

Wastewater Surveillance

Your Guide to VSD & Pathogens

May 2026



VSD Program

Wastewater surveillance is used to monitor the presence of pathogens within VSD's service community by tracking trends in virus rates. Public health officials can utilize the data to prevent and control disease within our service area.

Websites VSD Program data shared with:

- WastewaterScan
- Biobot Analytics – Pathogens
- Biobot & Office of National Drug Control Policy (ONDCP) Program
- CDC – National Wastewater Surveillance System (NWSS)
- CalSuWers & Riverside Public Health Laboratory (RPHL) Network

PodCast: [WEF "Sewer Signals"](#)



PROGRAM UPDATES

- CDC-NWSS: Unenrolled from program, participation ends 05/01
- 05/20 - CASA & California Department of Public Health (CDPH) webinar series "Wastewater Surveillance in Public Health 101" - VSD invited to be a speaker in session 3: "Sustaining Wastewater Surveillance: Lessons from the Front Lines".

Pathogen Information

Click on the Pathogen name for more information on the CDC website.

Respiratory Pathogens

SARS-CoV-2 +Variants	Severe Acute Respiratory Syndrome; spread through droplets from coughs, sneezes, or talking.
Influenza A & B	Seasonal respiratory viruses can cause flu pandemics.
Respiratory Syncytial Virus (RSV)	Common respiratory viruses cause mild, cold-like symptoms. RSV can be serious for infants and older adults. Cause Bronchiolitis (infection of small airways) and pneumonia (infection of lungs).
Metapneumovirus (hMPV)	Seasonal respiratory viruses are related to RSV.
Enterovirus (EVD68)	Causes common cold, asthma-like symptoms, wheezing, difficulty breathing and in rare cases polio-like disorder, acute flaccid myelitis (AFM).

Gastrointestinal Pathogens

Rotavirus	Major cause of GI illness (diarrheal disease) among infants and young children, vaccine preventable.
Human Norovirus GI	Leading cause of GI illness

Other Pathogens of Concern

Candida auris	Global health threat, emerging fungus resistant to all 3 major antifungal medicines. Infection can vary from superficial (skin) infections to more severe, life-threatening infections.
Hepatitis A	Contaminated food or water or contact with infected; symptoms include fatigue, nausea, abdominal pain, loss of appetite and low-grade fever. Inflames in the liver cause mild to severe illnesses. Vaccine preventable.
Mpox	Symptoms like smallpox but milder, rarely fatal.
Measles	Very contagious and can cause serious health complications. Best protection is MMR vaccine for long-lasting protection against all strains of measles.
Parvovirus	Virus, also called "fifth disease" causing a face rash.
West Nile Virus	Spread through infected mosquitoes. It starts in the summer and continues through fall.

Substance Information

*Substances are measured as the amount of the metabolite detected in the wastewater. The metabolite is the body's main metabolic product of the parent substance. The parent substance is the amount of unmetabolized portions, which may not fully reflect the actual consumption of the drug.

Parent	Metabolite	Type
Alprazolam	4-hydroxy alprazolam	High-Risk Substance
Cocaine	Benzoyllecgonine	
Fentanyl	Nor fentanyl	
Ketamine	Norketamine	
Medetomidine	3-hydroxy medetomidine	
Methamphetamine	Amphetamine	
Nicotine	trans-3'-Hydroxycotinine	
Xylazine	4-hydroxy xylazine	
Acetyl fentanyl	Acetyl Norfentanyl	Illicit Opioid
Carfentanil		
Heroin	6-MAM, Morphine	
Parafluorofentanyl		
Sufentanil		
Tiapentine	MC5	RX Opioid
Codeine		
Dihydrocodeine	Dihydromorphine	
Hydrocodone	Norhydrocodone	
Hydromorphone	Hydromorphone-3-glucuronide	
Morphine	Morphine-3-glucuronide	
Oxycodone	Nor oxycodone	
Oxymorphone		
Tramadol	N-Desmethyltramadol O-Desmethyltramadol	SUD Treatment
Buprenorphine	Norbuprenorphine	
Methadone	EDDP	
Naloxone	6 α -Naloxol	

Data Trends

WastewaterSCAN

Following Pathogens had no Detections - No graphs displayed:

Candidozyma auris **H5 influenza** **Mpox clade II/ Ib** **West Nile Virus**

Measles **Not Detected**

0 out of 5 samples in the 10 days prior to the last sample date were positive

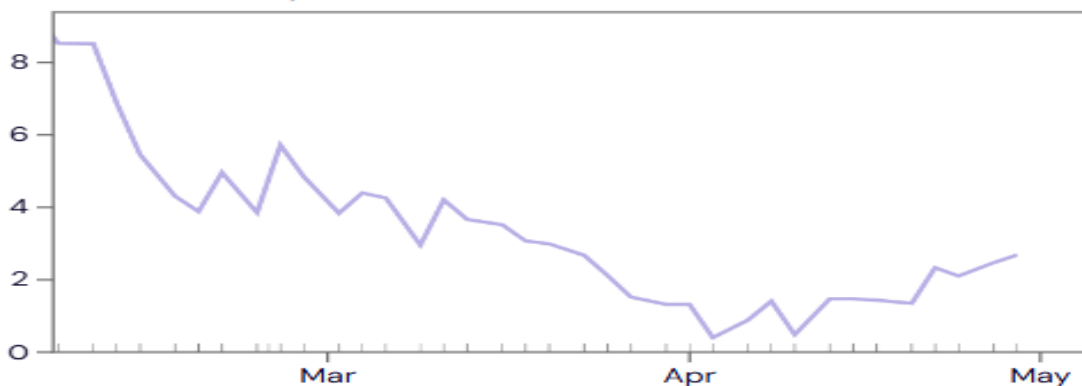


Level: ■ Not detected ■ Detected

[See data](#)

