National Suicide Research Foundation

Department of
**Health, Social Services
and Public Safety**
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Sláinte, Seirbhísí Sóisialta
agus Sábháilteachta Poiblí

MÄNNYSTRIE O
Poustie, Resydènter Heisin
an Fowk Siccar

Review of the Evidence Base for
Protect Life – A Shared Vision:
The Northern Ireland
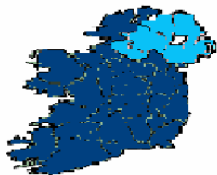# Suicide Prevention Strategy

Final Report

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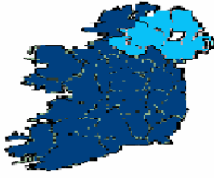T: 00353 (0)214277499
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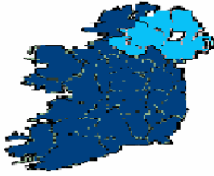
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INTRODUCTION

In October 2006, *'Protect Life – A Shared Vision',* the Northern Ireland Suicide Prevention Strategy and Action Plan (2006-2011) was launched (DHSSPS, 2006). In addition to consultation with a wide range of stakeholders, a review of the evidence in relation to the prevention of suicide and self harm was prepared in order to inform the development of the *Protect Life Strategy* (SHSSB, 2006).

The importance of evidence based suicide prevention programmes has been highlighted in reviews of the worldwide literature evaluating the effectiveness of suicide prevention programmes (Mann et al, 2005; Goldney, 2005).

The main objective of the present review was to update the 2006 review of the evidence base provided for *Protect Life* by reviewing the national and international literature and research evidence published and reported between January 2006 and December 2009.

For each of the actions set out in the *Protect Life* strategy, the available evidence in terms of published and reported research between January 2006 and December 2009 was reviewed taking into consideration the methodological quality of the research. In presenting the outcomes of the review, relevant research outcomes were highlighted and examples were given of best practice, nationally and internationally. In addition, consideration has been given to new priorities for suicide prevention emerging from the available research evidence in recent years.

The report concludes with recommendations based on the updated research and best practice as well as methodological issues that require attention in evaluating suicide prevention programmes.
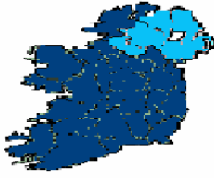
METHODOLOGY

A literature search was conducted accessing all relevant bibliographic databases including PubMed, PsychInfo, ScienceDirect and the Cochrane Database covering the period January 2006 until December 2009. A wide range of search terms relevant to the research areas listed below were used to search the relevant electronic databases. Reference lists of relevant studies and various Google directories were searched to identify any pertinent published or unpublished literature including books and reports.

The following research areas were covered in the literature review:

- Epidemiology of suicide and deliberate self harm in Northern Ireland
- Accuracy of suicide and deliberate self harm statistics
- Risk and protective factors associated with suicide and deliberate self harm
- Suicide and deliberate self harm in young people
- Suicide and deliberate self harm in older adults
- Efficacy of treatment interventions for deliberate self harm patients
- Efficacy of (multifaceted) suicide prevention programmes
- Restricting access to means of suicide and deliberate self harm
- Programmes promoting positive mental health (incl. school based programmes and programmes focusing on the general public)
- Aftercare and follow-up after deliberate self harm
- Responding to suicide
- Efficacy of media guidelines for reporting on suicide
- New at-risk groups for suicide and deliberate self harm
- Risk factors associated with extended suicide (e.g. filicide-suicide and familicide)

Additional research evidence was obtained through relevant international research networks involved in ongoing research, such as the Network for International Collaboration on Evidence in Suicide Prevention (NICE-SP), Child and Adolescent Self Harm in Europe (CASE), the European Alliance Against Depression (EAAD),

Optimising Suicide Prevention Programmes and their Implementation in Europe (OSPI-Europe) and Saving and Empowering Young Lives in Europe (SEYLE).
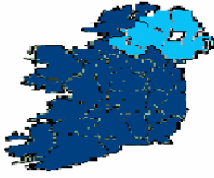
Through the literature search 118 published papers, 12 books and 17 reports were identified.

Based on the literature, the available research evidence for each of the actions of the *Protect Life* strategy was reviewed in terms of the effectiveness of intervention or prevention programmes in reducing suicidal behaviour (fatal/non-fatal) and/or reinforcement of implementing the actions. The available evidence was rated according to three categories:

1. Consistent evidence available (research outcomes consistent across studies)

2. Some evidence available (research outcomes not consistent across studies)

3. Limited research available

In the process of rating the available studies, the methodological quality of the studies was also taken into account. With regard to action areas that received a score 3 it is recommended to prioritise systematic evaluation in order to verify the impact of these actions before considering modification.

Prior to presentation of the results of the review, an update is provided on the extent of the problem of suicide and deliberate self harm in Northern Ireland.

EXTENT OF THE PROBLEM OF SUICIDE AND DELIBERATE SELF HARM IN NORTHERN IRELAND

The *Protect Life* Strategy Report includes a detailed overview of trends in suicide rates in Northern Ireland until 2004. In the present report, an update of suicide rates in Northern Ireland has been provided until 2007 based on 'year of occurrence' figures obtained from the General Register Office (GRO). The GRO publishes two sets of suicide figures: 1) 'year-of-registration': suicide figures that were registered in a certain year, and 2) 'year of occurrence': suicide figures that occurred in a certain year. Fore some years, large differences were found between the year-of-registration and year-of-occurrence suicide figures with the year-of-occurrence suicide figures giving a more accurate picture of the number of suicides that occurred within a certain year. Therefore, it would be recommended to only use the year-of-occurrence suicide figures in evaluating the Protect Life Strategy (see also Section C, p. 39).

Figure 1 shows the suicide rates by gender based on year-of-occurrence data for Northern Ireland for the period 1998-2007. Suicide rates among men were significantly higher than the rates among women, ranging from 12 per 100,000 in 2003 to 18.3 per 100,000 in 2005. Among women, suicide rates ranged from 3 per 100,000 in 1998 and 1999 to 5.5 per 100,000 in 2007. Due to year-to-year fluctuations, it is difficult to determine trends over time. Evaluating the effectiveness of the *Protect Life* Strategy, it would therefore be recommended to use three-year moving averages when the suicide figures for future years become available.

Taking into account the targets set by the *Protect Life* Strategy, to obtain a 10% reduction in the overall suicide rate by 2008, and to reduce the overall suicide rate by a further 5% by 2011, these targets appear to be high when compared to other suicide prevention strategies and taking into account the relatively short implementation period of just over 2 years (October 2006-December 2008) and 5 years (October 2006-December 2011) respectively. Therefore, it would be recommended to review the targets (see also Section C, pp. 48-50).
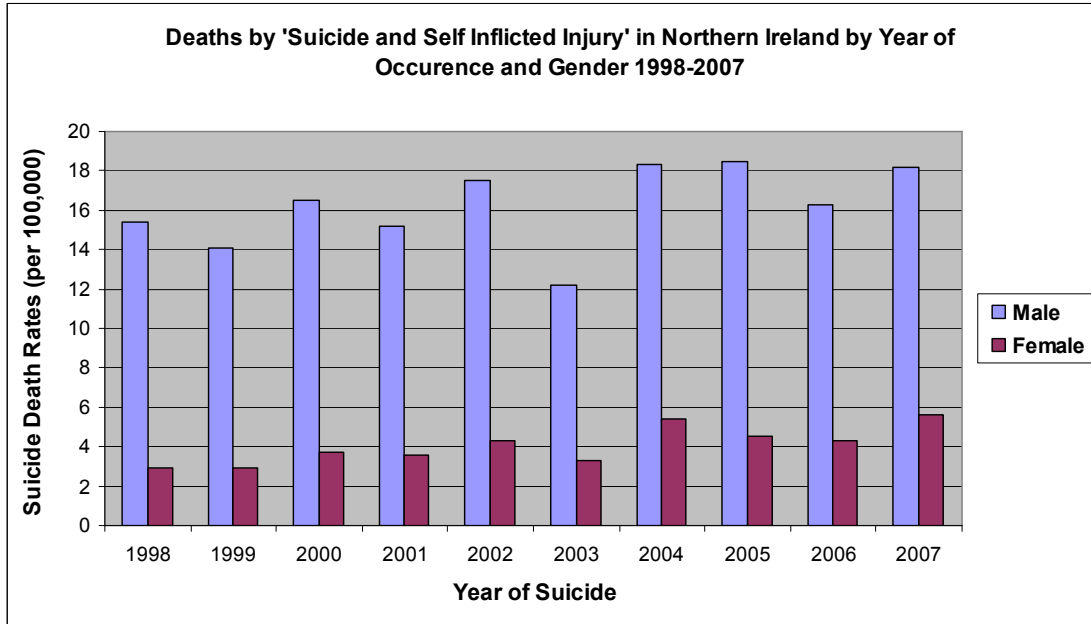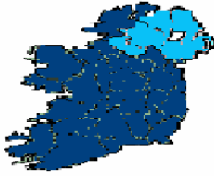
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Figure 1 Deaths by Suicide and Self Inflicted Injury in Northern Ireland by year-of-occurrence and gender, 1998-2007.

UNDETERMINED DEATHS

When considering the targets set by the *Protect Life* Strategy, it is important to take into account trends in the rates of undetermined deaths because of the likelihood of a certain proportion of 'hidden' suicides included among deaths classified as undetermined.

Figure 2 shows the rates of undetermined deaths by gender based on year-of-occurrence data for the period 1997-2007. Except for the year 1999, rates of undetermined deaths were higher among men than the rates for women. Comparing trends for the rates of suicide and undetermined deaths, there appears to be a pattern for most years that when there are is a reduction in suicide rates, there is an increase in rates of undetermined deaths. Based on these findings, it would be recommended to further investigate deaths classified as undetermined (see also Section C, pp. 41-42).
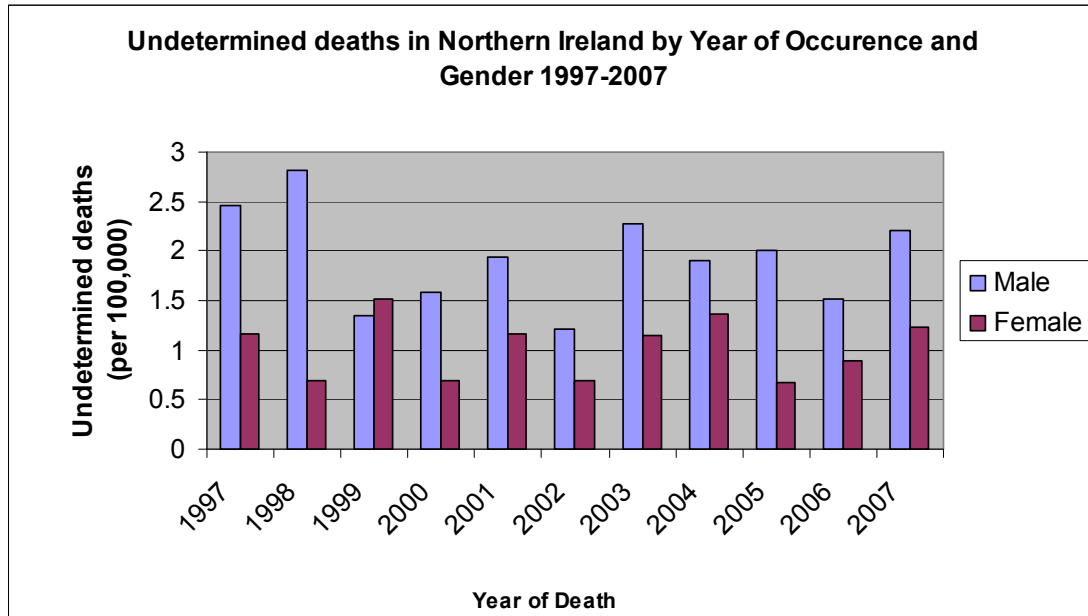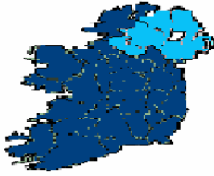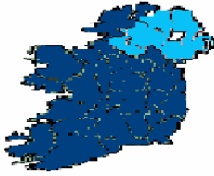
Undetermined deaths in Northern Ireland by Year of Occurence and Gender 1997-2007

Figure 2 Deaths with undetermined intent in Northern Ireland by year-of-occurrence and gender, 1997-2007.

DELIBERATE SELF HARM

The Registry of Deliberate Self harm (DSH) in the Western area was established in 2007 as a pilot project as part of the Protect Life Strategy (Section C, Action 3). The Registry in the Western area is a collaboration with the National Registry of Deliberate Self Harm (NRDSH) in the Republic of Ireland which has been in existence since 2002.

