THE SOUTHERN NEVADA HEALTH DISTRICT'S WEEKLY WASTEWATER SURVEILLANCE REPORT

October 24, 2025

Prepared by:
Jeremiah Zablon
Epidemiologist
Office of Epidemiology
Southern Nevada Health District

Contents

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, Boulder City, 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 **Verily**[1], funded through philanthropic support to Stanford. and Verily laboratories (https://verily.com/). 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 October 24, 2025, Report

This report summarizes the latest wastewater pathogen surveillance results for Clark County, Nevada, and surrounding regions. The analysis focuses on three key facilities, the Flamingo Water Reclamation Facility (FWRF), Mesquite Wastewater Treatment Plant, and Boulder Wastewater Treatment Plant with comparisons to selected sites in Utah and California. Surveillance was carried out by WastewaterSCAN and Verily, targeting a wide range of pathogens, including SARS-CoV-2 and its variants, seasonal respiratory viruses (Influenza A, Influenza B, RSV), and gastrointestinal pathogens (Norovirus, Rotavirus, *Enterovirus D68*, Hepatitis A). The study also accounts for site-level differences, noting that variations in sampling and analytical methods may influence results.

Key Findings (as of October 24, 2025)
Wastewater surveillance across ten monitored sites showed no detections of Measles, Mpox Clade 1b, Influenza H5, or RSV, indicating no current community transmission of these pathogens. The last Measles detection was recorded at FWRF, Nevada, on August 1, with all subsequent samples testing negative.

Respiratory virus trends revealed moderate Influenza A concentrations at FWRF, while other sites reported low levels. Influenza B concentrations remained low across the three monitored Nevada facilities, suggesting limited seasonal influenza activity. SARS-CoV-2 concentrations across Nevada wastewater sites continued to decline, with low concentration levels overall except in Mesquite, where medium concentrations were observed. Despite the downward trend, several Omicron sub lineages XFG, NB.1, LP, and XFC remain in regional circulation, suggesting ongoing but reduced community transmission.

Enteric viruses showed variable patterns. Parvovirus and Adenovirus Group F were both detected at low concentrations at FWRF, reflecting minimal activity. Rotavirus levels were moderate at FWRF, indicating some localized circulation. Norovirus, Candida auris, and Enterovirus D68 were detected at low concentration levels at FWRF, indicating limited spread. Both Candida auris and Hepatitis A were consistently present at low concentrations at FWRF.

Summary: Overall, wastewater data show regional stability with localized viral activity Influenza A and Rotavirus in Nevada, Adenovirus in Utah, and Enterovirus D68 in California indicating low pathogen transmission and the need for continued surveillance.

Methodological Notes: Sampling approaches differed by site. FWRF collected 24-hour composite solid samples analyzed by WastewaterSCAN, while Mesquite relied on liquid grab samples analyzed by Verily. Boulder Mesquite relied on liquid grab samples analyzed by Verily. These methodological differences likely influenced pathogen measurements and should be considered when comparing results across facilities.

Note: Boulder City has 25 days of missing wastewater data; these gaps may impact the accuracy of trend interpretation for virus concentrations.

Summary of Select Pathogen Concentrations in three wastewater treatment facilities in Neveda

- Latest data point for Flamingo Water reclamation district plant is October 22, 2025
- Latest data point for City of Mesquite Wastewater Treatment Plant is October 21, 2025
- Latest data point for Boulder City Wastewater Treatment Plant is October 22, 2025

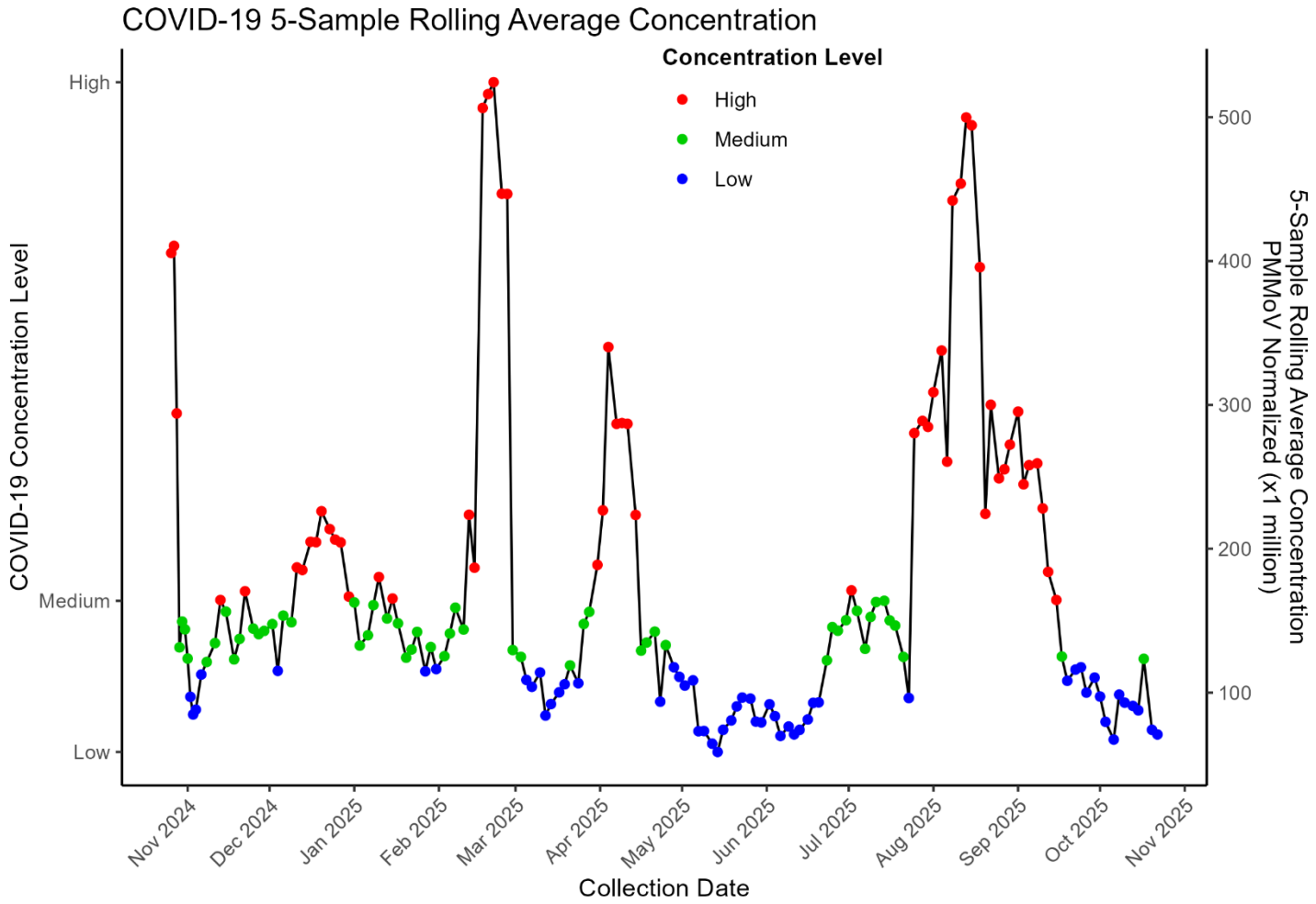
Pathogen	Concentration Level / Presence- Flamingo	Concentration Level / Presence- Boulder	Concentration Level / Presence - Mesquite
SARS-CoV-2	Low	Low	Medium
Influenza A	Medium	Low	Low
Influenza B	Low	Low	Low
Respiratory Syncytial virus (RSV)	Low	Low	Low
Norovirus	Low	Not Tested	Not Tested
Rotavirus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

