Rochester Homicide Statistics for 2020

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Introduction

This report examines homicide data reflecting incidents occurring in the City of Rochester, New York in 2020, and compares homicide data from 24 U.S. cities over time.\footnote{The 24 cities chosen were based on the “Rochester Homicide Statistics for 2019” report.} To account for population differences among the various cities in this sample, we calculated the rate of homicides per 100,000 residents. This report identifies possible trends by examining homicide levels over time using data gathered from local news outlets and police department websites. Rochester’s homicide data were collected from the Rochester Police Department’s Open Data Portal. The data presented in this report were not collected from the Uniform Crime Report (UCR) published by the Federal Bureau of Investigation (FBI) or other official sources. An official count of homicides cannot be determined by official sources for more than six months into the following year. Therefore, we anticipate small discrepancies in homicide counts when official data are released. This paper is updated and released annually to reflect yearly data.

This report discusses fluctuations in Rochester’s homicide count over the last 10 years and homicide rate over the past two decades. We also highlight the differences in homicide rates from 2019 and 2020 for twenty-four U.S cities. The comparisons made in this paper are essential for identifying trends in homicide levels over time. Cross-city comparisons can expose similarities and differences that may assist us in understanding violence across cities.

Results

Rochester

In 2020, Rochester, NY had 52 reported homicides, resulting in the highest number of victims in the past decade.\footnote{Daniel Prude’s death, although ruled a homicide by the medical examiner, was not included in this count.} From 2019 to 2020, Rochester experienced an approximate 62.5% increase in homicides. Though yearly fluctuations are a common feature of violence in most American cities, Rochester has not experienced an increase of this magnitude in the last decade.
Prior to this year, the only year to experience an increase relatively close to 2020 was in 2016 when homicide levels increased by 30.3%. The homicide count from 2010 to 2020 can be found in Figure 1. Figure 1 reveals that over the last ten years, Rochester’s annual homicide count has ranged between 27 and 52 homicides per year, with the highest number occurring in 2020.

Figure 1.

Comparing homicide levels over time, and with other cities, is facilitated by the use of homicide rates. An examination of homicide rates allows for comparisons in crime levels while still taking city population into account. To remain consistent with current data practices, this report uses U.S. Census population estimates to calculate the rate of homicide per 100,000 residents.

Figure 2 illustrates Rochester’s homicide rate from 2000 to 2020. When compared to 2019, Rochester’s homicide rate increased from 15.5 to 25.3 homicides per 100,000 residents. As evidenced by Figure 2, the substantial increase in 2020 reversed a gradual decline in the homicide rate over the last 20 years in Rochester. This decades-long downward trend in
homicide rate is comparable to what national homicide rates experienced between 2000 and 2018 (Lartey & Li, 2019).

Figure 2.

Table 1 compares trends in homicide across 24 U.S. select cities. The table shows percent change in homicide counts and rates from 2019 to 2020. By calculating percent change we can identify differences in homicide rates over time for select cities. The cities are ranked from highest to lowest by 2020 homicide rates. There are three general conclusions that Table 1 supports: (1) homicide levels across U.S. cities vary greatly, (2) nearly all cities in this sample, with the exception of one, experienced increases in homicide rates from 2019 to 2020, and (3) Rochester’s homicide rate has substantially increased in the past year, which was a common outcome throughout the sample.

Comparing U.S. Cities

Table 1 compares trends in homicide across 24 U.S. select cities. The table shows percent change in homicide counts and rates from 2019 to 2020. By calculating percent change we can identify differences in homicide rates over time for select cities. The cities are ranked from highest to lowest by 2020 homicide rates. There are three general conclusions that Table 1 supports: (1) homicide levels across U.S. cities vary greatly, (2) nearly all cities in this sample, with the exception of one, experienced increases in homicide rates from 2019 to 2020, and (3) Rochester’s homicide rate has substantially increased in the past year, which was a common outcome throughout the sample.
Table 1. United States City Homicide Number, Rate, & Percent Change for 2019 – 2020.