Using the same methodology as the Registry in the Republic of Ireland, the Western Registry extracts and collates data from existing records of self-harm attendances at the three Accident and Emergency (A&E)/Urgent Care departments in the Western area (see also Section C, pp. 44-46).

Based on the 2-year report (2007-2008) of the NI Western Area Registry of Deliberate Self Harm, the average rates of deliberate self harm (person-based, European Age-Standardised) were 408 per 100,000 for women and 339 per 100,000 for men (NI Western Area Registry of Deliberate Self Harm, 2010). These rates are significantly higher compared to the rates reported by the National Registry of

Deliberate Self Harm in the RoI, which are 219 per 100,000 for women and 171 per 100,000 for men (NSRF, 2009).

Comparing the 2007-2008 average person based European age standardised rates of self harm in Derry City Council (Derry CC) to cities in the RoI, Derry CC had the highest rates for both men and women, with higher rates than Limerick City, which has the highest rates in the RoI (Figure 3). The self harm rate for men in Derry CC was between 40-86% higher than the self harm rates for men in four other cities in the RoI (Cork, Dublin, Galway, Waterford). For women in Derry CC, the self harm rate was 65-80% higher than the self harm rates for women in the same four cities in the RoI.
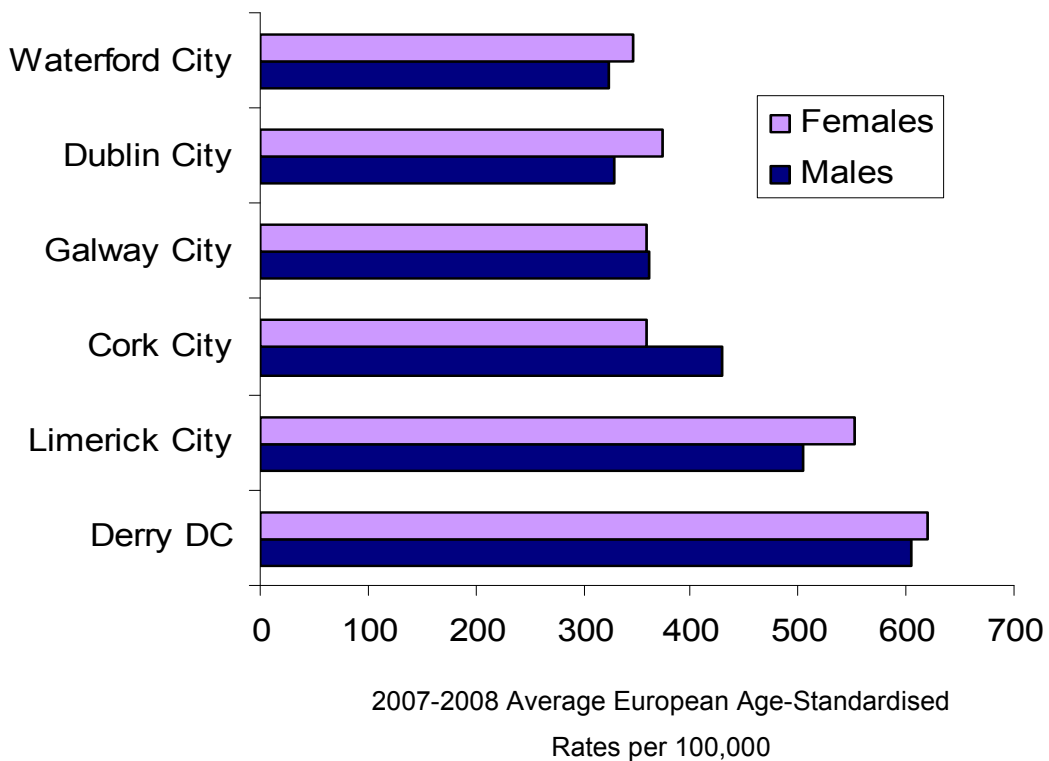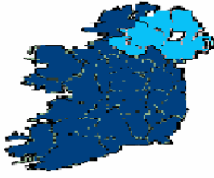

2007-2008 Average European Age-Standardised Rates per 100,000

Figure 3 Person based 2007-2008 average European Age-Standardised Rates of self harm in Derry CC compared to cities in the RoI.
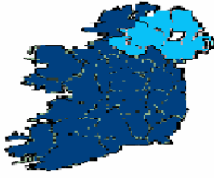
RESULTS

SECTION A – POPULATION APPROACH

Of the 25 actions set out in this section, for 2 actions substantial and consistent research evidence was available, for 12 actions moderate evidence was available, and for 10 actions the available research evidence was limited. One action (action 1) under the action area: *'Police and emergency services'* was given the rating 1, because the structure of the local performance arrangements would indicate that this rating should be a 1 for it to be effective within Northern Ireland.

ACTION AREA: COMMUNITIES

1. To initiate a major public information campaign that aims to de-stigmatise mental health, and promote awareness and understanding of issues relating to suicide and self-harm (2)[1].

Moderate research evidence was available supporting this action. A general public awareness campaign on depression and suicidal behaviour represented one of the four levels of a community based intervention study conducted in Germany, known as the Nuremberg Alliance Against Depression (Hegerl et al, 2006). Although after the two-year intervention no significant changes were observed in people's opinions on depression and attitudes towards suicidal behaviour, a significant (24%) reduction in suicidal acts (fatal and non-fatal) was identified. Optimised awareness campaigns were part of other multi-level suicide prevention programmes that have built on the Nuremberg Alliance Against Depression, such as the European Alliance Against Depression (EAAD, Hegerl et al, 2008) and Optimizing Suicide Prevention Programmes and their Implementation in Europe (OSPI-Europe, Hegerl et al, 2009). However, the evaluations of these interventions are still in progress. A study evaluating the effectiveness of a mental health awareness campaign targeting young people (aged 12-25) in Australia reported significant positive changes on factors related to mental health, such as self-identified depression, help-seeking behaviour and increased awareness of suicide risk (Wright et al, 2006). Another Australian study investigated whether mental health literacy varied as a function of remoteness of residence (Griffiths et al, 2009). Overall, mental health literacy was fairly similar

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[1] The score representing the available research evidence is indicated for each of the actions.
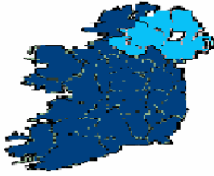
across regions with varying degrees of remoteness. However, the use of alcohol and painkillers (for depression) was more often endorsed by rural residents, whereas those living in major cities more often reported a preference to approach mental health practitioners. An important finding was that rural residents were as aware as those from major cities of a national public depression awareness campaign (*Beyondblue*). In line with previous publications (before 2006) reporting on the positive effects of the *Beyondblue* campaign which started in 2000 and is ongoing, Morgan & Jorm (2007) reported further evidence supporting the positive impact of this campaign on young people (aged 12-25) in Australia. Overall, 44% of young people were aware of *Beyondblue*. However, the awareness was lower among men compared to women and generally increased with age.

In Northern Ireland, a public information campaign, *'Minding your head'* has been widely implemented through TV and radio advertisements, leaflets and posters with different materials for specific age groups (young people, adults and older people) (HPA, 2007).

2. To support and encourage the development of community based suicide prevention initiatives and support mechanisms (2).

There is increasing evidence supporting this action. Nine studies were identified in which community based intervention and prevention programmes were included with the aim to prevent suicidal behaviour (Hegerl et al, 2006; Oyama et al, 2006; Hegerl et al, 2008; Matthieu et al, 2008; Ono et al, 2008; Wyman et al, 2008; Isaac et al, 2009; Tompkins & Witt, 2009; Hegerl et al, 2009). In three studies evaluations were still ongoing (Hegerl et al, 2008; Ono et al, 2008; Hegerl et al, 2009) and there was some inconsistency with regard to the outcomes of the other studies.

Isaac and colleagues conducted a systematic review of studies focusing on the effectiveness of gatekeeper training as a preventative intervention for suicide (Isaac et al, 2009). The studies by Hegerl et al (2006), Matthieu et al (2008) and Wyman et al (2008) were included in this review. The review showed that gatekeeper training has been studied in many populations including clinicians, school staff, military personnel and peer helpers with positive outcomes in terms of improved knowledge, skills and attitudes of trainees towards suicide prevention. Large-scale studies
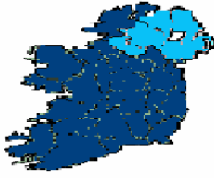
among military personnel and primary care physicians also reported significant reductions in suicidal ideation and suicidal behaviour (fatal and non-fatal). The outcomes of a study by Tompkins & Witt (2009) who evaluated the effectiveness of a gatekeeper training in a college setting were consistent with the review by Isaac et al (2009) in terms of improved knowledge and attitude change. In this study, residence advisers were trained according to the Question, Persuade, Refer (QPR, Quinnet, 2006) method which teaches how to recognise warning signs, question suicidal intent, listen to problems, and refer for help.

In 4 studies, multi-level community based suicide prevention programmes were (or are being) evaluated (Hegerl et al, 2006; Hegerl et al, 2008; Ono et al, 2008; Hegerl et al, 2009). Key elements of the multi-level programmes include public awareness campaigns, training of primary care physicians, training of community facilitators (such as school staff, social workers, counsellors, priests etc.) and interventions for high-risk groups (EAAD: Hegerl et al, 2006; Hegerl et al, 2008). An additional key element as part of the OSPI-Europe study is restricting access to lethal means (Hegerl et al, 2009). Additional elements included in a large multi-level community intervention study in Japan were: building social support networks in the public health system for suicide prevention and mental health promotion; community programmes to facilitate contact and communication, screening of high-risk individuals; aftercare for people bereaved by suicide; suicide prevention measures targeting individuals with mental health disorders including substance/alcohol related disorders and schizophrenia; and suicide prevention measures targeting individuals with work-related problems (Ono et al, 2008). Evaluations of this multi-level community intervention programme are still ongoing.

3. To encourage all statutory public bodies to carry out health impact assessments on their policies, in terms of possible adverse effects on the mental health and well-being of local communities (3)

Limited research evidence was available supporting this action. However, comprehensive documents on health impact assessment guidance addressing health inequalities been provided (IPH, 2006; 2009). In addition, the World Health Organisation has produced an overview of internet resources for health impact assessments (WHO, 2008).

With regard to this action, it would be recommended to prioritise systematic evaluation of the effectiveness of health impact assessments and related interventions in terms of suicide prevention.
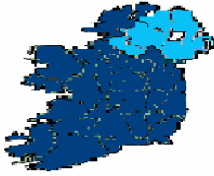
4. To restrict access to means and methods of suicide, including identification of "hotspots", the promotion of safer prescribing, a reduction in the accessibility of certain over the counter drugs, and restriction of access to firearms (1).

In 19 studies identified by the review, various measures to restrict access to lethal means for suicide and deliberate self harm were evaluated in terms of reductions in suicidal behaviour (fatal and non-fatal) (Bateman et al, 2006; Nordentoft et al, 2006; Gorman et al, 2007; Beautrais et al, 2007; Bennewith et al, 2007; Kapusta et al, 2007; Hawton, 2007; Morgan et al, 2007; Nordentoft et al, 2007; Reisch et al, 2007; Ilgen et al, 2008; Sandilands & Bateman, 2008; Beautrais et al, 2009; Hawton et al, 2009a; Hawton et al, 2009b; Klieve et al, 2009; Law et al, 2009; Skegg & Herbison, 2009; Corcoran et al, submitted 2009).

Overall, the outcomes of the available research supported the effectiveness of implementing measures restricting access to lethal means in order to reduce both fatal and non-fatal suicidal behaviour.

Studies in which the effects of barriers on bridges or limited access to bridges which had become so-called 'hotspots' were examined, all showed significant reductions in suicide with no indications for substitution effects (Bennewith et al, 2007; Reisch et al, 2007; Skegg & Herbison, 2009). Remarkably, Beautrais et al (2009) reported a fivefold increase in the number and rate of suicides from a bridge in New Zealand after barriers that had been in place for 60 years were removed, which further underlines the importance of restricting access to means as a suicide prevention strategy.

Studies investigating the impact of the withdrawal of prescription painkiller co-proxamol in the UK and Ireland (distalgesic)

consistently showed significant reductions in suicide and deliberate self harm involving co-proxamol, with little evidence for substitution effects (Hawton et al, 2009; Corcoran et al, submitted 2009).
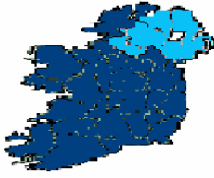
Even though legislation restricting paracetamol pack size initially showed promising results in terms of reduced rates of suicide and deliberate self harm, this was not confirmed by outcomes of a study by Bateman et al (2006) conducted in Scotland. However, in a second Scottish study reduced rates of deliberate self harm were observed immediately following the 1998 legislation restricting the paracetamol pack size, but this effect was not maintained in the long term (Gorman et al, 2007). In this regard it would be recommended to further restrict the paracetamol pack size and restrict the number of outlets where paracetamol can be obtained.