Note: The wastewater data for Las Vegas were 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 and Boulder City were 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 three facilities are expected. Mesquite and Boulder 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

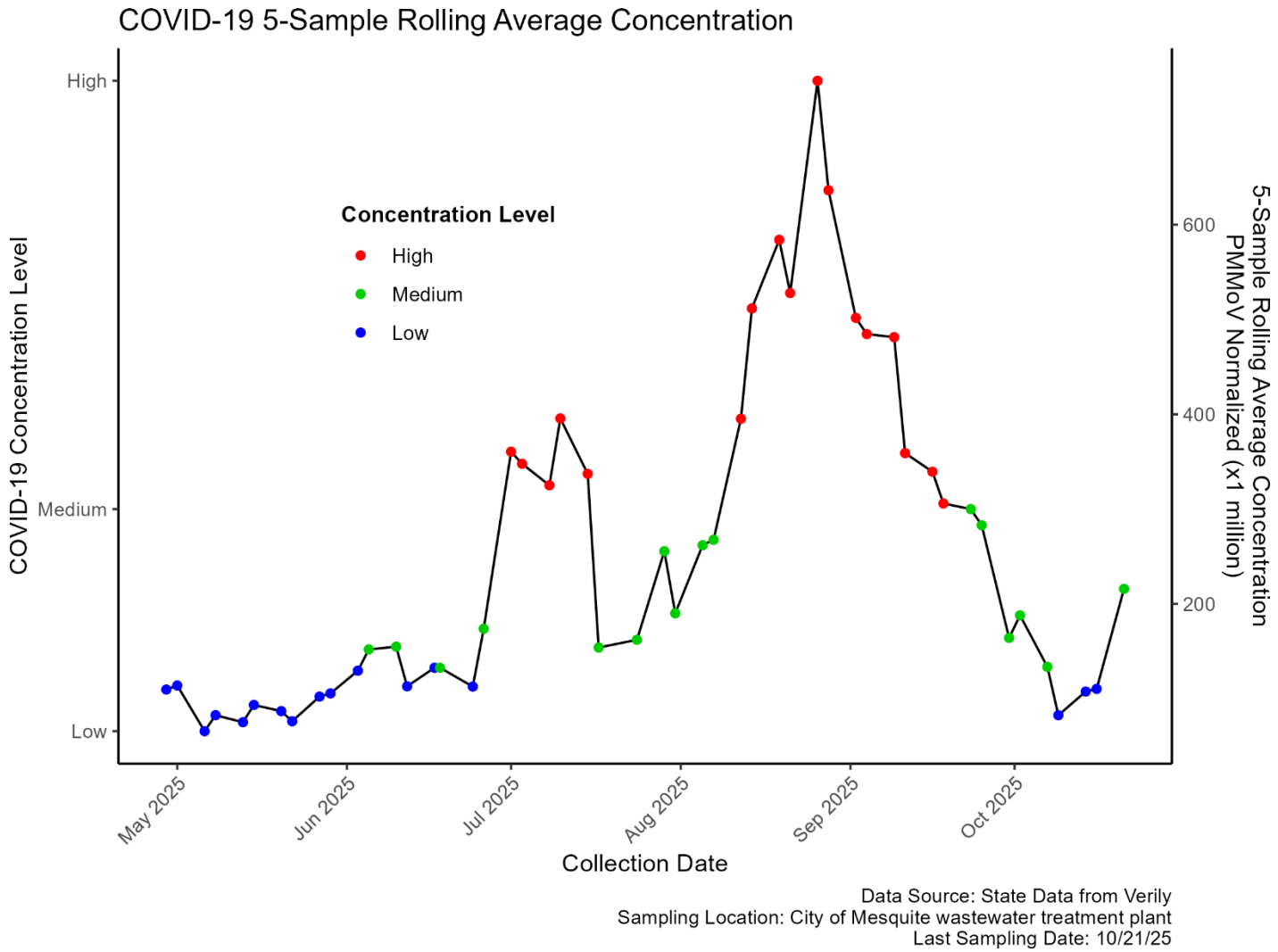
The chart shows COVID-19 5- Sample rolling average concentrations in wastewater from the Flamingo Water Reclamation District in Clark County, covering November 2024 through October 22, 2025. Concentrations fluctuated with several pronounced peaks, including major surges in Early November, February 2, and August Between these peaks, concentrations declined to medium or low levels. After the August spike, viral levels gradually decreased through September and mid-October. The data suggest multiple short-term outbreaks throughout the year, with overall declining activity toward the latest sampling date, indicating reduced community transmission by mid-October 2025.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 10/22/25

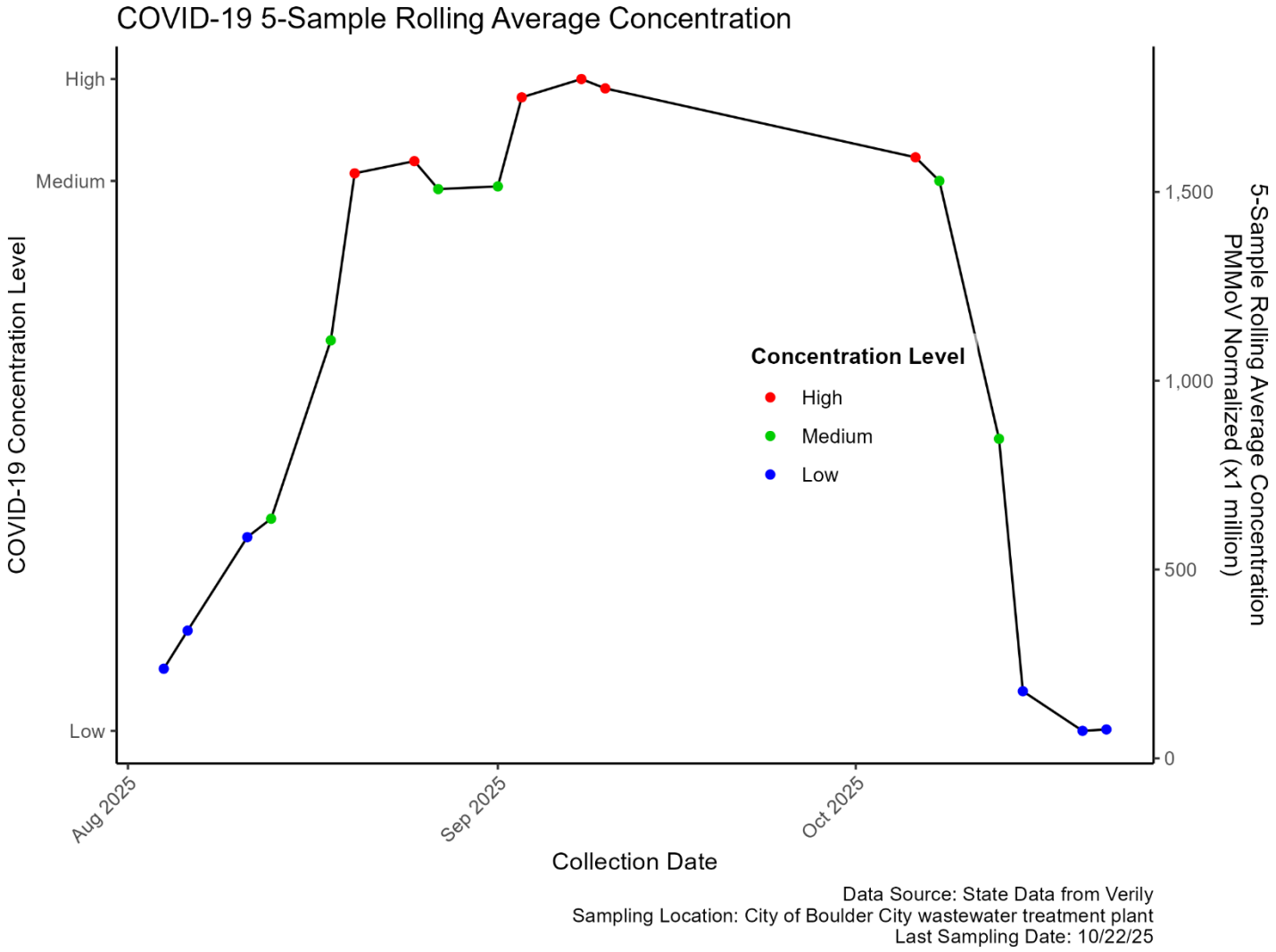
City of Mesquite Wastewater Treatment Plant

