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Preliminary Report on County-Level Opioid Overdose Trends and Settlement Implementation Across New York State

Preliminary Narrative Report Based on Community-Based County Research

Introduction

This preliminary synthesis draws on a collection of student-generated county opioid reports examining overdose deaths, non-fatal overdoses, emergency department visits, hospital discharges, opioid prescription trends, and population-adjusted rates across multiple New York State counties. The reports primarily relied on data from the New York State Opioid Data Dashboard and focused on longitudinal trends between approximately 2010 and 2024, including periods before and after the distribution of opioid settlement funds beginning in 2022.

Counties represented across the reports include rural, suburban, urban-adjacent, and highly isolated regions of New York State, including counties in the North Country, Central New York, the Finger Lakes region, the Capital Region, Western New York, and the Hudson Valley. While the reports were independently developed and varied in analytical depth, several recurring themes and patterns emerged across the datasets.

Emerging Statewide Patterns

1. Broad Long-Term Increase in Opioid Mortality

One of the clearest shared findings across nearly all counties was a substantial long-term increase in opioid overdose deaths between 2010 and the early 2020s. Even counties with relatively small populations and historically low overdose counts frequently demonstrated sharp proportional increases over time.

Many reports identified accelerated increases beginning around 2015–2017, followed by especially severe spikes during the COVID-19 period (2020–2021). Several counties demonstrated their highest overdose death rates during these years.

This pattern appeared in:

- rural counties such as Allegany, Otsego, Seneca, Wyoming, Franklin, Lewis, and Yates,
- suburban counties such as Saratoga and Rockland,
- and more urbanized counties such as Albany and Rensselaer.

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The consistency of this upward trend across very different county contexts suggests that the opioid crisis cannot be understood exclusively as an urban phenomenon. Instead, the data point toward a geographically diffuse and structurally embedded public health crisis affecting highly varied regions of New York State.

2. Rural Counties Often Experienced High Volatility and Instability

Several reports noted that small rural counties frequently displayed dramatic year-to-year fluctuations in overdose death rates. In counties with small populations, relatively small changes in raw overdose counts produced large swings in population-adjusted rates.

However, the volatility itself may also reflect deeper structural instability:

- inconsistent treatment access,
- limited emergency response infrastructure,
- transportation barriers,
- provider shortages,
- and fragile social service systems.

Many reports indirectly pointed toward the possibility that overdose trends in rural counties are shaped not only by substance use patterns, but by uneven healthcare infrastructures and varying access to intervention resources.

In some highly rural counties, overdose mortality increased despite declining population sizes, raising questions about demographic vulnerability, aging populations, economic stagnation, and healthcare access.

3. Declining Prescription Rates Did Not Necessarily Correspond With Reduced Mortality

A recurring pattern across several reports was the decline in opioid prescribing rates over time alongside continued increases in overdose deaths.

This disconnect appeared especially important. Multiple counties demonstrated:

- reductions in opioid dispensing rates,
- stabilization or decline in hospital opioid prescribing,
- yet continued increases in overdose mortality.

This finding may support broader national arguments suggesting that the contemporary overdose crisis increasingly involves:

- illicit fentanyl markets,
- polysubstance use,

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- and transitions away from prescription opioid-centered pathways.

The reports collectively suggest that reductions in prescription access alone did not produce parallel declines in overdose deaths.

This pattern raises important future research questions:

- How do local illicit drug markets shape county overdose patterns?
- Did prescribing reductions unintentionally increase transitions toward illicit opioid use in some communities?
- How do treatment access and harm reduction availability mediate these transitions?

4. Non-Fatal Overdoses and Emergency Department Visits Showed More Complex Patterns

Unlike overdose mortality, non-fatal overdose indicators often showed less consistent trends.

Several counties demonstrated:

- declining emergency department visits,
- stabilization in hospital discharges,
- or fluctuating non-fatal overdose rates, while overdose deaths simultaneously increased.

This divergence may suggest several possibilities:

- increasing lethality associated with fentanyl,
- reduced opportunities for emergency intervention,
- changing patterns in healthcare utilization,
- underreporting,
- or barriers to seeking care.

