

Wastewater Surveillance Newsletter



July 2026

Participating Programs

Valley Sanitary District (VSD) participates in multiple Wastewater Surveillance Programs:

- [WastewaterScan](#)
- Biobot Analytics – Pathogens
- Biobot & Office of National Drug Control Policy (ONDCP) Program
- CalSuWers & Riverside Public Health Laboratory (RPHL) Network

Wastewater surveillance is utilized to monitor the presence of pathogens and elements of concern within VSD's service community by monitoring trends in data.

Public health officials can utilize the data to prevent and control contaminants & pathogens of concern within our service area.

Panelist Speaker at the CASA / CWEA Wastewater Surveillance 101 webinar series – Session #3:

<https://www.youtube.com/watch?v=DOus8D8k5xU>

Session 1 – How Wastewater Tested and Role of Treatment facilities: <https://www.youtube.com/watch?v=4XcF6sJqwCU>

Session 2 – What it is and why it matters: <https://www.youtube.com/watch?v=QdBxzX1wYh0>



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.

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.

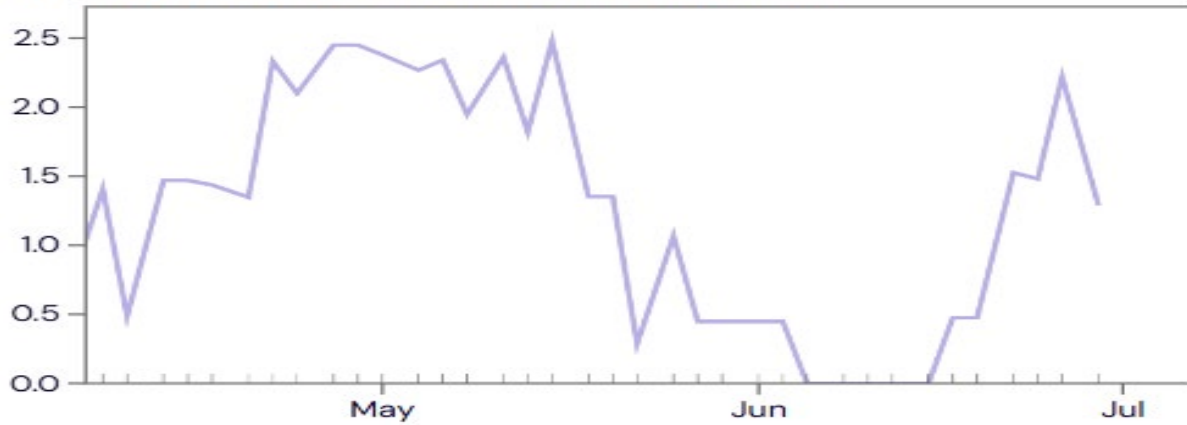
Parent	Metabolite	Type
Alprazolam	4-hydroxy alprazolam	High-Risk Substance
Cocaine	Benzoyllecgonine	
Fentanyl	Nor fentanyl	
Ketamine	Norketamine	
Medetomidine	3-hydroxy medetomidine	
Methamphetamine	Amphetamine	
Nicotine	trans-3'-Hydroxycotinine	
Xylazine	4-hydroxy xylazine	
Acetyl fentanyl	Acetyl Norfentanyl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

