Suicide and self-harm in Ireland:
Data collection systems and recent outcomes

Technical Meeting on Suicide and Self-Harm Monitoring and Prevention in the Russian Federation

Stavropol State Medical University,

28-30th October 2019

Prof Ella Arensman
School of Public Health & National Suicide Research Foundation,
WHO Collaborating Centre on Surveillance and Research in Suicide Prevention
University College Cork, Ireland
Australian Institute for Suicide Research and Prevention
International Association for Suicide Prevention

National Suicide Research Foundation NSRF

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

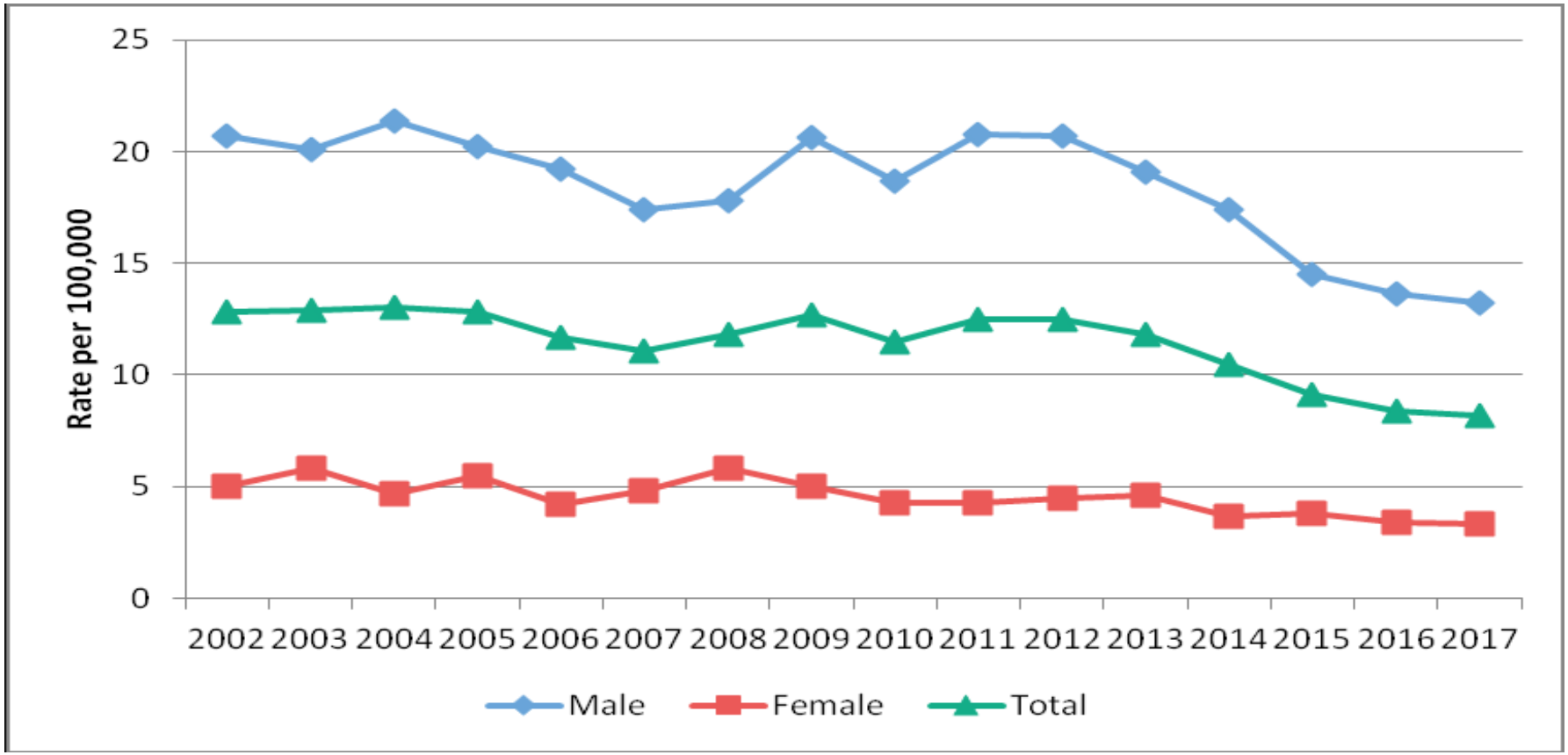
HRB Health Research Board

IASP

Overview

- Recent trends of suicide in Ireland
- Challenges in relation to accuracy and real-time access to suicide mortality data
- Suicide Support and Information System and Suicide and Self-Harm Observatory – recent outcomes
- National Self-Harm Registry of Self-Harm Ireland – recent outcomes
- Benefits of suicide and self-harm surveillance systems

Trends in suicide in Ireland by gender, 2002-2017



2016-2017: Provisional data CSO

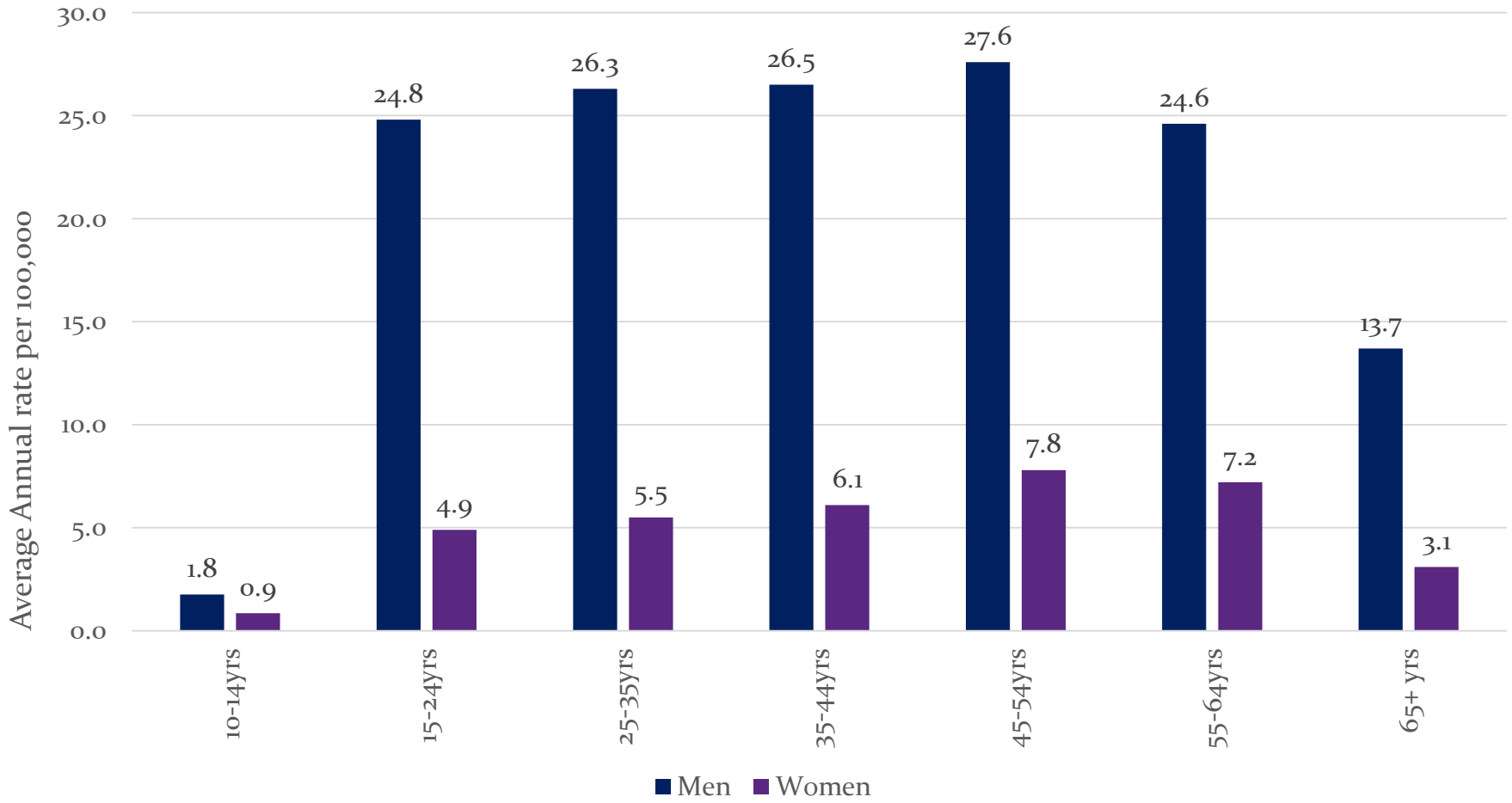
National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Suicide in Ireland by age and gender: Average rates