SARS-CoV-2 **Low** ⓘ

No trend in the last 21 days and low concentration

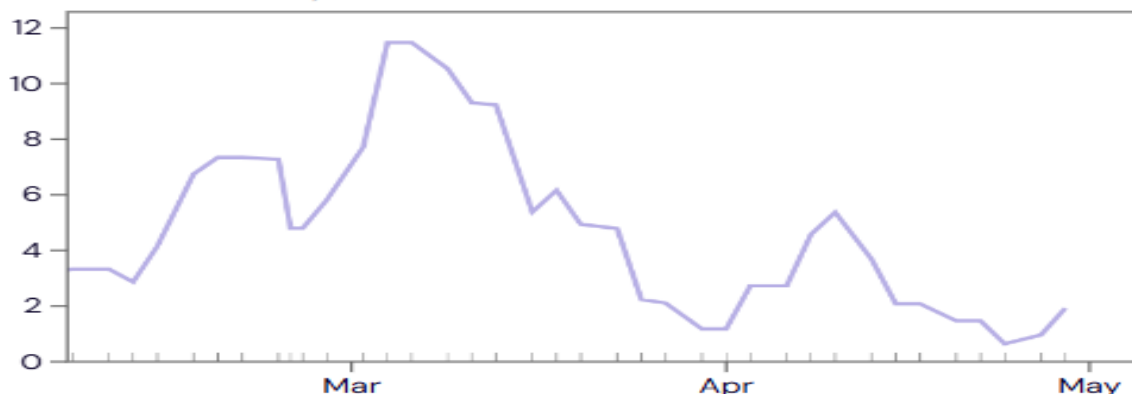


● Sample collected — SARS-CoV-2

[See details >](#)

Respiratory syncytial virus (RSV) **Medium** ⓘ

No trend in the last 21 days and medium concentration

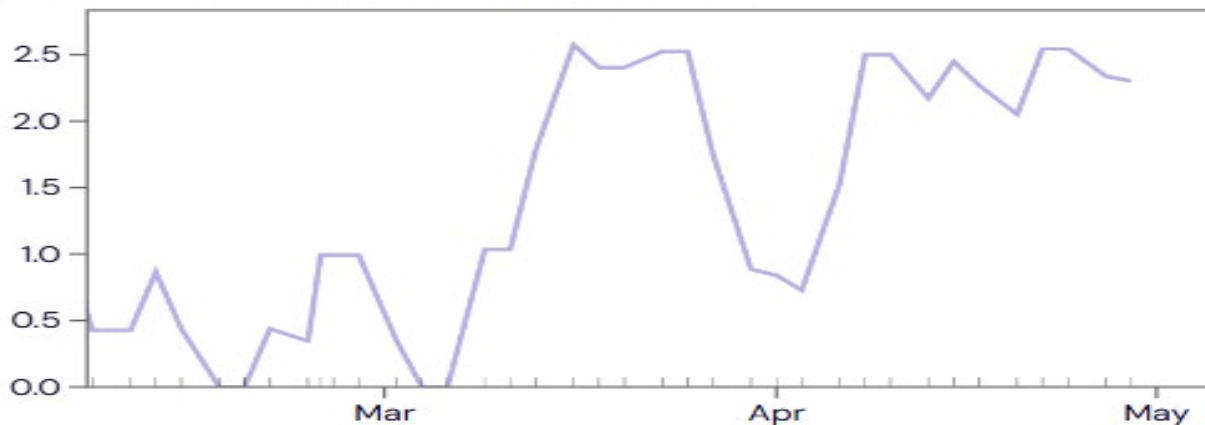


● Sample collected — RSV

[See details >](#)

