

# Self-harm and suicide in young people: Associated risk factors and evidence based interventions



**Self-Harm Awareness Conference**  
Dublin, 1<sup>st</sup> March 2019



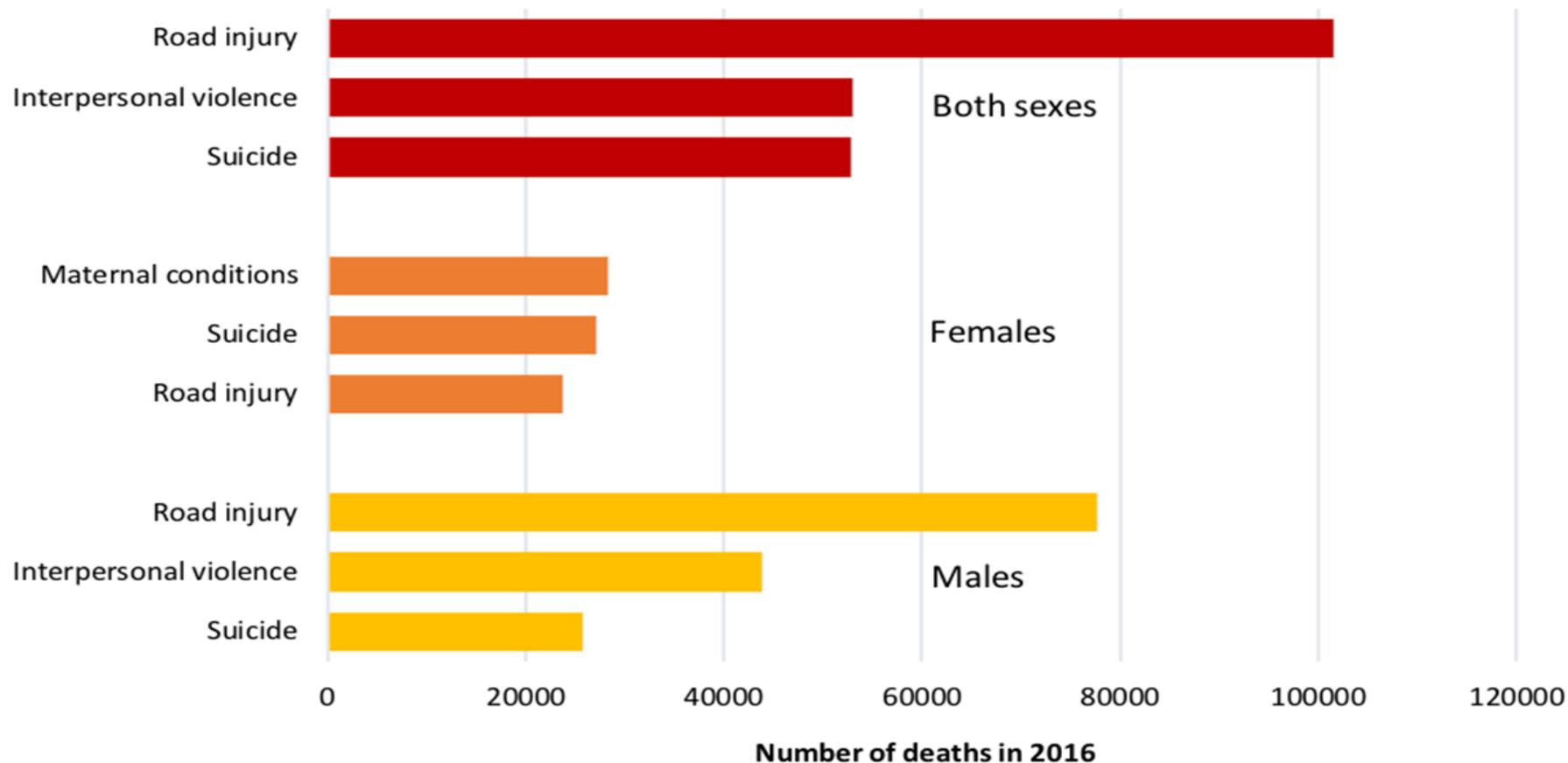
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International Association for Suicide Prevention

# Overview

- Extent of suicide and self-harm among adolescents and young adults
- Risk factors associated with self-harm and suicide among adolescents and young adults, and cases
- Psychotherapeutic interventions for self-harm in adolescents and young adults
- Suicide contagion and clustering

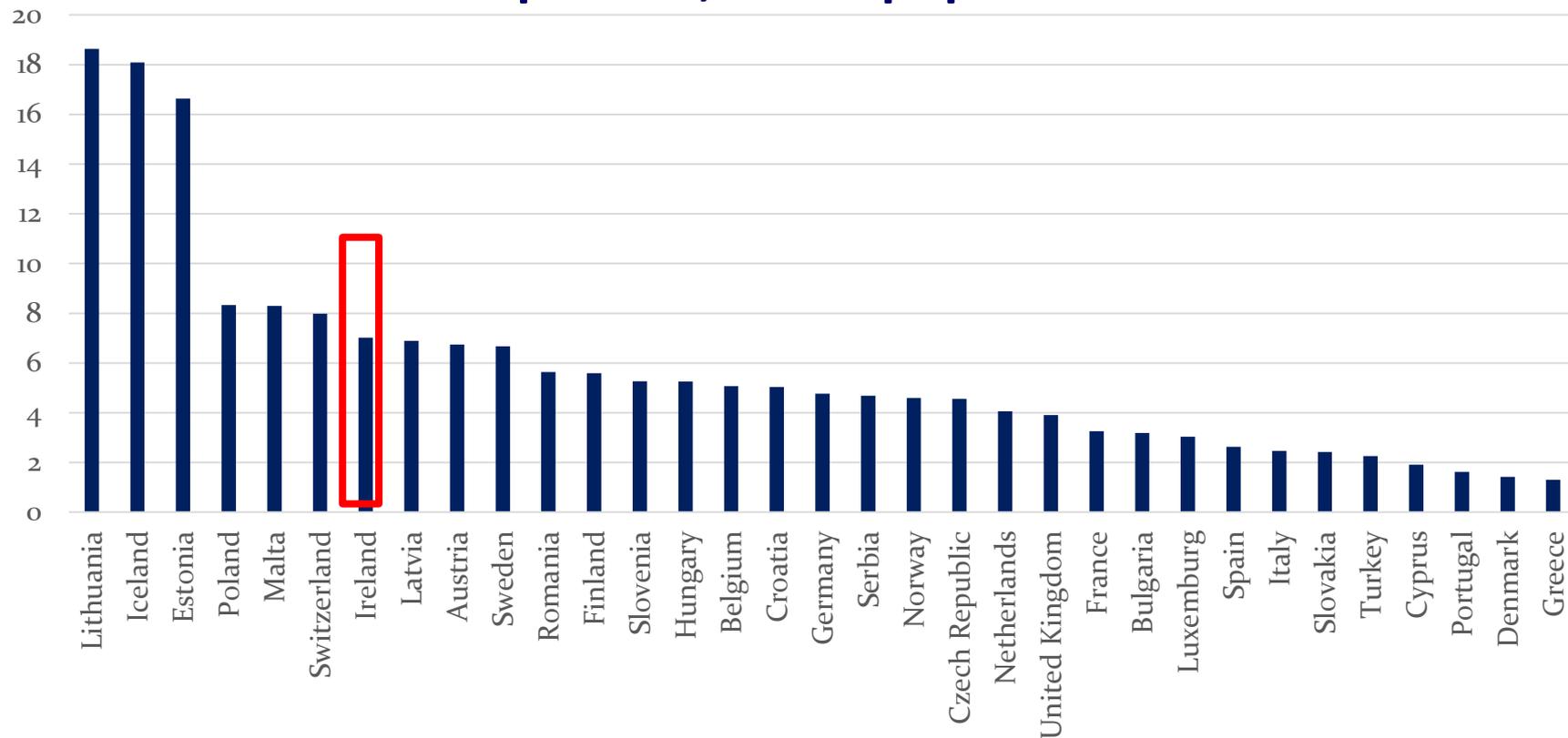
# Extent of the problem of self-harm in adolescents and young adults