National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Connecting for Life:
Ireland's National Strategy to Reduce Suicide 2015-2020

Goal 7: To improve surveillance, evaluation and high quality research relating to suicidal behaviour

7.2: Improve access to timely and high quality data on suicide and self-harm

SUSTAINABLE DEVELOPMENT GOALS

National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

The need to develop an innovative suicide recording system in Ireland: Suicide Support and Information System (SSIS)

- Absence of real-time data on suicide. Suicide figures are often published by the Central Statistics Office (CSO) 2 years after the death has occurred.

- Information from CSO is often limited to demographics and methods involved in cause of death

Development of the Suicide Support and Information System – Objectives:

1. Better define the incidence and pattern of suicide in Ireland

2. Identify and better understand causes of suicide

3. Identify and improve the response to clusters of suicide

4. Improve access to support for the bereaved

5. Reliably identify those individuals who present to the Emergency Department due to self-harm and who subsequently die by suicide

A systematic approach to obtain real-time and accurate data on suicide:

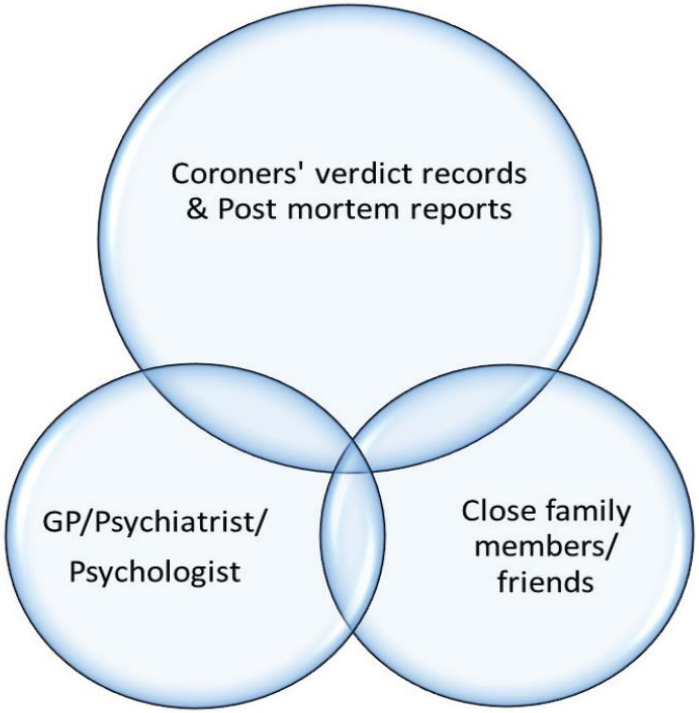
Suicide Support and Information System, Ireland

Coroner's inquest concluded involving cases of suicide / open verdicts

Step 1: SRP facilitates support for families bereaved by suicide / other sudden deaths after conclusion of inquest

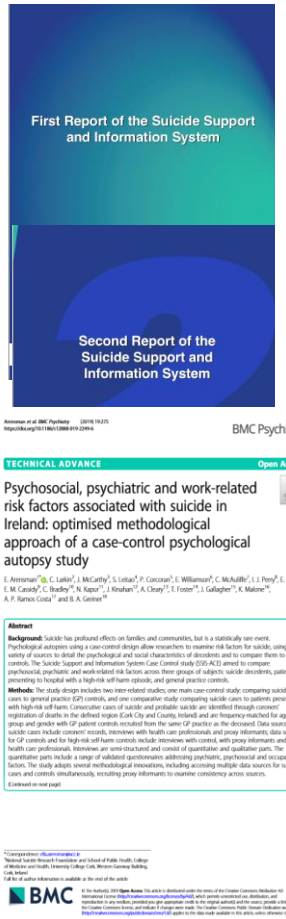
Step 2: Research: SRP approaches next of kin and health care professional(s) after conclusion of inquest

