

# Homicide Risk among Immigrants in California, 1970 through 1992

Susan B. Sorenson, PhD, and Haikang Shen, PhD

## ABSTRACT

According to the death certificates of the 65 510 California residents who died of homicide from 1970 through 1992, foreign-born persons are overrepresented in the homicides of California residents. Analysis of homicide data for 15- to 34-year-olds ( $n = 38\ 774$ ), who account for a majority of all homicide victims, indicated that immigrant-to-nonimmigrant risk patterns differed by ethnicity and across time. During the 23-year study period, foreign-born Whites, Hispanics, and Asians and others were at significantly higher risk and foreign-born Blacks were at a statistically similar risk of homicide compared with their US-born counterparts (risk ratio = 2.12, 1.24, 1.72, and 0.60, respectively). (*Am J Public Health*. 1996;86:97-100)

## Introduction

Violence and immigration—two currently controversial social issues in the United States—are rarely studied in conjunction with one another. Studies of immigrants' homicide risk<sup>1</sup> are particularly important because immigrant groups contain a high proportion of young men of color,<sup>2,3</sup> the very group at highest risk of homicide.<sup>4</sup>

The present investigation estimates homicide risk for immigrants (i.e., foreign-born persons) over time and across ethnic groups.

## Methods

Death certificates of the 64 510 persons who died of homicide in California from 1970 through 1992 were accessed through California Death Statistical Master tapes provided by the California Department of Health Services. Homicides were identified with the *International Classification of Diseases* external cause-of-death categories,<sup>5,6</sup> specifically codes 960 through 969.

Place of birth, age, and race were also abstracted from the death certificate. Place of birth was collapsed into a dichotomous variable—US born (born in any of the 50 US states or a US territory) and foreign born (born elsewhere)—to indicate whether the homicide victim was an immigrant. (Existing data categories precluded analyses by country or geographic region [e.g., Central America, Asia] of origin.) Four race/ethnicity categories—White, Hispanic, Black, and Asian/Other—were created based on race and Spanish surname. California death certificates provided the race categories of Black, White, Asian, American Indian, and Other. Hispanics were identified by comparing the decedent's last name to a US Census list of 12 497 Spanish surnames.<sup>7</sup> (The surname-linkage procedure was necessary because consistent use of an Hispanic identifier on California death certificates did not begin until 1987.) The surnames of persons who were not identified as Hispanic but who were born in Puerto Rico, Mexico, South and Central American countries, Cuba,

and Spain were reviewed, and 2064 surnames were added to the list for subsequent linkage.\* To reduce potential misclassification, Asians and Blacks were excluded from the surname linkage.

Composite population totals by ethnicity, age, and birthplace (i.e., US born, foreign born) were based on projections from California Department of Finance population data and the 1970, 1980, and 1990 US Census. The foreign-born category included immigrants (whether in the United States legally or illegally), refugees, amnesty applicants, students, and other types of foreign-born US residents; these finer distinctions are not made in either death certificate or population data.

Frequencies, rates, and risk ratios (RRs) were calculated to assess differential homicide risk for US-born and foreign-born persons overall and by race/ethnicity. We limited most analyses to 15- to 34-year-olds, who accounted for a majority of the homicides, and standardized rates by gender to US-born population figures because the population structures of immigrant and nonimmigrant groups differ.

