Connecting for Life

Report of the Research Advisory Group for the National Framework for Suicide Prevention Strategy

"When implementing a national response, the problem to be solved, reduced, changed or prevented must first be understood."(1)

HSE National Office for Suicide Prevention
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Feidhmeannacht na Seirbhíse Sláinte
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Introduction

1. Introduction

This paper is part of the development process for a new strategic framework to address the issue of suicide in Ireland. This new national framework for suicide prevention – to cover the period 2015-2020 – is being developed by the NOSP on behalf of the Department of Health. Like its predecessor, *Reach Out*, the new framework will be informed by a strong evidence base, to maximise the impact and cost-effectiveness of its interventions. This report contains a review of recent research and other data relevant to informing the development of the Strategic Framework and concludes with a series of research-related recommendations.

1.1 Background to the new strategic framework

Reach Out (2), the current suicide prevention strategy, is in its tenth and final year of implementation. During this timeframe there has been extensive national and international research and evidence in relation to suicide prevention.

Ireland has been at the forefront of research on suicide prevention. The NOSP has committed significant resources to research. This funding includes that allocated for the National Registry of Deliberate Self-Harm and the National Suicide Research Foundation (NSRF) - the primary research organisation working with NOSP.

The environment in which suicide prevention work takes place has also changed over the lifetime of *Reach Out*, including the HSE administrative structures and the range of supporting agencies. In 2014, the Department of Health and the HSE commenced the development of a new national framework for suicide prevention to cover the period 2015-2020. The new framework will need to reflect and respond to the changing context of suicide prevention. The framework will present the key priorities to be addressed over its lifetime. It will guide and be supported by robust implementation plans, which will specify agreed deliverables, outcome and performance indicators, resourcing commitments, lines of accountability and governance structures. These plans will require bilateral and multilateral engagement, ownership and oversight.

The new framework will support other relevant Government policies, including Vision for Change, Healthy Ireland and the National Substance Misuse Strategy. The framework will be published in 2015.

The group structure for developing the new framework included a Strategy Oversight Group, which is responsible for the process and outcomes. Five advisory groups were established to assist in the process in the areas of Research, Policy, Practice and Communications/Media Advisory and Engagement. These groups report into the Strategy Oversight Group.

1.2 Research Advisory Group

The Research Advisory Group was established to make recommendations to the Strategy Oversight Group about areas of research and to propose supporting actions to be incorporated into the new framework.

In developing the framework the NOSP also commissioned:

- An evidence-based review of the interventions in suicide prevention, completed by the Health Research Board.
- A review of national and international policy approaches to suicide prevention.
- An evaluation framework for the suicide prevention framework

The previous national suicide prevention strategy, *Reach Out (2)*, which covered the period 2005-2014, was based on the international and national research evidence available prior to 2005. The new framework will have a strong evidence base at its core.

Since the development of *Reach Out* the evidence base around suicidal behaviour has evolved and some shifts in understanding relating to the best approaches to suicide prevention have occurred. What is more, a broad range of agencies involved in delivering supports and services to people at risk of or affected by suicide have also accumulated in-depth knowledge and understanding of what is required to effectively plan and deliver such services.

It will be important that learnings from the implementation of *Reach Out*, and shifts in the international evidence, are identified and shared with all stakeholders as part of the development of the new framework. This will help to inform best use of resources and to establish consensus among stakeholders at the planning stage.

The remit of the Research Advisory Group was to make recommendations for the new strategic framework based on a review of research and other data sources. This report presents the recommendations and the work of the Group in formulating the recommendations. The report also presents the evidence that informed the development of the recommendations, including:

- An epidemiological review of suicidal behaviour in Ireland.
- A description of suicide and self-harm data-collection processes in Ireland.
- An analysis of the strengths and weaknesses of the available data and statistics for suicide in Ireland.
- An analysis of the risk and protective factors for suicidal behaviour.
- An overview of the mental and physical health outcomes associated with suicide bereavement.
- An identification of research gaps in Ireland.
- Key recommendations relating to research and evaluation in suicide prevention strategies from the World Health Organisation.
- An overview of the research-related learnings from the evaluation of the current strategy, Reach Out.
- A summary of the research-related recommendations that resulted from a public consultation on the new strategic framework.

1.3 Summary of key findings

- The most recently available international suicide mortality data is from Eurostat (2014), with 2010 being the most recent year for which data is available. The total rate of suicide for men and women of all ages in Ireland in 2010 was 10.9 per 100,000, the 11th lowest rate of suicide in the 31 European countries studied (Figure 3). The highest rate was found in Lithuania (32.9 per 100,000) and the lowest in Greece (3.3 per 100,000) (3).
- In Ireland, the suicide rates among young males and females are relatively high in comparison to international rates for young people. Taking females and males aged 15-19 years together, the rate was 10.5 per 100,000, the 4th highest suicide rate in this age group in the Eurostat data (Figure 4) (4).
- The rate of suicide amongst young and middle aged males in Ireland is of particular concern. Over the period 2001-2013, young males aged 15-24 years continued to show relatively high rates of suicide, although this rate would appear to be stabilising (5).
- In Ireland, a high proportion of people who die by suicide engage in hanging. This has risen over the last decade. In males, there was a 6.6% increase in the use of hanging between 2007 and 2011. In females for the same period an increase of 16.6% was seen (6).
- Since 2011 there have been consecutive decreases in the Irish rate of self-harm. However, the national self-harm rate per 100,000 (199 per 100,000) in 2011 was still 6% higher than the pre-recession rate in 2007 (188 per 100,000) (7).
- Based on the 2013 data, the highest rate of self-harm for females was among 15-19 year olds and for males it was among 20-24 year olds. Despite the fact that the rate of self-harm amongst females is still higher than among males, this gender gap is narrowing (7).
- During the early part of the economic downturn rates of self-harm increased between 2007 and 2010 with an overall increase of 20% of cases of hospital presentations of self-harm. An increase in the rate of self-harm of 30% and 12% amongst males and females respectively was observed during this time period (7).

- Data on suicide and self-harm in Ireland is obtained from the CSO and the National Registry of Deliberate Self-harm respectively. There is a significant time lag in official data becoming available due to the current coronial system. It is not known how many of the undetermined deaths in Ireland may be probable cases of suicide.
- The collation of deaths by suicide within the mental health services and not just acute units commenced in 2014.
- The most common method of self-harm is intentional overdose (67%) followed by self-cutting (24%), with a higher prevalence of self-cutting among men (26%) than women (23%) (7).
- Alcohol was involved in 37% of the self-harm presentations (7).
- More than one in five (21%) of all self-harm presentations in 2013 were due to a repeat act (7).
- Risk and protective factors differ for adolescents and adults who die by suicide and who engage in self-harm in Ireland.
- Information from the Suicide Support Information System (SSIS) showed that among men who had died by suicide, 57% were single and 48.6% had been working in the construction/production sector. In contrast, among women 46.7% were married/ cohabiting and a high proportion (26.5%) had been working in the healthcare sector (6).
- Protective factors for suicide for adults include: employment, co-habiting and living in a rural area. For adolescents, protective factors include: problem-orientated coping, seeking support, reflecting on past experiences and living with both parents (8-11).
- People who are bereaved by suicide have a tendency to be at a higher risk of mental health distress (1). Research in Ireland suggests that prolonged grief following loss by suicide is associated with increased risk of recurrent sleep difficulties, increased levels of depression, long-term symptoms of Post-Traumatic Stress Disorder and recurrent suicidal ideation, particularly amongst men.

2

Suicide Mortality and Self-Harm in Ireland

2. Suicide Mortality and Self-Harm in Ireland

Suicide mortality and self-harm statistics are collated by the CSO and the National Registry of Deliberate Self-Harm (NRDSH), respectively.

The Central Statistics Office (CSO) publishes national mortality data, including data on deaths by suicide. It is likely that a proportion of the deaths classified as undetermined are also deaths by suicide, but it is not possible to estimate this at present. The CSO provides mortality data in two forms: (i) year of registration data and (ii) year of occurrence data. In this report, we focus on 'year of occurrence' data, as this information is more comprehensive and allows for year-on-year comparison. At the time of writing, 2012 is the most recent 'year of occurrence' data available. Data for 2013 is also included, but this is provisional, due to the data-collection process in Ireland. This and other limitations of data-collection methods for suicide mortality are discussed in Section 3.

Self-harm statistics in Ireland are gathered by the National Registry of Deliberate Self-Harm (NRDSH). This national system records information on persons who present to hospital emergency departments after an episode of deliberate self-harm. The NRDSH is in operation since 2000 and has had national coverage since 2006.

Self-harm statistics are included in this review, as an increased risk of suicidal behaviour is associated with all episodes of self-harm, and so interventions to reduce suicidal behaviour tend to address the issue of self-harm (1). Overdose of drugs was the most common method of self-harm in Ireland in 2013, accounting for 67% of cases, according to the NRDSH (7).

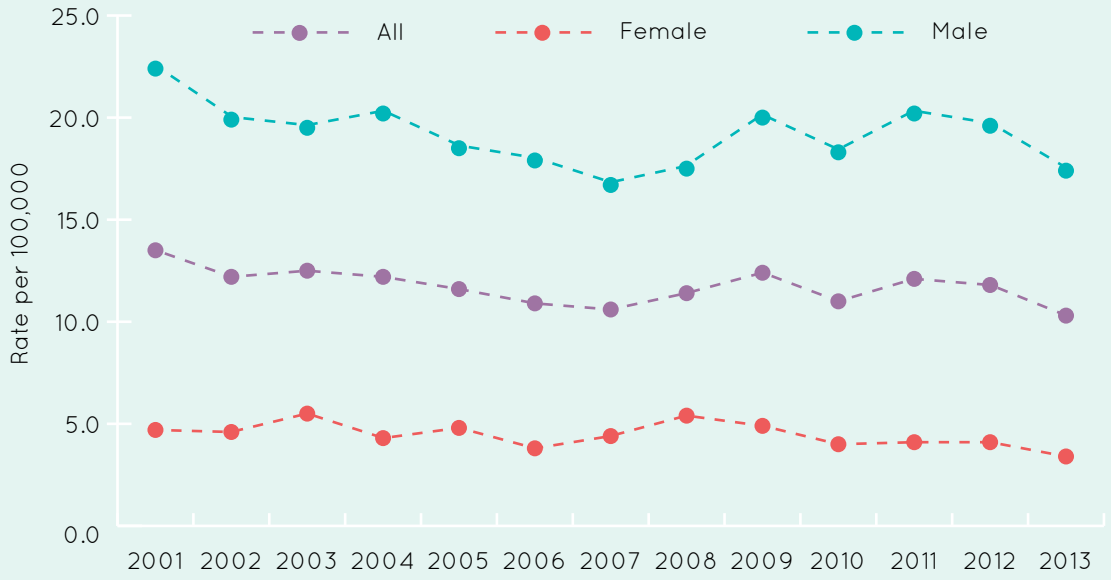
2.1 Incidence of suicide in Ireland, 2004-2013

There were 541 deaths by suicide in Ireland in 2012, representing a rate of 11.8 per 100,000 of the population. 445 (82.3%) of these were men (Table 1) (5). This high male-to-female ratio is a constant feature of deaths by suicide over the years, as can be seen in Figure 1 below.