Response rate: 100%



Response rate: 77%

Response rate: 66%

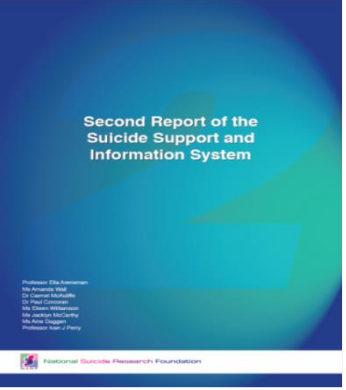


National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

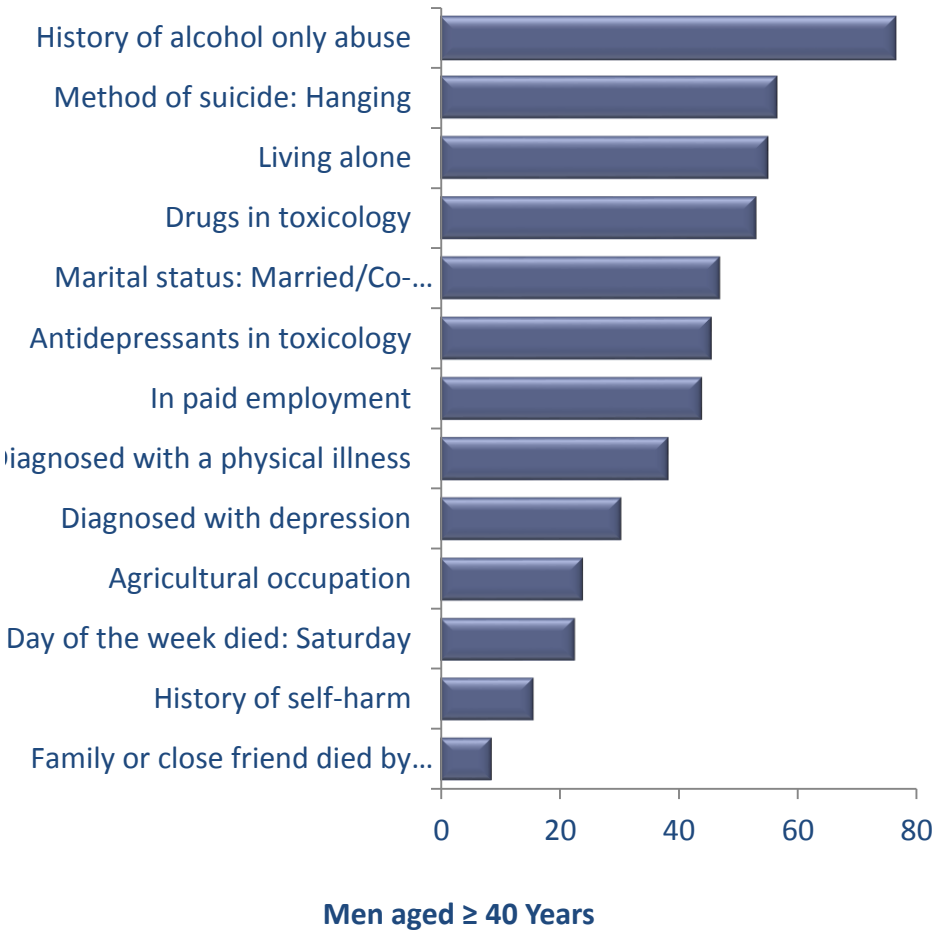


Main characteristics of people who had died by suicide

- Overrepresentation of men (80.1%); Men significantly younger than women
- Relatively high proportion were unemployed at time of death (33.1%)
- Among men, 48.6% had worked in the construction/production sector; among women, 26.5% had worked in a healthcare setting
- Nearly two thirds had a history of self-harm (65.2%); 69.1% were diagnosed with depression, and alcohol/and or drug abuse was present among 60.7%
- In the year prior to death, 81% had been in contact with their GP or a mental health service. Most people who contacted GP did so more than 4 times

Differences between men aged <40 years versus men aged ≥ 40 years

Men aged < 40 Years



Men aged ≥ 40 Years

National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

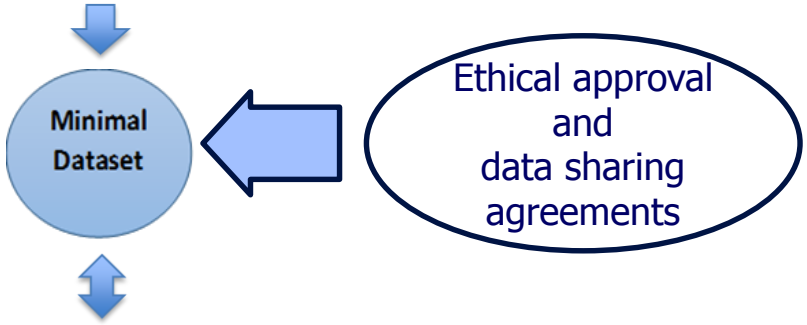
HRB Health Research Board

IASP

The Suicide and Self-Harm Observatory (SSHO)– Links between data sources to capture suspected suicide case in real-time

The Coroners of Cork city and county

- Only information that can be provided prior to coronial request will be made available by the coroner for entry to the minimal dataset.
- Information provided by the coroners will not be used by the NSRF/UCC to approach family members directly
- Data obtained from the coroners will provide the most complete information on case of suspected suicide



Health Service Executive

- A two way pathway will exist between the NSRF and the HSE:

1. Information relating to the suspected suicide of a service user will be obtained from the HSE patient mortality register.
2. Information from the minimal dataset will be shared with the Suicide Resource Officer (SRO) in order to facilitate early response to emerging suicide clusters.

- The SRO takes into consideration families in need due to the sudden death of a family member based on best practice.
- The SRO also provides support to schools and other community services in the region that has been affected by the sudden death of a student.

National Suicide Research Foundation NSRF

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Benefits of the SSHO based on pilot implementation December 2018-September 2019

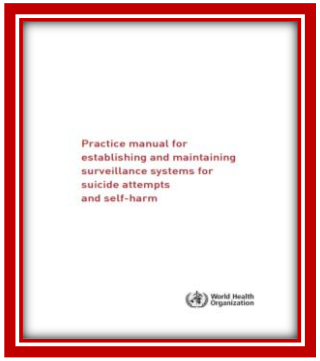
- SSHO has been effective in crosschecking incomplete data provided by the HSE Resource Officer for Suicide Prevention. The crosschecking feature of the SSHO ensures that support can be provided indirectly by the HSE in affected communities.

- Communication between the primary researcher and the data providers has been good overall.

- The SSHO has been used in five instances within the first six months of its existence to validate unverified reports of contagion within two areas of Cork in December 2018 and May 2019.

- This validation feature has also been effective in fulfilling a request from the media for verification of information, hence preventing the spread of misinformation relating to perceived contagion/clustering in the area of Cork.

The National Self-Harm Registry Ireland – Recent outcomes



National Suicide Research Foundation
NSRF

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

National Self-Harm Registry Ireland

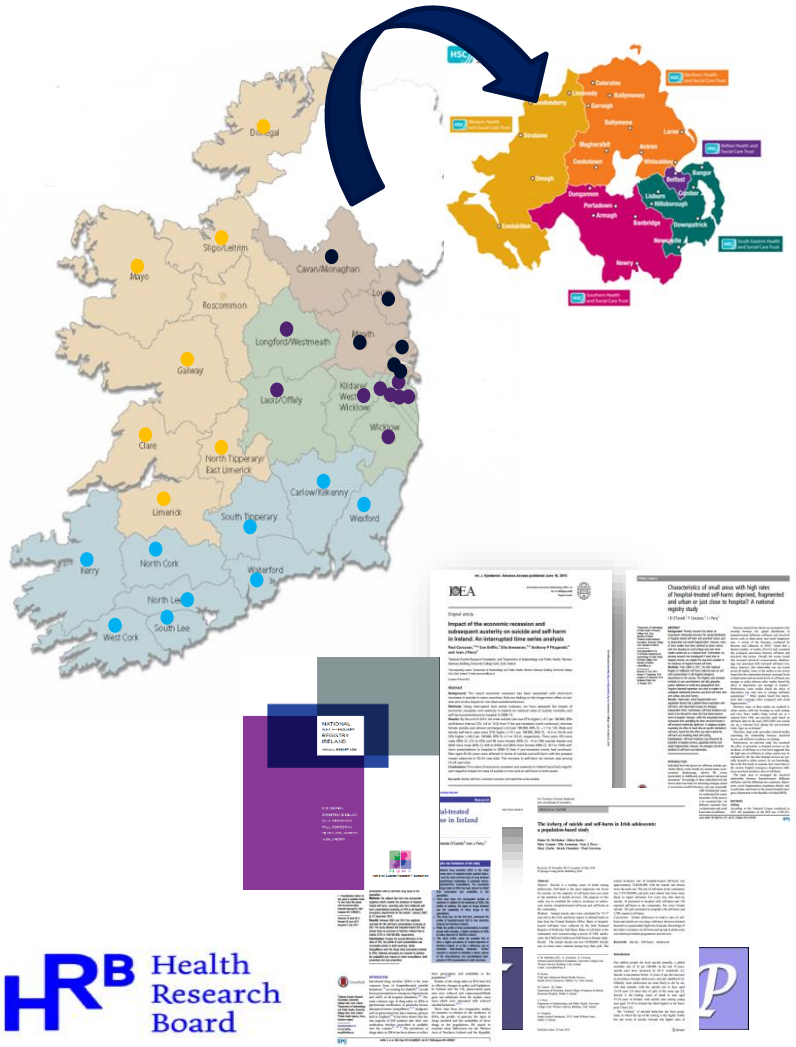
Aims:

- To **establish the extent and nature** of hospital-treated self-harm;
- To **monitor trends over time** and also by **area**;
- To **contribute to policy and development**;
- To **inform** the progress of **research and prevention**.

Definition

'an act with **non-fatal outcome** in which an individual **deliberately initiates a non-habitual behaviour**, that without intervention from others will cause self harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences'.

