

## **Background**

Neighborhood deterioration is generally characterized by trash, dilapidated housing, and abandoned structures. Abandoned dwellings are particularly susceptible to crime, especially gun violence and substance use. The presence of abandoned houses contributes to a stressful environment and reduces community cohesiveness. However, a variety of local "cleaning and greening" strategies may be effective in reducing crime. Research suggests that improving the neighborhood environment, by increasing street lighting, for instance, is an effective and inexpensive way to reduce crime in disinvested areas. Past scholarship also suggests that repairing housing features such as broken doors and windows is associated with a drop in gun violence.

## **Research Question**

Do housing facade repairs and clean-up of abandoned homes improve health and safety in low-income, Black neighborhoods?



## **Study Strategy**

The researchers employed a cluster randomized trial. After examining a list of all abandoned homes in Philadelphia (over 3,000), they randomly selected 63 clusters approximately one-quarter of a mile in diameter, each of which contained 258 abandoned homes. Researchers then randomly assigned these clusters to one of two treatment groups or a control group. The homes in the first treatment group received restorative home repairs (e.g., window and door fixes) and services (e.g., trash cleanup and weed removal). The second treatment group only received the services, not the repairs. The control group did not receive repairs or services. The services were completed multiple times during an eight-month period, from August 2018 to March 2019. The researchers examined crime trends and distributed surveys to residents in the clusters before and after the interventions. All the homes were in predominantly Black neighborhoods.



Clusters that received repairs and services experienced statistically significant decreases in both gun assaults (13.1%) and weapons offenses (8.4%). Shootings also decreased in this cluster, by 7%, but this drop was not significantly different from those seen in the control clusters.

"Abandoned houses potentially pose a major health and safety threat for residents of the predominantly Black neighborhoods in which they are concentrated."

- South et al. (2022)

Areas that received services but not repairs saw declines in weapons violations and gun assaults, but these declines did not substantially differ from the findings recorded in the control clusters. Similarly, although both of the treatment clusters experienced reductions in drug and alcohol offenses, they, too, were not significantly different from the declines in the control clusters. Overall, perceptions of public safety between the two treatment groups were not statistically different from the control clusters.



The findings support past research showing that environmental strategies can reduce some forms of criminal behavior. However, only the areas receiving home repairs and additional outdoor services saw reductions in weapons violations and gun assaults. There were no significant differences in shootings, drug offenses, or perceptions of public safety. The results did not show substantial differences in the measures between homes that only received services, such as trash cleanup, and the control clusters.

A similar study also analyzed areas of Philadelphia and found significant decreases in overall crime and several specific crime types following the rehabilitation of vacant lots. The results of these cleaning and greening studies suggest that crime in blighted

"The results for gun violence outcomes suggest that remediation of abandoned houses is a novel strategy that may be useful for improving community safety and health."

- South et al. (2022)

areas could be addressed using a variety of strategies that address the unique factors in each neighborhood. As noted in a recent review of broken windows strategies, many factors influence the effectiveness of approaches that aim to reduce neighborhood disorder. Cities may amplify the benefits of these improvements by combining the efforts with specific, targeted policing and other anti-violence strategies.

## **Article Citation**

South, E. C., MacDonald, J. M., Tam, V. W., Ridgeway, G., & Branas, C. C. (2022). Effect of abandoned housing interventions on gun violence, perceptions of safety, and substance use in Black neighborhoods. JAMA Internal Medicine, 183(1), 31-39. https://doi.org/10.1001/jamainternmed.2022.5460