Since 2007, around the time of the onset of the economic recession in Ireland, there has been an increase in the suicide rate in Ireland. The increase observed between 2007 and 2012 can be wholly attributed to an increase in the male rate of suicide. More recently, data from 2012 and 2013 suggest

a levelling-out of this rise, and perhaps a decreasing trend. However, this pattern should be interpreted with some caution as data for 2013 is still provisional.

Figure 1. Suicide rate per 100,000 by gender, 2001-2013



Note: Figures for 2013 are provisional and subject to change

Table 1. Rate of suicide and other causes of death by suicide, 2004-2013

	Suicide		Undetermined		Deaths by external causes		All deaths	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
2013*								
Males	396	17.4	43	1.9	1110	48.8	15211	669.0
Females	79	3.4	22	1.0	397	17.1	14807	638.4
Total	475	10.3	65	1.4	1507	32.8	30018	653.5
2012								
Males	445	19.6	36	1.6	1142	50.3	14945	658.5
Females	96	4.1	18	0.8	435	18.8	14241	614.9
Total	541	11.8	54	1.2	1577	34.4	29186	636.5
2011								
Males	458	20.2	58	2.6	1211	53.3	14492	638.0
Females	96	4.2	27	1.2	482	20.9	13964	606.0
Total	554	12.1	85	1.9	1693	37.0	28456	622.0
2010								
Males	405	17.9	54	3.5	1198	53.0	14334	633.6
Females	90	3.9	29	2.0	462	20.2	13627	594.4
Total	495	10.9	83	2.8	1600	36.4	27961	613.9
2009								
Males	443	20.0	52	2.3	1236	55.7	14727	664.1
Females	109	4.9	22	1.0	490	21.9	13653	609.1
Total	552	12.4	74	1.7	1726	38.7	28380	636.4
2008								
Males	386	17.5	64	2.9	1215	55.1	14457	655.3
Females	120	5.4	19	0.9	506	22.8	13817	623.6
Total	506	11.4	83	1.9	1721	38.9	28274	639.8
2007								
Males	362	16.7	87	4.0	1252	57.7	14391	662.8
Females	96	4.4	32	1.5	507	23.4	13726	633.1
Total	458	10.6	119	2.7	1759	40.5	28117	648.0
2006								
Males	379	17.9	68	3.2	1180	55.6	14065	688.5
Females	81	3.8	16	0.8	484	22.8	13883	655.3
Total	460	10.8	82	1.9	1664	39.2	28488	671.9
2005								
Males	382	18.5	93	4.5	1239	60.1	14412	699.0
Females	99	4.8	41	2.0	506	24.4	13848	668.3
Total	481	11.6	134	3.2	1745	42.2	28260	683.6
2004								
Males	406	20.2	60	3.0	1127	56.0	14801	735.9
Females	87	4.3	21	1.0	467	23.0	13864	682.1
Total	493	12.2	81	2.0	1594	39.4	28665	708.9

** Figures for 2013 are provisional and subject to change*

*** All rates are crude, based on 100,000 population*

2.2 Rates of suicide in Ireland by gender and age, 2001-2013

The majority of people who die by suicide in Ireland are male. In 2012, 82% of those who died were males. The highest rate was among 45-54 year old males, at 32.3 per 100,000 population (Table 2). The lowest rate for male suicide in 2012 was in the 65+ age group. Similarly, the lowest rate for female suicide in 2012 was also in the 65+ age group. The highest rate for female suicide in 2012 was 7.1 per 100,000 in the 45-54 year old age group (Table 3).

Table 2. Male suicide rates per 100,000 population

	All	15-24	25-34	35-44	45-54	55-64	65+
2001	22.4	27.7	37.2	29.9	28.6	26.5	17.2
2002	19.9	27.6	34.4	22.2	22.8	23.1	16.9
2003	19.5	29.5	22.7	30.6	23.3	24.3	14.0
2004	20.2	27.1	28.0	28.5	29.4	22.9	13.2
2005	18.5	25.6	26.8	24.9	25.8	21.6	10.4
2006	17.9	27.5	23.5	21.4	24.1	21.1	14.2
2007	16.7	23.7	23.5	19.5	20.9	16.6	17.6
2008	17.5	22.2	25.3	22.7	24.6	21.2	13.1
2009	20.0	24.4	26.6	31.5	26.6	26.9	13.7
2010	18.3	27.2	20.3	29.7	28.9	23.3	8.1
2011	20.2	26.8	27.1	28.1	32.3	25.0	13.8
2012	19.2	21.1	25.1	27.7	32.3	28.3	14.7
2013*	17.4	17.2	24.3	21.9	29.0	27.5	13.8

** Figures for 2013 are provisional and subject to change*

Table 3. Female suicide rates per 100,000 population

	All	15-24	25-34	35-44	45-54	55-64	65+
2001	4.7	5.1	4.4	6.8	8.5	10.7	1.6
2002	4.6	4.7	6.8	5.3	8.0	6.3	3.2
2003	5.5	5.0	6.0	7.0	9.5	9.9	5.2
2004	4.3	2.9	5.2	6.5	7.7	7.4	3.5
2005	4.8	6.4	6.8	4.3	7.5	6.2	4.3
2006	3.8	5.1	3.6	4.6	6.2	6.5	2.7
2007	4.4	4.8	5.1	6.4	9.4	5.3	2.2
2008	5.4	8.1	4.6	6.5	9.2	8.4	5.6
2009	4.9	4.1	5.3	7.9	7.2	6.8	5.1
2010	4.0	4.0	4.6	5.4	6.0	8.4	2.5
2011	4.1	5.5	7.0	6.1	5.8	5.2	1.2
2012	4.5	5.8	5.3	6.0	7.1	5.6	1.3
2013*	3.4	3.8	4.9	4.5	7.4	3.4	1.6

** Figures for 2013 are provisional and subject to change*

2.3 Deaths of undetermined intent

There are indications that deaths of undetermined intent may include 'hidden' cases of suicide. However, it is not yet clear which proportion of undetermined deaths involve probable suicide cases. Table 4 presents the percentage of deaths in each age group classified as deaths of undetermined intent for the years 2004-2013.

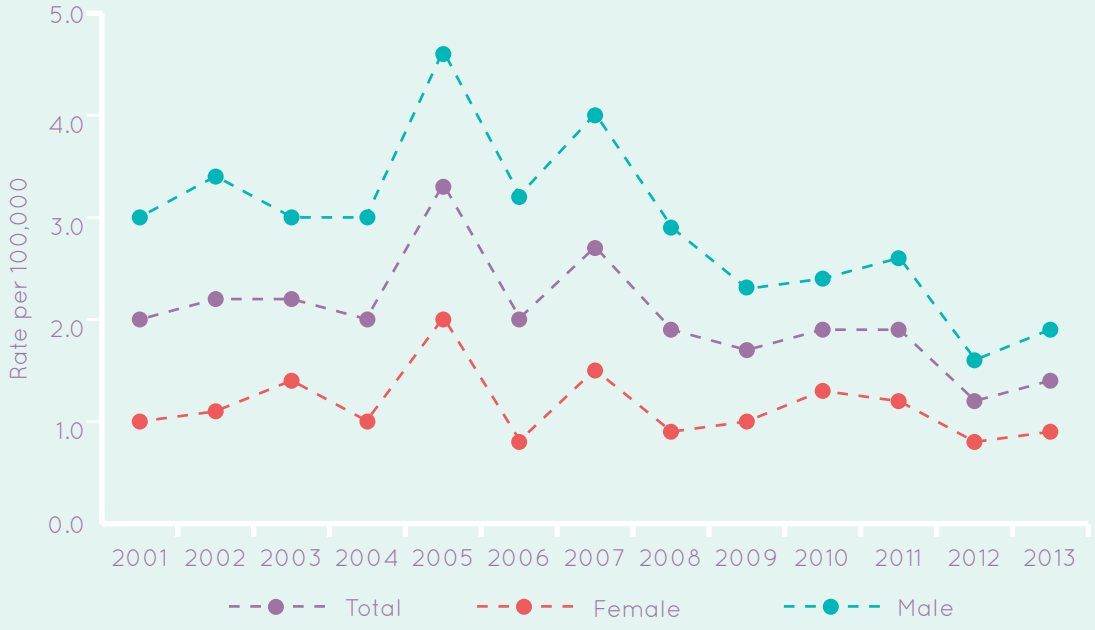
Figure 2 shows an overview of undetermined deaths per 100,000 by gender and total confirmed rates for Ireland, 2001-2012. Provisional rates for 2013 are also included.

