



National Wastewater Surveillance System (NWSS)

# Influenza A Virus Wastewater Data

Updated June 27, 2024

## Main Findings from Wastewater Surveillance

- During the two most recent weeks, (June 9, 2024–June 22, 2024), a total of 337 of 737 sites reported data meeting criteria for analysis for influenza A virus for both weeks or for either week, and 4 (1%) sites from 3 states were at a high level (>80th percentile compared to levels recorded at that site between October 1, 2023 and March 2, 2024).

### Wastewater and the Current Outbreak of Influenza A (H5N1) in birds, cattle, and other animals:

- Current wastewater monitoring methods detect influenza A viruses but do not determine the subtype. This means that avian influenza A(H5N1) viruses can be detected but would not be distinguished from other influenza A virus subtypes.
- Wastewater testing cannot determine the source of the influenza A virus. It could come from a human or from an animal (like a bird) or an animal product (like milk from an infected cow).
- Public health officials at CDC and state and local health departments are monitoring these data. For areas where influenza A virus levels in wastewater are high, CDC works with relevant partners to better understand the factors that could be contributing to these levels.
- Efforts to monitor influenza A virus activity using wastewater data are likely to evolve as the methodologies and interpretation are evaluated and refined.
- For the latest information on H5N1, and what you can do to protect yourself, visit [H5N1 Bird Flu: Current Situation](#). For the latest information on influenza activity in people, visit the [Weekly U.S. Influenza Surveillance Report](#).

**Number of Wastewater Sites with Data Meeting Criteria for Analysis Reporting Current High Influenza A Levels in Recent Two Weeks:** 4 (1% of Total Sites)

**Number of Sites with Data Meeting Criteria for Analysis Reporting Influenza A Wastewater Data in Past Two Weeks:** 337

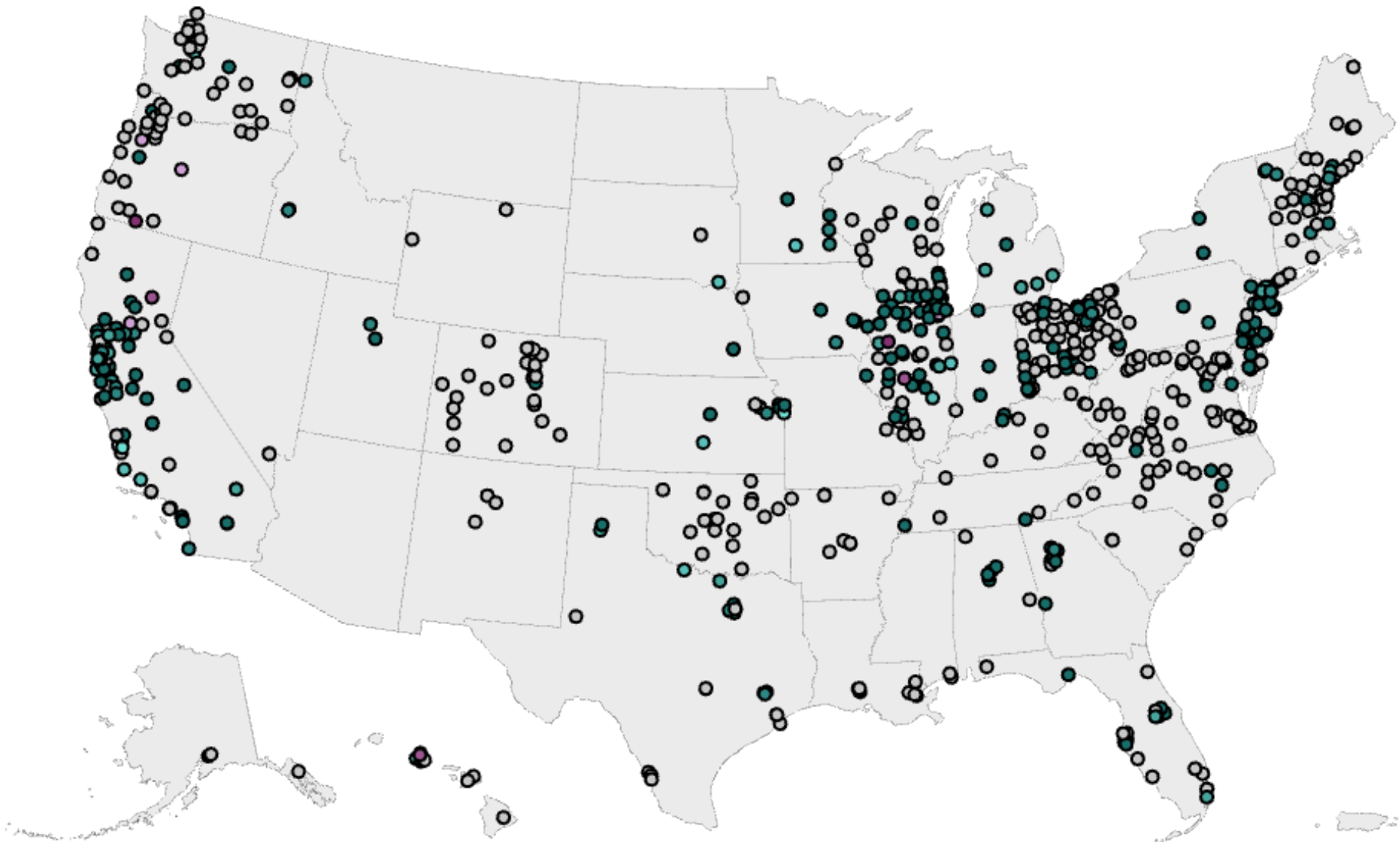
This interactive map shows current site-level data for influenza A virus in wastewater. Each dot on the map represents a wastewater sampling site. Sites are categorized based on the current level of influenza A compared to the past levels at the same site during the 2023-2024 influenza season. When influenza A virus levels are at the 80th percentile or higher, CDC will work with relevant partners to better understand the factors that could be contributing to these levels. Wastewater data for influenza A are available for the most recent two weeks:

- June 9, 2024 – June 15, 2024
- June 16, 2024 – June 22, 2024

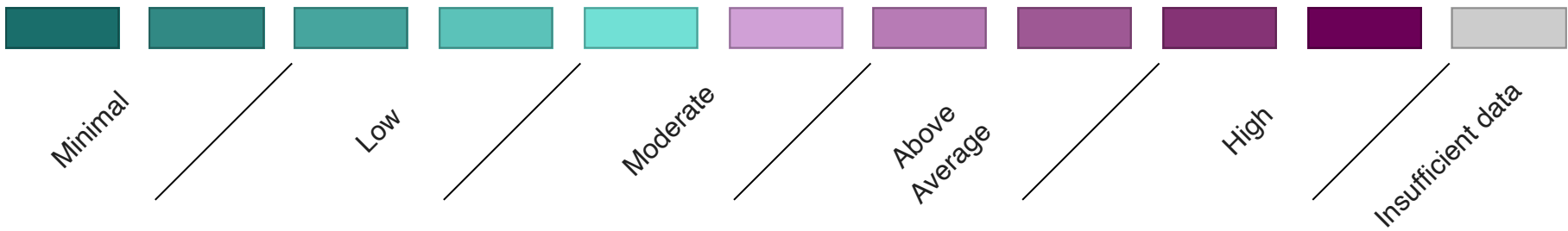
Data for the past two weeks can be viewed using the dropdown menu below

Week

Two-Week Maximum ▾



Select a color from the legend to add or remove it from the map.



All data are preliminary and may change as more reports are received. Wastewater data does not distinguish between human and animal waste or by-products.

[Download Data \(CSV\)](#)

Data Table								
Sewershed ID	Detection Classification	Jurisdiction	County	Detection Category	Percentile	Display Week	Sewershed Population	First Sampling Date
Id:100	0	California	Del Norte	Insufficient Data	Insufficient Data	Two-Week Maximum	20,000	2023-10-04
Id:1003	2	Minnesota	Goodhue	Minimal	17.78	Two-Week Maximum	20,000	2023-05-08
Id:101	0	California	El Dorado	Insufficient Data	Insufficient Data	Two-Week Maximum	30,000	2024-01-29
Id:1017	2	Minnesota	Olmsted	Minimal	10.42	Two-Week Maximum	120,000	2022-11-04