The chart shows COVID-19 wastewater concentrations from the City of Mesquite wastewater treatment plant between May and October 2025. Levels stayed low through early summer, began rising in July, and peaked sharply from late August to early September, the highest point of the year. After September, concentrations steadily declined to low levels by mid-October before increasing again to a medium level. Concentration categories are defined as high (red), medium (green), and low (blue). The data are based on 5-sample rolling averages normalized by PMMoV, sourced from Verily's state wastewater dataset, with the most recent sample collected on October 21, 2025.



Boulder City Wastewater Treatment Plant

The chart shows COVID-19 5- Sample rolling average concentrations in wastewater from the Boulder City Wastewater Treatment Plant, covering August through October 22, 2025. Concentrations were low in early August but rose sharply through late August and early September, reaching medium and then high levels. Elevated concentrations persisted through late September before beginning to decline steadily in October. By mid-October, concentrations had dropped to low levels. The data suggest a pronounced late-summer to early-fall surge in COVID-19 activity, followed by a sustained decrease in viral levels in October 2025.



SARS-CoV-2 Concentrations Interpretation

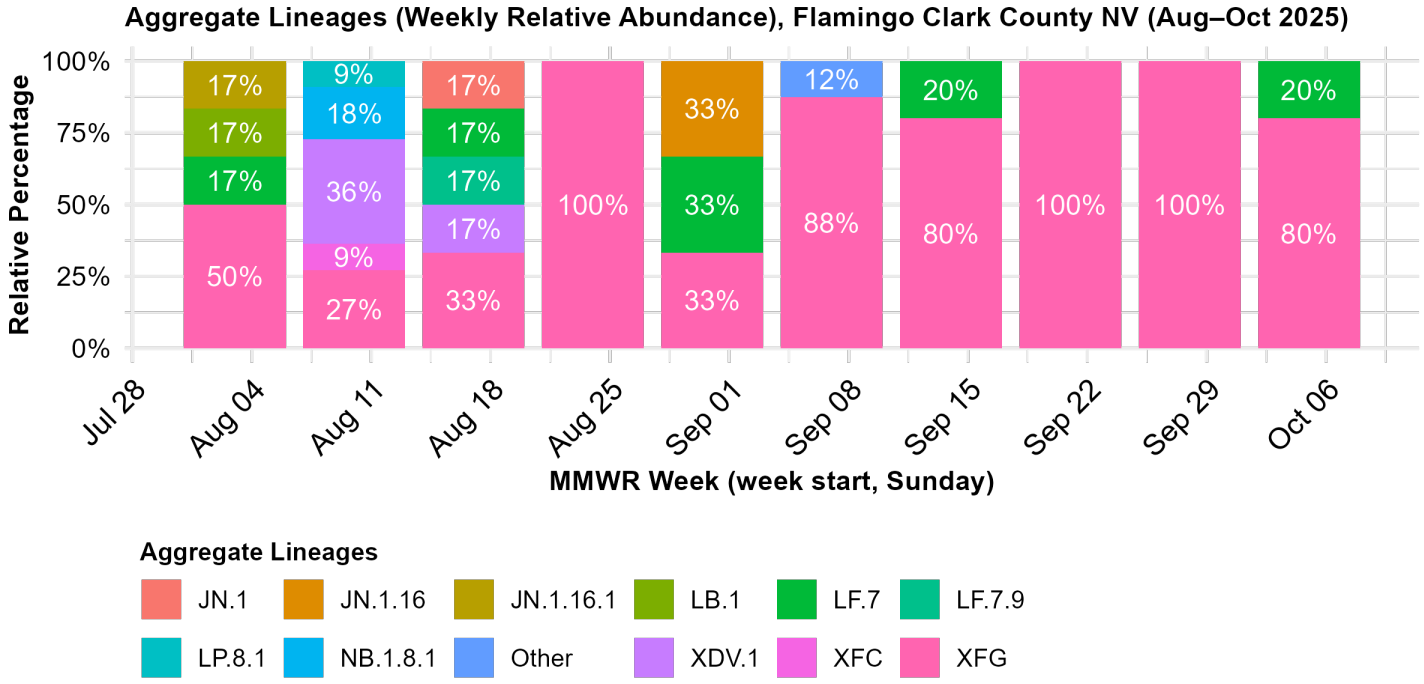
As of October 24, 2025, wastewater surveillance across Nevada, California, and Utah indicates widespread declines in SARS-CoV-2 concentrations. Most monitored sites show decreasing viral trends, with the highest 5-Sample rolling means reported in Mesquite, NV (215.91), Provo, UT (103.05), and Boulder City, NV (76.52). The only location showing an increase is Ontario, CA's Regional Water Recycling Plant No. 1 (59.59). Facilities in Las Vegas, Los Angeles, Riverside, Indio, and Salt Lake Valley all report downward trends. Sampling between October 21 to 24 confirms overall viral activity is lower than in prior weeks across the southwestern region.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	70.90	↓	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	215.91	↓	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	76.52	↓	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	26.72	↓	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	30.97	↓	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	45.52	↓	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	103.05	↓	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	59.59	↑	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	29.31	↓	October 24 2025
Valley Sanitary District	Indio, CA	Current	18.23	↓	October 24 2025

SARS-CoV-2 Variants Circulating

Flamingo Water Reclamation District Plant

The chart displays SARS-CoV-2 lineage groups detected at the Flamingo Water Reclamation District Plant from August through October 2025. Early August featured a mix of lineages including JN.1.16.1, LB.1, LF.7, and XFG at roughly comparable proportions (around 17–50%). Mid-August showed increased diversity, with XDV.1 and several minor variants briefly emerging. By late August, XFG became the predominant lineage, accounting for nearly all detections. Although LF.7 and JN.1.16 reappeared sporadically in early September, XFG maintained sustained dominance (80–100%) through September and October, indicating a strong replacement of earlier circulating variants.

