

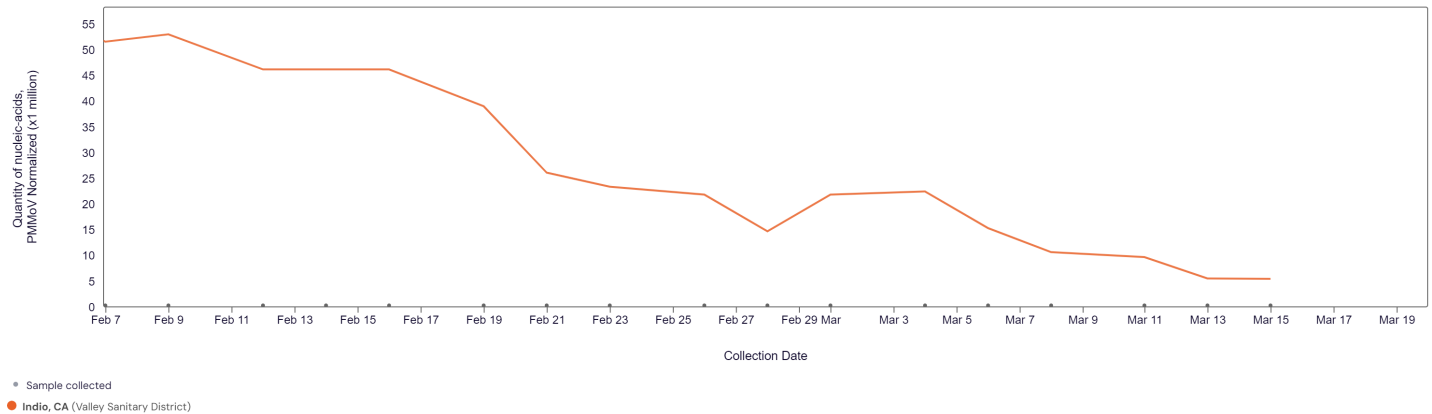
VSD Wastewater-Based Epidemiology Program Highlights

WastewaterSCAN Program

VSD is partnered with WastewaterSCAN to monitor Pathogens in the community to help guide public health responses. VSD collects grab samples from the plant primary sludge on Mondays, Wednesdays and Fridays. For more information on WastewaterSCAN visit: <https://wastewaterscan.org/>

1. **SARS-CoV-2:** a member of a large family of viruses called coronaviruses. The virus was first known to infect people in 2019 and is also called severe acute respiratory syndrome. The virus is thought to spread from person to person through droplets released in coughs, sneezes, or talking.

SARS-CoV-2, Indio, CA

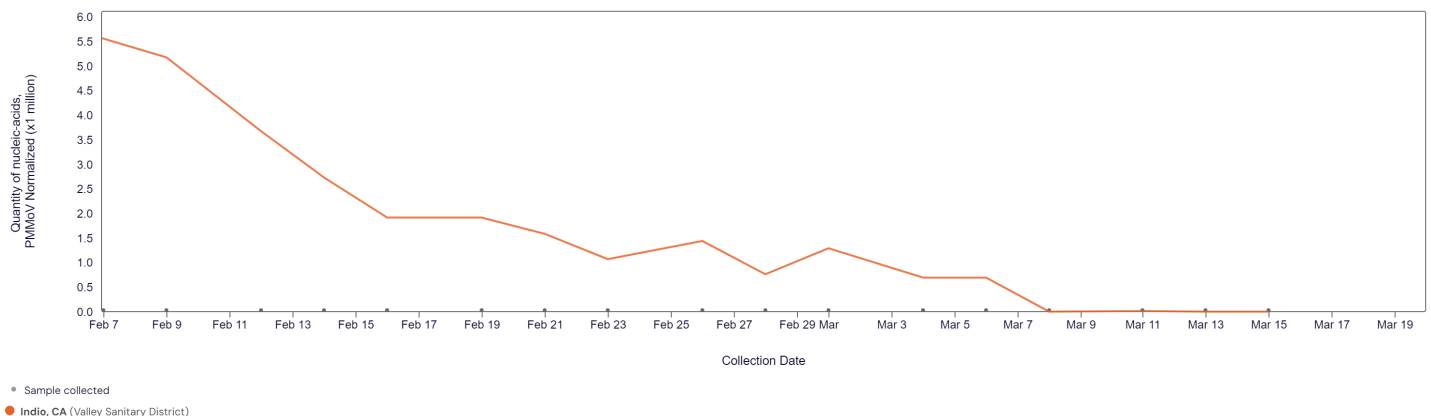


2. **Mpox:** is a rare disease caused by infection with the virus and is part of the family of viruses that cause smallpox. Mpox symptoms are like smallpox but milder and rarely fatal. Mpox is not related to chickenpox.

