

# Self-harm and the prevalence of smoking, e-cigarette and dual use - data from Growing Up in Ireland Cohort '98

**Joan Hanafin, Salome Sunday, Luke Clancy**

TobaccoFree Research Institute Ireland, TU Dublin, [www.tri.ie](http://www.tri.ie)

Irish Thoracic Society Annual Scientific Meeting Paediatric Forum  
Derry, 15th November 2024



# Disclosures & Acknowledgements



**Conflicts of Interest:** The authors have no real or perceived conflicts of interest that relate to this presentation.

**Funding:** This study was funded by Grant 209, Royal City of Dublin Hospital Trust.

**Data deposition:** The data that support the findings were used under license for the current study. They are available from Central Statistics Office Ireland but restrictions apply.

<https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/dataforresearchers/rmfregister/>

**Ethical approval** for GUI Wave 4 was granted by the GUI Research Ethics Committee, Department of Children and Youth Affairs, Ireland.



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# Background Self-harm

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- Self-harm behaviours are part of a group of deliberate behaviors that result in physical damage to one's body (Whitlock et al 2015), occurring all over the world and most prevalent in age groups 15–34 years (Jakobsen et al 2023).
- Although there is wide divergence in terminologies and definitions, self-harm behaviours include cutting or burning their skin, punching or hitting themselves, and poisoning with tablets or toxic chemicals (HSE 2024).
- Self-harm is important to investigate as a history of self-harm is among the largest risk factors for suicide (McMahon et al, 2010), with risk for suicidal behavior strongest among individuals engaging in more severe forms (e.g. cutting, carving, burning), compared to forms that are less intense (e.g., punching, skin picking). who have injured chronically and who use multiple methods to injure (Whitlock et al. 2015).
- Self-harm includes non-suicidal self-injury (NSSI) and suicidality (suicide thoughts and behaviors); “intention” is the most important distinction between these (Whitlock et al. 2015). Suicidality not measured in our study.



# Background Smoking prevalence & young adults

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- Ever-smoking among 20 year-olds is high at 74% (n=3,807) and daily/occasional smoking very high at 37.5% (n=1,946), also the ages between 17 and 19 years are particularly vulnerable ones for smoking initiation (Hanafin et al. 2023).
- Although patterns of self-harm are heterogeneous in type, frequency, and severity (Singhal et al 2021), there is evidence of greater smoking and e-cigarette use in those who self-harm (Striley et al 2022).
- Associations between self-harm and mental ill-health and disability.
- Higher prevalence of tobacco use is particularly well-established internationally in those who suffer mental ill-health (Purdy et al. 2023, Brown et al 2021, Catchpole et al. 2018), including in young adults (Hanafin et al. 2024).
- Psychiatric illnesses and many chronic illnesses/disabilities carry a greatly increased risk of self-harm (Singhal et al. 2021).



# Background Young adult mental health

In a previous GUI study on mental health, smoking and e-cigarette use (Hanafin et al. 2024), respondents were asked about their mental health diagnoses through two key questions.

1. Have you ever been diagnosed with depression or anxiety by a doctor, psychologist, or psychiatrist (Yes/No)
2. Have you ever been diagnosed with another psychological or psychiatric illness or disorder by a doctor, psychologist, or psychiatrist (Yes/No).
  1. Eating disorder (e.g. anorexia, bulimia),
  2. Post-traumatic stress disorder (PTSD),
  3. Obsessive Compulsive Disorder (OCD),
  4. Bipolar Disorder,
  5. Personality disorder,
  6. Schizophrenia,
  7. Other disorder including experience of hallucinations or delusions, and Other psychological or psychiatric disorder not listed above.



# Background Young Adult Disabilities/ Long-lasting conditions (GUI)

A18. [CARD A18] Do you have any of the following long-lasting conditions or difficulties?

	Yes	No
a. Blindness or a serious vision impairment	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
b. Deafness or a serious hearing impairment	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
c. A difficulty with basic physical activities such as walking, climbing stairs, reaching, lifting or carrying	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
d. An intellectual disability	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
e. A difficulty with learning, remembering or concentrating	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
f. A psychological or emotional condition	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
g. A difficulty with pain or breathing or any other chronic illness or condition	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>

# Background Self-harm and young adults

**Self-harm behaviours are not included as questions within mental health or disabilities sections in Growing Up in Ireland survey**

## K. SELF-HARM

This section contains questions on self-harm. If you would like to talk with someone about any issues in this area you could use the phone numbers in the booklet that will be given to all participants at the end of the interview. Alternatively, just tell the interviewer you would like someone who is experienced in this area to call you to discuss these matters with you.