Table 4. Total percentage of deaths classified as 'undetermined'

Year Age group	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013* %
<15	0.5	0.6	0.0	0.3	0.0	0.6	0.3	0.0	0.0	0.0
15-24	3.3	5.5	5.1	6.0	2.5	3.4	4.0	2.5	2.1	2.3
25-34	3.8	7.2	4.5	5.2	4.6	1.9	3.7	3.1	2.1	2.2
35-44	2.3	3.3	3.2	3.0	2.3	1.8	2.5	1.6	1.8	2.2
45-54	1.1	1.8	0.6	1.1	0.9	0.9	0.9	0.9	0.9	1.2
55-64	0.4	0.7	0.3	0.6	0.5	0.5	0.5	0.2	0.2	0.4
65+	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Total	0.3	0.5	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2

** Figures for 2013 are provisional and subject to change*

Figure 2. Rates of undetermined deaths per 100,000 by gender and total rates for Ireland, 2001-2013



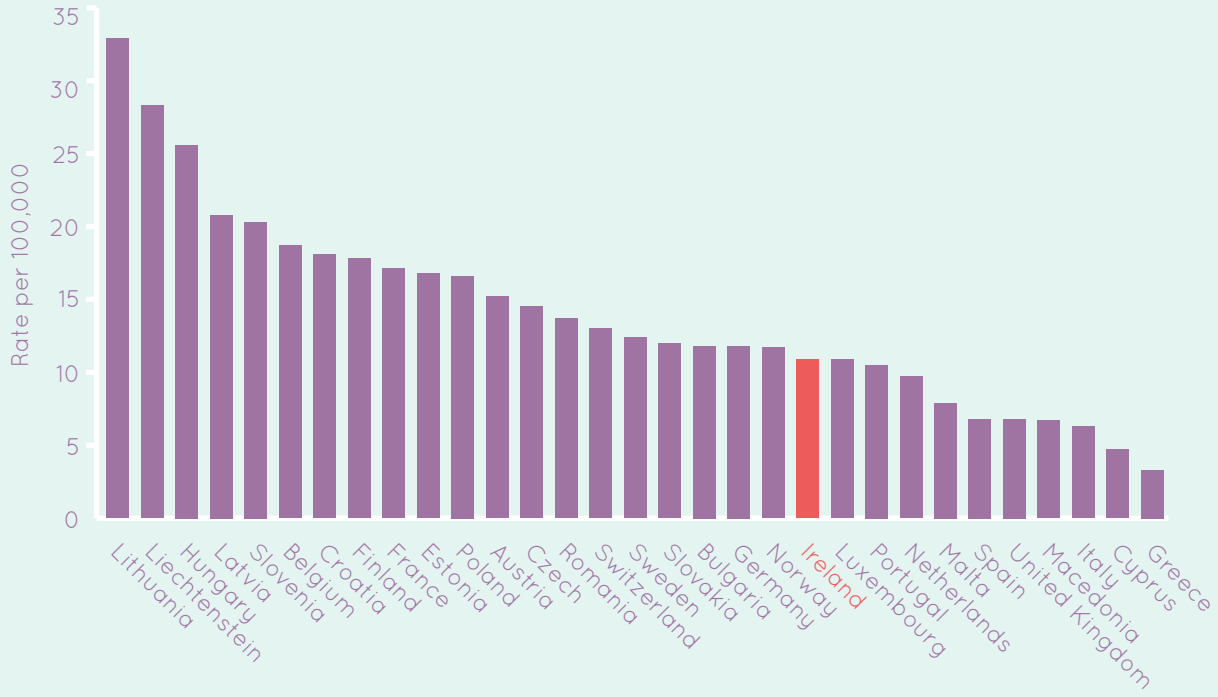
** Figures for 2013 are provisional and subject to change*

2.4 How does Ireland compare internationally?

2.4.1 European suicide rates

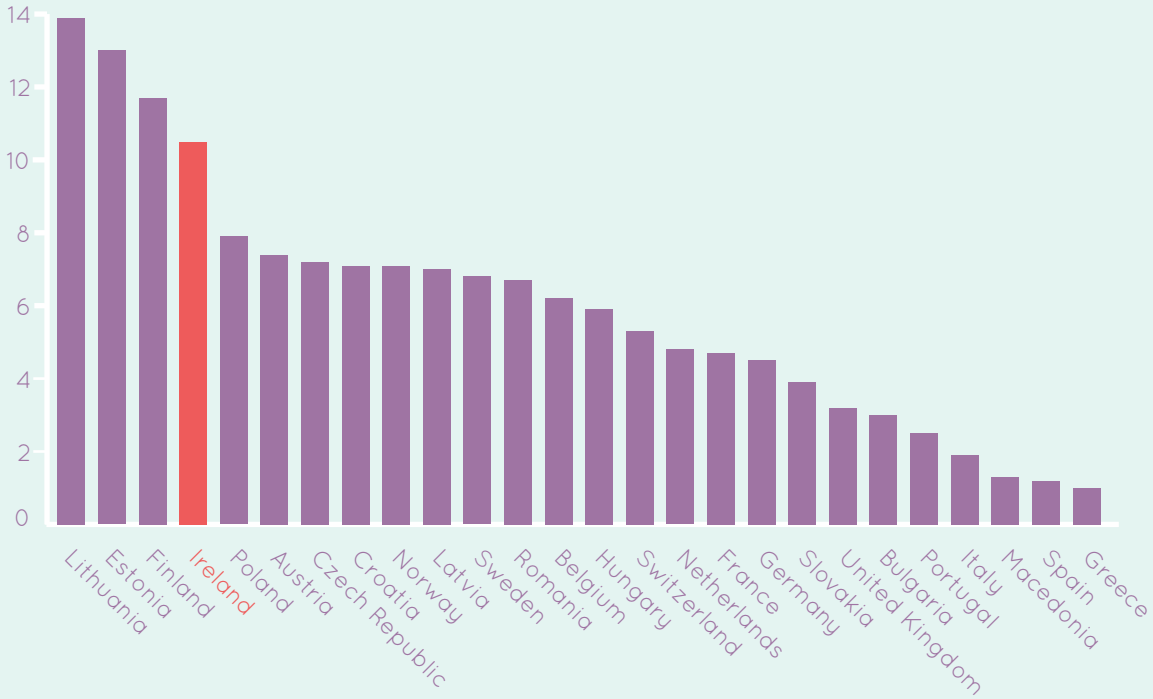
The most recently available suicide mortality data were obtained from Eurostat, with 2010 being the most recent year for which data was available. Looking at the total rate of suicide for men and women of all ages in Ireland, the rate in 2010 was 10.9 per 100,000, the 11th lowest rate of suicide among the 31 European countries for which data was recorded (Figure 3) (3). The highest rate was found in Lithuania (32.9 per 100,000) and the lowest in Greece (3.3 per 100,000) (3)

Figure 3. Suicide rate per 100,000 for males and females, 2010 Eurostat



In Ireland, the suicide rates among young males and females are relatively high in comparison to international rates for young people. Taking females and males aged 15-19 years together, the rate was 10.5 per 100,000, the 4th highest suicide rate in this age group across the 31 European countries studied (Figure 4). The highest rate was found in Lithuania (13.9 per 100,000) and the lowest in Greece (1 per 100,000)(4).

Figure 4. Suicide rate per 100,000 for males and females aged 15 to 19 years by geographic region, 2010 Eurostat



There was variance in suicide rates by geographical region over the period 2001-2013. Table 5 provides information on the rates by county, from 2004-2013. The suicide rates based on the most recent data available were highest in Limerick City, Cork City, Kerry and Wexford.

Table 5. Suicide rate by county, 3- year moving average, 2004-2013

3-year moving average	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013*
Carlow	17.0	19.9	17.4	14.5	11.7	12.3	11.6	14.0
Cavan	19.3	18.5	16.7	14.9	12.0	10.2	10.1	13.7
Clare	12.6	12.2	12.8	14.3	11.6	11.0	10.2	11.9
Cork City	17.9	18.6	19.3	19.3	19.2	17.6	18.3	16.0
Cork County	12.8	12.5	13.1	13.3	13.5	13.5	11.9	11.7
Donegal	10.4	9.7	10.1	10.9	9.6	8.0	6.4	8.3
Dublin City	11.3	11.0	10.3	10.4	10.4	14.3	15.6	15.4
Dun Laoghaire	5.6	5.9	6.5	7.3	7.9	7.3	7.2	6.3
Fingal	6.1	4.7	5.2	6.3	6.7	6.0	5.6	5.4
Galway City	8.7	5.5	7.5	8.7	8.8	10.7	9.4	9.9
Galway County	11.3	12.1	10.6	10.9	12.5	13.1	13.6	13.6
Kerry	11.3	9.9	9.5	12.6	15.4	18.0	18.9	19.7
Kildare	10.6	9.6	7.2	6.4	7.2	9.9	11.0	11.7
Kilkenny	10.1	11.4	11.5	10.9	9.6	11.2	11.9	13.6
Laois	8.8	10.4	11.6	10.9	13.5	16.5	16.9	13.6
Leitrim	23.4	13.1	8.9	10.9	14.9	16.9	15.7	9.5
Limerick City	16.4	14.1	12.4	10.8	11.9	16.5	21.1	21.1
Limerick County	10.7	10.1	8.6	10.8	11.4	13.2	13.9	12.1
Longford	15.2	12.6	10.5	9.2	7.9	8.7	7.6	8.4
Louth	9.3	8.6	11.1	11.6	12.8	12.9	14.1	14.1
Mayo	11.1	13.8	12.8	12.8	11.5	13.2	15.5	14.9
Meath	11.1	7.5	9.3	10.8	10.9	8.4	7.5	7.7
Monaghan	10.9	10.0	9.8	11.3	12.2	10.5	13.3	13.8
Offaly	19.1	14.7	14.8	14.8	14.7	14.6	9.9	9.9
Roscommon	12.8	11.8	13.7	14.7	17.6	16.1	16.0	12.9
Sligo	12.7	17.6	15.5	11.9	11.1	10.5	11.5	12.5
South Dublin	13.2	8.7	6.9	7.3	10.3	11.3	11.8	9.2
Tipperary North	10.2	8.4	8.6	8.2	8.2	7.2	5.9	5.6
Tipperary South	10.5	11.1	12.0	14.1	14.3	14.7	14.3	13.9
Waterford City	11.5	9.3	9.2	13.1	11.1	14.0	10.7	8.5
Waterford County	16.6	11.9	13.0	13.2	15.1	12.5	11.4	10.9
Westmeath	12.7	13.6	12.1	14.4	14.9	14.0	13.1	12.3
Wexford	13.6	15.7	13.5	13.9	12.5	14.8	17.8	19.4
Wicklow	13.4	11.7	10.3	9.3	10.6	11.5	10.2	7.7
Ireland	11.6	11.0	10.9	11.3	11.4	11.7	11.6	11.4

** Figures for 2013 are provisional and subject to change*

2.5 Incidence of self-harm in Ireland

Self-harm includes the various methods by which people deliberately harm themselves. The Irish statistics presented in Table 6 are collated by The National Registry of Deliberate Self-Harm, based on data collected on persons presenting to hospital emergency departments as a result of deliberate self-harm. Since 2006, all general hospital and paediatric hospital emergency departments in Ireland have contributed to the Registry.

