



Health Policy Brief

Criminal Justice and Health

Social drivers of violent crime

Everyone deserves to live in a safe and healthy environment, free from violence. Yet, violent crime occurs across Ohio communities, with more than 30,000 crimes, including homicide, rape, robbery and aggravated assault, reported in 2023.¹

Even with laws and penalties such as arrest and incarceration in place, violent crime persists and causes significant harm to victims and communities. Community conditions and societal structures can support or prevent violent crime. Since the research evidence is clear that arrests and incarceration are detrimental to the health of individuals, families and communities², it is important to take an upstream approach for violence prevention.

Ohio ranks 34th in the nation in homicide deaths. Like national trends, homicide in Ohio peaked during the COVID-19 pandemic, but has not returned to pre-pandemic rates (as displayed in figure 1). The use of firearms is the leading method of homicide in Ohio, with 80% of homicides being gun-related in 2022.³

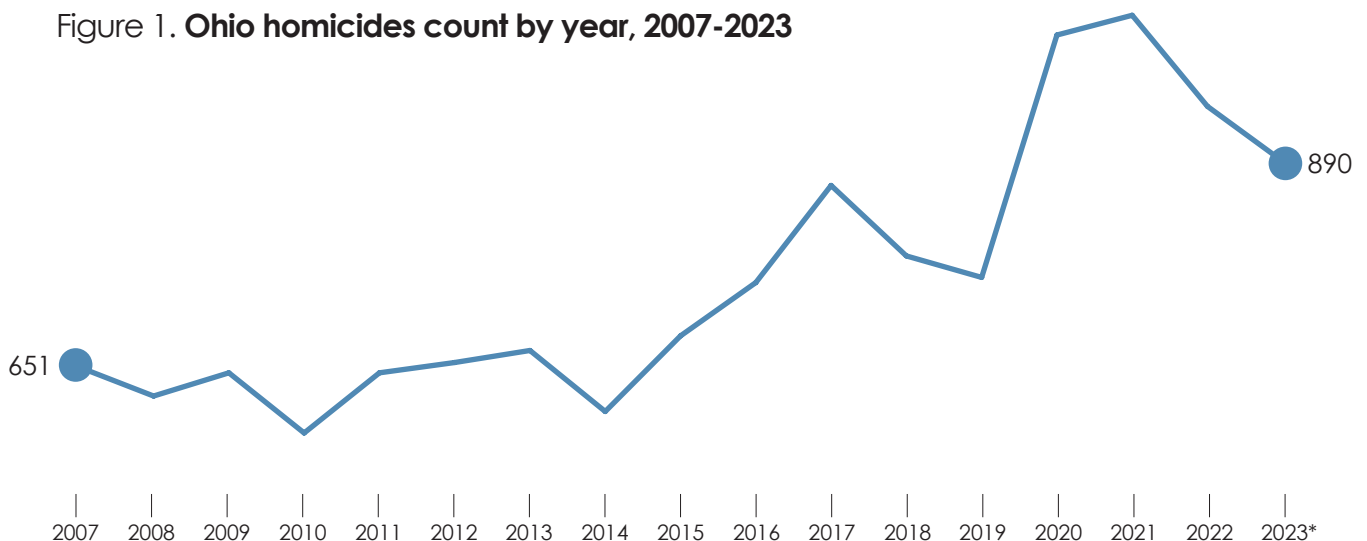
Leaders across Ohio can improve the health and safety of communities by addressing the drivers of violent crime. This policy brief includes:

- Data and information on the structural and social drivers of violence, including racism, income inequality, neighborhood planning, gendered social norms, education and employment, health care, housing and criminal justice.
- Recently passed or proposed state-level policy changes that may have an impact on community violence.
- A set of evidence-informed policy recommendations and implementation examples that Ohio can leverage to drive improvement.

3 key findings for policymakers

- **There are evidence-informed policy and program solutions** to improve community conditions, prevent violence and improve community health and safety.
- **Community conditions can perpetuate or prevent violence.** Community factors including social norms, exposure to racism, income inequality and access to quality housing, education, employment and health care impact violence.
- **Violence is a public health problem** and is detrimental to the physical and mental health of individuals and communities.

Figure 1. Ohio homicides count by year, 2007-2023



*2023 data is preliminary

Source: DataOhio, Mortality Data (Accessed May 29, 2024)

Guiding framework: The social ecological model

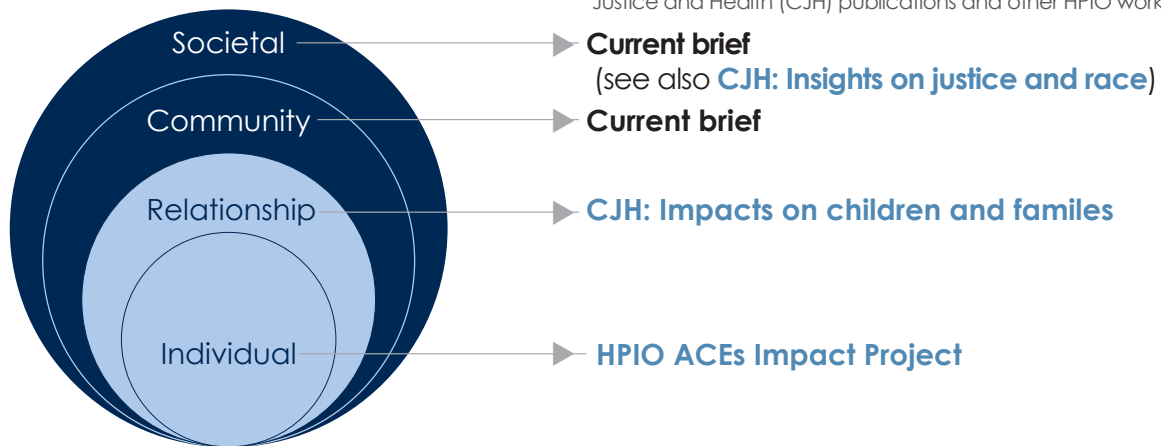
The social ecological model is a useful framework for understanding the drivers of violence and can guide violence-prevention efforts. The model, displayed in figure 2, demonstrates the connections between health and individual, relationship, community and societal factors.⁴

There are several factors associated with violence at all levels in the model. For example:⁵

- **Individual factors:** Age, education attainment, income, substance use or a history of abuse and trauma
- **Relationship factors:** Family members, intimate partners and friends
- **Community factors:** The physical and social conditions of the places where people live, work, play and pray
- **Societal factors:** Social and cultural norms and health, economic, educational and social policies that can support or prevent violence

The nesting of the levels in the model indicates that all levels impact each other, and there must be interventions at all levels to have meaningful impact. While all levels of the social ecological model are relevant to violence prevention, this brief focuses on the community and societal levels. See the linked publications below to learn more about research related to criminal justice and health at the individual and relationship levels.

Figure 2. **Social ecological model**



Source: Centers for Disease Control and Prevention

Social norms and violence prevention

Social norms are shared perceptions that exist within groups and are shaped by culture, religion, policy and economic environments.⁶ Social norms contribute to the acceptability of violence and can create unsafe environments that can lead to violence in many contexts, including intimate partner violence, gun violence and violence on college campuses.⁷

Developing positive social norms to interrupt cycles of violence requires a multi-pronged approach that engages schools, workplaces and communities.⁸ The promotion of positive social norms can increase collective efficacy, leading to community members gaining mutual trust and more willingness to intervene on behalf of the common good and prevent violence.⁹

Collective efficacy is defined as the “social cohesion among neighbors combined with their willingness to intervene on behalf of the common good.”¹⁰ Research shows that higher levels of collective efficacy is associated with reduced neighborhood crime.¹¹

Structures that drive violent crime

There are several foundational drivers of violent crime — societal structures that negatively impact social norms and create unsafe environments. These structural drivers of violence include racism, income inequality, zoning and neighborhood planning and gender-related social norms.