All samples since 09/21/23 are non-detect for the virus.

3. **Influenza A:** a seasonal respiratory virus and is the only influenza virus known to cause flu pandemics. Influenza A is usually more common and more severe than Influenza B.

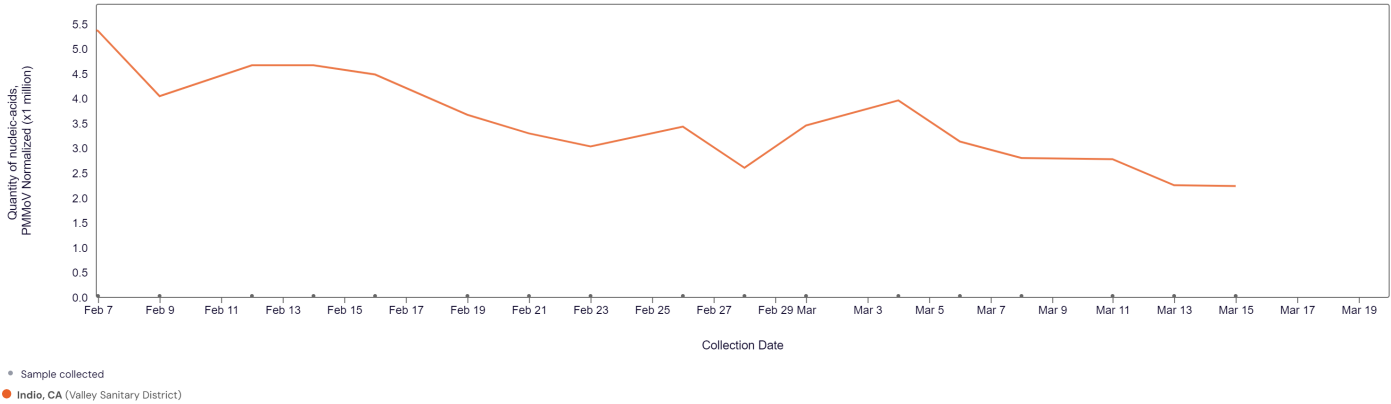
Influenza A, Indio, CA



VSD Wastewater-Based Epidemiology Program Highlights

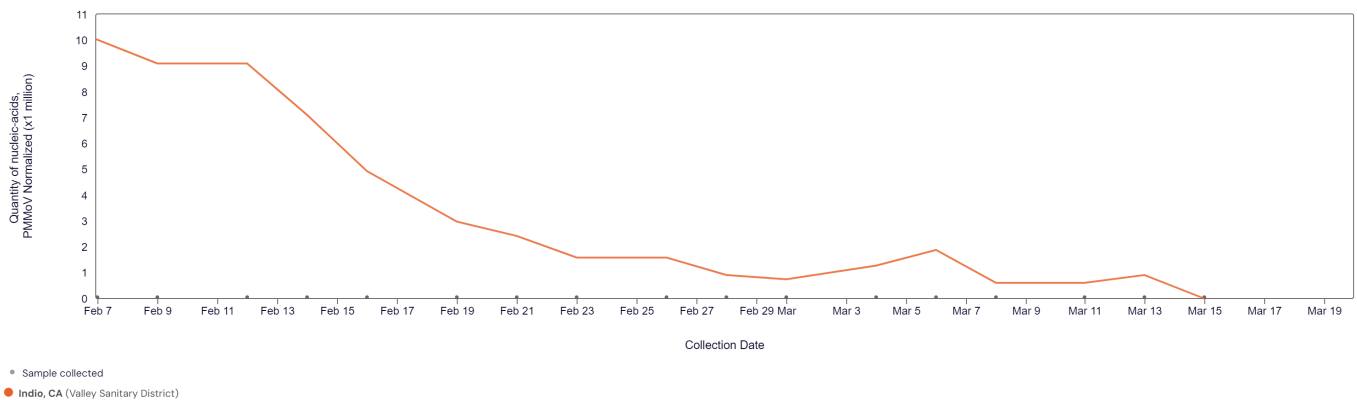
- 4. Influenza B:** a seasonal respiratory virus, along with Influenza A, is the cause of influenza outbreaks. Influenza B mutates more slowly, but was more common in the 2019-2020 flu season, particularly among young children. You can read more about it [here](#) and [here](#)