2.5.1 Trends in self-harm by gender in Ireland, 2002-2013

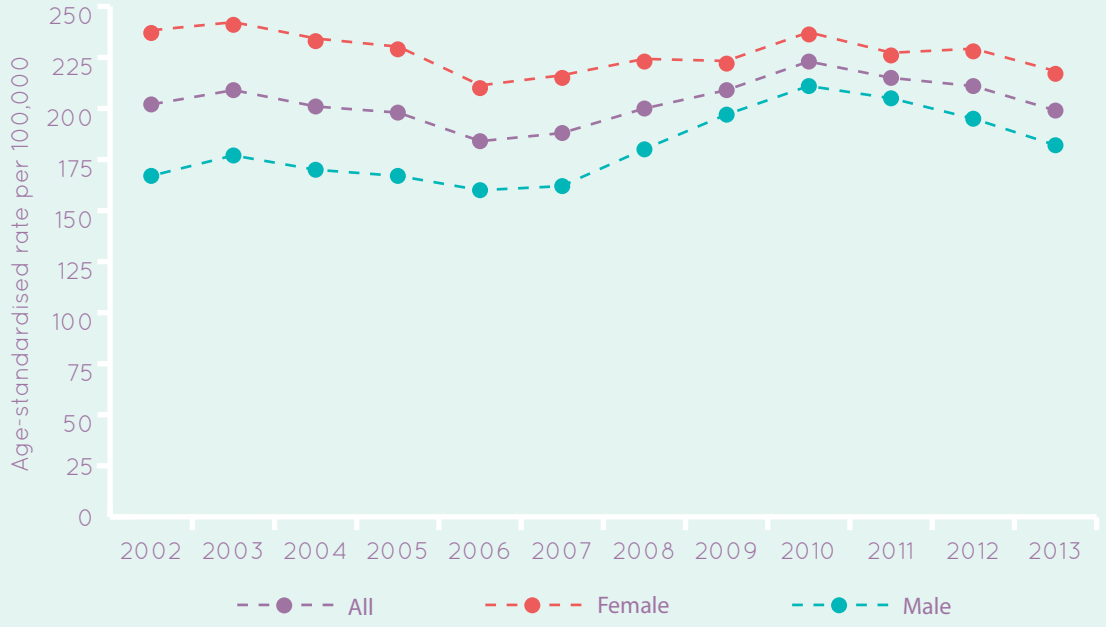
In 2011 and 2012 there were two successive decreases in the annual Irish rate of persons presenting to hospital as a result of self-harm (-4% and -2% respectively). The age-standardised rate of hospital-treated self-harm in 2013 was 199 per 100,000, 6% lower than the equivalent rate in 2012 (211 per 100,000). However, despite these decreases, the rate in 2013 was still 6% higher than in 2007, the year before the economic recession.

Between 2007 and 2010 there was an increasing trend in the rate of self-harm in Ireland, with a 20% increase overall during this period (see Figure 5). The largest increase was seen among men, where the rate went from 162 per 100,000 to 211 per 100,000 (+30%). There was a less pronounced increase in the female rate during this period, with a 10% increase observed. While overall the female rate of self-harm in Ireland is consistently higher than the male rate, this period has also seen the gender gap narrowing, with 2010 recording the smallest difference between these rates (10%).

Table 6. Person-based European age-standardised rate (EASR) of self-harm in Ireland, 2002-2013

	Men		Women		All	
Year	Rate	% difference	Rate	% difference	Rate	% difference
2002	167	-	237	-	202	-
2003	177	+7%	241	+2%	209	+4%
2004	170	-4%	233	-4%	201	-4%
2005	167	-2%	229	-1%	198	-2%
2006	160	-4%	210	-9%	184	-7%
2007	162	+2%	215	+3%	188	+2%
2008	180	+11%	223	+4%	200	+6%
2009	197	+10%	222	-<1%	209	+5%
2010	211	+7%	236	+6%	223	+7%
2011	205	-3%	226	-4%	215	-4%
2012	195	-5%	228	+1%	211	-2%
2013	182	-7%	217	-5%	199	-6%

Figure 5. Rates of self-harm by gender and overall, 2002-2013



2.5.2 Rates of self-harm by gender and age

The highest rate of self-harm is in the younger age brackets. In 2013 the highest rate for women was among 15-19 year-olds. This rate implies that one in every 162 girls in this age group presented to hospital in 2013 as a consequence of self-harm. The highest rate for men was among 20-24 year-olds or one in every 196 men. The incidence of self-harm gradually decreased with increasing age in men. This was the case to a lesser extent in women as their rate remained stable, across the 30-49 year age range.

During the time period of the economic recession in Ireland from 2008-2013, changes in the rate of self-harm were observed across certain age groups. During this period for men the greatest increase in the self-harm rate was for middle-aged men (aged 45-54), where an increase of 11% was seen. For women, the increase was greatest among those aged 15-24 years (12%) and for those aged 45-64 years (7%). Thus, while the self-harm rates remain highest among young people, middle-aged groups saw the most significant increase in recent years.

2.5.3 Repetition of self-harm, 2013

Repeat self-harm is seen as a significant risk factor for suicide. Therefore, those who present with repeated acts of self-harm are an important target group for suicide prevention. Appropriate aftercare is critical in reducing rates of subsequent suicide in this population cohort.

Of the total number of presentations made to emergency departments in Ireland in 2013 more than one in five (2,289, 21.0%) were due to repeated acts of self-harm. This rate is similar to that reported in 2012, which is higher than the proportion of acts accounted for by repetition in the years 2010 and 2011 (19.9 and 19.5% respectively).

Of the 8,772 individuals treated for self-harm in 2013, 1,211 (13.8%) made at least one repeat presentation to hospital during the calendar year. This proportion has been consistent over the last ten years and is slightly lower than the rate recorded in 2012 (14.5%).

2.5.4 Aftercare following self-harm, 2003-2013

Since 2003, there have been some changes in the pattern of aftercare following self-harm (see Figure 6). The proportion of presentations resulting in general admission to a ward has decreased by 55% since 2003, with a 33% reduction observed since 2007. Psychiatric admission has also decreased by 26% since 2003.

In 2013, 23% of self-harm patients were admitted to a general ward of the hospital to which they presented and 9% were admitted to a psychiatric ward. Most commonly, 53% of cases were discharged following treatment in the emergency department. In 15% of cases in 2013, the patient left the emergency department before a next care recommendation could be made.

For the first time in 2013 referrals for patients discharged from the emergency department following self-harm were recorded by the Registry:

- For just under one in three an outpatient appointment was recommended as a next care step for the patient.
- Just under one in five (17%) were discharged with a recommendation to attend their GP for a follow-up appointment.
- One in eight of those not admitted to the presenting hospital were transferred to another hospital for treatment (9% for psychiatric treatment and 3% for medical treatment).
- Other services (e.g. psychological services, community-based mental health teams and addiction services) were recommended in 10% of cases.
- 30% of patients discharged from the emergency department were discharged home without a referral.

Figure 6. Referral of self-harm patients following discharge from the Emergency Department, 2013

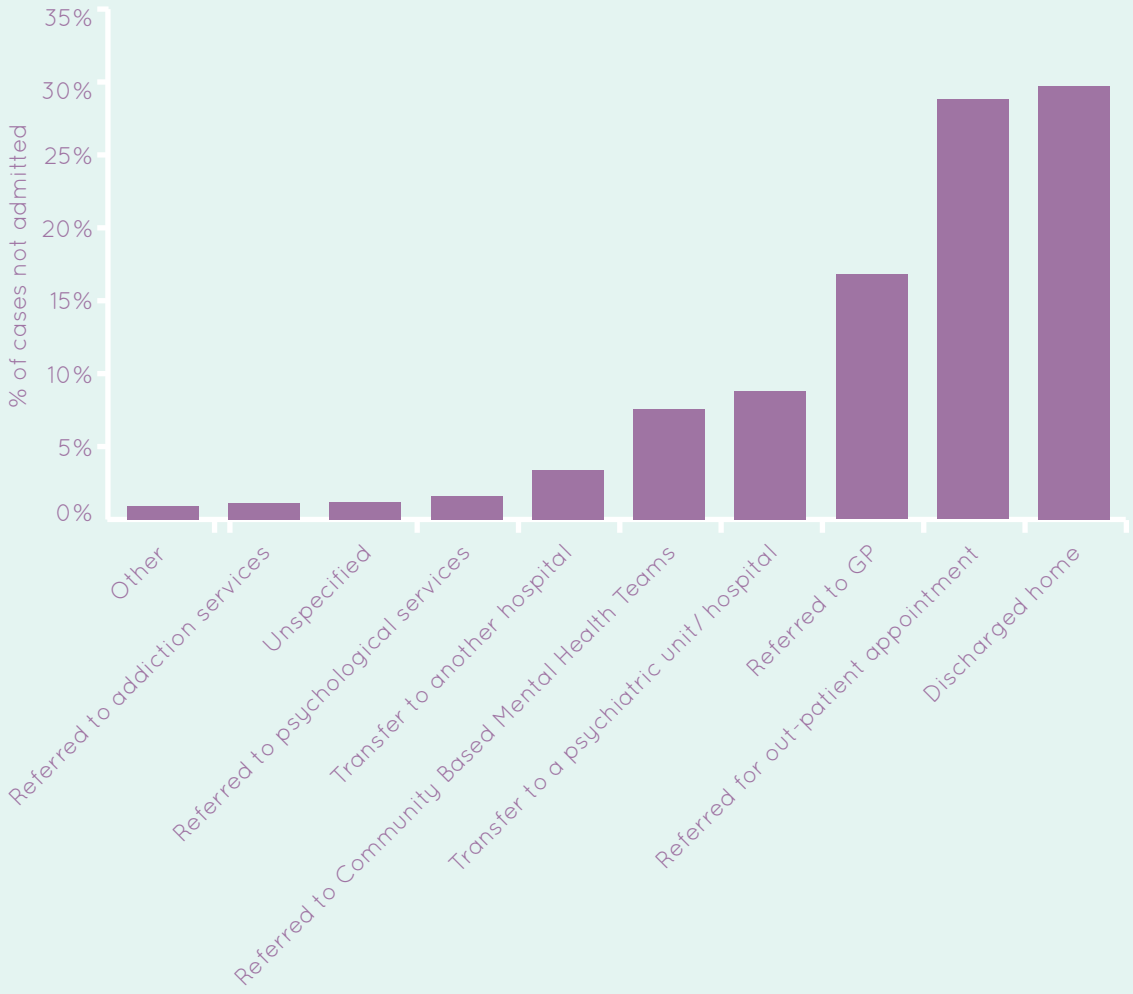


Table 7. Summary of main points on suicide mortality and self-harm in Ireland

- Ireland has the 11th lowest suicide rate overall and the 4th highest suicide rate among young males and females out of 31 European countries for which data was recorded.
- Men die by suicide more frequently than women, and therefore are a key target group for suicide prevention.
- Suicide rates increased during the economic downturn, particularly among men; these may now be stabilising. However recent statistics are provisional. Men impacted by the economic crisis and its aftermath may still be a target group for the new strategy.
- The highest rate of male suicide is among middle-aged men (aged 45-54 year group) followed by men aged 55-64 years and 35-44 years. A high rate of suicide can also be seen among both males and females in the 15-24 year old age group.
- Among women, the highest rates of suicide are seen in those aged 45-64 years and 35-44 years.
- The rates of undetermined deaths have fallen over the last ten years, with a small peak among men in 2011.
- There was variance in suicide rates by geographical region over the period 2001-2013. The suicide rates based on the most recently available year - 2012- were highest in Limerick City, Cork City, Kerry and Wexford.
    - Between 2007 and 2010 there was a 20% increase in the rate of self-harm in Ireland.
    - Since 2010 there has been an 11% decrease in the overall rate of self-harm. However, the rate of self-harm in 2013 was still higher than the pre-recession rate of 2007.
    - Rates of self-harm are higher among women than men.
    - 15-19 year old women and 20-24 year old men have the highest rates of self-harm.
    - In 2013 more than one in five self-harm presentations at A&E departments were due to repeat acts of self-harm. Repeat self-harm is seen as a significant risk factor for suicide.