Racism

Structural racism is the process by which policies, practices and beliefs inequitably distribute resources, power and opportunity based on race.¹² For example:

- **Racially restrictive covenants.** In the 1910s and 1920s, racially restrictive covenants barred people of color and Jewish people from purchasing or leasing properties.¹³ While a U.S. Supreme Court ruling in 1948 banned the use of these covenants, federal support for the covenants continued until President Kennedy signed an executive order ending support in 1962.¹⁴
- **Redlining.** From the 1930s until 1968, neighborhoods of color were marked as high-risk investments for mortgages by the federal government. This practice led to high home loan denial rates, disinvestment and lower credit scores for community members.¹⁵
- **The Interstate Highway System (IHS).** The construction of the IHS in the 1950s further burdened communities of color by intentionally routing highways through them, causing isolation, property loss, environmental hazards, noise and displacement.¹⁶

These historical policies and practices resulted in poor community stability, lower home valuations, increased foreclosures and limited economic mobility in majority-Black, Hispanic and Asian neighborhoods.¹⁷ As a result, many of these communities experienced concentrated disadvantage, which includes limited educational and employment opportunities and higher rates of poverty, unemployment and food insecurity that continue today.¹⁸ Research shows that concentrated disadvantage is associated with higher rates of violent crime.¹⁹

Concentrated disadvantage is the geographic clustering of people with low socioeconomic status. Areas experiencing concentrated disadvantage are in the bottom quartile for the percentage of households with the following community factors:²⁰

- Family households below the poverty line
- Individuals receiving public assistance
- Female-headed households
- Unemployment among people ages 16 and older
- Population younger than 18

Historical and ongoing policies and practices create concentrated disadvantage. Research shows that concentrated disadvantage is associated with poor outcomes in educational attainment, employment, health and violence.²¹

Income inequality

Income inequality occurs when income is unevenly distributed across a population. The U.S. has one of the highest levels of income inequality of any western country, and income inequality continues to grow.²² Ohio ranks 30th out of 50 states and the District of Columbia (D.C.) on income inequality, resulting in large disparities in community living standards across the state. The consequences of income inequality on social and health outcomes include shortened life span, poor health and increased neighborhood and interpersonal violence. These consequences are experienced by all residents, regardless of income.²³

Research shows that increases in income supports lead to reduced violence. For example:

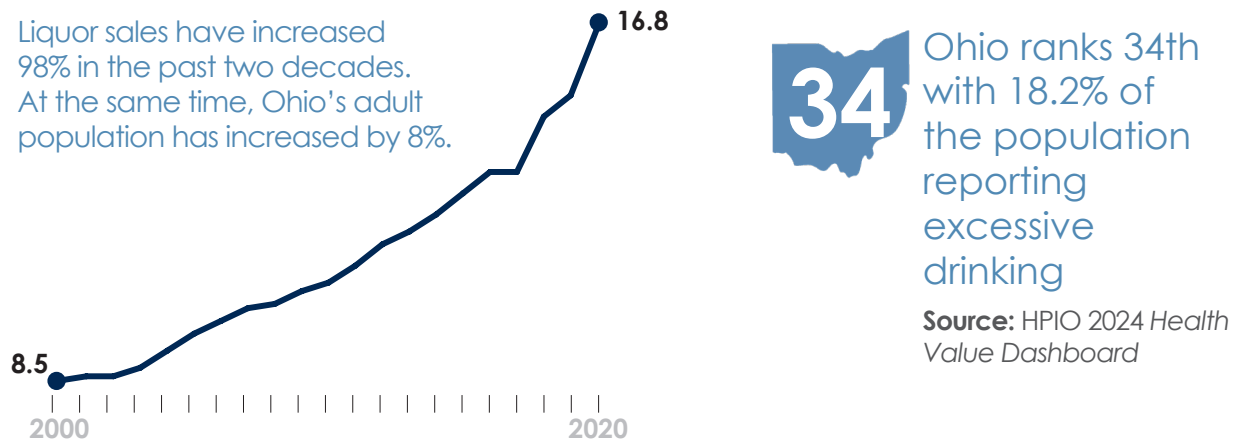
- **Earned Income Tax Credits (EITC)** are protective against violent crime, intimate partner violence and youth violence.²⁴
- **Increases to state minimum wage** are associated with a decreased firearm homicide rate.²⁵
- **Public spending** on income support policies and the Supplemental Nutrition Assistance Program (SNAP) are associated with reductions in firearm homicides.²⁶

Zoning and neighborhood planning

Zoning and neighborhood planning impact violent crime. Given that violence is highly concentrated in specific places known as hotspots²⁷, zoning and neighborhood planning are systems that can mitigate violence. For example, research indicates that zoning regulations that support higher population density combined with a mix of residential and commercial use reduces neighborhood violence.²⁸ Neighborhood factors that can increase violence include concentrated poverty, crowded housing and vacant buildings and lots. Conversely, protective neighborhood factors include painted crosswalks, parks and tree canopies.²⁹

Alcohol outlet density is a prime example of how zoning impacts violence. Due to inequitable zoning codes and weakened political power, communities of color and low-income neighborhoods are more likely to have a high density of alcohol outlets.³⁰ There is a relationship between alcohol outlet density and violent crime experienced in a community. In particular, off-premise outlets (such as liquor and convenience stores) are associated with higher rates of violent crime than on-premise outlets (such as bars and restaurants).³¹ Notably, Ohio ranks 34th in the nation for excessive drinking, and liquor sales have steadily increased over recent years (figure 3).

Figure 3. **Liquor sales in Ohio, millions of gallons, by year, 2000-2020**

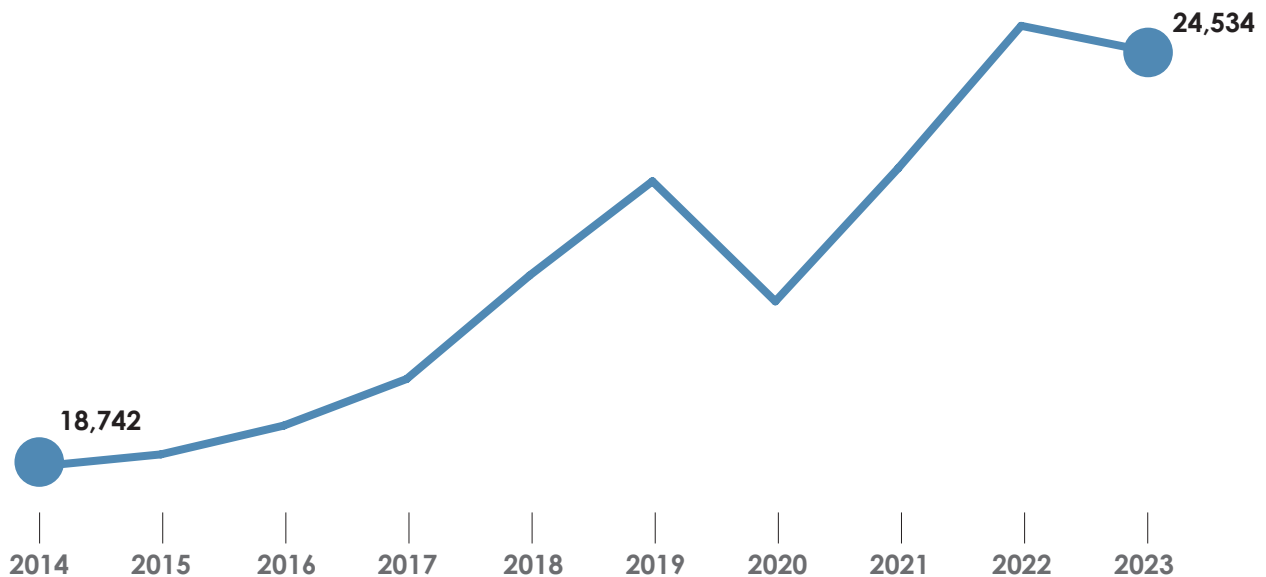


Source: Ohio Department of Commerce, Division of Liquor Control via Ohio State Health Assessment

Gender-related social norms

Gender-related social norms are society's gender-based expectations regarding how women and men should conduct themselves, communicate and express their emotions.³² Gender inequality refers to the imbalanced distribution of resources and power among men, women and others. Gender inequality and gender-related social norms are closely tied to higher rates of violence.³³ Prevalent forms of violence related to gender norms include intimate partner violence and emotional, physical, financial and sexual abuse and neglect.³⁴ Figure 4 shows that domestic violence case loads have increased in Ohio from 2014-2023.

