
	Total	13.5%	14.5%	19%	22.5%

## APPENDIX 3D: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE NORTH EASTERN HOSPITALS GROUP, 2011

		Cavan General Hospital	Our Lady of Lourdes Hospital, Drogheda	Our Lady's Hospital, Navan
Number of individuals treated	Men	91	85	138
	Women	108	104	160
	Total	199	189	298
Number who repeated	Men	17	16	23
	Women	11	7	17
	Total	28	23	40
Percentage who repeated	Men	18.7%	18.8%	16.7%
	Women	10.2%	6.7%	10.6%
	Total	14.1%	12.2%	13.4%

#### APPENDIX 3E: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE SOUTH EASTERN HOSPITALS GROUP, 2011

		St Luke's General Hospital, Kilkenny	South Tipperary General Hospital	Waterford Regional Hospital	Wexford General Hospital
Number of individuals treated	Men	91	140	123	31
	Women	121	124	171	26
	Total	212	264	294	<i>57</i>
Number who repeated	Men	12	21	17	5
	Women	15	14	34	3
	Total	<i>27</i>	35	51	8
Percentage who repeated	Men	13.2%	15%	13.8%	16.1%
	Women	12.4%	11.3%	19.9%	11.5%
	Total	12.7%	13.3%	17.3%	14%

#### APPENDIX 3F: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE SOUTHERN HOSPITALS GROUP, 2011

		Bantry General Hospital	Cork University Hospital	Kerry General Hospital	Mallow General Hospital	Mercy University Hospital, Cork	South Infirmary/ Victoria Hospital, Cork
Number of individuals treated	Men	323	153	25	311	28	32
	Women	252	153	18	241	14	52
	Total	<i>575</i>	306	43	552	42	84
Number who repeated	Men	30	27	4	38	3	7
	Women	25	17	1	36	3	11
	Total	55	44	5	74	6	18
Percentage who repeated	Men	9.3%	17.6%	16%	12.2%	10.7%	21.9%
	Women	9.9%	11.1%	5.6%	14.9%	21.4%	21.2%
	Total	9.6%	14.4%	11.6%	13.4%	14.3%	21.4%



## APPENDIX 3G: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE MID-WESTERN HOSPITALS GROUP, 2011

		Mid- Western Regional Hospital, Ennis	Mid- Western Regional Hospital, Limerick	Mid-Western Regional Hospital, Nenagh	St John's Hospital, Limerick
Number of individuals treated	Men	324	18	15	143
	Women	352	24	10	141
	Total	676	42	25	284
Number who repeated	Men	50	5	4	14
	Women	65	4	2	13
	Total	115	9	6	<i>27</i>
Percentage who repeated	Men	15.4%	27.8%	26.7%	9.8%
	Women	18.5%	16.7%	20%	9.2%
	Total	17%	21.4%	24%	9.5%

#### APPENDIX 3H: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE WEST/ NORTH WESTERN HOSPITALS GROUP, 2011

		Letterkenny General Hospital	Mayo General Hospital	Portiuncula Hospital, Ballinasloe	Roscommon County Hospital	Sligo General Hospital	University College Hospital, Galway
Number of individuals treated	Men	137	48	25	100	211	208
	Women	122	82	10	104	232	219
	Total	259	130	35	204	443	427
Number who repeated	Men	21	10	4	10	36	33
	Women	21	14	3	12	32	26
	Total	42	24	7	22	68	<i>59</i>
Percentage who repeated	Men	15.3%	20.8%	16%	10%	17.1%	15.9%
	Women	17.2%	17.1%	30%	11.5%	13.8%	11.9%
	Total	16.2%	18.5%	20%	10.8%	15.3%	13.8%

# APPENDIX 4: DELIBERATE SELF HARM BY RESIDENTS OF THE REPUBLIC OF IRELAND, 2011

Age group	Population	Men Deliberate self harm		Population	Wor Deli	<b>nen</b> berate self	harm ———	
		Persons	Rate	95% CI*		Persons	Rate	95% CI*
0-4yrs	182076	0	0	(+/-0)	174253	0	0	(+/-0)
5-9yrs	164037	<5	2	(+/-2)	156733	<5	1	(+/-2)
10-14yrs	155076	54	35	(+/-9)	147415	144	98	(+/-16)
15-19yrs	144262	621	430	(+/-35)	138757	813	586	(+/-41)
20-24yrs	146636	833	568	(+/-39)	150595	804	534	(+/-38)
25-29yrs	173714	664	382	(+/-30)	187408	614	328	(+/-26)
30-34yrs	194774	578	297	(+/-25)	199171	525	264	(+/-23)
35-39yrs	182237	545	299	(+/-26)	182024	508	279	(+/-25)
40-44yrs	166330	440	265	(+/-25)	164482	493	300	(+/-27)
45-49yrs	151516	346	228	(+/-25)	153669	466	303	(+/-28)
50-54yrs	136737	246	180	(+/-23)	137649	330	240	(+/-26)
55-59yrs	122121	153	125	(+/-20)	122401	206	168	(+/-23)
60-64yrs	109869	92	84	(+/-17)	108917	110	101	(+/-19)
65-69yrs	86298	60	70	(+/-18)	87340	61	70	(+/-18)
70-74yrs	63476	32	50	(+/-18)	67714	36	53	(+/-18)
75-79yrs	46631	9	19	(+/-13)	55405	25	45	(+/-18)
80-84yrs	28423	9	32	(+/-21)	41690	9	22	(+/-14)
85yrs+	18486	<5	16	(+/-19)	39930	0	0	(+/-0)
Total**	2272699	4688	205	(+/-6)	2315553	5146	226	(+/-6)