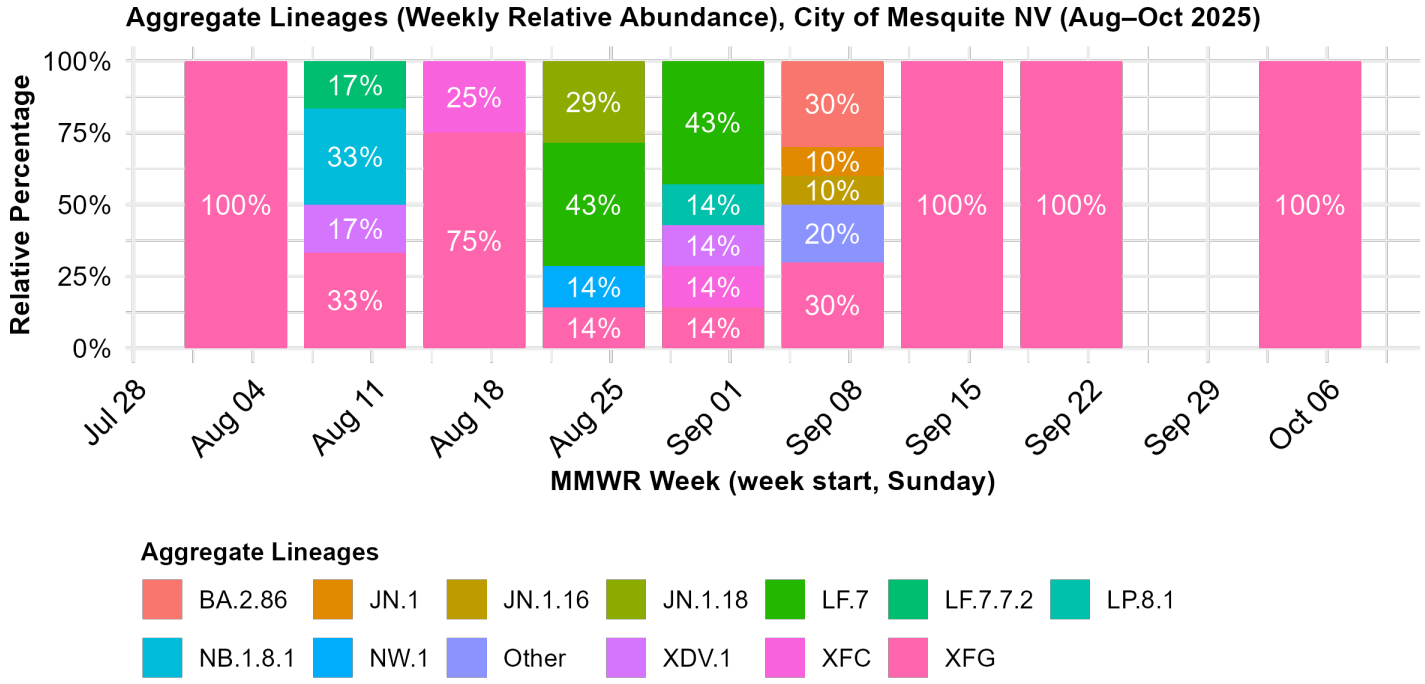


Source: Nevada State Health Department | Analyzed by Verily, October 2025

Note: The last data point is october 6 2025.

Mesquite Wastewater Treatment Plant

The chart illustrates the SARS-CoV-2 lineage groups detected in Mesquite wastewater from August to October 2025. During this period, sequencing data show that lineage XFG became overwhelmingly dominant, accounting for nearly all detections after mid-September. In early August, there was greater diversity, with LF.7, NB.1.8.1, XDV.1, and XFC each contributing between 10 and 40 percent of sequences. Through late August, transitional weeks showed shifting proportions as XFG steadily increased. By early September, only XFG and a few minor sub lineages BA.2.86, JN.1, and JN.1.16 remained detectable, marking XFG's clear rise to complete dominance by fall 2025.

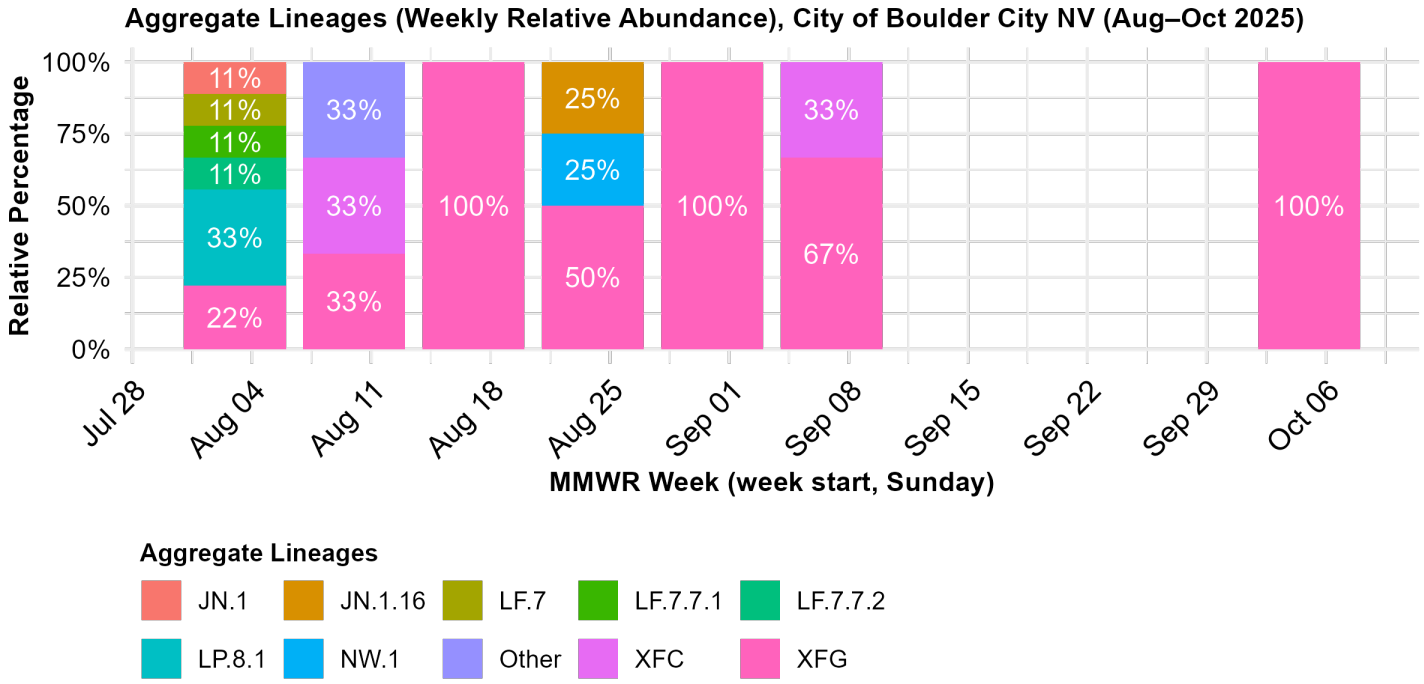


Source: Nevada State Health Department | Analyzed by Verily, October 2025

Note: Data for the week of September 29, 2025, were missing and are not represented in the chart. The last data point shown is for the week of October 6, 2025.