Figure 4. Incoming domestic violence cases, Ohio, 2014-2023



Source: Supreme Court of Ohio Case Management Section statistical reporting

While people of all genders can be the perpetrators and victims of violence, more violent crimes are committed by men.³⁵ Societal norms encourage boys and men to adhere to traditional masculine roles including more risky and dangerous behaviors and discourage them from seeking help for mental health concerns, resulting in more violence.³⁶

While gender inequality has been institutionalized for centuries in laws and policies³⁷, laws such as the following are examples of progress in the U.S.:

- **The 19th Amendment**, which was ratified in 1920, prohibited the U.S. and its states from denying the right to vote to citizens based on sex.³⁸
- **Equal Credit Opportunity Act of 1974** prohibited discrimination against financial borrowers based on their sex or marital status, allowing women to obtain credit cards and open bank accounts without a spouse.³⁹

There are many additional forms of discrimination not addressed in this brief including ableism⁴⁰, ageism⁴¹, xenophobia⁴², homophobia and transphobia⁴³ that impact violence. These forms of discrimination are intersectional and interact with each other as well as those discussed.⁴⁴

Systems that drive violent crime

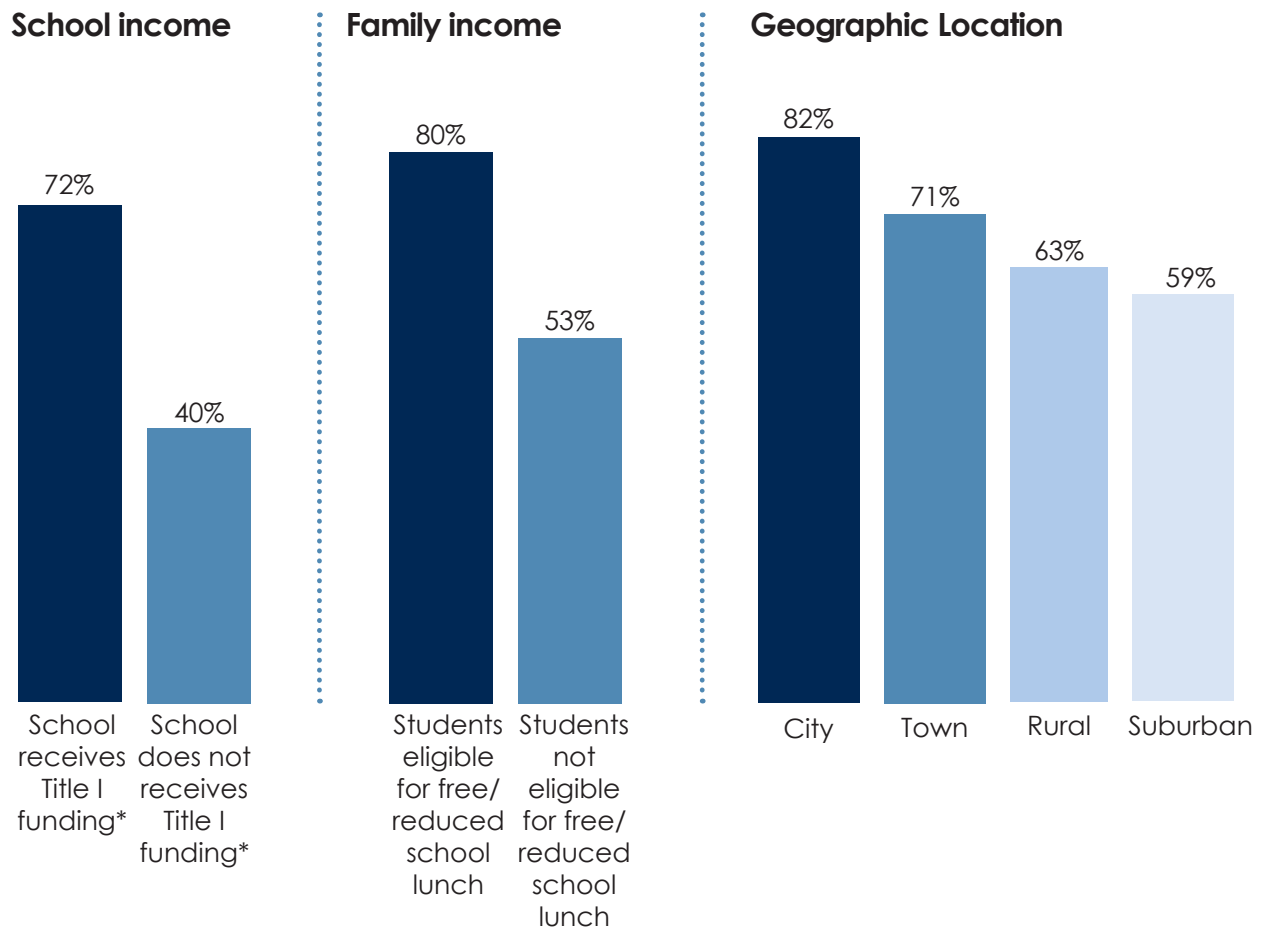
Education and employment

There is a clear relationship between education and violent crime.⁴⁵ Education can increase future employment opportunities, which can deter people from engaging in crime.⁴⁶ On the other hand, disconnection from school can lead to a higher risk of crime participation.⁴⁷ Various school and community factors can lead to disconnection from school, such as:

- **Under-resourced schools.** When schools are under-resourced, students may disengage and are less likely to finish school.⁴⁸ The resources a school can provide to students are determined by its funding, and higher levels of educational spending are linked to decreased violent crime rates.⁴⁹
- **Neighborhood crime.** Higher neighborhood crime rates can hinder a student's academic performance and feelings of safety at school.⁵⁰

Fourth grade reading levels of Ohio students illustrate how school and community factors play a role in a student's connection to school and subsequent academic outcomes (as displayed in figure 5). Children who reach fourth grade without being able to read proficiently are more likely to drop out of high school, reducing their earning potential and chances for success.⁵¹ Figure 6 displays the disparity in high school graduation rates between Black and white students. The disparity in graduation rates illustrates the relationship between external factors and educational attainment.