<sup>\* 95%</sup> Confidence Interval.

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



## APPENDIX 4A: DELIBERATE SELF HARM BY RESIDENTS OF THE HSE DUBLIN/ MID-LEINSTER REGION, 2011

Age group	Population	Men Population Deliberate self harm		Population		men iberate self	harm	
		Persons	Rate	95% CI*		Persons	Rate	95% CI*
0-4yrs	52003	0	0	(+/-0)	50091	0	0	(+/-0 <u>)</u>
5-9yrs	46189	0	0	(+/-0)	44278	<5	2	(+/-5)
10-14yrs	43452	10	23	(+/-15)	41009	47	115	(+/-33)
15-19yrs	41121	133	323	(+/-56)	39825	226	567	(+/-7 <u>5)</u>
20-24yrs	44849	209	466	(+/-64)	47381	202	426	(+/-60 <u>)</u>
25-29yrs	54793	164	299	(+/-47)	60003	180	300	(+/-4 <u>5)</u>
30-34yrs	59438	156	262	(+/-42)	60959	156	256	(+/-41 <u>)</u>
35-39yrs	52681	138	262	(+/-45)	52965	131	247	(+/-43 <u>)</u>
40-44yrs	47009	111	236	(+/-45)	47240	137	290	(+/-50)
45-49yrs	42638	92	216	(+/-45)	44566	139	312	(+/-53)
50-54yrs	38594	70	181	(+/-43)	39602	103	260	(+/-51 <u>)</u>
55-59yrs	33658	42	125	(+/-39)	34912	55	158	(+/-42)
60-64yrs	29357	32	109	(+/-39)	30045	36	120	(+/-40)
65-69yrs	22416	17	76	(+/-37)	23513	14	60	(+/-32)
70-74yrs	16393	6	37	(+/-30)	18792	8	43	(+/-30)
75-79yrs	12125	<5	16	(+/-23)	15095	9	60	(+/-40)
80-84yrs	7394	<5	41	(+/-47)	11566	<5	17	(+/-24)
85yrs+	4796	<5	21	(+/-42)	10744	0	0	(+/-0)
Total**	648904	1186	177	(+/-11)	672585	1446	215	(+/-11)

<sup>\* 95%</sup> Confidence Interval.

<sup>\*\*</sup> 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, $2011\,$

Age group	Population	Men  Ilation Deliberate self harm		Population		men iberate self	harm	
		Persons	Rate	95% CI*		Persons	Rate	95% CI*
0-4yrs	43094	0	0	(+/-0)	41275	0	0	(+/-0 <u>)</u>
5-9yrs	37347	<5	5	(+/-8)	35461	0	0	(+/-0)
10-14yrs	33875	15	44	(+/-23)	32121	39	121	(+/-39)
15-19yrs	31221	149	477	(+/-78)	29771	200	672	(+/-95)
20-24yrs	33574	178	530	(+/-79)	35039	208	594	(+/-82)
25-29yrs	42370	169	399	(+/-61)	45825	172	375	(+/-57 <u>)</u>
30-34yrs	47323	137	290	(+/-49)	48828	139	285	(+/-48)
35-39yrs	43691	149	341	(+/-56)	43681	144	330	(+/-55)
40-44yrs	37919	120	316	(+/-58)	37447	156	417	(+/-67 <u>)</u>
45-49yrs	32728	88	269	(+/-57)	33063	123	372	(+/-67)
50-54yrs	27957	68	243	(+/-59)	28640	75	262	(+/-60)
55-59yrs	24378	36	148	(+/-49)	24813	62	250	(+/-63)
60-64yrs	21929	17	78	(+/-38)	22355	25	112	(+/-45)
65-69yrs	17175	12	70	(+/-40)	17963	10	56	(+/-35)
70-74yrs	12532	16	128	(+/-64)	13643	11	81	(+/-49)
75-79yrs	8984	<5	22	(+/-31)	11229	5	45	(+/-40 <u>)</u>
80-84yrs	5308	0	0	(+/-0)	8122	<5	12	(+/-25)
85yrs+	3367	0	0	(+/-0)	7589	0	0	(+/-0)
Total**	504774	1158	224	(+/-13)	516866	1370	266	(+/-14)

<sup>\* 95%</sup> Confidence Interval.

