



First H5 Influenza Detection in Wastewater in New Jersey

Date: December 13, 2024

Public Health Message Type: Alert Advisory Update Information

Intended Audience: All public health partners Healthcare providers Infection preventionists
 Local health departments Schools/childcare centers ACOs
 Animal health professionals Other: Clinical and commercial laboratories

Background:

Novel influenza viruses, primarily of avian or swine origin, differ from currently circulating seasonal influenza (H1 and H3 viruses). Standard laboratory methods cannot subtype these viruses. Monitoring for these novel viruses is crucial for public health action.

Key Points or Updates:

- H5 Detection in NJ Wastewater: As part of ongoing avian influenza A(H5N1) response efforts, the Centers for Disease Control and Prevention (CDC) and the New Jersey Department of Health's (NJDOH) Communicable Disease Service (CDS) are monitoring wastewater. On December 6, 2024, influenza A(H5) was detected in wastewater from a Monmouth County treatment plant—the first such detection at this site and in New Jersey. A subsequent sample taken on December 9, 2024, at the same site was negative. An interactive map showing influenza A(H5) wastewater detections can be found [here](#).
- Wastewater testing cannot pinpoint the H5 virus source (human, animal, bird, or animal product like milk). H5 detection in wastewater warrants further investigation but does not necessarily indicate human cases or widespread transmission.
- Similar singular detections have been seen in other eastern states and while migratory wild birds could be a possible explanation, the source remains unknown.
- There have not been any influenza A(H5) human cases, dairy cattle detections or recent domestic poultry or wild bird detections in NJ.
- There has not been any unusual human influenza activity in New Jersey, including Monmouth County. We are seeing seasonal influenza increases in Monmouth County that are consistent with the Central East region and the rest of the state for this time of the year.
- NJDOH is collaborating with the Monmouth County Health Department, the New Jersey Department of Agriculture (NJDA), and the New Jersey Department of Environmental Protection (NJDEP), and CDC to review wastewater data in combination with other human and animal surveillance data to monitor unusual increases.
- While the risk to public remains low, NJDOH will continue to monitor the situation and asks the healthcare community to remain vigilant and take the following actions.

Action Items:

- Healthcare Providers
 - Review guidance for [Evaluating and Managing Patients Exposed to Animals or Persons Infected with Novel Influenza A Viruses of Public Health Concern](#)
 - Consider the possibility of novel influenza virus infections in persons showing signs or symptoms of acute respiratory illness who have relevant exposure history.
 - Report suspected cases or laboratory test reports indicative of novel influenza (e.g., AH5, AH7, A unsubtypeable) immediately to the [local health department](#) (LHD) where the patient resides or if unknown to your LHD.
 - If LHD personnel are unavailable, healthcare providers should report suspect cases to NJDOH CDS.
- Clinical and Commercial Laboratories
 - Notify the LHD immediately if laboratory test reports are indicative of a novel strain of influenza (e.g., AH5, AH7, A unsubtypeable).
 - Review [NJDOH Influenza Testing guidance](#) and submit any specimen that is “unsubtypeable” with a molecular influenza assay that can detect currently circulating influenza A virus subtypes (i.e., “seasonal influenza” subtypes) to the NJ Public Health and Environmental Laboratories (PHEL).
- Local Health Departments
 - Report suspect cases of novel influenza immediately to CDS.
 - Complete the [novel influenza case report form](#) and send via encrypted email to the CDS Influenza Surveillance team at [cgsfluteam@doh.nj.gov](mailto:cdsfluteam@doh.nj.gov)
 - Encourage all poultry owners, whether commercial producers or backyard enthusiasts, to report sick or unexplained bird deaths to NJDA as outlined [here](#)
- Animal Health Professionals
 - Immediately report sick or unexplained deaths in domestic poultry, or suspected cases of H5N1 in livestock, to the NJDA, Division of Animal Health at 609-671-6400 or state.veterinarian@ag.nj.gov. Additional information and recommendations for veterinarians and owners of poultry or dairy cattle can be found on the [NJDA website](#)
 - Report sick or dead wild birds to the [NJ Department of Environmental Protection, Division of Fish and Wildlife](#) hotline at 1-877-WARNDEP.

Contact Information:

- New Jersey Department of Health, Communicable Disease Service (CDS)
 - Phone: (609) 826-5964 during business hours; (609) 392-2020 after hours
 - Email: cgsfluteam@doh.nj.gov

References and Resources:

- [NJDOH Novel Influenza](#)
- [NJDOH Wastewater Surveillance](#)
- [Public Health and Environmental Laboratories \(PHEL\) Influenza Testing](#)
- [New Jersey Department of Agriculture: Animal Health](#)
- [NJDA Letter to poultry owners](#)
- [NJ Department of Environmental Protection, Division of Fish and Wildlife](#)
- [New Jersey H5N1 Resources](#)
- [CDC Avian Influenza Current Situation](#)
- [CDC National Wastewater Surveillance System \(NWSS\)](#)
- [CDC NWSS Wastewater Data for Avian Influenza A\(H5\)](#)
- [USDA Detections of Highly Pathogenic Avian Influenza in Livestock](#)