# Leading causes of death among young people aged 15-19 years at global level (WHO, 2017)



Mental Health Atlas, 2017

# Rate of suicide among 15-19 year olds in Europe in 2015 per 100,000 of population



\*Data unavailable for the following countries: Montenegro, Former Yugoslav Republic of Macedonia and Albania

Source –Eurostat, 2018



## Increasing rates of self-harm among children, adolescents and young adults: a 10-year national registry study 2007–2016

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### Abstract

**Purpose** Rates of hospital-treated self-harm are highest among young people. The current study examined trends in rates of self-harm among young people in Ireland over a 10-year period, as well as trends in self-harm methods.

**Methods** Data from the National Self-Harm Registry Ireland on presentations to hospital emergency departments (EDs) following self-harm by those aged 10–24 years during the period 2007–2016 were included. We calculated annual self-harm rates per 100,000 by age, gender and method of self-harm. Poisson regression models were used to examine trends in rates of self-harm.

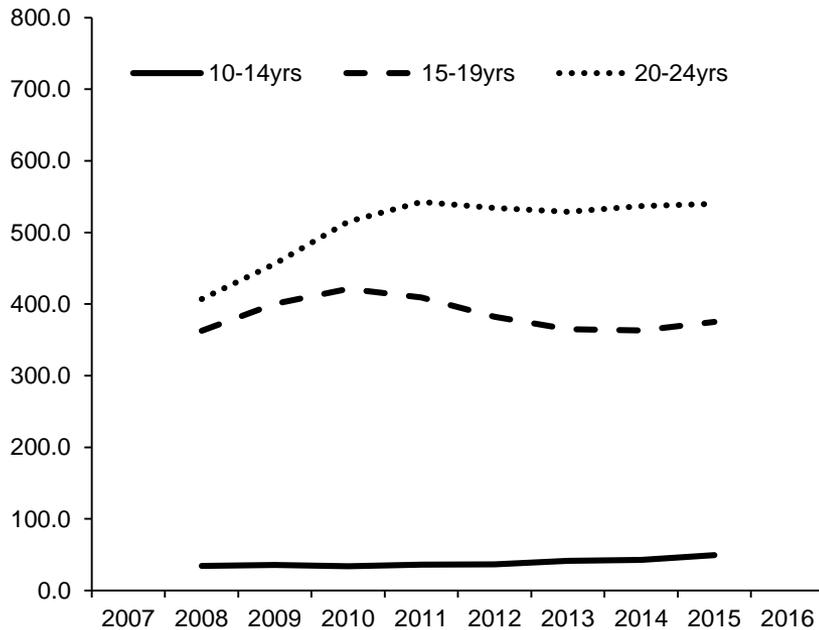
**Results** The average person-based rate of self-harm among 10–24-year-olds was 318 per 100,000. Peak rates were observed among 15–19-year-old females (564 per 100,000) and 20–24-year-old males (448 per 100,000). Between 2007 and 2016, rates of self-harm increased by 22%, with increases most pronounced for females and those aged 10–14 years. There were marked increases in specific methods of self-harm, including those associated with high lethality.

**Conclusions** The findings indicate that the age of onset of self-harm is decreasing. Increasing rates of self-harm, along with increases in highly lethal methods, indicate that targeted interventions in key transition stages for young people are warranted.

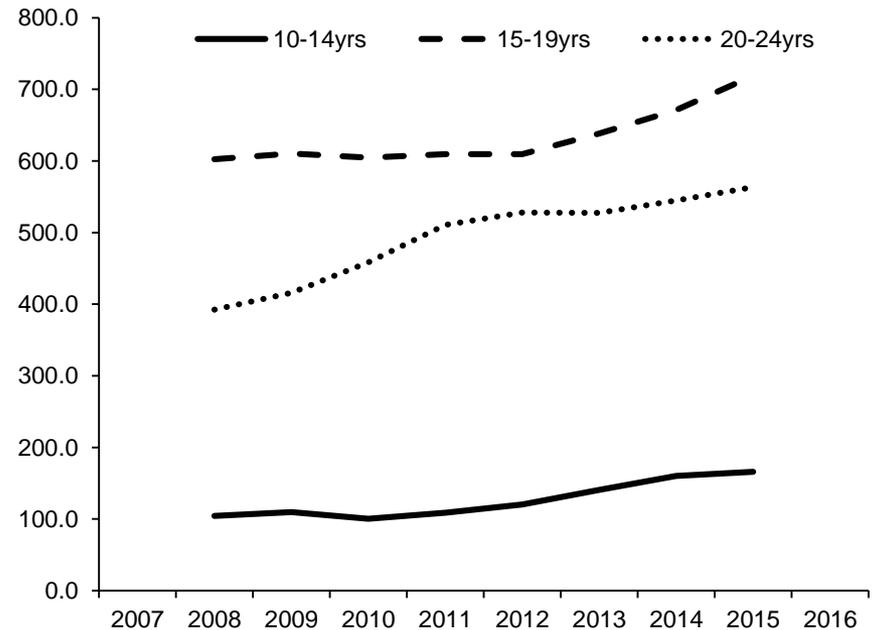
**Keywords** Self-harm · Young people · Epidemiology

