

THE SOUTHERN NEVADA HEALTH DISTRICT'S WEEKLY WASTEWATER SURVEILLANCE REPORT

September 11, 2025

Prepared by: Jeremiah Zablon

Epidemiologist
Office of Epidemiology and Public Health Informatics
Southern Nevada Health District



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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** (https://www.wastewaterscan.org/en) a collaborative project led by **Stanford University**, **Emory University**^{2,3} and City of Mesquite data by **Verily laboratories** (https://verily.com/)¹. 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 11, 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 11, 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 facilities in Nevada, California, and Utah showed mixed trends SARS-CoV-2 viral concentrations. The rising trends included Warren Water Resource Facility (Los Angeles County, CA 179.22), Hyperion Water Reclamation Plant (Los Angeles, CA, 166.52), Regional Water Recycling Plant No. 1 (Ontario, CA,178.20), and Valley Sanitary District (Indio, CA,17.13). Declining trends were noted at Flamingo Water Resource Center (Las Vegas, NV, 228.80), Central Valley Water Reclamation Facility (Salt Lake Valley, UT, 399.54), Provo City Water Reclamation Facility (Provo, UT,428.36). Variant dynamics shifted quickly: LP.8.1 was initially dominant, followed by Other/NB.1.8.1, XFG, and XFG.3. XDV.1 peaked in late July, then XFG/XFG.3 resurged in early August, underscoring evolving viral patterns.

Influenza activity in Southern Nevada showed expected seasonal patterns. At the FWRF site, Influenza A peaked January to March, while Influenza B peaked in February; both strains declined after May. No Influenza B has been reported since July. RSV levels remained consistently low or undetectable at both sites, consistent with seasonal declines following early 2025 peaks, suggesting minimal RSV transmission during summer. Notably, FWRF recorded a single measles detection on August 1, with no subsequent positives.

As of September 11, 2025, FWRF wastewater data shows high levels of SARS-CoV-2 and Enterovirus D68, with medium Rotavirus presence. Other pathogens are low or absent. Regionally, Norovirus levels are elevated but declining, Rotavirus trends vary, and Enterovirus D68 remains low with localized increases. Hepatitis A, Candida auris, and Parvovirus is mostly undetectable. Adenovirus Group F shows regional fluctuations. No Influenza H5 or measles activity was detected. In summary, most pathogens show declining or stable trends, with isolated elevations in Southern California and Utah. Sampling occurred between September 10 and 11 across Nevada, California, and Utah.

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 / Presence- Flamingo	Concentration Level / Presence - Mesquite
SARS-CoV-2	High	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	Medium	Data not available
Enterovirus D68	High	Data not available
Hepatitis A	Low	Data not available
Candida Auris	Low	Data not available
Adenovirus Group F	Low	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

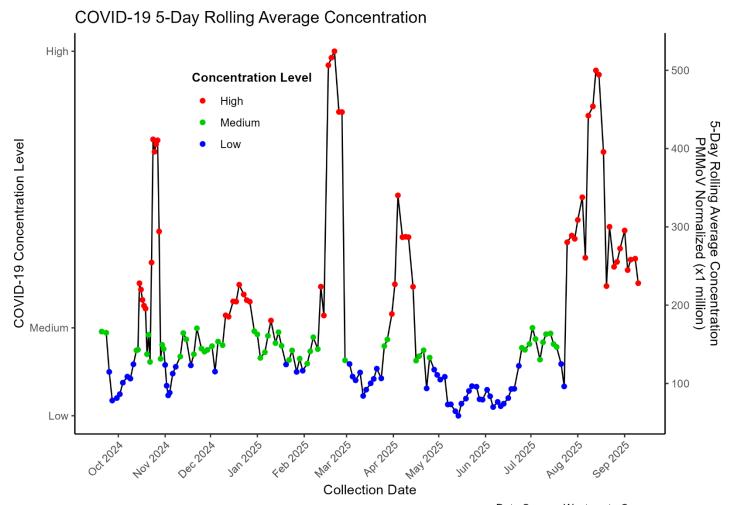
Note: The wastewater data for Las Vegas was collected from the Flamingo Water Reclamation District Plant, where samples were analyzed on solids and sourced from Wastewater SCAN. In contrast, data for the City of Mesquite was analyzed on liquid samples by Verily and provided by the State Wastewater Epidemiology 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 shows SARS–CoV-2 concentrations in Clark County's wastewater (Flamingo Water Resource Center) from October 2024 to September 10, 2025, using a 5-day rolling average normalized by PMMoV. The levels fluctuate between low (blue), medium (green), and high (red). Concentrations were mostly medium or low through late 2024 and early 2025, with brief spikes. Major surges occurred in April 2025, May 2025 and again from August 2025 to September 3, 2025, reaching high levels above 500 normalized units. The last sampling date was September 10, 2025





