

## **Retrospective Analysis of Suicide Deaths in Allen County Indiana, 2013 – 2022**

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Suicide rates at a national and state level have been on the rise over the past two decades. Patterns observed at the local level is less understood and underrepresented in research. Since local government can have a large impact on resource allocation in a community, revealing local suicide patterns could help facilitate targeted preventative efforts for at-risk populations. This study aims to analyze demographic patterns observed in Allen County suicides from 2013 – 2022, focusing on age groups and education attainment. Data collection was completed on the 604 individuals who died by suicide in Allen County over the past decade. The collection process included documenting various demographics accessed through death certificates and coroner's files. Within the county, suicide numbers increased over the decade. Results showed that males represented more than a 3:1 ratio of total suicides, a gunshot wound was the method of injury for 53% of all suicides, and decedents with a high school degree or less represented 62% of suicides within the population. These results echo what research has shown at the national level. Additionally, the 20-34 and the 35-54 age groups produced the greatest number of suicides consistently over the 10 years, and these suicides occurred most often in late spring and early summer. Within the 20-34 age group, individuals were more likely to commit suicide by gunshot wound ( $p = 0.000133$ ). Decedents of minority ethnic and racial groups had lower education attainment compared to non-Hispanic ( $p = 0.000027$ ) or white ( $p = 0.003314$ ) individuals. This information could be provided to local schools with the hopes of implementing more targeted preventative measures for at-risk groups. Knowledge of suicide patterns in healthcare could lead to improved care for patients. Finally, public health entities can use these findings to adapt current health initiatives to fit the needs of Allen County.