



Suicide Surveillance Report and Alert

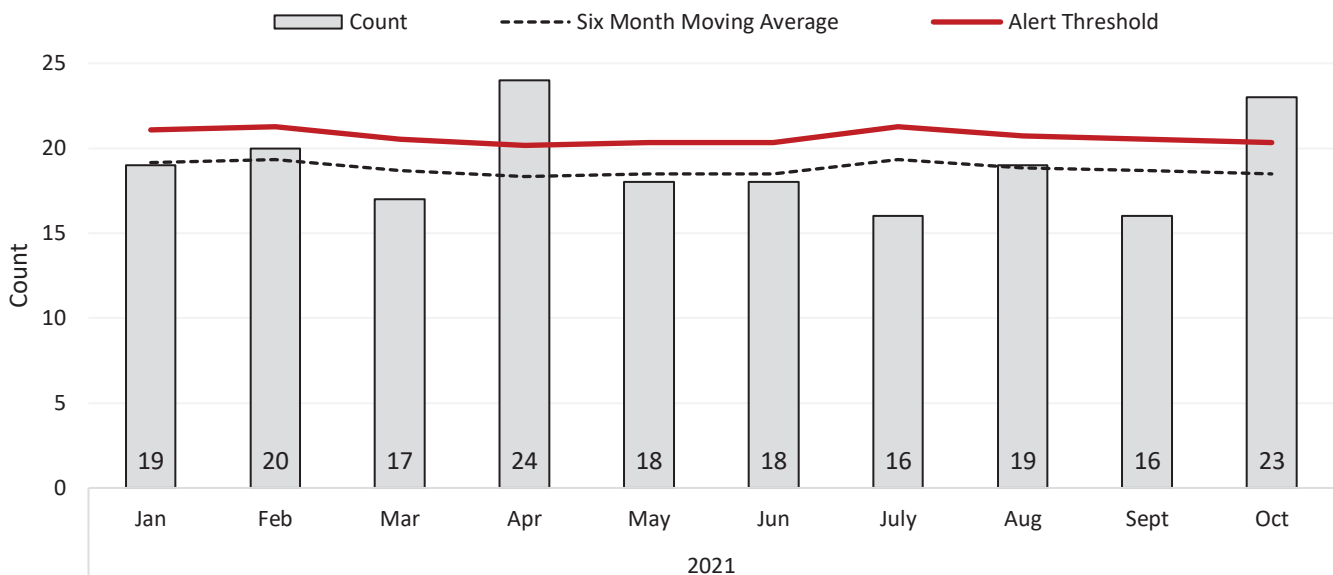
January-October 2021

Purpose: The primary focus of this report is to identify significant risk factors and intervention points to mitigate the impact of suicide and suicide attempts.

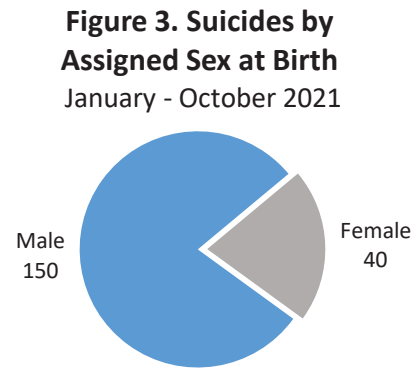
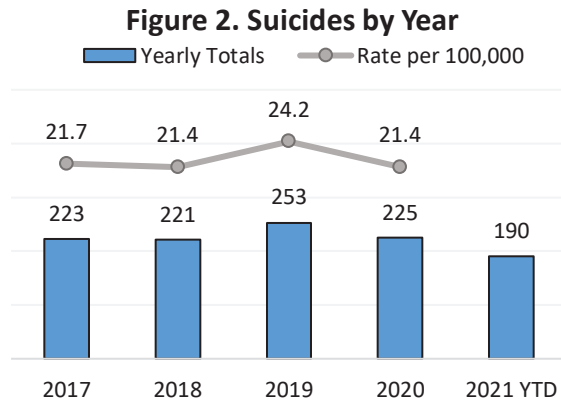
Limitations: There is an inherent data lag in the death certification process and the required time to complete the medical examination. Given these two factors, this report is limited to information available at the time the report was completed. Additional trends and statistics will be included in subsequent reports. Data is occasionally suppressed due to low counts to protect confidentiality.

