

Increase in Mortality among People at High Risk of Violence

September 2026

By James Densley and Jillian Peterson, The Violence Prevention Project Research Center

Key Takeaways

- + **The claim:** The wave of excess deaths in 2020 and 2021, from homicide, suicide, overdose, car crashes, and COVID-19, may have removed unusual numbers of people from the small high-risk group that drives most lethal violence, lowering homicide afterward.
- + **The theory:** This is incapacitation by another name. A tiny share of people commits most violence, so removing them, even by death, could in principle prevent future homicides. The same literature explains why the effect usually runs modest.
- + **The evidence:** Most excess deaths were older COVID-19 victims with no role in homicide, and overdose and suicide deaths skewed past peak offending ages. Excess homicides did fall on the high-risk population, concentrated in the most disadvantaged neighborhoods, but they were a small share of all excess deaths.
- + **Timing cuts the other way:** The steep declines came in 2023 through 2025, ran past the 2014 record, and have deepened rather than rebounded, the opposite of what a one-time thinning predicts. Falling lethality and network replacement complicate the story further.
- + No study has linked national death records to criminal histories or violence networks to test whether the excess dead were the high-violence population. Attrition remains plausible but largely untested, and likely modest at best.

Theoretical Mechanisms

The United States is on track for its lowest homicide rate in modern records: about 4.0 killings per 100,000 residents in 2025, per Council on Criminal Justice projections, under the 4.4 record set in 2014 and 44 percent below the 2021 peak.¹ The rate sat near 5 per 100,000 for years, jumped to 6.5 in 2020 (the largest one-year rise on record), and held

high through 2021.² One explanation for the turn is bleak: Those who died can no longer kill or be killed.

Across 2020 and 2021, Americans died in unusual numbers from homicide, suicide, overdose, car crashes, and COVID-19. If those deaths thinned the small population that commits and suffers most lethal violence, fewer perpetrators and victims remained. Criminologists call this attrition; public health calls it displacement or harvesting. It is incapacitation by another route, direct and national in principle, but only if death fell selectively on the high-risk few and only if risk stays fixed to persons.

Established Evidence

Lethal violence concentrates among particular people and places. Tracking a Philadelphia birth cohort more than 50 years ago, criminologist Marvin E. Wolfgang and colleagues found that 6 percent of the boys committed more than half of all offenses, and most of the serious ones.³ In Chicago, about 70 percent of gunshot injuries over eight years fell inside social networks holding less than 6 percent of the population; in one Boston neighborhood, 85 percent ran through a single network of 763 people.⁴ The people who pull the trigger and the people who get shot are often the same.

Our interviews with people convicted of homicide in Minnesota during the recent spike found lives marked by trauma and hopelessness, with many reporting suicidal thoughts or attempts before the killing. The line between wanting to die and being willing to kill was thin. The people most likely to take a life overlap with the people most likely to die young.

Forty years of incapacitation research sets the expectations.⁵ Selective incapacitation removes the highest-rate offenders and prevents a lot of crime per person; collective incapacitation removes people without regard to rate and prevents little.⁶ The literature also warns of replacement: Conflicts and status vacancies outlive the people in them.⁵ No prior national homicide decline has been credited to a die-off; the standard account of the 1990s drop points to shrinking crack markets and policing, among other causes.⁷

Recent Evidence and Relevance to Current Trends

Excess deaths in 2020 and 2021 ran to roughly 463,000 and 544,000 above normal.⁸ But total excess death is the wrong measure. What matters is the share that fell on high-risk networks, and most did not. The bulk were COVID-19 deaths among older adults, a group with almost no role in homicide. Overdose deaths peaked among adults 35 to 44, who died at four and a half times the rate of people 15 to 24 in 2021 and 2022.⁹ Suicide deaths concentrated among adults 25 to 64.¹⁰ Offending peaks far younger, so most people who died by overdose or suicide were already aging out of crime.¹¹

Excess homicides are the exception, and the strongest version of the theory rests on them. Homicide deaths ran more than 10,000 above the 2019 pace across the two years,² though they made up just 1 to 2 percent of non-COVID excess deaths in the early pandemic months.¹² Victims were disproportionately young men embedded in violence networks, and our study of the Twin Cities found the 183 excess homicides after May 2020 concentrated in the census tracts with the deepest disadvantage, the same places that anchor homicide risk.¹³ Prison removed some perpetrators too, though police cleared only about half of murders in those years.¹⁴ Some selective removal occurred, then, but the arithmetic runs small: 10,000 deaths plus some incarcerations is a sliver of networks holding hundreds of thousands, and incapacitation studies put homicides prevented per removal well below one.⁶

The theory also treats risk as static, so that only death removes it. Desistance research says otherwise: Risk moves with age and circumstance.¹¹ Living through a pandemic, record community violence, and the upheaval after George Floyd's murder could change a young man's risk without killing him. Exhaustion, grief, a job, a reopened school, a new sense of balancing risk. Our Minnesota interviews captured despair, but also hard reappraisal.^{15, 16} If risk profiles shifted, the decline doesn't need a body count.