SARS–CoV-2 Concentrations Interpretation

As of September 11, 2025, wastewater surveillance across facilities in Nevada, California, and Utah showed mixed trends in SARS-CoV-2 viral concentrations. Rising levels were observed at A.K. Warren Water Resource Facility (Los Angeles County, CA 179.22), Hyperion Water Reclamation Plant (Los Angeles, CA, 166.52), Regional Water Recycling Plant No. 1 (Ontario, CA,178.20), and Valley Sanitary District (Indio, CA,17.13). Declining trends were noted at Flamingo Water Resource Center (Las Vegas, NV, 228.80), Central Valley Water Reclamation Facility (Salt Lake Valley, UT, 399.54), Provo City Water Reclamation Facility (Provo, UT, 428.36), and Riverside Water Quality Control Plant (Riverside, CA, 168.10). Sampling occurred between September 10 and 11.

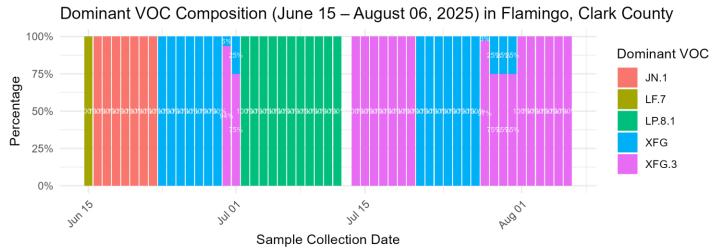
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	228.80	4	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	179.22	↑	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	166.52	↑	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	399.54	4	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	428.36	4	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	178.20	↑	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	168.10	4	September 11 2025
Valley Sanitary District	Indio, CA	Current	17.13	↑	September 11 2025



SARS-CoV-2 Variants Circulating

Flamingo Water Reclamation District Plant

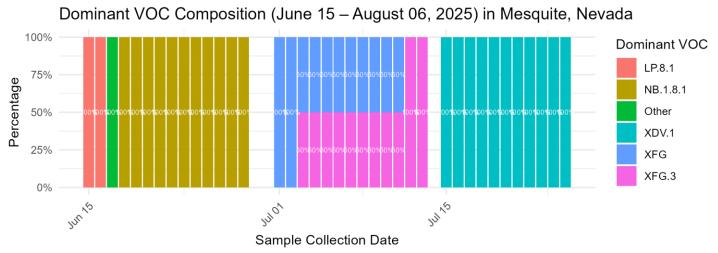
The stacked bar chart tracks daily SARS-CoV-2 Variants of Concern from mid-June to early August, showing rapid shifts in dominance. LF.7 (yellow) briefly leads before JN.1 (orange) takes over. By late June, XFG (blue) becomes fully dominant. Early July brings the emergence of XFG.3 (pink), followed by a surge of LP.8.1 (green), which leads until mid-July. Around July 30, XFG regains complete dominance through the end of the month. By early August, XFG.3 rises to the top, underscoring the swift turnover among variants.



Source: Nevada State Health Department | Analyzed by Verily, August 2025

Mesquite Wastewater Treatment Plant

The stacked bar chart tracks daily SARS-CoV-2 Variant of Concern (VOC) proportions from mid-June to late July, showing rapid turnover. LP.8.1 (orange) dominates first, briefly giving way to Other (green) and NB.1.8.1 (yellow). In early July, XFG (blue) and XFG.3 (pink) rise in prominence. By late July, XDV.1 (turquoise) takes over and it remains the dominant strain.