# Self-harm among young people in Ireland, 2007-2016

## Male



## Female



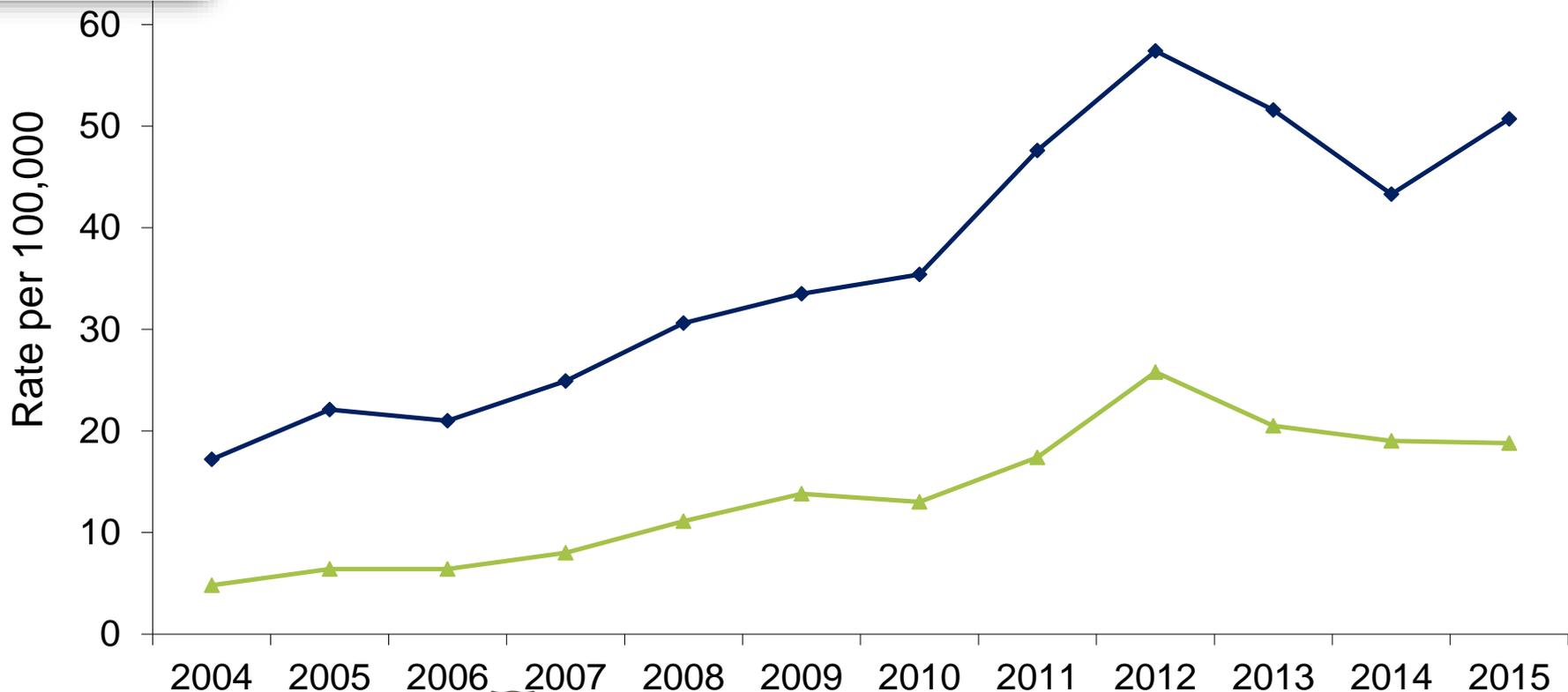
# Risk of repeated self-harm in young people

- Young people with the highest risk for repeated self-harm were 15–19-year-old females and 20–24-year-old males
- Self-cutting was the method associated with the highest risk of self-harm repetition. Time between first self-harm presentations represents an indicator of subsequent repetition
- Increased risk of self-harm method escalation among young people in recent years

# Increasing trend of self harm acts involving highly lethal methods among males and females aged 15-29 years

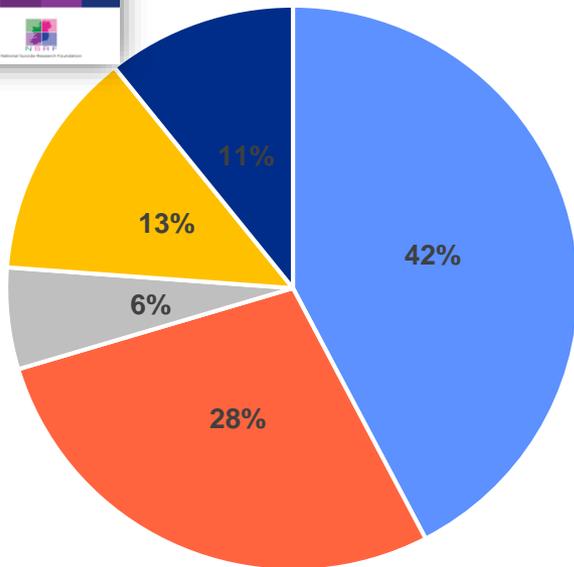


◆ Male ▲ Female

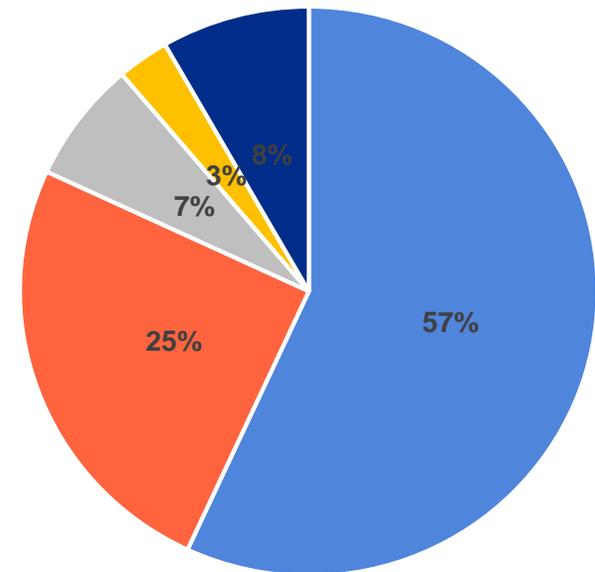


# Method of self-harm 10-17 year-olds, 2016

Male



Female



- Drug overdose only
- Self-cutting only
- Overdose & self-cutting
- Highly lethal
- Other

Alcohol was involved in 11% of presentations  
(15% for boys, 10% for girls)

# Case Claire

Claire, aged 13, engaged for the first time in self-cutting early 2017. Claire's mother discovered the self-cutting in March. With Claire's agreement an appointment was made with the GP. The GP assessed Claire and concluded Non-Suicidal Self-Injury, and referred her to a counsellor. In May, Claire's absenteeism from school increased and she told her mother that she didn't think the sessions with the counsellor were helpful.

In August, Claire engaged in an intentional drug overdose, using paracetamol that she had accessed in the bathroom. Claire's mother became very concerned and made a request to the GP to arrange a referral to the Child and Adolescent Mental Health Services (CAMHS). The GP immediately arranged a referral to CAMHS. However, the waiting time for the first session was 5 weeks.