Timing cuts against attrition too. Deaths crested in 2020 and 2021, and so did homicide. The steep declines came in 2023 through 2025, later than attrition predicts, and went further than it can explain. Thinning the pool might return homicide to its old baseline near 5 per 100,000; it cannot push the rate below the 2014 record. Go back to the harvesting idea.¹⁷ A heat wave kills people who were already close to death. Deaths spike, then dip below normal for a while, because the people who would have died that year are gone. Harvesting borrows deaths from the near future and pays them back, so the dip is temporary. This decline has done the opposite and keeps deepening. Replacement compounds the problem: Violence spreads through networks, and when a shooter dies, the conflict often does not.⁴

A rival mechanism mimics attrition in the death counts. Lethality, the share of serious violence that ends in death, has fallen, down 8 percent from 2024 to 2025, and it has declined most in the cities that once had the worst homicide problems.¹⁸ Same violence, fewer funerals. Falling lethality also runs the pool the other way: Survivors return to the community. In our linked trauma registry study in Minneapolis, people hospitalized after violent assault had 16 times the adjusted odds of later homicide involvement of other trauma patients.¹⁹ The net effect on homicide still points down, since every survived shooting subtracts a death now while only 2 percent of survivors surface in a later homicide. But it means the high-risk pool may be growing rather than shrinking. Crediting attrition means ruling lethality out first, which no one has done.

A confound runs beneath all of it. The people we interviewed described how the pandemic stripped away routines and the everyday eyes that keep disputes from turning deadly.¹⁵ The same collapse fed overdose, suicide, and homicide together, then eased. Current data cannot separate “these deaths lowered later homicide” from “one shock drove both, then passed.”

Recent Action or Change

The change was the mortality wave itself: Roughly one million excess deaths across 2020 and 2021, receding through 2022 as vaccines spread and institutions reopened.⁸ The wave was uneven. COVID-19 deaths concentrated among older adults, overdose and suicide deaths in midlife, and excess homicides among young men in disadvantaged urban neighborhoods.¹³ The same period brought record gun sales, thinned police forces, and closed schools, all of which moved alongside mortality, muddying any before-and-after comparison.

Emerging Questions and Future Directions

The core question is testable. No study has linked 2020 and 2021 death records to criminal histories or violence network data to ask whether the excess dead were the people most likely to kill or be killed. Our Minneapolis trauma registry linkage flagged, years in advance, who was most at risk;¹⁹ the harder step is to scale it nationally. Cross-city designs could test whether places that lost more young, justice-involved men to excess death saw deeper declines later, net of reopened schools and returning jobs. Counting shootings rather than deaths would separate attrition from lethality: Attrition predicts fewer shootings, while falling lethality predicts flat shootings with fewer deaths. Until those tests exist, attrition remains a plausible mechanism, probably modest, in search of stronger evidence.

Prepared for CCJ Homicide Decline Research Summit

The United States has experienced a sharp decline in homicide since the middle of 2022. This dramatic and largely unexpected shift has sparked a high-stakes debate about what is driving it. To examine the plausibility of dozens of potential factors, CCJ convened a two-day summit in September 2026 with about 50 researchers from criminology, economics, public health, psychology, sociology, and related disciplines. This brief was prepared to inform discussions during the convening.

