

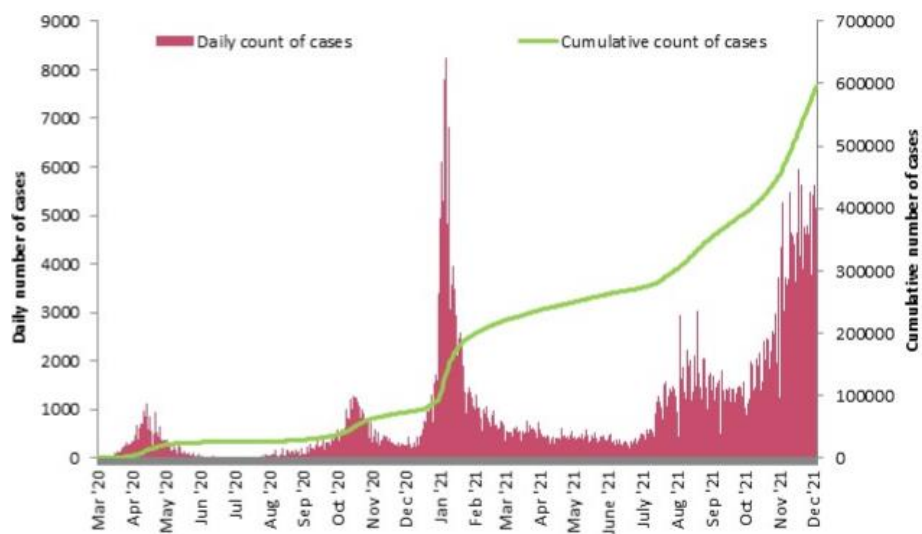


## Hospital-presenting self-harm during 2021

Data Briefing, March 2023

The COVID-19 pandemic and associated measures to address it led to an increase in individual and population level risk factors for self-harm and suicide. Surveillance of mental health issues including depression, anxiety, self-harm and suicidal behaviours were identified as a priority in order to inform interventions and comprehensive responses (Sinyor et al., 2021).

The year 2021 was associated with many more cases of COVID-19 in Ireland than in 2020 but thankfully the illness was far less severe for the vast majority of those affected. Ireland experienced its third and largest wave of COVID-19 in early 2021, even achieving the highest seven-day infection rate in the world in mid-January (Figure 1). Level 5 restrictions applied throughout January-March 2021, with a phased return to schools in March. The lockdown remained in place until May 2021 and indoor hospitality remained closed through June. Restrictions continued to be eased in the second half of the year. A highly-effective vaccination programme was rolled out in 2021 resulting in almost 80% of the population aged over six months being fully vaccinated by the year's end.



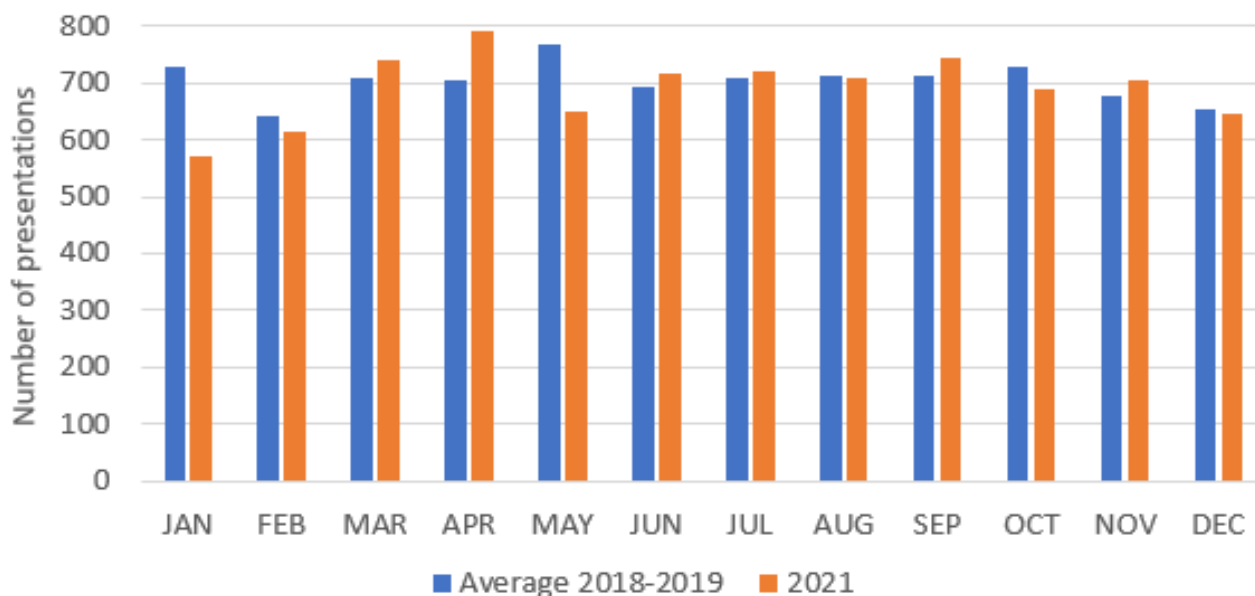
**Figure 1: Number and cumulative number of confirmed COVID-19 cases in Ireland (Available at: [hpsc.ie](https://hpsc.ie))**

The National Self-Harm Registry Ireland (NSHRI), operated by the National Suicide Research Foundation (NSRF) and funded by the Health Service Executive National Office for Suicide Prevention, collects data on self-harm presentations to hospital emergency departments in the Republic of Ireland. This data briefing provides information on the monthly number of self-harm presentations to 24 hospitals during 2021, compared to presentations made to the same hospitals in 2018 and 2019. Data from 2018 and 2019 are used for comparison because 2020 was associated with the outbreak of the pandemic in Ireland.

