

# THE SOUTHERN NEVADA HEALTH DISTRICT'S WEEKLY WASTEWATER SURVEILLANCE REPORT

September 18, 2025

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#### **Definitions**

Clade: A group that includes a common ancestor and all its descendants.

**Dominant Variants**: Versions of a virus, gene, or trait that are currently the most widespread or prevalent in a population.

**Grab Sample**: A single, discrete sample of wastewater collected at a specific time and location.

**Liquid matrices**: refers to the **fluid portion** of sewage collected for testing and analysis.

**Solid matrices**: Water refers to the **solid material (biosolids or sludge)** that is separated from liquid wastewater during the treatment process.

**Wastewater Scan**: An organization focused on sewage, community, and network-based efforts that conducts wastewater surveillance to detect pathogens present in wastewater.

**Variants of Interest (VOI)**: Viral variants with genetic changes that may affect transmissibility, diagnostics, or immune escape and are showing signs of increased spread.

**Variant of Concern (VOC):** A mutated form of a virus that demonstrates one or more of the following characteristics: increased ability to spread, greater severity of illness, reduced effectiveness of treatments, vaccines, or diagnostic tools, and the ability to evade immune protection.

Variants Under monitoring (VOM): KS.1.1, KP.3.3, LP.8.1, NB.1.8.1, KP.3, XFG

**Verily**: A private laboratory vendor contracted by CDC to test wastewater across the country for pathogen markers.

**PMMoV** (**Pepper Mild Mottle Virus**): It is a plant virus commonly found in human feces due to widespread consumption of pepper-containing foods.

**Concentration levels:** The viral concentration levels classify them into Low, Medium, and High based on tertile cutoffs from the data's distribution. It then identifies the minimum and maximum values within each group to define the range for each concentration level.

**Symbols:** Increasing: ↑ Decreasing: ↓ No change: →

#### **Purpose**

This report highlights the changes in wastewater concentration for selected pathogens within Clark County, Nevada. This report includes data for SARS CoV-2, Influenza (Flu) A, Influenza (Flu) B, Respiratory syncytial virus (RSV), Measles, *Candida Auris*, Rotavirus, Adenovirus group F, Hepatitis A, Parvovirus, Norovirus, and Mpox (clade II). All data was obtained from the Clark County Water Reclamation District, Flamingo Water Resource Center, City of Mesquite, selected Utah wastewater treatment facilities and California wastewater treatment facilities and is analyzed and reported by **Wastewater Scan** (<a href="https://www.wastewaterscan.org/en">https://www.wastewaterscan.org/en</a>) a collaborative project led by **Stanford University, Emory University**, and **Verily**, funded through philanthropic support to Stanford. and Verily laboratories (<a href="https://verily.com/">https://verily.com/</a>). The map below visualizes the wastewater treatment facilities in Nevada. A map of wastewater treatment facilities in Nevada is provided in the appendix.

Note: The Southern Nevada Health District (SNHD) uses PMMoV microbial normalization, while the CDC and the state rely on viral-activity normalization.



#### **Executive Summary of September 18, 2025, Report**

This report summarizes the most recent findings from pathogen surveillance conducted through wastewater sampling in Clark County, Nevada, and surrounding states. The last sampling date across all sites was collected on September 18, 2025. Flamingo Water Reclamation Facility (FWRF) was selected as the primary focus of this analysis because it is the largest facility within the Clark County Water Reclamation District and serves all unincorporated Clark County in the Las Vegas metropolitan area, making it a key indicator of regional wastewater trends. Surveillance was conducted by WastewaterSCAN and Verily to monitor trends in a wide range of pathogens, including SARS-CoV-2 and its variants, seasonal respiratory viruses such as Influenza A, B, RSV, and gastrointestinal pathogens such as Norovirus, Rotavirus, Enterovirus D68, and Hepatitis A. The study also evaluates site-level differences while accounting for variations in sampling and analysis methods.

Wastewater surveillance across Nevada, California, and Utah indicated mostly declining SARS-CoV-2 concentrations, with a few exceptions. In Nevada, Las Vegas' Flamingo Water Resource Center (FWRF) reported a 5-day mean of 125.10, trending downward. California showed mixed results and most sites declined, but Ontario's RP-1 and Indio's Valley Sanitary District recorded increases. Utah sites had higher viral loads overall but also showed downward trends.

Omicron subvariant analysis revealed a shift from KP and LP dominance in May to complete replacement by Other Omicron variants by July 2025, highlighting rapid turnover in circulating strains.

Influenza activity peaked in early 2025 and declined after May. RSV remained consistently low across the region, and measles was detected only once at FWRF on August 1.

Pathogen-specific monitoring at FWRF showed medium levels of SARS-CoV-2, and high levels of Candida auris and Adenovirus Group F. Other pathogens including Influenza A/B, RSV, Norovirus, Rotavirus, Enterovirus D68, and Hepatitis A were detected at low concentrations, while Mpox (Clades I & II), Measles, and Influenza H5 were not detected.

Across all three states, Adenovirus Group F remained elevated, especially in Utah. In contrast, Parvovirus, Norovirus, Rotavirus, Hepatitis A, and Enterovirus D68 remained consistently low or stable, reflecting both localized surges and regional stability in pathogen circulation.