<table>
<thead>
<tr>
<th>City</th>
<th>2019 Homicides</th>
<th>2019 Population Estimate</th>
<th>2019 Homicide Rate</th>
<th>2020 Homicides</th>
<th>2020 Population Estimate</th>
<th>2020 Homicide Rate</th>
<th>% Change (Number)</th>
<th>% Change (Rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. St. Louis, MO</td>
<td>194</td>
<td>302,838</td>
<td>64.1</td>
<td>262</td>
<td>300,576</td>
<td>87.2</td>
<td>35.1%</td>
<td>36.1%</td>
</tr>
<tr>
<td>2. New Orleans, LA</td>
<td>121</td>
<td>391,006</td>
<td>30.9</td>
<td>196</td>
<td>390,144</td>
<td>50.2</td>
<td>62.0%</td>
<td>62.3%</td>
</tr>
<tr>
<td>3. Detroit, MI</td>
<td>275</td>
<td>672,662</td>
<td>40.9</td>
<td>328</td>
<td>670,031</td>
<td>49.0</td>
<td>19.3%</td>
<td>19.7%</td>
</tr>
<tr>
<td>4. Atlanta, GA</td>
<td>70</td>
<td>498,044</td>
<td>14.1</td>
<td>154</td>
<td>506,811</td>
<td>30.4</td>
<td>120.0%</td>
<td>116.2%</td>
</tr>
<tr>
<td>5. Chicago, IL</td>
<td>491</td>
<td>2,705,994</td>
<td>18.1</td>
<td>774</td>
<td>2,693,976</td>
<td>28.7</td>
<td>57.6%</td>
<td>58.3%</td>
</tr>
<tr>
<td>6. Washington, DC</td>
<td>166</td>
<td>702,455</td>
<td>23.6</td>
<td>198</td>
<td>705,749</td>
<td>28.1</td>
<td>19.3%</td>
<td>18.7%</td>
</tr>
<tr>
<td>7. Indianapolis, IN</td>
<td>109</td>
<td>867,125</td>
<td>12.6</td>
<td>245</td>
<td>876,384</td>
<td>28.0</td>
<td>124.8%</td>
<td>122.4%</td>
</tr>
<tr>
<td>8. Richmond, VA</td>
<td>55</td>
<td>228,783</td>
<td>24.0</td>
<td>62</td>
<td>230,436</td>
<td>26.9</td>
<td>12.7%</td>
<td>11.9%</td>
</tr>
<tr>
<td>9. Buffalo, NY</td>
<td>47</td>
<td>256,304</td>
<td>18.3</td>
<td>65</td>
<td>255,284</td>
<td>25.5</td>
<td>38.3%</td>
<td>38.9%</td>
</tr>
<tr>
<td>10. Rochester, NY</td>
<td>32</td>
<td>206,284</td>
<td>15.5</td>
<td>52</td>
<td>205,695</td>
<td>25.3</td>
<td>62.5%</td>
<td>63.0%</td>
</tr>
<tr>
<td>11. Compton. CA</td>
<td>18</td>
<td>96,617</td>
<td>18.6</td>
<td>22</td>
<td>95,605</td>
<td>23.0</td>
<td>22.2%</td>
<td>23.5%</td>
</tr>
<tr>
<td>12. Oakland, CA</td>
<td>78</td>
<td>429,082</td>
<td>18.2</td>
<td>97</td>
<td>433,031</td>
<td>22.4</td>
<td>24.4%</td>
<td>23.2%</td>
</tr>
<tr>
<td>13. Syracuse, NY</td>
<td>18</td>
<td>142,749</td>
<td>12.6</td>
<td>31</td>
<td>142,327</td>
<td>21.8</td>
<td>72.2%</td>
<td>72.7%</td>
</tr>
<tr>
<td>14. Greensboro, NC</td>
<td>43</td>
<td>294,722</td>
<td>14.6</td>
<td>61</td>
<td>296,710</td>
<td>20.6</td>
<td>41.9%</td>
<td>40.9%</td>
</tr>
<tr>
<td>15. Hartford, CT</td>
<td>21</td>
<td>122,587</td>
<td>17.1</td>
<td>25</td>
<td>122,105</td>
<td>20.5</td>
<td>19.0%</td>
<td>19.5%</td>
</tr>
<tr>
<td>16. Dallas, TX</td>
<td>198</td>
<td>1,345,047</td>
<td>14.7</td>
<td>251</td>
<td>1,343,573</td>
<td>18.7</td>
<td>26.8%</td>
<td>26.9%</td>
</tr>
<tr>
<td>17. Newark, NJ</td>
<td>57</td>
<td>282,090</td>
<td>20.2</td>
<td>51</td>
<td>282,011</td>
<td>18.1</td>
<td>-10.5%</td>
<td>-10.5%</td>
</tr>
<tr>
<td>18. Pittsburgh, PA</td>
<td>26</td>
<td>301,048</td>
<td>8.6</td>
<td>51</td>
<td>300,286</td>
<td>17.0</td>
<td>96.2%</td>
<td>97.7%</td>
</tr>
<tr>
<td>19. Denver CO</td>
<td>67</td>
<td>716,492</td>
<td>9.4</td>
<td>84</td>
<td>727,211</td>
<td>11.6</td>
<td>25.4%</td>
<td>23.5%</td>
</tr>
<tr>
<td>20. Lexington, KY</td>
<td>26</td>
<td>323,780</td>
<td>8.0</td>
<td>33</td>
<td>323,152</td>
<td>10.2</td>
<td>26.9%</td>
<td>27.2%</td>
</tr>
<tr>
<td>21. Boston, MA</td>
<td>36</td>
<td>694,583</td>
<td>5.2</td>
<td>57</td>
<td>692,600</td>
<td>8.2</td>
<td>58.3%</td>
<td>58.8%</td>
</tr>
<tr>
<td>22. Omaha, NE</td>
<td>23</td>
<td>468,262</td>
<td>4.9</td>
<td>37</td>
<td>478,192</td>
<td>7.7</td>
<td>60.9%</td>
<td>57.5%</td>
</tr>
<tr>
<td>23. Los Angeles, CA</td>
<td>258</td>
<td>3,990,456</td>
<td>6.5</td>
<td>300</td>
<td>3,979,576</td>
<td>7.5</td>
<td>16.3%</td>
<td>16.6%</td>
</tr>
<tr>
<td>24. New York City, NY</td>
<td>319</td>
<td>8,398,748</td>
<td>3.8</td>
<td>447</td>
<td>8,336,817</td>
<td>5.4</td>
<td>40.1%</td>
<td>41.2%</td>
</tr>
</tbody>
</table>