Alert: In October 2021, there were 23 suicides in Pima County. This is greater than the alert indicator (average of preceding six months + 10%), indicating a spike in suicides (*Figure 1*).

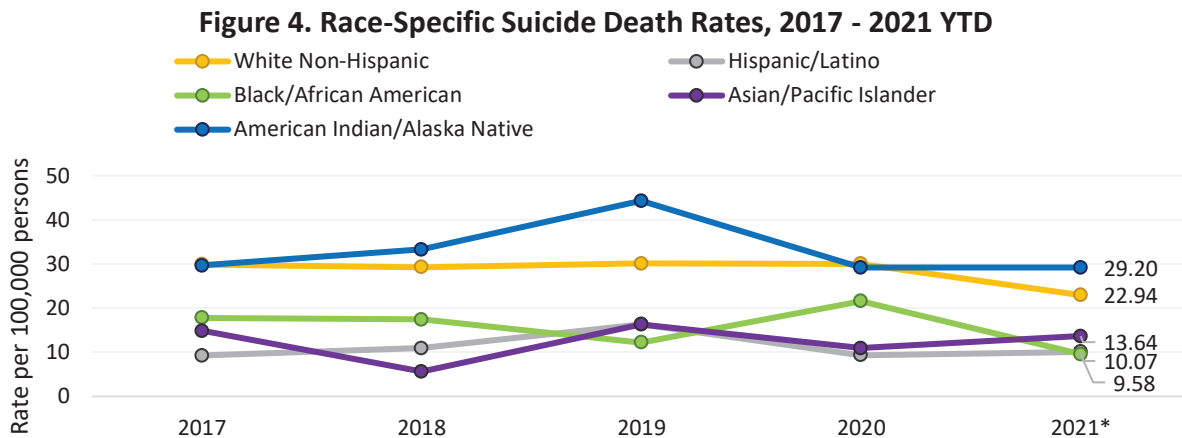
Figure 1. Suicides by Month with Six Month Moving Average and Alert Threshold



Summary and Demographics: Through October 2021, there have been 190 confirmed suicides in Pima County (Figure 2). Of these deaths, 79% were among males and 21% among females (Figure 3). Based on current trends, it is projected that this year's total will be relatively close to the number of suicides in 2020.

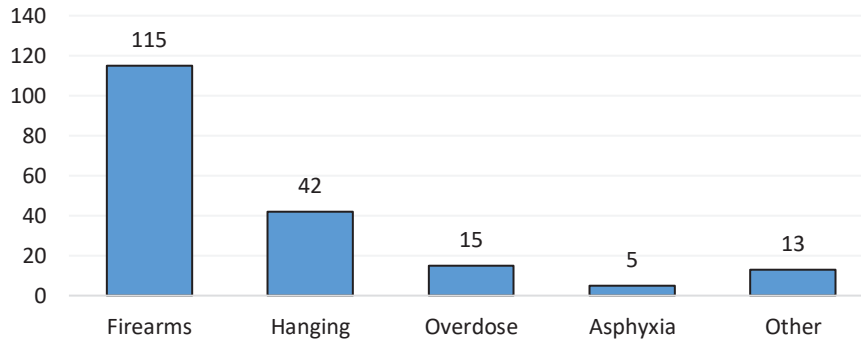


Race/Ethnicity: Suicide rates are highest in the American Indian/Alaska Native population in Pima County, followed by White, Non-Hispanic. Rate increases have been confirmed for Asian/Pacific Islanders and Hispanic/Latinos in the first ten months of the year in comparison to their respective rates in 2020. A rate increase is also expected by the end of the calendar year for American Indian/Alaska Natives. (Figure 4).