**Sampling method:** FWRF used 24-hour composite samples from solid waste analyzed by Wastewater SCAN.



#### **Summary of Select Pathogen Concentrations**

Latest data point for Flamingo Water reclamation district plant is September 11, 2025

Pathogen	Concentration Level /	Concentration Level /
	Presence- Flamingo	Presence - Mesquite
SARS-CoV-2	Medium	Data not available
Influenza A	Low	Data not available
Influenza B	Low	Data not available
Respiratory Syncytial virus (RSV)	Low	Data not available
Norovirus	Low	Data not available
Rotavirus	Low	Data not available
Enterovirus D68	Low	Data not available
Hepatitis A	Low	Data not available
Candida Auris	High	Data not available
Adenovirus Group F	High	Data not available
Parvovirus	Low	Not Tested
Mpox – Clade I	No Presence	Data not available
Measles	No Presence	Data not available
Mpox – Clade II	No Presence	Data not available
Influenza H5	No Presence	Data not available

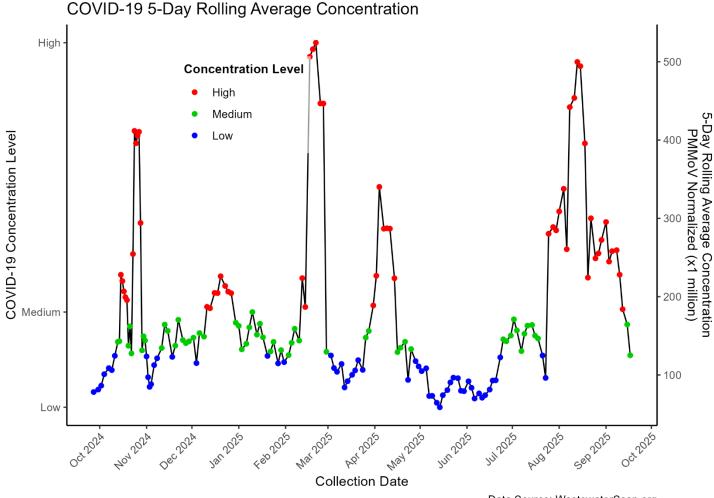
Note: The wastewater data for Las Vegas was collected from the Flamingo Water Reclamation District Plant, where samples were analyzed on solids and sourced from Wastewater SCAN. In contrast, data for the City of Mesquite was analyzed on liquid samples by Verily and provided by the State Wastewater Epidemiology Team. Due to the differences in sample matrices (solids vs. liquids) and analytical methods, variations in virus concentrations between the two facilities are expected. Mesquite sampling is conducted using grab sampling and is not performed over a 24-hour period.



#### SARS-CoV-2 Viral Concentration Trends in Clark County

#### Flamingo Water Reclamation District Plant

This chart tracks SARS-CoV-2 concentrations in Clark County's wastewater (Flamingo Water Resource Center) from October 2024 through September 17, 2025, using a 5-day rolling average normalized by PMMoV. Concentration levels varied between low (blue), medium (green), and high (red). Notable peaks appeared in November 2024, February 2025, April 2025, and especially August 2025, which recorded the most intense spike. After this surge, concentration declined steadily into September. Periods of reduced activity were also seen in March, June, and July. As of the last sampling date on September 17, 2025, concentrations had decreased to the medium range.





#### **SARS–CoV-2 Concentrations Interpretation**

As of September 18, 2025, wastewater surveillance across Nevada, California, and Utah reflected mostly declining SARS-CoV-2 trends with a few exceptions. In Nevada, Las Vegas' Flamingo Water Resource Center recorded a 5-day mean of 125.10 with a downward trend, California showed mixed results: A.K. Warren (125.60,  $\downarrow$ ), Hyperion (94.44,  $\downarrow$ ), and Riverside (89.99,  $\downarrow$ ) declined, while RP-1 in Ontario (133.68,  $\uparrow$ ) and Valley Sanitary District in Indio (44.88,  $\uparrow$ ) increased. Utah registered higher viral loads, with Central Valley (192.07,  $\downarrow$ ) and Provo (370.56,  $\downarrow$ ) both trending downward.

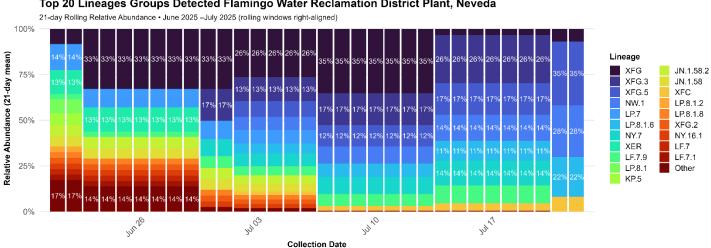
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	125.10	<b>1</b>	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	125.60	<b>4</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	94.44	<b>4</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	192.07	<b>4</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	370.56	<b>4</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	133.68	<b>↑</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	89.99	<b>\</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	44.88	<b>↑</b>	September 18 2025



#### **SARS-CoV-2 Variants Circulating**

#### Flamingo Water Reclamation District Plant

The stacked bar chart highlights the distribution of SARS-CoV-2 Omicron subvariants from June to July 2025. Between June and July, relative abundance percentages reveal significant variation despite equal sample counts. Lineage XFG dominated with 21.8%, while Other (8.9%), XFG.3 (8.7%), and LP.7 (7.2%) formed the next tier. Subvariants including XER (6.5%), XFG.5 (5.8%), NW.1 (4.7%), and LF.7.9 (4.7%) also contributed meaningfully. Mid-level groups like NY.7 (4.7%), LP.8.1 (3.8%), and LP.8.1.6 (3.6%) added moderate representation. The remaining lineages each contributed under 3.5%. Overall, XFG was dominant, with other subvariants sustaining diverse but smaller shares.