(Schmidtke et al, 2006)



National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

National Self-Harm Registry Ireland

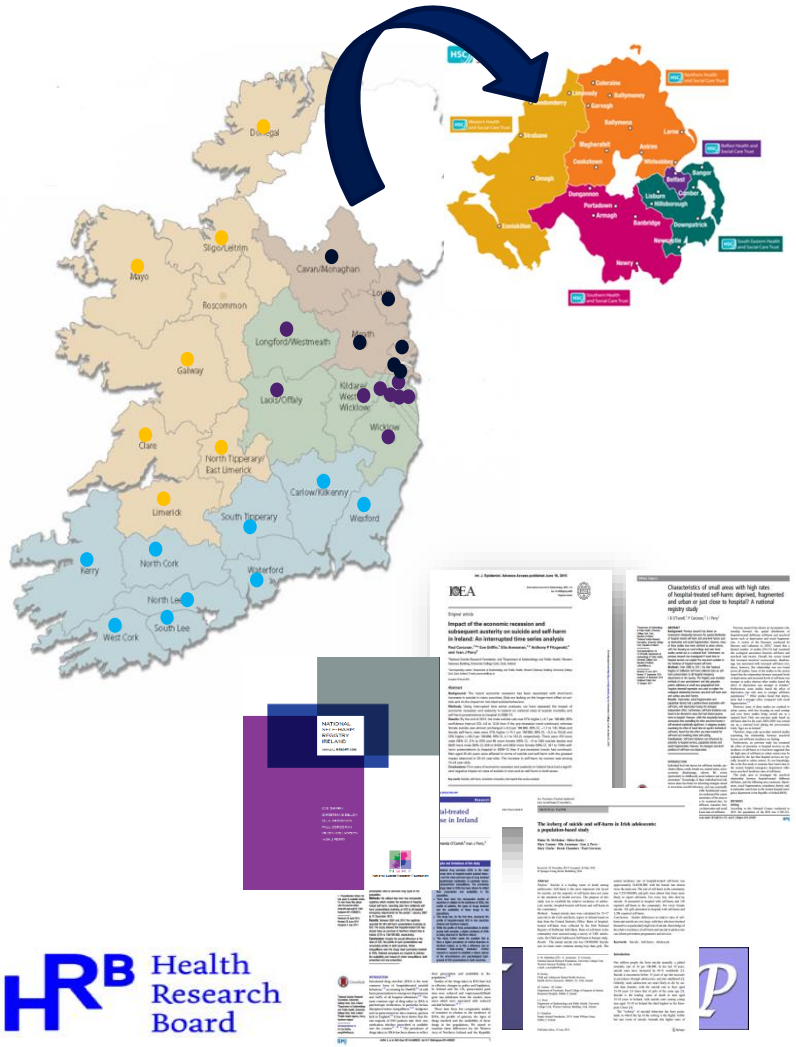
Aims:

- To **establish the extent and nature** of hospital-treated self-harm;
- To **monitor trends over time** and also by **area**;
- To **contribute to policy and development**;
- To **inform** the progress of **research and prevention**.

Definition

'an act with **non-fatal outcome** in which an individual **deliberately initiates a non-habitual behaviour**, that without intervention from others will cause self harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences'.

(Schmidtke et al, 2006)