Life has many ups and downs. Sometimes people may feel very upset at times and may want to self-harm. We know this is a sensitive subject, but it is important to ask about it. By finding out about self-harm we may be able to find ways of helping people.

**K1. Have you hurt yourself on purpose in any way IN THE LAST 12 MONTHS?**

Yes ..... <sub>1</sub>      No..... <sub>2</sub>      Prefer not to say ..... <sub>3</sub>

**K2. How many times have you done this in the last year? Please tick one box only.**

Once      2-5 times      6-10 times      More than 10 times      Don't know      Prefer not to say  
<sub>1</sub>      <sub>2</sub>      <sub>3</sub>      <sub>4</sub>      <sub>5</sub>      <sub>6</sub>

**K3. What form did this self-harm take on the last time you hurt yourself on purpose (tick all that apply)?**

a. Pills/poison ..... <sub>1</sub>      d. Burning ..... <sub>4</sub>  
b. Cutting ..... <sub>2</sub>      e. Other ..... <sub>5</sub>  
c. Banging/hitting/bruising ..... <sub>3</sub>      f. Prefer not to say ..... <sub>6</sub>

**K1. Have you hurt yourself on purpose in any way IN THE LAST 12 MONTHS?**

Yes ..... <sub>1</sub>      No..... <sub>2</sub>      Prefer not to say ..... <sub>3</sub>

**K2. How many times have you done this in the last year? Please tick one box only.**

Once      2-5 times      6-10 times      More than 10 times      Don't know      Prefer not to say  
<sub>1</sub>      <sub>2</sub>      <sub>3</sub>      <sub>4</sub>      <sub>5</sub>      <sub>6</sub>

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b. Cutting ..... <sub>2</sub>      e. Other ..... <sub>5</sub>  
c. Banging/hitting/bruising ..... <sub>3</sub>      f. Prefer not to say ..... <sub>6</sub>

# OBJECTIVES



**This study examines:**

- 1. Self-harm in young adults in Ireland**
- 2. Associations with mental ill-health and disability/long-term conditions**
- 3. Gender and social class differences**
- 4. Smoking and e-cigarette use in young adults who report self-harming**



Photo by [Austin Ramsey](#) on [Unsplash](#)



# METHODS GUI LONGITUDINAL STUDY



***Growing Up in Ireland:*** the national longitudinal study of children and young people in Ireland. Since 2006, the study has provided Government with an evidence base for informed policy decisions .



***Growing Up in Ireland*** has 2 cohorts ('98 and '08). We use data from 5,190, 20 year-olds from Wave 4 of *Growing Up in Ireland* Child Cohort who reported self-harming in the previous year and who reported ever- and current smoking and e-cigarette use.



Analyses were performed using SPSS v27.



# METHODS VARIABLES

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Questions about SELF-HARMING IN GUI, Wave 4 (20-year-olds)

**K1. Have you hurt yourself on purpose in any way IN THE LAST 12 MONTHS? Yes/No/Prefer not to say**

**K2. How many times have you done this in the last year? Please tick one box only. Once/2-5 times/6-10 times/More than 10 times/Don't know/Prefer not to say**

**K3. What form did this self-harm take on the last time you hurt yourself on purpose (tick all that apply)? a. Pills/poison; b. Cutting; c.. Banging/hitting/bruising; d. Burning; e. Other; f. Prefer not to say**



# METHODS VARIABLES

## Questions about SMOKING AND E-CIGARETTE USE in GUI Surveys

### Smoking

*Have you ever smoked a cigarette?* Yes/No.

*Which of the following best describes you?* Only ever tried smoking once or twice/ Used to smoke but not now/ Smoke occasionally/ Smoke daily

### E-cigarette use

*Have you ever tried an e-cigarette or “vaping”?* Yes/No

*How often, if at all, do you currently use an electronic cigarette?* Daily/ Less than daily, but at least once a week/ Less than weekly, but at least once a month/ Less than monthly/ Not at all



# Results

# Prevalence of Self-Harm

	Total	Male	Female	p
	5148 (100.0)	2610 (50.8)	2533 (49.2)	
<b>Self-Harm</b>				
Yes	384 (7.5)	159 (41.4)	225 (58.6)	
No	4681 (90.9)	2422 (51.7)	2259 (48.3)	
Prefer not to say	78 (1.2)	29 (37.2)	49 (62.8)	<0.001

Table 1: Overall Prevalence of Self-Harm and Gender Differences, 20-year-olds, GUI, Wave 4