Source: Nevada State Health Department | Analyzed by Verily, August 2025

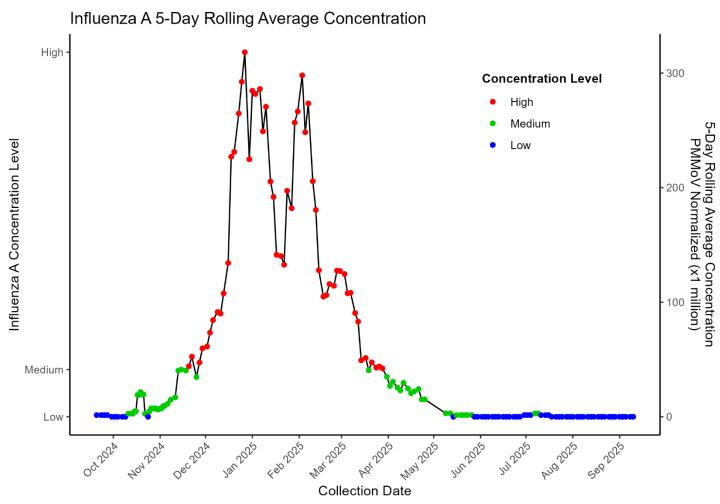
Note: The most recent data available for the SARS-CoV-2 variant circulation for section is from August 6, 2025, for Flamingo and July 30 for Mesquite.



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 September 2024 to September 10, 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 3, 2025, levels remained consistently low with no notable resurgence. The last sampling date was September 10, 2025, showing minimal Influenza A activity in the community.





Interpretation of Influenza A Concentrations

As of September 11, 2025, wastewater surveillance for Influenza A across eight facilities in Nevada, California, and Utah showed consistently low activity. All monitored sites including Flamingo (Las Vegas), A.K. Warren and Hyperion (Los Angeles), RP-1 (Ontario), Riverside, Indio, Central Valley (Salt Lake Valley), and Provo reported a 5-day rolling mean of 0.00 with flat 14-day trends, indicating no detectable viral concentrations. Sampling occurred between September 10 and 11. The uniform absence of Influenza A signals across these regions suggests stable conditions and minimal transmission risk at the time of monitoring.

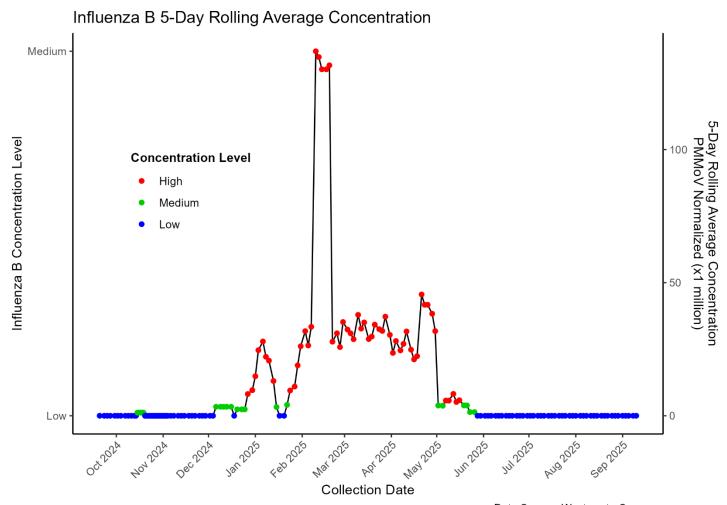
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	\rightarrow	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	→	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	→	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	→	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	\rightarrow	September 11 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 10, 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 10, 2025.





Interpretation of Influenza B Concentrations

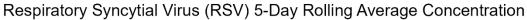
As of September 11, 2025, wastewater surveillance for Influenza B across facilities in Nevada, California, and Utah indicates minimal viral activity. Eight monitored sites including Las Vegas, Los Angeles County, Hyperion, Central Salt Lake Valley, Provo, Riverside, Indio, and RP-1 in Ontario reported either non-detectable concentrations (0.00) or very low levels. All sites showed flat 14-day trends, suggesting stable conditions. RP-1 in Ontario was the only location with a measurable concentration, recording 0.61. The findings reflect low Influenza B presence across the region, with consistent stability observed during sampling conducted on September 10 and 11.

