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# Suicide and Homicide among Hispanics in the Southwest

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The Offices of Vital Statistics in Arizona, California, Colorado, New Mexico, and Texas provided data for the study.

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## Synopsis

*A study of suicide and homicide among Hispanics of Mexican origin (Mexican Americans) focused on five southwestern States—Arizona, California, Colorado, New Mexico, and Texas—where more than 60 percent of all Hispanics in the United States reside. And 85 percent of them are Mexican Americans.*

*Data were obtained on all suicides and homicides among Hispanics and Anglos (white non-Hispanics), using Anglos as a comparison group.*

*Results for suicide showed the suicide rate for Hispanics (9.0 per 100,000) to be less than the national rate for whites (13.2) and half that of the Anglos residing in the same area (19.2). The lower suicide rate for Hispanics relative to Anglos is seen for both males and females. For homicide, the overall rate for Hispanics (20.5) was more than 2½ times that of Anglos (7.9). The rate for Hispanic men (39.3) was more than three times the rate for Anglo men (11.4).*

THERE HAS NEVER BEEN A COMPREHENSIVE study of the incidence of mortality from suicide and homicide among Hispanics in the United States. Although 16 million Hispanics live in this country, national mortality statistics cannot identify deaths of Hispanics as a specific ethnic subgroup. Thus, Hispanic ethnicity has not been epidemiologically examined as a risk factor related to suicide and homicide as causes of death because of a lack of sufficient data. We attempted to rectify that problem by studying the incidence of suicide and homicide among the largest segment of Hispanics in the United States, those (primarily Mexican Americans) living in five States near the United States-Mexico border.

## Methods

The Hispanic population of the United States is composed of three major and culturally diverse subgroups: Mexican Americans, Puerto Ricans, and Cubans. We chose to direct our initial study of the incidence of Hispanic suicide and homicide toward the largest of these three subgroups, Mexican Americans. Obviously, if national mortality statistics do not contain information to identify Hispanics in general, those data do not contain information to identify Mexican Americans specifically. Because more than 60 percent of all of the Hispanics in the United States reside in five States of the Southwest and because almost 90 percent of Hispanics in those five States are of Mexican origin (*1*), we focused our attention on Arizona, California, Colorado, New Mexico, and Texas.

Although they have been reanalyzed for this paper, our basic data on suicides have been previously discussed (*2*).

The offices of vital statistics of the health departments in those States cooperated in this study by providing the Centers for Disease Control (CDC) with either special tabulations or computer tapes of data on suicide and homicide for the 5-year period, 1976–80. The data identified Hispanics and white non-Hispanics separately. The white non-Hispanics, referred to in this study as Anglos, were used as a comparison group. Classification of suicide and homicide as causes of death were based on the Eighth Revision of the International Classification of Diseases (*3*) for those deaths that occurred from 1976 through 1978, and the Ninth Revision (*4*) for deaths that occurred from 1979 through 1980. The comparability ratio between the Eighth and Ninth Revision for both suicide and homicide is near one (*5*).

We produced population data for calculating suicide and homicide rates for Hispanics and Anglos for the five southwestern States from computer tapes of the Current Population Survey, a survey conducted annually by the U.S. Bureau of the Census. Population statistics from the Current Population Survey are estimates based on a weighted national sample. Since the sample was considered too small to provide reliable population estimates at the State level by ethnicity, age, and sex for individual years, aggregate 5-year rates were calculated for the five-State area. Rates were centered for 1978 by using the mean number of suicides and homicides for the period 1976–80 as the numerator and the mean population for the period, 1977–79, as the denominator.

