

## **COVID-19 Effects on Pennsylvania Crime Trends: A Rural/Urban Comparison**

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The project's primary goal was to investigate whether shocks stemming from the COVID-19 pandemic either triggered or heightened human suffering in two crime-related areas: murder and abuse. A secondary goal was to identify rural-urban differences in these outcomes both before and during the pandemic.

### **Key Findings**

- The statewide homicide rate rose 21 percent from 2019 to 2020, but the increase was specific to a certain group and location: Black, male victims in Philadelphia County, murdered with a firearm, with most of these incidents being homicides, with no known relationship between the victim and offender.
- In rural counties, the 2020 murder rate rose 24 percent, and in non-Philadelphia urban counties, there was a 3 percent increase. These upward trends came after homicides steadily rose from 2014 to 2018, then fell significantly in 2019, and then increased in 2020.
- The exploratory analysis on county-levels of COVID case and death rates found no statistical evidence that high COVID-rate counties were more likely to experience high levels of protection from abuse orders or homicides.
- Counties with higher unemployment rates and Supplemental Nutrition Assistance Program (SNAP) participation experienced higher murder rates and protection from abuse (PFA) order prevalence in 2020 (a relationship that holds when tested across other years).
- While the analysis of homicides and PFA orders over time provided valuable insights on crime trends and rural-urban differences, it did not suggest large, long-term effects due to the COVID-19 pandemic throughout the state.

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### **Data and Methods**

The research team used detailed data on homicide cases from 2012 to 2020 and PFA orders from 2017 to 2020 from the Pennsylvania Commission on Crime and Delinquency. Annual county, rural-urban, and state age-standardized homicide rates were estimated for time trend and comparative analysis. Subpopulation rates and trends by gender, race, and rural-urban county group were analyzed for differences over time and pre- and post-pandemic onset. PFA prevalence was similarly calculated and studied over the time leading up to the pandemic and after its onset. County rates of these indicators were mapped using geographic information system

software and combined with county-level indicators of economic distress to test for any associations between these crime rates, COVID rates, and distress.

### **Results**

The analysis of homicides and PFA orders over time provided valuable insights on crime trends and rural-urban differences, but it did not suggest large, long-term effects due to the COVID-19 pandemic throughout the state. The statewide homicide rate rose 21 percent from 2019 to 2020, but the increase was specific to a certain group and location: Black, male victims in Philadelphia County, murdered with a firearm, with most of these incidents being homi-

cides with no known relationship between the victim and offender. Racial and gender disparities in the homicide rate were large and persistent throughout the timeframe analyzed and grew in 2020, with Black (vs. white) and male (vs. female) subpopulations having 10-15 times the murder rates of others.

Courthouse closures during the onset of the pandemic in March and April 2020 led to a brief decline in final protection from abuse orders, with urban counties seeing the largest decreases during those months. However, temporary orders were processed at similar levels during these initial months of the pandemic. Both temporary and final PFA orders have moved back in line with historic trends since the early onset of the pandemic.

Finally, the exploratory analysis on county-levels of COVID case and death rates found no statistical evidence that high COVID-rate counties were more likely to experience high levels of PFA orders or homicides. However, the analysis found that counties with higher unemployment rates and Supplemental Nutrition Assistance Program (SNAP) participation also experienced higher murder rates and PFA order prevalence in 2020 (a relationship that holds when tested across other years).

### **Policy Considerations**

- As murders in Philadelphia made up 44 percent of all murders in the Commonwealth from 2012-2020 and 56 percent of murders in 2020 alone, active state support in helping the city and county address this issue is warranted. Although this study focused on rural counties, understanding the statewide context of the homicide increase in 2020 informs appropriate policy responses in rural areas. That statewide context is driven by gains in Philadelphia and allows for comparison to rural counties.
- Since the findings of this analysis are unclear as to whether the COVID pandemic influenced abuse, more research using a wider set of data should be conducted.
- Finally, more research should be conducted to see whether differences in county responses to the pandemic (i.e., differences in courthouse responses or community uptakes in mask use) are associated with differences in case rates or the indicators of distress explored above.



Scan the QR code for a copy of the report, *COVID-19 Effects on Pennsylvania Crime Trends: A Rural/Urban Comparison*.

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