In most studies the impact of restricting access to lethal means was evaluated over a relatively short period. Therefore, it would be recommended to verify the effectiveness including possible substitution effects over a longer period of time.

ACTION AREA: FAMILY

1. To provide families with the opportunity to avail of non-stigmatising practical interventions to help consolidate parenting, coping and life skills (3)

With regard to this action, the available research evidence was limited. However, in terms of the needs identified in two studies (Byrne et al, 2008; Steele et al, 2009), this action should be given priority. Specific needs expressed by parents in the study by Byrne et al (2008) in the Republic of Ireland among parents and carers of children and adolescents who engaged in deliberate self harm included the need for support, the need to obtain information about suicidal behaviour in young people, skills for parenting an adolescent, advice on managing future self harm episodes. An innovative project, 'SPACE' to support parents of children (aged 16 or younger) who have engaged in deliberate self harm is currently being piloted in Children's University Hospital, Temple Street, Dublin. Parents are offered an 8-week programme including supportive and awareness sessions. Preliminary findings show

that following the programme, parents show less psychological distress and increased parental satisfaction (Power et al, 2009).

With regard to this action, it is recommended to prioritise systematic evaluation in order to verify the impact of relevant interventions.

2. To ensure that in times of distress, families have the opportunity to access a local emotional health and well-being support network, including community/voluntary sector provision (2)
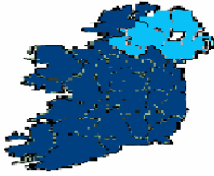
Some evidence has been reported on the effectiveness of access to support networks / facilities for families caring for relatives with mental health problems or when faced with bereavement or other types of distress (Chang & Horrocks, 2006; Feinberg & Kan, 2008; Kirwin & Hamrin, 2005; Pickett-Schenk et al, 2006).

For example, a family-led educational intervention, the so-called *'Journey of Hope'* intervention which was received by 231 family members of adults with mental illness, showed improved psychological well-being among family members and more positive views of their relationships with their relatives (Pickett-Schenk et al, 2006). The Journey of Hope intervention consisted of 8 modules of education on the etiology and treatment of mental illness, problem-solving and communication skills training, and family support. Based on the outcome, it is recommended to make this intervention available through community and voluntary agencies involved in mental health.

Kirwin & Hamrin (2005) provide evidence for positive impact of early prevention support programmes for surviving parents following death in a family and bereaved children in order to decrease the risk of complicated grief and future psychiatric disorders in children.

ACTION AREA: CHILDREN AND YOUNG PEOPLE

1. Promote the inclusion of promoting positive mental health as a key element of the "Healthy Schools" programme and ensure that children and young people are protected from all forms of bullying (2)
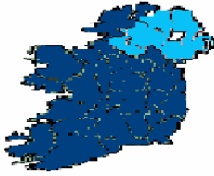
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Some evidence has been reported on the effectiveness positive mental health promotion (Arensman et al, 2009; Buckner et al, 2009; Gaffney et al, 2007; Swartz et al, 2007).

Studies investigating the effectiveness of a school-based brief (3-hour) problem-solving programme, *'Mind Yourself'* for school going adolescents aged 15-17, showed positive changes among those who had received the Mind Yourself programme in terms of improved problem-solving, increased emotional resilience and self esteem, and reduced depressive symptoms (Arensman et al, 2009; Gaffney et al, 2007). A school-based adolescent depression education programme (duration 3 hours) with the aim to increase young people's awareness of depression, to promote help seeking behaviour and to reduce stigma revealed significant positive outcomes (Swartz et al, 2007).

Research evidence shows a relationship between bullying and suicidal behaviour (non-fatal and fatal) (Arsenault et al, 2009; McMahon et al, submitted 2009). However, anti-bullying interventions to date have shown limited success in reducing victimisation. This is partly due to methodological issues, such as the absence of a controlled design in most studies.

Sapouna et al. (2009) examined the effectiveness of a virtual learning intervention, *'FearNot!'* to reduce bullying victimisation in primary school children using a controlled study. The *FearNot!* Programme is designed to enhance coping skills of children who are known to be, or are likely to be, victimised. Children who had received the The *FearNot!* programme, were more likely to escape victimisation compared to those who had not received the programme. According to Rigby & Slee (2008) a number of factors have to be taken into account when developing and implementing interventions to reduce bullying, such as severity of bullying, age of the child or adolescent involved and thoroughness of programme implementation.

2. Raise awareness of and ensure availability and timely access to appropriate intervention services (e.g. Child and Adolescent Mental Health Services, mentoring schemes and other appropriate statutory and voluntary services) (3)
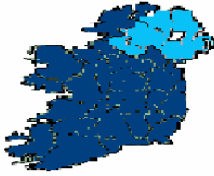
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Limited research evidence was available supporting the effectiveness of this action. However, in terms of the needs identified by recent research findings, this action should be given priority. Based on the 2007 and 2008 findings of the Self Harm Registry in the Western Area, the highest rates of self harm were found among girls in the 15-19 and 20-24 years age group (NI Western Area Registry of Deliberate Self Harm, 2010). These findings indicate that early identification of self harm and suicide risk is a key priority. This is further supported by the outcomes of a large school-based survey among adolescents aged 15-17 years, which showed that the majority (85%) of adolescents who engaged in one or more than one act of self harm had not been in contact with any health care professional (including GP) either before or after the self harm act (Morey et al, 2008).

3. To make suicide awareness and positive mental health & well-being training, including how to deal sensitively with disclosure of self-harm or suicidal behaviour, a priority for teachers, youth workers, etc. (2)

There is increasing evidence for the effectiveness of youth focused training programmes, i.e. gatekeeper training, in terms of attitude change of health care professionals, teachers and community workers and early identification of young people at risk of suicidal behaviour (Hegerl et al, 2006; Hegerl et al, 2008). Training programmes to increase the awareness of depression and suicidal behaviour among a wide range of community facilitators (including teachers, youth workers etc.) are a fundamental element of the European Alliance Against Depression (Hegerl et al, 2006; Hegerl et al, 2008) and will be an important element of a new European study: Optimising Suicide Prevention programmes and their Implementation in Europe (OSPI-Europe) (Hegerl et al, 2009; *www.ospi-europe.com)*. Training programmes to increase awareness of self harm and related mental health difficulties among teaching staff in secondary schools are also incorporated in a new European project: Saving and Empowering Young Lives in Europe (SEYLE; *www.seyle.org)*.

In a study using community-based participatory research to improve the social and academic functioning of children from racial and ethnic minorities, teachers were involved in problem definition and intervention planning (Mulvaney-Day et al, 2006). The findings showed increased awareness of the behavioural and academic needs of minority children.

From the perspective of evaluating the effectiveness of national suicide prevention programmes, these studies underline the importance of taking into account intermediate outcomes, such as increased knowledge and attitude change following awareness training or Gatekeeper programmes, which is reinforced by Hegerl et al, 2008; 2009).

4. Promote a culture of help seeking behaviour, particularly among young people (2)
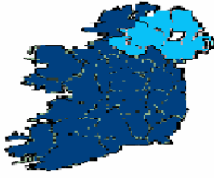
Some evidence was found supporting the effectiveness of a brief problem solving intervention among adolescents, the so-called Mind Yourself programme, in improving help seeking behaviour (Arensman, 2009; Gaffney et al, 2007).

A European study by Ystgaard et al (2008) showed that nearly half (48.4%) of adolescents who had engaged in one or more than one act of deliberate self harm had not received any help following DSH, 32.8% had received help from their social network only (mostly friends) and 18.8% had been in contact with health services. In a Canadian study among young people who had engaged in non-suicidal self harm, nearly half (44%) had not sought any help. These findings underline the need to promote help seeking behaviour among young people at risk of self harm.

A study on adolescents' views on preventing self harm showed that they considered family, friends and school as the main sources of support in preventing suicidal behaviour, and more pertinent than external helping agencies (Fortune et al, 2008). These findings underline the importance of enhanced provision of school-based mental health programmes and increased youth orientation in helping services.

An evaluation of an educational programme for young people in secondary schools in Northern Ireland, 'Mood Matters' showed that the programme had achieved most of its objectives including increased awareness of depression and an increase in help seeking behaviour (Trevor Gill Associates, 2008).

5. Encourage the inclusion of coping and life skills, emotional literacy, and programmes that promote positive mental health in the school curriculum (2)

There is increasing evidence for the effectiveness of school-based programmes on positive mental health in terms of increased emotional resilience, improved problem-solving and self esteem, and reduced levels of depressive symptoms (Arensman, 2009; Gaffney et al, 2007). However, many studies have not included an independent evaluation of the effectiveness of the intervention. A considerable number of studies provide evidence for the need to develop and implement interventions to promote positive mental health (including problem-solving, emotional resilience, self esteem) among adolescents in order to prevent deliberate self harm (Morey et al, 2008; Madge et al, 2008; McMahon et al, 2010; O'Connor et al, 2009).

6. To develop and implement practices, protocols and referral pathways to smooth the transition from youth to adult Health and Social services (3)
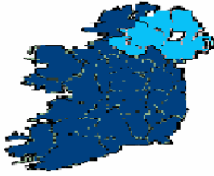
No specific studies were identified regarding this action. It would be recommended to review this action and formulate specific actions in order to facilitate implementation and evaluation.

ACTION AREA: HEALTH AND SOCIAL SERVICES

1. Develop enhanced linkages between the Health and Social Services and the community/voluntary counselling and support network, particularly in relation to transition services and to bridge gaps in service provision (3)

Limited research has been conducted in this area. However, the importance of establishing links between health and community based services has been underlined by the European Alliance Against Depression (Hegerl et al, 2008) and Optimising Suicide Prevention programmes and their Implementation in Europe (OSPI-Europe, Hegerl et al, 2009), and are taken into account as synergistic effects of these multifaceted suicide prevention programmes.

2. To make depression and suicide awareness/prevention training a priority for all frontline staff dealing with people in distress, particularly for GPs, Primary Care and A&E staff in the HSS (2)
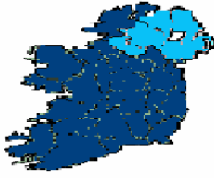
There is increasing evidence supporting the effectiveness of depression and suicide awareness and prevention training for health care professionals including GPs, A&E nurses, Public Health nurses etc. in terms increased knowledge and attitude changes, also referred to as intermediate outcomes (Isaac et al, 2009; Lamb et al, 2006; Berlim et al, 2007). Furthermore, depression and suicide awareness training among GPs and a wide range of community facilitators are key objectives of both EAAD and OSPI-Europe (Hegerl et al, 2008; Hegerl et al, 2009). As part of *Protect Life,* the Health Promotion Agency (HPA) for Northern Ireland developed a training programme for GPs on depression awareness, which was delivered among 14% of all GPs. Evaluation of the training showed increased awareness of depression and treatments and there was an increase in the number of GPs reporting that they were comfortable in dealing with depressed patients after attendance of the training programme (HPA, 2008).

3. Develop clinical guidelines for all HSS staff to use when dealing with people who are at risk of suicide/self harm (1)

There is consistent research evidence supporting the effectiveness of various guidelines used by health service staff were evaluated in terms of reductions in suicidal behaviour (fatal and non-fatal) *(*Cooper et al, 2006; Cooper et al, 2007; Holi et al, 2008; Cooper et al, 2008; Patel et al, 2009).

For example, Cooper et al (2006) developed a 4-question tool, known as the Manchester Self Harm (MASH) rule in order to improve assessment of repeated self harm, both non-fatal and fatal, by emergency department clinical staff. The 4 questions address 1) history of self harm, 2) previous psychiatric treatment, 3) benzodiazepine use in current DSH act, and 4) any current psychiatric treatment. Based on a study including over 9,000 patients who presented with self harm at emergency departments in Manchester and Salford, England, the MASH rule successfully predicted 94% of all DSH patients who engaged in a repeated DSH act within 6 months following their hospital index DSH act, reflecting high sensitivity.
The MASH rule also successfully identified all 22 suicides that occurred in the study period. The specificity was lower at 25% indicating that one fourth of all DSH patients were identified as non-repeaters. The MASH rule performed slightly better for women
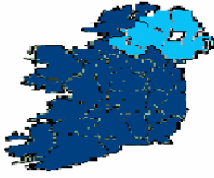
than men (sensitivity: 96% versus 93%) and for patients aged 35 years and older versus those young than 35 years (sensitivity: 96% versus 93%). A slightly higher sensitivity for the MASH rule was found when comparing DSH episodes assessed by emergency department staff (97%) versus those assessed by psychiatric staff (94%). Taking into account the objectives of the MASH rule and the target group involved, high sensitivity is more important than specificity since a highly sensitive tool has few false negatives. Considering the absence of accurate screening tools in identifying risk of repeated self harm and suicide, the evidence obtained in the study by Cooper et al (2006) supports wider implementation of the MASH rule in emergency departments.