# Results

# Frequency of Self-Harm

<i>How many times have you done this in the last year?</i>	Total	Male	Female	p
<i>Tick one box only</i>	384 (100.0)	159 (41.4)	225 (58.6)	
<b>Self-Harm Frequency (Last Year)</b>				
Once	107 (27.9)	49 (45.8)	58 (54.2)	
2-5 times	174 (45.4)	60 (34.5)	114 (65.5)	
6-10 times	43 (11.2)	21 (48.8)	22 (51.2)	
More than 10 times	29 (7.6)	17 (58.6)	12 (41.4)	
Don't know	19 (5.0)	8 (42.1)	11 (57.9)	
Prefer not to say	11 (2.9)	3 (27.3)	8 (72.7)	0.083

Table 2: Frequency of Self-Harm, 20-year-olds, GUI, Wave 4



# Results

# Types of Self-Harm

<i>What form did this self-harm take on the last time you hurt yourself on purpose (tick all that apply)?</i>	Total %	Male	Female	p
Form of Self-Harm (n=384)	384 (100.0)	159 (41.4)	225 (58.6)	
Pills/poison	-	-	-	-
Burning	238 (62.1)	89 (37.4)	149 (62.6)	0.049
Cutting	145 (37.9)	68 (46.9)	77 (53.1)	0.080
Other	38 (9.9)	20 (52.6)	18 (47.4)	0.139
Banging/hitting/bruising	49 (12.8)	22 (44.9)	27 (55.1)	0.579
Prefer not to say	17 (4.4)	4 (23.5)	13 (76.5)	0.126

Table 3: Types of Self-Harm, 20-year-olds, GUI Wave 4



# Results Self-harm, Mental Health And Disabilities

	Self-Harm			
	No	Yes	Total	P
	4680 (92.4)	384 (7.6)	5064 (100.0)	
<b>Long-lasting conditions and mental health (Total)</b>				
No	3438 (73.0)	144 (38.5)	3582 (70.4)	<0.01
Yes	1273 (27.0)	230 (61.5)	1503 (29.6)	
<b>Number of long-lasting conditions or difficulties</b>				
No condition	3853 (82.3)	288 (75.2)	4141 (81.8)	<0.01
At least 1 condition	827 (17.7)	95 (24.8)	922 (18.2)	
<b>Mental Health</b>				
No	3905 (83.4)	191 (49.7)	4096 (80.9)	<0.01
Yes	775 (16.6)	193 (50.3)	968 (19.1)	

Table 5: Self-harm – associations with mental health and disabilities reported by 20-year-olds, GUI



