



D10 Statistical Distributions of Suicide in Tarrant County

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After attending this presentation, attendees will understand a useful format for the Medical Examiner's Office to assist the community in development of suicide statistical information and demographics for epidemiological purposes and for prevention and education efforts.

This presentation will impact the forensic community and/or humanity by encouraging the forensic community to understand their importance in presenting accurate information and developing statistical reports to assist community efforts in suicide prevention and education.

Methods: All 523 cases of suicide examined by the Tarrant County Medical Examiner in the years 2000-2003 were reviewed. The study was conducted at the Medical Examiner's office, using the Medical Examiner's computerized records. Individual deidentified case data were analyzed by staff of the Health Intelligence Center of the Tarrant County Public Health Department using SPSS and Geographic Information System (GIS) technology. The U.S. Census 2000 was used for population rates. Suicide rates for the U.S. were obtained from the Centers for Disease Control and Prevention, and for Texas from the Texas Department of Health, Vital Statistics Department.

Results: The suicide rate has varied somewhat in Tarrant County over the four years of this study.

- Overall rates: 2000/8.3 2001/8.68 2002/7.99 2003/10.27
- Youth 24 & under rates: 2000/5.09 2001/3.72 2002/2.85 2003/3.71
- Adult over 24: 2000/10.4 2001/11.71 2002/11.11 2003/14.21
- Males are at 4.8 times the risk for committing suicide as females
- The highest rate per 100,000 of population is in males over the age of 75
- Although more white youth commit suicide, the highest rate is in black youth
- Some zip codes in Tarrant County have both a higher incidence of suicide and higher rate per 100,000 population than most other zip codes
- For adults there is little pattern between zip codes for the years
- For youth the suicide rates by zip code indicated some zip codes have higher rates each year

Implications:

- Periodic analysis of suicide data can assist the community in evaluating trends.
- Understanding trends can assist the community in developing public health education and intervention strategies to prevent suicide.
- It is critical that the Medical Examiner, law enforcement and medical facilities present information as accurately as possible regarding suicide.
- Medical Examiner investigative reports can be especially helpful in differential diagnosis between suicide and accidental death when intent may be unclear.
- ME reports are especially important when cause of death is substance related. Undercounts of the incidence of suicide may cause a community to underestimate the impact of suicide.
- It is especially important that supportive analytical instruments and tests, such as hair analysis be used to determine substance use. Many substances can lead to periods of severe depression even weeks after they are discontinued, and may not show on routine toxicology tests. A better understanding of the contribution of substances, including prescription medications, is needed in the effort to prevent suicide.

Suicide, Suicide Rates, Tarrant County