Suicide Deaths by Cause of Death: Overall, firearms continue to be the leading cause of death by suicide, accounting for 61% this year. The next most common cause is by hanging at 22%, an increase from 16% in 2020 (*Figure 5*).

Figure 5. Suicides by Cause of Death
January - October 2021



Age Groups: In 2021, suicides are highest in age groups 50-59 and 20-29. Of note, age groups 20-29, 40-49, and 70-79 have already surpassed their 2020 totals, although they have not exceeded their 2019 totals (*Figure 6*). Suicides in the age group 50-59 are projected to also exceed their 2020 total. Worth noting, suicides among minors (17 and under) are projected to be lower, with only 2 suicides year to date compared to 11 for all 2020.

Figure 6. Suicides by Age Groups and Year

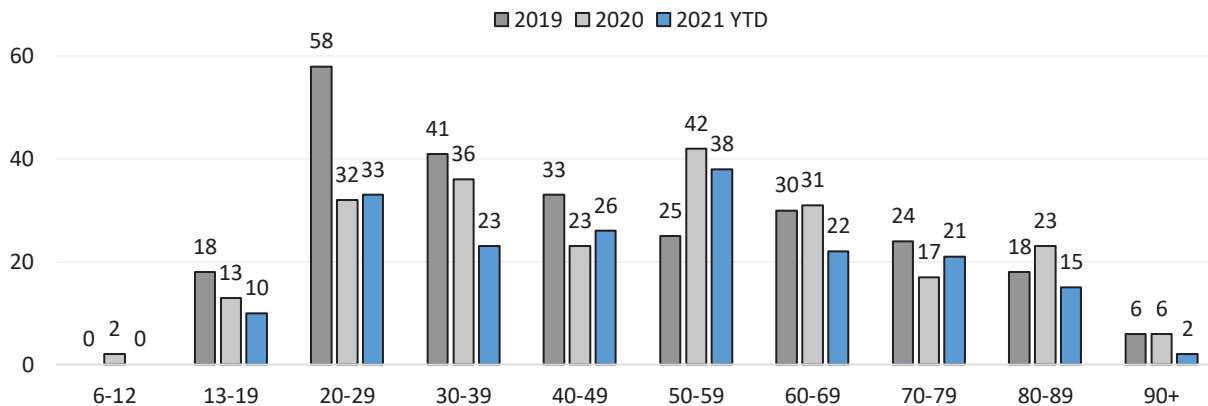
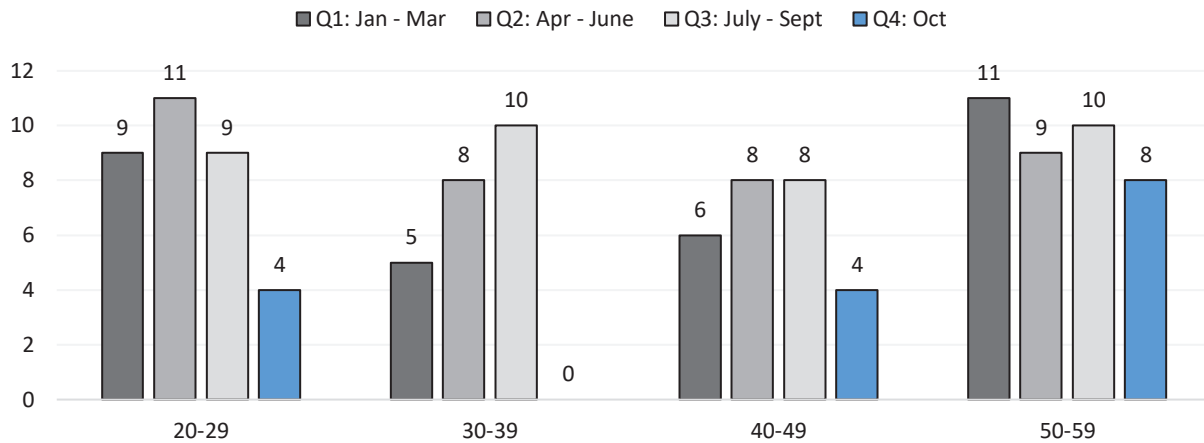


Figure 7 shows 2021 suicides by quarter and selected age groups. Data for age groups under 20 and over 60 were suppressed due to small counts.