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



# APPENDIX 4C: DELIBERATE SELF HARM BY RESIDENTS OF THE HSE SOUTH REGION, $2011\,$

Age group	Population	Men Population Deliberate self harm		Population		men iberate self	harm	
		Persons	Rate	95% CI*		Persons	Rate	95% CI*
0-4yrs	45415	0	0	(+/-0)	43373	0	0	(+/-0)
5-9yrs	41689	0	0	(+/-0)	39784	<5	3	(+/-5)
10-14yrs	40160	22	55	(+/-23)	38312	36	94	(+/-31)
15-19yrs	36552	206	564	(+/-79)	35340	229	648	(+/-86)
20-24yrs	34647	257	742	(+/-93)	34882	224	642	(+/-86)
25-29yrs	39744	209	526	(+/-73)	43163	148	343	(+/-56)
30-34yrs	46304	186	402	(+/-59)	47397	136	287	(+/-49)
35-39yrs	45170	134	297	(+/-51)	44576	127	285	(+/-51)
40-44yrs	42513	129	303	(+/-53)	41605	115	276	(+/-52)
45-49yrs	40070	87	217	(+/-47)	39941	127	318	(+/-56)
50-54yrs	36228	61	168	(+/-43)	35916	95	265	(+/-54 <u>)</u>
55-59yrs	32653	49	150	(+/-43)	31977	43	134	(+/-41 <u>)</u>
60-64yrs	29679	22	74	(+/-32)	28833	32	111	(+/-39)
65-69yrs	23677	21	89	(+/-39)	23784	22	92	(+/-39)
70-74yrs	17691	8	45	(+/-32)	18412	7	38	(+/-29)
75-79yrs	12873	<5	23	(+/-27)	15172	5	33	(+/-29)
80-84yrs	7867	6	76	(+/-62)	11129	<5	18	(+/-25)
85yrs+	5003	<5	20	(+/-40)	10581	0	0	(+/-0)
Total**	577935	1401	248	(+/-13)	584177	1349	241	(+/-13)

<sup>\* 95%</sup> Confidence Interval.

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

# APPENDIX 4D: DELIBERATE SELF HARM BY RESIDENTS OF THE HSE WEST REGION, $2011\,$

Age group	Population	Men Deliberate self harm		Population		men iberate self	harm ———	
		Persons	Rate	95% CI*		Persons	Rate	95% CI*
0-4yrs	41564	0	0	(+/-0)	39514	0	0	(+/-0 <u>)</u>
5-9yrs	38812	<5	3	(+/-5)	37210	0	0	(+/-0 <u>)</u>
10-14yrs	37589	7	19	(+/-14)	35973	22	61	(+/-26)
15-19yrs	35368	133	376	(+/-65)	33821	158	467	(+/-74 <u>)</u>
20-24yrs	33566	189	563	(+/-82)	33293	170	511	(+/-78 <u>)</u>
25-29yrs	36807	122	331	(+/-60)	38417	114	297	(+/-56 <u>)</u>
30-34yrs	41709	99	237	(+/-48)	41987	94	224	(+/-46)
35-39yrs	40695	124	305	(+/-55)	40802	106	260	(+/-50)
40-44yrs	38889	80	206	(+/-46)	38190	85	223	(+/-48)
45-49yrs	36080	79	219	(+/-49)	36099	77	213	(+/-49)
50-54yrs	33958	47	138	(+/-40)	33491	57	170	(+/-45)
55-59yrs	31432	26	83	(+/-32)	30699	46	150	(+/-44)
60-64yrs	28904	21	73	(+/-32)	27684	17	61	(+/-30)
65-69yrs	23030	10	43	(+/-27)	22080	15	68	(+/-35)
70-74yrs	16860	<5	12	(+/-17)	16867	10	59	(+/-37)
75-79yrs	12649	<5	16	(+/-22)	13909	6	43	(+/-35)
80-84yrs	7854	0	0	(+/-0)	10873	<5	37	(+/-37)
85yrs+	5320	<5	19	(+/-38)	11016	0	0	(+/-0)
Total**	541086	943	179	(+/-11)	541925	981	188	(+/-12)

<sup>\* 95%</sup> Confidence Interval.

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





1 Perrott Avenue, College Road, Cork, Ireland Tel: +353 21 4277499 Email: info@nsrf.ie