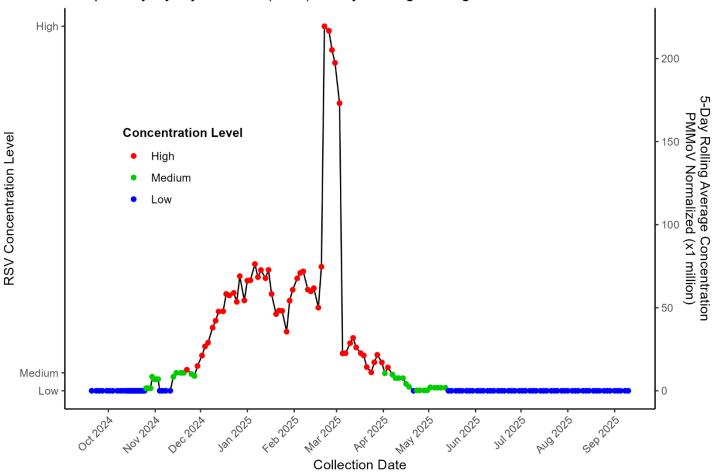
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	→	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	\rightarrow	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	\rightarrow	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	\rightarrow	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.61	\rightarrow	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	September 11 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 10, 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 the early of September 2025. Data was normalized using PMMoV, with the last sampling recorded on September 10, 2025.







Respiratory Syncytial Virus (RSV) Concentrations Interpretation

As of September 11, 2025, wastewater surveillance for Respiratory Syncytial Virus (RSV) across eight facilities in Nevada, California, and Utah showed no detectable concentrations, each reporting a 5-day rolling mean of 0.00 and flat 14-day trends. Monitored sites included Flamingo (Las Vegas), A.K. Warren and Hyperion (Los Angeles), RP-1 (Ontario), Riverside, Indio, and Central Valley (Salt Lake Valley). Provo, Utah, was the only site with measurable activity, recording 1.33 with an upward trend. The results suggest minimal RSV presence, with stable conditions across most locations during sampling on September 10 and 11.

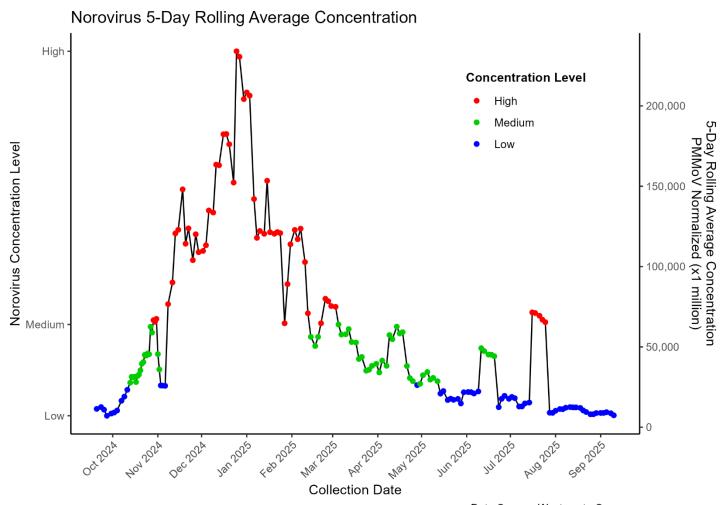
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	\rightarrow	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	\rightarrow	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	\rightarrow	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	1.33	1	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	\rightarrow	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	\rightarrow	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	\rightarrow	September 11 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 10, 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 11, 2025, wastewater surveillance for Norovirus across Nevada, California, and Utah showed elevated concentrations with generally declining trends. Las Vegas reported 7,401.51, while Central Salt Lake Valley and Provo recorded the highest levels at 13,274.06 and 10,772.09, respectively. California sites also showed notable readings: Hyperion (4,209.02), Riverside (4,316.40), RP-1 in Ontario (5,623.10), and A.K. Warren (2,978.20), all trending downward. Indio reported a lower level of 1,102.59. Despite high viral loads, the overall downward movement suggests a potential easing of Norovirus activity. Sampling occurred between September 10 and 11.