Data Trends

WastewaterSCAN: Pathogens

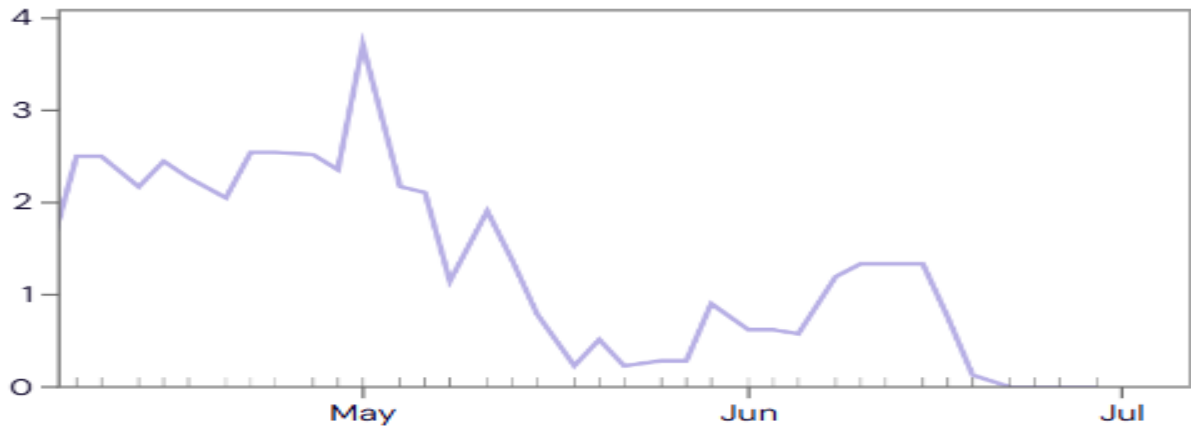
SARS-CoV-2 Medium ⓘ

Upward trend in the last 21 days and low concentration



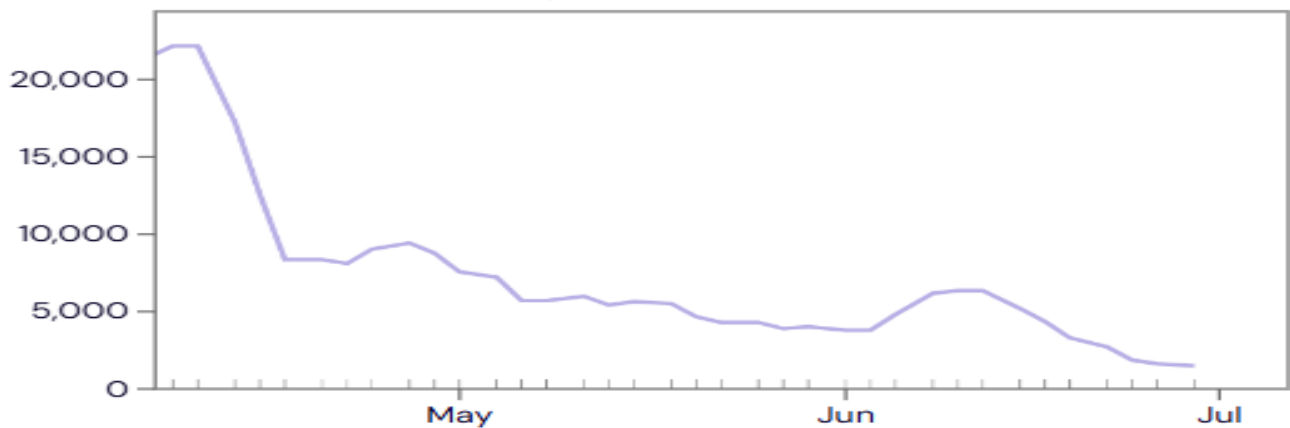
Influenza B Low ⓘ

Pathogen is seasonal and not in onset



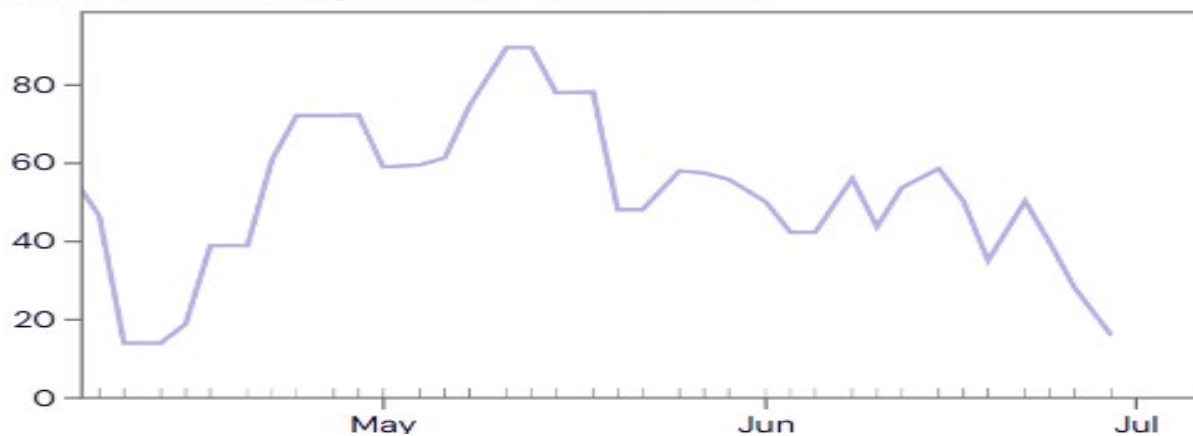
Norovirus Low ⓘ