ACTION AREA: WORKPLACES

1. To implement a targeted information campaign aimed at enhancing the mental health and well-being of all members of the workforce (2)

Some evidence has been reported supporting the effectiveness of this action (Corbiere et al, 2009; Nishiuchi et al, 2007; Martin et al, 2009; Zimber et al, 2009). Based on a review of 24 studies, Corbiere et al (2009) found that some elements of mental health promotion programmes had a positive impact on employees in the short term, such as skills training, individual, group and organisation level interventions. An educational programme for supervisors including the provision of information on stress management and skills training resulted in improved knowledge and behaviour regarding stress management at the workplace for at least 6 months (Nishiuchi et al. (2007). A study evaluating the effectiveness of a behavioural stress management programme involving employees also found positive effects in terms of reduced occupational stress and improved working climate (Zimber et al. (2009). Long-term follow-up studies are required to investigate the sustainability of these outcomes.

2. To ensure that positive mental health training is available to relevant members of the workforce including small/medium enterprise employers (2)

Increasing evidence has been reported on the implementation of positive mental health training among members of the workforce. Corbiere et al (2009) identified that most positive mental health promotion programmes included skills training for both employees and managers, and one third of the programmes included a combination of individual, group and organisation level interventions. Martin et al (2009) are evaluating a new mental health promoting programme, the so-called *'Business in Mind'* programme, which aims to improve managers' mental health through self efficacy, resilience and optimism.
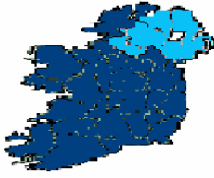
ACTION AREA: POLICE AND EMERGENCY SERVICES

1. To ensure that suicide prevention is included in all Emergency Services Public Service Agreements, and reflected in individual services annual priorities (1)

Limited research has been conducted in this area. However, the structure of local performance management arrangements would indicate that this rating should be a 1 for it to effective within Northern Ireland. Considering the intensive involvement of Emergency Services in suicide and deliberate self harm, it is recommended to prioritise systematic evaluation in order to verify the appropriateness and impact of suicide prevention initiatives among emergency services. Furthermore, awareness training on depression and suicidal behaviour among professionals working in emergency services is one of the key priorities of the EAAD (Hegerl et al, 2008) and OSPI-Europe (Hegerl et al, 2009).

2. To make suicide awareness/intervention training a priority for all frontline emergency services staff (2).

This action overlaps with Action 2 under *'Health and Social Services'.* In addition to awareness training among health care professionals, suicide awareness training programmes implemented among military personnel resulted in increased knowledge and self-efficacy and one study showed a significant reduction in suicide rates (Isaac et al, 2009). No specific studies were identified regarding awareness training among police staff. However, depression and suicide awareness training for the police, juvenile liaison officers etc. is a priority in EAAD (Hegerl et al, 2008) and OSPI-Europe (Hegerl et al, 2009). Another example is the Applied Suicide Intervention

Skills Training (ASIST), developed by Ramsey et al (1990), which has been widely implemented among health care professionals in many countries.

ACTION AREA: CHURCHES AND RELIGIOUS BODIES

1. To support the development of enhanced links between churches/religious bodies and the local community support networks (3)

2. To make suicide/depression awareness type training available for all church/religious leaders (3)
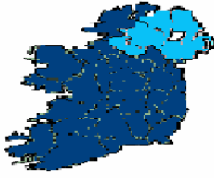
With regard to these 2 actions, no specific studies were identified. However, considering the role of clergy in the community, and in particular their involvement with families bereaved by suicide and people at risk of suicidal behaviour, it would be recommended to prioritise implementation and evaluation of these actions. Depression and suicide awareness training among priests is a priority in the EAAD (Hegerl et al, 2008) and OSPI-Europe (Hegerl et al, 2009).

ACTION AREA: MEDIA

1. To work with the National Union of Journalists, and the Association of Editors, in relation to implementation of effective media guidelines in relation to the reporting of suicide and self-harm issues (3).

2. To pro-actively work with the media to promote positive mental health and raise awareness of sources of support for individuals or families experiencing mental health problems (3).

With regard to the first two actions in relation to the media the available research evidence was limited. However, pro-active collaboration with the media is one of the key priorities of multi-level community based intervention programmes to reduce depressive disorders and suicidal behaviour, such as the European Alliance Against Depression (EAAD) (Hegerl et al, 2006; Hegerl et al, 2008; Schäfer et al, 2006) and Optimising Suicide Prevention and its Implementation in Europe (OSPI-Europe)

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(Hegerl et al, 2009). In addition, two studies highlighted the importance of exploring the impact of "journalist-led" media guidelines on the reporting of suicide as opposed to those that are developed by others (Pirkis et al, 2006; Pirkis et al, 2007).
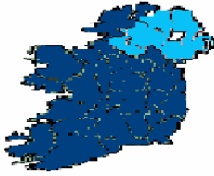
3. To develop and implement appropriate media monitoring mechanisms (2).

Based on the identified research, there is increasing evidence for effective implementation of media guidelines and its impact on reducing suicidal behaviour. However, this effect was not consistent across all studies.

In a study conducted in Austria, the implementation of media guidelines at national was found to be effective in terms of both the quality of reporting and a significant reduction in the number of suicides (Niederkrotenthaler & Sonneck, 2007). They also found that in regions with strong media collaboration these effects were more pronounced and maintained over time. Two other studies reported evidence in terms of improved media reporting of suicide following the implementation of media guidelines (Fu & Yip, 2008; Schäfer et al, 2006*). However, in these studies the impact of the implementation of media guidelines on the occurrence of suicide was not addressed*.

Another Austrian study by Niederkrotenthaler et al (2009) revealed that media reports of characteristics of people who engage in suicide were not representative of the population. For example, they found that suicides involving murder or murder attempts were over-represented while suicides associated with mental disorders were under-represented. As a consequence, the general public will be misinformed and this may result in social and political responses that are not based on a realistic picture of the factors associated with suicide. Therefore, it is recommended that programmes to educate media professionals about suicide should focus on the identified discrepancies between suicide characteristics in the media and the population.

Evidence for the relationship between inappropriate (sensationalised and detailed) media reporting of suicide and an increase in actual suicide was reported by Pirkis et al (2006).

In 2008, the World Health Organization (WHO) in collaboration with the Media Task Force of the International Association for Suicide Prevention (IASP) published a resource for media professionals on how to report on suicide (WHO, 2008). In addition to specific media guidelines for reporting on suicide, this resource also includes research evidence supporting the first three *Protect Life* actions in relation to the media.

4. To provide media volunteer training for nominated bereaved family representatives (3).

No research evidence was identified in relation this action. Therefore, it would be recommended to initiate evaluations following media volunteer training for nominated bereaved family representatives.
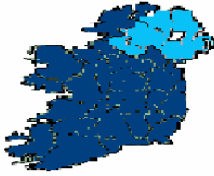
Interviewing people bereaved by suicide is briefly addressed as part of the resource for media professionals, published by the WHO (WHO, 2008). The resource underlines the need for caution when inviting people bereaved by suicide to participate in an interview because of their increased vulnerability when working through grief and related issues. Furthermore, people bereaved by suicide are at increased risk of suicide themselves.

NEW ACTION

SUICIDE AND THE INTERNET

The literature review identified a number of studies published in recent years that highlight the possible influence of internet sites on the occurrence of suicide. (Alao et al, 2006; Hagihara et al, 2007; Tam et al, 2007; WHO, 2008; Biddle et al, 2008). The possible negative impact of internet sites on suicide is likely to be associated with a number of specific factors, such as:

- The 'copycat' effect associated with suicide, in particular among young people, is likely to be reinforced by the portrayal of suicide and communication (chat rooms) through internet sites
- With the internet, information in relation to suicide including lethal methods can be preserved and individuals with suicidal ideas can always locate it by searching with the relevant key word
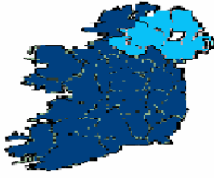
- Internet sites facilitate access to prescription drugs through the possibility of online orders whereby government regulations and custom controls can be bypassed

- Research indicated a stronger association between exposure to suicide reports on internet sites and actual suicide in men compared to women, which may be explained by the evidence that men spend more time on the internet.

These findings underline the need to develop internet-specific media guidelines in relation to suicide.

Apart from the possible negative impact of the internet on suicide, a number of studies also refer to new opportunities to promote positive mental health through the internet, to distribute resources to increase people's awareness of suicidal behaviour and related mental health and social factors, and to provide support for people bereaved by suicide (Tam et al, 2007; Feigelman et al, 2008; Biddle et al, 2008).

Considering this information, it would be recommended to include a specific action on suicide and the internet in the next phase of *Protect Life.*

SECTION B – TARGETED APPROACH

Of the 28 actions set out in this section, for 1 action substantial and consistent research evidence was available, for 8 actions moderate evidence was available, and for 19 actions the available research evidence was limited.
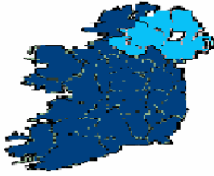
ACTION AREA: SELF HARM

1. To ensure that responsive self-harm support services, including mentoring support, are in place in all Health and Social Service Trusts (3).

No specific studies were identified in relation to this action. However, the relatively high rates of self harm based on the Western Area Self Harm Registry: 2007-2008 average person-based rates per 100,000 for men and women were 339 and 408 respectively. These findings indicate that the implementation and evaluation of self-harm support services, including mentoring support, should be given priority (NI Western Area Registry of Deliberate Self Harm, 2010).

2. To implement programmes that enhance the coping and problem solving skills of those who self harm, and which reduce the risk of repeat self harm (1).

In 13 studies, the effectiveness of various psychological treatments in terms of reduced repeated self harm was investigated, with beneficial effects in the majority of the studies (Hawton, 2008).

Consistent evidence was found for the effectiveness of Cognitive Behaviour Therapy (CBT) and Problem-Solving Therapy (PST) in reducing repeated self harm. Further beneficial effects of these interventions were found in terms of reduced levels of suicidal ideation, depressive symptoms and hopelessness. Indications were also found for the effectiveness of Dialectical Behaviour Therapy (DBT) in reducing repeated self harm. However, the effectiveness of DBT was investigated in only a small number of studies.

Based on these findings, it is recommended to implement CBT and PST interventions in mental health services at national level. Considering that the studies investigating the effectiveness of CBT and PST mainly involve female self harm patients, it is also recommended to verify the effectiveness of these interventions among men who engage in self harm.
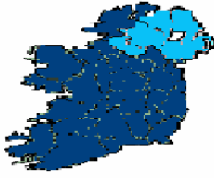
3. To improve detection of and access to support services for people who engage in less serious forms of self-harm (3).

Limited research has been conducted in this area. However, there are indications that people who engage in non-suicidal self harm show less severe mental health problems and greater self esteem compared to those who report suicidal intent (Brausch & Gutierrez, 2009). Early identification of people who engage in less serious forms of self harm is recommended in order to prevent further or more severe acts of self harm, which is a priority in EAAD (Hegerl et al, 2008) and OSPI-Europe (Hegerl et al, 2009). It is also recommended to further develop and evaluate this action.

ACTION AREA: MENTAL ILLNESS

1. To ensure that those in contact with mental health services are followed up at appropriate intervals, with assertive outreach where necessary, to assess suicide and self harm risk (3).

A limited number of studies were identified and outcomes were not always consistent. Currier et al (2010) investigated the effectiveness of a Mobile Crisis Team intervention (MCT) to enhance linkage of discharged suicidal emergency department patients to Outpatient Psychiatric Centres (OPCs). The results showed some improvement of suicidal patients shortly after discharge from the emergency department but the risk of repeated self harm presentations remained. The need to implement and evaluate this action is supported by Zivin et al (2009) and Nordentoft (2007) who indicate that people with major health and social service needs including suicidal crises are often not obtaining any treatment and should therefore be prioritised for outreach and follow-up interventions.

2. To ensure that all Health and Social Service Trusts, and other relevant bodies, have pro-active suicide awareness/intervention programmes in place for staff who work with people who have mental health difficulties (2).