3

Data Systems for Recording Deaths by Suicide and Self-Harm Presentations in Ireland

3. Data Systems for Recording Deaths By Suicide and Self-harm Presentations in Ireland

3.1 Suicide data-recording systems

The Central Statistics Office (CSO) publishes national mortality data, including data on deaths by suicide. This data is gathered by assigning statistical codes to different causes of death, based on information in official death certificates.

3.1.1 Death certificate issue process

In approximately 80% of cases when someone dies, the cause of death is known, for example, when the deceased was under the care of a doctor for an illness that proved fatal. In these cases the doctor can fill out the Medical Certificate of the Cause of Death in a relatively straightforward manner.

Deaths from sudden, unexplained or violent causes and unnatural deaths must be reported and investigated by the Coroner. This happens in approximately 20% of all cases (5,000 to 6,000 deaths annually). The Coroner is an independent office holder with responsibility under the law for the medico-legal investigation.

The Coroner's inquiry will establish whether death was due to natural or unnatural causes. If death is due to unnatural causes then an inquest must be held by law. An inquest takes place in about 30% of cases referred to a Coroner (some 1,500 to 1,800 cases each year). Suicide verdicts are returned when it has been established beyond a reasonable doubt that a person has taken his/her own life.

The death will be registered by means of a Coroner's Certificate when the inquest is concluded (or adjourned in some cases).

3.1.2 CSO statistical classification - Form 104

The Central Statistics Office normally issues a Form 104[1] to the Gardaí in respect of most inquest cases. The Form 104 collects additional information on the circumstances/location of the death. The information returned on this form is strictly confidential under the Statistics Act 1993. The Garda completing the form provides his/her opinion as to whether the death was an accident, homicide, suicide or undetermined. That information is taken into account when the CSO assigns a statistical code for cause of death.

3.1.3 CSO statistical cause of death coding

If the Coroner's Certificate states that the death was by suicide and provides enough information to assign a statistical cause of death code, it is not necessary for the CSO to issue a Form 104 to the Gardaí. If there is not enough information provided by the Coroner's Certificate then it is necessary for the CSO to issue a Form 104. The Vital Statistics Officer in the CSO examines both the Coroner's Certificate and Form 104, where applicable, to determine the statistical classification of the cause of death.

When assigning a cause of death code, if the Coroner's Certificate does not mention suicide but the Garda states on Form 104 that the death was as a result of intentional self-harm, the statistical cause of death is coded as suicide.

The CSO manually codes and checks all deaths involving an inquest to ensure that the statistical code is correctly assigned.

The classification system used for cause of death is the World Health Organisation's International Classification of Diseases and Related Health Problems (ICD-10).

[1] The Form 104 was first issued in October 1967 and revised in 1998 following a recommendation by the Task Force on Suicide, to improve the statistical classification of deaths by suicide.

3.2 Self-harm statistics

Statistics for deliberate self-harm in Ireland are provided by the National Registry of Deliberate Self-Harm. This data is based on individuals who present with deliberate self-harm (as defined by the Registry) to hospital Emergency Departments within the Republic of Ireland. Data is available on the age, gender and county of residence of those presenting. The method of self-harm and repeat presentations is also noted. Since 2013, data on mental health assessment and referrals for those discharged from the emergency department have been recorded.

3.3 Limitations on current data systems on suicide and self-harm in Ireland

3.3.1 Limitations on current data systems on suicide and self-harm in Ireland

There are four important points to note about the CSO mortality statistics.

Firstly it is not possible to access real-time suicide statistics. Official CSO mortality data - the year of occurrence data - generally takes two years to be released. At the time of writing, 2012 is the most recent year for which year of occurrence data is available.

Year of registration figures are more recent but research conducted by the National Suicide Research Foundation has shown that the year of registration figures published by the CSO are consistently lower than the year of occurrence suicide figures(12). The discrepancy between the year of registration suicide figures and year of occurrence figures varies from +6% to +20%. As a consequence, the year of registration data is not comparable with year of occurrence data, and therefore, it is not possible to use year of registration data as a means of determining if the rate of suicide has increased or decreased from one year to the next. Due to the wide range of potential additional suicide cases, it is also not possible to compare year of registration data for 2 or more years. The NOSP and Government use the year of occurrence data only.

Second, deaths by suicide are included in the category of deaths by external causes, along with deaths by accident, homicide and undetermined deaths. There is a likelihood that a proportion of deaths

classified as undetermined and other external causes of death may be deaths by suicide. However, the exact proportion of probable cases of suicide is not yet known, and it is currently not possible to state whether this proportion is constant over time.

Third, the absolute number of deaths by suicide is relatively small each year, statistically speaking. Therefore, it is more appropriate to report the rates per 100,000 population, rather than the absolute numbers, so that changes in the population data are taken into account and can be accurately compared on a year-by-year basis. Once the data is broken down by categories, such as gender and age group, the numbers become even smaller. In order to interpret the data in a meaningful way, we combined data across a number of years, in order to determine true changes in trends.

Finally, in the official CSO data, information on the characteristics of people who die by suicide is mostly limited to demographic information. Data on the broader characteristics and history of people who die by suicide and their exposure to known risk factors, would paint a more complete picture and provide more nuanced evidence on which to base targeted interventions.

3.3.2 Limitations on current data systems on self-harm in Ireland

The WHO recommends that governments should improve national surveillance and monitoring of suicide and self-harm. Having accurate data and being able to access real-time data are fundamental requirements for national suicide preventions strategies (13). Similarly, the Annual Report of the National Registry of Deliberate Self-Harm and the Second Report of the Suicide Support and Information System underline the importance of real-time information systems for self-harm and suicide, so that health services and communities can more quickly identify changes in risk factors and clusters of self-harm or suicide and plan services and appropriate responses accordingly (6, 7). Whilst the NRDSH has complete coverage of all presentations to hospital emergency departments in Ireland, it does not capture cases of self-harm that come to primary care or those that do not come to services at all.

4

Risk and Protective Factors for Suicide

4. Risk and Protective Factors for Suicide

4.1 Introduction

Suicide prevention is defined in *Reach Out* as the practice of identifying and reducing the impact of risk factors associated with suicidal behaviour and identifying and strengthening factors that protect against people engaging in suicidal behaviour. According to the WHO it is important to address multiple risk factors.

The WHO report, *Public Health Action for the Prevention of Suicide: A Framework* (13), highlights the importance of identifying and addressing the underlying causes of suicide and protective factors. The WHO identifies the following as some of the key risk factors for suicide:

> Mental and physical illness, alcohol or drug abuse, chronic illness, acute emotional distress, violence, a sudden and major change in an individual's life, such as loss of employment, separation from a partner, or other adverse events, or, in many cases, a combination of these factors. While mental health problems play a role which varies across different contexts, other factors, such as cultural and socio-economic status, are also particularly influential (13)

The WHO also stresses the need to take account of the way different factors affect different demographic and population groups, with an emphasis on the most vulnerable who are in the greatest need of suicide prevention efforts. Addressing the different risk factors for different sections of the population means devising prevention strategies at different levels and targeted to specific needs. Effective interventions are likely to include prevention strategies at the general population level, prevention strategies for vulnerable sub-populations at risk and prevention strategies at the individual level (13).

Table 8. Individual, socio-cultural and situational risk factors (13)

Individual	Socio-cultural	Situational
• Previous suicide attempt • Mental disorder • Alcohol or drug abuse • Hopelessness • Sense of isolation • Lack of social support • Aggressive tendencies • Impulsivity • History of trauma or abuse • Acute emotional distress • Major physical or chronic illnesses and chronic pain • Family history of suicide • Neurobiological factors	• Stigma associated with help-seeking behaviour • Barriers to accessing health care, mental health and substance abuse treatment • Certain cultural and religious beliefs (e.g. the belief that suicide is a noble resolution of a personal dilemma) • Exposure to suicidal behaviours, e.g. through the media, and influence of others who have died by suicide	• Job and financial losses • Relational or social losses • Easy access to lethal means • Local clusters of suicide that have a contagious influence • Stressful life events

Many international suicide prevention strategies, including *Reach Out*, have adopted multi-level suicide prevention strategies, as recommended by the WHO. These combine broad population approaches with complementary targeted prevention for certain population groups.

4.2 Risk and protective factors within the Irish context

It is clear that effective suicide prevention strategies must be rooted in robust data about the risk and protective factors affecting particular population groups. In order to inform the development of the new strategy in this regard, research examining the risk and protective factors associated with suicide and self-harm in Ireland was examined, to complement the international evidence.

Suicide is a significant public health problem. The reviewed studies were conducted to address a variety of aims, including to examine risk factors for repetition of self-harm, factors associated with various methods of self-harm and high risk groups for self-harm and suicide.

Risk and protective factors differ for adolescents and adults and for other demographic and clinical subgroups.

The information for this section was collated from three primary pieces of research examining the risk factors associated with suicide in Ireland: The 'Suicide Support and Information System (SSIS) Study' (6, 14) and 'Suicide in Ireland' (15). Data about the protective and risk factors for young people was taken from the 'My World Survey' (10). Information on risk factors for self-harm was obtained from the National Registry of Deliberate Self-Harm.

Suicide Support and Information System (SSIS) study (6, 14): The SSIS study is a pilot study that ran in County Cork from September 2008 to March 2011. The study captured information on risk factors associated with suicide and deaths classified as open verdicts by means of interviews with families bereaved by suicide and a questionnaire issued to healthcare professionals. The SSIS gives a more complete picture than the CSO figures, by complementing official cause of death information with data about possible risk factors, including history of non-fatal suicidal behaviour, psychiatric history, physical health, alcohol and drug abuse, treatment history, history of physical maltreatment and/or sexual abuse, family and personal history, stressful and traumatic life events and social network. The data involved 307 cases. Data from completed interviews with family informants were available for 70 cases. 64 healthcare professionals completed semi-structured questionnaires.