Influenza B, Indio, CA



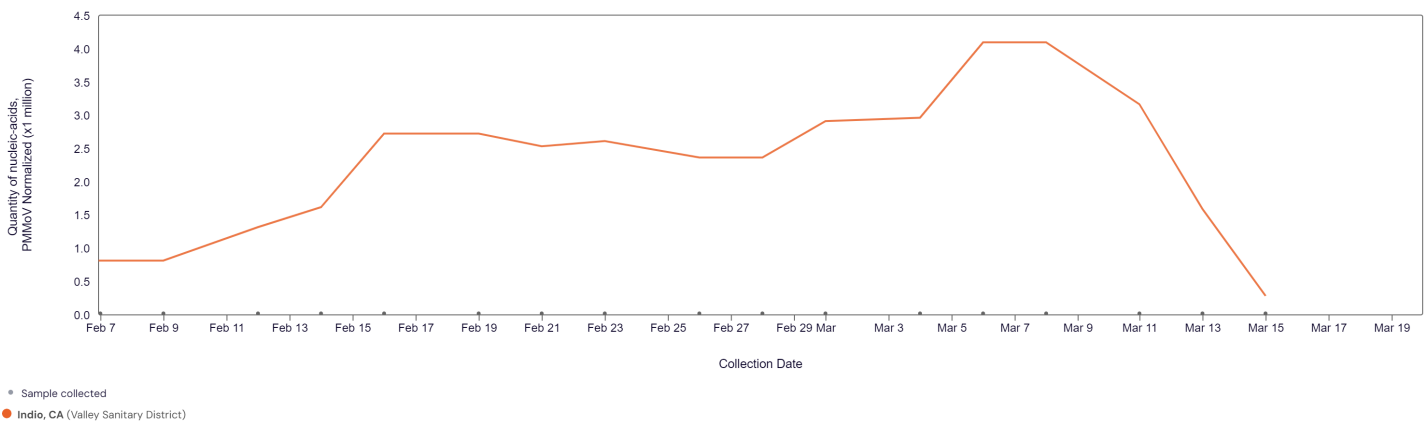
- 5. Respiratory Syncytial Virus (RSV):** is a common respiratory virus that usually causes mild, cold-like symptoms. RSV can be serious for infants and older adults. The most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (infection of the lungs).

RSV, Indio, CA



- 6. Human Metapneumovirus (hMPV):** a seasonal respiratory virus that is related to RSV. You can read more about infections caused by this virus [here](#).