These 24 hospitals provide nationally representative data given they are spread across the country and are located in the centres of large cities, in city suburbs and in large towns. In 2018 and 2019, these hospitals accounted for 67% of the national number of self-harm presentations recorded by the NSHRI. It should be noted that the data presented for 2021 are provisional and subject to change.

The NSHRI recorded a total of 8,300 self-harm presentations to the 24 hospitals during 2021, equivalent to 22.7 self-harm presentations per day. A total of 16,864 self-harm presentations to these 24 hospitals were recorded for the years 2018 and 2019, equating to a rate of 23.1 per day. Therefore, the rate of hospital-presenting self-harm was just 1.6% lower in 2021 compared to 2018-2019 (Rate ratio=0.984, 95% confidence interval=0.959, 1.011).

While there was no overall difference in hospital-presenting self-harm between 2021 and the period 2018-2019, there were marked differences in specific months, namely fewer self-harm presentations than expected in January and May 2021 and more presentations than expected in April 2021 (Figure 2).



**Figure 2: Monthly self-harm presentations to 24 hospitals in Ireland during 2018-2019 and 2021**

In January 2021, there were 570 self-harm presentations to the 24 hospitals. The daily rate was 18.4, which is 22% lower than the rate of 23.4 per day in January 2018-2019 (Table 1). In February and March 2021, the daily rate was broadly in line with the rate for the same months of 2018-2019. However, the rate of hospital-presenting self-harm increased across the four months of lockdown so that in April 2021, it was 44% higher than it was in January (Rate ratio=1.44, 95% confidence interval=1.29, 1.60) and 12% higher than it was in the April of 2018-2019. Then, coinciding with the easing of restrictions in May, the self-harm rate fell by 21% (Rate ratio=0.79, 95% confidence interval=0.72, 0.88). This reduction meant the rate in May 2021 was 15% lower than in May 2018-2019. For the remaining seven months of 2021, the rate of hospital-presenting self-harm was similar to the rate for the equivalent month in 2018-2019.

**Table 1: Monthly self-harm presentations to 24 hospitals during 2021 and 2018-2019**

Month	Number (daily rate) in 2021	Average number (daily rate) in 2018-2019	Rate ratio (95% confidence interval)
January	570 (18.4)	1,453 (23.4)	0.78 (0.71, 0.86)
February	614 (21.9)	1,287 (23.0)	0.95 (0.87, 1.05)
March	740 (23.9)	1,414 (22.8)	1.05 (0.96, 1.14)
April	793 (26.4)	1,411 (23.5)	1.12 (1.03, 1.23)
May	651 (21.0)	1,533 (24.7)	0.85 (0.77, 0.93)
June	718 (23.9)	1,385 (23.1)	1.04 (0.95, 1.13)
July	721 (23.3)	1,417 (22.9)	1.02 (0.93, 1.11)
August	710 (22.9)	1,425 (23.0)	1.00 (0.91, 1.09)
September	745 (24.8)	1,427 (23.8)	1.04 (0.96, 1.14)
October	688 (22.2)	1,456 (23.5)	0.95 (0.86, 1.03)
November	705 (23.5)	1,352 (22.5)	1.04 (0.95, 1.14)
December	645 (20.8)	1,304 (21.0)	0.99 (0.90, 1.09)
<b>Total</b>	<b>8,300 (22.7)</b>	<b>16,864 (23.1)</b>	<b>0.98 (0.96, 1.01)</b>

Note: The rate ratio (RR) is the daily rate for a period in 2021 divided by the daily rate in the same period of 2018-2019. RRs equal or close to one indicate that the rate in 2021 was equal or similar to the rate in 2018-2019. RRs greater than one indicate that the rate in 2021 was higher than in 2018-2019. RRs less than one indicate that the rate was lower in 2021. The difference between the rate in 2021 and 2018-2019 is statistically significant if the 95% confidence interval for the RR does not include the value one, which is the case for January, April and May.

### Key Findings

- Overall, the rate of hospital-presenting self-harm to the 24 hospitals with available data was just 1.6% lower in 2021 than it was in 2018-2019.
- The rate in January 2021, at the peak of the third wave of COVID-19 and start of the third lockdown, was 22% lower than it was in January 2018-2019
- The rate increased across the four months of lockdown and in April 2021, the rate was 44% higher than in January and 12% higher than in April 2018-2019
- Coinciding with the easing of restrictions in May, the self-harm rate fell by 21%, a reduction that meant the rate in May 2021 was 15% lower than in May 2018-2019
- For the remaining seven months of 2021, the rate of hospital-presenting self-harm was similar to the rate for the equivalent month in 2018-2019

*For further information, please contact:*

Dr Paul Corcoran,  
 Head of Research,  
 National Suicide Research Foundation.  
 E-mail: pcorcoran@ucc.ie

### References

Sinyor M, Knipe D, Borges G, Ueda M, Pirkis J, Phillips MR, et al. Suicide Risk and Prevention During the COVID-19 Pandemic: One Year On. Archives of Suicide Research. 2021 Aug 23;0(0):1–6.