United States: 14,185 | 328,239,523 | 4.3 | N/A   | N/A   | N/A   | N/A   | N/A   | N/A   |
The two cities with the largest increases in homicide were Indianapolis, Indiana and Atlanta, Georgia, with a year-to-year rate increase of 122.4% and 116.2%, respectively. Within our sample, Indianapolis and Atlanta experienced abnormally high increases in homicide rates. The only city that witnessed an increase close to Indianapolis and Atlanta was Pittsburgh, Pennsylvania with an increase of 97.7%. Most of the cities that witnessed an increase in homicide rates had an increase below 80%. The only city in this sample to experience a decrease from 2019 to 2020 was Newark, New Jersey, with a year-to-year rate decrease of 10.5%. Newark, New Jersey’s homicide rates have gradually declined in recent years.

Rochester, New York had a 63% increase in homicide rate from 2019 to 2020. Compared to the 24 cities in our sample, Rochester ranks 10th in terms of homicide rate. Rochester had the second highest overall homicide rate, and second highest percent increase among New York cities in our sample. In 2019, the homicide rates of Rochester and Buffalo, New York differed by approximately 3 homicides per 100,000 residents. In 2020, the gap decreased between the two cities, as the rates differed by less than 1 homicide per 100,000 residents. Both New York City and Syracuse had lower homicides rates than Rochester in 2020, a similar pattern from 2019. However, Syracuse experienced the highest increase in homicide rates out of the major metropolitan areas in the state of New York that were sampled.

**Plausible Explanations for Increased Homicide Levels**

It is difficult to pinpoint exactly why there was an overall increase in homicides in 2020. However, there are many things to consider when discussing the homicide rate increase, in both our sample and nationwide. One of the main factors that may have contributed to the uptick in homicides is the COVID-19 pandemic. This pandemic has changed daily lives, which disrupted crime patterns, increased fear and stress within communities, and weakened support systems for
both youth and adults. To reduce the spread of the virus in the early stages of the pandemic, community policing efforts scaled back, less arrests were made, and nonviolent detainees were released (Jablow, 2020).

Soon after, many high-profile deaths occurred, such as the deaths of Daniel Prude, George Floyd, and Breonna Taylor, and Black Lives Matter protests arose in different cities, where many called for the defunding of police. The disproportionate impacts of these communities coupled with the unrest in policing and other governmental bodies led to distrust in law enforcement. Any distrust in the police can make citizens less likely to report crime and cooperate with law enforcement officials (Lopez, 2020). This may have also caused individuals to settle disputes themselves (Smith, 2020). Moreover, in 2020 there was a national rise in gun sales in 2020 (Lopez, 2020). The rise in these sales could be explained by the concern of safety and self-defense (Smith, 2020). These explanations should be interpreted with restraint as they are not concrete reasons as to why there was an overall national increase in homicides.