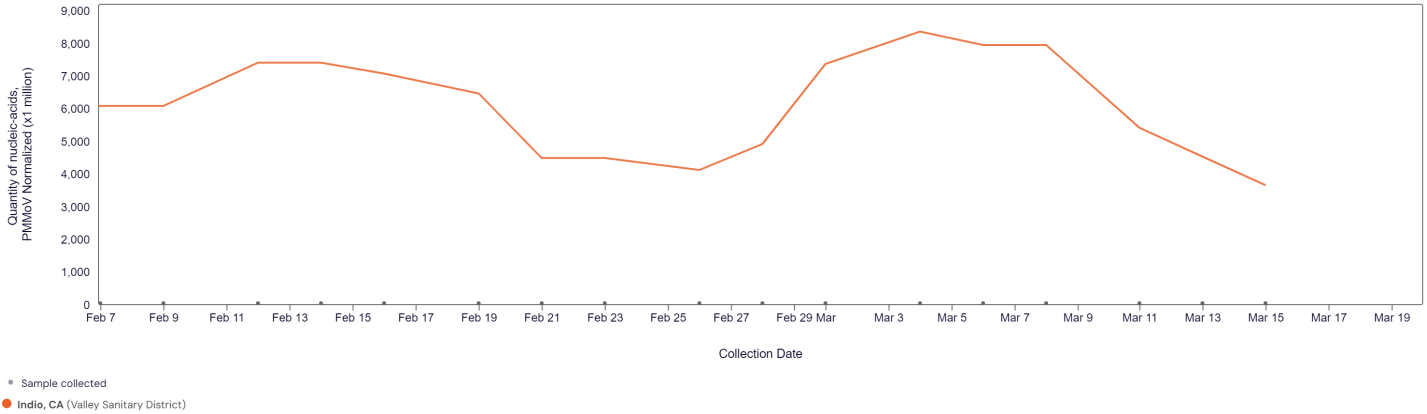
Human Metapneumovirus, Indio, CA



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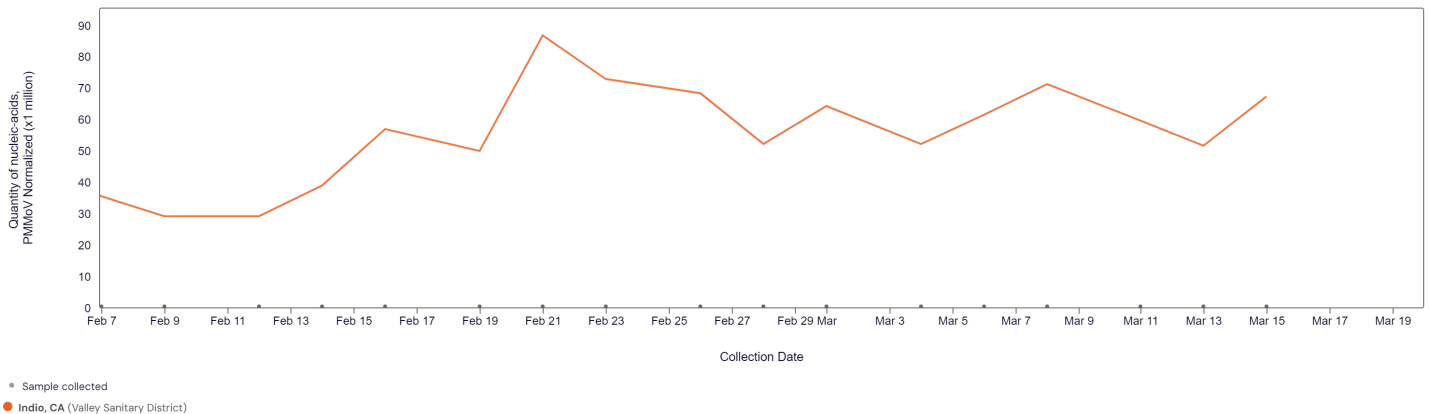
- 7. Norovirus:** a leading cause of gastrointestinal illness around the world. It has been measured in wastewater for years, the assay used will detect Norovirus GII.

Norovirus, Indio, CA



- 8. Rotavirus:** common cause of diarrheal disease among infants and young children.

Rotavirus, Indio, CA



- 9. EVD68 (Enterovirus):** causes common cold, asthma-like symptoms, wheezing, difficulty breathing, and in rare cases the polio-like disorder, acute flaccid myelitis (AFM).

All samples since 09/08/23 have been negative.

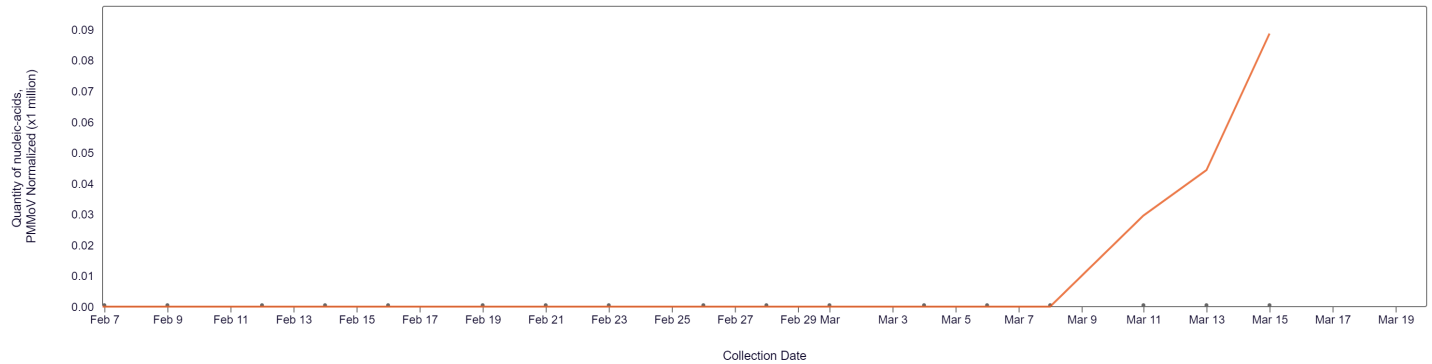
- 10. Candida auris:** emerging fungus that presents a global health threat since it is resistant to all 3 major classes of antifungal medicines. Infection can vary from superficial (skin) infections to more severe, life-threatening infections.

All samples since 09/08/23 have been non-detect.

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11. Hepatitis A: spreads from contaminated food or water or contacted with infected. Symptoms include fatigue, nausea, abdominal pain, loss of appetite and low-grade fever. Inflames the liver to cause mild to severe illness.