Suicides in age groups 20-29, 40-49, and 50-59 remained generally consistent across the first 3 quarters, while the 30-39 age group displayed an upward trend. Also noteworthy, there were 8 suicides in the 50-59 age group in October alone, which is 140% higher than their monthly average.

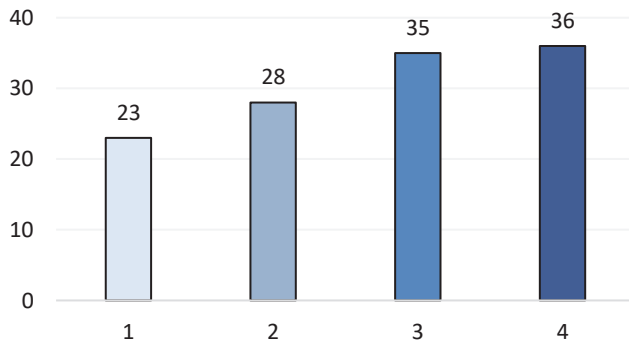
Figure 7. 2021 Suicides by Selected Age Group and Quarter



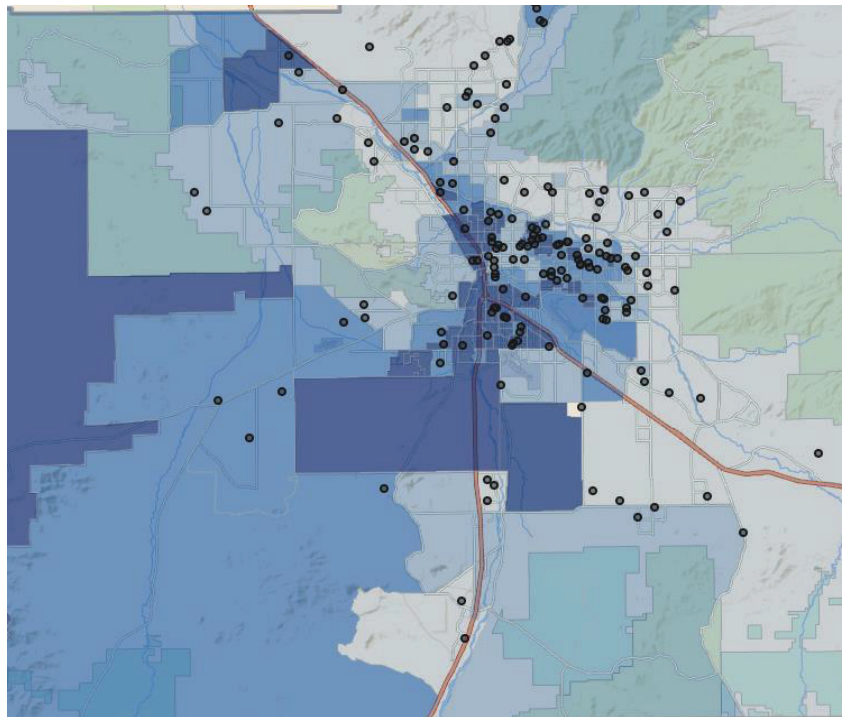
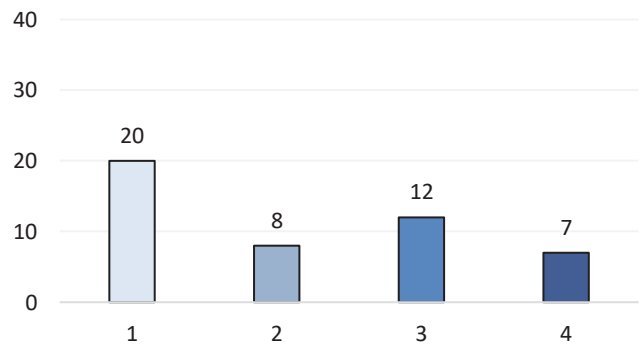
Social Vulnerability: Social vulnerability is an important risk factor in the context of suicide. Generally speaking, a person’s level of vulnerability may be a contributing factor to a decline in mental health and wellness. For instance, a person struggling with language barriers, housing insecurity, and lack of transportation may be less resilient than someone who does not experience those same insecurities. Decedents without a known, valid address or an out of county address were not mapped.