Top 20 Lineages Groups Detected Flamingo Water Reclamation District Plant, Neveda

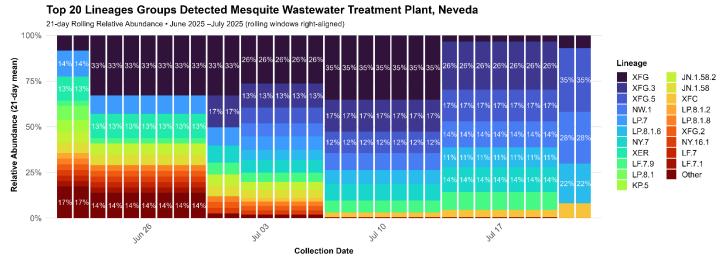
Notes: 21-day rolling mean over days with data; two-day metrics computed only for consecutive days with data to avoid overlapping. Figure generated on 2025-09-24.

Note: The most recent data on circulating SARS-CoV-2 lineages referenced in this section is current as of July 30.



#### **Mesquite Wastewater Treatment Plant**

The stacked bar chart presents the distribution of SARS-CoV-2 Omicron subvariants in wastewater samples from the Mesquite Treatment Plant between June and July 2025. Relative abundance analysis shows that XFG.3 and NW.1 were the leading lineages, each representing 16.7%. They were followed closely by NB.1.8.1 (15.8%), together making up nearly half of all detected variants. Mid-range contributors included NY.7 (9.5%), XFG.5 (9.4%), and XFG.2 (7.3%), while smaller shares came from XDV (4.9%) and XEC.4.1 (3.7%). Several other lineages, such as XFG and XDV.1.5, accounted for under 2.5%, underscoring both concentration among dominant subvariants and underlying diversity.



Notes: 21-day rolling mean over days with data; two-day metrics computed only for consecutive days with data to avoid overlapping. Figure generated on 2025-09-24.

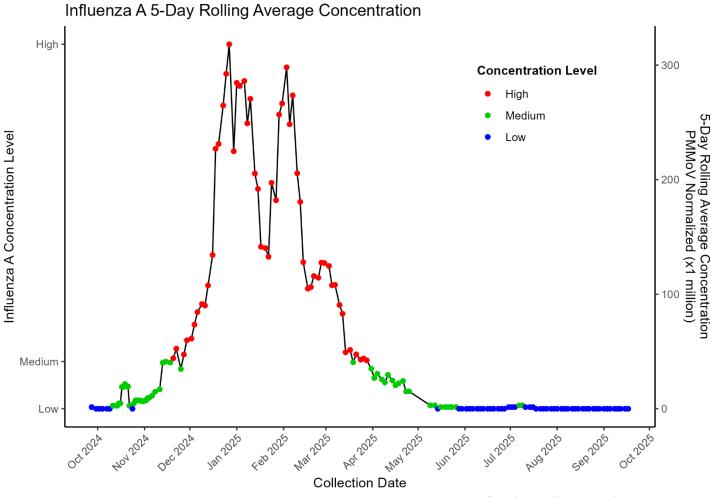
Note: The most recent data on circulating SARS-CoV-2 lineages referenced in this section is current as of July 30.



#### Influenza A Viral Concentration Trends in Clark County

# Flamingo Water Reclamation District Plant

This chart tracks Influenza A concentrations in Clark County's wastewater (Flamingo Water Resource Center) from October 2024 to September 17, 2025, using a 5-day rolling average normalized by PMMoV. The levels were low through fall 2024, then rose sharply in December 2024, peaking at high concentrations from January 2025 through February 2025. Concentrations steadily declined in March 2025 and April 2025, returning to medium and then low levels by May. From June 2025 through September 17, 2025, levels remained consistently low with no notable resurgence. The last sampling date was September 17, 2025, showing minimal Influenza A activity in the community.





#### **Interpretation of Influenza A Concentrations**

As of September 18, 2025, wastewater surveillance for Influenza A across eight facilities in Nevada, California, and Utah showed consistently low activity. Influenza A monitoring across the same states revealed nearly universal non-detectable levels. In Nevada, the Flamingo Water Resource Center, California sites including A.K. Warren, Hyperion, RP-1 in Ontario, and Riverside also recorded 0.00, with only Indio's Valley Sanitary District showing a negligible 0.25. Utah's Central Valley and Provo facilities registered at 0.00. All locations showed stable  $(\rightarrow)$  14-day trends, reflecting a plateau at near-zero viral activity.

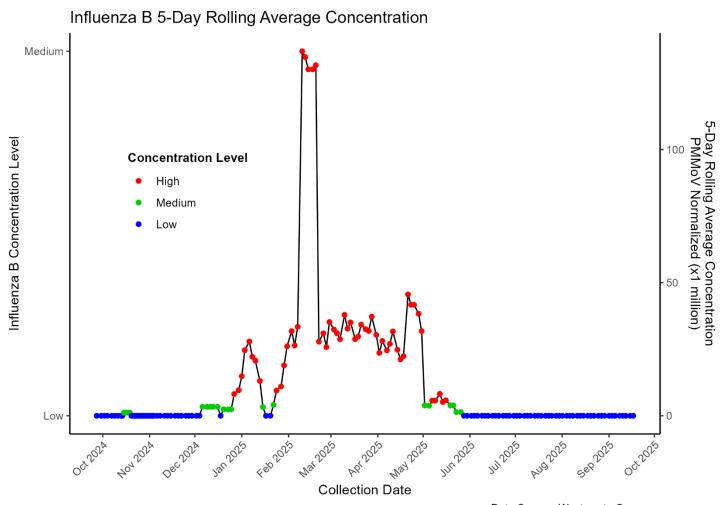
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	<b>→</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	<b>→</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	$\rightarrow$	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	$\rightarrow$	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	<b>→</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	0.25	$\rightarrow$	September 18 2025