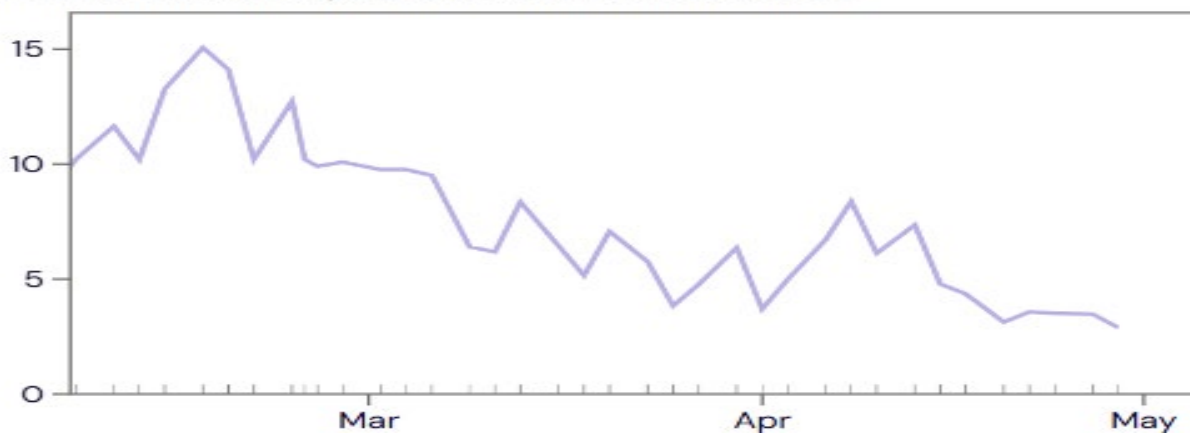
Influenza B High i

No trend in the last 21 days and high concentration



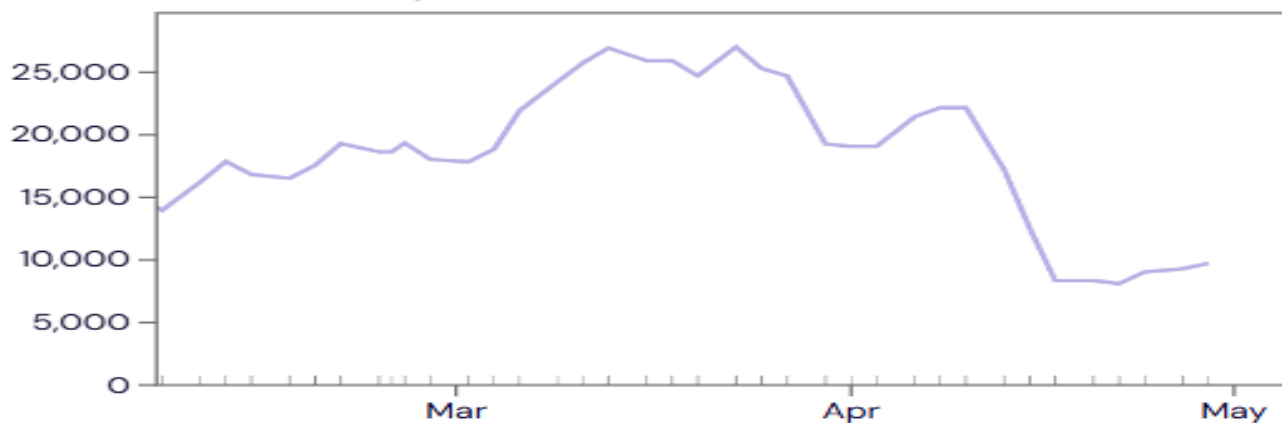
Human Metapneumovirus Medium i

No trend in the last 21 days and medium concentration



Norovirus Medium i

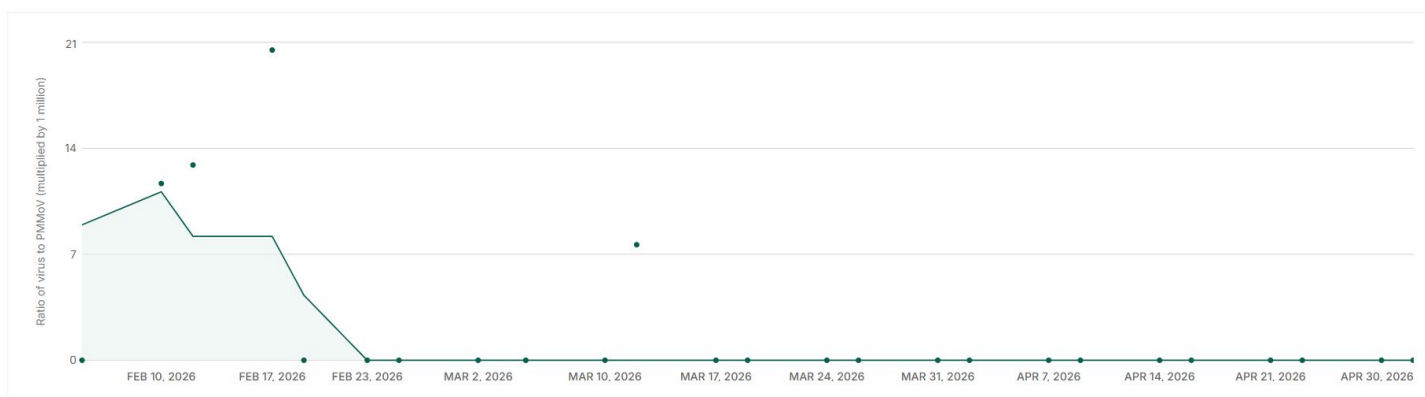
No trend in the last 21 days and medium concentration