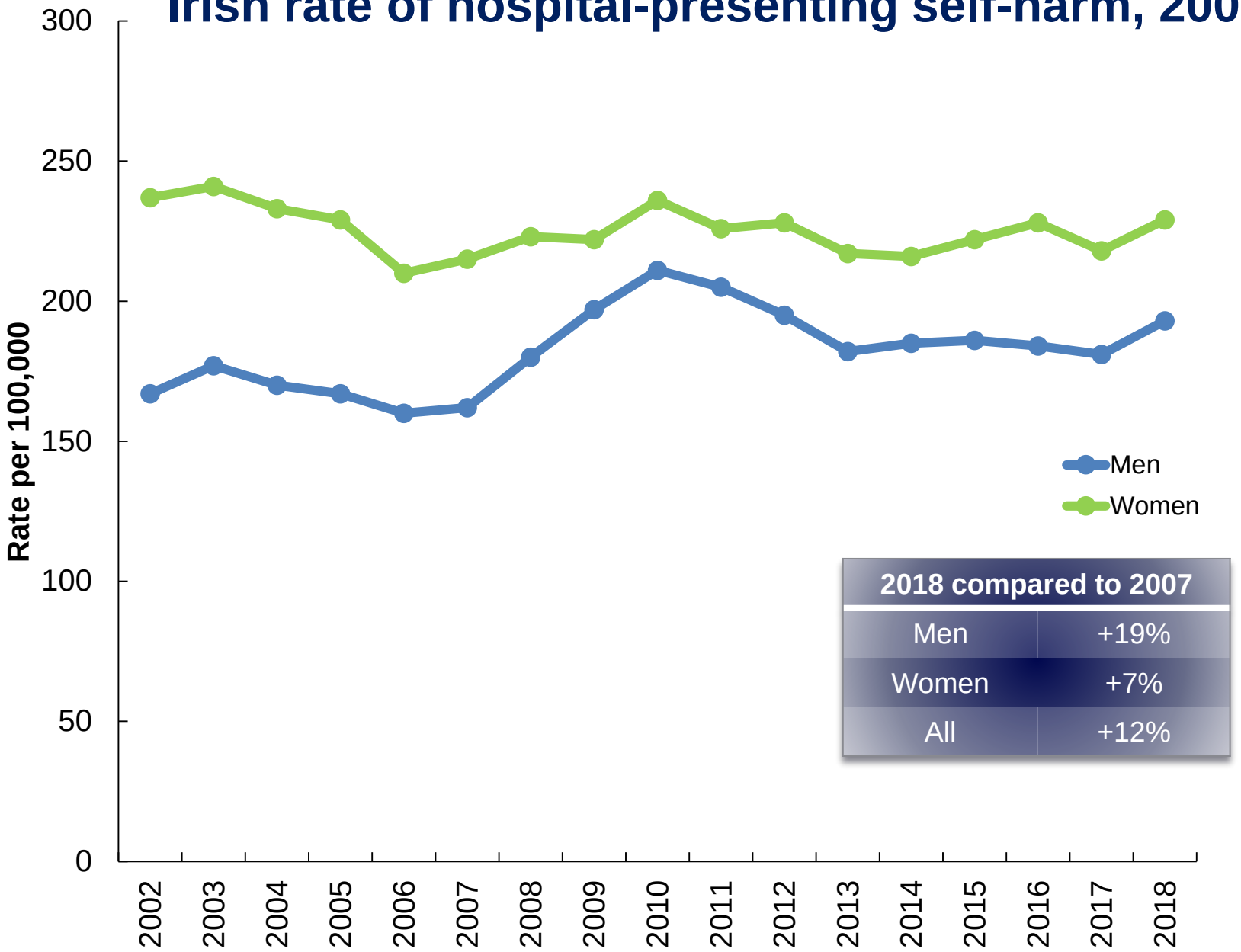


National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

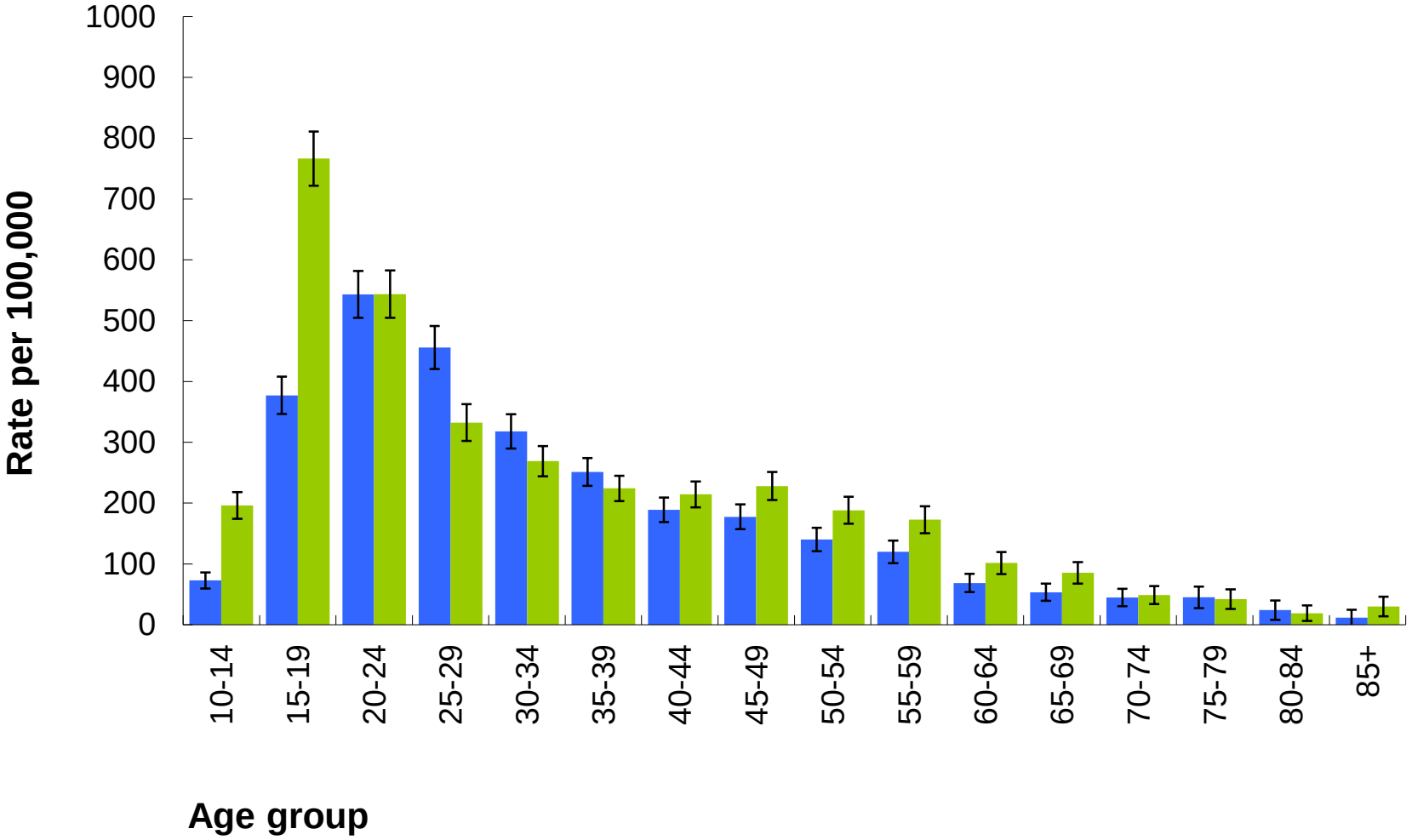
HRB Health Research Board

Irish rate of hospital-presenting self-harm, 2002-2018



2018 compared to 2007	
Men	+19%
Women	+7%
All	+12%

Self-harm by age and gender, 2018



National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Social Psychiatry and Psychiatric Epidemiology (2018) 53:663–671
https://doi.org/10.1007/s00127-018-1522-1

ORIGINAL PAPER

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

Eve Griffin[1] · Elaine McMahon[1] · Fiona McNicholas[2,3,4] · Paul Corcoran[1,5] · Ivan J. Perry[5] · Ella Arensman[1,5]

Received: 30 November 2017 / Accepted: 25 April 2018 / Published online: 2 May 2018
© Springer-Verlag GmbH Germany, part of Springer Nature 2018

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.

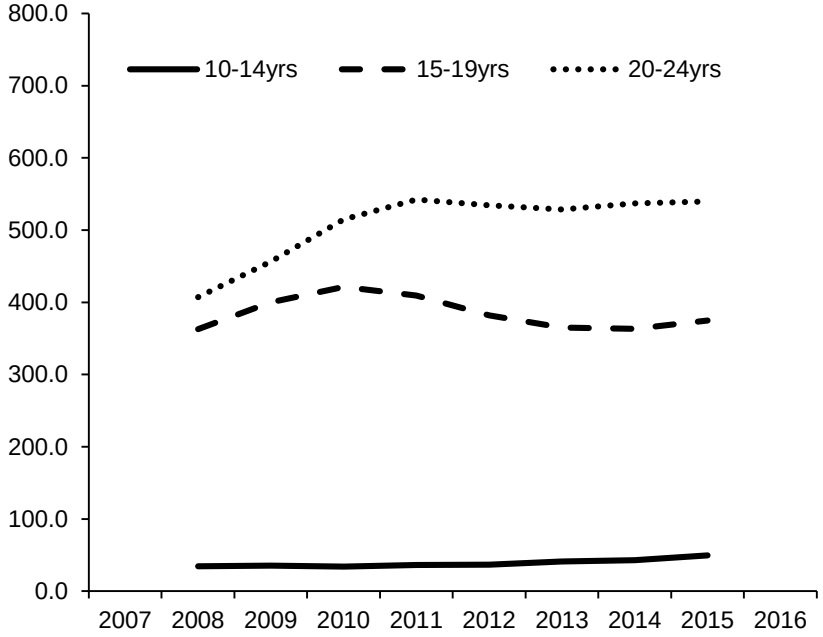
Results The average person-based rate of self-harm among 10–24-year-olds was 318 per 100,000. Peak rates were observed among 15–19-year-old females (564 per 100,000) and 20–24-year-old males (448 per 100,000). Between 2007 and 2016, rates of self-harm increased by 22%, with increases most pronounced 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.

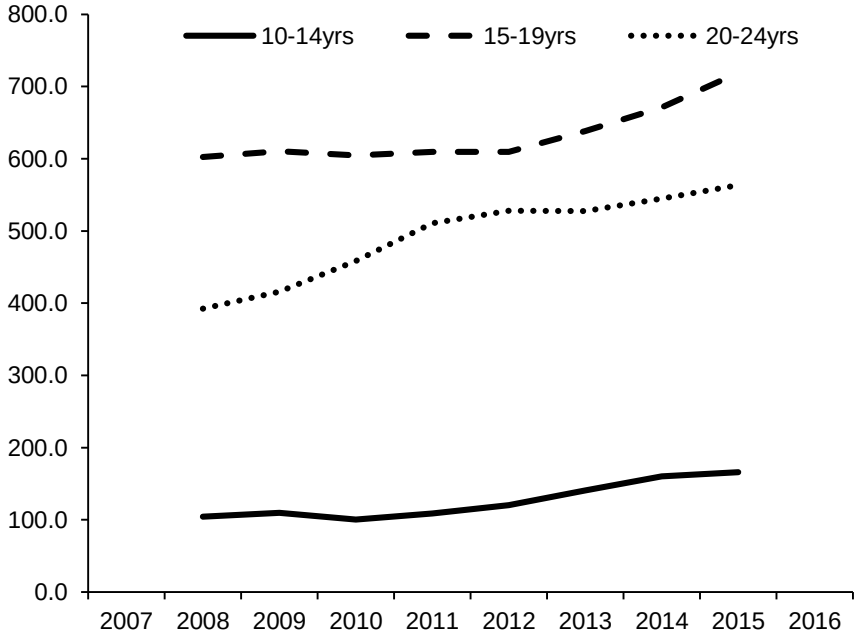
Keywords Self-harm · Young people · Epidemiology

