Homicide in New York, Los Angeles and Chicago

Eric H. Monkkonen

Follow this and additional works at: http://scholarlycommons.law.northwestern.edu/jclc

Part of the Criminal Law Commons, Criminology Commons, and the Criminology and Criminal Justice Commons

Recommended Citation
HOMICIDE IN NEW YORK, LOS ANGELES AND CHICAGO

ERIC H. MONKKONEN

Homicide rates are understood in large part by comparison. Almost without thinking we compare this year to last, this place to that. Usually we make modest leaps in time and space, taking adjacent sites and time periods in an effort to hold constant otherwise uncontrollable factors. But, in keeping the comparisons modest, we may lose the leverage necessary to make sense of rates. Simply put, the theoretical questions we must address are very different if the United States has always had rates and short term variations similar to those of the present as opposed to completely different ones. If, for example, the highs of 1990 and the lows of 1999 represent a range within which rates have always fluctuated, then the objects to be explained are customary and normal. If, on the other hand, they are extraordinary, or occur only in particular times and places, the explanatory task is very different. Establishing American homicide rates for a wide range of times and places is fundamental to our understanding of homicide. As a beginning of this effort, this paper reports on reconstructed homicide rates from six large and representative cities for 1900, and for what were the nation's two largest cities—Chicago and New York City—over a long span.

In order to compare homicide rates from places separated by long distances in time or space, one must take more care than is customary to make data similar.\(^1\) Comparing this year's count to last

---

\* UCLA, Presented at Northwestern University School of Law, November 17, 2000. I wish to thank Kevin Mullen for his help with the San Francisco data, Roy Ho for extra special searching via interlibrary loans at UCLA's Young Research Library, Roger Lane for keeping and sharing his original Philadelphia data forms, all of my Los Angeles research assistants—Evan Seamone, Tamara Myers and Petula lu. This work was funded by grants from the National Science Foundation, the UCLA Department of History, the UCLA Academic Senate and the National Consortium on Violence Research. The Los Angeles Department of Coroner has generously facilitated this work.

year's is perfectly reasonable because the population base is also comparable and extraordinary demographic events would be well known. Over longer time spans, at a minimum, adjusting counts to rates per population base is considered customary and basic. This form is the standard in most homicide studies, with a reporting of deaths per 100,000 population. This form is known as the "crude death rate," and its virtues are clarity, simplicity, and relatively easy construction.²

It makes sense to modify this customary approach when there have been large demographic changes, such as an increase in life expectancy or decrease in infant mortality. For example, in the twentieth century, as the United States completed its transition from a youthful, high mortality, high fertility regime to an older, low fertility low mortality one, the proportion of young males, 20–29 years old, in the total population decreased from 9.1% (1900) to 7.7% (1950) to 6.6% (2000).³ This is approximately a twenty-five percent decrease in one of the most violence prone age and sex groups. Without adjusting for this demographic shift and possibly even greater local variations, one runs the risk of comparing apples and oranges rather than long term rate changes.

The approach taken here is that used in health statistics, standardizing homicide rates per age groups to the distribution of the United States population in the year 2000. The resulting values, age standardized homicides per hundred thousand, can be interpreted as the rates that the target year and place would have had if its base population had the same age distribution as does the whole United States in 2000.⁴ This reference population is an arbitrary benchmark set by the Center for Health Statistics: until recently it had been the population in 1940.⁵ I use victim rather than offender ages as they are much more completely reported. Obviously, offender ages would be the better data to use, as offenders produce the homicides. Typi-

---

² I should note that for those doing medieval homicide research, estimating the denominator of population is often quite difficult.
⁵ Id. at 1.
cally, the reporting of victim ages is much more thorough and accurate, in part because a coroner processes victims. Offenders, if caught, are of interest for their actions and culpability, so officials are less assiduous in accurately reporting age. Where evidence on offenders is available, it demonstrates that offenders have a very similar age distribution to victims. For example, in 1995, for the whole United States, the correlation between the 11,760 homicide victim-offender pairs over five years old was 0.43, while their mean ages were 32.4 and 29.2 respectively. The exceptions come at the extremes, child victims in particular having no offender analogues. For this reason, and to avoid the poor and probably inconsistent quality of child murder discovery and reporting, I use no victims under five years old.