Endnotes

1. Council on Criminal Justice, Crime Trends in U.S. Cities: Year-End 2025 Update (January 2026), <https://counciloncj.org/crime-trends-in-u-s-cities-year-end-2025-update/>; Council on Criminal Justice, What's Driving the Drop in Homicide? How Low Might It Go? (January 2026). <https://counciloncj.org/whats-driving-the-drop-in-homicide-how-low-might-it-go/>
2. Homicide rates held near 5 per 100,000 through 2019, rose to 6.5 in 2020 (the largest one-year increase in the modern record), and remained elevated through 2021. FBI Uniform Crime Reporting Program, Crime in the United States, 2019 (murder rate of 5.0 per 100,000), and Congressional Research Service, Violent Crime Trends, 1990–2021, <https://www.congress.gov/crs-product/IF12281>. In counts, the FBI recorded roughly 16,400 murders in 2019, 21,570 in 2020, and an estimated 22,500 in 2021 amid the NIBRS transition. (CDC's death-certificate series puts the 2021 rate higher, near 7.8, owing to different counting rules.)
3. Wolfgang, Figlio, and Sellin, *Delinquency in a Birth Cohort* (1972). Roughly 6 percent of the cohort accounted for more than half of all recorded offenses and a majority of the serious ones.
4. Papachristos AV, Wildeman C, Roberto E, "Tragic, but not random: The social contagion of nonfatal gunshot injuries," *Social Science & Medicine* 125 (2015): 139–150, on the network concentration of gun violence (Chicago, ~70% of injuries in networks holding <6% of the population; a Boston neighborhood, 85% in a single 763-person network). On homicide as a network process in which conflicts outlive individuals, see Papachristos AV, "Murder by structure: Dominance relations and the social structure of gang homicide," *American Journal of Sociology* 115 (2009): 74–128.
5. Zimring and Hawkins, *Incapacitation: Penal Confinement and the Restraint of Crime* (1995); Blumstein, Cohen, Roth, and Visher, eds., *Criminal Careers and "Career Criminals"* (1986). Both discuss why incapacitation effects run smaller than expected, including low individual homicide rates and offender replacement.
6. On selective versus collective incapacitation, see Greenwood and Abrahamse, *Selective Incapacitation* (RAND, 1982); Cohen, "Incapacitation as a Strategy for Crime Control," in *Crime and Justice* (1983); and Zimring and Hawkins (1995).
7. Goldstein D, "10 (not entirely crazy) theories explaining the great crime decline," *The Marshall Project* (2014). <https://www.themarshallproject.org/2014/11/24/10-not-entirely-crazy-theories-explaining-the-great-crime-decline>
8. Excess all-cause mortality of roughly 463,000 (2020) and 544,000 (2021). See Kandula S, Keyes KM, Yaari R, Shaman J. "Excess Mortality in the United States, 2020–21: County-level Estimates for Population Groups and Associations with Social Vulnerability," preprint. *medRxiv*. 2024; doi:10.1101/2024.01.14.24301290
9. CDC/NCHS, drug overdose death rates by age. Adults 35–44 had the highest rate (~60–63 per 100,000 in 2021–2022), roughly 4.5 times the rate for those 15–24. <https://www.cdc.gov/nchs/products/databriefs/db491.htm>
10. Garnett MF, Curtin SC (2023). Suicide mortality in the United States, 2001–2021 (NCHS Data Brief No. 464). National Center for Health Statistics. <https://doi.org/10.15620/cdc:125705>. The age groups with the most suicide deaths in 2020 and 2021 were 25–44 and 45–64.
11. On the age–crime curve and desistance, see Hirschi and Gottfredson, "Age and the Explanation of Crime," *American Journal of Sociology* (1983); and Laub and Sampson, *Shared Beginnings, Divergent Lives* (2003), on how turning points such as work and family change individual risk without incapacitation.
12. Faust et al., "Mortality from drug overdoses, homicides, unintentional injuries, motor vehicle crashes, and suicides during the pandemic, March–August 2020," *JAMA* 326 (2021): 84–86.

doi:10.1001/jama.2021.8012. Excess overdose ran 4% (March–July 2020) to 12.7% (March–August 2020) of non-COVID excess deaths; excess homicide 0.7% to 2.4%.

13. Larson RP, Densley JA, Peterson JK, Manchi J, Santaularia NJ, Robertson CE, Uggen C, “The changing nature of homicide in the Twin Cities: An interrupted time series analysis of the police murder of George Floyd,” *Journal of Quantitative Criminology* (2026). <https://doi.org/10.1007/s10940-026-09653-x>. The weekly homicide rate rose 2.5-fold after May 25, 2020, yielding an estimated 183 excess homicides over 136 weeks, with the largest increases in census tracts with the highest concentrated disadvantage.
14. FBI Uniform Crime Reporting Program, clearance data. Agencies cleared roughly half of murders in 2020 and 2021, among the lowest rates on record.
15. Densley JA, Peterson JK, “Murder in a time of crisis: A qualitative exploration of the 2020 homicide spike through offender interviews,” *Journal of Crime and Justice* 48 (2025): 618–627. <https://doi.org/10.1080/0735648X.2024.2426502>
16. Peterson JK, Densley JA, “Exploring the overlap: Suicidal thoughts and homicidal acts among incarcerated offenders,” *Deviant Behavior* 47 (2026): 395–409. <https://doi.org/10.1080/01639625.2024.2443778>
17. Schwartz J, “Harvesting and long term exposure effects in the relation between air pollution and mortality,” *American Journal of Epidemiology* 151 (2000): 440–448. <https://doi.org/10.1093/oxfordjournals.aje.a010228>
18. Council on Criminal Justice, Year-End 2025 Update: lethality down 8% (2024–2025) and 5% (2019–2025), with the largest declines in cities that had the highest pre-pandemic homicide levels. (See note 1.)
19. Lumbard DC, Vang C, Densley JA, Peterson JK, Nygaard RM, “Prior violent injury and subsequent homicide involvement: Evidence from a linked trauma registry study,” *Injury Prevention* (2026, online first). <https://injuryprevention.bmj.com/content/early/2026/05/07/ip-2025-046127>. Of 3,409 patients admitted for assault-related injuries, 2% were later involved in a homicide as victim or offender; prior trauma contact carried an adjusted odds ratio of 16.5, with injuries concentrated in deprived, spatially clustered neighborhoods.