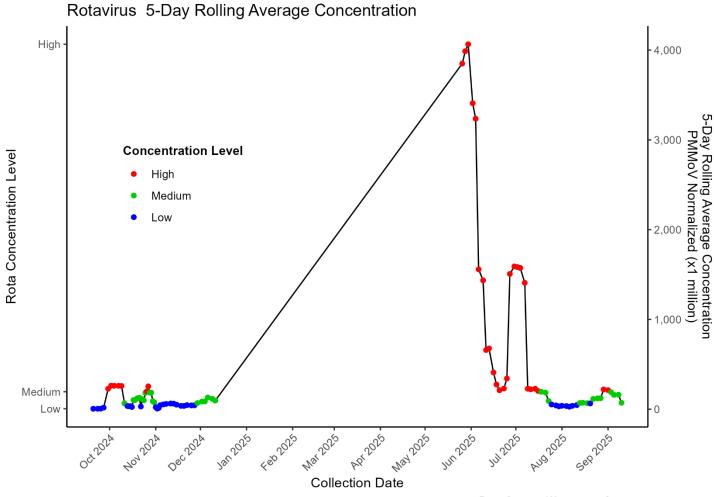
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	7,401.51	4	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	2,978.20	4	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	4,209.02	4	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	13,274.06	4	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	10,772.09	4	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	5,623.10	4	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	4,316.40	4	September 11 2025
Valley Sanitary District	Indio, CA	Current	1,102.59	4	September 11 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 10, 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 10, 2025.





Interpretation of Rotavirus Concentrations

As of September 11, 2025, wastewater surveillance for Rotavirus across Nevada, California, and Utah showed mixed patterns in viral activity. Most sites reported moderate concentrations with declining trends, including Las Vegas (71.58), A.K. Warren (53.63), Central Valley (59.04), Provo (44.49), and Indio (2.36). In contrast, Hyperion (113.45), Riverside (122.66), and RP-1 in Ontario (9.45) recorded rising levels. The highest concentrations were observed in Southern California, particularly at Hyperion and Riverside. The data reflects regional fluctuations, with notable elevations in parts of Los Angeles and Riverside counties. Sampling took place between September 10 and 11.

Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	71.58	4	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	53.63	T	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	113.45	1	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	59.04	1	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	44.49	4	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	9.45	1	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	122.66	↑	September 11 2025
Valley Sanitary District	Indio, CA	Current	2.36	4	September 11 2025

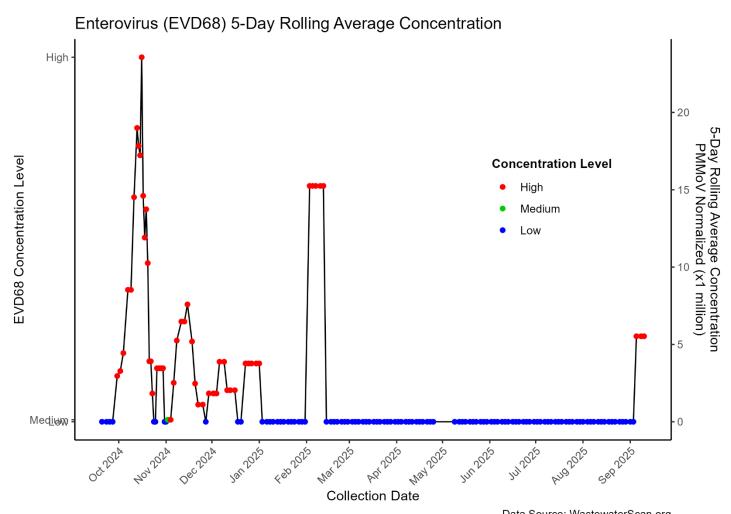


Enterovirus D68 Viral Concentration Trends in Clark County

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 10, 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 11, 2025, wastewater surveillance for Enterovirus D68 across Nevada, California, and Utah revealed generally low concentrations with mixed trends. Las Vegas showed a 5-day rolling mean of 5.53 and an upward trend, while Provo and Central Salt Lake Valley remained stable at low levels. In California, A.K. Warren (1.01), RP-1 in Ontario (4.47), and Riverside (2.27) all showed declining trends. Hyperion and Indio reported non-detectable levels. The data indicates limited viral activity with localized fluctuations, particularly in Southern Nevada and select areas of California. Sampling was conducted between September 10 and 11.