The technique known as age standardization is designed to compare groups from populations with different age distributions. To calculate these rates, one needs the base population age distribution and the age of homicide victims. The United States Vital Statistics began to collect and publish such information beginning in 1900, but one cannot rely on complete coverage until 1930. At the city level, good coverage is more likely, but, unfortunately, the United States Vital Statistics lumped all violent deaths—e.g., homicide, suicide, and accident—together so that one cannot calculate those due to homicide from these sources. Prior years have some coverage in the United States census, but the coverage is not complete enough for a relatively small numerical category like homicide. The best year, 1850, depended on households recalling previous deaths, thus eliminating recall in the case of victims who had lived alone or died unknown.

---

6 For 18,915 victims out of 19,918 total.
7 For 12,451 total offenders.
8 The higher mean of victims reflects the larger number of victims over fifty-five: could the huge number of missing offenders and data peculiarities, such as multiple offenders among teenagers, bias these results? For pre-1875 New York City, with 1788 homicides, similar results obtained. The correlation coefficient was .33; the victim mean age was 31.8 (n=783) and the offender mean was 30.1 (n=379). For striking graphic on ages, see Michael D. Maltz, Visualizing Homicide: A Research Note, 14 J. QUANTITATIVE CRIMINOLOGY 397 (1998).
9 Anderson & Rosenberg, supra note 4, at 1.
Age standardizing practice groups ages on ten year intervals beginning with every five: e.g., twenty-five to thirty-four years old. The year 2000 standard population has been defined by the Center for Health Statistics, and I use their reference population here. Because some health departments grouped their age data on the zero years, e.g., 20 to 29, I have on occasion had to use a slightly different reference population. For the years when ages are grouped on the ten, I have used an appropriate reference population supplied to me by Robert N. Anderson of the Center for Health Statistics. The differences are tiny, but it is important to note that the practice of spanning the zero years smoothes the largest region of age heaping: respondents are most likely to round to a zero year, then to fives and threes.\footnote{Tim McGuire \& Joel A. Harrison, \textit{Direct Standardization}, 21 \textit{Stata Technical Bull.} 5 (1994).} Direct age standardization can be done if one has the age rates and population base of the original population: this is the "preferred" method. Otherwise, estimates of the actual age rates have to be created.\footnote{T. Kue Young, \textit{Population Health: Concepts and Methods} 39 (1998).} The computations here are done using Stata 6.0 direct age standardization.\footnote{Stata Corp., \textit{Stata Statistical Software: Release 6.0} (1999).}

Ideally, the age standardized populations would be male, as men predominate in homicides, both as victims and offenders. Due to data limitations, I use as the population and victim age groups both males and females because sex based age groups cannot always be found or created for the earlier censuses. In order to compensate, I use, as a separate variable, the sex distribution (percent male) for the city’s whole population in order to test whether it might vary and exert a shaping impact on the rates.

The focus on big cities is not intended to be due to their higher homicide rates. It may come as a surprise to learn that until 1957, New York City’s homicide rate was lower than that of the whole United States. Rather, the advantage of the big city is consistency in health reporting and geopolitical boundaries. As the health data most often came to the health department from the county coroner, the only similar high quality source would be at the county level, but county health departments did not always do the reporting job of their big city cousins.