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

Male



Female



National Suicide Research Foundation
NSRF

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

BMC Psychiatry

RESEARCH ARTICLE Open Access

Risk of repeated self-harm and associated factors in children, adolescents and young adults

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

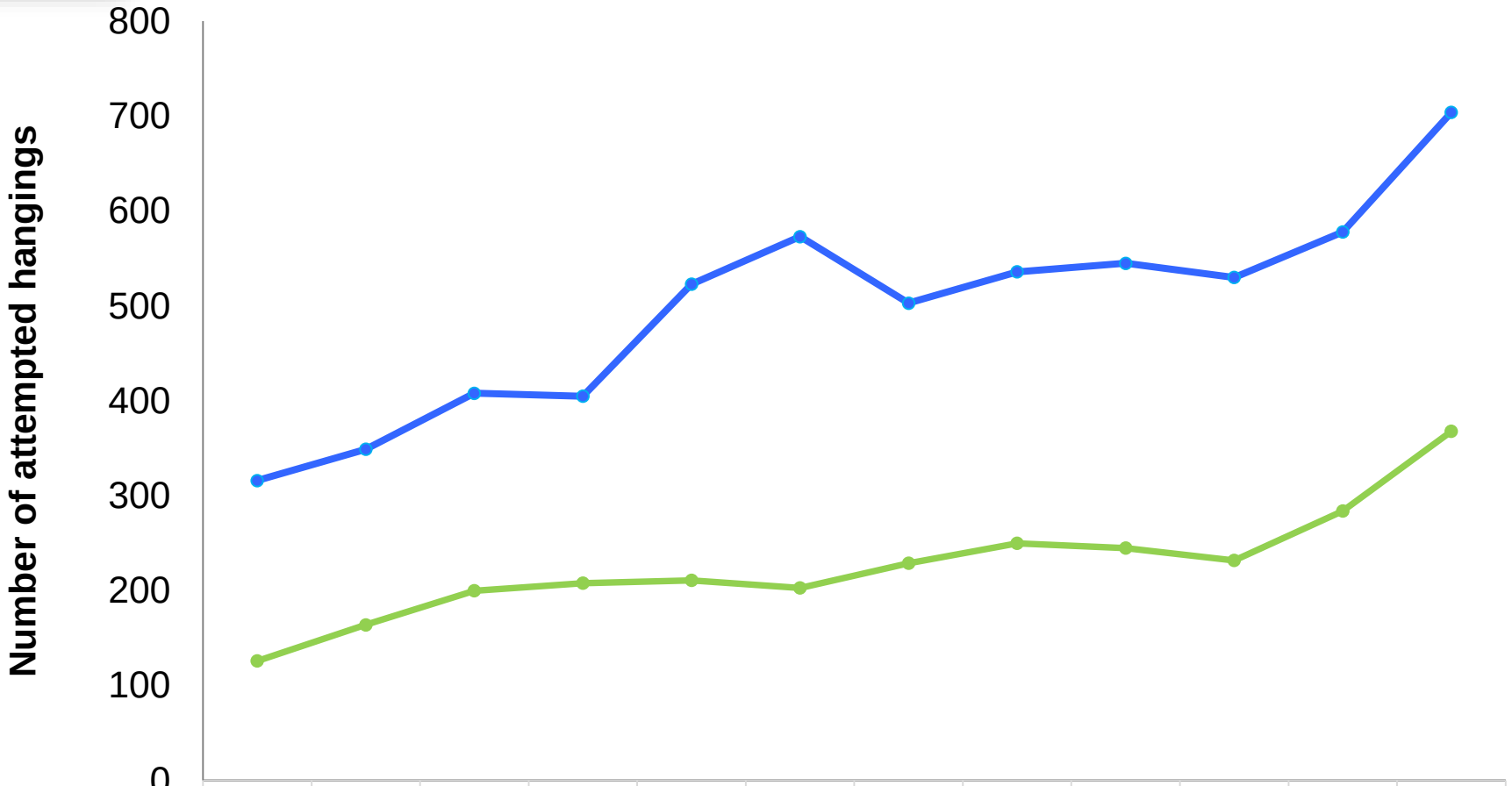
National Suicide Research Foundation NSRF

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Trends in highly lethal self-harm methods



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Men	316	349	408	405	523	573	503	536	545	530	578	704
Women	126	164	200	208	211	203	229	250	245	232	284	368

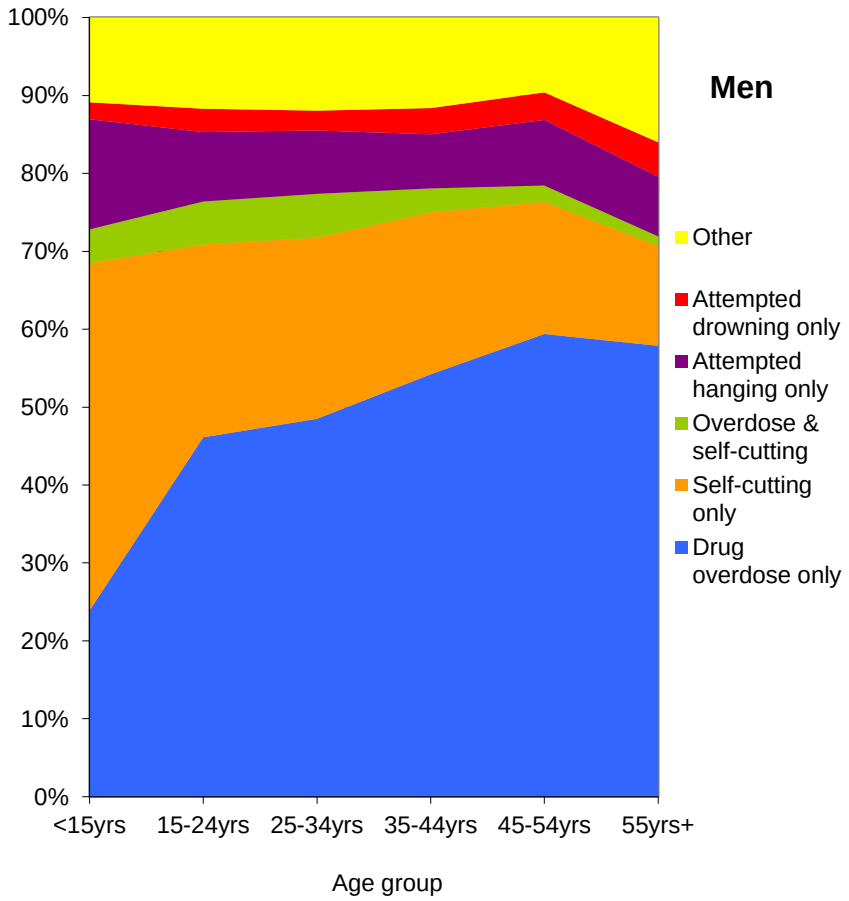
National Suicide Research Foundation NSRF