State health departments in the Southwest categorize suicide and homicide victims as Hispanic if the surname on the death certificate appears on a list of Spanish surnames used by their offices of vital statistics. The Current Population Survey uses self-reporting to identify Hispanic ethnicity. Any person in the survey who reports himself or herself as Mexican American, Chicano, Mexican, Puerto Rican, Cuban, Central or South American, or of other Spanish origin is identified as Hispanic. White Hispanics only were included in our study. Less than 1 percent of persons in the five Southwestern States who were self-identified as Hispanic in the 1978 Current Population Survey were of a race other than white. Our study assumes that the number of persons of black and other races who are identified as Hispanic by having a Spanish surname is equally small.

## Results

The table shows for the United States and for the five southwestern States the mean number of

Number of suicides and homicides of white persons and 5-year rates, by race-ethnicity, United States and 5 southwestern States, 1976–80

| | | 5 southwestern States[1] | | |
|---|---|---|---|---|
| | United States, all whites | Anglo whites | Hispanic whites | Total whites |
| Mean number: | | | | |
| Suicides | 25,291 | 5,459 | 619 | 6,078 |
| Homicides | 11,589 | 2,246 | 1,413 | 3,659 |
| 5 year rate per 100,000 population: | | | | |
| Suicide | 13.2 | 19.2 | 9.0 | 17.2 |
| Homicide | 6.0 | 7.9 | 20.5 | 10.4 |

[1]Arizona, California, Colorado, New Mexico, and Texas.

suicide and homicide deaths for whites for the period 1976–80 and the accompanying 5-year rates. The 5-year suicide rate for all whites in the five southwestern States (17.2 per 100,000 population) is higher than the rate for all whites nationally (13.2). But the suicide rate for white non-Hispanic Anglos (19.2) is more than twice the suicide rate for white Hispanics (9.0). The homicide rate for all whites in the five southwestern States (10.4), like suicide, is higher than the homicide rate for all whites nationally (6.0). For homicide, however, it is the white Hispanic rate (20.5) that is more than twice as high as the white non-Hispanic Anglo rate (7.9).

Figure 1. Age-adusted 5-year suicide and homicide rates by sex and ethnicity, 5 southwestern States, 1976-80

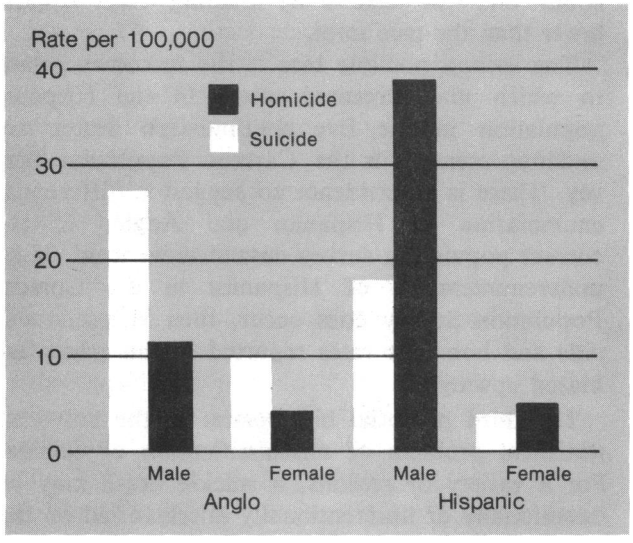



Figure 1 shows age-adjusted suicide and homicide rates by sex for Anglos and Hispanics. For Anglos, the incidence of suicide is greater than the incidence of homicide for both males and females. For Hispanics, however, the incidence of homicide is greater than the incidence of suicide for both males and females. Hispanic males stand out as being at high risk of becoming the victim of homicide, while Anglo males stand out as being at high risk of suicide. Males of each ethnic group have higher rates than females for both suicide and homicide.