City selection for 1900 was designed to achieve regional coverage: East (New York City and Philadelphia), Midwest (Chicago), South (St. Louis), and West (San Francisco and Los Angeles). St.
Louis had excellent vital statistics reporting for the late 1890's and early twentieth century, so it serves as the most reasonable approximation to a southern city in the sample. Memphis, known, to its constant anger, as the murder capital of the United States, would have been an ideal, though small candidate, as would have New Orleans or Baltimore, but none seem to have produced the public health data needed. It is important to note that these cities represent great research targets: they may well have archival materials making the creation of a data series possible.14

New York City reached one million people between 1860 and 1870. Its political boundaries changed once, in 1898, when the surrounding cities became the five boroughs. It had more than enough political corruption to make one concerned about its murder data; coroners were elected officials who initiated homicide prosecutions until the early twentieth century. On the other hand, they were paid on a fee per body basis, so except for the very political victim, the coroners had a financial incentive to discover murder. The city had sophisticated annual health reports from as early as 1866, in a format consistently reporting causes of death by age group over the years. Reported in five year age groups, the data allow easy conversion to the ten year grouping centered on the decade as used for age standardizing. My earlier research on individual level homicides in New York City has demonstrated the quality of the post–1870 health reports.15

Chicago was unusual in that its murder books were kept by the Chicago Police Department.16 The books represent an astounding resource for scholars. The city grew tenfold between 1870 and 1930—three hundred thousand to three million—a rate exceeded only by Los Angeles. Although here it is categorized as midwestern, in 1870 it was still considered western. Occasionally the city had very good quality health reporting, which enables the individual level data to be checked against the counts reproduced in health department annual reports.17

14 For example, Baltimore has a guide to city deaths in the nineteenth century which suggests that the city archives has a full body of coroners' inquests. BALTIMORE CITY ARCHIVES AND RECORDS MANAGEMENT OFFICE, SUSPICIOUS DEATHS IN MID–19TH CENTURY BALTIMORE: A NAME INDEX FOR CORONER INQUEST REPORTS AT THE BALTIMORE CITY ARCHIVES RELATING TO 4,000 DEATHS IN 1827, 1835–1860, 1864 AND 1867 (1986).
15 See ERIC H. MONKKONEN, MURDER IN NEW YORK CITY (2001).
17 Such titles included CHI. (ILL.) BD. OF HEALTH, REPORT OF THE DEPARTMENT OF
St. Louis boasted an unusually sophisticated government. It published high quality reports and was often considered to have a technically progressive bureaucracy. Here I have labeled it as southern, but in many ways it was western or midwestern. In part the difficulty with regional labeling for the nineteenth century is that the south was so rural that all of its cities represented something very non-southern, not something southern. By 1900, its population was over half a million.

Los Angeles was very much a cow town in the late nineteenth century, with a population expanding and contracting in its boom and bust economy. Its Latino government was eclipsed in the late nineteenth century by Yankees. There is some evidence that in the early 1890’s, Chinese murders were not even enumerated. Up through the 1920’s, coroners’ reports casually noted the large numbers of “justifiable homicides” by police officers, and if ever there was a western city which had the personal violence associated with that region, it was Los Angeles. This paper uses the original Inquest Registers, which are still held by the Department of Coroner and list every inquest and cause of death from 1894 on. Los Angeles was just beginning to become a large city in 1900, at over 100,000 people.

In the early 1850’s, San Francisco entered the United States with a burst of vigilante violence, justified with reports of high levels of crime and violence. The city was known for its high proportion of men, many sojourners moving on the gold fields. By the latter part of the nineteenth century, its character had changed, with a strong and politically active labor movement and its earlier violence having faded. The city often produced good quality health reports, and I have been fortunate enough to have the research of historian Kevin Mullen to augment these. Although its growth rate never matched that of Los Angeles or Chicago, San Francisco was still three times Los Angeles’ size in 1900. By 1920, Los Angeles had forged ahead of San Francisco in size.