#### Influenza B Viral Concentration Trends in Clark County

#### **Flamingo Water Reclamation District Plant**

The chart shows Influenza B wastewater trends at the Flamingo Water Resource Center (Las Vegas, NV) from October 2024 to September 17, 2025. Levels remained low through late 2024, with only brief medium detections in mid-December 2024. A sharp rise began in early January 2025, peaking in March 2025 with sustained high concentrations. Moderate but elevated activity persisted into April,2025 and May 2025 before declining rapidly. By June 2025, signals returned to low or undetectable levels, where they remained through August. The last sampling date was September 17, 2025.





#### **Interpretation of Influenza B Concentrations**

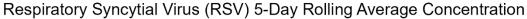
As of September 18, 2025, wastewater surveillance for Influenza B across facilities in Nevada, California, and Utah showed minimal viral activity. Influenza B monitoring indicated nearly universal non-detectable levels, with all sites reporting stable (→) 14-day trends. In Nevada, the Flamingo Water Resource Center showed no detectable loads. California facilities including A.K. Warren, Hyperion, RP-1 in Ontario, Riverside, and the Valley Sanitary District in Indio each recorded 0.00. Utah's Central Valley and Provo plants also measured 0.00.

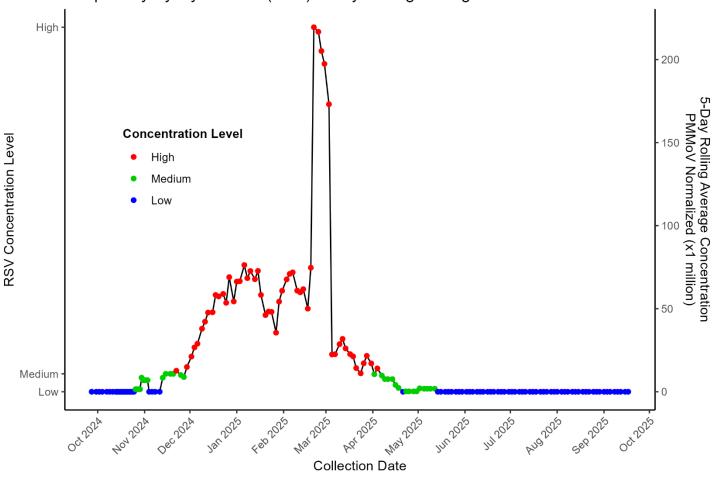
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	<b>→</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	$\rightarrow$	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	$\rightarrow$	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	<b>→</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	<b>→</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	0.00	<b>→</b>	September 18 2025



# Respiratory Syncytial Virus (RSV) Viral Concentration Trends in Clark County Flamingo Water Reclamation District Plant

The chart shows Respiratory Syncytial Virus (RSV) levels at the Clark County Water Reclamation District (Flamingo site) from October 2024 to September 17, 2025. RSV concentrations remained low through October, began rising in November 2024, and peaked sharply in March 2025. Levels declined through April 2025 and returned to low by June 2025, remaining low through late September 2025. Data was normalized using PMMoV, with the last sampling recorded on September 17, 2025.







#### Respiratory Syncytial Virus (RSV) Concentrations Interpretation

As of September 18, 2025, wastewater surveillance for Respiratory Syncytial Virus (RSV) across facilities in Nevada, California, and Utah indicated no detectable concentrations. In Nevada, the Flamingo Water Resource Center in Las Vegas, California sites including A.K. Warren, Hyperion in Los Angeles, RP-1 in Ontario, Riverside, and the Valley Sanitary District in Indio all reported 0.00 levels. Utah facilities, including the Central Valley Water Reclamation Facility and Provo City Water Reclamation Facility, also recorded 0.00. All locations displayed stable (→) 14-day trends, reflecting uniformly absent RSV activity regionwide.

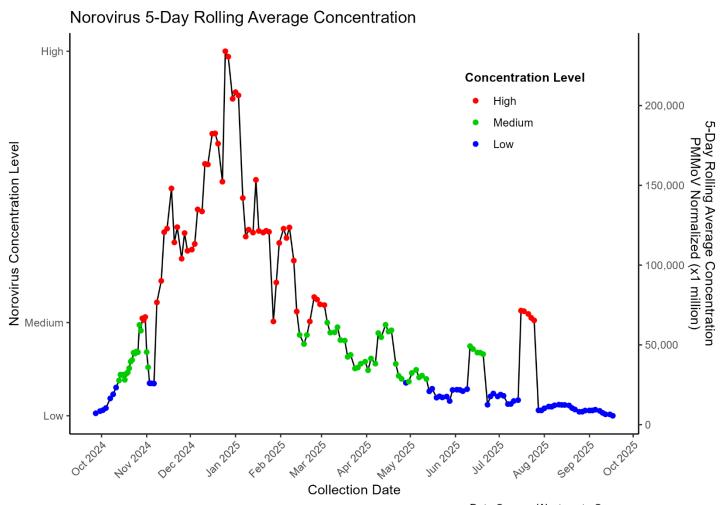
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	$\rightarrow$	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	$\rightarrow$	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	$\rightarrow$	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	$\rightarrow$	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	$\rightarrow$	September 18 2025
Valley Sanitary District	Indio, CA	Current	0.00	<b>→</b>	September 18 2025



# Norovirus Viral Concentration Trends in Clark County

#### **Flamingo Water Reclamation District Plant**

The chart tracks Norovirus 5-day rolling average concentrations at the Flamingo Water Resource Center from October 2024 to September 17, 2025. Levels began low in fall 2024, rising sharply in November and peaking in December—January with sustained high concentrations. After January 2025, levels declined but fluctuated at medium to high levels through February and March. From April to June 2025, concentrations trended downward, returning mostly to low levels. A brief resurgence occurred in July 2025 to August 2025, before declining again.