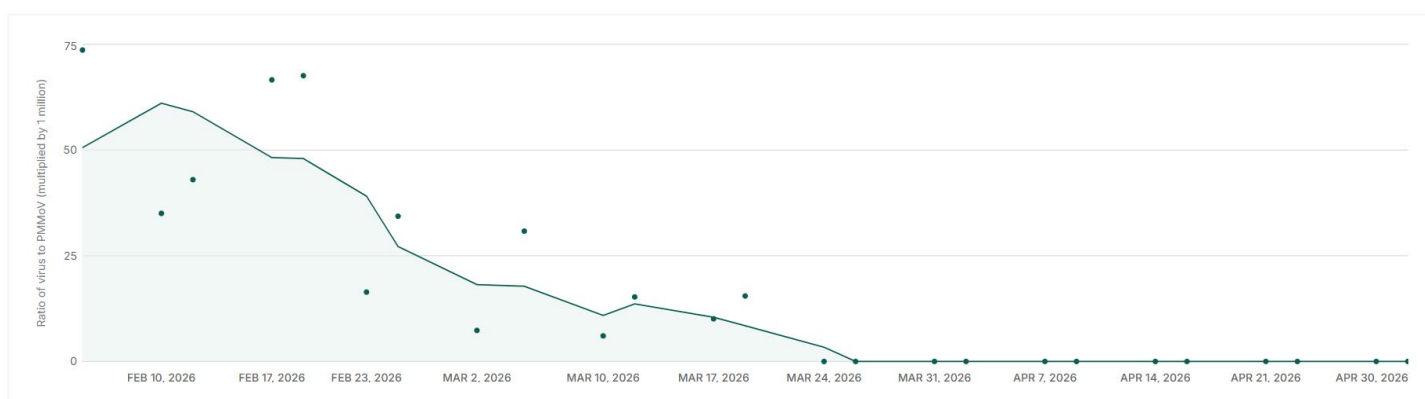
CDC-NWSS

Participation from 08/24/22 - 04/30/26 - Total 578 Samples collected

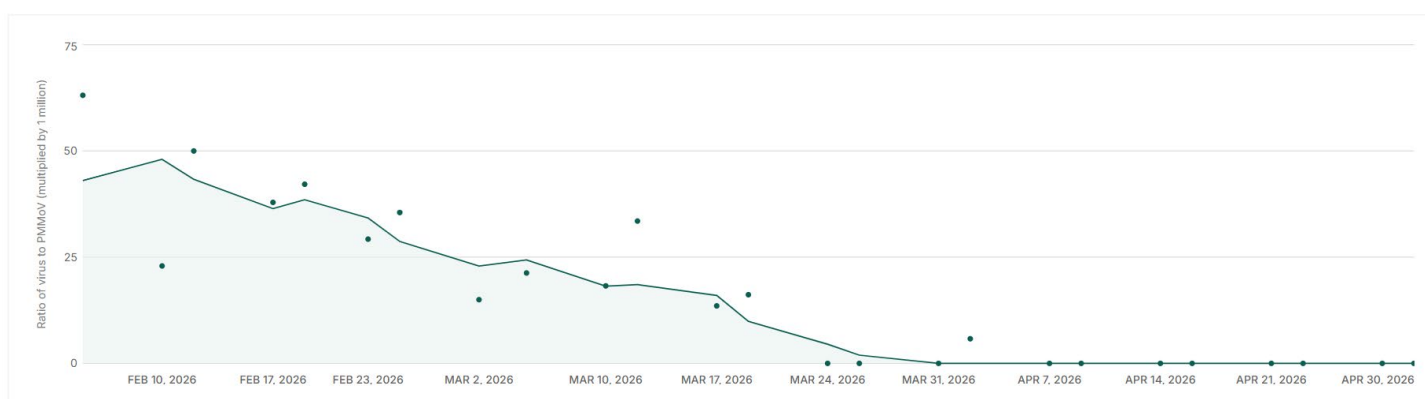
Influenza H1



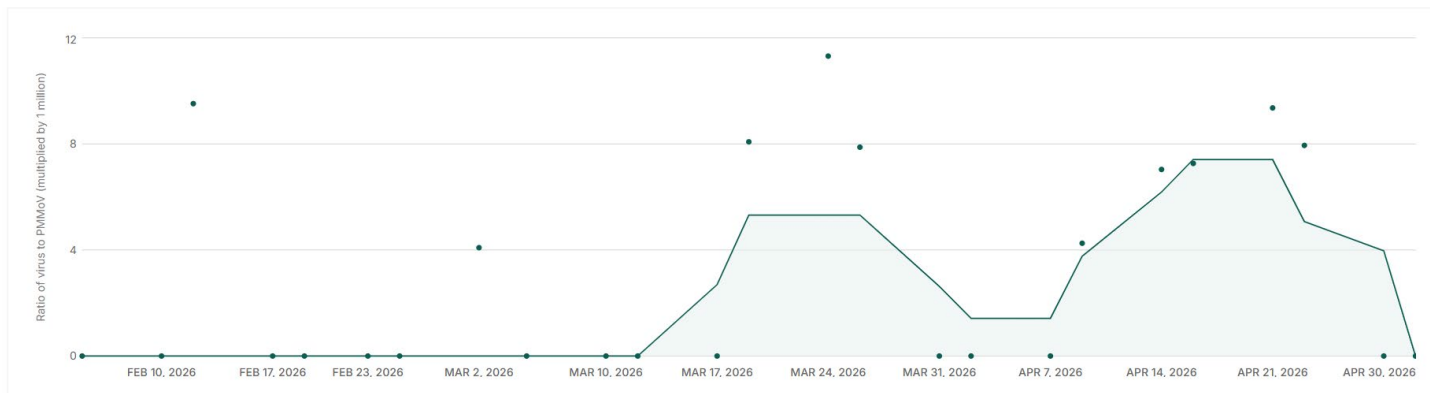
Influenza H3



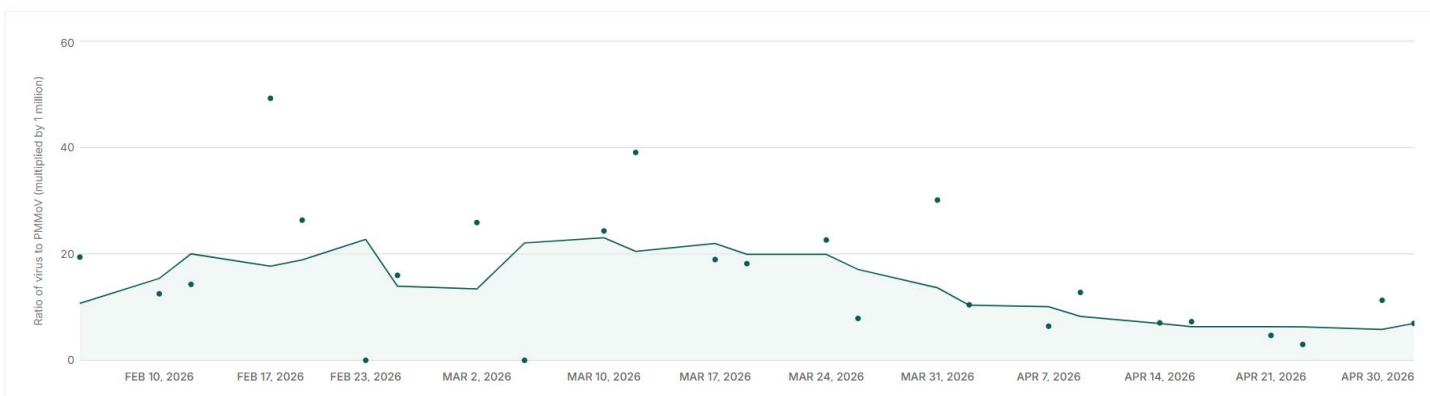
Influenza A



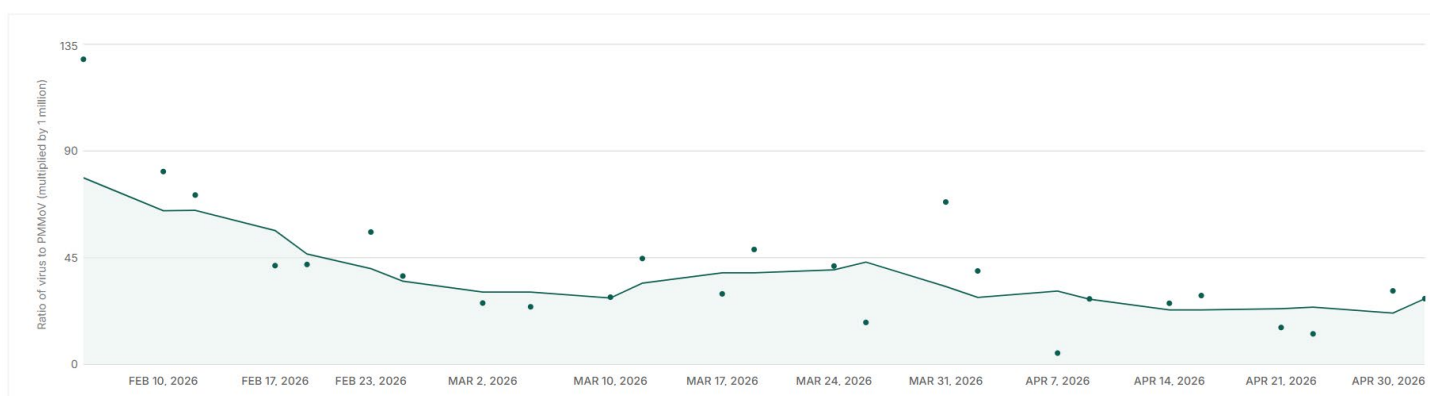
Influenza B



RSV



Sars-CoV-2 (Covid-19)



Biobot - Pathogens

Risk Tiers:

- Minimal ⓘ
- Low ⓘ
- Moderate ⓘ
- High ⓘ
- Very High ⓘ
- Severe ⓘ

SARS-CoV-2

[View Command Center](#) →

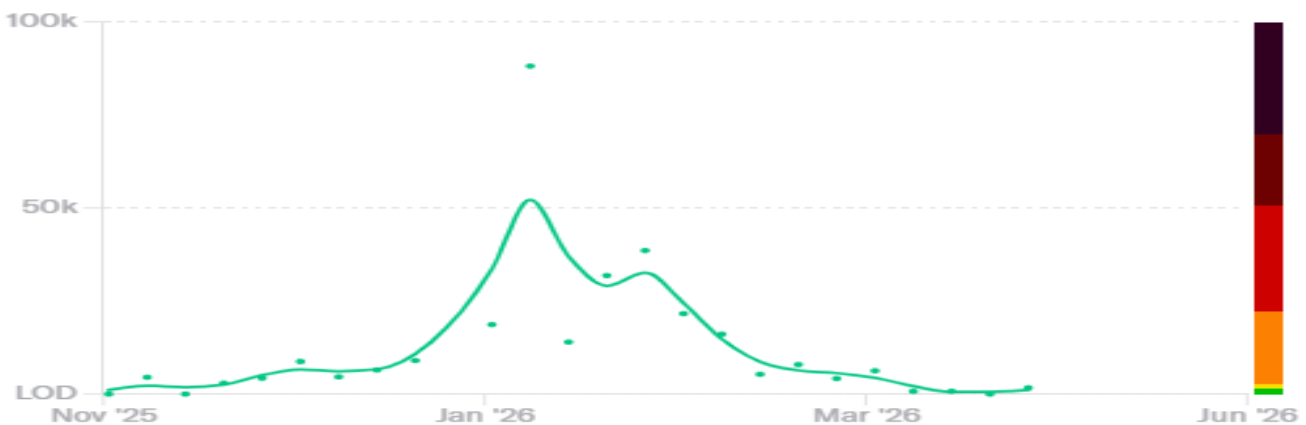
copies/L



Influenza ⓘ

[View Command Center](#) → ⓘ

copies/L



RSV

[View Command Center](#) →

copies/L



hMPV

[View Command Center](#) —

copies/L



Riverside Public Health System

Data

Target	Current Week 04.06.26	Prior Week 03.30.26	Trend
COVID-19	16.60	72.50	Decrease
Influenza A	0	0	No trend
Influenza B	0	0	No trend
RSV	28.11	277.33	Decrease

**Flow- and population-normalized concentrations (copies per 100,000 population per day).*

Data

Target	Current Week 04.13.26	Prior Week 04.06.26	Trend
COVID-19	19.47	16.60	Increase
Influenza A	10.64	0	Increase
Influenza B	0	0	No trend
RSV	28.52	28.11	Increase

**Flow- and population-normalized concentrations (copies per 100,000 population per day).*

Data

Target	Current Week 04.20.26	Prior Week 04.13.26	Trend
COVID-19	39.26	19.47	Increase
Influenza A	0	10.64	Decrease
Influenza B	10.37	0	Increase
RSV	15.66	28.52	Decrease

**Flow- and population-normalized concentrations (copies per 100,000 population per day).*

Target	Current Week 04.27.26	Prior Week 04.20.26	Trend
COVID-19	60.42	39.26	Increase
Influenza A	0	0	No trend
Influenza B	12.17	10.37	Increase
RSV	21.08	15.66	Increase