Boulder City Wastewater Treatment Plant

The chart illustrates the SARS-CoV-2 lineage groups detected in Boulder City wastewater between August and October 2025. During this period, sequencing data show a clear progression toward XFG lineage dominance. In early August, viral diversity was high, with JN.1, LF.7, LF.7.7.1, LF.7.7.2, and LP.8.1 each representing roughly 10–33% of sequences. By mid-August, this diversity declined sharply as XFG rose to 100% of detections. Minor sub lineages such as JN.1.16, NW.1, and XFC appeared briefly in late August and early September but quickly diminished.



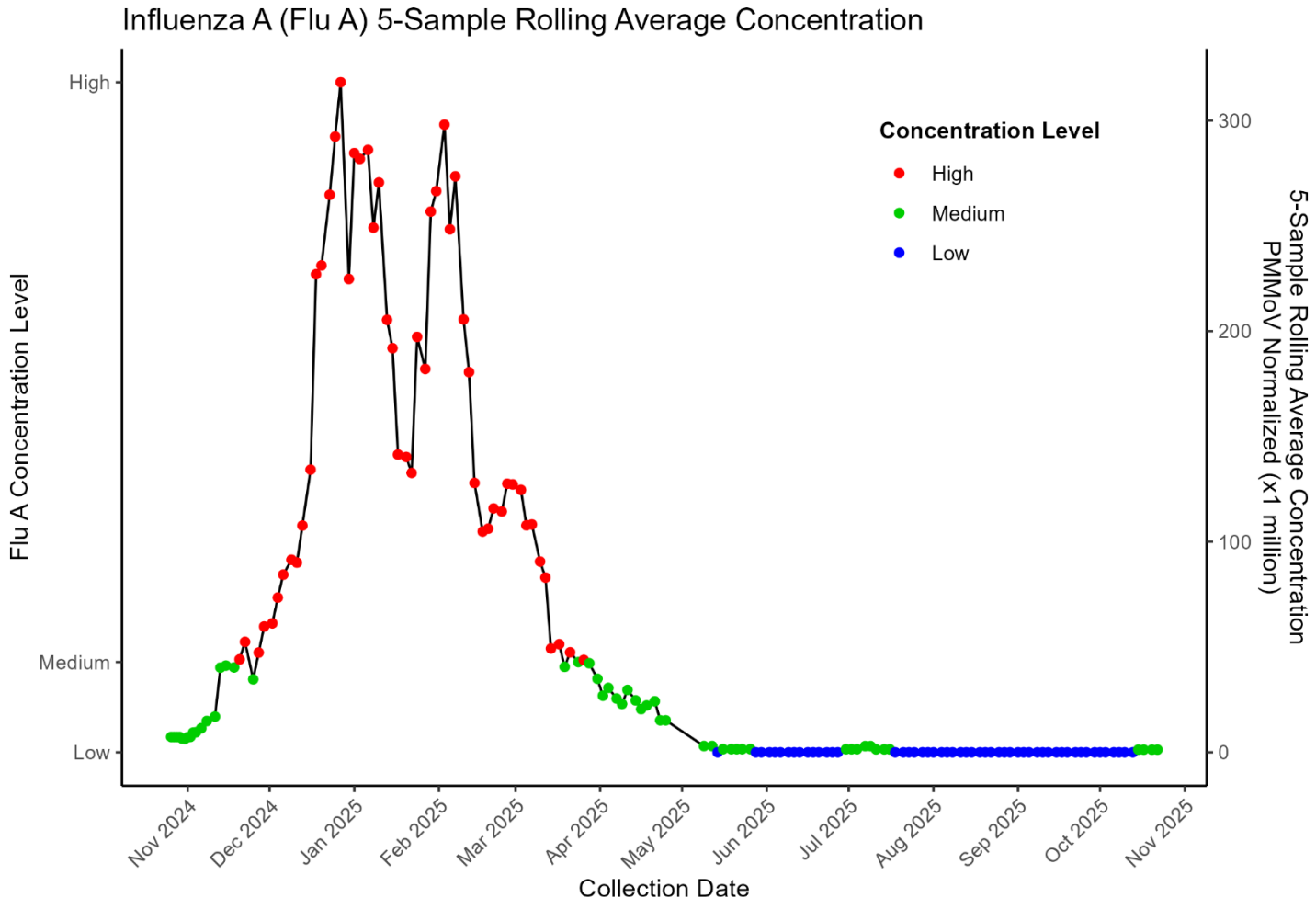
Source: Nevada State Health Department | Analyzed by Verily, October 2025

Note: Data for the weeks of September 15, 22, and 29, 2025, were missing and are not represented in the dataset. The last data point shown is for the week of October 6, 2025.

Influenza A Viral Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

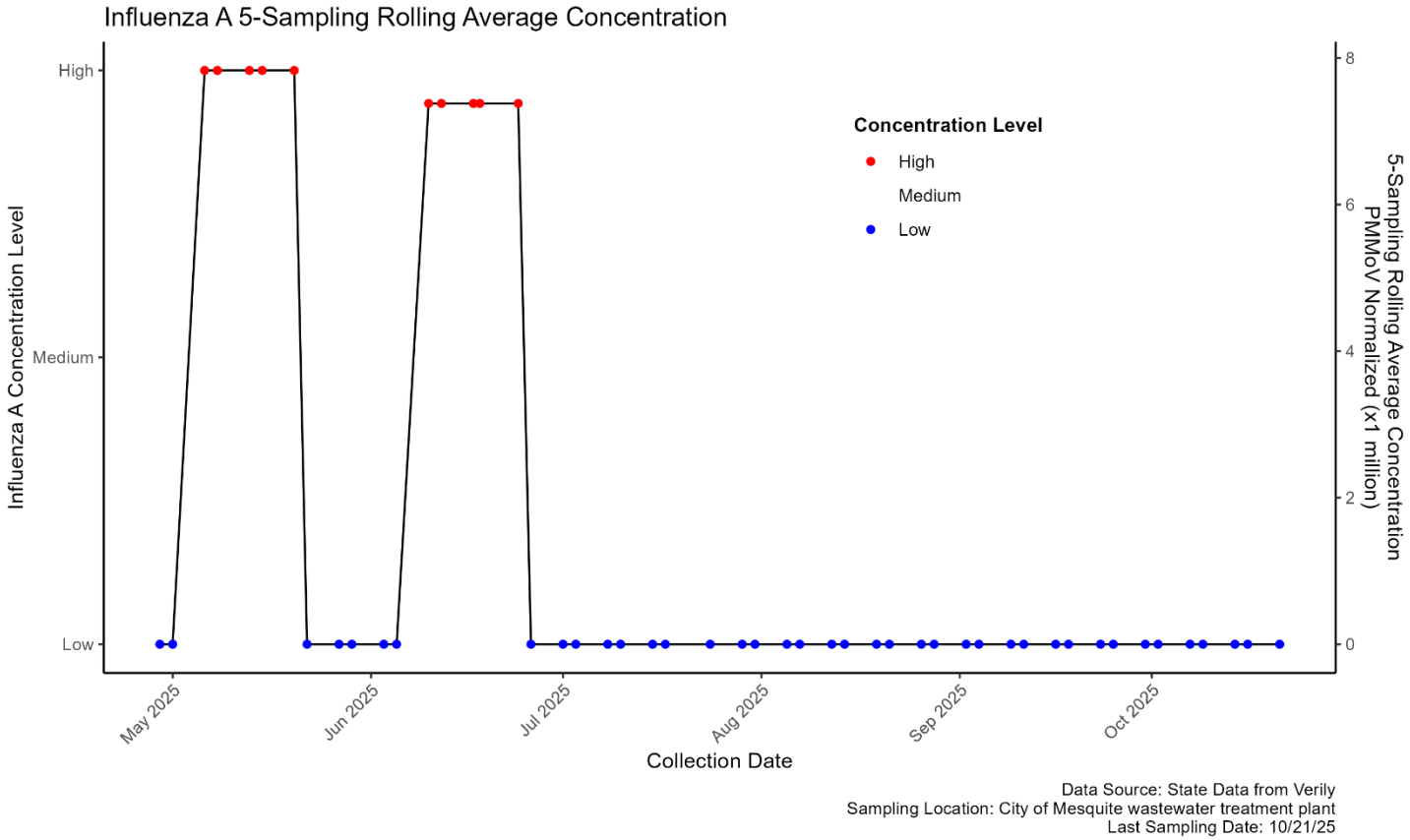
The chart illustrates Influenza A (Flu A) 5- Sample rolling average concentrations in wastewater from the Flamingo Water Reclamation District in Clark County, spanning November 2024 through October 22, 2025. Concentrations began to rise in November 2024, peaking sharply in December and January 2025 at high levels. Levels gradually declined through February and March, shifting from high to medium concentrations and stabilizing by May. From June onward, concentrations decreased from medium to consistently low levels, with a slight return to medium levels in mid-October. The most recent sample, collected on October 22, 2025, confirmed moderate Influenza A activity.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 2025-10-22