# Case Claire

On 27<sup>th</sup> August, Claire engaged in a highly lethal act of self-harm and she die the same day.

Research article  
The prevalence of self-reported deliberate self-harm in Irish adolescents  
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# Risk factors associated with self-harm in adolescents

## Girls

- ❖ Substance abuse, including alcohol and drug abuse
- ❖ Self-harm by friends and family members
- ❖ Sexual abuse and physical maltreatment
- ❖ Problems related to sexuality
- ❖ Problems with parents
- ❖ Bullying and Cyberbullying
- ❖ Difficulties in making – keeping friends
- ❖ High levels of depressive symptoms
- ❖ Sleep problems

## Boys

- ❖ Substance abuse, including alcohol and drug abuse
- ❖ Self-harm by friends and family members
- ❖ High levels of anxiety
- ❖ High levels of impulsivity
- ❖ Problems related to sexuality
- ❖ Bullying and Cyberbullying
- ❖ Problems with school work
- ❖ Sleep problems

*McMahon et al, 2013; Hysing et al, 2015*



Minimising the risks of the internet while harnessing its potential for good is one of the most significant emerging challenges for suicide prevention. This research explored how people with suicidal feelings use the internet, and its impact on the suicidal behaviour.

**About the research**

Many cases of internet-related suicide have been reported in the popular and academic press. These highlight the existence of pro-suicide discussions and online information about methods, leading to concern that the internet can promote suicide. At the same time, there has been speculation about the potential to use the internet as a way of reaching vulnerable people through online help sites, peer-support, and as a means of delivering mental health interventions.

However, little is known about how many people use the internet when they are feeling suicidal, why they do this and how they interpret the material that they view. Understanding when, how and for whom the internet is a positive or negative resource is paramount.

This research gathered the experiences of over 1,000 people who had used the internet for suicide-related purposes or those someone who had used the internet when planning suicide. This was achieved by surveying 8000 young people in their 20s and over 1500 people of all ages who were hospitalized following suicide attempts, and by interviewing over 60 people, including those who had used the internet in the context of suicidal feelings or self-harm, as well as bereaved family or friends. Clinicians were also interviewed about their experiences of asking patients about internet use when making assessments of suicide risk.

There is an urgent need to further develop regulation, policy and best practice around internet use and internet surveillance. This policy report recommends a number of strategies ranging from working with search engine companies, transforming online help provision, and encouraging clinicians to explore patients' internet use and support those at risk. There is also an urgent need to encourage and promote responsible practice by all internet users.

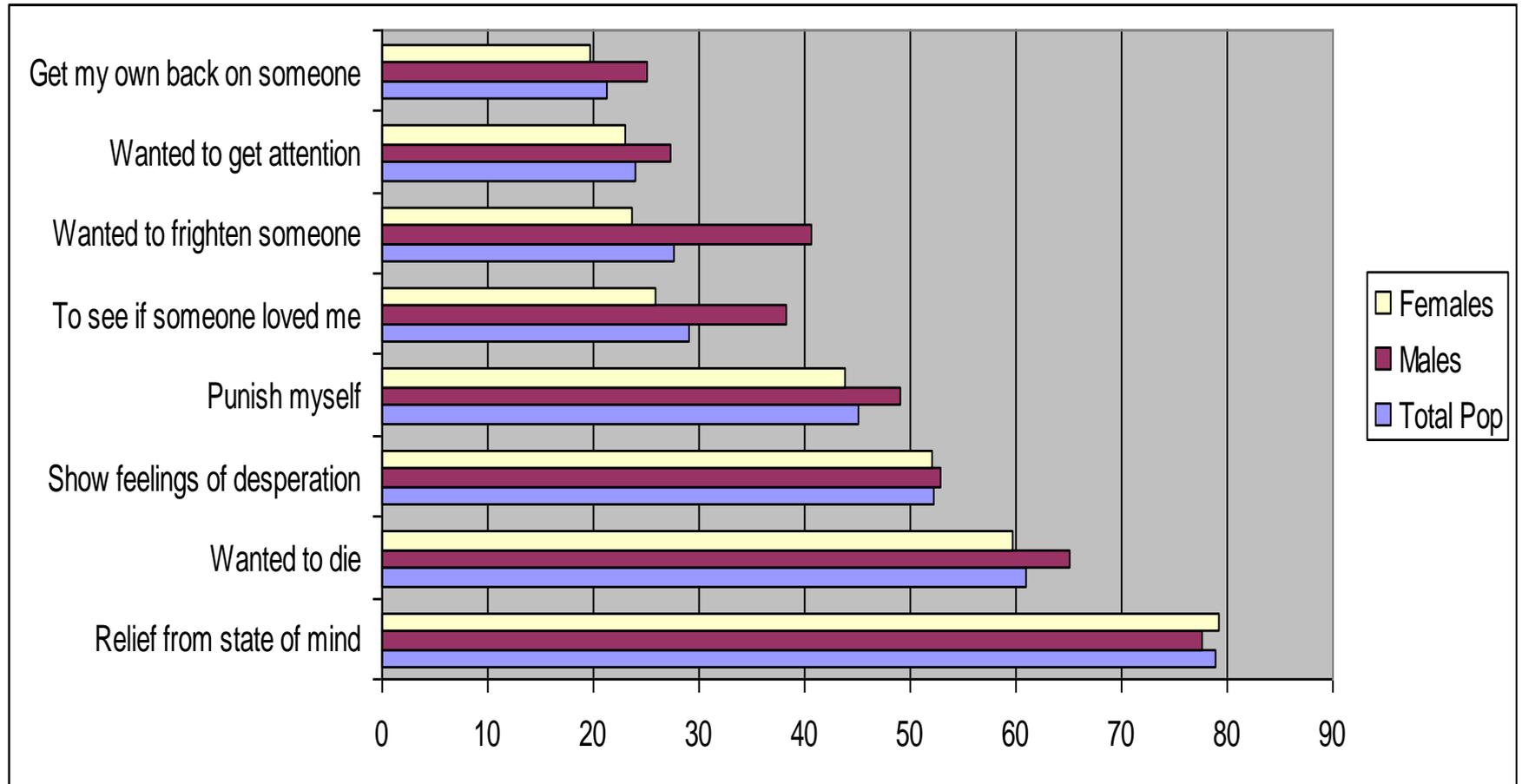
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# Balancing the risks and opportunities of internet use

- In a population survey of 21 year olds, of the 248 participants who had made suicide attempts (6% of the overall sample), almost three quarters reported some kind of suicide-related internet use at some point in their lives
- One in five had accessed sites giving information on how to harm yourself or take your life. In addition, help-sites were accessed as well.