#### **Interpretation of Norovirus Concentrations**

As of September 18, 2025, wastewater surveillance for Norovirus across Nevada, California, and Utah showed elevated concentrations, with most facilities trending downward. In Nevada, the Flamingo Water Resource Center in Las Vegas measured 5,574.35, reflecting a decline. California sites largely decreased: A.K. Warren (3,073.24), Hyperion (3,852.81), Riverside (3,914.71), and Indio's Valley Sanitary District (1,043.72). The exception was RP-1 in Ontario, which rose to 6,073.85. Utah reported the highest levels, with Central Valley at 12,763.18 and Provo at 10,529.45, both declining.

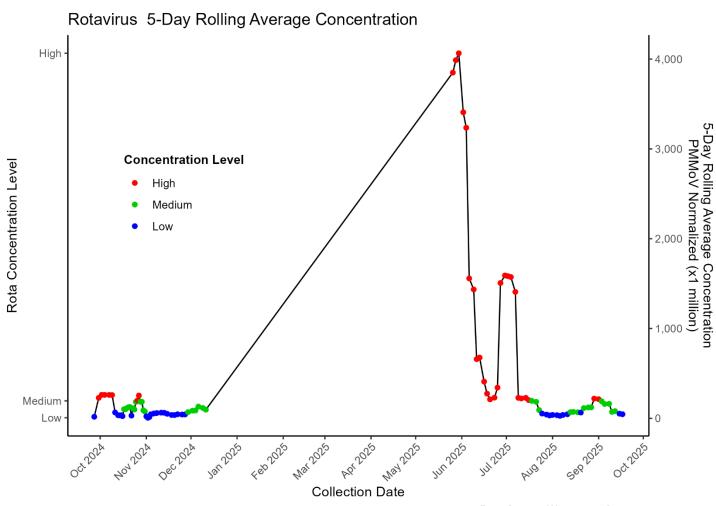
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	5,574.35	<b>T</b>	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	3,073.24	Ψ	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	3,852.81	$oldsymbol{\downarrow}$	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	12,763.18	<b>4</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	10,529.45	$oldsymbol{\downarrow}$	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	6,073.85	<b>1</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	3,914.71	Ψ	September 18 2025
Valley Sanitary District	Indio, CA	Current	1,043.72	<b>4</b>	September 18 2025



#### **Rotavirus Viral Concentration Trends in Clark County**

#### **Flamingo Water Reclamation District Plant**

This chart tracks the 5-day rolling average concentration of Rotavirus at the Clark County Water Reclamation District, Flamingo Water Resource Center, from October 2024 through September 17, 2025. Concentration levels were generally low to medium until late May 2025, when a sharp surge occurred, peaking above 4,000 normalized units in June. Following this peak, levels declined but showed a smaller resurgence in July before returning to low and medium levels by August. The pattern suggests seasonal or episodic increases, with June 2025 representing the highest risk period. Data was normalized using PMMoV, with the last sampling recorded on September 17, 2025.





#### **Interpretation of Rotavirus Concentrations**

As of September 18, 2025, wastewater surveillance for Rotavirus across Nevada, California, and Utah revealed mixed viral activity. In Nevada, the Flamingo Water Resource Center recorded 45.88 with a declining trend. California facilities showed varied results: A.K. Warren (43.64,  $\downarrow$ ), Hyperion (27.56,  $\downarrow$ ), and Indio's Valley Sanitary District (2.58,  $\downarrow$ ) declined, while RP-1 in Ontario (16.33,  $\uparrow$ ) and Riverside (130.36,  $\uparrow$ ) increased, with Riverside showing the highest rise in the state. Utah sites also reported notable levels—Central Valley (31.99,  $\downarrow$ ) and Provo (68.55,  $\downarrow$ )—both trending downward.

Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	45.88	lack lack lack	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	43.64	<b>4</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	27.56	<b>4</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	31.99	<b>4</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	68.55	<b>4</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	16.33	<b>↑</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	130.36	<b>↑</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	2.58	$lack \psi$	September 18 2025