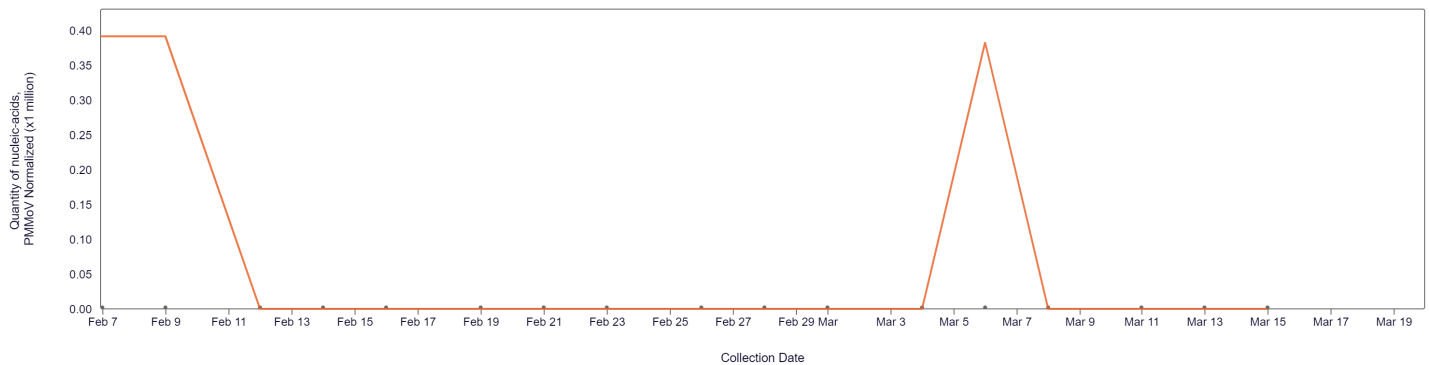
Hepatitis A, Indio, CA



* Sample collected
● Indio, CA (Valley Sanitary District)

Parainfluenza: group of viruses that cause different types of upper and lower respiratory illnesses most common in infants and young children and can occur in adults.

Parainfluenza, Indio, CA



* Sample collected
● Indio, CA (Valley Sanitary District)

VSD Wastewater-Based Epidemiology Program Highlights

Biobot Network

1. Covid-19



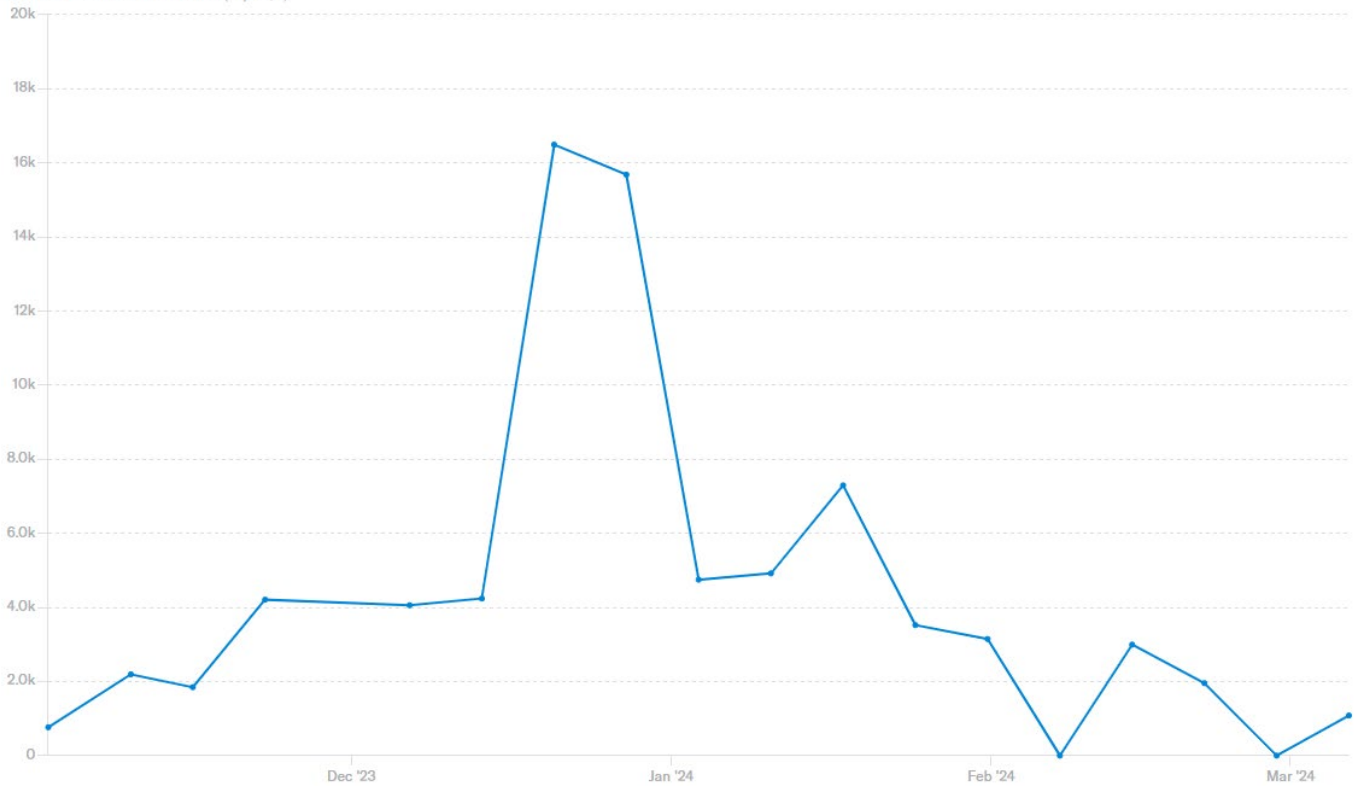
2. Respiratory Syncytial Virus (RSV)