*Biddle et al, 2016*

# Motives related to self-harm by gender among adolescents

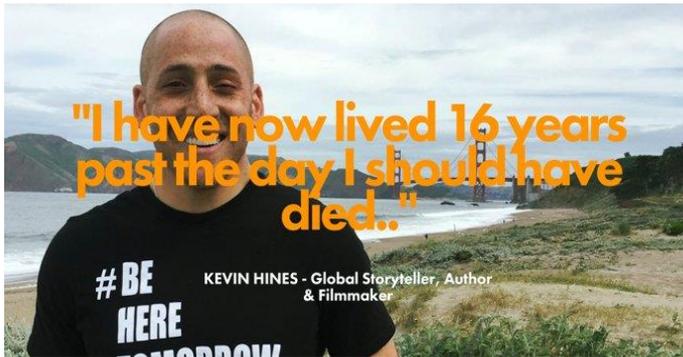


*Scoliers et al, 2009; Rasmussen et al, 2016*

# The importance of understanding **Ambivalence**

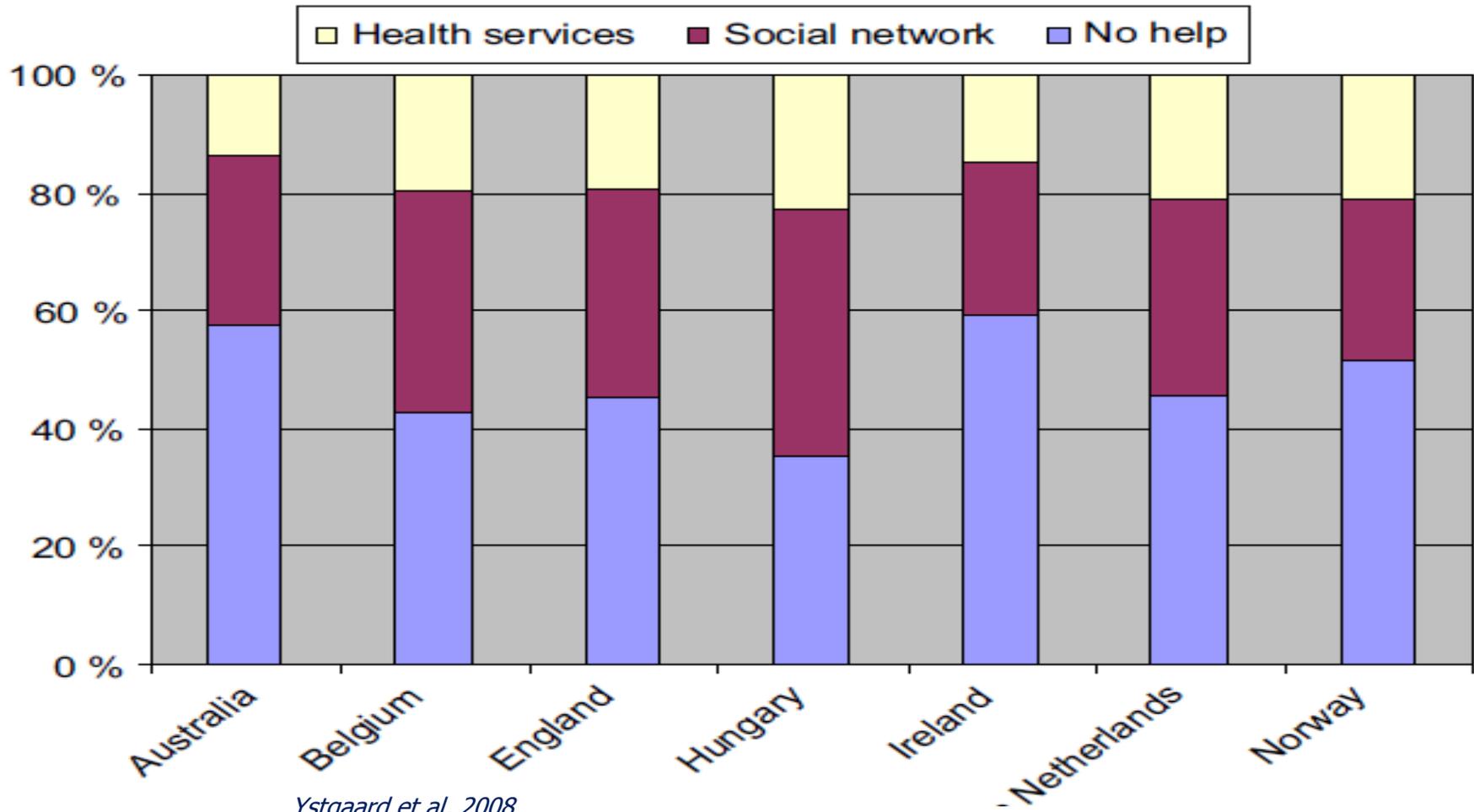
- A critical feature in working with those who self-harm is to recognise their ambiguity and the fragility and temporality of their decisions about their destiny.

*Bermans et al, 2009; 2017*



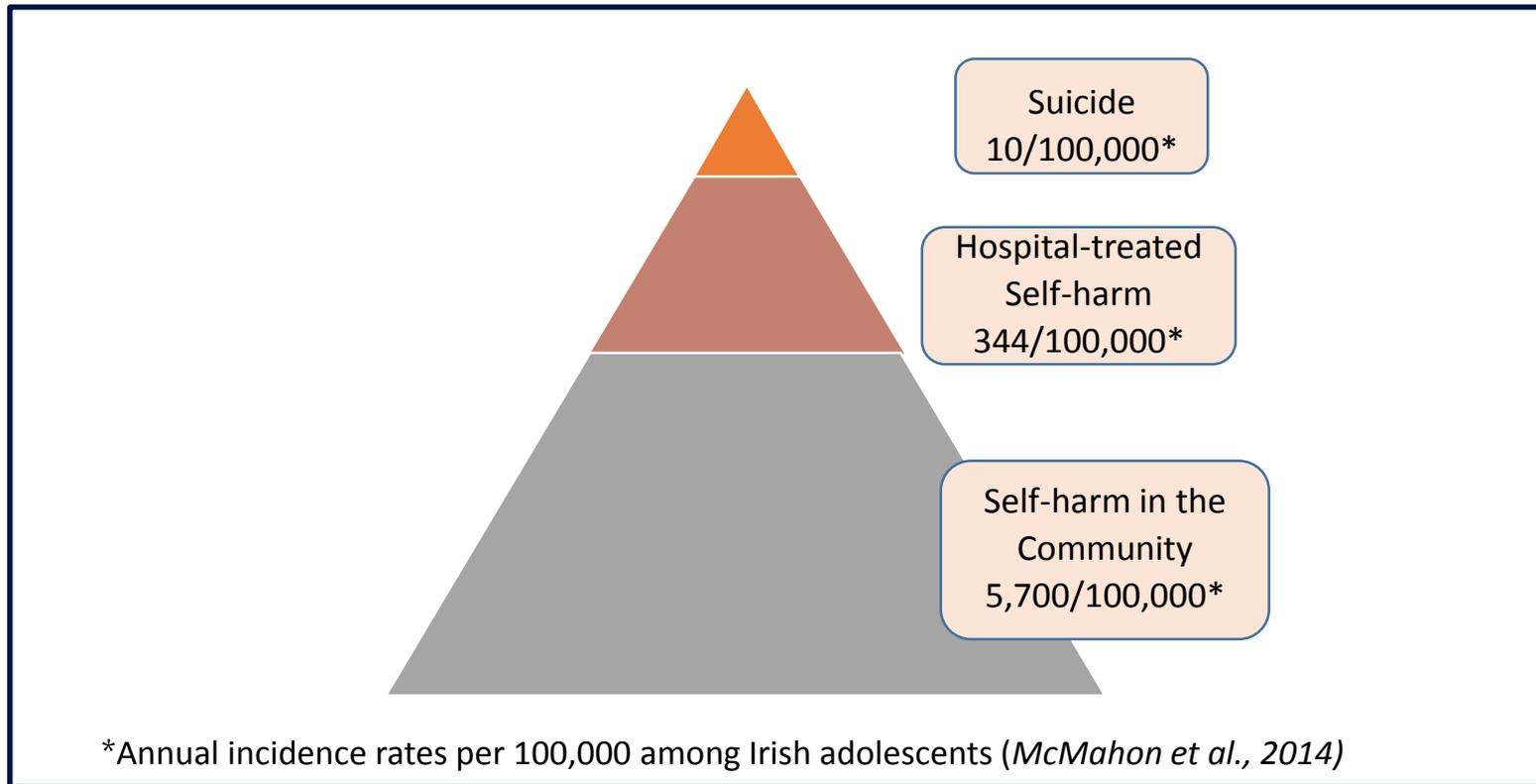
- I said to myself, If somebody comes up to me and says, ‘Are you okay? Is something wrong? Can I help you?’ I was going to tell them my whole life story and they were going to make me safe.”
- A suicidal person needs to hear: *“That we care about you, your life does matter and that all we want is for you to stay,”* he says. *“If someone had looked at me on that bridge or that bus and said that to me, I would have begged for help.”*  
*Kevin Hines*