Downward trend in the last 21 days and low concentration



Rotavirus Low

No trend in the last 21 days and low concentration



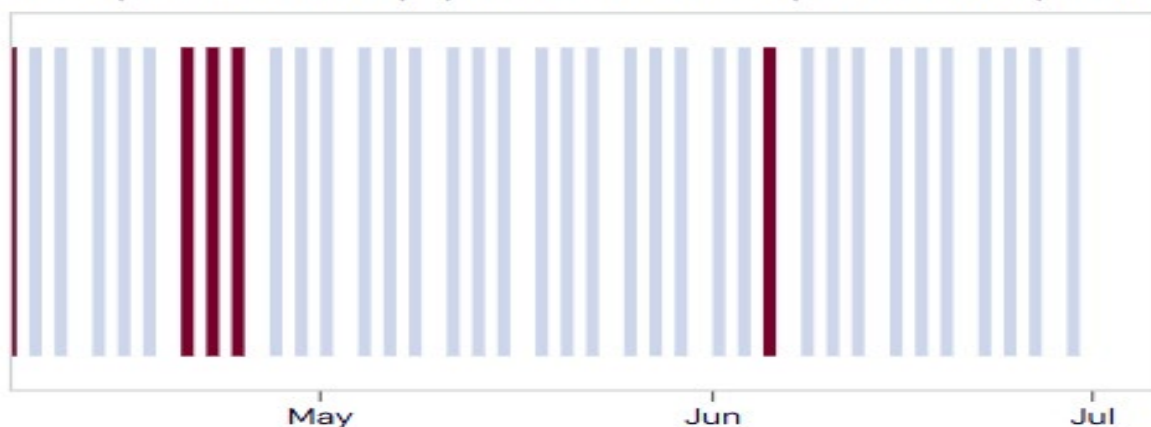
Candidozyma auris Low

1 out of 4 samples in the 10 days prior to the last sample date were positive



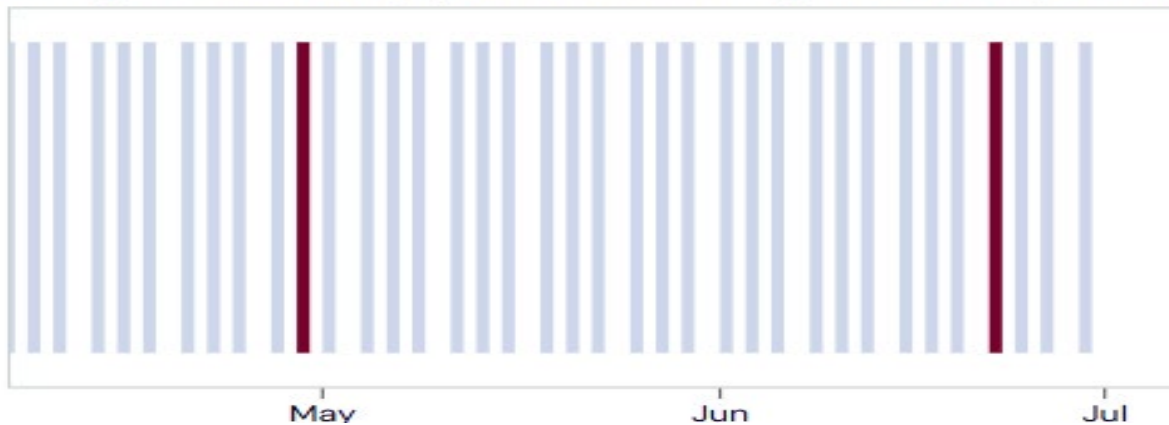
Hepatitis A Not Detected