Figures 2 and 3 show age-specific suicide and homicide rates separately for males and for females. Figure 2 shows male suicide and homicide rates by ethnicity and age group. The most striking feature of figure 2 is the very high homicide rates for young Hispanic males, peaking at a rate of 83.3 in the 20– to 24–year-age-group. For suicide,

Figure 2. Male suicide and homicide rates by ethnicity and age group, 5 southwestern States, 1976-80

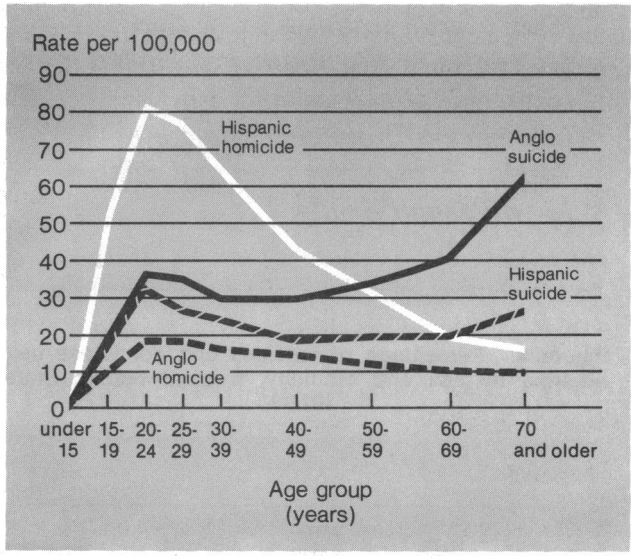
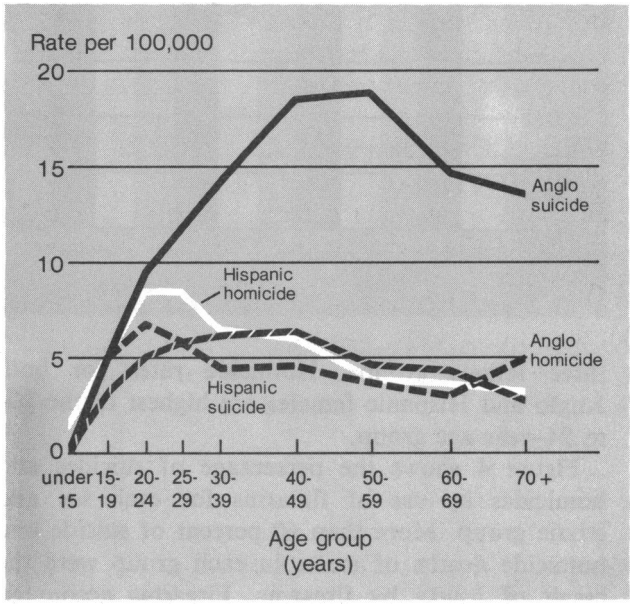



Figure 3. Female suicide and homicide rates by ethnicity and age group, 5 southwestern States, 1976-80

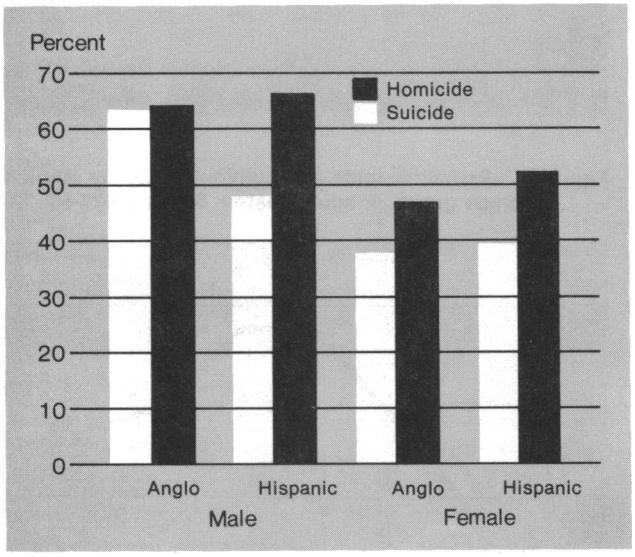



the general pattern among males in both ethnic groups is one of the highest suicide rates in the 20– to 24–year age group and increasing rates in older age groups, with especially high rates for males in the 70 and older age group. For young Anglo and Hispanic males, suicide rates are similar, peaking at 37.4 for Anglos 20–24 years of age and 33.1 for Hispanics in the same age group.

