

Effect of the Communities That HEAL Intervention on Mortality Including Polysubstance Overdose Deaths: A Randomized Clinical Trial

The Questions:

Did the Communities That HEAL (CTH) intervention, part of the HEALing Communities Study (HCS), lower total drug overdose deaths? Did the CTH lower specific combinations of opioid-involved drug overdose deaths (e.g., with cocaine)?

The Details:

The CTH intervention was designed to encourage the adoption and expansion of evidence-based practices to reduce opioid overdose deaths. From July 2021 through June 2022, we compared the rates of overdose deaths per 100,000 adult residents in intervention (where the intervention had been implemented) and comparison communities (where the intervention had not yet been implemented).

An 8% lower rate of all drug overdose deaths was observed in intervention communities versus comparison communities in all HCS communities. There was not enough evidence to attribute the decrease to the intervention. Ohio saw an 18% reduction, which was also not statistically significant. Overdose deaths involving any opioid and 1) cocaine or 2) any benzodiazepine showed slight but nonsignificant decreases. A 37% reduction in overdose deaths involving all psychostimulants and opioids other than cocaine was significant across HCS states.

Adjusted rate of all drug overdose death rates per 100,000 during comparison period

	Intervention	Comparison
Ohio	48.01	58.73
Study-wide	55.99	61.11

Conclusions:

Although the overall 8% reduction in overdose death rates in intervention communities was not statistically significant, it represents an estimated 525 drug overdose deaths averted. Deaths involving any opioid and psychostimulant other than cocaine decreased significantly, which is notable because more than 40% of opioid overdose deaths in the study involved an opioid with a psychostimulant.

Events outside of the control of the study may have influenced these results. Death rates from overdoses increased in all communities during the COVID-19 pandemic, and because of COVID-related delays, only about 1/3 of evidence-based practices were implemented in intervention communities before the comparison period. Expansions in both fentanyl and other sources of drug overdose prevention funding may have also influenced these results.

The Takeaway

- Across HCS states (Ohio, Kentucky, Massachusetts, and New York), intervention communities had 37% fewer deaths from an opioid in combination with a psychostimulant other than cocaine compared to comparison communities, a significant difference.
- Intervention communities had an 8% lower total overdose death rate than comparison communities across the study, although this difference was not statistically significant.

References & Links:

Freisthler B, Chahine RA, Villani J, et al. Communities That HEAL Intervention and Mortality Including Polysubstance Overdose Deaths: A Randomized Clinical Trial. *JAMA Netw Open*. 2024;7(10):e2440006. doi:10.1001/jamanetworkopen.2024.40006