VSD Wastewater-Based Epidemiology Program Highlights

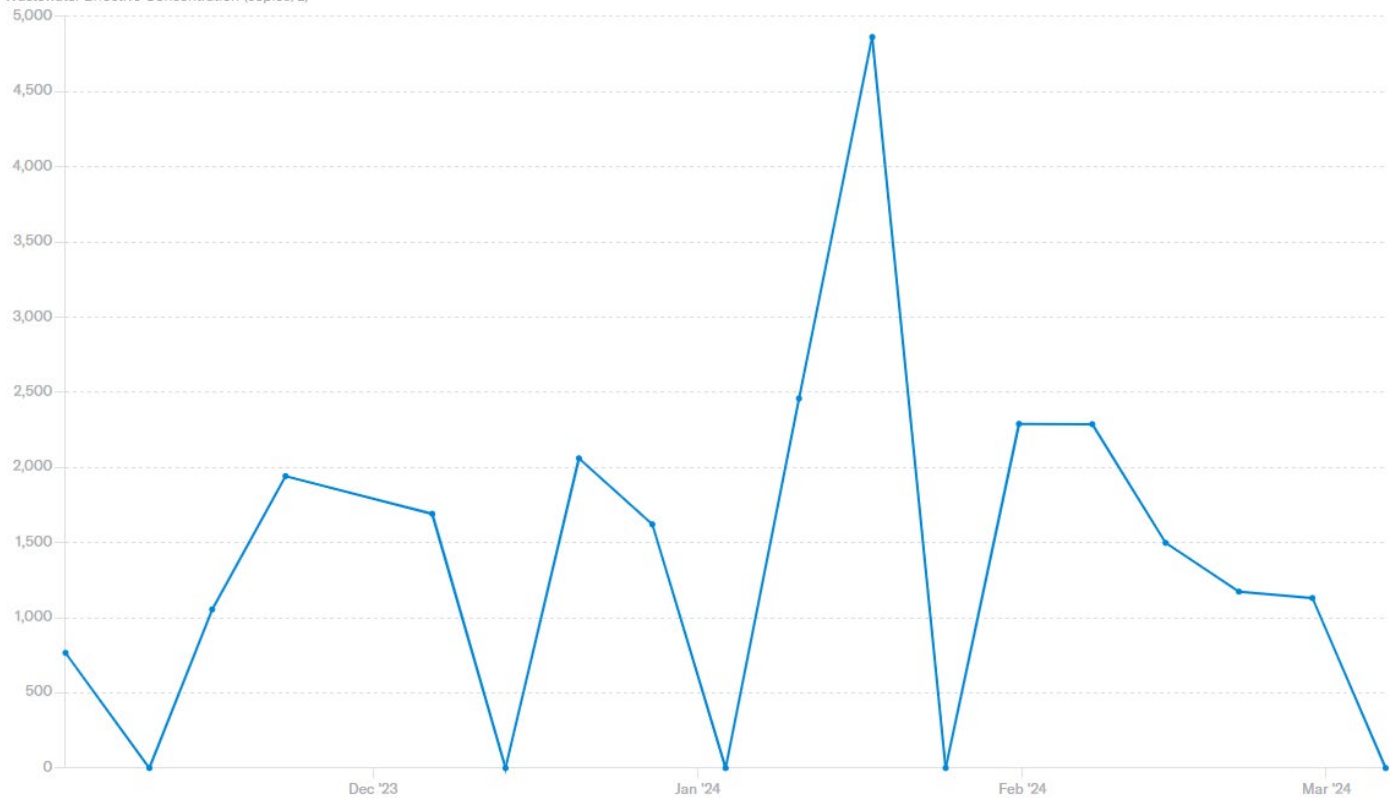
3. Influenza A

Wastewater Effective Concentration (copies/L)



4. Influenza B

Wastewater Effective Concentration (copies/L)