## Results

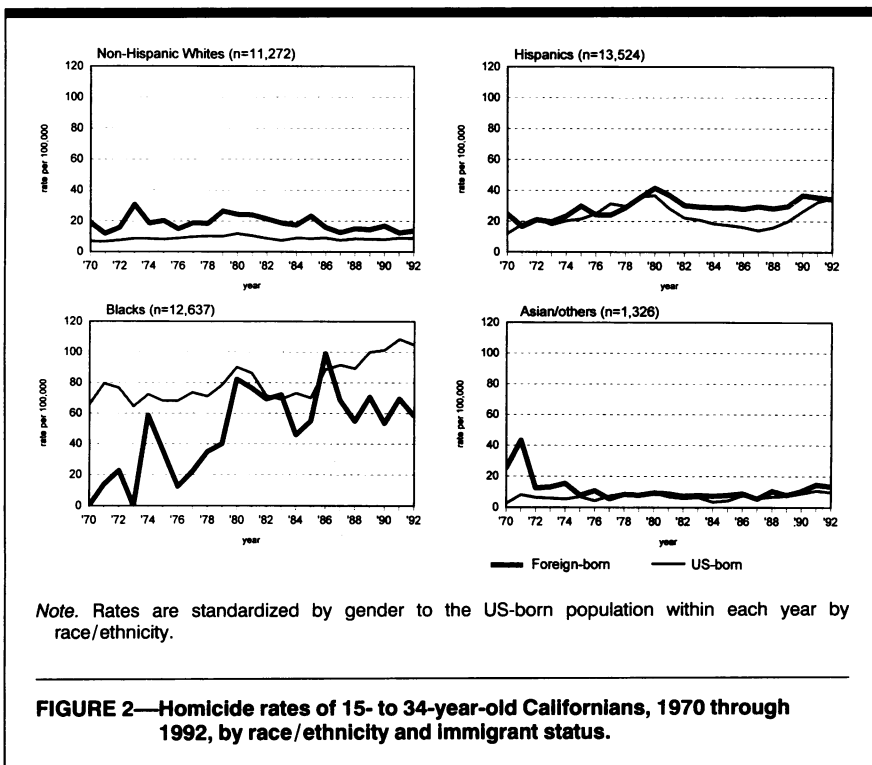
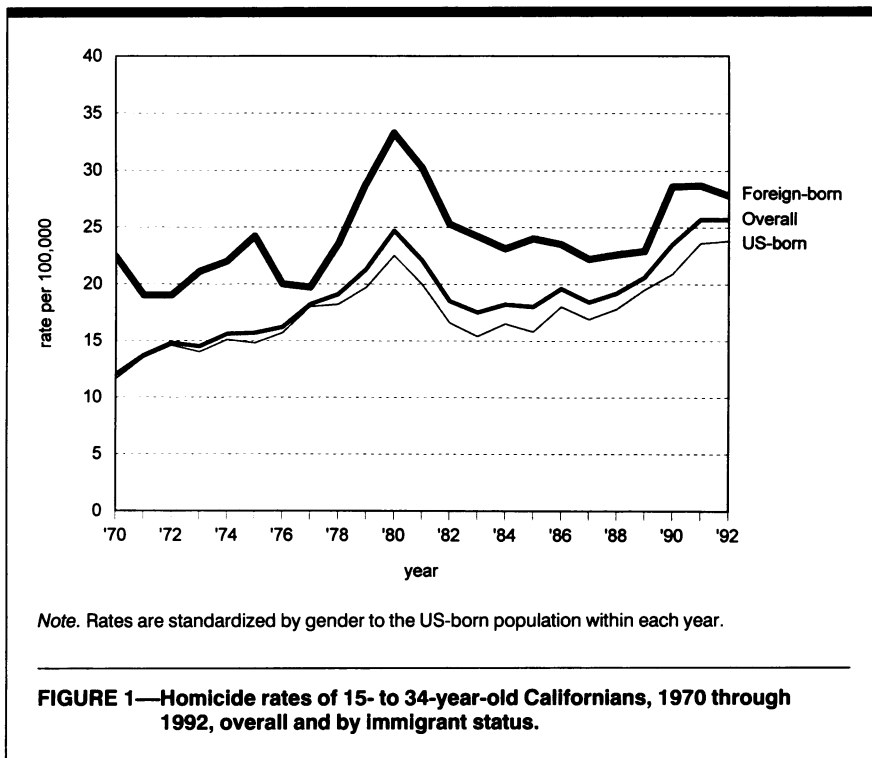
Immigrants are overrepresented among homicide victims in California. From 1970 through 1992, immigrants

\*Hyphenated last names (e.g., Lopez-Perez) are recorded on death certificates with the hyphen removed and therefore are not classified as being of Spanish origin by the Spanish-surname list. To identify these and other less common Spanish surnames, two Hispanic researchers with training in ethnic studies and linguistics, respectively, evaluated whether the names were of Spanish origin. A 96.4% agreement was obtained after two independent reviews of the list; the remaining cases were decided by consensus following discussion.