Vulnerability differed by age groups – 58% of decedents under 65 lived in areas of higher vulnerability while 60% of decedents over 65 lived in areas of lower vulnerability.

Residential Vulnerability Scores of Decedents Under 65 Years Old
January - October 2021



Residential Vulnerability Scores of Decedents 65 Years Old and Over
January - October 2021



Provider Recommendations and Risk Factors

Summary

This alert is being issued following a spike in suicides observed in the month of October. Specifically, the count of 23 total suicides was >10% higher than the 6 month average. With prevention in mind, time periods with spikes in suicides present windows of opportunity to amplify outreach and treatment, to direct individuals contemplating suicide to appropriate resources and restore the hope they need.

Provider Recommendations

- Become certified in QPR Gatekeeper Training and/or Mental Health First Aid
- Make an organizational commitment: [About Zero Suicide](#)
- Create policy to help others surrounding a suicide: [Suicide Postvention Information](#)
- Refer to the 2-1-1 crisis counseling program: [Resilient Arizona Crisis Counseling Program](#)
- Promote and share resources and 24-hour crisis lines:
 - Local [Community Wide Crisis Line](#): 1-866-495-6735 or 520-622-6000
 - [National Suicide Prevention Lifeline](#): 1-800-273-TALK (8255)
 - [Teen Lifeline](#), call or text: 602-248-TEEN (8336)
 - [Veterans Crisis Line](#): 1-800-273-8255 (press 1)
 - [Substance Use Referral and Treatment Hotline](#): 1-800-662-HELP (4357)
 - [Disaster Distress Helpline](#): 1-800-985-5990

Recognize Risk Factors for Suicide:

- Prior suicide attempts
- Presence of mental illness and/or substance use
- Access to firearms or other lethal means
- Social isolation
- Lack of natural supports
- Recent life stressors including eviction, job loss, divorce, or foreclosure

Our Commitment

The Health Department continues to conduct surveillance to closely monitor changes in trends and will keep you informed through these types of updates. For more information or to schedule trainings, including Mental Health First Aid and QPR Gatekeeper Training offered by certified public health instructors, visit www.pima.gov/mentalhealth or contact our team at CMHA@pima.gov.



Methods and Data Sources

Method

The Health Department's Community Mental Health and Addiction unit conducts routine surveillance of local suicide trends. Surveillance looks at specific data sets to monitor and record trends in critical public health indicators commonly associated with mental health and suicide. The CMHA team uses a six-month moving average to set thresholds for issuing health alerts. The chart below illustrates the number of suicides per month compared to the average number of suicides for the six preceding months. The alert indicator (red line) is set at 10% greater than the moving average. This alert indicator allows for standardized methodology for the team to issue alerts when local suicide trends reach higher than expected totals.

Mortality Data

Vital Records' Death Certificate Data and Pima County's Office of the Medical Examiner.

Social Vulnerability Index

The CDC's Social Vulnerability Index is a standardized method of measuring levels of vulnerability. For this reason, Pima County has used CDC's Social Vulnerability Index (CDC-SVI), to create a social vulnerability scale for the county consisting of four categories defined by 25th, 50th, and 75th percentile of overall vulnerability scores.