This action overlaps with Action 2 under *'Health and Social Services' and Action 2 under 'Police and Emergency Services'.* Lamb et al (2006), who evaluated the effectiveness of awareness training on suicide and related mental health problems among A&E and Medical Assessment Unit nurses, also reported increased job satisfaction, in addition to attitude change and increased confidence among nurses who had received the training programme.

3. To provide appropriate support and information to promote awareness of suicide risk among people caring for someone with mental illness (3).
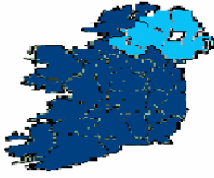
Limited research has been conducted in this area. However, the need to prioritise this action is supported by a study by Lloyd (2007) who identified specific themes to be addressed among mental health nurses working an acute admission unit, such as working with mental illness, making connections, responsibility and team working.

Bengtsson-Tops et al (2009) identified specific needs for training among staff working with abused women who suffer from mental illness, including theoretical knowledge regarding causes and consequences of abuse, formal support and legitimacy.

4. To provide timely and appropriate support and follow-up for patients discharged from psychiatric units (3).

A limited number of studies were identified and outcomes were not always consistent. However, the need to provide support for patients who have been discharged from psychiatric units has been reinforced by the Connected Health Care Strategy for Northern Ireland Health and Social Care Services (European Centre for Connected Health, 2008).

Considering the relatively high risk of suicidal behaviour immediately after discharge from a psychiatric unit, it would be recommended to prioritise the implementation and evaluation of this action.

ACTION AREA: DRUG AND ALCOHOL MISUSE

1. To ensure that appropriate suicide awareness/intervention training is available for all frontline health services staff, police officers and other relevant professionals who come into contact with people with alcohol and drug problems (3).

No specific studies were identified in this area. However, it would be recommended to incorporate a module on dealing with people who have misused or abused alcohol and/or drugs in positively evaluated awareness training programmes among health care professionals and community facilitators.

2. To develop agreed protocols concerning the assessment and management of patients at risk while under the influence of drugs and alcohol (3).
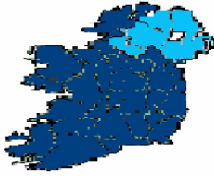
No specific studies were identified in this area. However, this action is in line with the guidelines for the assessment and aftercare of self harm patients, developed by the National Institute for Clinical Excellence (NICE, 2004).

Even though 2 actions in relation to alcohol and drug use have been included in the *Protect Life* Strategy, the findings of the Self Harm Registry in the Western Area indicate that there is a strong association between alcohol use/abuse and deliberate self harm. Therefore, this action area should be given priority in the next phase of *Protect Life*.

ACTION AREA: YOUNG MALES

1. To ensure that targeted outreach programmes for young males, who may be at risk of suicide and self-harm, are available in local communities and in all Health & Social Services Trusts (3).

2. To implement a targeted information and awareness campaign for young males aimed at breaking down the current male culture of not discussing their problems openly (3).

Limited research is available in relation to these actions. Based on Action 2, a specific mental health awareness campaign for young men aged 16-24 years was developed and implemented as part of the *"Minding your Head"* Campaign in Northern Ireland in 2007. A baseline survey on the general public's attitudes towards mental health was conducted in 2006, prior to the campaign. In order to determine the impact of the *"Minding your Head"* Campaign, a follow-up survey would be recommended. Considering that the highest rates of suicide in Northern Ireland are found among young adult men and taking into account the high rates of self harm, this action should be given priority in the next phase of *Protect Life.*

3. To enhance the role of the community/voluntary sector concerning provision of mentoring support for young people at risk of suicide and self-harm (3).
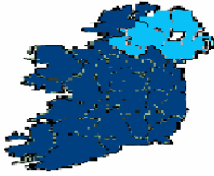
Even though the research evidence for the effectiveness of this action is limited, this action is considered a priority in EAAD (Hegerl et al, 2008) and OSPI-Europe (Hegerl et al, 2009). Furthermore, the high rates of suicide and self-harm in young men in Northern Ireland underline the need to implement and evaluate this action in the next phase of *Protect Life.*

ACTION AREA: BEREAVED BY SUICIDE

1. To ensure that accessible information and support, both at community/voluntary and statutory level, is available to all those bereaved by suicide, and to encourage the development of support groups/ networks (2).

A number of studies have investigated the effectiveness of interventions for people bereaved by suicide. McDaid et al (2009) conducted a systematic review including 8 studies. Evidence was found for some benefit of cognitive-behavioural family interventions, bereavement support group intervention for children and group therapy for adults, but the findings were not consistent across all studies.

2. To work with the Coroner's Office to facilitate the provision of sensitive and timely information to those bereaved by suicide (3).

A limited number of studies were identified in relation to this action. However, based on preliminary findings of a project in which support is offered to bereaved family members immediately following the inquest, the Suicide Support and Information System (SSIS), nearly all people (96%) who are approached by a project team member appreciate to be contacted and nearly 30% have been referred to a bereavement support service (Arensman, 2009).

Considering these outcomes, it would be recommended to implement and evaluate this action as a priority.
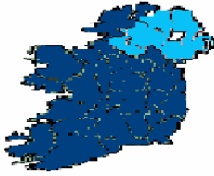
3. To raise awareness among local health and education service providers, especially with Primary Care and education settings, of the increased risk of self-harm and suicide among those bereaved or affected by suicide (2).

There is a limited number of studies that have addressed the impact of awareness training in relation to suicide bereavement support among primary care professionals. However, this is incorporated in the widely implemented depression and suicide awareness training as part of the European Alliance Against Depression (EAAD, Hegerl et al, 2008) and Optimising Suicide Prevention programmes and their implementation in Europe (OSPI-Europe, Hegerl et al, 2009). Hamaoka et al (2007) underline the importance of specific education on suicide bereavement for medical students.

ACTION AREA: SURVIVORS OF SEXUAL, PHYSICAL AND EMOTIONAL ABUSE

1. To provide an accessible support network in local communities for all survivors of abuse (3).

No specific studies investigating the effectiveness of access to support networks for survivors of abuse, were identified. However, a number of studies underline the need for early identification of people who are victims of sexual / physical / emotional abuse in childhood due to the high risk of suicidal behaviour (Brodsky et al, 2008; Glasser et al, 2008; Widom et al, 2008).

With regard to survivors of institutional abuse, the intensity of interventions provided by support services may be greater due to increased co-morbidity of mental health problems (Fitzpatrick et al, 2009; O'Riordan & Arensman, 2007).
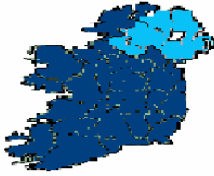
Considering the high risk of suicidal behaviour among people with a history of abuse, the implementation and evaluation of this action should be given priority.

2. To initiate an information campaign that seeks to sensitively raise awareness of the increased risk of suicide among all survivors of abuse, and encourage survivors of abuse to seek help in times of crisis (3).

No specific studies were conducted in this area. Considering the importance of early identification of victims of abuse in terms of preventing the development of mental health problems and suicidal behaviour, it would be recommended to prioritise the implementation and evaluation of this action.

3. To make training available to support those working with survivors of abuse (3).

Research in relation to this action was limited and not consistent. However, available research recommends that health care professionals who perform sexual assault examinations require increased knowledge and skills in sexual assault care and should fulfil a role as part of the team responding to sexual assault cases in a community (Ferguson, 2006). This is in line with Teitelman (2006) who recommends specialised training for health care professionals working with older adults who have been sexually abused. O'Riordan & Arensman (2007) recommend specialised training for health care professionals who are working with survivors of institutional (industrial schools) abuse considering the demands on professionals and co-morbidity of mental health problems.

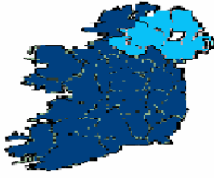**ACTION AREA: MARGINALISED AND DISADVANTAGED GROUPS**

1. To ensure that appropriate support services reach out to all marginalised and disadvantaged groups, in particular lesbian, gay, bi-sexual, and transgender groups, rural communities, ethnic minorities, and those people who are economically deprived (2).

Even though there is limited research into the effectiveness of support services for marginalised groups, there are several studies proposing specific support services and interventions. Eisenberg & Resnick (2006) identified protective factors associated with reduced suicidal behaviour among gay, lesbian and bisexual (GLB) youth, which include family connectedness, adult caring and school safety. Silenzio et al (2009) promote the implementation of online social networks for GLB people. Other studies reported on health issues of the GLB community to be addressed by health care and community services, such as depression, suicide, HIV, family relationship problems and alcohol problems (King et al, 2008; Meads et al, 2007; Rogers, 2007; Scourfield et al, 2008). According to Scourfield and colleagues, GLB groups should be prioritised within suicide prevention strategies.

Corcoran et al (2007) found that in the Republic of Ireland, the highest rates of deliberate self harm were in deprived urban areas. This underlines the need to prioritise these areas when implementing community-based suicide prevention programmes aimed at reducing suicidal behaviour.

2. To initiate a targeted information campaign that seeks to sensitively raise awareness of the increased risk of suicide among those groups identified as marginalise and disadvantaged, and encourages them to seek help at times of crisis (3).

There is limited research available into the effectiveness of targeted information campaigns for specific marginalised and disadvantaged groups. However, in order to increase awareness of the increased risk of suicidal behaviour associated with specific marginalised groups (e.g. the GLB, farmers, ethnic minorities), it would be recommended to prioritise the development and evaluation of targeted information campaigns.

ACTION AREA: HIGH RISK OCCUPATIONS

1. To raise awareness of high risk occupations and develop a culture of help seeking among people in occupations that have a high risk of suicide and self-harm (2).

Regarding the effectiveness of awareness programmes for people in occupations at high risk of suicide, limited research is available. However, there is increasing evidence for specific occupations associated with high risk of suicide, such as farmers (Browning et al, 2008; Fragar et al, 2008; Gallagher et al, 2008), physicians, nurses and medical students (Agerbo et al, 2007; Puschel & Schalinski, 2006; Voltmer et al, 2008; Wolfersdorf, 2007).

It would be recommended to develop and evaluate awareness programmes and interventions for these groups and to monitor other occupations associated with high suicide risk in Northern Ireland.
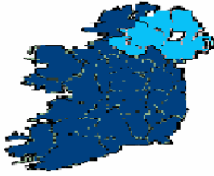
2. To develop a crisis plan for targeting people in high risk occupations, as when emergency situations arise (3).

Limited research evidence is available for this action. It would be recommended to develop specific actions for occupations associated with high suicide risk in Northern Ireland including systematic evaluation of interventions.

ACTION AREA: PRISONERS

1. To make appropriate mental health and suicide awareness, prevention and intervention training a priority for all frontline prison and police custody staff, and where possible identified "listener" inmates (3).

Limited research has been conducted into the effectiveness of mental health and suicide awareness training for frontline prison and police custody staff. However, Hayes et al. (2008) report significant positive changes in prison officers' attitudes, knowledge and confidence after they had received the Skills-based Training on Risk Management (STORM). They recommend providing the STORM training to the wider
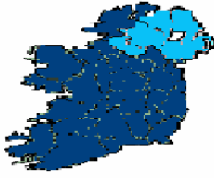
prison estate, with regular refresher training courses. Konrad et al (2007) highlight the importance of the resource produced by the IASP/WHO Task Force on Suicide in Prisons: Preventing suicide in jails and prisons: *www.who.int/mental_health/prevention/suicide/resource_jails_prisons.pdf*

2. To ensure that the environment for those held in custody, in both prison and police stations, has been adapted to reduce the possibility of suicide (2).

There is increasing evidence underlining the need to adapt the environment for people held in custody in order to prevent suicide. Camilleri & McArthur (2008) underline the importance of addressing safety issues in relation to suicide prevention when developing new prisons. Based on a review of completed suicides, Patterson & Hughes (2008) present risk indicators for suicide to be addressed in suicide prevention programmes in prisons. Based on a review of litigation cases related to suicide in jails and prisons, Daniel (2009) presents risk management strategies and procedures for clinicians and correctional officers. The IASP/WHO Task Force resource on preventing suicide in jails and prisons also addresses aspects in relation to the physical environment and architecture of prisons that are important for suicide prevention.

3. To work with the Prison Service to provide access to appropriate services for all prisoners with mental health difficulties, including the development of appropriate "listener" groups (2).

There is increasing evidence supporting the effectiveness of this action. A telepsychiatry counselling service designed for young people in juvenile detention showed that this intervention improved the rate of attainment of goals with family and personality/behaviour (Fox et al, 2008; Fox & Whitt, 2008). A review by Watson et al (2008) addresses response models for the police and prison officers in responding to people with mental health problems. The IASP Task Force document on preventing suicide in prisons also addresses the importance of mental health treatment of people in prisons.