VSD Wastewater-Based Epidemiology Program Highlights

Biobot – NIDA Program

1. Cocaine and Benzoyllecgonine

Select Date Range

Start date → End date 

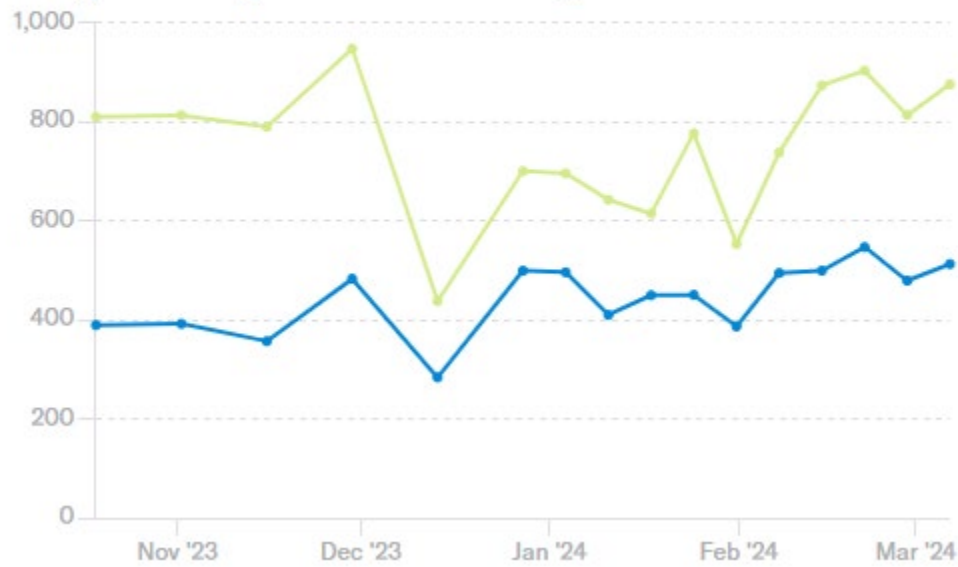


Cocaine



Benzoyllecgonine

Valley Sanitary District INF-001_Influent



2. Fentanyl and Norfentanyl

Select Date Range

Start date → End date 



Fentanyl



Norfentanyl

Valley Sanitary District INF-001_Influent



VSD Wastewater-Based Epidemiology Program Highlights

3. Methamphetamine and Amphetamine

Select Date Range

Start date



End date



Methamphetamine



Amphetamine

Valley Sanitary District INF-001_Influent



4. Naloxone and 6α-naloxol

Select Date Range

Start date