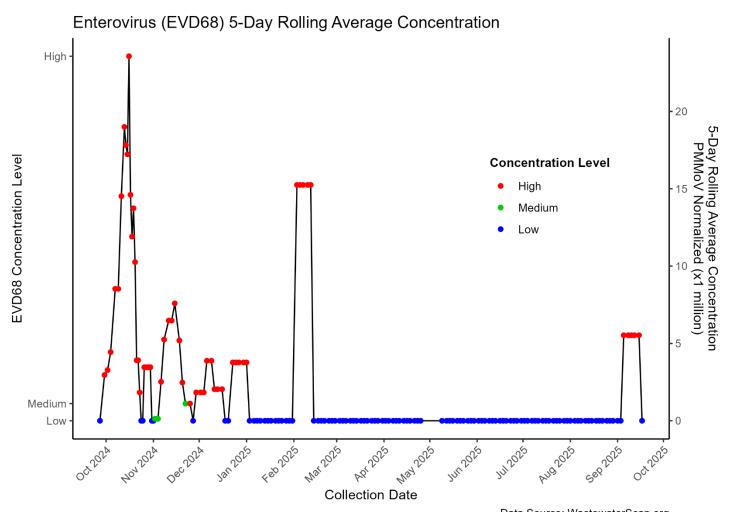


# **Enterovirus D68 Viral Concentration Trends in Clark County**

#### Flamingo Water Reclamation District Plant

The chart illustrates Enterovirus D68 (EVD68) concentrations in wastewater at the Flamingo Water Reclamation District in Clark County from October 2024 through September 17, 2025. Between September 2024 and January 2025, concentrations fluctuated sharply, reaching peak levels in late October and November. Additional spikes were observed in December 2024, though these were generally lower to moderate in intensity. From February 2025 onward, concentrations declined to consistently low levels, with notable resurgence on September 10, 2025. The data indicates a significant outbreak in late 2024, followed by a steady decline and minimal community circulation in 2025.

#### **Enterovirus (EVD68)**





#### **Interpretation of Enterovirus D68 Concentrations**

As of September 18, 2025, wastewater surveillance for Enterovirus D68 across Nevada, California, and Utah indicated generally low concentrations with mixed trends. In Nevada, the Flamingo Water Resource Center reported 0.00 with a stable trend. California sites showed slight variation: A.K. Warren  $(0.50, \downarrow)$ , Hyperion  $(0.00, \rightarrow)$ , RP-1 in Ontario  $(2.25, \downarrow)$ , Riverside  $(2.14, \downarrow)$ , and Indio's Valley Sanitary District  $(1.01, \rightarrow)$ . Utah facilities reflected similarly low levels, with Central Valley at  $0.00 (\rightarrow)$  and Provo at  $0.56 (\rightarrow)$ .

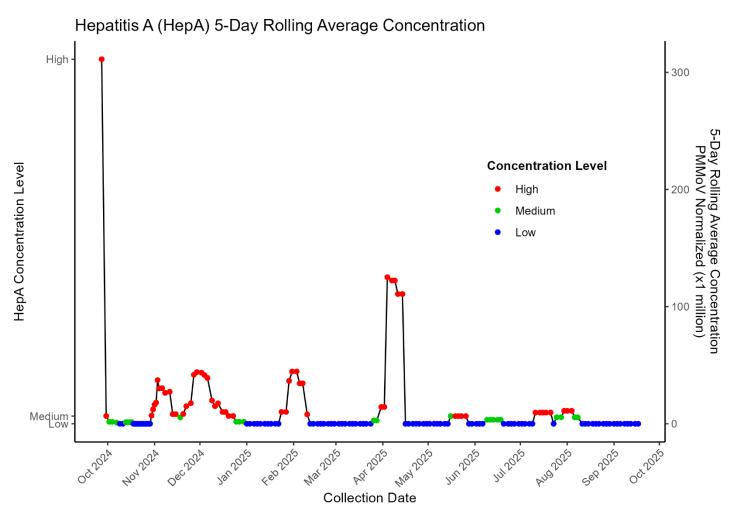
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.50	<b>4</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	<b>→</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.56	<b>→</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	2.25	<b>4</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	2.14	<b>4</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	1.01	$\rightarrow$	September 18 2025



# Hepatitis A (HepA) Viral Concentration Trends in Clark County

#### **Flamingo Water Reclamation District Plant**

The chart tracks Hepatitis A (HepA) concentrations in wastewater at the Clark County Water Reclamation District, Flamingo Water Resource Center, from October 2024 to September 17, 2025, using a 5-day rolling average. Levels peaked sharply in September 2024 and again in April 2025, reaching "High" concentrations. Between peaks, values fluctuated low to medium levels, with intermittent short-lived increases in late 2024 and early 2025. From May through September 17, 2025, concentrations were mostly low or medium, with no sustained spikes. The most recent sample, collected on September 17, 2025, showed low detection.





#### **Interpretation of Hepatitis A Concentrations**

As of September 18, 2025, wastewater surveillance for Hepatitis A across Nevada, California, and Utah showed mostly non-detectable levels. In Nevada, the Flamingo Water Resource Center reported 0.00 with a stable trend. California sites displayed low but measurable activity: A.K. Warren recorded 4.93 ( $\downarrow$ ), Hyperion reported the highest at 30.61 ( $\downarrow$ ), Riverside measured 0.50 ( $\downarrow$ ), while RP-1 in Ontario and Indio's Valley Sanitary District both showed 0.00 ( $\rightarrow$ ). Utah's Central Valley and Provo facilities also reported 0.00 ( $\rightarrow$ ).

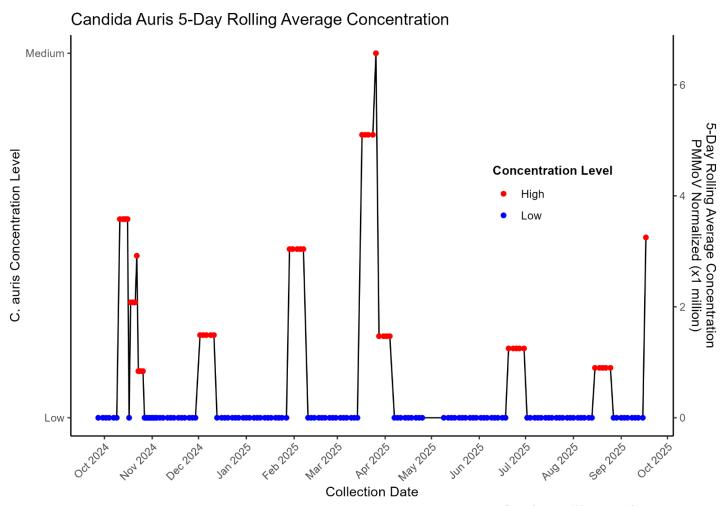
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	4.93	<b>4</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	30.61	<b>4</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	<b>→</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	$\rightarrow$	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.50	<b>4</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	0.00	$\rightarrow$	September 18 2025