Suicide in Ireland (15): Suicide in Ireland is a five-project study, including findings from interviews with 107 families bereaved by suicide between 2003 and 2008. Data was gathered on a range of factors such as mental illness, alcohol, substance abuse, co-morbidity, suicidality, psychosocial and life events, separation and loss and interface with statutory services.

My World Survey (10): The My World Survey is a youth mental health study, which mapped the mental health experience of over 14,000 adolescents and young adults in Ireland aged between 12 and 25.

4.3 Risk factors associated with suicide and attempted suicide among Irish adults

The Suicide Support Information System (SSIS) was designed to facilitate access to support for those bereaved, while also obtaining information on risk factors associated with suicides and open verdict death in the Cork region of Ireland. The SSIS has published two reports (6, 14). In both reports, men were overrepresented among those who died by suicide, and men were significantly younger than women. One third of people who died by suicide were unemployed at the time of death (6, 14).

The majority of men who died had worked in either the construction or agricultural sectors. The 2013 figures showed that nearly two-thirds of suicide cases had a history of self-harm. The rates of those engaging in self-harm less than a day prior to suicide were similar comparing the outcomes of the 2012 and 2013 report, at 12% and 10.5% respectively. Nearly two-thirds of cases had experienced suicidal behaviour (fatal and/or non-fatal) by a family member or friend. Substance misuse was present in half of the cases in the year prior to the death, as reported in the 2012 report (14).

In the year prior to death, nearly half of the deceased had experienced loneliness over a long period of time (46.6%). Problems in making contact with others were reported for 18.3% and 18.0% had lost a close family member or close friend to death. Psychological abuse by a family member or friend and physical abuse by parent(s) or carer(s) in childhood and early adolescence were reported for 16.4% and 15.8% respectively (6).

Ill health and health problems have been identified as risk factors associated with suicide from three studies within the Irish context (16-18).

Several studies have considered the effect of socio-economic and living area factors associated with increased risk of suicidal behaviour. There was a strong relationship between household deprivation and risk of suicide, while socially fragmented and deprived areas had increased rates of self-harm (16, 19). Two studies found that those living in urban areas had higher rates of self-harm compared to those in rural areas (19, 20).

Psychiatric diagnoses, including depression, schizophrenia, psychoactive substance use disorders and anti-social, borderline, avoidant and dependant personality disorders were reported by three studies as risk factors for suicidal behaviour within the Irish context (17, 21, 22).

4.3.1 Suicide risk factors for specific adult population groups

The WHO stresses the need to take account of the way different factors affect different population groups (13). In-depth investigation of the SSIS data on the 307 cases of suicide and probable suicides in Ireland revealed an interplay of different risk factors and identified specific risk factors that had a particular influence on distinct demographic and clinical subgroups.

i. Men and women

Among men who had died by suicide, the majority were single (57%), and nearly half had been working in the construction/production sector (48.6%). In contrast, the majority of women were married/cohabiting (46.7%) and a relatively high proportion had been working in the healthcare sector (26.5%). More women than men had a history of non-fatal self-harm (44.3% vs. 24.0%), and more women than men had received a diagnosis of depression (39.3% vs. 24.8%) (6).

Even though hanging was the most common method of suicide among both genders, more women than men had drugs in their system according to their toxicology results at time of death (53.4% vs. 30.0%). However, a higher proportion of men than women had alcohol in their system, according to their toxicology results (6).

ii. Men under the age of 40

Specific risk factors associated with suicide among men less than 40 years of age were unemployment (39.5%), drug abuse (29.4%) and history of non-fatal self-harm (31.3%) (6).

iii. Men over the age of 40

Risk factors more strongly associated with suicide among men aged over 40 years included history of alcohol misuse (76.5%), physical illness (38.3%) and diagnosis of depression (31.5%). At time of death younger men more often had opiates and benzodiazepines in their toxicology (62% and 58% respectively) compared to men aged over 40 (18.2% and 38.6% respectively). Those aged over 40 years more often had used antidepressants (45.5%) (6).

iv. Unemployed people

Among people who had died by suicide and who were unemployed at the time of death a higher proportion had worked in the construction/ production sector compared to those who were employed (66.7% vs. 38.4%). Among those who were unemployed, a higher proportion had a history of non-fatal self-harm than those employed (41.9% vs. 17.5%) (6)

Substance misuse was more common among those who died by suicide and were unemployed (51.6%) compared to those employed (18.4%). Among those who were unemployed, a higher proportion had been in contact with their GP for psychological reasons in the year prior to death (23.5%) compared to the employed (15.0%) (6).

v. People with a history of self-harm

A higher proportion of people with a self-harm history took their life by hanging compared to those without such history (74% vs. 65.2%). Of those with a self-harm history, 72.1% had drugs in their system at time of death compared to 47.8% without. Two-thirds of those with a self-harm history (66.3%) had received a diagnosis of depression compared to 43.5% of those without. Alcohol was a factor and/or drug abuse was also higher among those with a self-harm history (50.0%) than those without (34.8%) (6).

vi. People diagnosed with depression

A higher proportion of people diagnosed with depression had died by suicide. A higher proportion of those with depression who died had a history of non-fatal self-harm and substance misuse. Among people with depression who died by suicide, a higher proportion had received outpatient (44.7%) and inpatient psychiatric treatment (34.1%) compared to those without depression (34.0% and 24.5% respectively (6).

4.3.2 Risk factors for suicide among marginalised groups in Ireland

There is a dearth of information about rates of suicide among marginalised groups in Ireland. Obtaining information on suicidal behaviour and identifying how risk factors interplay for marginalised groups is essential to allow targeted interventions to be planned. This is especially important as in some marginalised groups, such as the Traveller community, there is a particularly high rate of suicide.

i. The Traveller community

The *All Ireland Traveller Study* (AITHS)(23) showed that health issues in the Traveller community were far more troubling than for settled people. This study did not specifically investigate suicide risk factors or the histories of those who had died by suicide to determine likely risk factors; however, the study found that there was a high rate of mental health illness and suicide within the community, with suicide the cause of 11% of all Traveller deaths. The suicide rate for Traveller women was 6 times higher than settled women and 7 times higher for Traveller men. Suicide was most common in young Traveller men aged 15-25.

- 62.7% of Traveller women said their mental health was not good enough for one or more days in the last 30 days.
- 59.4% of Traveller men said that their mental health was not good for one or more days in the last 30 days.
- 56% of Travellers said that poor physical and mental health restricted their normal daily activities, compared to only 24% of the population from lower socioeconomic groups.

ii. LGBT people

The aim of the LGBT lives study (24) was to identify and provide responses to the issue of suicide among the lesbian, gay, bisexual and transgender population in Ireland, with a special emphasis on young people. The study clearly identified that experiences of homophobic bullying, violence, invisibility and alienation from family and friends are all linked to increased mental health risk and suicidality among LGBT people in Ireland. While the majority of people in the study

demonstrated considerable resilience, a significant number of respondents reported a worrying level of psychological distress. The time period from when young people first realised they were LGBT to when they came out was a time when they were likely to commence self-harming or have attempted to take their own life. This period of vulnerability also coincided with participants' school-going years and their negotiation of early adulthood – a time of critical social and emotional development.

iii. Survivors of institutional child sex abuse

A qualitative study undertaken by the NSRF in 2007 and funded by the NOSP found that alcohol and/or drug abuse and social isolation were major factors associated with suicidal behaviour among survivors of institutional child sexual abuse. A wide range of other, less frequently reported mental health difficulties included inadequate coping skills, impulsive behaviour, Post Traumatic Stress Disorder (PTSD), anti-climax following attendance at the Redress Board and depression. Relationships, children and education were major protective factors identified by the specialist support services. Other less frequently reported protective factors included support from survivor groups, being employed and receiving counselling (25).

iv. Men living in rural communities

A qualitative study entitled *Pain and Distress in Rural Ireland* conducted in-depth interviews with 26 men who were admitted to hospitals or psychiatric units following suicide attempts or serious self-harming episodes (26). The men were aged 19-75 years and many came from lower socio-economic groups and half were unemployed. Most were single or separated. While the sample is small, the study gives an in-depth understanding to suicide attempts among a male cohort living in rural Ireland. Some 80% had a history of contact with the health services for psychological problems. Alcohol was a key factor in suicide attempts among study participants, with one-third of the men having a history of alcohol dependency. The men in the study were reluctant to speak with their primary care physician about their mental health problems because of concerns about confidentiality and the stigma attached to men seeking help. In addition, the study found that the stress associated with the farming profession was a risk factor for their well-being.

v. Other marginalised groups

There have been no large-scale national studies completed among asylum seekers or women experiencing abuse or violence in Ireland. Studies focusing on the consequences of child sexual abuse in general have revealed consistent evidence of an association with adult suicidal behaviour, in particular attempted suicide, as well as suicide ideation.

4.4 Risk factors for suicide among young people in Ireland

Information on young people who have died by suicide in Ireland can be obtained from the 'Suicide in Ireland 2003-2008' study (15), which examined 104 cases of suicide. While acknowledging the small sample in the study, the findings do provide an insight into the risk factors for suicide among young people in Ireland. Within the sample, 56 of the people who died by suicide were aged 25 years or less and 70% had been exposed to a suicide death three months prior to their death. The study identified traumatic personal factors such as assaults and acute inter-personal conflict including relationship break-up and family conflict as well as conflict with statutory agencies such as justice, education and health as risk factors for the adolescents (n=14) who had died by suicide in the study. In addition, enduring psychiatric, psychological and psychosocial problems were identified as risk factors for suicide within the young people in the study (15). Three studies have shown that adolescents with psychotic symptoms have a greatly increased risk for suicidal behaviour, so this must be an important consideration for clinicians (27, 28).

Worries about sexual orientation, frequent alcohol consumption, illicit drug use, anxiety, negative life events, relationship problems with boyfriend/girlfriend and self-harm thoughts are further risk factors for self-harm and suicide among adolescents (29, 30). Emotion-oriented coping (use of alcohol, self-blame, anger, withdrawal) is also a risk factor (11).