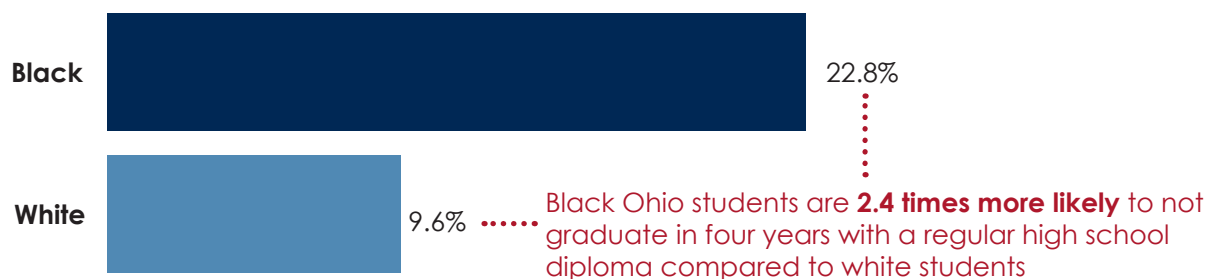
Figure 5. **Fourth graders who scored below proficient reading level by school income, family income and geographic location, Ohio, 2022**



* Title 1 provides federal financial assistance to schools with high percentages of low-income students to help ensure students meet academic achievement standards

Source: U.S. Department of Education, National Assessment of Educational Progress, as compiled by the Annie E. Casey Foundation Kids Count Data Center

Figure 6. **Percent of students who do not graduate in four years with a regular high school diploma, Ohio, by race, 2022-2023 school year**

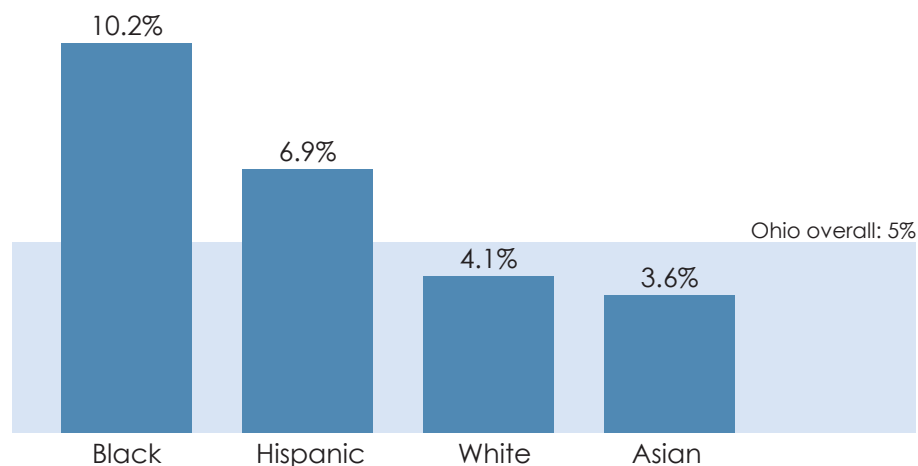


Source: Ohio Department of Education and Workforce

Education and employment outcomes are closely linked, and there is a similar relationship between unemployment and violent crime.⁵² While employment can prevent crime participation, for communities to thrive, the labor market must include high-quality employment opportunities (e.g., jobs with higher pay, stability, safe working conditions, benefits and opportunities for advancement). Communities with fewer high-quality jobs for less-educated workers have higher rates of violent crime⁵³ and adolescent delinquency.⁵⁴

Unemployment in Ohio varies by race with Black and Hispanic Ohioans experiencing unemployment more often than white and Asian Ohioans (figure 7). Increasing equitable access to quality education and employment can contribute to a reduction in violence.

Figure 7. **Unemployment rate, Ohio, by race, 2018-2022**



Source: U.S. Census Bureau, American Community Survey 5-year estimates

Healthcare system

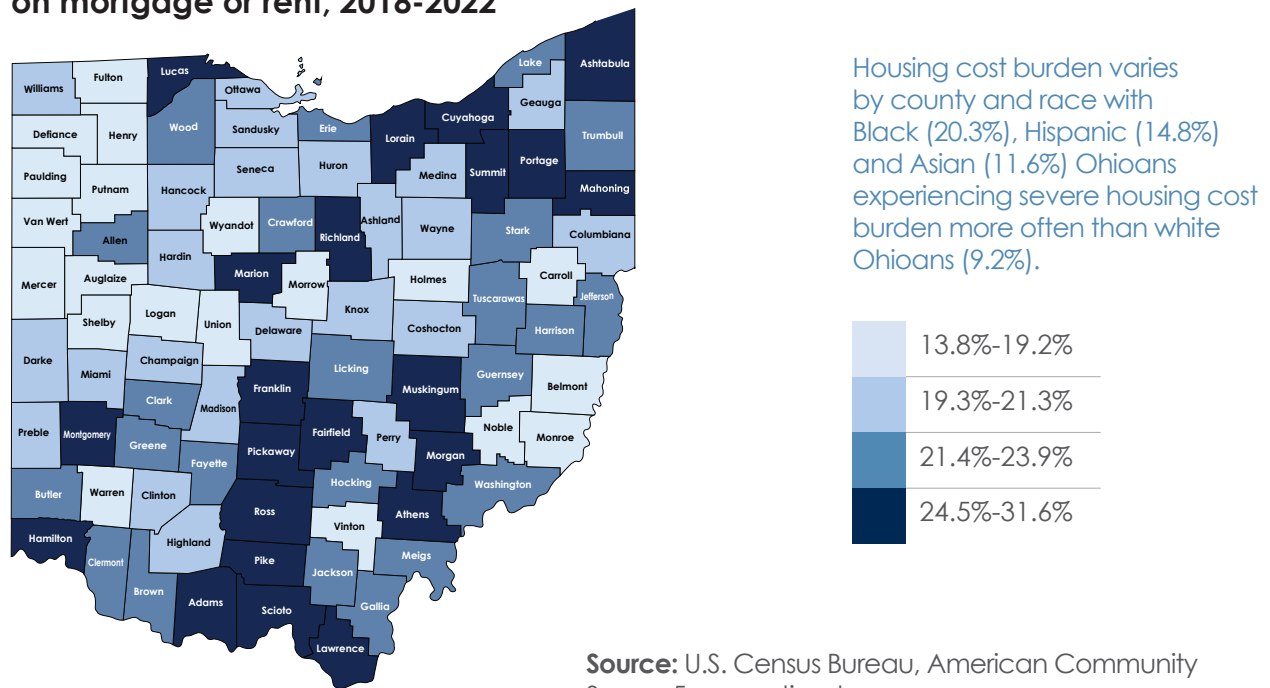
Access to health care is related to the perpetuation of violence. For example, people who are uninsured or underinsured are more likely to experience injury from violence.⁵⁵ Mental illness is often erroneously seen as a cause of crime, when, in fact, research shows that people experiencing mental health crises are more often victims of violence.⁵⁶ On the other hand, access to quality health care can also prevent crime. For example, increased healthcare access associated with Affordable Care Act Medicaid expansion has been shown to reduce violent crime by improving financial security and increasing access to treatment for behavioral health and substance use disorders.⁵⁷

Housing

Availability of safe, affordable housing is critical for community and individual well-being. Providing affordable housing and mitigating dilapidated housing can reduce violent crime rates by providing relief from financial stress for homeowners and renters and increasing feelings of safety and collective efficacy within the community.⁵⁸ Many Ohioans are overburdened by housing costs, as displayed in figure 8.

Eviction is a major destabilizing event that can undermine community power.⁵⁹ Communities with higher rates of eviction also have higher rates of homicide, robbery and burglary.⁶⁰ Not only does eviction result in financial consequences at the individual level, but it can also exacerbate collective disadvantage within a community, giving rise to crime.⁶¹ High rates of eviction also hinder the development of community crime prevention by disrupting social networks that promote collective efficacy.