# Proportion of adolescents with self-harm who receive help from health services, social network or no help by country



*Ystgaard et al, 2008*

# Suicide and medically treated self-harm in adolescents - The tip of the iceberg



# School-based and psychotherapeutic and interventions for self-harm in adolescents and young adults





# Young People's perspectives

## School-based individual support

*"Show them there is always someone there to help"*

## Peer discussion groups

*"A group where kids can sit and discuss problems freely"*

*"Maybe someone else feels the same and would like to help"*

## School-based mental health education

*"More mental health classes"*

*"Get someone who had a problem to give a talk in school"*

## Anonymous support

*"Write down problems privately and a teacher can discuss them in front of the class"*

# Psychotherapeutic interventions for self-harm in adolescents and young adults

- Cognitive Behaviour Therapy - Individual and Group-based psychotherapy
- Dialectical Behaviour Therapy for Adolescents (DBT-A)
- Home-based family therapy
- Brief compliance enhancement

**Interventions for self-harm in children and adolescents (Review)**

Hawton K, Witt KG, Taylor Salisbury, EB, Aronson, E, Gunnell D, Townsend E, v Heeringen K, Hazel P



**THE COCHRANE COLLABORATION**

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Interventions for self-harm in children and adolescents (Review)  
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**Articles**

**Psychosocial interventions following self-harm in adults: a systematic review and meta-analysis**

Keith Hawton, Kazuo G Witt, Tereasa L Taylor Salisbury, Elin Aronson, David Gunnell, Philip Hazel, Ellen Townsend, Ees van Hooghton

**Summary**  
Self-harm (intentional acts of non-fatal self-poisoning or self-injury) is common, particularly in young adults aged 15–35 years, often recurrent, and strongly associated with suicide. Effective alternatives of individuals who self-harm is therefore important. We have undertaken a Cochrane systematic review and meta-analysis of the effectiveness of psychosocial interventions for self-harm in adults.

**Methods** We searched five electronic databases (CCDANCTR-Studies and References, CENTRAL, MEDLINE, Embase, and PsycINFO) between Jan 1, 1996, and April 20, 2015, for randomised controlled trials of psychosocial interventions for adults after a recent (within 6 months) episode of self-harm. Most interventions were assessed in single trials. We report results for interventions for which at least three randomised controlled trials comparing interventions with treatment as usual have been published and hence might contribute to clinical guidance. The primary outcome was repetition of self-harm at the conclusion of treatment and at 6, 12, and 24 months' follow-up analysed, when available, with the intention-to-treat method; if this was not possible, we analysed with all available case data.

**Findings** We identified 20 non-overlapping randomised controlled trials with three independent trials of the same intervention. Cognitive-behavioural-based psychotherapy (CBT) comprising cognitive-behavioural and problem-solving therapy was associated with fewer participants repeating self-harm at 6 months' (odds ratio 0.54, 95% CI 0.34–0.85; 12 trials, n=117) and at 12 months' follow-up (0.40, 0.45–0.90; ten trials, n=221). There were also significant improvements in the secondary outcomes of depression, hopelessness, suicidal ideation, and problem solving. Patients receiving dialectical behaviour therapy (in three trials) were not less likely to repeat self-harm compared with those provided with treatment as usual at 6 months (odds ratio [OR] 0.59, 95% CI 0.16–2.15; n=267, three trials) or at 12 months (0.36, 0.05–2.47; n=172, two trials). However, the secondary endpoint of frequency of self-harm was associated with a significant reduction with use of dialectical behaviour therapy (mean difference: -18.82, 95% CI -36.68 to -0.95). Four trials each of case management (OR 0.78, 95% CI 0.47–1.30; n=1608) and sending regular postcards (OR 0.87, 95% CI 0.62–1.23; n=3277) did not reduce repetition of self-harm.

**Interpretation** CBT seems to be effective in patients after self-harm. Dialectical behaviour therapy did not reduce the proportion of patients repeating self-harm but did reduce the frequency of self-harm. However, aside from CBT, there were few trials of other promising interventions, precluding firm conclusions as to their effectiveness.