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4. To ensure that all remand and sentenced prisoners continue to receive initial and ongoing monitoring of their mental health, and assessment of their risk of suicide (2).
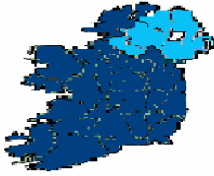
Several studies have presented evidence supporting this action. The IASP/WHO Task Force document on *Preventing Suicide in Prisons* recommends ongoing monitoring of prisoners' mental health and assessment of suicide risk. Examples of assessment instruments that have shown to be effective in identifying prisoners with high suicide risk are: the Suicide Risk Assessment Scale (SRAS, Daigle et al, 2006) and the Viennese Instrument for Suicidality in Correctional Institutions (VISCI, Frottier et al, 2009). Perry & Olason (2009) tested the effectiveness of the Suicide Concerns for Offenders in Orison Environment (SCOPE), which showed to be able to discriminate between prisoners at risk and those not at risk of suicidal behaviour.

5. To liaise with the prison and probation service about the provision of follow-up support for those who have been recently released from custody (3).

6. To provide appropriate support in relation to the removal of stigma from those who have been released from custody without charge (3).

A limited number of studies investigating the effectiveness of these two actions were identified. The UK confidential inquiry into homicide and suicide found a relatively high rate of suicides by offenders within 12 months of their release from prison (Pratt et al, 2009). This study and the IASP/WHO Task Force document on *Preventing Suicide in Prisons* underline the need for continuity of care for people who are released from prison, and it is recommended that community health, offender and social agencies are involved in the co-ordination of care for this group.

The enduring stigma on people who have been released from custody has been identified in several studies (Howerton et al, 2007; Schnittker, 2007; Van Olphen et al, 2009). This may be further compounded by stigma related to mental health problems and gender and race-based stigma (Van Olphen et al, 2009). These findings underline the need to prioritise increased awareness among professionals and relevant agencies including probation officers, juvenile liaison officers, community health, offender and social agencies.
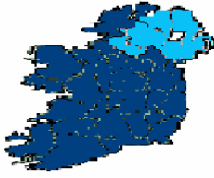
NEW ACTION IN RELATION TO OLDER ADULTS

Based on the available research, it would be recommended to include an action area on older adults, a target group that has not yet been included in the *Protect Life* Strategy. In preventing suicide and deliberate self harm, interventions to increase awareness of depression and suicidal behaviour among older adults in general and CBT oriented interventions for older adults who suffer from depression have shown to be effective in terms of reducing levels of depression and suicidal behaviour.

NEW ACTION IN RELATION TO EXTENDED SUICIDE

The *Protect Life* Strategy does not include actions in relation to preventing cases of filicide-suicide or familicide, also referred to as extended suicide, and responding when cases of extended suicide occur. Filicide-suicide refers to the killing of one's child(ren) followed by suicide. Familicide-suicide refers to the killing of one's child(ren) and spouse/partner followed by suicide. Considering the impact of these incidents on communities and possible implications in terms of copycat effects (Bourget et al, 2007; West et al, 2009), it would be recommended to include an action on extended suicide in the next phase of *Protect Life.*
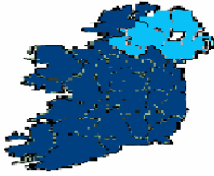
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SECTION C – OVERARCHING ACTIONS

All 9 overarching actions are considered relevant in terms of: a) access to accurate information on the prevalence of suicide and deliberate self harm in Northern Ireland, b) enhanced insight into risk factors associated with suicide and deliberate self harm, and c) the evaluation of the effectiveness of the *Protect Life – Suicide Prevention Strategy.*

1. To liaise with the Coroner's Office to minimise delays in the reporting of suicide, and to ensure increased sensitivity to the needs of bereaved families.

Three studies were identified in which delays in the registration of suicide associated with a Coroner's inquest were addressed (Corcoran et al, 2006; National Suicide Research Foundation, 2007; Largey et al, 2009). The study by Largey et al (2009), conducted in Northern Ireland, found that based on the General Register Office figures for the period 1999-2003, 24.3% of suicides were registered within six months, 93.7% within one year and 96.9% within two years. As a result, there are differences between suicide mortality statistics based on year of registration and those based on year of occurrence. On the basis of a study by Corcoran et al (2006) of deaths by external causes including suicide in the Republic of Ireland over the period 1987-2003, this difference resulted in 'year-of-occurrence' figures being on average 6% higher than the 'year-of-registration figures'. The greatest differences were found in more recent years, with the highest difference of 19% in 2002. In examining trends in suicide over time, it would therefore be recommended to rely exclusively on the 'year of occurrence' suicide figures as opposed to the preliminary and less accurate 'year of registration figures'.

Based on the research it is recommended to move towards more prompt reporting of suicide (and other external causes of) mortality statistics, which will reduce the attention given to the preliminary 'year-of–registration' figures. This change could be facilitated by using electronic coding systems as opposed to the paper-based system which is still widely used.
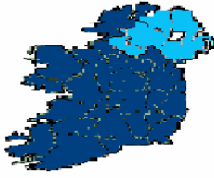
Delays in the registration of suicide at national level also impact on delayed reporting of international suicide mortality statistics by sources such as the World Health Organisation's Statistical Information System (WHOSIS) and Eurostat, the Statistical Office of the European Communities. In order to enhance timely reporting of suicide statistics, EuroStat has proposed a regulation that would set an 18-month deadline on the submission of cause of death data for a calendar year.

As part of this action, it would be recommended to establish a subcommittee of the Protect Life Steering Group and associated agency, Department of Health, and Department or Justice in order to develop close links with the Coroner Service to facilitate the implementation of actions, such as an electronic coding system, which will contribute to reduced delays in the reporting of suicide.

A number of studies have addressed the impact of suicide inquests on bereaved relatives (Biddle, 2003; Harwood et al, 2002). People's reactions to a suicide inquest vary widely. A suicide inquest can negatively impact on resolution of grief in that grief reactions associated with suicide bereavement may be exacerbated, such as shame, guilt and anger. However, some people have reported overall positive experiences in that they regard the inquest as cathartic and helpful to their resolution of grief (Biddle, 2003). According to Harwood et al (2002), the media reporting of the coroners' inquests are a frequently reported source of distress for suicide bereaved relatives and are associated with stigma and shame.

A study on attitudes towards suicide and its prevention among Coroners in Northern Ireland and the Republic of Ireland by Farrow et al (2009) revealed that coroners consider mental health problems to be fairly infrequent among people who engage in suicidal behaviour, which underlines the need for increased awareness of mental health problems associated with suicidal behaviour. Already in January 2009, a workshop was organised by the NSRF for coroners and their staff in Co. Cork in order to increase awareness on bereavement / complicated grief following suicide and other sudden deaths in which mental health issues associated with suicidal behaviour were also addressed. Following positive feedback from the coroners involved, a proposal has been made to the Coroners Society in the RoI to offer similar workshops to all coroners.

As part of this action, it would be recommended to offer similar workshops to coroners in Northern Ireland or to implement these workshops as an all Ireland initiative.
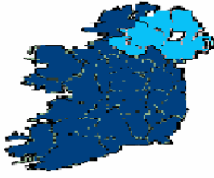
2. To liaise with the Coroner's Office and the General Register Office to further enhance the classification and recording arrangements for deaths by suicide.

Research consistently indicates the need to enhance the accuracy, classification and recording arrangements for deaths by suicide, in particular because of the relatively high rates of undetermined deaths in many countries and the likelihood of a certain proportion of 'hidden' suicides (Salib, 2005; Pritchard & Hean, 2008; Chang et al, 2009; Varnik et al, 2009). This also applies to Northern Ireland where during the period 2003-2006 on average 23 deaths per year receive the verdict 'undetermined' at inquest.

Internationally, there are major differences between countries in death certification procedures and coding practices, which will impact negatively on international comparisons of suicide rates and the interpretation of time trends (Varnik et al, 2009). Research conducted in the Republic of Ireland and Australia shows that even within one country there is disparity between jurisdictions due to differences in documentation about suicidal, accidental and undetermined causes of death (Walker et al, 2008; Corcoran & Arensman, in press, 2010).

In some studies published in recent years, the reported suicide rates are based on both confirmed cases of suicide and verdicts of undetermined deaths (Kapur et al, 2009; Varnik et al, 2009). However, combining suicide and undetermined deaths without an in-depth investigation into death certification and coding procedures will not contribute to more accurate classification of suicide and other external causes of death.

Based on the research evidence, it would be recommended to establish a close link with the Coroner Service in order to facilitate research into deaths that receive the verdict 'undetermined' at inquest. Comparison between confirmed cases of suicide and undetermined deaths on demographic, psychosocial and psychiatric characteristics would be important in order to examine how similar/dissimilar the

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profiles of the individuals involved are. A pilot study in which these objectives are being pursued are currently being conducted in collaboration with coroners in England and in the Republic of Ireland.

Since September 2008, the so-called Suicide Support and Information System (SSIS) is being piloted in Co. Cork in collaboration with three coroners over an 18 month period.
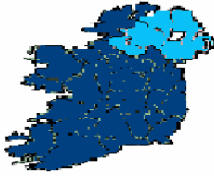
The objectives of the Suicide Support and Information System are to:
1) Improve provision of support to the bereaved
2) Better define the incidence and pattern of suicide in Ireland
3) Identify and better understand the causes of suicide
4) Identify and improve the response to clusters of suicide, filicide-suicide and familicide

The SSIS will operate in close collaboration with the revised Irish coroner's system which is being legislated for in the new Coroner's Bill in the RoI. The SSIS will obtain data on possible suicide deaths shortly after they occur through notification by the coroners. It will support the provision of information on suitable support services to the bereaved. It will obtain relevant data on factors associated with the death and the deceased in an appropriately sensitive and confidential manner from sources including coroners, the family, general practitioners and mental health professionals. One of the innovative aspects of the SSIS is that both confirmed cases of suicide and cases receiving an open verdict at the coroner's inquest will be taken into account.

Support

The SSIS team members will facilitate support for families bereaved by suicide and possible suicide (open verdicts) after conclusion of the inquest according to a stepped approach. The first contact with the bereaved family will take place either in the week after conclusion of the inquest. During the first contact with the bereaved family, the SSIS team member will assess the needs in relation to support and subsequently liaise with the counsellor from quality ensured bereavement support services, who will be available to provide support to bereaved families. In order to ensure that the GP and the police who were involved with the deceased following his or her death are aware of this support structure, they will be notified.
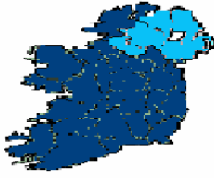
Research

Information on each case of suicide and possible suicide (open verdicts) will be obtained from verdict records and post-mortem reports that are preserved by the Coroner and made available to the public after the inquest has been concluded. Family members will be invited for an interview with an SSIS team member after conclusion of the inquest according to a stepped approach. For each case of suicide or possible suicide a family member who had a close relationship with the deceased will be invited to participate in a semi-structured interview. Participation in the interview will be on a voluntary basis and the family member can decide to end the interview at any time. Following completion of the interview with a family member, for each case of suicide and possible suicide one or more health care professionals, who had been in contact with the deceased within 12 months prior to death, will be asked to complete a semi-structured questionnaire.

Functions and elements of the SSIS are in line with existing international systems, such as the National Confidential Inquiry into Suicide and Homicide, which was established in the UK in 1995 and which provides an evidence base for the development of suicide intervention and prevention programmes. Based on routine data on suicide cases through the inquiry in the UK, specific information has been obtained on the ecological association between suicide and deprivation (Hunt et al., 2007; Rezaeian et al, 2006), precipitants of suicide in the three months prior to suicide (Hunt et al, 2007) and factors associated with frequently used methods of suicide, such as hanging (Gunnell et al, 2005). The outcomes of the UK inquiry form a major evidence base for intervention and prevention programmes in preventing suicide (Hunt et al, 2006; Hunt et al, 2007; Kapur et al, 2006).