4.5 Risk factors for self-harm

4.5.1 Risk factors for repeated self-harm in adults

Females are more likely than males to present with self-harm to hospital departments compared to males. Factors associated with

future repetition of self-harm include female gender, homelessness, living in a city, being an inpatient, presenting on a weekday and combining self-harm methods (31). Evidence also indicates that those presenting with self-cutting are more likely to repeat self-harm in the future (6, 31). Young to middle adulthood has been identified as being especially associated with repeat self-cutting (6). The risk of repetition of a self-harm episode increases significantly with increasing numbers of previous self-harm presentations (32). Therefore, past history of self-harm can be seen as a predictor or risk factor for future occurrences.

4.5.2 Risk factors associated with self-harm among adolescents

Based on the *My World Survey* among adolescents and young adults aged between 12-25 years of age, gender appeared to be both a risk and protective factor for self-harm. Males engaged more frequently in risk-taking behaviour, including excessive alcohol consumption and substance misuse compared to females, yet males had higher levels of self-esteem than females (10). It has been reported that girls are three times more likely to harm themselves compared to boys (33).

Bullying and problems coping with schoolwork have been identified as a risk factor for self-harm among young people by several studies (29, 30). Almost 42% of adolescents responding to the *My World Survey* reported that they had been bullied at some point in their lives and were more likely to describe symptoms of distress that fell outside of the normal range (10). This highlights the need to address specific interventions to target bullying in schools. Similarly, adolescents exposed to the suicidal behaviour of a friend or family member have been shown to be 8 times more likely to report own self-harm (11). Predictors of self-harm in adolescents include not living with mother, not living with father, not born in Ireland, mother not born in Ireland and father not born in Ireland (27). Adolescents who engaged in self-harm also had substantially higher levels of anxiety, depression and impulsivity and lower self-esteem than those who do not engage in self-harm (11).

It was found that experiencing serious problems and the absence of a person that is always available (for example family member, friend, professional) was associated with an increased likelihood of self-harm (34).

4.6 Protective factors against self-harm and suicide in Ireland

4.6.1 Adults

There is a lack of detailed information on the protective factors against suicide and self-harm within the Irish population and further research will need to be undertaken in this area. Research in Ireland has found that employment is a protective factor against suicide. However, employment appears to be a stronger protective factor for men (8). Cohabiting and living in urban areas also appear to be protective factors (9).

4.6.2 Adolescents

More evidence is available on the protective factors for positive mental health, self-harm and suicide for young people. The My World Survey has found that support from family and friends appears to be a protective factor for adolescent mental health (10). The availability of 'One Good Adult' – a consistent and supportive adult presence on whom a young person could rely – was key to their mental wellbeing.

Problem-oriented coping, including seeking support and reflecting on past experiences, has been associated with positive mental health (11).

4.7 Limitations of the data on risk and protective factors for suicide prevention

The data does shows consistency in relation to a number of risk factors associated with suicide, such as alcohol and drug abuse, history of mental illness, relationship problems, unemployment, history of deliberate self-harm and traumatic or adverse life events. Young men aged 15-39 years and middle-aged women (45-55 years) consistently show an increased risk of suicide (6, 15).

However, information on specific patterns and subgroups is sparse in Ireland. What is more, the interplay of multiple risk factors at the individual, social and situational level is not fully understood.

In order to develop targeted interventions more research is needed to develop risk profiles for individual and high-risk subgroups, taking into account the effect of broader social, cultural and economic factors on suicide and self-harm behaviours.

Table 9. Summary of main points on risk and protective factors for suicide and self-harm

- The WHO's *Public Health Action for the Prevention of Suicide: A Framework* provides an overarching research and policy context from which to address the underlying and multiple causes of suicide.
- Awareness of risk and protective factors is increasingly important in suicide prevention and results in multiple interaction points ranging from individual risk factors to socio-cultural and situational risk factors.
- International research has identified common risk factors at individual, socio-cultural and situational levels:
  - Individual level risk factors include previous suicide attempt, mental health problem particularly depression, disorder, substance misuse, lack of social support, impulsivity, history of trauma, acute emotional distress, major physical illnesses and chronic pain, family history of suicide and neurobiological factors.
  - Socio-cultural risk factors include stigma associated with help-seeking behaviour, barriers to accessing healthcare, mental health and substance abuse treatment, exposure to suicidal behaviours via the media and by others.
  - Situational risk factors include job and financial losses, relational or social losses, easy access to lethal means, local clusters of suicide and stressful life events.
- Compared to research into risk factors associated with suicide in Ireland and internationally, only few studies have addressed protective factors for suicide and how risk factors interplay to elevate risk for suicide.
- Protective factors for suicide and deliberate self-harm in Ireland include marriage/cohabitation, employment, and living in an urban area.
- Recent data from the SSIS confirms that men were overrepresented in those who died by suicide (approximately 4:1); were significantly younger than women; one in three was unemployed; and approximately half had worked in either the construction or agricultural sectors.

Table 9. continued on pg. 42

- Other characteristics of those who died by suicide included having a history of self-harm, having experience of suicidal behaviour by a family member or friend, and having a history of alcohol or substance abuse.
- Women were more likely than men to have had a history of non-fatal self-harm and to have had a diagnosis of depression.
- Particular patterns and trends were also apparent (for men and women) when further analysis was conducted into factors such as employment status, history of self-harm, use of GP services in the year prior to suicide, means of suicide, alcohol and/or drug abuse and history of depression. This underlines the complex and intersecting nature of risk factors for suicide.
- Factors associated with future repetition of self-harm include female gender, homelessness, living in a city, being an inpatient, presenting on a weekday and combining self-harm methods.
- Bullying has been identified as a risk factor for self-harm for young people.
- Adolescents who engaged in self-harm also had substantially higher levels of anxiety, depression and impulsivity and lower self-esteem than those who did not engage in self-harm.
- Problem-oriented coping, seeking support and reflecting on past experiences were protective factors for self-harm.
    - For teens living with both parents was also a protective factor.

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- There have been no large-scale national studies completed among asylum seekers or women experiencing abuse or violence in Ireland.
- Limitations of CSO data mean that a breakdown of who died by suicide in each of the known marginal groups is not available.
- Research into risk and protective factors associated with suicide among young people, in particular adolescents and young adults, is limited in Ireland.

5

Mental and Physical Health Outcomes Associated with Suicide Bereavement

5. Mental and Physical Health Outcomes Associated With Suicide Bereavement

5.1 Introduction

The WHO identifies family members of people who die by suicide as being at risk of suicide (1). There is a paucity of research into the needs of people bereaved by suicide in Ireland. Seven studies were identified, mostly retrospective studies using qualitative research methods. In Ireland, there is clearly a lack of large-scale prospective studies among those bereaved by suicide.

The long-term negative mental and physical health implications of bereavement by suicide underline the need for healthcare professionals to adopt a pro-active approach towards assessing the mental and physical health of suicide survivors, and subsequent referral to appropriate services.

5.2 Grief reactions and mental health after suicide bereavement

A systematic review of 41 international studies investigated the grief reactions and mental health among people bereaved by suicide compared with other modes of death. Feelings of rejection, self-blame, stigma and need to conceal the circumstances of the death were significantly higher among people bereaved by suicide compared to other bereaved groups. Whilst there are a number of grief responses common to all bereavements, anger at the deceased for selecting death over life and feeling abandoned were identified as responses unique for those bereaved by suicide. Risk of separation distress, cognitive, emotional and behavioural symptoms and impairment in normal functioning are also associated with bereavement by suicide (35).

5.2.1 Complicated grief

A systematic review of international literature identified that suicide survivors are at an increased risk of complicated grief. Complicated grief is an intense and long-lasting form of grief that takes over a person's life. Prolonged grief is characterised by significant separation distress symptoms 6 months post loss and a range of cognitive behavioural symptoms resulting in significant impairment in social, occupational or other areas of functioning.

Other risk factors for complicated grief include insecure attachment styles, a history of child abuse and separation in childhood (36).

While there is a lack of methodologically robust studies on the prevalence of complicated grief (37), a systematic review suggests that 10-20% of the population encounter complicated grief and are at an increased risk of developing unfavourable health outcomes (36). Research has shown complicated grief to be distinct from depression, anxiety and PTSD. However, these disorders may co-occur (38, 39). Available research in Ireland conducted with persons who had been bereaved by suicide shows that prolonged grief is significantly associated with increased risk of recurrent sleep difficulties, increased levels of depression, long-term symptoms of PTSD, and recurrent suicidal ideation, in particular among men. In addition, frequently reported physical health outcomes have been reported including cancer, cardiac and respiratory problems (40).

5.3 Services and interventions for people bereaved by suicide

Postvention services include counselling, telephone helplines and support groups. In Ireland, there is limited evidence about the effectiveness of the different support models and interventions available for people bereaved by suicide in Ireland; few evaluations have been conducted of the effectiveness of existing therapeutic approaches in terms of their short-term and long-term impact on mental and physical health outcomes.

In an Australian study, postvention services, including 24-hour crisis response telephone lines manned by professional crisis response teams and offering face-to-face outreach and referrals to other community services, were shown to be effective in improving outcomes for people bereaved by suicide in Australia (41). Partaking in suicide-bereavement research has also been shown to be helpful for those bereaved by suicide, as the proactive contact element was welcomed by the bereaved. They also felt that answering questions regarding their loved one allowed them to deal with the emotions surrounding the bereavement (42).

Table 10. Summary of main points on mental and physical health outcomes associated with suicide bereavement

- Research into the needs of people bereaved by suicide in Ireland is limited and there is a lack of large-scale prospective studies among those bereaved by suicide.
- People bereaved by suicide and particularly men are at greater risk of sleep difficulties, depression, PTSD, suicidal ideation, physical and mental illness, and complicated grief. In addition, physical health problems, including cancer, cardiac and respiratory problems, have frequently been reported. Risk of separation distress, cognitive, emotional and behavioural symptoms and significant impairment in social, occupational or other important areas of functioning are also associated with bereavement by suicide.
- Feelings of rejection, self-blame, stigma and need to conceal the circumstances of the death were significantly higher among people bereaved by suicide.
- Anger at the deceased for selecting death over life and feeling abandoned were identified as responses unique for those bereaved by suicide.
- A proactive approach towards people bereaved by suicide is associated with a higher uptake of bereavement support compared to those who are not proactively approached.
- Prolonged grief is characterised by significant separation distress symptoms 6 months post loss and a range of cognitive behavioural symptoms resulting in significant impairment in social, occupational or other areas of functioning.
- Internationally, there is limited evidence about effective services and interventions for people bereaved by suicide.
- In Ireland, there is limited evidence about the effectiveness of the different support models and interventions available for people bereaved by suicide in Ireland.
- Participating in suicide-bereavement research has also been shown to be helpful for those bereaved by suicide.

