

## Work in progress: Prison deaths, ethnic differences

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This paper represents a preliminary report of some trends in prison deaths for three ethnic groups. The data are based on a large prison system for the years 1968-1982. Complete records are available for 572 inmate deaths from natural causes and an additional 113 from suicide and homicide. Death rates from natural causes were much higher for blacks and non-Hispanics under 45 years of age than for similarly aged Hispanics. The patterns for homicides and suicides for the three ethnic groups were quite different from one another.

Over the past 13 years, the first author, together with his colleagues Verne Cox and Paul Paulus, has been exploring the effects of variations in housing in prisons and jails (see Cox, Paulus, & McCain, in press, McCain, Cox, & Paulus, 1980, and Paulus, McCain, & Cox, 1978). The present work is an outgrowth of our work on "crowding," although it does not address that particular topic directly.

Various reports of death rates in the free (non-prison) world tend to show that nonwhites have somewhat higher death rates than do whites. For example, Bradshaw and Fonner (1978) and Kautz, Bradshaw, and Fonner (1981) surveyed death rates for those with Spanish surnames, other whites, and blacks in Texas for the periods 1969-1971 and 1970-1975. For most age groups of males, other whites had the lowest death rates, followed by those with Spanish surnames and then by blacks. The situation is somewhat more complicated than this (e.g., Spanish-surnamed males have the lowest cardiovascular death rates), but those with Spanish surnames and other whites clearly have lower death rates than do blacks up to the age of 65 years, and the differences between those with Spanish surnames and other whites are not very large.

Comparisons such as these present a number of problems that are clearly recognized by the authors cited. First, there is the problem of the census. It appears likely that individuals with Spanish surnames and blacks are underrepresented in the census. This is likely to be particularly true in Texas, where there is a large group of undocumented aliens. Second, there are some problems in identifying those of Hispanic descent. The usual approach is to use Spanish surnames. Third, there are substantial socioeconomic differences among these groups.

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Whatever its other features, a prison does have certain advantages for the researcher. The data presented come from a single state system, and the inmates have the following conditions in common: diet, medical care, psychiatric care, clothing, housing, jobs, and daily schedule. There may be some discrepancies, but they are likely to be slight in comparison with the discrepancies in the free world. A prison population does have the advantage (for us) of a count four times a day, as compared with every 10 years in the census. In addition, there is substantial background information that makes ethnic identification likely to be simpler and more accurate than census figures. There are some problems with prison data. The turnover of inmates is very high—up to 40% per year. The total population may change as much as 10% from one year to the next. In addition, there are some trends over time. Fortunately, we have multiple reports of the number and distributions of inmates; thus, for any given period, we are able to construct a reasonably accurate picture of the number, age distribution, and ethnic identification of inmates.

Naming of ethnic groups takes many forms. The term blacks is now widely used and seems acceptable to most (this was not always the case). We use the term Hispanics to identify the groups generally, but not always, of Mexican descent. Later, we indicate our method of identification of members of this group. The term non-Hispanics is used for the other large group, usually of European descent. We have

Table 1  
Death Rates for Natural Causes Per 10,000 Male  
Inmates in the Period 1978-1982 (N = 231)

	Age (in Years)			
	17-35	36-45	46-55	>55
Blacks	5.20	47.98	72.62	178.17
Hispanics	.97	12.80	7.69	202.43
Non-Hispanics	2.42	31.18	109.33	318.38

Table 2  
Ratio of Death Rates of Male Inmates From Natural Causes at Various Ages in the Period 1978-1982

	Age (in Years)			
	17-35	36-45	46-55	>55
Blacks to Hispanics	5.35 to 1	3.74 to 1	9.44 to 1	.88 to 1
Blacks to Non-Hispanics	2.15 to 1	1.53 to 1	.66 to 1	.56 to 1
Non-Hispanics to Hispanics	2.49 to 1	2.43 to 1	14.21 to 1	1.57 to 1

not encountered any Oriental names and have encountered only one identifiable American Indian in the system considered. If anyone can suggest a more acceptable system of identification, we will award him/her a bag of M&Ms.

Our data on deaths covers the period 1968-1982. We do have data for a short period in 1983, but for our convenience, the data for that period are not included here. The basic sources are official records of the prison system. In addition, for the period 1972-1978, we have copies of the death certificates. In all cases, we are able to identify each individual included by name, race, serial number, cause of death, and date of death. At present, we have information on 572 male inmate deaths from natural causes. This is expected to increase by about 20 to 30 individuals as we are able to fill in some missing data. We also have identified 66 male suicides and 52 male homicides (not including inmates killed during escape). These numbers may also be increased by 5% to 10% as we obtain more complete data. The prison system from which these data were obtained had over 37,000 inmates in 1982.

An initial rough calculation indicated that Hispanics had a much lower incidence of deaths from natural causes than did either of the other groups. In order to avoid the possibility of underestimating the death rates for the Hispanics, we adopted criteria that probably maximized the count of the number of deaths in this group. We had records from the prison system. In addition, we had two individuals of Mexican descent, one born in Mexico and the other in the United States, go through the death records independently. The ground rule was that any inmate who could be identified, either by given name (or names) or by surname, as being of Latin descent was listed as Hispanic. All individuals who were classified by *any one* of these three independent sources as being Hispanic were so listed. The number in the final list appears to be about 10% higher than that in the prison records.

We are presenting these preliminary data in terms of death rates for male inmates per 10,000. In Table 1, we show the death rates per 10,000 male inmates for four broad ranges for 1978-1982. We have done an analysis on much shorter ranges, and the results are much the same.

At present, our baseline data from 1968-1977 are adequate, but the age breakdown is not completely

satisfactory. For example, one age bracket was 46-60 years. This is a period of substantial change. In any case, the earlier data will be presented at a later date. Our preliminary calculations do not indicate any major changes from the data presented.

From Table 1, it is clear that there are wide discrepancies in death rates through age 45 years. It can also be seen that, in comparison with the other groups, death rates for the non-Hispanics rise more rapidly.

In Table 2, ratios of death rates are shown. Some of the comparisons show extremely large differences. The number of deaths among the Hispanics is low, and their rates and ratios are the most vulnerable to change. Again, on the basis of preliminary analyses, we do not expect major changes in the trends.

In this presentation, we collapsed across age groups for homicides and suicides. Preliminary analysis indicated that this does not seriously distort the data. The suicide and homicide data are presented as a ratio of actual deaths to expected deaths on the basis of population of each ethnic group. Thus, if the expected number of suicides for blacks was 20 and the actual number was 11, we would have a rate of 55%. For suicides, blacks had a rate of 55%, Hispanics, 130%, and non-Hispanics, 139%. The pattern for homicides is quite different. The rate for blacks is 122%, for Hispanics, 143%, and for non-Hispanics, 55%.

At the moment, we can only speculate as to the basis for these differences. We are considering a wide range of possible explanations. There are just too many possibilities, with too little support for any one of them. The earlier work on "crowding" suggests that psychological factors ordinarily considered to govern "stress" may play a large part. We leave the topic in that vague condition for the moment.

By the time we are ready with a full report, we expect to have data from two other large prison systems. Life will be simpler for us if the results from the other systems match the results presented. Whether or not they do, the present results represent a large population and a considerable period of time. On that basis, they seem worth considering.

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