**Funding** National Institute for Health Research.

**Introduction**  
Self-harm (non-fatal intentional acts of self-poisoning or self-injury irrespective of the extent of suicidal intent) has been a growing problem in most countries over the past 40 years. In the UK, there are now estimated to be more than 200000 presentations of self-harm to general hospitals each year. Self-harm requires the use of considerable hospital resources in both developed and developing countries. Self-harm is most common in younger people between 15 years and 35 years of age. Unlike suicide, self-harm usually occurs more frequently in women than men, although the female-to-male ratio appears to have narrowed over the past decade. The sex ratio also decreases over the lifespan. Self-harm is often repeated, with 15–25% of individuals who present to hospital with self-harm re-presenting after a repeat episode within a year, although the risk of

factor for suicide across a range of psychiatric disorders. Repetition of self-harm further increases the risk of suicide.<sup>1,2</sup> Given the size of the problem of self-harm, the frequency with which it is repeated, and the risk of subsequent suicide, it is important that effective treatment interventions are developed for this patient population. We previously published a systematic review and meta-analysis<sup>3</sup> of both psychosocial and pharmacological treatment studies across the age spectrum in 1998, which was subsequently updated in an official guideline in 2011.<sup>4</sup> We have also done a major update of this review in conjunction with the Cochrane Collaboration.<sup>5,6</sup> In this Article we have focused on the results of psychosocial interventions for self-harm in adults investigated in a minimum of three independent trials compared with treatment as usual, because these



# Self-harm intervention and suicide prevention among young people at national level in Ireland

- National Clinical Programme for the Assessment and Management of Patients Presenting to Emergency Departments following Self-Harm
- *Connecting for Life*, Ireland's National Strategy to Reduce Suicide, 2015-2020



# Impact of Pieta House therapeutic approach on client recovery *(Conway et al, 2018)*

- Survey among clients aged 18 years and older, who completed therapy at Pieta House, using the Recovery Self-Assessment-Revised (RSA-R)
- 24.9% were aged 18-24 years
- The majority of clients indicated:
  - Willingness to ask for help (84.5%)
  - Reliance on others (82.1%)
  - Goal and success orientation (73.6%)
  - No domination of symptoms (66.6%)
  - Personal confidence and hope (46.7%)
- Areas of improvement: service user involvement, peer support and advocacy.



## Documentary “My other Life”



<https://vimeo.com/293985609>

<https://www.youtube.com/watch?v=EhwXUyM9V7g>

# Suicide contagion and clustering in young people

# Historical evidence of contagion of suicide

**1774:** *“The Sorrows of Jung Werther”* – JW Von Goethe

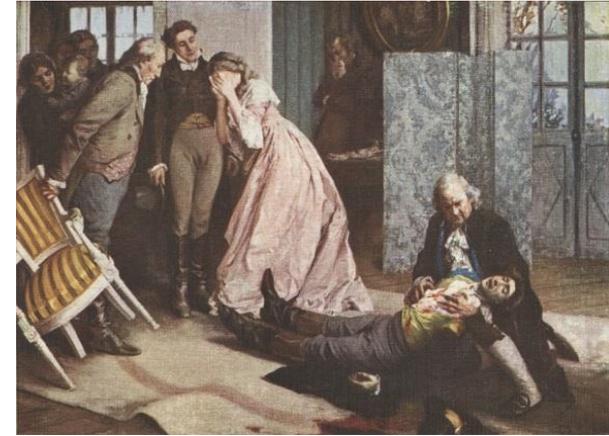
- Following publication of the novel, indications for imitative suicides among young men in Germany, and in Denmark and Italy – “The Werther Effect”

**1962:** *Marilyn Monroe*

- 12% increase in suicide in the month following her death by suicide.

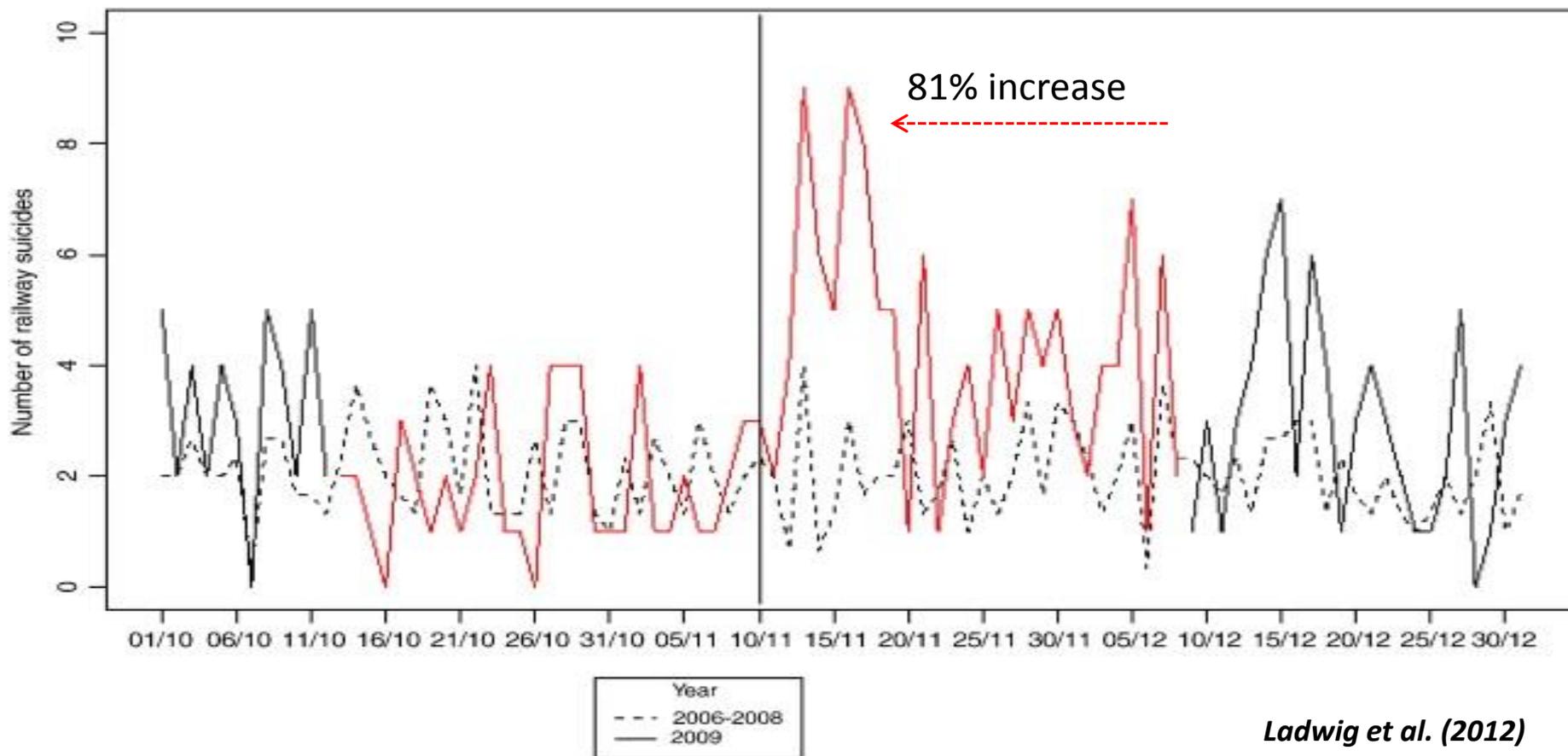
**1988:** *TV film of railway suicide of a 19-year old male student*

- A tv film showing the railway suicide of a young men was followed by a 175% increase in railway suicides in young men over 70 days after broadcasting.