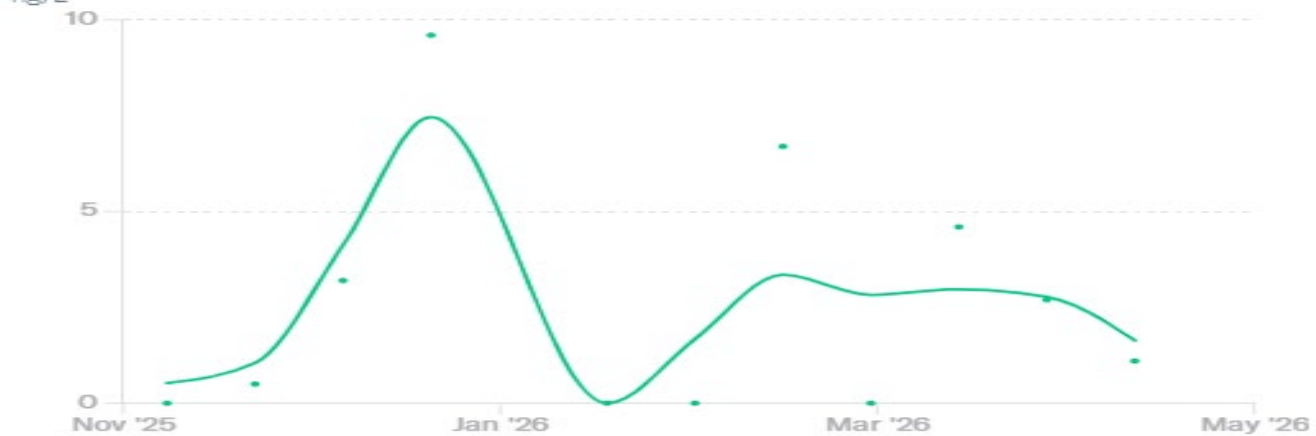
*Flow- and population-normalized concentrations (copies per 100,000 population per day).

Biobot - High-Risk Substances

Alprazolam

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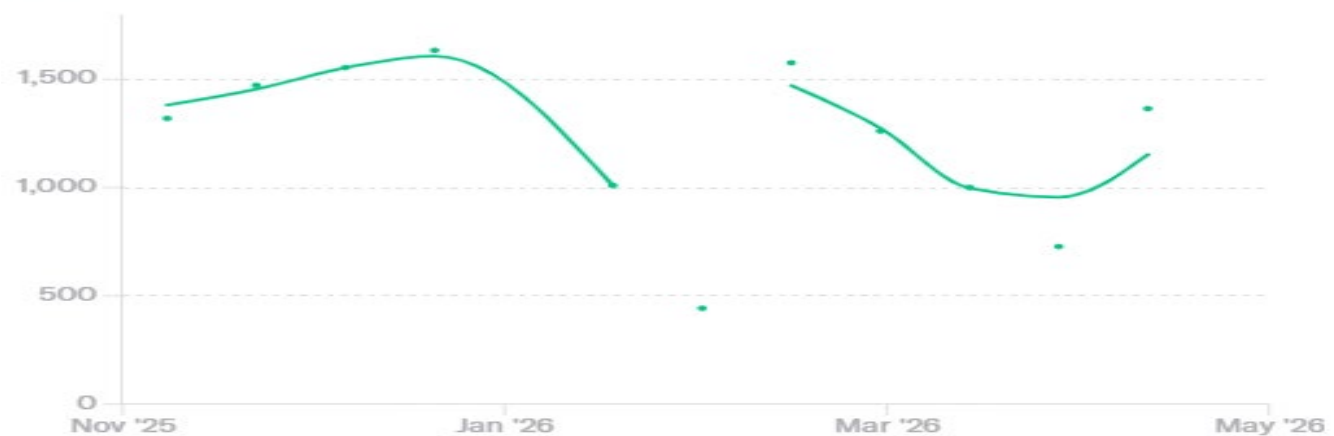
ng/L