# Candida Auris Fungal Concentration Trends in Clark County

#### **Flamingo Water Reclamation District Plant**

The graph displays *Candida auris* (C. auris) 5-day rolling average concentrations at the Flamingo Water Resource Center from October 2024 through September 17, 2025. While most measurements remained at low levels, several notable spikes were observed: in late October 2024 to November 2024, mid-December 2024, February 2025, early April 2025, mid-July 2025, mid-August 2025 and late-September 2025. The highest concentration occurred in early April 2025. These surges suggest periods of elevated *Candida Auris* presence in the community, followed by returns to baseline low levels. Results are shown as 5-day rolling averages, normalized by PMMoV. The most recent sample was collected on September 17, 2025.





#### Interpretation of Candida Auris Concentrations

As of September 18, 2025, wastewater monitoring for Candida auris across Nevada, California, and Utah showed almost entirely undetectable levels. In Nevada, the Flamingo Water Resource Center in Las Vegas reported a small but measurable concentration of 3.25 with an upward trend. All California facilities, including A.K. Warren, Hyperion, RP-1 in Ontario, Riverside, and Indio's Valley Sanitary District recorded 0.00 with stable trends. Similarly, Utah's Central Valley and Provo facilities both showed 0.00.

Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	3.25	<b>↑</b>	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	<b>→</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	<b>→</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	<b>→</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	<b>→</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	<b>→</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	0.00	$\rightarrow$	September 18 2025

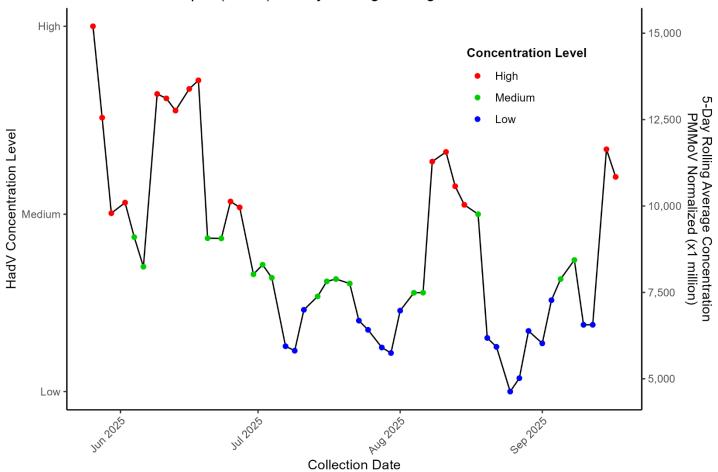


# Adenovirus Group F Concentration Trends in Clark County

#### **Flamingo Water Reclamation District Plant**

This chart tracks Adenovirus Group F (HadV) concentrations in wastewater at Clark County's Flamingo Water Resource Center from June to September 17, 2025. The 5-day rolling average shows fluctuations between high, medium, and low concentration levels. In early June, levels were consistently high but dropped to medium and low by late June. July saw mostly medium levels, trending downward. In August, concentrations dipped into the low range, then rose back toward medium. By September, levels fluctuated widely, peaking again in high range mid- and late months. The last sample was collected on September 17, 2025.

#### Adenovirus Group F (HadV) 5-Day Rolling Average Concentration





#### Interpretation of Adenovirus Group F Concentrations

As of September 18, 2025, wastewater surveillance for Adenovirus Group F across Nevada, California, and Utah showed elevated but varied levels. In Nevada, Las Vegas' Flamingo Water Resource Center reported 10,842.21 with an increasing trend. California facilities displayed mixed signals: A.K. Warren  $(6,028.54,\downarrow)$  and Indio's Valley Sanitary District  $(1,360.81,\downarrow)$  declined, whereas Hyperion  $(5,405.25,\uparrow)$ , RP-1 in Ontario  $(12,599.45,\uparrow)$ , and Riverside  $(9,305.01,\uparrow)$  increased. Utah sites recorded the highest values, with Central Valley at 13,583.04  $(\uparrow)$  and Provo at 11,540.46  $(\uparrow)$ .

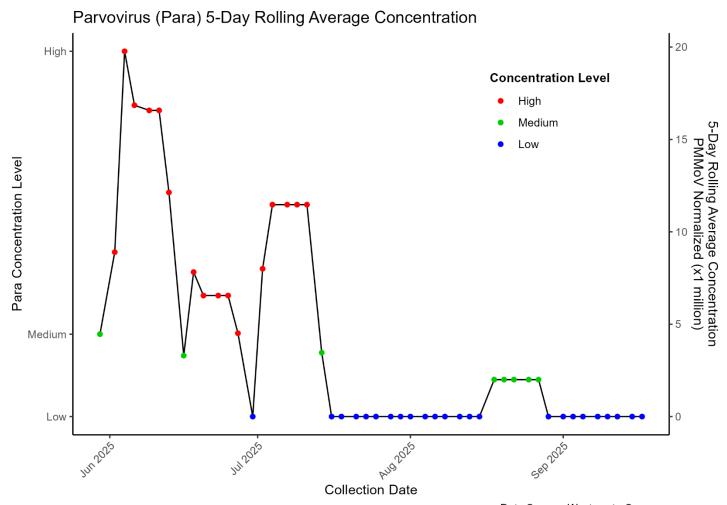
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	10,842.21	<b>1</b>	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	6,028.54	<b>4</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	5,405.25	<b>1</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	13,583.04	<b>↑</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	11,540.46	<b>1</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	12,599.45	<b>1</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	9,305.01	<b>↑</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	1,360.81	<b>4</b>	September 18 2025