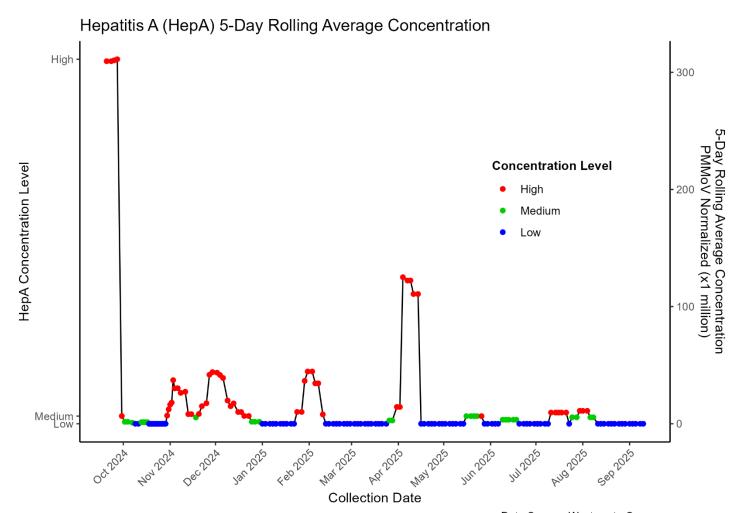
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	5.53	1	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	1.01	4	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	\rightarrow	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.40	\rightarrow	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	4.47	4	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	2.27	4	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	September 11 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 10, 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 10, 2025, concentrations were mostly low or medium, with no sustained spikes. The most recent sample, collected on September 10, 2025, showed low detection.





Interpretation of Hepatitis A Concentrations

As of September 11, 2025, wastewater surveillance for Hepatitis A across Nevada, California, and Utah indicated mostly non-detectable levels. Facilities in Las Vegas, Provo, Central Salt Lake Valley, Ontario, and Indio reported a 5-day rolling mean of 0.00 with stable trends. In California, isolated elevations were noted: A.K. Warren measured 8.90, Hyperion reached 68.42, and Riverside recorded 5.47, all showing downward trends. These results point to low overall viral activity, with localized concentrations in Los Angeles and Riverside counties. Sampling was conducted between September 10 and 11.

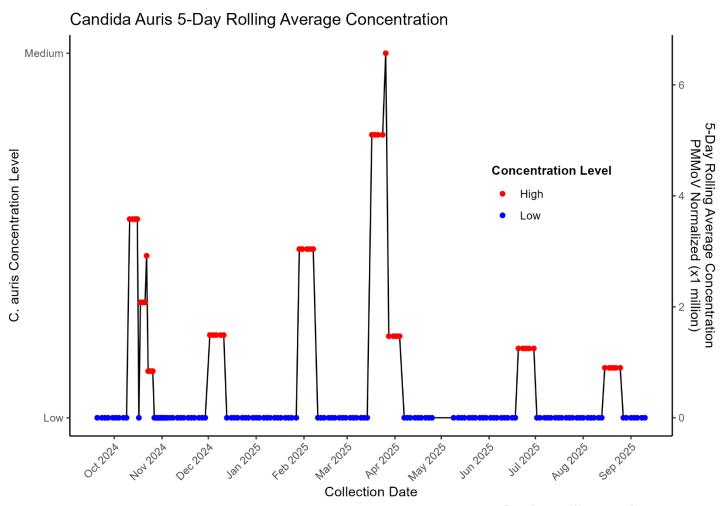
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	\rightarrow	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	8.90	4	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	68.42	1	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	\rightarrow	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	\rightarrow	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	5.47	T	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	\rightarrow	September 11 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 10, 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, and mid-July 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 10, 2025.





