

# Partners in Preparedness and Response:

## How New York City Automated Integration of Pharmacy and Case Data To Address Disparities in Mpox Treatment

Lack of access to the latest and best medical interventions contributes to long-standing inequities in the health of New Yorkers of color compared to white New Yorkers. To better address these racial health gaps, public health must center equity in a data-driven way. During the 2022 mpox (formerly monkeypox) outbreak, the New York City Department of Health and Mental Hygiene (NYC Health Department) used data integration to identify and address inequities in access to treatment based on neighborhood of residence and race and ethnicity.

As opposed to COVID-19 treatment data, which were vast and needed to be analyzed manually, mpox treatment data were more contained. Only one pharmacy in NYC filled outpatient prescriptions for the mpox treatment tecovirimat. This enabled the NYC Health Department to set up an automated system to analyze the pharmacy's data rapidly and use it to address inequities by race and ethnicity. The system worked as follows:

1. Health care providers who prescribed tecovirimat entered information into a simple online survey.
2. These data were integrated with data provided by the pharmacy.
3. Integrated data were automatically uploaded into NYC's surveillance system, which contained mpox case investigation data, to be matched with case data.

Demographic and geographic information, including neighborhood of residence, age, and race and ethnicity, was used to assess whether the percentage of people who had mpox and received treatment was similar across NYC's diverse population and neighborhoods. After matching treatment and case investigation data, the NYC Health Department examined treatment initiations by race and ethnicity, and disparities were not observed. However, by evaluating the people treated as a percentage of those who had mpox compared across various demographic characteristics, the NYC Health Department found that:

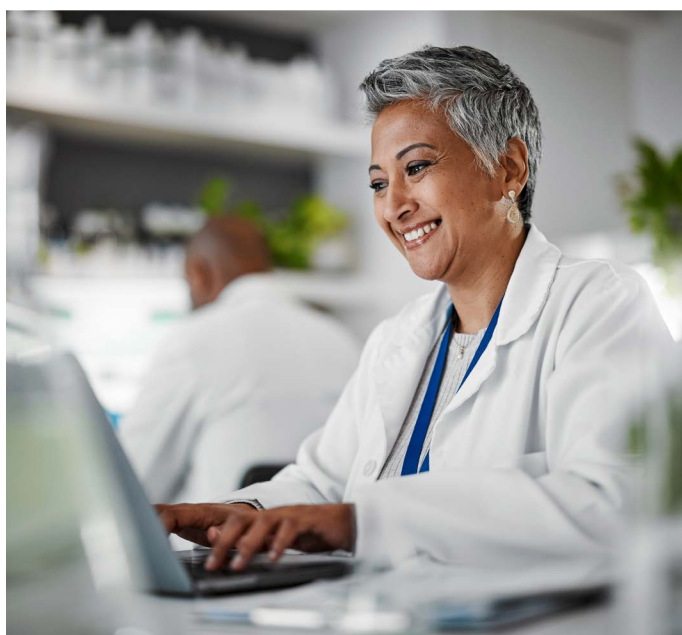
- ✔ There was no difference in treatment access by neighborhood poverty level.
- ✔ A greater percentage of people with mpox who identified as white received treatment (39%) than people who identified as Black or Hispanic (31%).
- ✔ Boroughs with a greater proportion of nonwhite New Yorkers and fewer treatment providers had disproportionately low rates of treatment initiation among residents who had mpox.

If treatment data had not been crossmatched with case data, these disparities would not have been apparent.

The NYC Health Department performed targeted outreach to health care providers in identified neighborhoods to encourage the prescribing of tecovirimat and address barriers to lifesaving therapy. The NYC Health Department also expanded the capacity to prescribe tecovirimat in its Sexual Health Clinics, which serve a high proportion of Hispanic patients and non-Hispanic Black patients, and integrated treatment messaging into routine case investigation.

The NYC Health Department helped ensure that more than 1,300 New Yorkers were treated for mpox, which accounted for 32% of all mpox cases in NYC (a high proportion compared to many other places). This treatment helped relieve some of the difficulties people faced due to mpox and reduce the risk of complications and death. The NYC Health Department’s approach may have also helped mitigate some inequities over time through data-driven course correction and advocacy.

The NYC Health Department plans to use the lessons learned from the mpox outbreak and employ similar methods to inform future public health interventions and access to care in a data-driven, equity-centered approach.



For more information about the role of pharmacies in public health emergencies, visit [nyc.gov/health/hospitalready](https://nyc.gov/health/hospitalready) and click **Pharmacies**.

**Reference:** Lash MK, Latham NH, Chan P, et al. Racial and Socioeconomic Equity of Tecovirimat Treatment during the 2022 Mpox Emergency, New York, New York, USA. *Emerging Infectious Diseases*. 2023;29(11):2353-2357. doi:10.3201/eid2911.230814

This story has also been submitted to the Council of State and Territorial Epidemiologists to include in their “Stories from the Field” publication.