# **Parvovirus Concentration Trends in Clark County**

#### **Flamingo Water Reclamation District Plant**

The graph presents Parvovirus 5-day rolling average concentrations at the Flamingo Water Resource Center from June to September 17, 2025. Concentrations peaked in early June at high levels (red) and gradually declined through mid-June. After a brief resurgence of high levels in early July, the concentration dropped sharply. From mid-July to the end of the month, levels remained consistently low (blue). The trend shows two distinct spikes followed by a sustained decline. The last sample, taken on September 17, 2025, showed medium concentration.





#### **Parvovirus Concentrations Interpretation**

As of September 18, 2025, wastewater surveillance for Parvovirus across Nevada, California, and Utah showed largely non-detectable levels, with only a few sites reporting measurable concentrations. In Nevada, the Flamingo Water Resource Center recorded 0.00. A.K. Warren measured 0.42 ( $\rightarrow$ ), Hyperion 0.87 ( $\rightarrow$ ), and RP-1 in Ontario 0.63 ( $\downarrow$ ). Riverside and Indio both reported 0.00. In Utah, Central Valley recorded 0.00 ( $\rightarrow$ ), while Provo registered 0.71 with a declining trend.

Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.42	<b>→</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.87	<b>→</b>	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	<b>→</b>	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.71	<b>4</b>	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.63	<b>4</b>	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	<b>→</b>	September 18 2025
Valley Sanitary District	Indio, CA	Current	0.00	$\rightarrow$	September 18 2025



#### Influenza H5 Viral Detection Comparing to Neighboring States

As of September 18, 2025, wastewater surveillance from eight treatment facilities in California, Nevada, and Utah detected no Influenza H5 activity. All sites reported a five-day rolling average of zero with no change in the 14-day trend, indicating stable conditions and no current evidence of Influenza H5.

Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0	$\rightarrow$	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	0		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0	<b>→</b>	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0	$\rightarrow$	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0	$\rightarrow$	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0	$\rightarrow$	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0	$\rightarrow$	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0	$\rightarrow$	September 18 2025
Valley Sanitary District	Indio, CA	Current	0	<b>→</b>	September 18 2025



#### MPOX Clade 1b Viral Detection Comparing to Neighboring States

As of September 18, 2025, wastewater surveillance from eight facilities in California, Nevada, and Utah detected no Mpox clade 1b. Across all sites, monitoring within the past 90 days reported no recent presence. These findings indicate continued absence of detectable Mpox clade 1b in sampled wastewater across the three states

Plant Name	City	Time frame	Detect/ Non-detect	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	Non-detect	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	Non-detect	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	Non-detect	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	Non-detect	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	Non-detect	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	Non-detect	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	Non-detect	September 18 2025
Valley Sanitary District	Indio, CA	Current	Non-detect	September 18 2025



#### **Measles Viral Detection Comparing to Neighboring States**

As of September 18, 2025, wastewater monitoring at eight facilities in California, Nevada, and Utah shows no signs of measles activity. The only recent detection occurred at the Flamingo Water Resource Center in Las Vegas on August 1, but a follow-up sample on August 6 was negative. All other sites, including Los Angeles County, Ontario, Riverside, Indio, and Central Salt Lake Valley, reported non-detectable levels in their most recent samples.

Plant Name	City	Time frame	Detect/ Non-detect	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	Non-detect	September 17 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	Non-detect	September 17 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	Non-detect	September 17 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	Non-detect	September 17 2025
Provo City Water Reclamation Facility	Provo, UT	Current	Non-detect	September 17 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	Non-detect	September 18 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	Non-detect	September 18 2025
Valley Sanitary District	Indio, CA	Current	Non-detect	September 18 2025



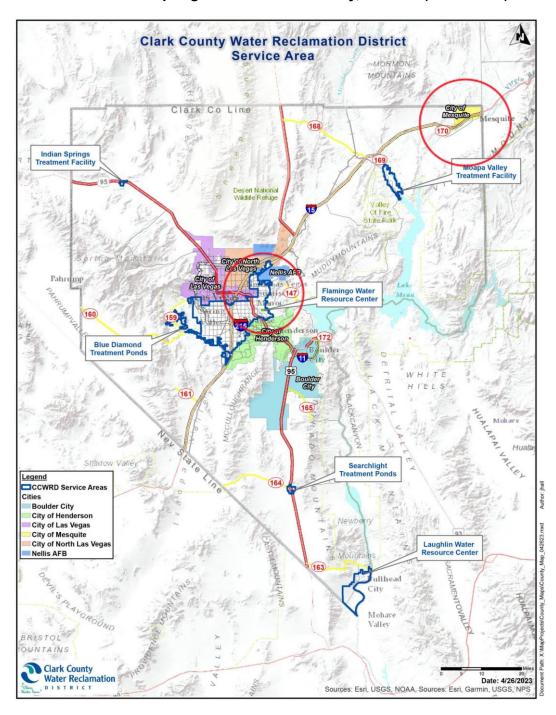
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# **Appendix**

# Wastewater Sampling Sites in Clark County, Nevada (red circles).



Source: Clark County Water Reclamation District