Interpretation of Candida Auris Concentrations

As of September 11, 2025, wastewater monitoring for *Candida auris* across Nevada, California, and Utah showed almost entirely undetectable levels. All sampled facilities reported a 5-day rolling mean of 0.00 with stable 14-day trends, except for one: the A.K. Warren Water Resource Facility in Los Angeles County, which recorded a level of 1.00 and an upward trend. Sampling dates ranged from September 10 to 11, confirming minimal pathogen presence across the region. The data indicates low transmission risk, with only isolated activity observed in Southern California.

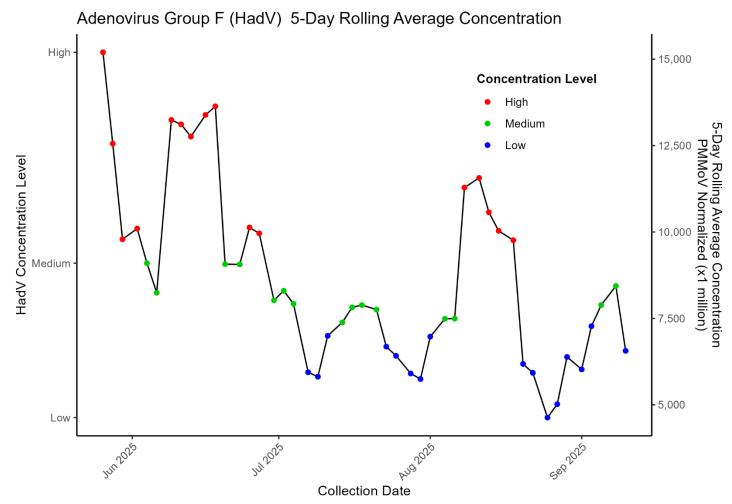
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	\rightarrow	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	1.00	↑	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	→	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	→	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	→	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	\rightarrow	September 11 2025



Adenovirus Group F Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

This graph shows adenovirus group F (HadV) concentrations at the Flamingo Water Resource Center from June 2025 to September 10, 2025, using a 5-day rolling average. Concentration levels are marked as high (red), medium (green), or low (blue). Levels were high through late May 2025 but declined to medium in June 2025, with some fluctuations. In July, concentration dropped further, remaining mostly medium to low. By early August 2025, they reached their lowest point, then briefly spiked to a high in mid-August before settling back to medium. The data indicates a downward trend with occasional short-term increases. The last sample was collected on September 10, 2025.





Interpretation of Adenovirus Group F Concentrations

As of September 11, 2025, wastewater surveillance for Adenovirus Group F across Nevada, California, and Utah showed elevated but varied levels. Nevada's Flamingo Water Resource Center reported 6,562.02 with a downward trend. Utah's Central Valley rose to 15,275.43, while Provo City declined to 6,934.47. In California, A.K. Warren (Los Angeles County) dropped to 6,885.08, while Hyperion (Los Angeles) and Riverside increased to 4,610.47 and 4,358.83, respectively. RP-1 in Ontario (11,577.78) and Valley Sanitary District in Indio (1,793.34) both showed declines.

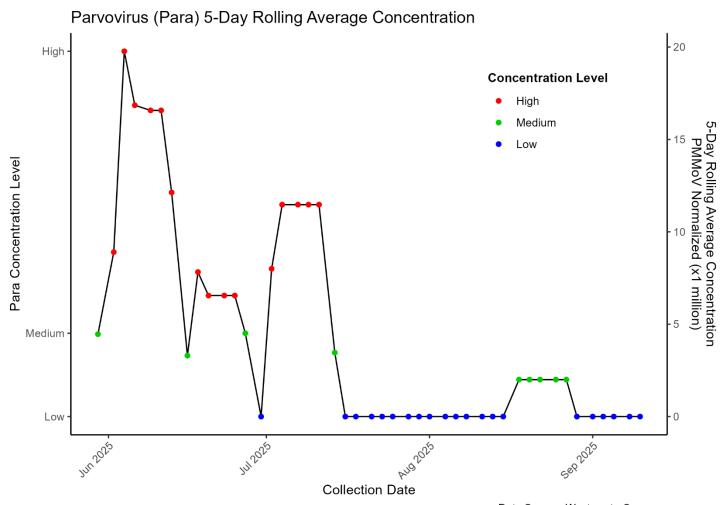
Plant Name	City	Time frame	5 Day Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	6,562.02	4	September 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	-		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	6,885.08	4	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	4,610.47	1	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	15,275.43	↑	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	6,934.47	4	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	11,577.78	4	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	4,358.83	↑	September 11 2025
Valley Sanitary District	Indio, CA	Current	1,793.34	4	September 11 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 11, 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 11, 2025, showed medium concentration.