Whenever any city’s reported homicides in the health reports seemed suspiciously low, I rechecked them from a separate source. Philadelphia vital statistics, for instance, reported just eighteen homicides in 1900 (for 1899), yielding a crude rate of 1.4.18 Roger Lane’s

research on Philadelphia had found an annual rate of 2.2 for 1895–1901, just for homicide indictments, and he casts some doubt on the health department methods.\textsuperscript{19} To estimate the true rate, I used capture–recapture sampling. Also known as the Chandra Sekar Deming method, this is a technique of estimating a true population when a complete census or list is unavailable: it is used most often in lieu of proper censuses and for research on wild animal populations. This method requires two samples, preferably independently drawn and random, to estimate the objects included in neither sample. It has been applied to historic homicide data in a pioneering effort by Douglas Eckberg for nineteenth century South Carolina.\textsuperscript{20} The Philadelphia health report data could be rechecked by working from two lists of homicide victims: First, Lane’s original sample of indictments, and second, a list of all homicides mentioned in the Philadelphia Ledger for that year.\textsuperscript{21} The new estimate: a crude rate of 4.4 homicides per 100,000, age standardized to 4.6. Unfortunately, not every city can be checked through capture–recapture, for not all have the possibility of using two lists of victim names. Of those cities reported here, I have been able to re-estimate the counts for Los Angeles as well as Philadelphia, 1900.\textsuperscript{22}

\textsuperscript{19} ROGER LANE, VIOLENT DEATH IN THE CITY: SUICIDE, ACCIDENT AND MURDER IN NINETEENTH-CENTURY PHILADELPHIA 71, 144–47 (1979).


\textsuperscript{21} I wish to thank Roger Lane for preserving and sharing his original research notes with me, and Petula Iu for searching the Ledger.

\textsuperscript{22} Capture–recapture for Philadelphia, 1900. Roger Lane has indictments for twenty-five murders, twenty of which are in the Ledger. Hence five are unique to the indictments (x1). The Philadelphia Ledger mentions forty-five murders, twenty-five of which are unique to it (x2). There are eight further possible murders mentioned in the Ledger. Twenty are in both sources, indictments and Ledger (C). See LANE, supra note 19, at 177.
The five decades between 1870 and 1930 cover a period of enormous change in American cities, from the technology of steam, telegraph and wagon to the telephone and automobile. Over that span, the United States became an urban nation, its population reaching fifty percent urban by 1920. It went through a period of national prohibition, and from an era of domination of urban politics by Yankee elites to immigrant machines. On the other hand, there were also significant continuities. Cities were places filled with immigrants. This was the era of the classic Big City with a big downtown. In the post–World War II era, urban growth took a new and quite different direction towards the multi–government metropolis, and the “typical” big city, like New York or Chicago, became atypical. Between 1850 and 1870, the nature of gun ownership probably changed. While it may well have been higher (perhaps as much as sixty percent) in the colonial period, the mass manufacturing era introduced inexpensive concealable weapons. Murders in both New York City and Los Angeles reflect the change: in both cities, guns accounted for about

The capture–recapture arithmetic is:
\[(X_1 \times x_2)/C = 6.25\]
\[X_1 + x_2 + c + x_{nu} = 5 + 25 + 20 + 6.25 = 56.5\] for new total.

His estimate: 66.5

The age distribution of victims for 1900 is:

<table>
<thead>
<tr>
<th>Age</th>
<th>Freq.</th>
<th>Age</th>
<th>Freq.</th>
<th>Age</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-14</td>
<td>7</td>
<td>45-54</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td>4</td>
<td>55-64</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>12</td>
<td>65-74</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>4</td>
<td>Total</td>
<td>32 known</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50 total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I sum this and then inflate by missing % (\(*1.765\)) to get:

<table>
<thead>
<tr>
<th>Age</th>
<th>Freq.</th>
<th>Age</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-14</td>
<td>7</td>
<td>45-54</td>
<td>4</td>
</tr>
<tr>
<td>15-24</td>
<td>4</td>
<td>55-64</td>
<td>2</td>
</tr>
<tr>
<td>25-34</td>
<td>12</td>
<td>65-74</td>
<td>1</td>
</tr>
<tr>
<td>35-44</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
seven percent of murders before 1851 and about twenty-five percent (LA) and twenty-two percent (NYC) from 1855–1875.\textsuperscript{23} And the criminal justice system, never too highly sophisticated, still lacked clear criminal identification systems or coordination between places and agencies.