Figure 8. Percent of county population spending 30 percent or more of income on mortgage or rent, 2018-2022



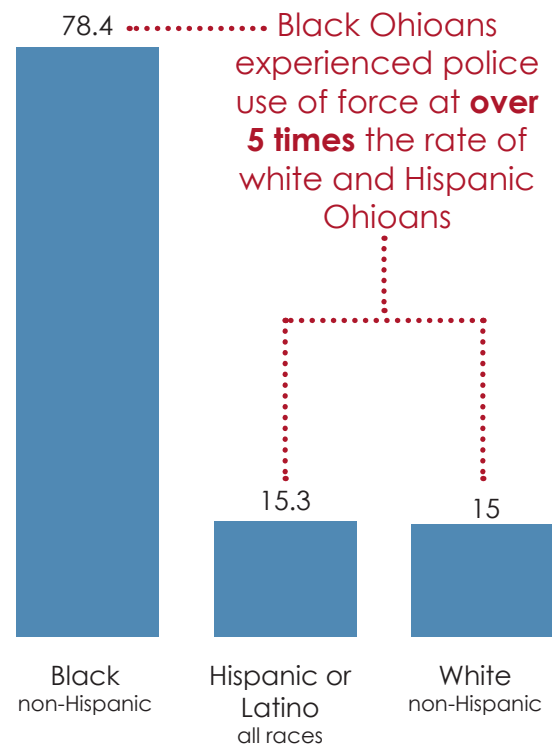
Source: U.S. Census Bureau, American Community Survey 5-year estimates

Criminal justice

The policies and practices of the criminal justice system have an impact on community violence. For example, there is evidence that additional police officers reduce violent crime in a community.⁶² However, increased police presence can also have negative impacts on community safety, such as through increased negative interactions with police, including police use of force.⁶³ In 2023, 42% of Ohioans who experienced police use of force were Black, and Black Ohioans experienced police use of force at over five times the rate of white and Hispanic Ohioans (highlighted in figure 9).

Black Ohioans are negatively impacted by unjust biases, policies and structures in the criminal justice system, which leads to Black communities experiencing much higher rates of violence in interactions with police.⁶⁴ The history of policing and incarceration is closely tied to the history of slavery and systemic oppression of Black people in the U.S.⁶⁵ This history casts a shadow over the modern criminal justice system, and people of color continue to be disparately affected. See HPIO's brief [Connections between criminal justice and health: Insights on justice and race](#) for more information on the history of racism in policing and criminal justice.

Figure 9. Police use of force per 100,000 population, Ohio, by race, 2023



Note: Participation in Ohio Incident-Based Reporting System (OIBRS) is voluntary. Therefore, not all Ohio law enforcement agencies' data are available through OIBRS.

Source: Ohio Incident-Based Reporting System (accessed May 10, 2024)

Additionally, while police presence in communities can reduce crime rates, research finds that the threat of incarceration does not prevent crime and having been incarcerated does not deter future crime.⁶⁶ In fact, having been incarcerated may actually increase the likelihood that a person reoffends because incarceration is traumatic, does not provide needed resources and is associated with barriers to re-entry.⁶⁷ For this reason, mass incarceration and inequities in incarceration are drivers of violent crime.⁶⁸

Returning citizens, collateral sanctions and recidivism

The criminal justice system can contribute to recidivism (the likelihood that a person will commit another criminal offense after release from jail or prison⁶⁹) by imposing collateral sanctions — legal restrictions on the rights, benefits and opportunities of people who have been charged or convicted of crimes.⁷⁰ Examples of collateral sanctions include restrictions on:

- Employment and volunteering
- Education
- Housing and residency
- Civic participation, such as voting

Collateral sanctions, conditions of parole and other barriers make it difficult to find and secure high-quality housing, employment and educational opportunities upon re-entry.⁷¹ These barriers can exacerbate community conditions that give rise to crime in the first place, as well as limit chances for Ohioans to break generational cycles of poverty and incarceration.⁷² Notably, Ohio has more collateral sanctions than most other states, creating community-level barriers for returning citizens.⁷³

Key relevant Ohio policies and legislation

Federal, state and local policies shape communities and can either prevent or drive violent crime. State policymakers have implemented, or are considering, many policies that impact violence in Ohio. While the list below is not exhaustive, it shows the breadth of policies at the community and societal levels that can impact violence.



Policies directly impacting violence

- In 2023, the DeWine administration awarded \$20 million in grants to support more than three dozen community-based intervention programs to prevent violence and support victims of crime as part of the **Community Violence Prevention Grant Program**.
- **Ohio law** requires school districts to include developmentally appropriate instruction for grades 7-12 in dating violence and sexual violence prevention.
- The **Safety and Violence Education Students (SAVE Students) Act**, passed in 2020, requires the Ohio Department of Education and Workforce to maintain a list of approved, evidence-based training programs for violence prevention, with at least one program that is of no cost to schools. The law also requires schools to provide at least one hour or standard class period per year on safety training and violence prevention for grades 6-12.
- **Senate Bill (SB) 215** (effective 2022) — Requires that a qualifying adult does not need to obtain a concealed handgun license.
- **House Bill (HB) 161** (effective 2024) — Eliminates exceptions to sex offenses that previously applied if the victim is the offender's spouse.
- **HB 420** (introduced 2024) — Would establish the Office of Firearm Violence Prevention within the Ohio Department of Children and Youth and require the Office to administer grant programs aimed at reducing firearm violence.



Policies impacting community conditions

- **HB 352** (effective 2021) — Shortens the time in which lawsuits related to employment discrimination can be brought under Ohio law to two years from six years.
- **HB 110** (effective 2021) — Voided all discriminatory restrictive covenants.
- **SB 102** (effective 2022) — Under continuing law, allows a municipality to create a designated outdoor refreshment area (DORA) and revises the size, number and liquor permit holders among DORAs.
- **HB 50** (introduced 2023) — Would allow an individual who is subject to collateral sanctions for housing due to being convicted of, or pleading guilty to, an offense to file a petition for a certificate of qualification for housing (CQH), which removes certain barriers to housing.
- **HB 71** (introduced 2023) — Would establish the Community Connectors Workforce Program, designed to connect students to jobs and internships in their communities.
- **SB 256** (introduced 2024) — Would modify the state's earned income tax credit for lower-income taxpayers, including by offering a refundable credit option, and would increase the basic state minimum wage to \$12.00 per hour.
- Ohio Commission on Minority Health — Funds communities to implement the **Pathways Community HUB Model**, which provides care coordination to connect people to resources including housing, employment, healthcare and social services.
- Ohio Department of Education and Workforce — **Ohio Positive Behavioral Interventions & Supports (PBIS)** is a framework that guides school teams in the selection, integration and implementation of evidence-based practices for improving academic, social and behavior outcomes for all students.

What can be done to drive improvement?

Ohio can prevent violent crime by addressing upstream community conditions and structures. Investing in communities and dismantling inequitable structures can address the conditions that give rise to crime. By using these evidence-informed recommendations, policymakers can promote safety and well-being for all Ohioans.