# Results

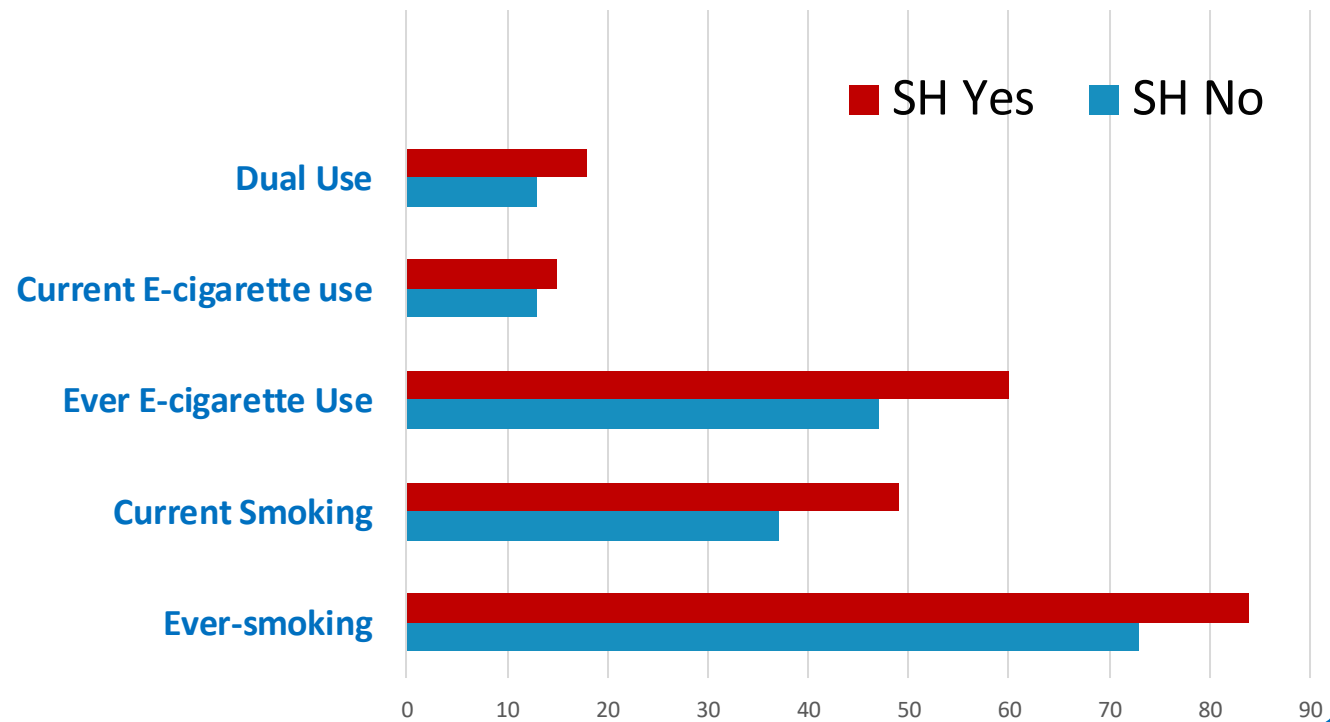
# Self-Harm, Gender and Social Class

	Self-Harm			
	No	Yes	Total	P
	4680 (92.4)	384 (7.6)	5064 (100.0)	
<b>Gender</b>				
Male	2422 (51.7)	159 (41.4)	2581 (51.0)	<0.01
Female	2259 (48.3)	225 (58.6)	2484 (49.0)	
<b>Social Class</b>				
Professional/Managerial	1910 (48.6)	150 (44.4)	2060 (48.3)	0.14
Skilled/semi/unskilled	2021 (51.4)	188 (55.6)	2209 (51.7)	

Table 4: Prevalence of Self-Harm and Gender/Social Class Differences, 20-year-olds, GUI, Wave 4



**Fig. 1 Smoking and E-Cigarette Use in Young Adults who report Self-Harm**



# Results

## Self-harm, Smoking & E-cigarette use

	Self-Harm			
	No	Yes	Total	P
<b>Ever Smoking</b>				
No	1256 (26.8)	60 (15.6)	1316 (26.0)	<0.01
Yes	3423 (73.2)	324 (84.4)	3747 (74.0)	
<b>Current Smoking</b>				
No	2964 (63.3)	195 (50.9)	3159 (62.4)	<0.01
Yes	1717 (36.7)	188 (49.1)	1905 (37.6)	
<b>Ever e-cigarette use</b>				
No	2497 (53.4)	154 (40.1)	2651 (52.3)	<0.01
Yes	2183 (46.6)	230 (59.9)	2413 (47.7)	
<b>Current e-cigarette use</b>				
No	4057 (86.7)	325 (84.6)	4382 (86.5)	0.26
Yes	623 (13.3)	59 (15.4)	682 (13.5)	
<b>Current Dual Use</b>				
No	2760 (86.8)	176 (81.9)	2936 (86.5)	0.04
Yes	419 (13.2)	39 (18.1)	458 (13.5)	

# Main Findings

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**7.5% (n=384) of 20-year-olds report self-harming, of whom 58.6% (n=225) were female.**

**Young adults from professional/managerial social classes were less likely to report self-harming but not significantly so.**

**Burning and cutting are the most frequently reported self-harm behaviours.**



# Main Findings

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Young adults who report self-harming are significantly more likely to report

long-lasting conditions/disabilities, and  
mental ill-health.



# Main Findings

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Those who report self-harming are significantly more likely to report

ever-smoking (84% vs 73%)

current smoking (49% vs 37%)

ever e-cigarette use (60% vs 47%) and  
dual use (18% vs 13%).

They are also more likely to report higher current e-cigarette use but not at the level of statistical significance.



# Conclusions

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Smoking continues to decrease in the general population, but remains a serious health threat, especially for some vulnerable groups.

Nicotine use continues to grow and may be a particular risk for vulnerable and/or marginalised groups.

Young adults who self-harm are one such group.



# Conclusions

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**It is important to identify those at special risk and to provide tailored policy interventions and appropriate smoking and nicotine cessation services.**

**A successful tobacco endgame strategy depends on reducing tobacco and nicotine use in vulnerable and/or marginalised populations.**



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## Contact

Prof Joan Hanafin, Director of Social Research

E: [jhanafin@tri.ie](mailto:jhanafin@tri.ie)

Prof Luke Clancy, Director General

E: [lclancy@tri.ie](mailto:lclancy@tri.ie)

TobaccoFree Research Institute Ireland

TU Dublin, Dublin 2.

W: [www.tri.ie](http://www.tri.ie)

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