City of Mesquite Wastewater Treatment Plant

The chart shows Influenza A concentrations in wastewater from the City of Mesquite, NV between May and October 2025, based on a 5- Sample rolling average normalized to PMMoV. Levels were mostly low (blue) across the monitoring period, with two brief high spikes (red) observed in May and June. These peaks quickly subsided, returning concentrations to low levels by early July. From July through October, values remained consistently low, with no further medium-level signals detected. The most recent sample, collected on October 21, 2025, confirms that Influenza A activity in wastewater is currently minimal following earlier isolated surges.



Interpretation of Influenza A Concentrations

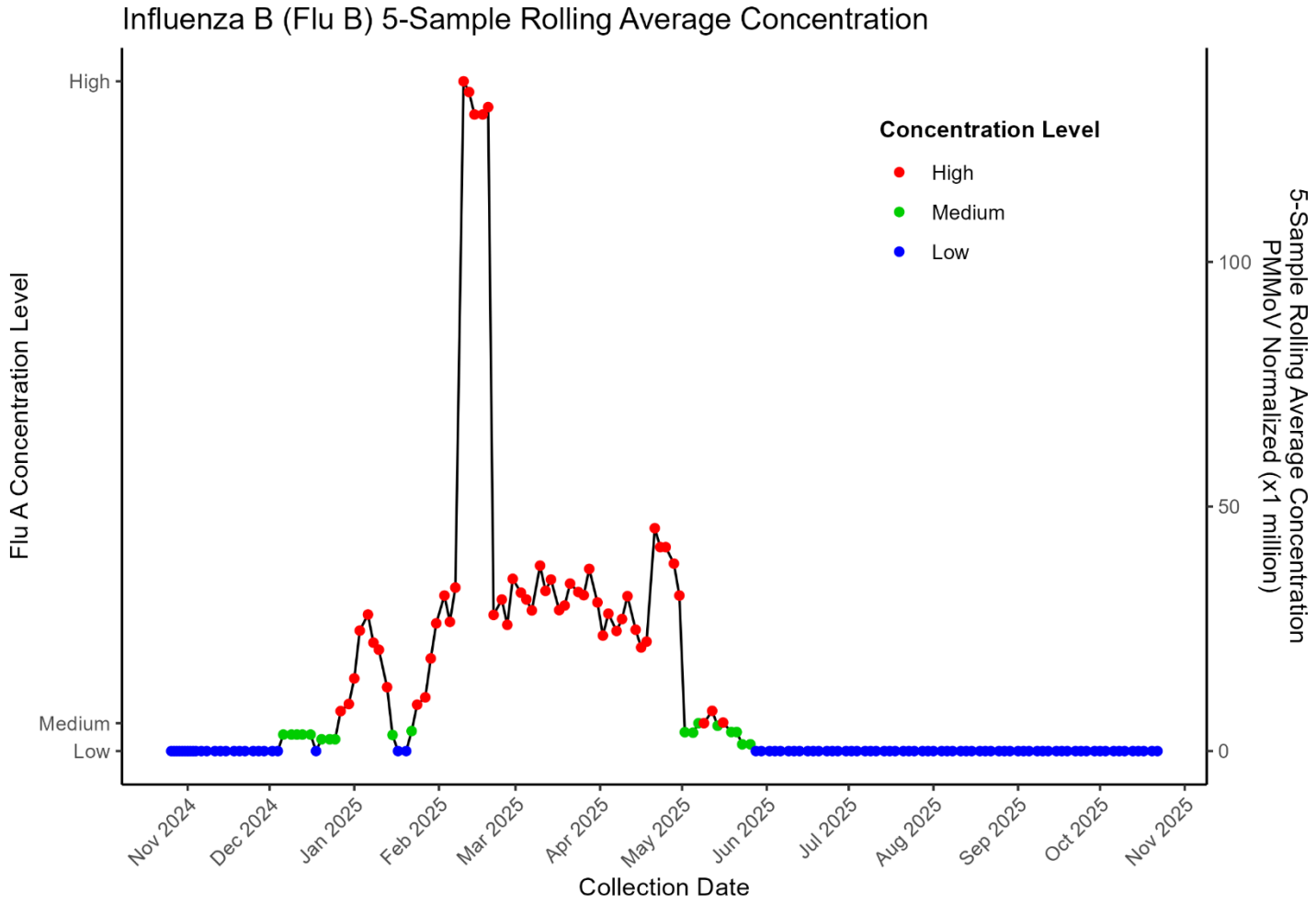
As of October 24, 2025, wastewater surveillance for Influenza A across Nevada, California, and Utah continued to show very low or non-detectable levels. Most facilities including those in Las Vegas, Mesquite, Boulder City, Los Angeles, Ontario, Riverside, and Indio reported 5- Sample rolling means near zero with stable trends. Only Utah sites showed slight increases: Central Valley Water Reclamation Facility (4.26) and Provo City Water Reclamation Facility (4.10) both trended upward.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	1.26	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	0.00	→	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	0.00	→	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	→	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	4.26	↑	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	4.10	↑	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.00	→	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	October 24 2025