The most current theory predicts that violent behavior in American cities should have decreased in this era. Throughout Western Europe, the long term decline of rates in personal violence had begun in the late middle ages, and the second half of the nineteenth century saw rates—including legal executions—fall to record lows of around one per hundred thousand in northern Europe and England.\textsuperscript{24} These
lows persisted through most of the twentieth century, with a slight rise towards its end. Whether theorized as the “civilizing process” or modernization, the suppression of impulsive violence is now understood as the consequence of the slow spread of the state and the related decline of impulsive violence, as well as the rise of internalized, predictable interpersonal norms of behavior—courtesy. The post-1960’s burst in American violence completely contradicts the predictions of these theories. Of course this one (large) instance has not yet been seen as enough to reject theories which account for so many places over half a millennium, though it is worth noting here that now some theorists talk of “decivilizing.” Spierenburg suggests that the unanticipated high rate of U.S. urban violence may come from a kind of place specific “decivilizing,” the state failing to penetrate all of urban society.

---


Even this idea has little explanatory relevance, especially when one considers the second half of the twentieth century, dominated by rising rates. Figure 1 shows national crude homicide rate estimates for the U.S. and England. Although the English pattern is subject to some controversy, work on many other individual cities throughout Europe suggests that this picture captures the trailing off from very high medieval crude rates averaging around twenty per hundred

---

29 The primary source for England is SEC’Y OF STATE FOR THE HOME DEP’T, CRIMINAL STATISTICS, ENGLAND AND WALES (various dates); for the U.S., Douglas Lee Eckberg, Estimates of Early Twentieth-Century U.S. Homicide Rates: An Econometric Forecasting Approach, 32 DEMOGRAPHY 1 (1995). See also, HAVEN EMERSON & HARRIET E. HUGHES, POPULATION, BIRTHS, NOTIFIABLE DISEASES, AND DEATHS, ASSEMBLED FOR NEW YORK CITY, NEW YORK, 1866–1938, FROM OFFICIAL RECORDS (1941); HAVEN EMERSON & HARRIET E. HUGHES, SUPPLEMENT 1936–1953 TO POPULATION, BIRTHS, NOTIFIABLE DISEASES, AND DEATHS, ASSEMBLED FOR NEW YORK CITY, NEW YORK, 1866–1938, FROM OFFICIAL RECORDS (1941); PAUL C. HOLINGER, VIOLENT DEATHS IN THE UNITED STATES (1987); all supplemented with the FBI’s Uniform Crime Reports.

It is not as though the U.S. is completely separate: the national rates of England and the U.S. actually fluctuate similarly, with a positive correlation throughout the twentieth century. The much greater size of the U.S. rate obscures this relationship in graphic form unless one uses a log scale.

Figure 2

Age Standardized Homicide Rates, Chicago and New York City, by Decade, 1880–1930. Source: see text.