| Recommendations | Implementation examples |
|---|---|
| <p>Implement and fund evidence-informed violence prevention interventions. Interventions can build positive social norms and include active bystander interventions, violence interrupters, mentorship and restorative justice programs.</p> | <ul style="list-style-type: none"> • Ohio Domestic Violence Network's CDC DELTA AHEAD program focuses on state and community-level violence prevention. • Lorain County Urban League's Serving our Streets is modeled on the Cure Violence model. The model uses disease control and behavior change methods to interrupt violence and change group norms. • City of Cincinnati Police's Children In Trauma Intervention (CITI) Camp supports youth in social and personal growth including conflict resolution and leadership. • Several Ohio courts conduct restorative justice circles, especially for juveniles, to divert people with lower-level offenses from the criminal justice system. • Ohio Department of Rehabilitation & Correction's Victim-Offender Dialogue program is a restorative justice program that centers healing for the victim and the offender. |

| Recommendations | Implementation examples |
|---|--|
| <p>Reduce exposure to community-level risks by strengthening the social and economic stability of individuals, families and communities. Interventions may include increasing housing affordability; alcohol policies, including density zoning and pricing; and education, employment and criminal justice reform. Evidence supports policy interventions including child care subsidies, transitional and subsidized jobs and adult vocational training.</p> | <ul style="list-style-type: none"> • In 2021, the City of Cleveland's Department of Community Development developed a Housing Equity Plan, with a goal of implementing inclusionary zoning to provide affordable housing options in strong-market neighborhoods by 2025. • Akron Public Schools partners with ConxusNEO and Ford Next Generation Learning to provide career academies for in-demand jobs. • The City of Cincinnati requires a living wage, adjusted annually, be paid to all full-time city employees and full- and part-time employees of most contractors providing or delivering services to the city. • Cleveland is in the early stages of piloting a Universal Basic Employment program. |
| <p>Implement evidence-based firearm safety policies. Scientifically supported gun policies include child access prevention laws and firearm licensing laws.</p> | <ul style="list-style-type: none"> • As of Jan. 1, 2021, 30 states and D.C. have Child-Access Prevention Laws that allow prosecutors to bring charges against adults who intentionally or carelessly allow children to have unsupervised access to firearms. • As of Jan. 1, 2021, 14 states and D.C. have comprehensive background check laws that require checks at the point of transfer for all firearms. |
| <p>Eliminate racism and discrimination. A holistic approach to eliminating racism and discrimination includes building partnerships, tailoring policies and programs to meet community needs, implementing and funding policies and programs that promote justice and fairness, and maintaining accountability for eliminating disparities and inequities.</p> | <ul style="list-style-type: none"> • The Cuyahoga County Equity Commission examines how policies and protocols can be improved to be more accessible for all. The commission releases annual reports on the progress, activity and future initiatives of the commission. • The Racism is a Public Health Crisis Initiative in King County, Washington, organized a community-led process to equitably allocate \$25 million in American Rescue Plan Act funds to community-led organizations, non-profits, groups or businesses that are committed to undoing the harms of racism compounded by the pandemic and influencing the county's 2023-24 budget cycle to prioritize and reflect anti-racism and pro-equity investments. • The YWCA seeks to eliminate racism and empower women and girls through its domestic violence shelters, housing programs, youth programs and wrap around services. |

To learn more

More information and tools related to improving community conditions and preventing violence can be found through:

- **CDC Resources for Action**, CDC Violence Prevention
- **Cardiff Violence Prevention Model Toolkit**, CDC Violence Prevention
- **Gun Policy in America Initiative**, RAND
- **Social Drivers of Infant Mortality Action Guides**, HPIO
- **Ohio ACEs (Adverse Childhood Experiences) Impact Project**, HPIO

Acknowledgments

Authors

Tonni Oberly, PhD, MPH
Robin Blair-Ackison, MPH
June Postalakis, BS
Hailey Akah, JD, MA

Graphic design and layout

Nick Wiselogel, MA
Alana Clark-Kirk, BA

Members of HPIO's **criminal justice and health advisory group** and **equity advisory group** contributed information and feedback to this brief.

Funding for this project was provided by the Ohio State Bar Foundation and HPIO's core funders.