Comparing U.S. Homicide Rates Among Cities with Similar Populations

To gain a broader understanding of violence in American cities, we compared homicide rates among cities of similar population sizes. Figure 3 shows a comparison of Rochester, New York with cities that have a population below 250,000. As seen in Figure 3, Rochester had the second highest homicide rate of 25.3 homicides per 100,000 residents. This is somewhat of a change considering that in 2019 Rochester had the second lowest homicide rate of 15.5 per 100,000 residents. However, as aforementioned, yearly fluctuations in homicide levels are a common feature of violence in America.

The homicide rates for our sample cities with populations below 250,000 all range between 26.9 and 20.5 homicides per 100,000 residents. In 2019, the range of homicide rates for
these cities were between 24 and 12.6 homicides per 100,000. Among this sample of cities, Richmond, VA had the highest homicide rate, a common outcome since 2016 (Klofas et al., 2017; Panico et al., 2018; Ruggero et al., 2019).

Figure 3.

Figure 4 is a comparison of seven cities within our sample with populations between 250,000 and 400,000. As seen in Figure 4, St. Louis, Missouri stands out with the highest homicide rate in 2020. Since 2016, St. Louis has remained the leading city in our sample. Consistent with 2019 data, substantial variations in homicide rates for 2020 were present in these cities. St. Louis reported a homicide rate over eight times higher than Lexington’s, five times higher than Pittsburgh’s, four times higher than Newark’s and Greensboro’s, and three times higher than Buffalo’s. In other words, St. Louis homicide levels are exponentially greater than most cities and merit some concern.
Figure 5 shows homicide rates for our sample cities with populations between 400,000 and 1,000,000. Similar to the previous figure discussed, the cities shown in Figure 5 have substantial variations in homicide levels. Detroit, Michigan had a rate of 49 homicides per 100,000 residents, making it the third highest homicide rate in our entire sample. Detroit’s rate is nearly seven times higher than Omaha’s, almost six times higher than Boston’s, over four times higher than Denver’s, and twice as high as Oakland’s homicide rate. On the other hand, some cities depicted in this figure also have the lowest homicide rates in our sample. Boston, Massachusetts and Omaha, Nebraska currently rank 21 and 22 in homicide rates, respectively. Further examination is required to attempt to explain the causal differences that result in these figures.
Lastly, Figure 6 examines homicide rates of select cities with populations above 1,000,000. For several consecutive years, Chicago, Illinois has experienced the highest homicide rate among these cities. However, it is important to note that Chicago’s homicide rate is only a third of St. Louis’s. Conversely, New York City, the largest city in the nation, has the lowest homicide rate in our sample. Though New York City had the second highest total number of homicides reported (447), New York City is not as dangerous as the raw homicide count may suggest. When taking into account that over 8 million people reside in New York City, the overall general risk for New York City residents is much lower than any other city in our sample.
The objective of this paper was to analyze homicide rates and yearly changes across the U.S., with a focus on Rochester, New York. We found that cities across the nation have substantial variations in homicide levels, with rates as high as 87.2 homicides per 100,000 (St. Louis) and as low as 5.4 homicides per 100,000 residents (New York City). Although it is unclear why these differences exist, elevated homicide levels may be attributed to stressors associated with the COVID-19 pandemic, civil unrest resulting from the death of George Floyd and Breonna Taylor, and an increase in gun sales in 2020. Nonetheless, further research is critical in confirming the causes of this phenomenon.

We also found that homicide levels in nearly all (96%) of the cities in our sample witnessed an increased from 2019 to 2020. It is important to recognize that although homicide levels increased in most cities, change in year-to-year homicide rates are not enough to identify
trends. Despite public perception, homicide rates have been overall declining since the 1990s (Siegel, 2011). Further research should examine the five to ten year trends in homicide rates in these cities.

From 2019 to 2020, Rochester’s homicide rate increased by 63%. Indeed, this is an alarming increase. It is not clear, however, that this increase will continue in subsequent years. This increase should lead to calls to reexamine current homicide reduction efforts and support the development of new initiatives to reduce homicide levels in American cities.

The Center for Public Safety Initiatives has conducted this study for the last few years. When the FBI releases updated data on 2020 homicides, we intend to return to this report to compare the accuracy of our calculations against theirs. We hope this report serves as a valuable tool for local agency leaders and policy makers in their attempts to evaluate current strategies to decrease violence in our city.
References


