

Pediatric Suicide-Related Hospital Encounters for 13- to 15-Year-Olds Up 60% Since 2017

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Last updated 22 April 2022 • Check for updates at EpicResearch.org

Abstract: Suicide attempts and self-harm are on the rise, with 13- to 15-year-olds and girls most at risk

Key Findings:

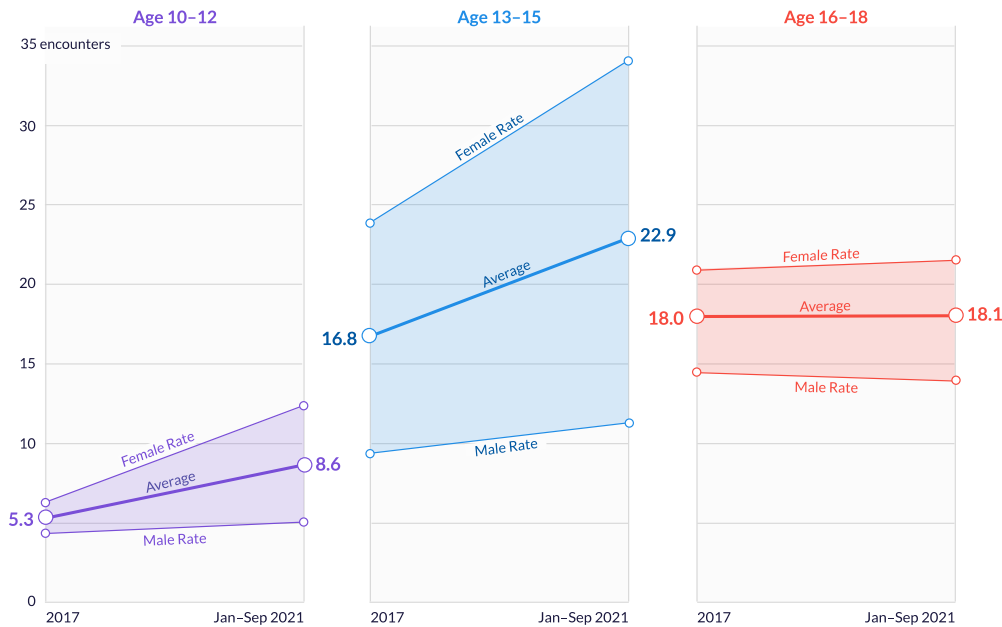
- Pediatric suicide and self-harm attempts are on the rise, especially for 13- to 15-year-olds and females.
- Universal screenings, patient safety plans, and provider facilitation of family communication can help address the mental health concerns that have led to this increase.

Suicide is the second leading cause of death in the U.S. for 10- to 17-year-olds,¹ and the youth suicide rate increased 56% between 2007 and 2017.² Our data show that this trend has continued through 2021 as pediatric suicide and self-harm encounters in the emergency department and hospital increased for all age groups.

From 2017 to 2021, the rate of suicide or self-harm related encounters increased by 30% across 10- to 18-year-olds – from 13.7 encounters per 10,000 patients to 17.8 per 10,000. For 13- to 15-year-olds, that rate increased 60% over the same period. Females accounted for more than three times the rate when compared to male 13- to 15-year-olds, which is consistent with other data.^{3,4,5}

Figure 1: Average Rate of Pediatric ED and Inpatient Encounters Related to Suicide or Self-Harm

Monthly encounters per 10k active patients



"Average Rate of Pediatric ED Encounters Related to Suicide or Self-Harm," 2022, EpicResearch.org

Figure 1. Suicide and self-harm-related encounters have increased in the past five years. Children ages 13-15 have a higher risk, and females in this age group are three times more likely to attempt or ideate suicide or self-harm compared to males.

According to Michael Kane, MD, a child and adolescent psychiatrist at the University of North Carolina Healthcare System, unfortunately, these findings are not surprising. The isolation and lack of typical school supports during the pandemic likely contributed to the increase in mental health crises. However, several best practices are available to better support adolescent mental health.

- Universal screening for pediatric mental health across disciplines is vital to early identification and prevention, as well as connecting patients and their families to appropriate behavioral health resources.⁶
- Pediatric clinicians can also facilitate family discussions through the HELP mnemonic established by the American Academy of Pediatrics Task Force on Mental Health⁶
- Mental health providers should work with struggling patients, their families, and their clinicians to develop a patient safety plan prior to a crisis, which can help mitigate the risk of self-harm or suicide attempts.⁷

Cosmos is a HIPAA-Limited Data Set of more than 138 million patients from 161 Epic organizations including 960 hospitals and 20,814 clinics, serving patients in all 50 states. This study was completed by two teams, composed of clinicians and data scientists, that independently acquired and analyzed data. Both teams were involved in the interpretation of results and drafting of this brief. Overall, the two teams came to similar conclusions.

References

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Data Definitions

Term	Definition
Study Encounters	Pediatric encounters between January 1, 2017, and December 31, 2021, that were hospital admissions or emergency department visits for patients ages 10-18 with a documented diagnosis of suicide or self-harm.
Suicide/Self-Harm Diagnosis	An encounter or final billing diagnosis mapped to an ICD-10-CM code included in the CCSR category MBD012 (Suicidal ideation/attempt/intentional self-harm)

Patient Sex

Patients documented as male by legal sex, sex assigned at birth, or gender identity with no values besides male in those categories are considered male. Patients documented as female by legal sex, sex assigned at birth, or gender identity with no values besides female in those categories are considered female.