Parvovirus Concentrations Interpretation

As of September 11, 2025, wastewater surveillance for Parvovirus across Nevada, California, and Utah showed largely non-detectable levels, with only a few facilities reporting measurable activity. In Nevada, the Flamingo Water Resource Center in Las Vegas recorded 0.00 with stable signals. Utah sites showed mixed patterns: Central Valley measured 5.46 with an upward trend, whereas Provo City detected 2.06 with a decline. In California, Hyperion (Los Angeles) reported 0.87 with a downward trend, and RP-1 in Ontario measured 0.63, also declining. All other California sites A.K. Warren (Los Angeles County), Riverside, and Valley Sanitary District (Indio) remained at 0.00 with no change.

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 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.87	T	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	5.46	↑	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	2.06	4	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.63	4	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	September 11 2025
Valley Sanitary District	Indio, CA	Current	0.00	\rightarrow	September 11 2025



Influenza H5 Viral Detection Comparing to Neighboring States

As of September 11, 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 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	0		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0	→	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0	→	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0	→	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0	\rightarrow	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0	\rightarrow	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0	→	September 11 2025
Valley Sanitary District	Indio, CA	Current	0	→	September 11 2025



MPOX Clade 1b Viral Detection Comparing to Neighboring States

As of September 11, 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 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV			
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	Non-detect	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	Non-detect	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	Non-detect	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	Non-detect	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	Non-detect	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	Non-detect	September 11 2025
Valley Sanitary District	Indio, CA	Current	Non-detect	September 11 2025



Measles Viral Detection Comparing to Neighboring States

As of September 11, 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 10 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current		
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	Non-detect	September 10 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	Non-detect	September 10 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	Non-detect	September 10 2025
Provo City Water Reclamation Facility	Provo, UT	Current	Non-detect	September 10 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	Non-detect	September 11 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	Non-detect	September 11 2025
Valley Sanitary District	Indio, CA	Current	Non-detect	September 11 2025



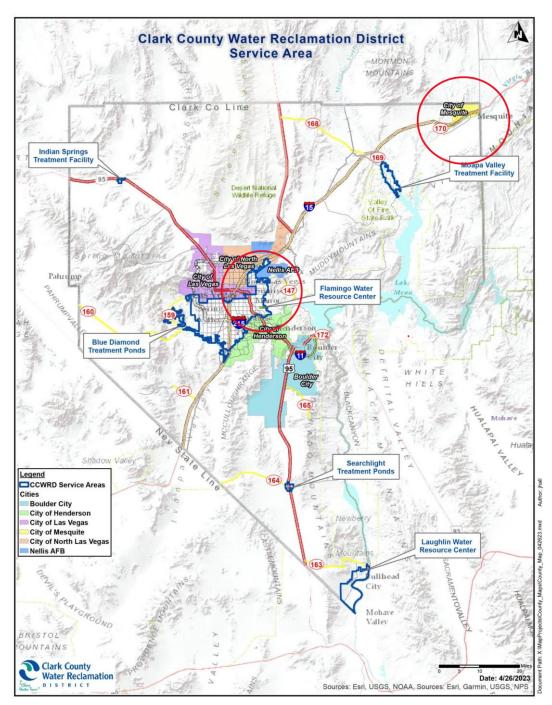
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- 3. Boehm, A. B., Wolfe, M. K., Bidwell, A. L., Zulli, A., Vikram-Chan-Herur, V., White, B. J., Shelden, B., & Duong, D. (2024). *Human pathogen nucleic acids in wastewater solids from 191 wastewater treatment plants in the United States. Scientific Data*, 11, 1141.



Appendix

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



Source: Clark County Water Reclamation District