Minnesota Department of Health

# Opioid Overdose Anomaly Case Study: Olmsted County

## Overview

Over a one-week period in November, Olmsted County, specifically Rochester, experienced a significant increase in opioid overdoses, totaling nine cases over a five-day period, which surpassed both the moderate and severe thresholds for a seven-day rolling period. The spike included one fatality linked to a mass casualty event involving multiple overdoses. This anomaly disproportionately impacted men, Black individuals, and people using opioids in private residences.

**As a result, the Minnesota Department of Health (MDH) issued a Tier 2 alert, prioritizing targeted response for at-risk groups and coordination among key partners.**

## Background

A severe alert was triggered in Olmsted County after the number of overdose incidents surpassed the seven-day rolling severe threshold. Following the alert, MDH conducted an in-depth data review, notifying local partners with “For Information Only” communications to limit dissemination and prevent public concern. Local public health informed their Overdose Spike Response Team (OSRT) of the ongoing review and encouraged reporting relevant information back to MDH. The Tier 2 alert was recommended based on:

* Exceeding the severe threshold for overdose incidents.
* Evidence of a suspected overdose cluster in Rochester and one associated fatality.

MDH recommended focused outreach to affected groups and harm reduction strategies for at-risk populations without broad public messaging.

## Incident Analysis

1. **Extent and Duration of Anomaly:** Nine opioid overdoses over five days in Olmsted County.
2. **Substance Involvement and Route of Administration:** All nonfatal cases responded to naloxone. Specific substance details were available for 50% of cases, with reports of:
   1. Oxycodone
   2. Cocaine and alcohol (associated with the fatal overdose)
   3. Smoking fentanyl
   4. Fentanyl use
3. **Geographical Concentration:** All incidents occurred within Rochester.
4. **Location and Circumstances of Discovery:**
   1. **Private Residences:** Nearly all incidents occurred in private residences, often discovered by friends, family members, or roommates.
   2. **Presence of Bystanders:** In several cases, bystanders witnessed or discovered the individuals shortly after overdose, including the fatality.
   3. **Refusal of Medical Transport:** Two individuals initially refused further medical transport after naloxone administration; one eventually agreed after law enforcement intervention due to an active warrant.
5. **Demographics:**
   1. **Gender:** Men represented 75% of cases.
   2. **Race:** Black patients represented 38% of cases compared to 9% of the city population.
   3. **Age Range:** Patients spanned a wide range of ages, from their 20s to their 60s.

## Key Risk Factors

* **Polysubstance Use:** Incidents involved a range of drugs, sometimes unknowingly mixed with opioids.
* **Routes of Administration:** Cases involving inhalation indicate a need for harm reduction strategies tailored to smoking-related opioid use.
* **Private Residences and Isolation:** Nearly all overdoses occurred in private settings which can create delayed response times, especially when individuals are alone.
* **Refusal for Transport to Hospital:** Some individuals refused further medical care after naloxone administration, complicating continuity of care.
* **Men and Black People:** Overrepresented groups point to possible healthcare disparities and the need for culturally responsive outreach.

## ****Recommended Actions****

* **Targeted Naloxone Distribution:** Increase naloxone access for law enforcement, EMS, and community health workers, focusing on distribution to private residences and high-risk individuals, including men and Black communities.
* **Culturally Tailored Harm Reduction Messaging:** Work with community leaders to deliver safer use guidance, Good Samaritan Law awareness, and treatment resources to Black and male populations.
* **Cross-Agency Coordination:** Strengthen collaboration among law enforcement, EMS, public health, and harm reduction partners to improve outreach and resource distribution.
* **Post-Overdose Follow-Up:** Activate the Post-Overdose Response Team (PORT) to connect overdose survivors to treatment and harm reduction resources, especially those who refuse transport to EDs.

## State Response

* **Ongoing Surveillance:** Continuously monitor overdose trends, providing regular updates and data analysis to local health authorities.
* **Resource and Messaging Coordination:** Supply additional resources, such as naloxone kits and fentanyl test strips, and support culturally targeted messaging for affected groups.