Some reports also noted that non-fatal overdose data were incomplete, unstable, or unavailable for certain years and counties.

The inconsistency of non-fatal overdose indicators compared to mortality data suggests the need for caution when interpreting healthcare utilization metrics as proxies for overdose burden.

5. Settlement Funds Have Not Yet Produced Clearly Observable County-Level Mortality Shifts

A major shared question across the reports involved the timing of opioid settlement fund distribution beginning around 2022.

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At this preliminary stage, there was little evidence across the reports suggesting immediate or dramatic reductions in overdose mortality following settlement distributions.

In many counties:

- overdose deaths remained elevated,
- trends plateaued rather than declined,
- or mortality continued increasing after settlement allocation.

This does not necessarily indicate policy failure. Rather, the reports suggest several important possibilities:

- settlement implementation may require longer timelines,
- funds may not yet have reached frontline infrastructures,
- interventions may remain fragmented,
- or existing structural conditions may limit rapid impact.

This may represent one of the most important emerging themes from the reports collectively: there appears to be a significant temporal gap between financial settlement announcements and measurable changes in county-level overdose outcomes.

6. Data Limitations Were Recurring Across Counties

Several reports encountered recurring methodological problems, including:

- unstable estimates in low-population counties,
- suppressed values,
- changing reporting categories,
- incomplete non-fatal overdose datasets,
- and inconsistencies between county-level indicators.

Students frequently relied on emergency department visits or hospital discharges as substitutes for direct non-fatal overdose measures due to missing data.

These limitations themselves may point toward a broader issue: local opioid surveillance infrastructures remain uneven and fragmented.

This raises additional research questions:

- How do counties construct and interpret opioid data differently?
- Which forms of overdose become visible through official datasets?
- What institutional assumptions shape opioid surveillance systems?

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Preliminary Interpretive Themes

Across the reports, several broader interpretive themes emerge that may provide the foundation for a larger research project:

Structural Unevenness

The opioid crisis appears deeply shaped by uneven regional infrastructures, including treatment availability, transportation access, healthcare staffing, and emergency response capacity.

Temporal Lag Between Policy and Outcomes

Settlement funding has not yet translated into clearly observable improvements in overdose mortality trends at the county level.

Rural Vulnerability

Many rural counties experienced disproportionately severe or unstable overdose trends despite smaller populations and lower visibility within broader public discourse.

Fragmentation of Care Systems

The divergence between mortality, emergency department visits, hospital discharges, and prescription trends suggests fragmented systems of prevention, treatment, and intervention.

Transition Beyond Prescription Opioids

The data collectively support the argument that the opioid crisis has increasingly shifted beyond prescription opioid frameworks toward fentanyl-centered overdose environments.

County-Level Comparative Trends

Chenango County

Chenango County emerged as one of the more analytically important counties in the dataset because it appears to demonstrate a delayed stabilization trajectory following the beginning of opioid settlement distribution.

The county experienced a substantial increase in overdose mortality during the COVID-era years. According to the student reports, overdose deaths increased from approximately 11 deaths in 2020 to 13 deaths in 2021, corresponding to a significant rise in population-adjusted mortality rates. Mortality remained elevated through 2022 and 2023 before declining more substantially in 2024.

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At the same time, overdose-related emergency department visits followed a different trajectory. Emergency department visits increased between 2020 and 2022 before declining sharply in 2023. This divergence between fatal and non-fatal overdose indicators may suggest increasing overdose lethality associated with fentanyl exposure, changes in healthcare utilization patterns, reduced opportunities for successful intervention, or barriers to emergency care access.

Chenango County is particularly important because it appears to sit between persistent rural vulnerability and possible emerging stabilization. Unlike some counties that showed continued worsening after 2022, Chenango may demonstrate a lagged response pattern in which settlement funding required substantial implementation time before measurable public health shifts began appearing.

The county also reflects several broader structural characteristics identified across the reports:

- rural geographic dispersion,
- limited healthcare infrastructure,
- transportation barriers,
- workforce shortages,
- and dependence on relatively fragile treatment and social service systems.

Given these conditions, the apparent decline in overdose mortality in 2024 may indicate that even relatively constrained counties can experience stabilization once treatment, harm reduction, and coordination systems begin expanding. However, the available data remain too preliminary to determine whether this decline represents a durable trend or temporary fluctuation.