6

Evaluation of Suicide Prevention and Support Interventions

6. Evaluation of Suicide Prevention and Support Interventions

One of the issues identified in international policy reviews and research is that many suicide prevention strategies lack substantive evidence for the effectiveness of different interventions or the synergies between population and high-risk interventions. This is inevitable given the difficulties in evaluating the impact of multi-layered interventions (1). For example, research into the effectiveness of suicide prevention programmes in Finland, Norway, Australia and Sweden highlighted that even where evidence of reduced suicide rates exists after the implementation of national suicide prevention strategies, it is not always possible to determine the explicit influence of the strategies, as it is hard to control for other broader contextual or societal factors that may be at play (43).

In its 2014 report, *Preventing Suicide: A Global Imperative (1)*, the WHO has recommended that the components of suicide prevention strategies should be evaluated. The WHO report recognises the challenges in evaluating suicide prevention interventions but maintains that evaluation is essential to enable ongoing improvement, support accountability and ensure that resources are targeted to the most effective interventions. The WHO also recommends that the findings and lessons learned should be disseminated to a wide group of stakeholders, while also acknowledging that stakeholders may have limited knowledge on how to change the way they work to align with evidence.

Many other studies that have reviewed suicide prevention policies and strategies support this view and point to the need for more systematic evaluation and review of suicide prevention measures, including the use of multidisciplinary and integrated approaches to assess impact across different universal, selective and indicated interventions.

In an Irish context, this points to the need for careful evaluation of interventions over time, and for robust evidence to inform policy decisions. Available evidence reveals important implications for policy in driving effective service provision, for example, in relation to the specialist services that provide long-term contact following discharge, in supporting social support networks and in providing intensive individualised therapeutic services.

7

The Way Forward: Formulating Recommendations for Ireland's New Suicide Prevention Framework

7. The Way Forward: Formulating Recommendations For Ireland's New Suicide Prevention Framework

In formulating its recommendations, the Research Advisory Group has reviewed the key findings from international and national research evidence and statistical data; these are presented above. The Group also considered the research-based submissions from a public consultation process on the framework development and from a review of the current strategy, *Reach Out*. An identification of areas where research evidence is lacking also informed the development of the recommendations.

7.1 Identified research gaps in relation to suicide in Ireland

The following research areas are under-developed in the Irish context, and thus have been identified as priorities for the new framework:

- The outcomes of universal, targeted and indicated approaches in suicide prevention funded under the framework.
- Knowledge on suicide behaviour and risk and protective factors for population-specific target groups, e.g. young people, marginalised groups in society.
- The means by which people die by suicide, so as to develop tailored suicide prevention interventions within the Irish context.
- The impact of suicide bereavement services and post-vention responses on suicide.
- Real-time monitoring of suicide, with a focus on identifying emerging suicide clusters, particularly among young people. Examine how clusters of risk factors interplay together to increase risk.
- Focus on the protective factors for mental health and against suicide and self-harm and how these can be ameliorated within prevention programmes.

7.2 Recommendations relating to research from the WHO Report 2014: Preventing suicide: A global imperative (1).

A recent WHO Report 2014: *Preventing suicide: A global imperative* represents a global knowledge base on suicide and suicide attempts to guide governments, policy-makers and relevant stakeholders. The report proposes practical guidance on strategic actions and evidence-based interventions that governments can take and as such was a valuable resource for the Research Advisory Group.

With regard to research and data-collection in suicide prevention work, the report makes the following comments:

- There is a need to increase the quality and timeliness of national data on suicide and suicide attempts.
- Data collection systems should be integrated with the purpose of identifying emerging trends for suicide within vulnerable groups.
- Research undertaken needs to have a focus on quality improvement to point to where services and agencies can improve their response to suicide.
- Suicide prevention strategies should include outcome-oriented plans and systems for data-gathering and feedback to facilitate evaluation and ongoing improvement.
- Outcomes for suicide prevention strategies can be measured and these outcomes can be divided into short-term, intermediate and long-term outcomes. Outcomes that can be measured as part of the evaluation of a national strategy include:
    - Number of suicides, suicide attempts and non-fatal self-harm.
    - Numbers trained or influenced by activities within the strategy.
    - Hours of accessibility of services.
    - Numbers treated by interventions.
    - Measures reflecting a decrease in perceived stigmas regarding help-seeking.
    - Improvement in the provision of mental health services.
    - Mental health and wellbeing of the population or connectedness.
    - Measures reflecting cost-effectiveness.

- Reduced rates of hospitalisations due to suicide or suicide attempts.
- Suicide prevention strategies should be evaluated to guide future planning and resource allocation.
- The findings and lessons learned from evaluation should be disseminated to a wide group of stakeholders (1).

7.3 Review of Reach Out

An internal review of *Reach Out* identified the following in relation to suicide prevention research and evaluation in Ireland:

- *Reach Out* did not set an overall target for the reduction of national suicide rates, or an evaluation framework setting out targets / outcomes or timelines relating to delivery of actions. The new framework should attempt to incorporate these elements. There is a need to review the rates of suicide within population groups (e.g. social exclusion) and target groups (e.g. asylum, homeless) for the new framework.
- Consideration should be given to the adaptation of the SSIS for wider-scale application.
- A review should be carried out to examine the need for an audit system examining deaths by suicide within state institutions, similar to the confidential inquiry in the UK.
- The National Registry of Deliberate Self-Harm should continue to be supported and continued use should be made of the learnings from its work.
- The significance of different suicide methods and geographical sites should be established.
- A research strategy should be formulated as part of the new framework, including a dissemination strategy and governance structure.

7.4 Public consultation

As part of its work, the Research Advisory Group examined the public submissions relating to research that were made as part of the public engagement process to develop a new national framework for suicide prevention. Proposed actions related to research were brought to the group for consideration following a distilling of the submissions made for the new framework. The proposed actions included:

- Establish a research office within the coordinating body for the new framework, e.g. NOSP.
- Develop a national research plan.
- Develop a national data repository.
- Co-ordinate funding streams and ring-fence research funding.
- Ensure balance of research evidence between crisis interventions with preventative, long-term 'approaches'. (Acute, Intervention, Post-vention.)
- Review and evaluate the extent of existing suicide bereavement service provision nationwide to inform further development and integration of services addressing the needs of people bereaved by suicide.

The Research Advisory Group also examined the outputs relating to research that emerged from the practice and policy working groups. Recommendations included:

- Further develop and implement standardised systems of audit, investigation and routine reporting (including to the bereaved family) following deaths by suicide of service users in contact with secondary and specialist mental health services. This will be completed in conjunction with the Mental Health Commission.
- Review and evaluate the extent of existing suicide bereavement service provision nationwide to inform further development and integration of services addressing the needs of people bereaved by suicide.

8

Research Recommendations for the New Suicide Prevention Framework

8. Research Recommendations for the New Suicide Prevention Framework

8.1 Guiding principles

In making the recommendations for this report, the Research Advisory Group recognises the significant amount of research that has been undertaken on mental health and suicide prevention across many government and non-government organisations. Some key guiding principles for the research elements for the new framework are as follows:

- Research completed under the new framework needs to build on the existing and developing evidence base for suicide prevention in Ireland and internationally.
- Under the new framework, consideration will need to be given to how funding should be best utilised so as to:
  - Improve surveillance and data collection systems.
  - Inform suicide prevention practice through improved dissemination and evaluation.
  - Implement primary research.
  - Build a governance structure around suicide prevention research in Ireland.
- A national dissemination plan for the outputs of research, such as that funded by the NOSP over the last ten years for the current framework, is required. This plan should be integrated with communications actions for the framework.
- Research funded should be completed to the highest standard possible and be underpinned by sound ethical principles.
- Evaluations need to be practical, feasible, methodologically sound and built into prevention programmes and services.
- Given the population size of Ireland and the numbers of people who die by suicide in Ireland, consideration should be given to commissioning elements of a research programme on an all-island basis and/or in partnership with UK-based research institutes e.g. University of Manchester, Oxford University.
- Research completed under the framework has to be aligned to research actions within other government strategies including 'Vision for Change' (44), 'Healthy Ireland' (45) and in line with WHO policy in this area.

8.2 Research recommendations

Recommendation 1:
National agreed research programme to underpin the new national suicide prevention strategic framework

- There is a need for an overall national agreed research programme to underpin the new national framework, with comprehensive input from multiple stakeholders. This programme will require clear governance and accountability systems. Its objective should be to deliver on agreed national priorities for research under the new framework. The governance structure needs to be closely aligned to the evaluation and monitoring system that will be developed for the framework. The plan needs to clearly focus on improving the capacity to undertake high-quality research in this area.
- A national research advisory group should be established and the membership needs to represent different research disciplines, government agencies, funding bodies, stakeholders with expertise in suicide prevention and mental health and service users.
- The NOSP, as coordinating body for the new framework, may have to build its in-house research function to support the above. The NOSP will need to work with the HSE/Health and Wellbeing Division and other government and non-government agencies in considering same.

Recommendation 2:
Surveillance systems on suicide mortality and morbidity

- Improve, integrate and resource surveillance systems and data collection systems that report on suicides, attempted suicides and self-harm acts.
- Improve the timeliness of reporting of suicide mortality and morbidity data.
- Examine the feasibility of the development of a national system to report on deaths by people who die suicide both within the mental health services and within state institutions.
- Indicators for the outcomes of the framework need to be agreed and aligned to those developed under Healthy Ireland.

- Improve and expand regional and national public health capacity to routinely collect, analyse, report, and use suicide-related data to implement prevention efforts and inform policy decisions.
- Increase the number of nationally representative surveys and other data-collection instruments that include questions on mental health, stigma, suicidal behaviours, related risk factors, and exposure to suicide.

Recommendation 3:
Evaluating interventions funded under the new framework

- Evaluate the impact and effectiveness of the new suicide prevention strategy 2015-2020 in reducing suicide morbidity and mortality.
- Evaluate the effectiveness of suicide prevention interventions and services funded under the framework.
- Examine how suicide prevention efforts are implemented in different services, regions and communities to identify the types of delivery structures that may be most efficient, effective and deliver value for money.
- Enhance the capacity of organisations funded under the new framework to undertake methodologically sound evaluations of interventions and services that aim to reduce suicide.

Recommendation 4:
Using research to inform good practice in suicide prevention

- Improve the shared learning, research expertise and quality of research across all organisations working in the sector.
- Promote the timely dissemination of suicide prevention research findings.
- Develop and support a repository of research resources to help inform practitioners working in the area.
- Planning and delivery of health and social care services should be informed by accessible, timely data.

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