Cocaine

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ng/L



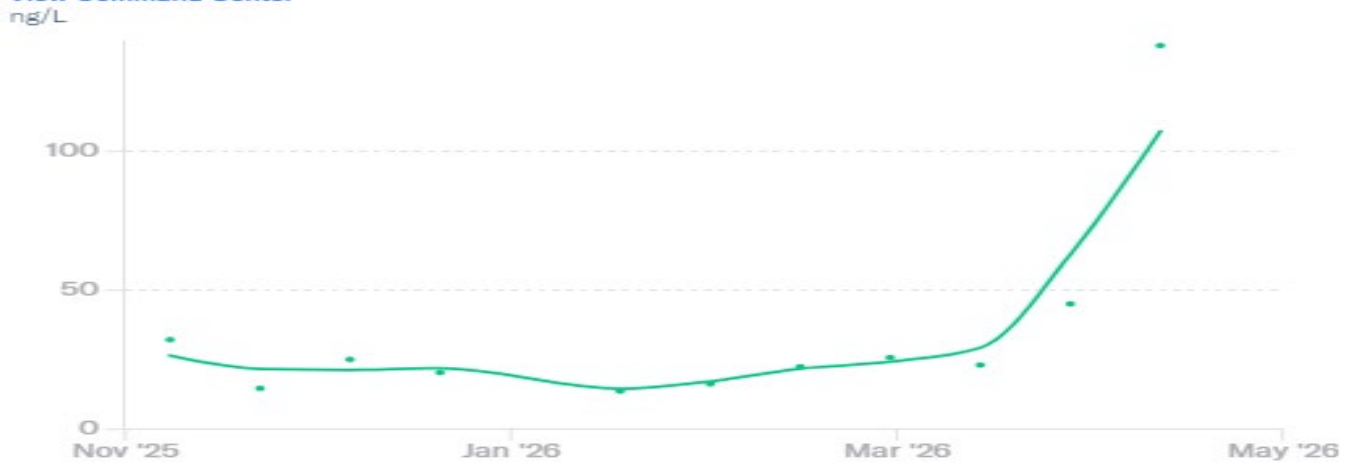
Fentanyl

[View Command Center](#) →



Ketamine

[View Command Center](#) →



Medetomidine

[View Command Center](#) →



Methamphetamine

[View Command Center](#) →

ng/L



Nicotine

[View Command Center](#) →

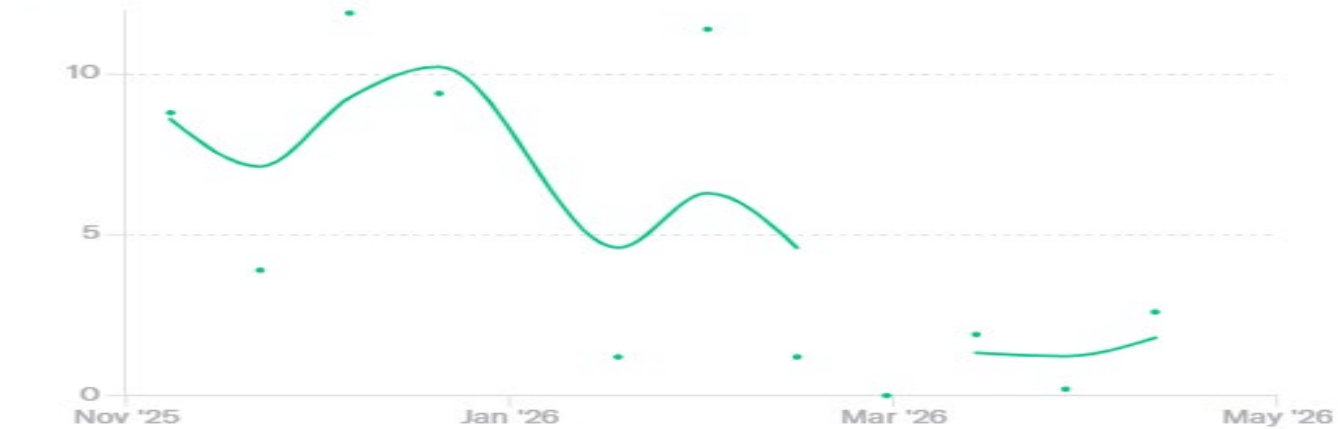
ng/L



Xylazine

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ng/L



Acetyl Fentanyl

[View Command Center](#) →

ng/L



Carfentanil

[View Command Center](#) →

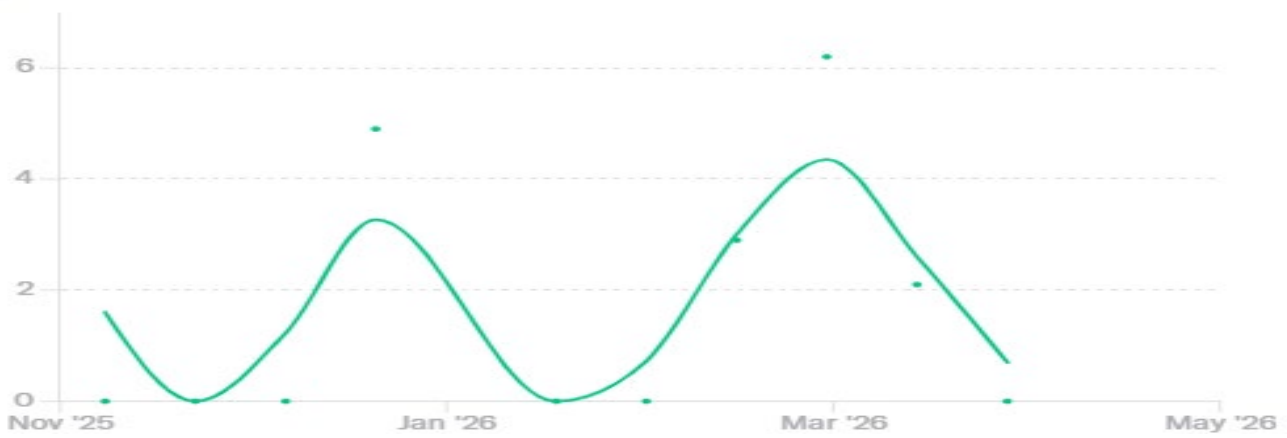
ng/L



Heroin

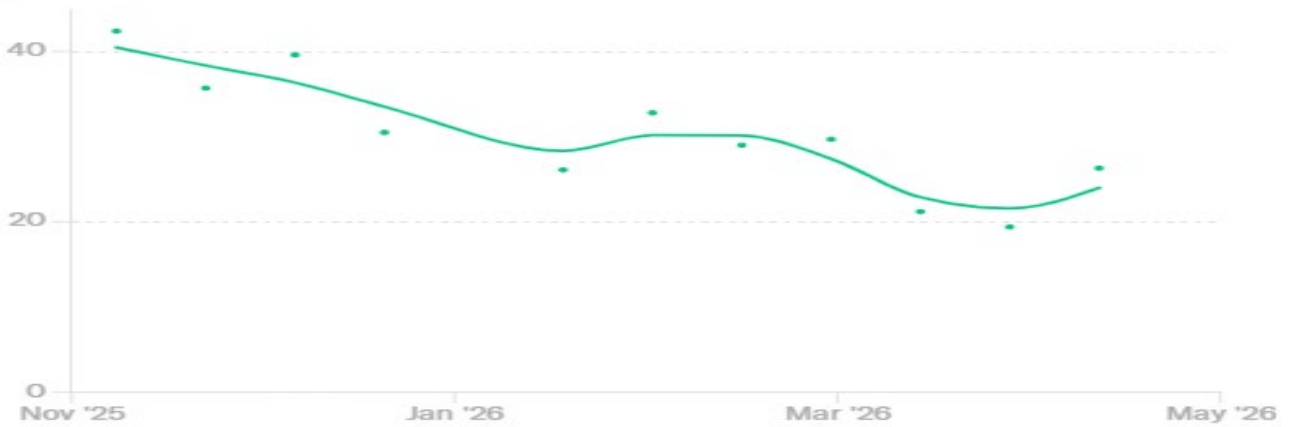
[View Command Center](#) →

ng/L



Methadone

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ng/L



Naloxone

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ng/L



Buprenorphine

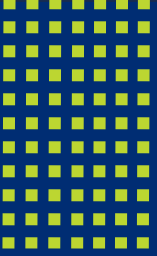
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ng/L