The most prominent feature of figure 3 is the consistently higher suicide rates for Anglo females relative to homicide and suicide rates of the other

*'Our overall findings show that Hispanics in the Southwest have a low incidence of suicide and a high incidence of homicide relative to Anglos in the same area and relative to whites nationally.'*

Figure 4. Percentage of suicides and homicides using firearms by sex and ethnicity, 5 southwestern States, 1976-80




three female groups. Homicide rates for both Anglo and Hispanic females are highest in the 20- to 24-year-age group.

Figure 4 shows the percentage of suicides and homicides by use of firearms for each sex and ethnic group. More than 60 percent of suicide and homicide deaths of males in each group were the result of injury by firearms. Firearms accounted for more than one-third of suicide deaths of females in each ethnic group and approximately half of homicide deaths. There is a remarkable similarity in the proportion of suicides and homicides by firearms for Anglo and Hispanic males.

## Discussion

The rates in our study are subject to at least three potential biases. First, the extent to which different methods of determining Hispanic ethnicity—that is, Spanish surname (for vital statistics) and self-identification (for population statistics)—affect suicide and homicide rates is not known. Special tabulations of data from the 1980 Census by Spanish surname suggest that the surname method of identifying Hispanics is likely to underestimate the number of Hispanics to a greater extent than the self-identification method. Self-identification as used by the U.S. Bureau of the Census has been suggested as an important way to establish a consistent and uniform definition for Hispanic ethnicity (*6*). Offices of vital statistics in the Southwest, however, continue to rely on Spanish surname for ethnic identification in mortality statistics because of problems encountered with self-reporting of ethnicity on death certificates. Thus, by possible underestimating of the numerator, the surname method of identification could bias the results by making rates appear lower than the true rates.

The second possible bias is the unknown extent to which undocumented aliens in the Hispanic population in the five southwestern States are underrepresented in the Current Population Survey. There is no evidence to suggest a differential enumeration of Hispanics and Anglos in the current population survey data that we used. If an underenumeration of Hispanics in the Current Population Survey does occur, then Hispanic suicide and homicide rates reported in this paper are biased upward.

The third potential bias relates to the universal statistical problem of misclassification of suicide. For a variety of reasons, a suicide death may be intentionally or unintentionally misclassified on the death certificate as due to an accident or to natural, or other causes. Thus, the suicide rates for both Hispanics and Anglos will likely understate the true incidence of suicide, although we have no evidence to suggest that there is any differential in the accuracy of classification between the two ethnic groups. We have no way to estimate the net effect of these three possible biases on rates.

Our overall findings show that Hispanics in the Southwest have a low incidence of suicide and a high incidence of homicide relative to Anglos in the same area and relative to whites nationally. Because death by suicide and death by homicide are very different phenomena, we will comment on the findings for the two mortality events separately.

**Suicide.** Our finding that suicide rates for Hispanics are approximately half the suicide rates for

Anglos is consistent with the only two comparable studies in the literature—studies done in El Paso (*7*) and Denver (*8*) more than a decade ago. However, we found that for young males, suicide rates are about the same for the two ethnic groups.

It is well documented that nationally more males than females commit suicide (*9*). We found in our study, however, that the proportion of male suicides to female suicides was considerably higher for Hispanics than for Anglos or for whites nationally. The higher proportion of male to female suicides for Hispanics was observed for each age group (data not shown).

The 1990 health objective for the United States for suicide identifies young persons 15 to 24 years of age as the target population for national suicide prevention efforts (*10*). Suicide rates of persons in this age group have almost tripled in the past three decades. It would appear from our findings that the 1990 objective that focuses on youth suicide is quite appropriate for the Hispanic population, since the highest suicide rates for Hispanics (18.7) are in the 20- to 24-year age group. This compares with a national rate of 17.1 for whites 20- to 24-years of age in 1978, according to an unpublished CDC report of background statistics on suicide deaths of persons 15-24 years of age by race and sex for the years 1970-80.