*Phillips, 1974; Schmidtke & Häfner, 1988; Halgin et al, 2006*

# Significant increase of railway suicides after the suicide of German goal keeper, Robert Enke on 10<sup>th</sup> November 2009



*Ladwig et al. (2012)*

In addition to the short term increase in railway suicides, *Hegerl et al (2013)* identified a long-term effect: 19% increase in railway suicides in the two years after the suicide by Robert Enke

# Evidence of copycat suicides and suicide attempts/ self-harm

*Families blame '13 Reasons Why' for the suicides of 2 teens in California (US), April 2017)*

Netflix officials defend 13 Reasons Why against claims it glamorises suicide



*Dylan Minnette and Katherine Langford in 13 Reasons Why*

*Netflix drama series blamed for inspiring teens' suicide and attempted suicide (Austria), May 2017*

*'13 Reasons Why' copycat suicide in Peru, June 2017*

*Increase in teen suicidal behaviour linked to '13 Reasons Why', Toronto, June 2017*

# Internet searches for suicide following the release of *13 Reasons Why* (Ayers et al, JAMA, 2017)

- Comparison of internet search volumes (31<sup>st</sup> March - 18<sup>th</sup> April 2017) with expected search volumes if the series had never been released
- Suicide-related searches were 15-44% higher than expected, 12-19 days after the show's premiere
- Searches "*how to commit suicide*" (26%); "*commitsuicide*" (18%); "*howtokillyourself*" (9%) were all significantly higher than expected
- Public awareness indicative searches were also elevated.
- **Conclusion:** *13 Reasons Why* elevated suicide awareness, but it is concerning that searches indicating suicidal ideation also increased.

# Reasons Why Not

- The graphic nature of reporting and the reporting of specific details of highly lethal methods involved can trigger copycat cases; the effects of exposure on suicidal behaviour and violence are well-documented.
- Revenge suicide is relatively rare; revenge motive is reported by a minority of young people who self-harm.
- Evidence based information on positive mental health promotion and help-seeking for mental health problems, was not taken into account.
- There are elements of glorifying and romanticising suicide, which may further impact on vulnerable people who are considering suicide or self-harm.



# Negative impact of certain apps and online games, such as Momo challenge and Blue Whale on children and adolescents



- These games play on the fears and apprehension of some children and many parents.
- Once the user engages with the account, a request is made to the user to complete some challenge.
- The initial challenges may not be harmful, but may grow into threatening and request photographic evidence of completion. Further demands may request users to self-harm or harm others and threaten harm to the user's family.

# Characteristics of people involved in suicide contagion and clusters

## Comparing cluster suicides to singleton suicide cases

- Younger age
- More frequent loss of friends/family members through suicide (complicated grief and PTSD)
- More often drugs in toxicology (in particular benzodiazepines)
- More often history of alcohol and drug abuse
- Less frequently left a suicide note
- More often disconnected from parents

*(Haw et al, 2012; Larkin & Beautrais, 2012; Malone, 2013; Arensman et al, 2016)*

# How to respond to emerging suicide clusters and contagion

➤ There is a gap in evidence-based guidelines detailing appropriate response strategies to suicide clusters and the low-frequency nature of clusters makes it difficult to evaluate strategies

## Current best practice guidelines for responding to emerging clusters – the core elements

- Preparedness - Response team and core response plan should be available as part of a routine procedure
- Clarity on leadership/co-ordination of response team
- Multidisciplinary response team comprised of qualified representatives of all relevant agencies, incl. mental health services, suicide bereavement support services, social work, police, media
- Inter-agency protocols (if available) should be put in place in order to address referral procedures, confidentiality and information sharing
- Involvement of specialised staff of suicide prevention agencies and mental health professionals trained in dealing with severe traumatic incidents, post traumatic stress and complicated grief
- Response plan needs to address different phases:
  - Immediate aftermath: Up to 1 week
  - Reactive period: 1 week up to 1 month
  - Outreach period: weeks up to years (incl. anniversaries)



# Specific challenges related to self-harm and suicide in young people

- Self-harm more frequently observed among children and adolescents at younger age (e.g. Ireland, US, Japan)
- Shift in use of more highly lethal methods of self-harm at younger age, and method escalation over shorter period of time
- More emphasis on evidence based mental health promotion and programmes addressing positive coping skills at younger age
- Improved access to mental health services for children and adolescents at risk of self-harm and suicide
- More insight required into impact of harmful social media platforms and sites on self-harm and suicide

# Suicide Support and Information

## Informing and Supporting People Affected by Suicide

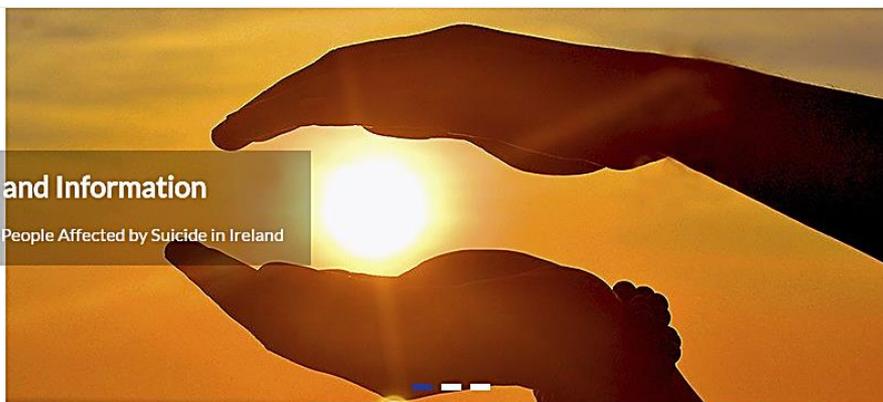
[www.suicidesupportandinformation.ie](http://www.suicidesupportandinformation.ie)



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### Suicide Support and Information

Informing and Supporting People Affected by Suicide in Ireland



## Suicide Support and Information

Developed by the **National Suicide Research Foundation** and funded by the Health Research Board (HRB) this website provides evidence based information on bereavement following suicide and responding to people at risk of suicide. The information is tailored for people bereaved by suicide and for health professionals, including GPs and mental health professionals, as well as the general public.

The evidence base represents up-to-date information from international systematic reviews and outcomes of a HRB funded study: *Psychosocial, psychiatric and work related factors associated with suicide in Ireland: A case-control study (SSIS-ACE)*.

The **Suicide Support and Information** website is a timely resource, which meets a key objective of the Irish National Strategy for the Reduction of Suicide, **Connecting for Life**, 2015-2020: *To enhance accessibility, consistency and care pathways of services for people vulnerable to suicidal behaviour.*

Edit

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[Aetiology and Risk Factors for Suicidal Behaviour](#)

[Responding to a Suicide Death](#)

[Responding to People at Risk of Suicide](#)

[Self-Care and Peer Support](#)



## Go Raibh Maith Agat!



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