Saratoga County

Saratoga County provides an important contrast case because it demonstrated a comparatively earlier stabilization trajectory following the COVID-era overdose peaks.

Although Saratoga experienced significant increases in overdose mortality during the broader opioid crisis, the county demonstrated:

- less severe year-to-year volatility,
- more stable emergency department trends,
- and earlier plateauing following the most acute pandemic-era escalation.

Compared to Chenango County, Saratoga benefits from:

- denser healthcare infrastructure,
- stronger transportation access,
- larger provider networks,
- closer proximity to urban healthcare systems,

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- and greater institutional capacity.

The contrast between Saratoga and Chenango suggests that opioid settlement outcomes may depend not only on funding levels themselves, but on the degree of institutional infrastructure already present before settlement implementation began.

This comparison raises several important analytical questions:

- Which counties possessed sufficient administrative capacity to operationalize settlement funds rapidly?
- How do regional healthcare systems shape overdose mortality trajectories?
- Are counties with stronger healthcare ecosystems able to stabilize overdose trends more effectively even before settlement interventions fully mature?

Franklin and Lewis Counties

Franklin and Lewis Counties represent some of the clearest examples of continuing rural instability within the reports.

Both counties demonstrated:

- high year-to-year volatility,
- elevated overdose mortality,
- and limited evidence of immediate post-settlement stabilization.

In these counties, even relatively small increases in overdose deaths produced dramatic shifts in population-adjusted mortality rates due to smaller population sizes.

However, the volatility itself may also reflect deeper structural fragility. The reports repeatedly pointed toward:

- limited treatment access,
- sparse healthcare infrastructure,
- long transportation distances,
- workforce shortages,
- and limited harm reduction availability.

These counties may therefore illustrate how rural overdose crises are shaped not simply by substance use prevalence, but by uneven access to intervention infrastructures.

Albany County

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Albany County presented a different pattern from many rural counties. Although the county experienced substantial overdose burden throughout the study period, trends appeared somewhat more stable following the extreme increases associated with the COVID period.

The county's larger healthcare ecosystem, institutional density, and more extensive provider networks may have contributed to this relative stabilization.

Unlike smaller counties where annual changes in a handful of deaths dramatically altered mortality rates, Albany's larger population produced more gradual trend shifts. The reports suggest that counties with larger healthcare systems may have been better positioned to absorb the destabilizing effects of fentanyl-driven overdose environments.

Discussion

The collective findings from these reports point toward several broader interpretive possibilities that may serve as the foundation for a future article, dissertation chapter, policy report, or mixed-methods research project.

1. Opioid Settlement Funds Enter Uneven Infrastructural Landscapes

One of the strongest emerging patterns across the reports is that opioid settlement funds did not enter neutral or uniform environments. Instead, they entered counties with profoundly unequal healthcare infrastructures, administrative capacities, treatment ecosystems, and public health coordination systems.

This may help explain why some counties appeared to stabilize more rapidly while others remained highly volatile after 2022.

The reports suggest that settlement funding alone may not produce rapid public health transformation if counties lack:

- treatment workforce capacity,
- transportation infrastructure,
- harm reduction networks,
- administrative coordination,
- or healthcare density.

This raises an important analytical shift away from the question:

> "Did settlement funds work?"

Toward a more complex question:

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> "Which counties possessed the infrastructural capacity necessary to operationalize settlement resources effectively?"

This framing may provide a strong basis for future publication because it moves beyond simplistic success/failure narratives and instead examines the interaction between funding and structural inequality.

2. Temporal Lag Between Policy and Measurable Outcomes

Another major theme emerging from the reports is the possibility of a significant lag between policy implementation and measurable mortality outcomes.

Most counties only began receiving settlement resources around 2022. However, many counties likely spent 2022–2023:

- developing allocation plans,
- hiring staff,
- negotiating contracts,
- coordinating agencies,
- or building treatment partnerships.

As a result, overdose mortality data from 2023 may still reflect older infrastructural realities rather than mature settlement interventions.