**Homicide**. Much attention has been focused on high rates of homicide among blacks—rates that are substantially higher than for whites. However, nationally, homicide rates for blacks have decreased since 1970, while rates for whites have increased. Our findings indicate that the two major subgroups of whites in the Southwest, namely Anglos and Hispanics, differ substantially in the risk of dying from homicide. Our data, showing a homicide rate for Hispanics that is more than twice the homicide rate for Anglos, compares favorably with data from two local area studies—one in Houston (*11*) and one in Los Angeles (*12*). The crude homicide rate for Hispanics found in our studies (20.5) was intermediate to the comparable crude rate for Anglos (7.9) and for black and other races (35.4) produced by CDC from special tabulations of homicides from the national mortality files and from special population estimates from Current Population Survey files.

Just as there is a higher ratio of male to female suicides for Hispanics compared with Anglos, there is an even more strikingly high ratio of male to female homicide deaths for Hispanics compared with Anglos. The risk of an Anglo male being a victim of homicide is approximately three times greater than the risk for an Anglo female. However, the risk of a Hispanic male being a victim of homicide is from five to ten times greater than that for a Hispanic female, depending on the age group.

*'In the 20- to 24-year age group, the homicide rate for Hispanic males in the five southwestern States is more than four times higher than the comparable Anglo rate and is approaching the rate for black males nationally.'*

The 1990 health objective for the United States related to homicide focuses specifically on the high rate of homicide for black males, 15 to 24 years of age (*10*). Our study indicates a strong need to pay attention to young Hispanic males as well as young black males. In fact, in the five southwestern States, the risk of death from homicide for Hispanic males 15 to 19 years of age (52.5) exceeds the risk for black males nationally in the same age group (38.9) according to an unpublished CDC report of background statistics on homicide death to black males, 15-24 years of age. In the 20- to 24-year age group, the homicide rate for Hispanic males in the five southwestern States is more than four times higher than the comparable Anglo rate and is approaching the rate for black males nationally. Thus, we suggest that young Hispanic males and young black males are both at high risk of homicide and that both groups warrant consideration for homicide prevention and intervention.

In conclusion, our study of suicide and homicide among Hispanics in the Southwest points to young Hispanic males as being at high risk for both kinds of violent death. For homicide in particular, we found that young Hispanic males have an alarmingly high risk of being a victim of homicide—a risk almost as high as that for young black males.

Finally, we reiterate that the investigation of the health status of Hispanics is often hampered by the lack of sufficient data. Given the present limited information on Hispanics, particularly at the national level, and recognizing the importance of violence as a public health concern, we would recommend that public health researchers be more

aggressive in the use of State and local data sources that allow for Hispanics to be identified separately. These data sources would be useful in exploring the myriad of questions related to culture, socioeconomic status, and lifestyles that need to be answered in order to provide the necessary scientific foundation for developing appropriate prevention and intervention strategies for Hispanics.

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# Minnesota Plan for Nonsmoking and Health: Multidisciplinary Approach to Risk Factor Control


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## Synopsis

*In 1981, the Minnesota Department of Health began a long-term program to control risk factors for the major health problems of the State as determined by an expert committee. The methods chosen to initiate programs were (a) social, economic, and epidemiologic background research and (b) a multidisciplinary statewide planning process. Smoking was considered the most important problem. During 1983-84, department staff members analyzed the epidemiology and economics of smoking in Minnesota and reviewed the literature on methods of smoking control. They and a multidisciplinary technical committee prepared a coordinated plan to increase the prevalence of nonsmoking in Minnesota. The 39 recommendations address mass communication and marketing, educational programs in schools, public and private regulation, economic disincentives through taxation, and funding of programs and evaluation of results.*