Notes

- Ohio Incident Based Reporting System, "Crime in Ohio," 2023, <https://dpsolbrspxet.azurewebsites.net/>.
- Health Policy Institute of Ohio, "Connections between Criminal Justice and Health," Health Policy Brief, June 2021, <https://www.healthpolicyohio.org/files/publications/policybriefcjandhealthfinal2.pdf>.
- DataOhio, "Mortality DataOhio," 2022, <https://data.ohio.gov/ports/portaldataview/mortality?visualize=true>.
- Bruce G. Simons-Morton, Kenneth Riley McLeroy, and Monica L. Wendel, *Behavior Theory in Health Promotion Practice and Research* (Sudbury, Mass: Jones & Bartlett Learning, 2012).
- Centers for Disease Control and Prevention, "About Violence Prevention," Violence Prevention, April 9, 2024, <https://www.cdc.gov/violence-prevention/about/index.html>. "The Social-Ecological Model: A Framework for Prevention | Violence Prevention | Injury Center | CDC," January 18, 2022, <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html>.
- P. S. Liljeston et al., "Understanding Social Norms and Violence in Childhood: Theoretical Underpinnings and Strategies for Intervention," *Psychology, Health & Medicine* 22, no. sup1 (March 6, 2017): 122-34, <https://doi.org/10.1080/13548506.2016.1271954>.
- Alan D. Berkowitz et al., "Chapter 7 - The Social Norms Approach as a Strategy to Prevent Violence Perpetrated by Men and Boys: A Review of the Literature," in *Engaging Boys and Men in Sexual Assault Prevention*, ed. Lindsay M. Orchowski and Alan D. Berkowitz (Academic Press, 2022), 149-81, <https://doi.org/10.1016/B978-0-12-819202-3.00009-2>; see also Sarah McMahon, "Call for Research on Bystander Intervention to Prevent Sexual Violence: The Role of Campus Environments," *American Journal of Community Psychology* 55, no. 3 (June 1, 2015): 472-89, <https://doi.org/10.1007/s10464-015-9724-0>.
- Health Policy Institute of Ohio, "Health Policy Brief: Strategies to Prevent Adverse Childhood Experiences (ACEs) in Ohio Promoting Positive Social Norms and Intervening to Lessen Harm," January 2024, https://www.healthpolicyohio.org/files/publications/policybriefacesstrategies301_24.2024.pdf.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls, "Neighborhood Collective Efficacy - Does It Help Reduce Violence?" National Institute of Justice, April 1998, <https://nij.ojp.gov/library/publications/neighborhood-collective-efficacy-does-it-help-reduce-violence>.
- Ibid.
- Hipp, John R., and James C. Wo, "Collective Efficacy and Crime," in *International Encyclopedia of the Social & Behavioral Sciences*, 169-73, Elsevier, 2015, <https://doi.org/10.1016/B978-0-08-097086-8.45045-2>.
- Zini D Bailey et al., "Structural Racism and Health Inequities in the USA: Evidence and Interventions," *The Lancet* 389, no. 10077 (April 2017): 1453-63, [https://doi.org/10.1016/S0140-6736\(17\)30569-X](https://doi.org/10.1016/S0140-6736(17)30569-X).
- Santucci, Lary, "How Prevalent Were Racially Restrictive Covenants in 20th Century Philadelphia? A New Spatial Data Set Provides Answers," November 2019, Federal Reserve Bank of Philadelphia, Accessed May 13, 2024, <https://www.philadelphiafed.org/consumer-finance/how-prevalent-were-racially-restrictive-covenants-in-20th-century-philadelphia>.
- Ibid.
- Powell, Richard and Jeremy Porter, "Redlining, Concentrated Disadvantage, and Crime: The Effects of Discriminatory Government Policies on Urban Violent Crime," *American Journal of Criminal Justice* 48, no. 5 (October 1, 2023): 1132-56, <https://doi.org/10.1007/s12103-022-09688-3>; see also Price Fishback et al., "New Evidence on Redlining by Federal Housing Programs in the 1930s," *Journal of Urban Economics* 141 (May 2024): 103462, <https://doi.org/10.1016/j.jue.2022.103462>.
- M. T. Fullilove, "Root Shock: The Consequences of African American Disposition," *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 78, no. 1 (March 1, 2001): 72-80, <https://doi.org/10.1093/jurban/78.1.72>.
- "Fewer than One-Fifth of Neighborhoods Affordable to Pacific Islanders in 2019 Were High Opportunity," accessed June 4, 2024, <https://datawrapper.dwcdn.net/2ocYI4/>.
- Powell and Porter, "Redlining, Concentrated Disadvantage, and Crime"; Santucci, "How Prevalent Were Racially Restrictive Covenants in 20th Century Philadelphia?"; Fishback et al., "New Evidence on Redlining by Federal Housing Programs in the 1930s"; Calamunci and Lonsky, "Highway to Hell?"; "Fewer than One-Fifth of Neighborhoods Affordable to Pacific Islanders in 2019 Were High Opportunity," accessed June 4, 2024, <https://datawrapper.dwcdn.net/2ocYI4/>.
- Powell and Porter, "Redlining, Concentrated Disadvantage, and Crime."
- America's Health Rankings, "Explore Concentrated Disadvantage in the United States," America's Health Rankings, 2024, https://www.americashealthrankings.org/explore/measure/concentrated_disadvantage_c.
- Sharkey, Patrick, *Stuck in Place: Urban Neighborhoods and the End of Progress Toward Racial Equality*, University of Chicago Press, 2013.
- Kochhar, Juliana Menasce, Ruth Igielnik, and Rakesh Kochhar, "Most Americans Say There Is Too Much Economic Inequality in the U.S., but Fewer Than Half Call it a Top Priority," Pew Research Center, January 9, 2020, <https://www.pewresearch.org/social-trends/2020/01/09/trends-in-income-and-equality/>.
- Ali Rowhani-Rahbar et al., "Income Inequality and Firearm Homicide in the US: A County-Level Cohort Study," *Injury Prevention* 25, no. Suppl 1 (September 1, 2019): i25-30, <https://doi.org/10.1136/injuryprev-2018-043080>.
- Rachael A. Spencer et al., "The Impact of Temporary Assistance for Needy Families, Minimum Wage, and Earned Income Tax Credit on Women's Well-Being and Intimate Partner Violence Victimization," *Social Science & Medicine* 266 (December 2020): 113355, <https://doi.org/10.1016/j.socscimed.2020.113355>; see also Kimberly Dalve et al., "Earned Income Tax Credit and Youth Violence: Findings from the Youth Risk Behavior Surveillance System," *Prevention Science* 23, no. 8 (November 1, 2022): 1370-78, <https://doi.org/10.1007/s11211-022-01417-w>; Otto Lenhart, "Earned Income Tax Credit and Crime," *Contemporary Economic Policy* 39, no. 3 (July 2021): 589-607, <https://doi.org/10.1111/coep.12522>.
- Molly Merrill-Francis et al., "The Association Between State Minimum Wage and Firearm Homicides, 2000-2020," *American Journal of Preventive Medicine*, February 1, 2024, <https://doi.org/10.1016/j.amepre.2024.01.014>.
- Ali Rowhani-Rahbar et al., "Income Support Policies and Firearm Violence Prevention: A Scoping Review," *Preventive Medicine*, Epidemiology and Prevention of Gun Violence, 165 (December 1, 2022): 107133, <https://doi.org/10.1016/j.ypmed.2022.107133>.
- Anthony A. Braga et al., "Hot Spots Policing of Small Geographic Areas Effects on Crime," *Campbell Systematic Reviews* 15, no. 3 (2019): e1046, <https://doi.org/10.1002/cl2.1046>.
- Twinnam, Tate, "Danger Zone: Land Use and the Geography of Neighborhood Crime," *Journal of Urban Economics* 100 (July 1, 2017): 104-19, <https://doi.org/10.1016/j.jue.2017.05.006>.
- Michelle C. Kondo et al., "Neighborhood Interventions to Reduce Violence," *Annual Review of Public Health* 39, no. Volume 39, 2018 (April 1, 2018): 253-71, <https://doi.org/10.1146/annurev-pubhealth-040617-014600>.
- Julie P. Lee et al., "What Explains the Concentration of Off-Premise Alcohol Outlets in Black Neighborhoods?," *SSM - Population Health* 12 (December 1, 2020): 100669, <https://doi.org/10.1016/j.ssmph.2020.100669>.
- P.J. Trangenstein et al., "Outlet Type, Access to Alcohol, and Violent Crime: Alcoholism: Clinical and Experimental Research," *Alcoholism: Clinical and Experimental Research* 42, no. 11 (November 2018): 2234-45, <https://doi.org/10.1111/acer.13880>.
- United Way of the National Capital Area, "Gender Roles and Norms: What Are They & How Do They Affect Children?," May 19, 2023, <https://unitedwaynca.org/blog/gender-norms/>.
- United Way of the National Capital Area, "Gender Roles and Norms: What Are They & How Do They Affect Children?," May 19, 2023, <https://unitedwaynca.org/blog/gender-norms/>.
- Claudia Garcia-Moreno et al., "Addressing violence against women: a call to action."
- "Table 42," FBI, accessed May 24, 2024, https://ucr.fbi.gov/crime-in-the-u.s/2012/crime-in-the-u.s.-2012/tables/42tabledataatadecoverviewpdf/table_42_arrests_by_sex_2012.xls.
- "Gender Roles and Norms: What Are They & How Do They Affect Children?"; see also Jewkes, Rachel, Michael Flood, and James Lang, "From Work with Men and Boys to Changes of Social Norms and Reduction of Inequities in Gender Relations: A Conceptual Shift in Prevention of Violence against Women and Girls," *The Lancet* 385, no. 9977 (April 18, 2015): 1580-89, [https://doi.org/10.1016/S0140-6736\(14\)61683-4](https://doi.org/10.1016/S0140-6736(14)61683-4).