The authors are with the School of Public Health, University of California at Los Angeles.

Requests for reprints should be sent to Susan B. Sorenson, PhD, UCLA School of Public Health, 10833 Le Conte Ave, Los Angeles, CA 90095-1772.

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were an estimated 17.4% of California's population but were 23.3% of the state's homicide victims. In 1990, the most recent year for which census data are available, immigrants constituted 22.8% of California's residents and 32.8% of California's homicide victims. Subsequent analyses were limited to 15- to 34-year-olds be-

cause a substantial portion of the homicides (73.7% for immigrants, 62.3% for nonimmigrants) were of persons of that age group.

Homicide rate patterns were similar for both immigrant and US-born 15- to 34-year-old Californians (see Figure 1). However, as indicated in Figure 2, pat-

terns differed by ethnicity. Foreign-born non-Hispanic Whites and Hispanics have higher homicide rates than their US-born counterparts. US-born Blacks have higher homicide rates than foreign-born Blacks, whereas foreign-born and US-born Asians and others appear to have similar rates, with the exception of rates in the early 1970s.

Foreign-born persons were at consistently higher risk of homicide than US-born persons: RR = 1.42 for 1970 through 1979, 1.40 for 1980 through 1989, and 1.24 for 1990 through 1992. Immigrant to nonimmigrant homicide risk ratios differed across time by ethnicity. Non-Hispanic White immigrants were at significantly higher risk of homicide than US-born non-Hispanic Whites from 1970 through 1992. Hispanics' immigrant-to-nonimmigrant homicide differential became statistically significant in 1980, and immigrants remained at higher risk through 1992. Black immigrants generally were at lower risk of homicide than US-born Blacks; low numbers of Black immigrants contributed to statistically inconsistent risk ratios. Immigrants and nonimmigrants of Asian or other descent generally were at similar risk of homicide.

Immigrants and nonimmigrants were killed by similar means. Firearms accounted for the largest percentage of deaths (71.6% for immigrants, 68.4% for US-born persons), followed by stabbing (20.5% for immigrants, 19.6% for US-born persons), other (a compilation of several relatively rare methods), and strangulation. From 1970 to 1992, firearms accounted for a growing proportion of the homicide deaths of both immigrants (64.1% to 79.6%) and nonimmigrants (64.5% to 80.1%). These patterns are evident across each ethnic group. (Tabled data are available from the authors.)

**Discussion**

The health of immigrants in the United States warrants attention due to sheer numbers alone; from 1970 to 1990 the immigrant population more than doubled from less than 10 million to nearly 20 million.<sup>8</sup> According to a variety of indicators, immigrants are in better health than US-born persons.<sup>9</sup> However, the United States is not necessarily a safe haven. Immigrants—especially non-Hispanic Whites—are at higher risk of homicide than US-born persons.

But are immigrants accorded relative safety in the United States? Cross-

**TABLE 1—Homicide Risk for Foreign-Born vs US-Born 15- to 34-Year-Old Californians, by Race/Ethnicity, 1970 through 1992**

Race/Ethnicity	1970–1979		1980–1989		1990–1992		1970–1992	
	RR	95% CI	RR	95% CI	RR	95% CI	RR	95% CI
Non-Hispanic White	2.29	1.57, 3.35*	2.09	1.57, 2.79*	1.66	1.25, 2.21*	2.12	1.55, 2.90*
Hispanic	1.06	0.84, 1.35	1.48	1.27, 1.74*	1.13	1.01, 1.28*	1.24	1.05, 1.47*
Black	0.33	0.11, 1.00	0.84	0.55, 1.27	0.58	0.39, 0.84*	0.60	0.34, 1.05
Asian/other	2.38	1.26, 4.52*	1.26	0.74, 2.14	1.31	0.86, 1.99	1.72	1.01, 2.93*
All races and ethnicities	1.42	1.20, 1.67*	1.40	1.27, 1.55*	1.24	1.15, 1.35*	1.38	1.23, 1.55*

Note. Rates are standardized by gender to the US-born population within each year by ethnicity. RR = risk ratio; CI = confidence interval.