In order to improve the accuracy of suicide statistics in Northern Ireland and to facilitate support for those who are bereaved by suicide or other sudden deaths, it would be recommended to pilot and implement a system similar to the SSIS in collaboration with coroners in Northern Ireland.
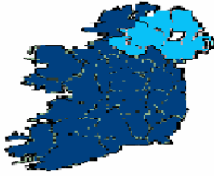
3. To develop and pilot a self-harm register in local A&E departments

In 2007, a pilot Deliberate Self Harm Registry was launched by the Minister for Health in Northern Ireland, Michael McGimpsey and the Minister for Health in the Republic of Ireland, Mary Harney as a North – South initiative between the Department of Health, CAWT and the National Suicide Research Foundation (NSRF). Since January 2007, the Self Harm Registry has obtained data on all presentations to the Emergency Departments of the three hospitals in the Western Area due to deliberate self harm. A first report based on the deliberate self harm data obtained in 2007 was published in 2008 (WHSSB, 2008)), and a second report including the 2008 self harm data is currently being finalised (NI Western Area Registry of Deliberate Self Harm, 2010).

The 2007 Annual Report of the Self Harm Registry in the Western Area revealed that the incidence of deliberate self harm (471 per 100,000) was twice as high compared to the incidence in the Republic of Ireland (236 per 100,000). In terms of age and gender patterns, further North – South differences were found. In the Western Area, the highest rates of DSH were found among young adult men aged 20-24 whereas in the RoI, the highest rates were in girls aged 15-19. Based on the Self Harm Registry data, the peak rates for DSH among women were in the age group 35-39 followed by 40-44. Similar to the Western Area, among men in the RoI, the highest DSH rates were found among those aged 20-25.

The high rate of self harm in young adult men is particularly worrying considering the increasing international evidence showing a significant association between deliberate self harm and suicide in men, but not in women (Arensman et al, submitted).

In terms of urban-rural differences, the highest self harm rates were found in the more urban areas, such as Derry city (women: 500/100,00; men: 480/100,000), whereas in more rural areas, such as Limavady the rates were significantly lower (women: 210/100,000; men: 215/100,000), which is in line with the pattern found in other European countries.

Based on the 2007 Western Area Registry report, the proportion of self harm patients who had taken alcohol around the time of their self harm act was 66% for men and 59% for women, which is significantly higher compared to the findings in the RoI, which show that in 2007 alcohol was involved in 41% of self harm acts by men and in 38% of self harm acts by women.
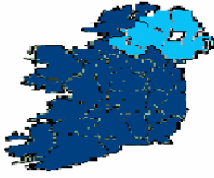
The 2007 the Western Area Self Harm Registry Report showed that the next stage of recommended care after treatment at the Emergency Department was for most self harm cases a general admission (59%). Nineteen percent of self harm cases were not admitted and 10% received a psychiatric admission. Six percent of the self harm patients refused any recommended next care, 4% left before being seen/assessed, and 3% left before a decision was made. Comparing this to the situation the RoI, a higher percentage of self harm patients in the RoI left the Emergency Department before a next care recommendation could be made (13%) and 11% had left the hospital before being treated.

In January 2009, an independent evaluation of the pilot Self Harm Registry in the Western Area was completed. The main recommendations were:

- Continuation of the Self Harm Registry in the Western Area in order to determine trends over time and increased evidence for specific socio-demographic groups at high risk of self harm
- Roll out of the Western Area Registry to Belfast
- Increased linking in with UK based Registries of self harm / the UK multi-centre monitoring system of deliberate self harm in addition to the continued link with the NSRF.

In addition to these recommendations, which are also reinforced by the present review, the information obtained through the Self Harm Registry is of major importance with regard to multiple actions of the Protect Life strategy:

- To determine the extent of extent of deliberate self harm and trends over time.
- To determine geographic and demographic groups at high risk of self harm, and to identify 'new' at risk groups over time.

- To obtain information on aftercare for self harm patients following presentation to the Emergency Department.
- To determine clusters or potential clusters of deliberate self harm and to determine associations with geographic and demographic factors.
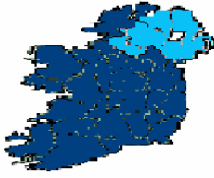
The Self Harm Registry enables monitoring changes in the incidence of self harm over time, which also serves the function of an evaluation tool to determine the effectiveness of *Protect Life* actions implemented after 2007. International research shows that deliberate self harm can be used as a proxy for suicide, in particular among men.

4. To develop a mechanism to allow timely access to statistics and geographic/demographic information at local levels so that potential clusters of suicides/self-harm can be identified early and appropriate action taken.

Nationally and internationally, limited research has been conducted into suicide/self harm clusters. Clustering of suicide appears to be more common among young people than in adults, which may be particularly related to behaviour contagion, also referred to as 'copycat' (Johansson et al, 2006; Exeter et al, 2007; Insel & Gould, 2008).

As part of this action, it is relevant to highlight the recently R&D funded research project on *Geo-demographic factors associated with deliberate self harm and death by suicide: a within and between neighbourhoods'* analysis, conducted by Professor Bunting and colleagues at Magee University. The main objective of the study is to investigate associations between geo-demographic aspects and suicide/deliberate self harm at individual level. Information on cases of suicide obtained from coroner's report and information on deliberate self harm cases accessed through Emergency Departments will be linked with geo-demographic information systems, which is an innovative element of this research. The study outcomes will inform policy, resource allocation and service delivery.
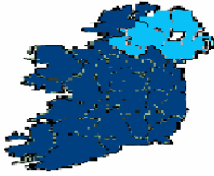
Even though overall, the research into suicide / self harm clusters is limited, there is consistency with regard to a number of recommendations in relation to intervention and prevention:

- In areas with confirmed or potential clusters of suicide / deliberate self harm it is recommended to develop suicide prevention strategies targeting at-risk populations living in these areas

- Implementation of and adherence to evidence based media guidelines (see also Action area A - 3).

- General practitioners can be considered key persons, both in the aftermath of suicides as well as in preventing suicides. In the aftermath of a suicide, a GP often meets the family, friends and other acquaintances early in the process after a suicide. This makes the general practitioner suitable to initiate contacts with others involved in the wellbeing of those who are affected, in order to prevent cluster formation.

- In order to facilitate timely access to information in relation to potential clusters at local level, close collaboration with local coroners which is a key element of the proposed Suicide Support and Information System would be recommended.

5. To initiate further in-depth research into the underlying causes of suicide and self-harm in Northern Ireland.

Research into suicide and self-harm in Northern Ireland is limited, in particular in-depth investigation into the underlying causes. In the nineties, Foster and colleagues

conducted a case-controlled psychological autopsy study among 118 cases of suicide (Foster et al, 1997; Foster et al, 1999). This research revealed that in the vast majority of suicides (90%) there was at least one mental disorder at the time of death. Psychiatric co-morbidity was present in 55% of suicides. Risk factors independently associated with suicide were personality disorders, in particular antisocial, avoidant and dependent, having experience at least one traumatic life event during the year prior to death, unemployment, previous history of deliberate self harm, and contact with a GP within the 26 weeks prior to death (Foster et al, 1999).

Even though the research by Foster and colleagues provided detailed information relation to risk factors associated with suicide, the information obtained in the nineties may be less valid after a period of ten years and requires updating. Therefore, the following recommendations are proposed:

- It would be recommended to conduct in-depth research into the underlying causes of suicide as part of research linking in with the Coroner Service according to a template similar to the Suicide Support and Information System.

- It would be recommended to establish a closer link with the National Confidential Inquiry into Suicide and Homicide in the UK in order to obtain detailed information on cases of suicide by individuals who have been in contact with the mental health services in the 12 months prior to death.

6. To review the suicide reduction targets highlighted in the Strategy, and in particular the baseline figures used for the establishment of these targets
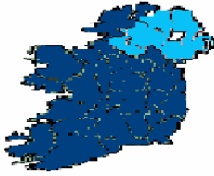
The target set by the Protect Life Strategy are:
- To obtain a 10% reduction in the overall suicide rate by 2008; and
- To reduce the overall suicide rate by a further 5% by 2011.

Comparing the targets set for *Protect Life* to other suicide prevention strategies, a relatively large reduction of 10% is expected in the 3rd year of the implementation of the five year strategy. Taking into account, the stepped approach that has been

taken to implement the Protect Life Strategy over a five year period, it would be recommended to set the target for the primary outcome: reduction in the overall suicide rate, at the end of the five year period.
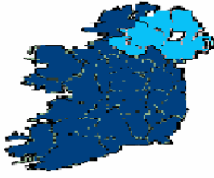
Other factors that may complicate the evaluation of *Protect Life* on the basis of only one primary outcome, such as the reduction in the overall suicide rate are that in terms of absolute numbers, suicide is considered a relatively rare phenomenon, and therefore can show strong year-by-year fluctuations. This complicates the evaluation

of the effectiveness of the *Protect Life* Strategy over a relatively short period October 2006-December 2008.

Considering the relatively large number of undetermined deaths in Northern Ireland: an average of 23 cases over the period 2002-2006, which may include a certain number of 'hidden' cases of suicide, it would be recommended to also take into account changes in the rates of undetermined deaths per 100,000 before and after the implementation of *Protect Life.* Considering that a number of *Protect Life* actions aim to increase the awareness of suicide and deliberate self harm, it is likely that as a result the number of undermined deaths may decrease and the number of suicides may increase. Therefore, it is recommended to take into account additional outcomes:

- In addition to changes in suicide rates, it would be recommended to take into account changes in deliberate self harm, in particular changes in repeat self harm presentations to Emergency Departments. Considering the significant association between self harm and suicide among men, the outcomes in relation to self harm in men may be considered as a proxy for suicide.

- Evaluating suicide prevention programmes internationally, there is increasing evidence supporting the inclusion of intermediate outcomes in addition to primary outcomes (Goldney, 2005; Mann et al, 2005). Intermediate outcome measures refer to proximal or short-term effect indicators of single interventions and are directly linked to the operational goals and the content of the interventions (e.g. improved awareness, knowledge, confidence, attitude change, referral, prescription rates).

- In addition to outcome evaluation, it would be recommended to conduct an independent process evaluation. Process evaluation is important in order to identify factors that may hinder progress in achieving the milestones and deliverables that are required in order to meet the targets. As part of process evaluation, the following aspects should be addressed:

  - Sufficient resources, such as funding, capacity and quality of research and prevention networks?

  - Achievement of milestones and deliverables?

  - Management and feasibility of implementation actions proposed in the

strategy documents (e.g. ethical, legal issues)?

- Political support and endorsement of the priorities and actions set out in the strategy documents?

7. To undertake a long-term study on the effectiveness of interventions on the general population.

Internationally, there is increasing evidence for the effectiveness of multi-faceted community-based intervention programmes in terms of reducing suicidal behaviour, including fatal and non-fatal suicidal acts (see also Action Area A – 1,2). There is limited research evidence demonstrating the effectiveness of single interventions, such as a once-off awareness campaign for the general public.

8. To initiate research into the additional risk factors faced by the "new populations".
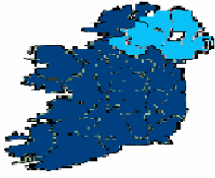
Specific groups at high risk of suicide and deliberate self harm that require the development of specific suicide and self harm prevention strategies:
- People who have become unemployed and who suffer from mental health problems
- People who experienced sexual and physical abuse in childhood, with particular emphasis on people who were abused in Industrial Schools as children
- Marginalised and disadvantaged groups including lesbian, gay, bi-sexual and transgender groups, travellers, and people who are unemployed.
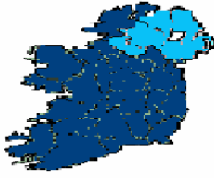
9. *To identify areas of co-operation on a North/South basis, including research, reporting mechanisms, and public information.*

Since the start of the *Protect Life* Strategy, an increasing number of North/South co-operative initiatives have been developed, such as the Western Area Self Harm Registry and exchange of expertise and co-operation in terms of common actions as part of *Protect Life* and *Reach Out* in the South.

It would be recommended to initiate new areas of co-operation, such as the assessment and aftercare of deliberate self harm patients following presentation at Emergency Departments, the development of suicide bereavement support and

information systems in collaboration with the Coroner Service, implementation of media guidelines and responding to / preventing extended suicide.