0 out of 4 samples in the 10 days prior to the last sample date were positive



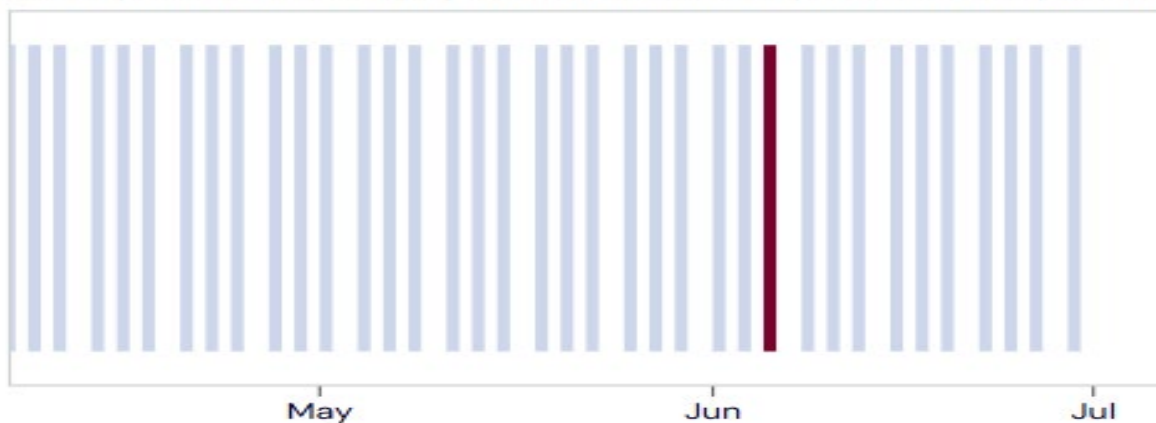
Parvovirus Low

1 out of 4 samples in the 10 days prior to the last sample date were positive



West Nile Virus Not Detected

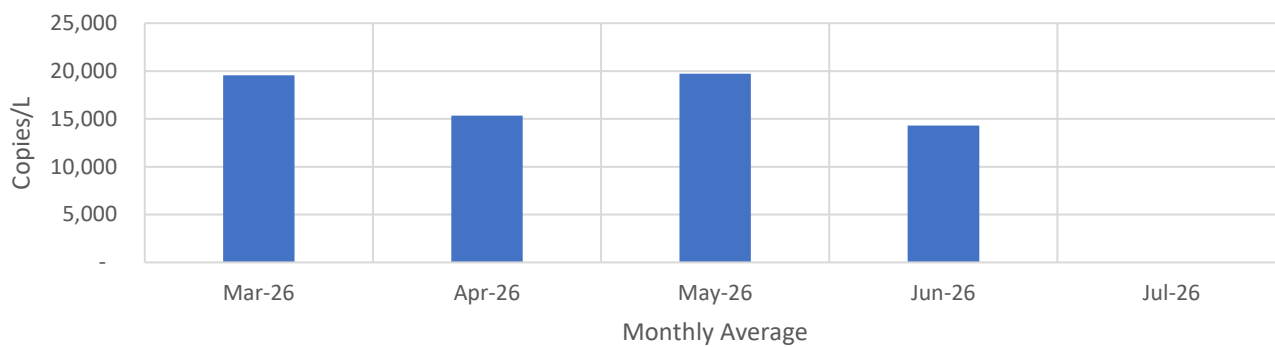
0 out of 4 samples in the 10 days prior to the last sample date were positive