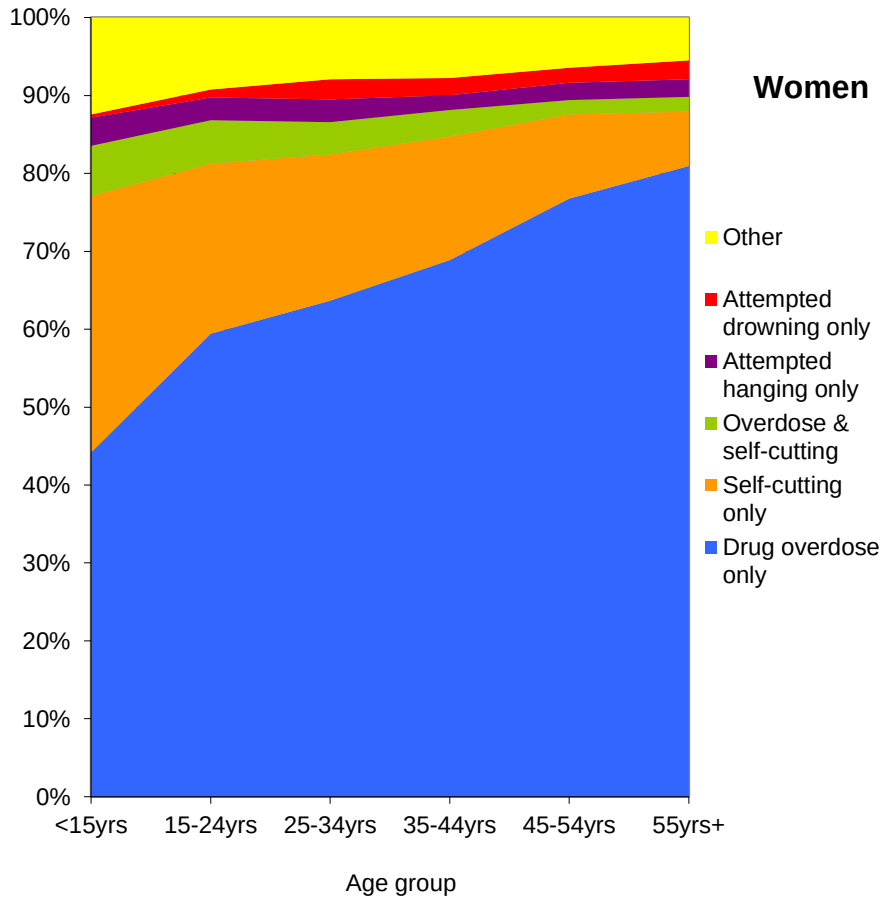
UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Method of self-harm by males and females by age group





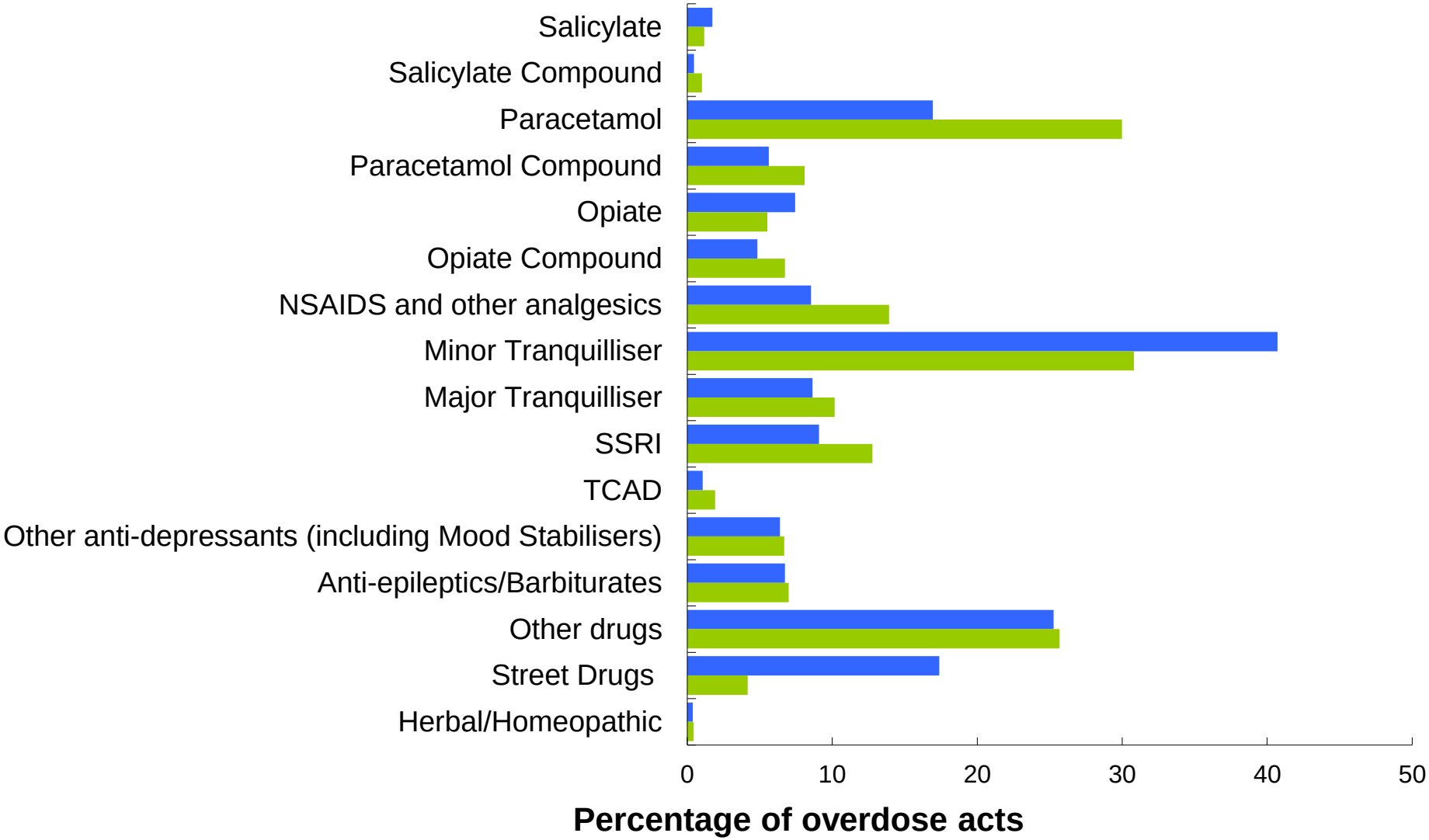
National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Drugs used in intentional overdose



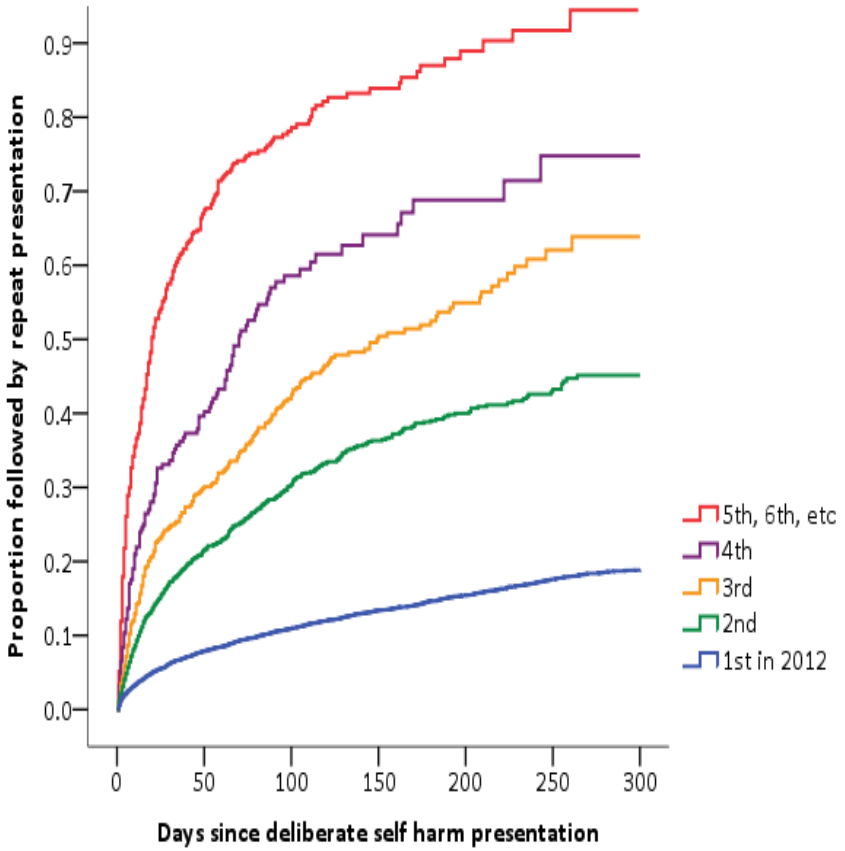
National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