Influenza B Viral Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

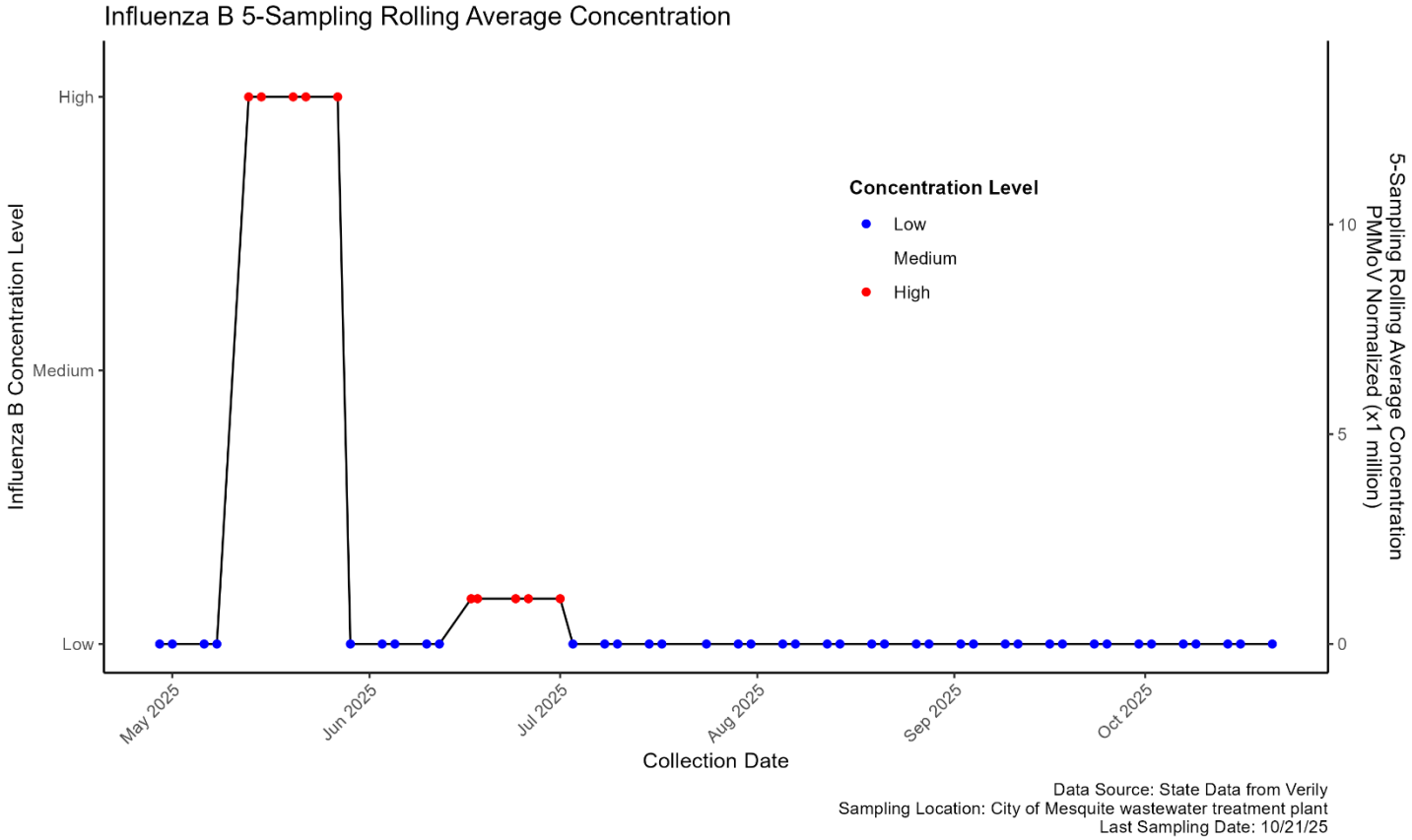
The chart shows Influenza B wastewater trends at the Flamingo Water Resource Center (Las Vegas, NV) from November 2024 to October 22, 2025. Levels remained low through late 2024, with only brief medium detections in mid-December 2024. A sharp rise began in early January 2025, peaking in March 2025 with 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 October 2025. The last sampling date was October 22, 2025.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 2025-10-22

City of Mesquite Wastewater Treatment Plant

The chart tracks Influenza B concentrations in wastewater from the City of Mesquite, NV between May and October 2025, using a 5- Sample rolling average normalized to PMMoV. Concentrations were low (blue) for most of the monitoring period, with two briefly high spikes (red) one in mid-May to late June and another in mid-June to late June. Both peaks quickly declined, and levels returned to low by early July. From July through October, concentration remained consistently low, with no medium-level activity observed. The most recent sample, collected on October 21, 2025, confirms minimal Influenza B activity following earlier isolated surges.



Interpretation of Influenza B Concentrations

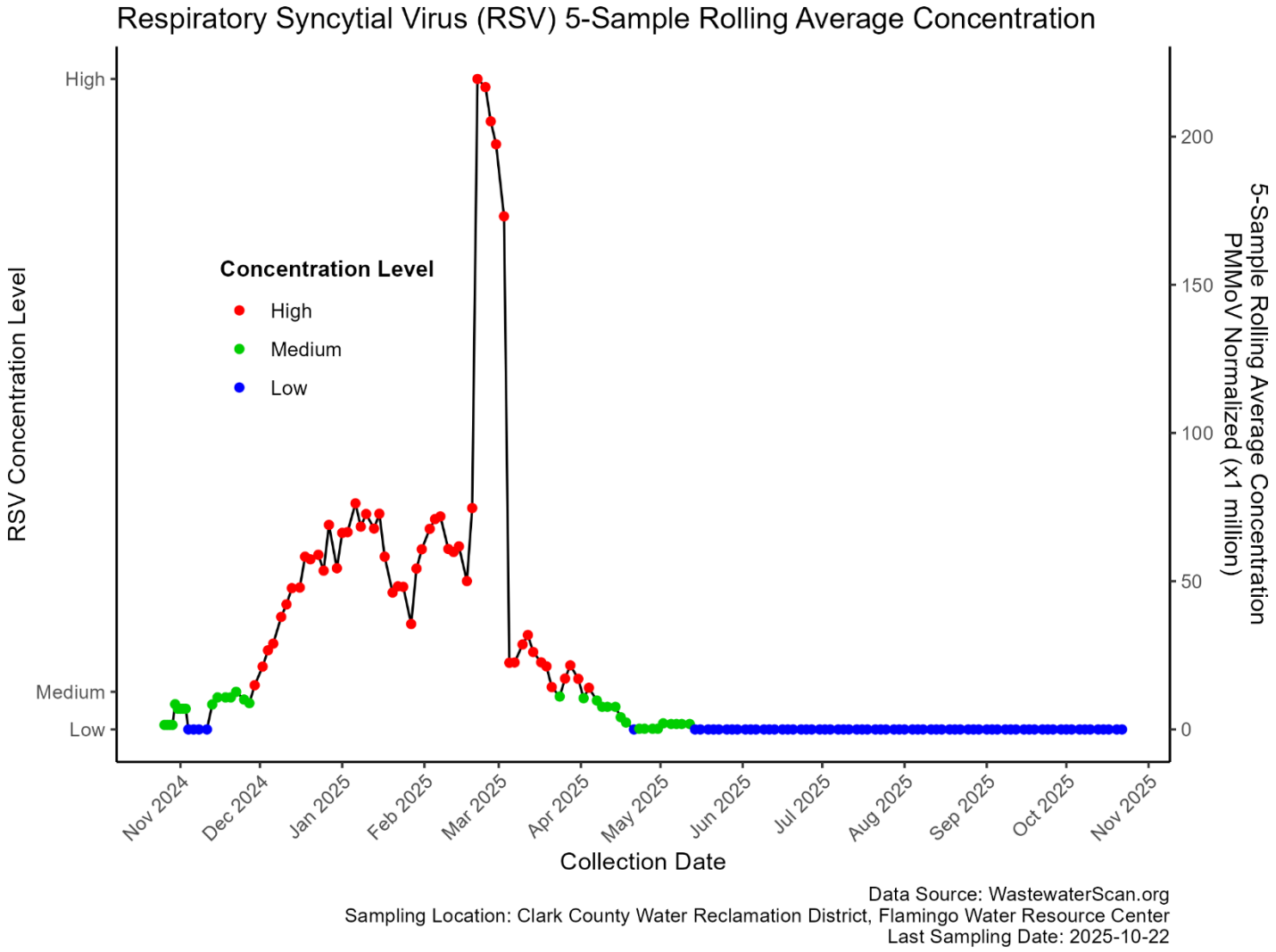
As of October 24, 2025, wastewater surveillance for Influenza B across Nevada, California, and Utah indicated minimal to non-detectable activity. Most sites including those in Las Vegas, Mesquite, Boulder City, Los Angeles, Ontario, Riverside, and Indio reported 5-sample rolling means of 0.00 with stable trends. Slightly elevated but still low levels were observed in Utah: Central Valley Water Reclamation Facility (1.98, stable) and Provo City Water Reclamation Facility (1.79, rising). Sampling occurred between October 21 to 24, 2025. Overall, Influenza B signals remain very low throughout the region, with only minor increases noted in Provo, Utah.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	0.00	→	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	0.00	→	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	→	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	1.98	→	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	1.79	↑	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	1.78	→	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	October 24 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 November 2024 to October 22, 2025. RSV concentrations remained low through October 2024, began rising in December 2024, and peaked sharply in February 2025. Levels declined through April 2025 and returned to low by June 2025, remaining low through late October 2025. Data was normalized using PMMoV, with the last sampling recorded on October 22, 2025.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 2025-10-22