Figure 2 compares the age standardized rates of Chicago and New York City, the two largest U.S. cities at the time. Several observations are of importance. First, the long series for New York shows several surprises: a relatively high rate throughout two centuries, a low period in 1900 when one would have predicted a high period, and a high rate at the beginning of the nineteenth century, in all

---


32 $r = .45$ for the twentieth century. It rises to .57 if we drop the war years, 1914–1921, when England’s rate plummeted as young men went to war. In a final massage, the correlation rises to .63 if we delete the post-1995 U.S. rates.
probability much higher than the current rate. Because the data are reported on the decade, at least two important high peaks for New York are invisible—those for 1857–1858 and 1862–1864—both of which exceeded rates at the end of the twentieth century. Similarly, the 1930 peak for Chicago actually masks a downturn, for the city’s crude rate had reached a high point in 1925 and then began to decline.33

Chicago has rates closer to one set of theoretical expectations; essentially it is a picture of sustained growth. If one wanted a city in which to confirm the theory that urban growth leads to high rates of violence, Chicago fits the requirements. Chicago and New York begin the period with rates around five and Chicago ends it with rates over ten. During the period, Chicago has doubled the rate of New York. The rates in most cities drop afterward, in a widely noted Depression effect.

Figure 2 really raises a question: should we talk about “American homicide rates” when the two major cities were so divergent? Do we use 1880 as the talking point? Do we say that New York does not count? Do we have two theories of change? Or, we could use Chicago to confirm Michael Bellesiles’ prediction that the growing American “gun culture” caused increasing homicide rates.34 At this point, one must conclude on a cautionary note: the two biggest United States cities contradict each other and most theories.

33 The 1920 data plotted here are from the public health reports, as the Chicago data set reports an unusually small number of homicides for 1920. The absolute counts, excluding vehicular and abortion related deaths, is 294 (1919), 229 (1920), 309 (1921), a twenty-two percent drop. The vital statistics data give an almost fifty percent higher result for 1920 than do the individual level data.

34 BELLESILES, supra note 23, at 443–444. MONKKONEN, supra note 15, at 37–43. Note: I do not use vehicular or abortion deaths.
Table 1

**Major City Rates and Populations, 1900. Source: see text**

<table>
<thead>
<tr>
<th>PLACE, 1900s</th>
<th>AGE STANDARDIZED HOMICIDE RATE</th>
<th>CRUDE HOMICIDE RATE</th>
<th>POPULATION (IN THOUSANDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>3.4</td>
<td>3.8</td>
<td>3437</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>4.6</td>
<td>4.7</td>
<td>1294</td>
</tr>
<tr>
<td>Chicago</td>
<td>7.3</td>
<td>6.0</td>
<td>1100</td>
</tr>
<tr>
<td>St. Louis</td>
<td>10.25</td>
<td>11.4</td>
<td>575</td>
</tr>
<tr>
<td>San Francisco</td>
<td>12.3</td>
<td>12.2</td>
<td>343</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>14.9</td>
<td>15.0</td>
<td>102</td>
</tr>
</tbody>
</table>

Table 1 displays populations and rates for six major U.S. cities at the beginning of the twentieth century. Its ordering is by age standardized rates, but, it turns out, the order is also the same as the cities' sizes, crude rates, and geographical location on the continent: increasing from east to west and north to south. On the face of it the table rejects size as a cause of high homicide rates, leaving geography intact and much work for scholars to do. Simply put, New York City, the densest, most crowded, most—or one of the most—corrupt, filled with immigrants, should have had high rates, yet it recorded some of the lowest rates of the era.

Only a regional explanation holds together, but region is really a concept which encompasses more precise sets of explanations: e.g., the legitimacy of the state, criminal justice structure, real income, and so forth. By 1900, the west should no longer encompass the notion of a violent, stateless region. And the idea that Chicago in 1900 had a regional difference which would account for its homicide rate twice that of New York simply makes no sense.

The right data on homicides—age adjusted, male proportions included—prove to verify a few things, such as the sense that while age and sex composition matter, they do not matter as much as change over time as well as place specificity. Change over time then needs to be further decomposed. On the other hand, it becomes equally clear that the right data in and of themselves do not flatten out the huge temporal and regional differences across the United States. Even stranger, the biggest city, New York, with over three million people in 1900, had the lowest rates, while smaller places had higher ones. The better we understand homicide rates, the more challenging and interesting our task becomes.