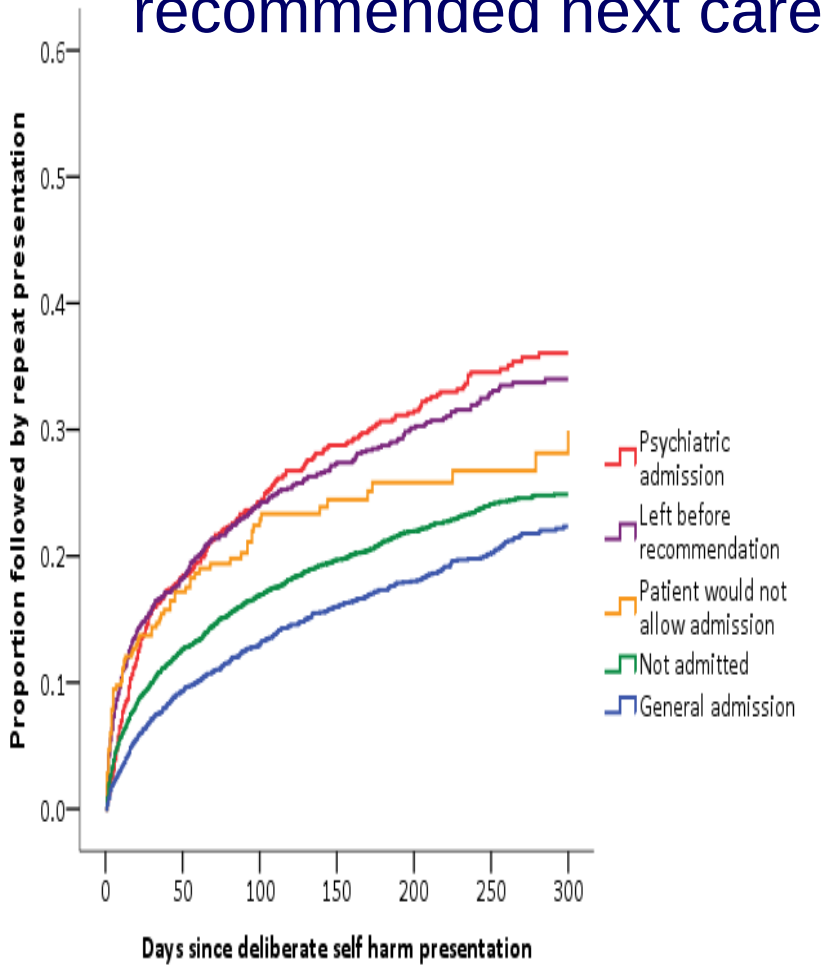
HRB Health Research Board

IASP

Repetition by number of self-harm presentations



Repetition of self-harm by recommended next care



National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Self-harm intervention and suicide prevention 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

National Suicide Research Foundation

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

2018 Statistics at a Glance

Rates in young people aged 10-24 years increased by 29% between 2007-2018

Presentations **12,588**

Persons **9,785**

RATES:

210 per 100,000

1 in every 476 had a self-harm act

Male: 20-24 year-olds (543 per 100,000) **1 in every 184**

Female: 15-19 year-olds (766 per 100,000) **1 in every 131**

PEAK RATES WERE AMONG YOUNG PEOPLE

TIME:

Peak time

11pm

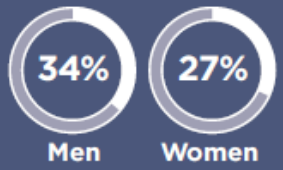
Almost **half (44%)** of presentations were made between 7pm-3am

Monday, Tuesday and **Sunday** had the highest number of self-harm presentations

METHOD:

2 in every 3 involved **overdose**

3 in every 10 involved **alcohol**



3 in every 10 involved **self-cutting**

TREATMENT:

72% received an assessment in the ED

79% received a follow-up recommendation after discharge

13% left ED before a recommendation was made

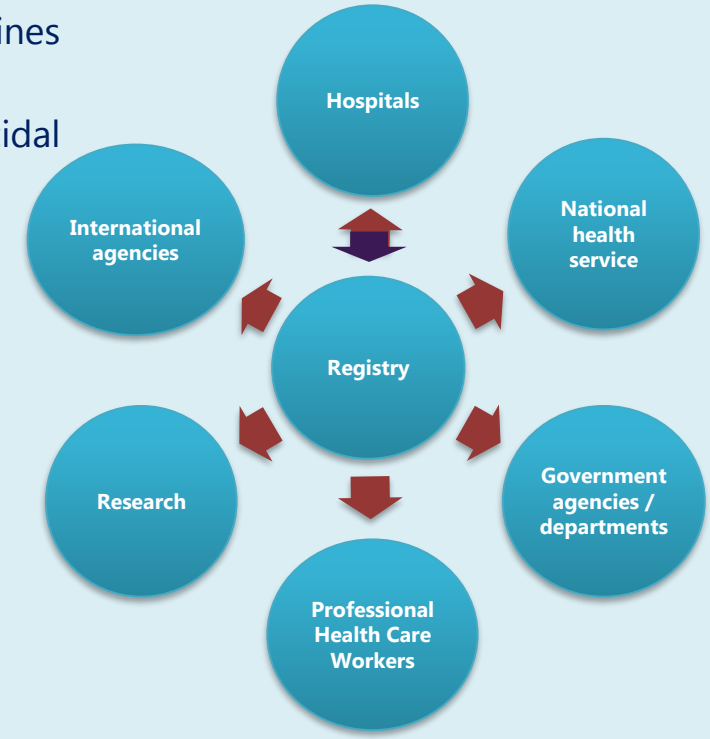
1 in 7 persons had a repeat attendance in 2018

National Suicide Research Foundation

IASP

Benefits of surveillance systems for hospital/health centre treated self-harm

- Informing:
  - Service provision, resource deployment and guidelines for self-harm management
  - Assessment and interventions for non-fatal suicidal behaviour
- "Real-Time Data"
- Evaluation of interventions
- Regional variations
- Clinical management of self-harm
- All attendances to hospital Emergency Departments



National Suicide Research Foundation
NSRF

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP

Thank you!
благодарю вас!

Acknowledgements:
Eileen Williamson, Paul Corcoran, Eve Griffin, Niall McTernan, Caroline Daly, Grace Cully, Sarah Nicholson, Karen Mulcahy, Ruth Benson, Mary Joyce, Jan Rigby, Chris Brunsdon, Eugene Cassidy, James Kinahan, Colin Bradley, Sinead Glennan, Martin Ryan, Frank O'Connell, Michael Kennedy, Philip Comyn

National Suicide Research Foundation
NSRF

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

HRB Health Research Board

IASP