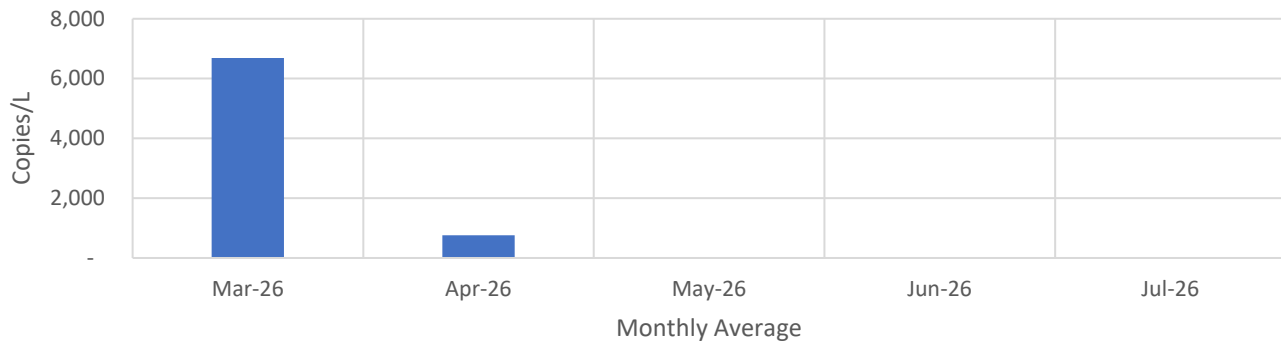
CalSuWers & RPHL: Pathogens

VSD Wastewater Treatment Plant Covid-19 Concentration

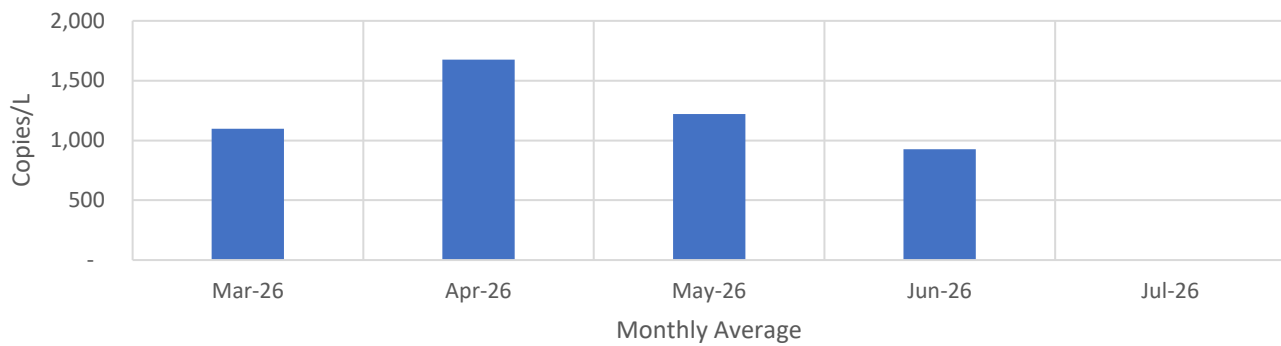
Average Number of Viral Copies per Liter of Wastewater by Month



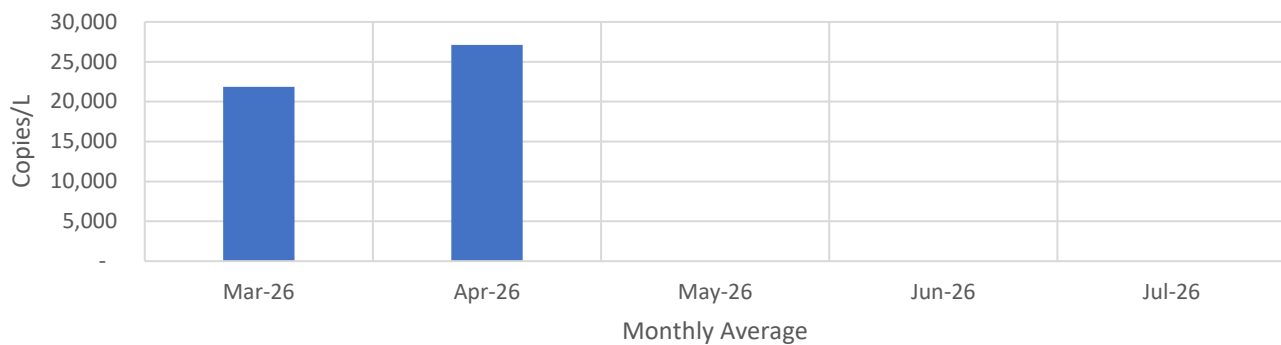
VSD Wastewater Treatment Plant
Influenza A Concentration
Average Number of Viral Copies per Liter of Wastewater by Month



VSD Wastewater Treatment Plant
Influenza B Concentration
Average Number of Viral Copies per Liter of Wastewater by Month



VSD Wastewater Treatment Plant
RSV Concentration
Average Number of Viral Copies per Liter of Wastewater by Month



BioBot: Pathogens

Risk Tiers:

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

SARS-CoV-2

[View Command Center](#) →

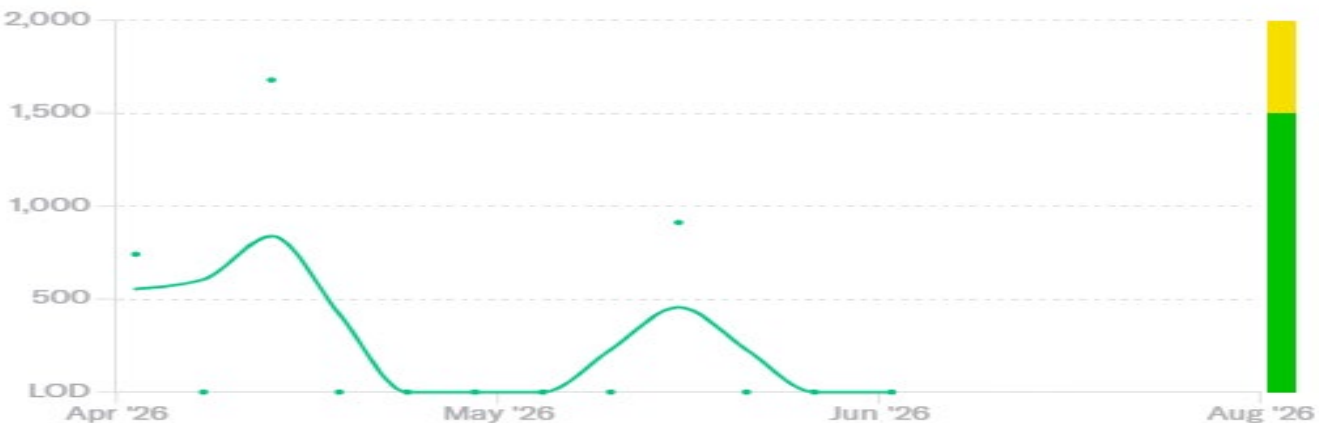
copies/L



Influenza ⓘ

[View Command Center](#) →

copies/L



RSV

[View Command Center](#) →

copies/L



hMPV

[View Command Center](#) →
copies/L



BioBot – ONDCP: Substances

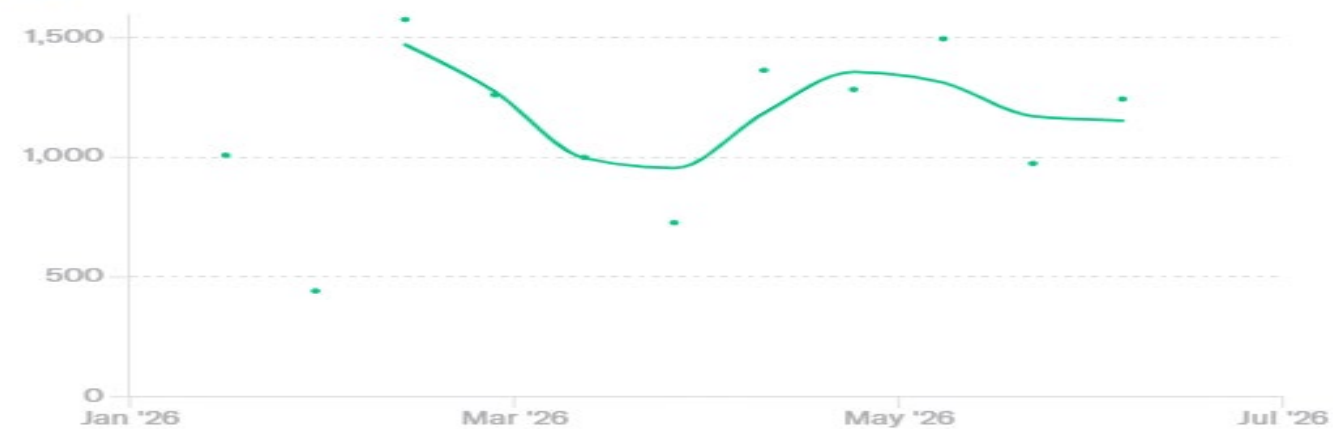
Alprazolam

[View Command Center](#) →
ng/L



Cocaine

[View Command Center](#) →
ng/L



Fentanyl

[View Command Center](#) →

ng/L



Ketamine

[View Command Center](#) →

ng/L



Methamphetamine

[View Command Center](#) →

ng/L



Nicotine

[View Command Center](#) →

ng/L



Xylazine

[View Command Center](#) →

ng/L



Acetyl Fentanyl

