Mpox rapid response in Wayne County, Michigan



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CATEGORY: Epidemiology and Laboratory Capacity (ELC)

The Wayne County Public Health Division (MI) utilized ELC-funded staff to support their mpox disease investigation processes. They have been able to maintain low levels of mpox incidence compared to similar counties, facilitate the delivery of vaccines and treatment to healthcare providers, and maintain routine operations of surveillance and response to other conditions.





The "What"

Wayne County Public Health Division (WCPHD) received notice of the county's first 'suspect' mpox case on 06/24/2022. Due to the re-emerging and unprecedented nature of this global outbreak, as well as initial delays in testing, WCPHD immediately acted to fully investigate all 'unknown' and 'suspect' cases reported into the Michigan Disease Surveillance System (MDSS) in the jurisdiction, regardless of the availability of or status of test results.

To do this, WCPHD utilized Epidemiology and Laboratory Capacity for the Prevention and Control of Emerging Infectious Diseases (ELC) cooperative agreement funded COVID-19 Epidemiologists, Case Investigators, and Contact Tracers to support their disease investigation processes (e.g., interviewing; soliciting close contact(s) details; and providing education and guidance for testing, treatment, isolation, and limiting spread within their households), monitor and provide guidance to close contacts, and initiate timely post-exposure prophylaxis (PEP). In addition, added emergency preparedness capacity was critical in securing treatment from the strategic national stockpile and facilitate a process to quickly distribute TPOXX to local healthcare providers and patients. As of June 2023, there have been zero (0) deaths attributed to mpox in Wayne County, and zero (0) close contacts monitored by WCPHD for mpox have converted into cases themselves.

The "So What"

As of 06/06/2023, WCPHD has completed a total of 157 investigations on individuals reported to their jurisdiction in MDSS for mpox. Of these 157 individuals, 53 (34%) were 'confirmed' and/or 'probable' cases. While it is the second largest local health jurisdiction by population in the state of Michigan, WCPHD currently has the third highest number of mpox cases in the state. Race and ethnicity data have been collected for 100% of 'confirmed' and/or 'probable' cases referred to WCPHD. WCPHD, in partnership with local providers, have administered a total of 787 doses of vaccine. There have been zero (0) deaths attributed to mpox in WCPHD.

From the disease investigation process, a total of 64 close contacts were identified and monitored for symptoms via the Outbreak Management System and encouraged to obtain PEP vaccination by the Case Investigators. At this time, zero (0) close contacts monitored by WCPHD for mpox have converted into cases themselves.

The "Now What"

WCPHD remains prepared to utilize current ELC grant funded staff to respond to an uptick in both COVID-19 cases, as well as a potential resurgence in mpox. Additionally, ELC Case Investigators are trained and prepared to respond to symptom monitoring for international travelers returning from locations with identified Ebola and/or Marburg virus outbreaks.

According to CDC modeling¹, Wayne County, Michigan is grouped as part of the 'low' jurisdictional immunity grouping and has the 9th highest overall inferred risk for recurrence of sustained transmission of mpox cases in the U.S. (51%). The CDC's estimated immunity level for Wayne County is 16% and the men who have sex with men (MSM) population at increased risk for mpox exposure is estimated to be 14,705. To quickly investigate and identify cases and limit potential spread, trained and capable ELC staff are necessary to WCPHD's response for both disease investigation and symptom monitoring of close contacts. ELC staff have allowed WCPHD to expeditiously respond to COVID-19 and mpox, while allowing other staff to remain focused on the remaining 80+ mandatory reportable conditions and pathogens.

¹Potential for Recurrent Mpox Outbreaks Among Gay, Bisexual, and Other Men Who Have Sex with Men — United States, 2023 | MMWR (<u>www.cdc.gov</u>)

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