\* $P < .05$ .

national data indicate that this is not likely for some immigrants because US homicide rates are substantially higher than those in most developed and many developing countries.<sup>10–12</sup> Many European nations strictly regulate access to firearms and have much lower rates of homicide than the United States.<sup>11,12</sup> Most non-Hispanic White immigrants to the United States are from these countries; thus, their higher risk of homicide relative to their US-born counterparts may be due, in part, to a change in exposure. By contrast, Hispanic immigrants to California, who are at higher risk of homicide than US-born Hispanics, come primarily from Mexico, which reports higher rates of homicide than the United States.<sup>12</sup> Thus, homicide risk relative to the country of origin varies.

Large numbers of foreign- and US-born persons of different ethnic backgrounds provided the opportunity to investigate homicide risk differentials for immigrants and nonimmigrants by ethnicity. We improved on the standard Spanish-surname linkage procedure by excluding Asians and Blacks from the linkage and by generating a revised list of Spanish surnames (see "Methods" for details). Future research will be able to use the Hispanic ethnic identifier that is currently available on death certificates in 49 states (J. Maurer, Mortality Statistics Branch, National Center for Health Statistics, personal communication, March 8, 1995). Research will be needed to assess the accuracy of ethnicity and place of birth on death certificates, an assumption made in the current investigation.

The central problem in research on immigrants to the United States is the lack of data on illegal immigrants. Gross estimates of the illegal immigrant population vary greatly, and several groups are working to develop better estimates (e.g., the National Academy of Sciences' Com-

mittee on National Statistics and Committee on Population, the US Commission on Immigration Reform, and the National Institute of Child Health and Human Development). A substantial undercount of illegal immigrants in the denominator would spuriously inflate homicide rate estimates for immigrant subgroups with a large proportion of undocumented members, as well as inflate the overall immigrant to nonimmigrant risk ratio. Although the Census does not exclude undocumented immigrants from its population counts, one could surmise that for a variety of reasons the US Census undercounts illegal immigrants. Estimates of this possible undercount are not available, however. Because of the lack of information in both the homicide and the population data, analysis by immigrant type (e.g., legal, humanitarian, undocumented) is not possible. Nonetheless, the numerator and denominator data are comparable in that they both include legal and illegal immigrants. (It is important to underscore that most immigrants to the United States enter the country legally.) Thus, the present investigation reasonably describes immigrant to nonimmigrant homicide risk with the currently available data.

Findings for the Asian/Other group must be interpreted with caution because Native Americans, a group with high homicide rates,<sup>13</sup> could not be separated from "Other." Given that none of the American Indian decedents were immigrants to the United States, their inclusion made for a more stringent test of the hypothesis and may have contributed to the statistical similarity of immigrant and nonimmigrant Asians and others from 1980 through 1992.

Future research will need to use other databases to investigate issues important for prevention efforts (e.g., how long the deceased immigrant had been in the country, information about exposure

to risk factors, and information about the perpetrator), because these data are not available on death certificates.

### Conclusions and Implications

The current investigation underscores the importance of ethnicity and identifies the relevance of immigration in homicide risk. Population-based violence and injury prevention efforts (e.g., reducing exposure to handguns, school-based conflict resolution programs, increasing economic opportunities) aspire to reduce homicide risk for all US residents. Study findings indicate that public health efforts focusing on firearms are relevant for immigrants in that gunshot wounds account for a substantial majority of their homicides.

Services and programs designed specifically for foreign-born residents (e.g., churches, temples, social organizations, the Immigration and Naturalization Service) may be good distribution points for information about immigrants' risk of homicide in the United States. Such efforts would need to include information about known risk factors (e.g., keeping a gun in the home<sup>14</sup>) to avoid the unintended consequence of immigrants taking counterproductive actions to reduce homicide risk in response to increased awareness. □

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