- "Gender and Health," accessed June 18, 2024, <https://www.who.int/health-topics/gender>; World Health Organization and Centers for Disease Control and Prevention (U.S.), "Manual for Estimating the Economic Costs of Injuries Due to Interpersonal and Self-Directed Violence," A. Butchard, D. Brown, A. Khanth-Huyh, P. Corso, N. Florquin, R. Muggah," 2008, 48.
- "19th Amendment to the U.S. Constitution: Women's Right to Vote," National Archives, January 25, 2016, <https://www.archives.gov/historical-docs/19th-amendment>.
- Kratz, Jessie, "On the Basis of Sex: Equal Credit Opportunities," *Pieces of History (Blog)*, March 22, 2023, <https://prologue.blogs.archives.gov/2023/03/22/on-the-basis-of-sex-equal-credit-opportunities/>.
- Carlyn O. Mueller, Anjali J. Forber-Pratt, and Julie Sliken, "Disability: Missing from the Conversation of Violence," *Journal of Social Issues* 75, no. 3 (2019): 707-25, <https://doi.org/10.1111/josi.12339>.
- E-Shien Chang et al., "Impact of Structural Ageism on Greater Violence against Older Persons: A Cross-National Study of 56 Countries," *BMJ Open* 11, no. 5 (May 1, 2021): e042580, <https://doi.org/10.1136/bmjopen-2020-042580>.
- Janice A. Iwama, "Understanding Hate Crimes against Immigrants: Considerations for Future Research," *Sociology Compass* 12, no. 3 (2018): e12565, <https://doi.org/10.1111/soc1.12565>.
- Andrew R. Flores et al., "Hate Crimes against LGBT People: National Crime Victimization Survey, 2017-2019," *PLOS ONE* 17, no. 12 (December 21, 2022): e0279363, <https://doi.org/10.1371/journal.pone.0279363>.
- SUMI CHO, Kimberlé WILLIAMS CRENSHAW, and Leslie MCCALL, "Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis: Intersectionality: Theorizing Power, Empowering Theory," *Signs: Journal of Women in Culture and Society* 38, no. 4 (2013): 785-810.
- Arum, Richard, and Gary LaFree, "Educational Attainment, Teacher-Student Ratios, and the Risk of Adult Incarceration Among U.S. Birth Cohorts Since 1910," *Sociology of Education* 81, no. 4 (October 1, 2008): 397-421, <https://doi.org/10.1177/003804070808100404>.
- Lochner, Lance, "Chapter 9 - Education and Crime," in *The Economics of Education* (Second Edition), edited by Steve Bradley and Colin Green, 109-17, Academic Press, 2020, <https://doi.org/10.1016/B978-0-12-815391-8.00009-4>.
- Bjerk, David, "Re-Examining the Impact of Dropping out on Criminal and Labor Outcomes in Early Adulthood," *Economics of Education Review* 31, no. 1 (February 1, 2012): 110-22, <https://doi.org/10.1016/j.econedurev.2011.09.003>; see also Arum, Richard, and Gary LaFree, "Educational Attainment, Teacher-Student Ratios, and the Risk of Adult Incarceration Among U.S. Birth Cohorts Since 1910," *Sociology of Education* 81, no. 4 (October 1, 2008): 397-421, <https://doi.org/10.1177/003804070808100404>.
- Ibid.
- Hazza, Devika, and Jose Aranzazu, "Crime, Correction, Education and Welfare in the U.S. - What Role Does the Government Play?" *Journal of Policy Modeling* 44, no. 2 (March 1, 2022): 474-91, <https://doi.org/10.1016/j.jpolmod.2022.03.007>.
- Agustina Laurito et al., "School Climate and the Impact of Neighborhood Crime on Test Scores," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 5, no. 2 (2019): 141, <https://doi.org/10.7758/rsf.2019.5.2.08>.
- Annie E. Casey Foundation, "Early Warning! Why Reading by the End of Third Grade Matters," 2010, <https://www.aecf.org/resources/early-warning-why-reading-by-the-end-of-third-grade-matters>.
- Nordin, Martin, and Daniel Almén, "Long-Term Unemployment and Violent Crime: Empirical Economics," *Empirical Economics* 52, no. 1 (February 2017): 1-29, <https://doi.org/10.1007/s00181-016-1068-6>; see also Smith, Sven, Christopher J. Ferguson, and Howard Henderson, "An Exploratory Study of Environmental Stress in Four High Violent Crime Cities: What Sets Them Apart?" *Crime & Delinquency* 68, no. 11 (October 1, 2022): 2092-2114, <https://doi.org/10.1177/0011287211057858>.
- Weiss, Harold E., and Lesley Williams Reid, "Low-Quality Employment Concentration and Crime: An Examination of Metropolitan Labor Markets," *Sociological Perspectives* 48, no. 2 (June 1, 2005): 213-32, <https://doi.org/10.1525/sop.2005.48.2.213>.
- Bellair, Paul E., Vincent J. Roscigno, and Thomas L. McNulty, "Linking Local Labor Market Opportunity to Violent Adolescent Delinquency," *Journal of Research in Crime and Delinquency* 40, no. 1 (February 1, 2003): 6-33, <https://doi.org/10.1177/0022427802239252>.
- Grossman, David C., and Bechara Choucair, "Violence And The US Health Care Sector: Burden And Response," *Health Affairs* 38, no. 10 (October 2019): 1638-45, <https://doi.org/10.1377/hlthaff.2019.06042>.
- Rossa-Roccar, Verena, Peter Schmid, and Tilman Steinert, "Victimization of People With Severe Mental Illness Outside and Within the Mental Health Care System: Results on Prevalence and Risk Factors From a Multicenter Study," *Frontiers in Psychiatry* 11 (September 8, 2020): 563860, <https://doi.org/10.3389/fpsy.2020.563860>.
- He, Qiwei, and Scott Barkowski, "The Effect of Health Insurance on Crime: Evidence from the Affordable Care Act Medicaid Expansion," *Health Economics* 29, no. 3 (March 2020): 261-77, <https://doi.org/10.1002/hec.3977>; see also Boudarut, Samuel R., Jason M. Lindo, and Isaac D. Swensen, "Substance Abuse Treatment Centers and Local Crime," *Journal of Urban Economics* 104 (March 1, 2018): 124-33, <https://doi.org/10.1016/j.jue.2018.01.007>; see also Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, Katherine Baicker, and Oregon Health Study Group, "The Oregon Health Insurance Experiment: Evidence from the First Year," *The Quarterly Journal of Economics* 127, no. 3 (August 1, 2012): 1057-1106, <https://doi.org/10.1093/qje/qjs020>.
- Michelle C. Kondo et al., "Neighborhood Interventions to Reduce Violence," *Annual Review of Public Health* 39, no. Volume 39, 2018 (April 1, 2018): 253-71, <https://doi.org/10.1146/annurev-pubhealth-040617-014600>; South, Eugenia C., John MacDonald, and Vincent Reina, "Association Between Structural Housing Repairs for Low-Income Homeowners and Neighborhood Crime," *JAMA Network Open* 4, no. 7 (July 1, 2021): e2117067, <https://doi.org/10.1001/jamanetworkopen.2021.17067>.
- Kirk, Eileen M., "Untangling Eviction, Disadvantage, Race, and Social Processes: Neighborhood Factors Influencing Crime," *Crime & Delinquency* 68, no. 4 (April 1, 2022): 594-612, <https://doi.org/10.1177/0011287211010492>.
- Semenza, Daniel C., Richard Stansfield, Jessica M. Grosholz, and Nathan W. Link, "Eviction and Crime: A Neighborhood Analysis in Philadelphia," *Crime & Delinquency* 68, no. 4 (April 1, 2022): 707-32, <https://doi.org/10.1177/0011287211035989>.
- Ibid.
- Klick, Jonathan and Alexander Tabarok, "Using Terror Alert Levels to Estimate the Effect of Police on Crime," *Journal of Law and Economics* 48, no. 1 (2005), doi/abs/10.1086/426877
- Kane, Robert J., "Compromised Police Legitimacy as a Predictor of Violent Crime in Structurally Disadvantaged Communities," *Criminology* 43, no. 2 (2005): 469-98, <https://doi.org/10.1111/j.0011-1348.2005.00014.x>.
- Health Policy Institute of Ohio, "Connections between criminal justice and health: Insights on justice and race," November 2021.
- "Slave Patrols: An Early Form of American Policing," National Law Enforcement Officers Memorial Fund, <https://nleomf.org/slave-patrols-an-early-form-of-american-policing/>.
- Myths & Facts: Why Incarceration is Not the Best Way to Keep Communities Safe, Washington, DC: National Institute of Corrections, 2016, <https://s3.amazonaws.com/static.nic.gov/Library/032698.pdf>.
- Ibid.
- Chalfin, Aaron and Justin McCrary, "Criminal Deterrence: A Review of the Literature," *Journal of Economic Literature* 55, no. 1 (March 1, 2017): 5-48, <https://doi.org/10.1257/ej.2014.1147>; see also Ghandnoosh, Nazzgol, "One in Five: Ending Racial Inequality in Incarceration," The Sentencing Project, October 11, 2023, <https://www.sentencingproject.org/reports/one-in-five-ending-racial-inequality-in-incarceration/>.
- Health Policy Institute of Ohio, "Connections between criminal justice and health," June 2021; see also "Recidivism," National Institute on Justice, Accessed November 2, 2023, <https://nij.ojp.gov/topics/corrections/recidivism>.
- Health Policy Institute of Ohio, "Connections between criminal justice and health," June 2021.
- Ibid.
- Health Policy Institute of Ohio, "Connections between criminal justice and health: Impacts on children and families," December 2023.
- "Welcome to the NICCC | National Inventory of Collateral Consequences of Criminal Conviction," accessed May 21, 2024, <https://niccc.nationalreentryresourcecenter.org/>.