KEY RECOMMENDATIONS

The following is a summary of key recommendations for actions and priorities for the next phase of *Protect Life.*

PROTECT LIFE ACTIONS

1. It is recommended that actions for which substantial and consistent research evidence is available be implemented at national level as a matter of priority in the next phase of *Protect Life.*
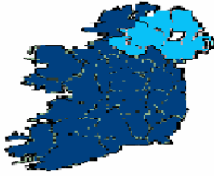
These actions include:

Section A – Population approach

- *To restrict access to means and methods of suicide, including identification of "hotspots", the promotion of safer prescribing, a reduction in the accessibility of certain over the counter drugs, and restriction of access to firearms).*

- *Develop clinical guidelines for all HSS staff to use when dealing with people who are at risk of suicide/self harm.*

Section B – Targeted approach

- *To implement programmes that enhance the coping and problem solving skills of those who self harm, and which reduce the risk of repeat self harm.*
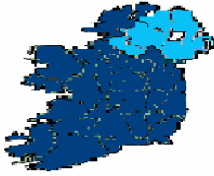
2. For 12 actions in Section A and 8 actions in Section B the available research evidence was not always consistent, but there is potential for beneficial outcomes on suicide and deliberate self harm. Therefore, it is recommended to include independent evaluations when implementing these actions in the next phase of *Protect Life.*

These actions include:
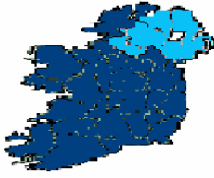
Section A – General population approach

- *To initiate a major public information campaign that aims to de-stigmatise mental health, and promote awareness and understanding of issues relating to suicide and self –harm.*

- *To support and encourage the development of community based suicide prevention initiatives and support mechanisms.*

- *To ensure that in times of distress, families have the opportunity to access a local emotional health and well-being support network, including community/ voluntary sector provision.*

- *Promote the inclusion of promoting positive mental health as a key element of the "Healthy Schools" programme and ensure that children and young people are protected from all forms of bullying.*

- *To make suicide awareness and positive mental health and well-being training, including how to deal sensitively with disclosure of self-harm or suicidal behaviour, a priority for teachers, youth workers, etc.*

- *Promote a culture of help seeking behaviour, particularly among young people.*

- *Encourage the inclusion of coping and life skills, emotional literacy, and programmes that promote positive mental health in the school curriculum.*

- *To make depression and suicide awareness/prevention training a priority for all frontline staff dealing with people in distress, particularly for GPs, Primary Care and A&E staff in the HSS.*

- *To implement a targeted information campaign aimed at enhancing the mental health and well-being of all members of the workforce.*

- *To ensure that positive mental health training is available to relevant members of the workforce including small/medium enterprise employers.*

- *To make suicide awareness/intervention training a priority for all frontline emergency services staff.*

- *To develop and implement appropriate media monitoring mechanisms.*

Section B – Targeted approach

- *To ensure that all Health and Social Service Trusts, and other relevant bodies, have pro-active suicide awareness/intervention programmes in place for staff working with people who have mental health difficulties.*

- *To ensure that accessible information and support, both at community/voluntary and statutory level, is available to all those bereaved by suicide, and to encourage the development of support groups/networks*

- *To raise awareness among local health and education service providers especially with Primary Care and education settings, of the increased risk of self-harm and suicide among those bereaved by suicide.*

- *To ensure that appropriate support services reach out to all marginalised and disadvantaged groups, in particular lesbian, gay, bi-sexual, and transgender groups, rural communities, ethnic minorities, and those people who are economically deprived.*

- *To raise awareness of high risk occupations and develop a culture of help seeking among people in occupations that have a high risk of suicide and self-harm.*
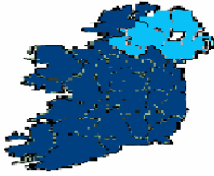
- *To ensure that the environment for those held in custody, in both prison and police stations, has been adapted to reduce the possibility of suicide.*

- *To work with the Prison Service to provide access to appropriate services for all prisoners with mental health difficulties, including the development of appropriate "listener" groups.*

- *To ensure that all remand and sentenced prisoners continue to receive initial and ongoing monitoring of their mental health, and assessment of their risk of suicide.*

3. For 10 actions in Section A and 19 actions in Section B the available research evidence was limited. For the next phase of *Protect Life,* it would be recommended to prioritise systematic evaluation of these actions in order to verify the impact of these actions before considering modification.

These actions include:
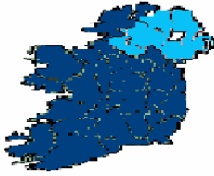
Section A – General population approach

- *To encourage all statutory public bodies to carry out health impact assessments on their policies, in terms of possible adverse effects on the mental health and well-being of local communities.*

- *To provide families with the opportunity to avail of non-stigmatising practical interventions to help consolidate parenting, coping and life skills.*

- *Raise awareness of and ensure availability and timely access to appropriate intervention services (e.g. Child and Adolescent Mental Health Services, mentoring schemes and other appropriate statutory and voluntary services).*

- *To develop and implement practices, protocols and referral pathways to smooth the transition from youth to adult Health and Social services.*
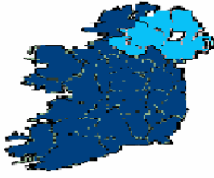
- *Develop enhanced linkages between the Health and Social Services and the community/voluntary counselling and support network, particularly in relation to transition services and to bridge gaps in service provision.*

- *To support the development of enhanced links between churches/religious bodies and the local community support networks.*

- *To make suicide/depression awareness type training available for all church/religious leaders.*

- *To work with the National Union of Journalists, and the Association of Editors, in relation to implementation of effective media guidelines in relation to the reporting of suicide and self-harm issues.*

- *To pro-actively work with the media to promote positive mental health and raise awareness of sources of support for individuals or families experiencing mental health problems.*

- *To provide media volunteer training for nominated bereaved family representatives.*

Section B – Targeted approach

- *To ensure that responsive self-harm support services, including mentoring support, are in place in all Health and Social Service Trusts.*

- *To improve detection of and access to support services for people who engage in less serious forms of self-harm.*

- *To ensure that those in contact with mental health services are followed up at appropriate intervals, with assertive outreach where necessary, to assess suicide and self harm risk.*
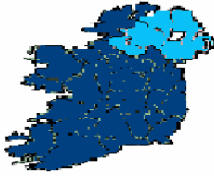
- *To provide appropriate support and information to promote awareness of suicide risk among people caring for someone with mental illness.*

- *To provide timely and appropriate support and follow-up for patients discharged from psychiatric units.*

- *To ensure that appropriate suicide awareness/intervention training is available for all frontline health services staff, police officers and other relevant professionals who come into contact with people with alcohol and drug problems.*

- *To develop agreed protocols concerning the assessment and management of patients at risk while under the influence of drugs and alcohol.*

- *To ensure that targeted outreach programmes for young males, who may be at risk of suicide and self-harm, are available in local communities and in all Health & Social Services Trusts.*

- *To implement a targeted information and awareness campaign for young males aimed at breaking down the current male culture of not discussing their problems openly.*

- *To enhance the role of the community/voluntary sector concerning provision of mentoring support for young people at risk of suicide and self-harm.*

- *To work with the Coroner's Office to facilitate the provision of sensitive and timely information to those bereaved by suicide.*

- *To provide an accessible support network in local communities for all survivors of abuse.*

- *To initiate an information campaign that seeks to sensitively raise awareness of the increased risk of suicide among all survivors of abuse, and encourage survivors of abuse to seek help in times of crisis.*

- *To make training available to support those working with survivors of abuse.*

- *To initiate a targeted information campaign that seeks to sensitively raise awareness of the increased risk of suicide among those groups identified as marginalise and disadvantaged, and encourages them to seek help at times of crisis.*

- *To develop a crisis plan for targeting people in high risk occupations, as when emergency situations arise.*

- *To make appropriate mental health and suicide awareness, prevention and intervention training a priority for all frontline prison and police custody staff, and where possible identified "listener" inmates.*

- *To liaise with the prison and probation service about the provision of follow-up support for those who have been recently released from custody.*

- *To provide appropriate support in relation to the removal of stigma from those who have been released from custody without charge.*

4. It is recommended to prioritise further actions in relation to alcohol and drug use. Even though 2 actions in relation to alcohol and drug use have been included in the *Protect Life* Strategy, the findings of the Self Harm Registry indicate that there is a strong association between alcohol use/abuse and deliberate self harm. Therefore, this action area should be given priority in the next phase of *Protect Life.*

5. Based on research evidence in recent years (2006-2009), it would be recommended to include a number of new actions in the next phase of *Protect Life.*

These are:

- Suicide and the internet including internet specific media guidelines
- Suicide prevention actions in relation to older adults
- Development of actions in relation to extended suicide (e.g. fillicide suicide, familicide)
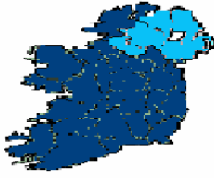
EVALUATION OF *PROTECT LIFE*

6. Comparing the targets set for Protect Life to other suicide prevention strategies, a relatively large reduction in suicide of 10% is expected in the 3rd year of the implementation of the five-year strategy. Taking into account the stepped approach that has been taken to implement the *Protect Life* strategy over a five-year period, it would be recommended to set the target for the primary outcome: reduction in the overall suicide rate, at the end of the five year period.

7. Evaluating the effectiveness of *Protect Life* in terms of changes in suicide rates, it would be recommended to rely exclusively on 'year of occurrence' suicide figures because of inaccuracy of 'year of registration' suicide figures.

8. Evaluating the effectiveness of *Protect Life,* it would be recommended to take into account figures on undetermined deaths in addition to suicide figures due to possible 'hidden' cases of suicide that could be included among verdicts of undetermined deaths.

9. In order to improve the accuracy of suicide figures, it would be recommended to establish a close link with the Coroner Service, in line with the Suicide Support and Information System (SSIS), which is currently being piloted in the RoI.

10. In addition to suicide as primary outcome in evaluating the effectiveness of *Protect Life*, it would be recommended to include changes in deliberate self harm and repeated self harm following presentation at Emergency Departments as additional outcomes.
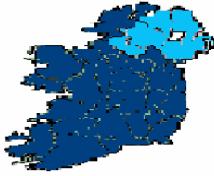
International research evidence shows that deliberate self harm can be used as a proxy for suicide, in particular among men.

11. Evaluating the effectiveness of suicide prevention programmes, it would be recommended to include intermediate outcomes (e.g. improved awareness and knowledge of suicidal behaviour, increased confidence, attitude change, increased referral etc.) in addition to primary outcomes (e.g. suicide, deliberate self harm).

12. In addition to outcome evaluation, it would be recommended to conduct an independent process evaluation in order to identify factors that may hinder progress in achieving milestones and deliverables that are required in order to meet the targets set.
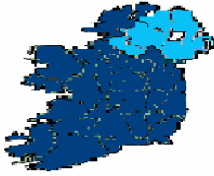
Aspects to include in process evaluation are for example resources including funding, capacity and quality research and prevention networks, achievement of milestones and deliverables, political support etc.

13. In terms of North/South co-operation, it would be recommended to initiate new areas of co-operation, such as the assessment and aftercare of deliberate self harm patients following presentation at Emergency Departments, the development of a suicide bereavement support and information system in collaboration with the Coroner Service, the implementation of media guidelines and responding to / preventing extended suicide.
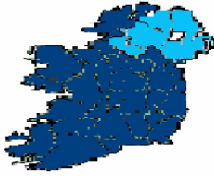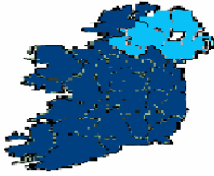
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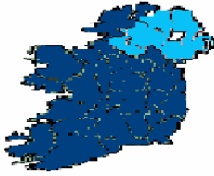
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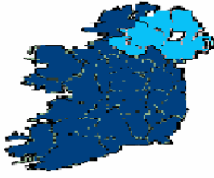
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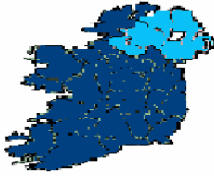
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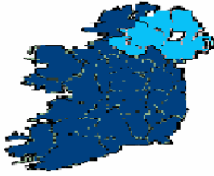
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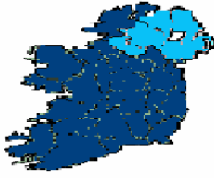Goldney, R.D. (2005). Suicide prevention: a pragmatic review of recent studies. *Crisis.* 26(3):128-40.

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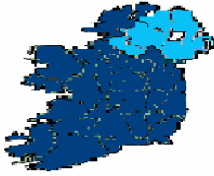
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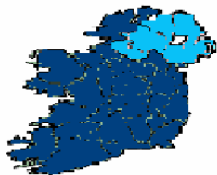
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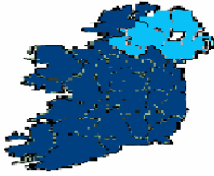
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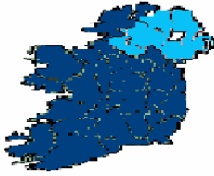
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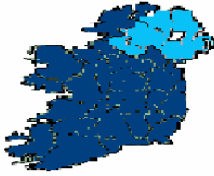
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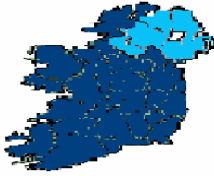
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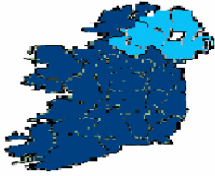
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