Sewershed ID ▲	Detection Classification	Jurisdiction	County	Detection Category	Percentile	Display Week	Sewershed Population	First Sampling Date
● Id:1028	1	Minnesota	Sherburne, Benton, Stearns	Minimal	0.0	Two-Week Maximum	120,000	2023-04-03
● Id:103	0	California	Humboldt	Insufficient Data	Insufficient Data	Two-Week Maximum	50,000	2023-07-30
● Id:1033	0	Mississippi	Jackson	Insufficient Data	Insufficient Data	Two-Week Maximum	20,000	2023-11-14
● Id:1034	0	Mississippi	Jackson	Insufficient Data	Insufficient Data	Two-Week Maximum	30,000	2023-11-12
● Id:106	0	California	Kern	Insufficient Data	Insufficient Data	Two-Week Maximum	170,000	2022-12-13
● Id:108-A	0	California	Kings	Insufficient Data	Insufficient Data	Two-Week Maximum	60,000	2023-12-05
● Id:108-C	1	California	Kings	Minimal	0.0	Two-Week Maximum	60,000	2023-08-07
● Id:1081	0	Missouri	Jefferson	Insufficient Data	Insufficient Data	Two-Week Maximum	50,000	2024-02-27
● Id:111	1	California	Lake	Minimal	0.0	Two-Week Maximum	10,000	2022-12-22

### About the Data:

The influenza A virus level metric describes how current influenza A virus wastewater levels at a site compare to past levels at the same site during the 2023-2024 influenza season, October 1, 2023 to March 2, 2024. This metric is represented both categorically and as a percentile.

The percentile represents the position of the current level within the historical range. A value of 0 indicates that the current level is the lowest recorded at the site, while a value of 100 indicates that it is the highest.

The wastewater level for influenza A is categorized as follows:

- **Minimal** = The site’s current level for influenza A virus is **minimal** compared to the data collected from the last influenza season. The current level is within the lowest 0-<20<sup>th</sup> percentile of influenza A virus recorded at that site or influenza A virus was not detected in the most recent sample.
- **Low** = The site’s current level for influenza A virus is **low** compared to data collected from the last influenza season. Its current level is within the 20-<40<sup>th</sup> percentile of influenza A virus recorded at that site.
- **Moderate** = The site’s current level for influenza A virus is **moderate** compared to data collected from the last influenza season. Its current level is within the 40-<60<sup>th</sup> percentile of influenza A virus recorded at that site.
- **Above Average** = The site’s current level for influenza A virus is **above average** compared to data collected from the last influenza season. Its current level is within the 60-<80<sup>th</sup> percentile of influenza A virus recorded at that site.
- **High** = The site’s level activity for influenza A virus is **high** compared to data collected from the last influenza season. Its current level is at 80<sup>th</sup> percentile or higher for influenza A virus recorded at that site.
- **Insufficient Data** = Site is testing for influenza A but does not have sufficient data for a comparison with the 2023-2024 influenza season or a site that has not submitted data in the last two weeks. For more information on these criteria, see [Data Methods](#).

Wastewater sampling sites can encompass populations of varying sizes (also known as a sewershed population) that may extend across county or state boundaries.

**What CDC is Doing with Influenza A Wastewater Data:** Wastewater surveillance complements other [existing influenza virus surveillance systems](#) to monitor influenza trends. Sites with high levels of influenza A virus (80-100<sup>th</sup> percentile) detected in wastewater are being closely monitored by CDC and its partners to identify potential contributing factors. This involves analyzing routine influenza virus and syndromic surveillance data to understand human influenza A infections and following up with the relevant jurisdiction to better understand the factors that could be contributing to these levels. Additionally, this could include reviewing other potential contributors of virus into wastewater. For instance, some states have identified non-human sources such as milk processing waste that contribute to wastewater sites.

**Wastewater surveillance is an evolving science.** Efforts to monitor influenza A virus activity using wastewater data are likely to evolve as the methodologies and interpretation are evaluated and refined.

**Data Limitations:**

- Current wastewater monitoring methods detect influenza A viruses but do not distinguish the subtype. This means that avian influenza A(H5N1) viruses can be detected but would not be distinguished from other influenza A virus subtypes.
- Wastewater testing cannot determine the source of the influenza A virus. It could come from a human or from an animal (like a bird) or an animal product (like milk from an infected cow).

**Data Source:** [CDC’s National Wastewater Surveillance System \(NWSS\)](#) has over 600 sites from a variety of partners reporting influenza A virus data to CDC.

For more information, see [Data Methods](#).

Last Reviewed: May 24, 2024

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Not helpfulVery helpful