## Trends in Pediatric Suicidal Behavior in Illinois Emergency Departments, 2012-2017

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BACKGROUND: Depression and suicide are a growing problem in the United States, with suicide climbing to the second leading cause of death in Americans aged 10-24. There is a need for additional resources to address the mental health needs of youth with suicidal behavior who present for acute care in the emergency department. Past studies have demonstrated that numbers continue to rise, with fewer cases seen during summer months than during the academic year.

OBJECTIVES: To describe care encounters for pediatric suicidal behavior in Illinois Emergency Departments from 2012-2017.

METHODS: We performed a retrospective chart review using CompData, a comprehensive database of emergency department visits across the state of Illinois. We extracted charts of patients aged 5-21 years old that presented to Illinois emergency departments from 2012-2017 with primary or secondary diagnoses pertaining to suicidal behavior. We used descriptive statistics to assess demographic data. We used linear regression analysis by year to report increases in overall cases and chi square analysis to compare cases by season.

RESULTS: Illinois emergency departments saw 62,977 cases of suicidal behavior during the 6-year period, representing 1.4% of all ED visits for this age group in the state. Patients were predominantly 15-21 years old, however a sharp increase was seen starting at age 12-14. Patients were predominantly female and non-Hispanic white. Overall, the number of cases of suicidal behavior increased over the 6-year period. We observed statistically significant increases among females, non-Hispanic black youth, Hispanic youth, and other non-Hispanic youth (regression, p<0.02). There were significantly fewer cases during the summer months (20%; 95% CI 19.7-20.3), and more cases during the fall (28%; 95% CI 27.7-28.3) and spring (27%; 95% CI 26.7-27.4).

CONCLUSIONS: Depression, suicidal ideation, and suicide is a growing problem in the United States. Our emergency departments are caring for more youth with psychiatric complaints that we must acknowledge and allocate resources to address. Understanding these increases in suicidality can help us decrease morbidity/mortality for preventable deaths by allowing us to target at-risk groups at high-risk times for interventions.