End date

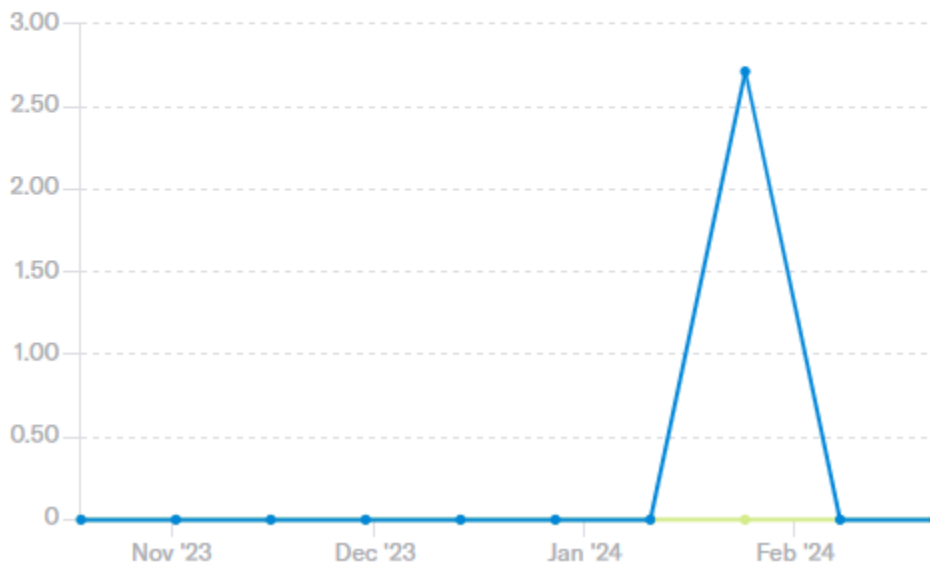


Naloxone



6α-Naloxol

Valley Sanitary District INF-001_Influent



VSD Wastewater-Based Epidemiology Program Highlights

5. Xylazine and 4-hydroxy xylazine

Select Date Range

Start date

→ End date



Xylazine



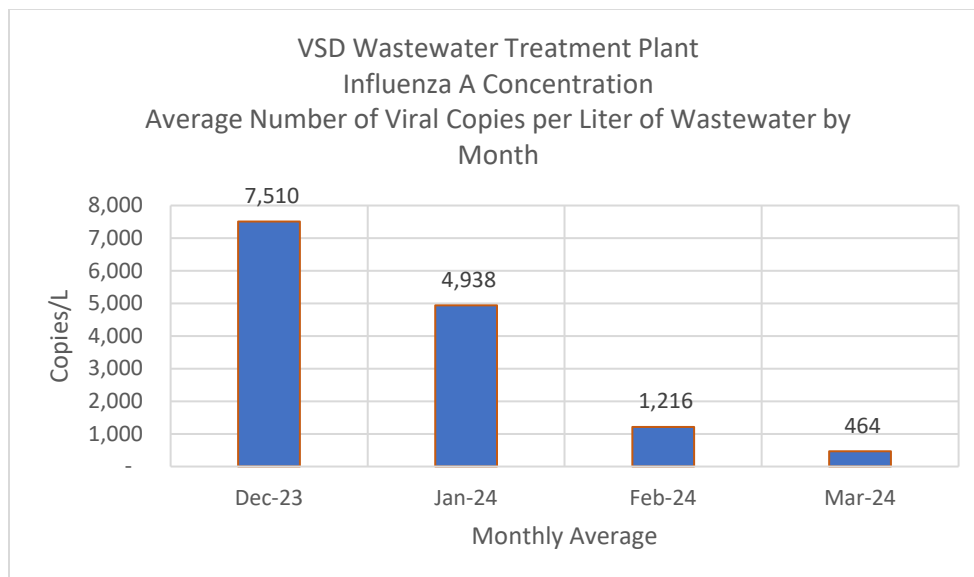
4-hydroxy xylazine

Valley Sanitary District INF-001_Influent



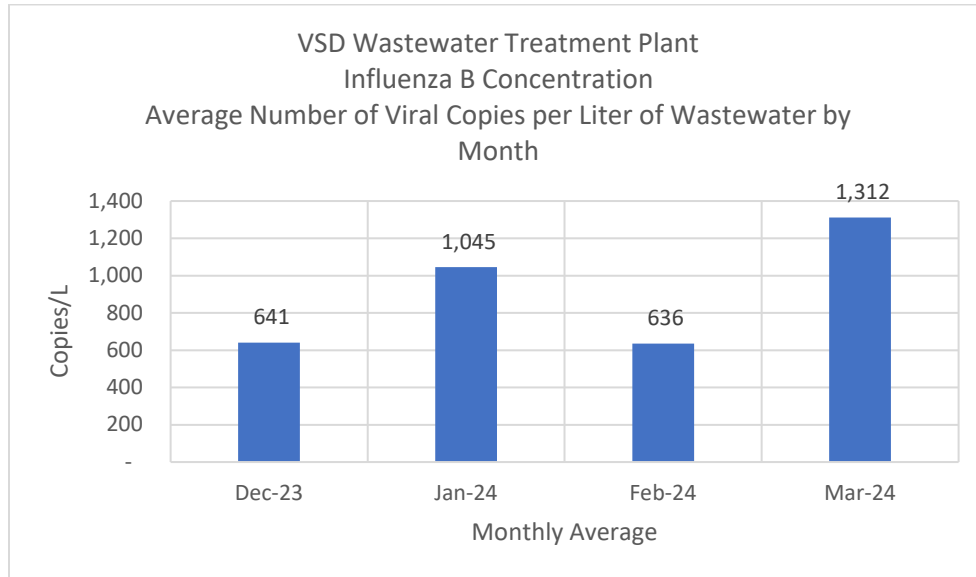
CDC – National Wastewater Surveillance Survey (NWSS) Program

1. Influenza A

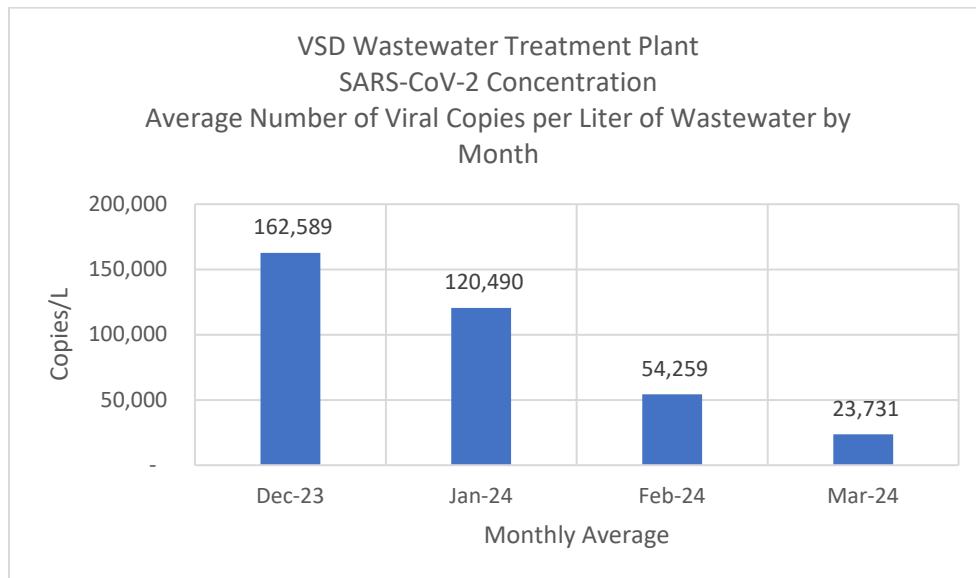


VSD Wastewater-Based Epidemiology Program Highlights

2. Influenza B



3. SARS-CoV-2



VSD Wastewater-Based Epidemiology Program Highlights

4. RSV