[View Command Center](#) →

ng/L



Heroin

[View Command Center](#) →



ng/L



Codeine

[View Command Center](#) →



ng/L



Dihydrocodeine

[View Command Center](#) →



ng/L



Hydrocodone

[View Command Center](#) →

ng/L



Hydromorphone

[View Command Center](#) →

ng/L



Morphine

[View Command Center](#) →

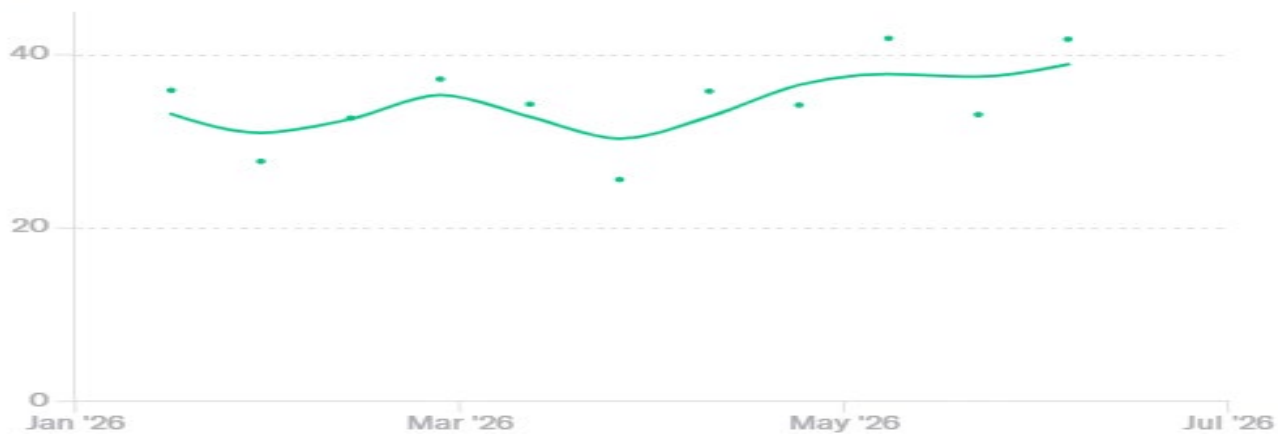
ng/L



Oxycodone

[View Command Center](#) →

ng/L



Oxymorphone

[View Command Center](#) →

ng/L



Tramadol

[View Command Center](#) →

ng/L



Methadone

[View Command Center](#) →

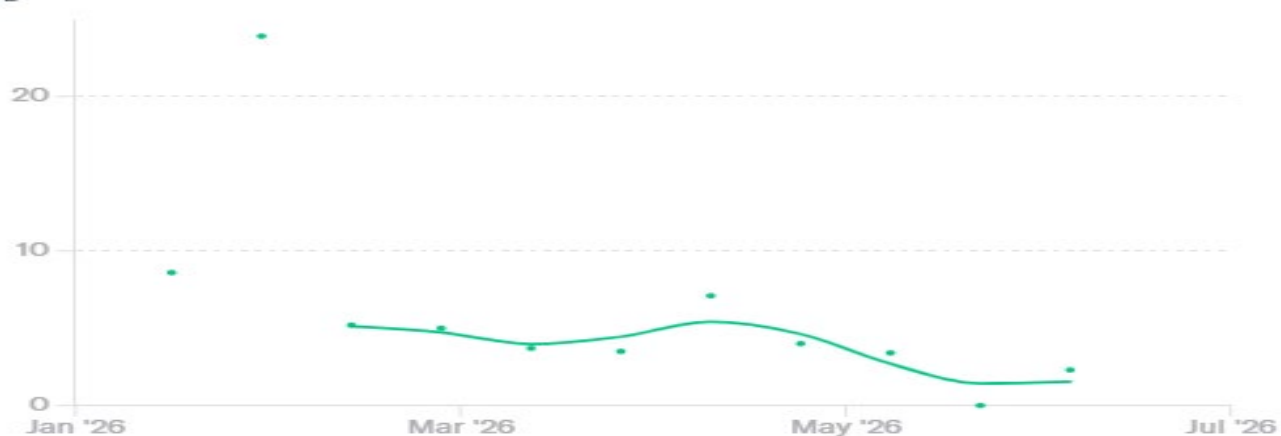
ng/L



Naloxone

[View Command Center](#) →

ng/L



Buprenorphine

[View Command Center](#) →

ng/L