This temporal lag framework may become particularly important in your own future interview research with:

- county commissioners,
- nonprofit organizations,
- healthcare coordinators,
- and frontline providers.

Qualitative interviews may help explain why measurable mortality changes remain inconsistent despite major financial settlements.

3. Transition From Prescription Opioids to Fentanyl-Centered Overdose Environments

The reports repeatedly demonstrated a disconnect between declining opioid prescription rates and continuing overdose mortality.

This pattern supports broader national research suggesting that the opioid crisis has increasingly shifted beyond prescription-centered pathways toward:

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- fentanyl-driven overdose environments,
- illicit opioid markets,
- and polysubstance use.

Importantly, several counties demonstrated:

- declining prescribing,
- declining emergency department visits,
- yet increasing overdose deaths.

This divergence may indicate increasing overdose lethality and changing intervention dynamics.

Future research might therefore examine:

- how counties adapt to fentanyl-centered overdose environments,
- how treatment systems respond to changing drug markets,
- and whether existing public health models remain aligned with current overdose realities.

4. Rural Opioid Crises as Infrastructure Crises

The reports collectively suggest that overdose mortality in rural counties may be inseparable from broader infrastructural conditions.

Several counties experiencing severe overdose instability also demonstrated:

- healthcare provider shortages,
- limited transportation access,
- geographic isolation,
- declining populations,
- and fragile social service systems.

This suggests that overdose mortality may not simply reflect substance use prevalence, but broader forms of institutional precarity and regional disinvestment.

This perspective could support a larger anthropological or sociological argument that rural overdose crises are simultaneously:

- public health crises,
- infrastructure crises,
- and governance crises.

5. Fragmented Care Systems and Uneven Data Visibility

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The divergence between mortality trends, emergency department visits, hospital discharges, and prescribing patterns also points toward fragmented care systems.

The reports repeatedly encountered:

- incomplete non-fatal overdose data,
- unstable county-level estimates,
- missing years,
- and inconsistent reporting categories.

This suggests that opioid surveillance itself may be fragmented and uneven.

Future work could therefore examine not only overdose trends themselves, but also:

- how counties construct opioid knowledge,
- which forms of overdose become visible through institutional data systems,
- and how data infrastructures shape public understandings of the crisis.

This direction could connect strongly with medical anthropology, science and technology studies, and critical public health scholarship.

Directions for Future Research

This preliminary synthesis suggests several major directions for future research:

1. Comparative study of how counties operationalize opioid settlement funds.
2. Ethnographic examination of county-level opioid governance systems.
3. Analysis of implementation lag between funding distribution and measurable outcomes.
4. Study of how rural healthcare infrastructures shape overdose mortality.
5. Examination of the relationship between fentanyl markets and local overdose trajectories.
6. Analysis of workforce shortages and treatment access barriers.
7. Investigation of why some counties stabilize while others remain volatile.
8. Study of county-level harm reduction implementation.
9. Examination of data infrastructures and opioid surveillance systems.
10. Comparative interviews with commissioners, nonprofits, and frontline providers.
11. Longitudinal comparison between fatal and non-fatal overdose trends.
12. Study of how settlement funds reshape local institutional relationships.
13. Examination of administrative burden within opioid response systems.
14. Analysis of regional inequality in public health capacity.
15. Mixed-methods comparison between highly rural and institutionally dense counties.

Preliminary Conclusions and Future Research Directions

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Although these reports were developed independently and vary in methodological sophistication, collectively they reveal a number of striking shared patterns across New York State counties. The data suggest that opioid overdose trends are shaped not only by substance use itself, but by broader systems of healthcare access, regional inequality, institutional fragmentation, and delayed policy implementation.

Most importantly, the reports point toward the need to understand the opioid crisis as a structurally uneven and geographically diffuse phenomenon whose effects continue despite major legal settlements and public policy interventions. The persistence of elevated overdose mortality alongside declining prescription rates and inconsistent non-fatal overdose trends suggests that current public health responses remain only partially aligned with the evolving realities of opioid use and overdose in New York State.

This synthesis may serve as the basis for a future mixed-methods or ethnographic project examining the relationship between opioid governance, healthcare infrastructure, settlement implementation, and regional inequality across New York State.