**COUNTY OF RIVERSIDE
WASTEWATER SURVEILLANCE PROGRAM
2026 | Q1 Quarterly Report**

Prepared for
Valley Sanitary District

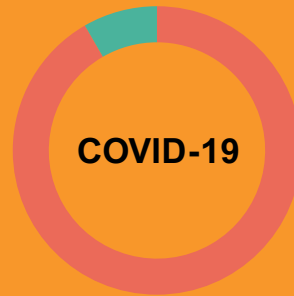
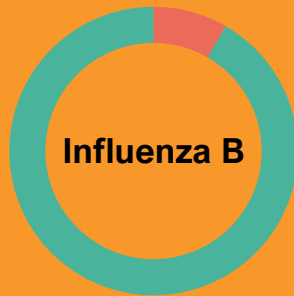
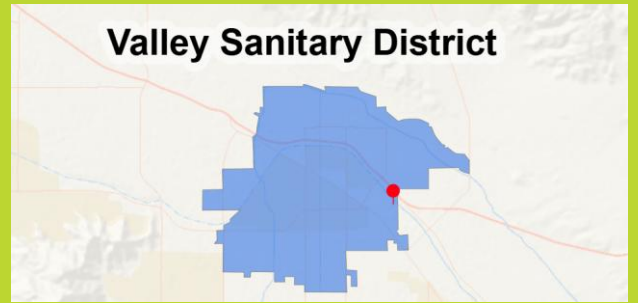


Facility Overview

Valley Sanitary District

45500 Van Buren St, Indio, CA 92201

Service population: 85,000
 Average flow rate: 6.23 ± 0.14 MGD
 Sampling completeness: 92.3% (12/13)



■ Detected ■ Not Detected

KEY MESSAGES

- Wastewater surveillance indicated declining levels of respiratory viruses as the winter season approached its end.
- Most respiratory targets remained near the county average, and RSV activity warranted continued monitoring.
- Communities are encouraged to follow Public Health guidance and take recommended precautions to protect themselves and their households.





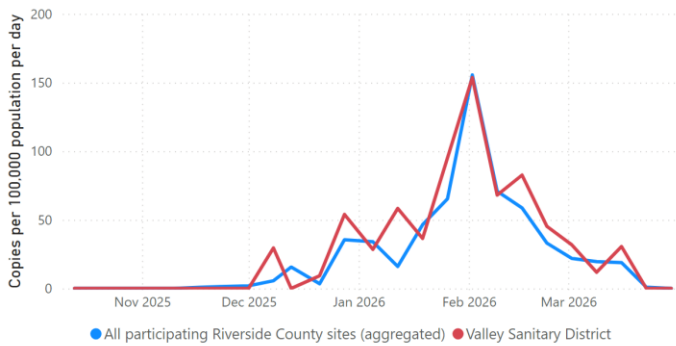
Quarterly Trend Summary

- **Influenza A:** Detected in 83.3% of samples. Levels peaked sharply in early February and then declined steadily back to near-baseline by March.
- **Influenza B:** Detected in 8.3% of samples. Activity remained minimal, with a single notable detection in early March.
- **COVID-19:** Detected in 91.7% of samples. Levels fluctuated throughout the period, with trends generally similar to the county-wide pattern.
- **RSV:** Detected in 100% of samples. Levels gradually increased from early January and showed a significant surge in late March.

Flow- and Population-Normalized Concentrations by Target, Q4 2025–Q1 2026

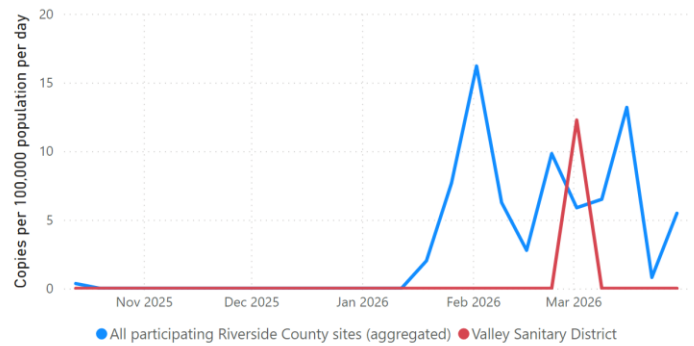
Influenza A

Flow- and Population-Normalized Concentration by Collection Date



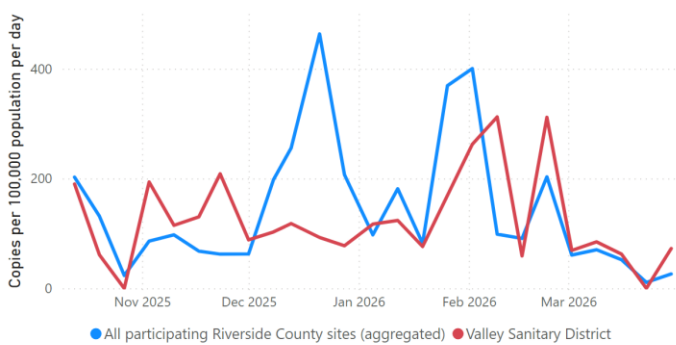
Influenza B

Flow- and Population-Normalized Concentration by Collection Date



COVID-19

Flow- and Population-Normalized Concentration by Collection Date



RSV

Flow- and Population-Normalized Concentration by Collection Date