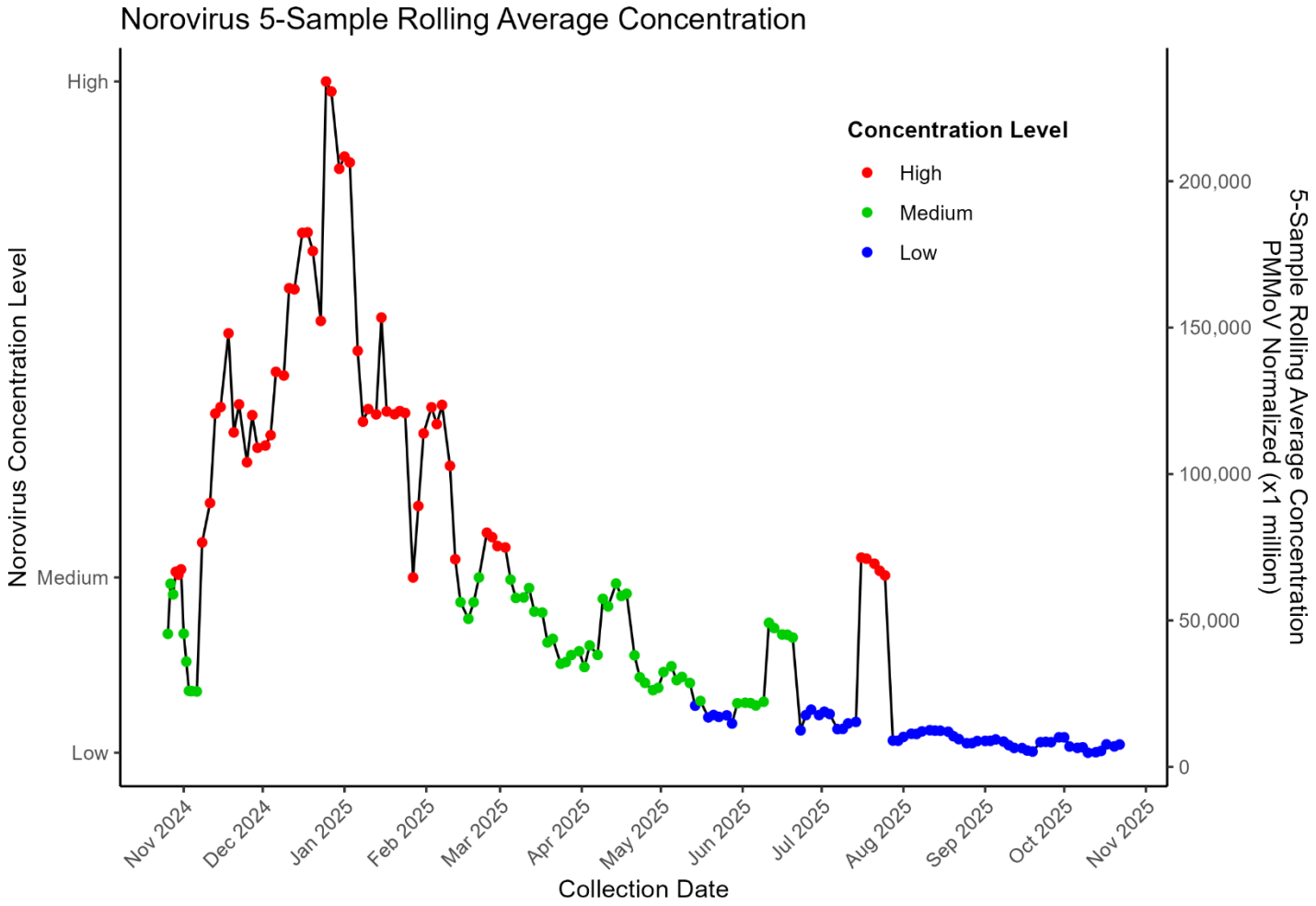
Respiratory Syncytial Virus (RSV) Concentrations Interpretation
As of October 24, 2025, wastewater surveillance for Respiratory Syncytial Virus (RSV) across Nevada, California, and Utah showed no detectable or minimal concentrations, suggesting very limited community transmission. All monitored sites in Nevada including Las Vegas, Mesquite, and Boulder City reported 5-sample rolling means of 0.00 with stable trends. Most California facilities also recorded non-detectable levels, except for slight detections at Hyperion Water Reclamation Plant in Los Angeles (1.34) and Ontario's Regional Plant No. 1 (0.55). In Utah, Central Valley Water Reclamation Facility showed a low reading (0.36), while Provo remained undetected.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	0.00	→	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	0.00	→	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	1.34	→	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.36	→	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	→	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.55	→	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	October 24 2025

Norovirus Viral Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

The chart shows Norovirus 5- Sample rolling average concentrations in wastewater from the Flamingo Water Reclamation District in Clark County from November 2024 through October 22, 2025. Concentrations rose sharply in November 2024, peaking at high levels in December and January 2025, before gradually declining through spring. Moderate activity persisted from February to April, followed by a steady drop to low levels by May. Brief spikes were observed in July and August 2025, but concentrations remained low from September onward. Overall, the data indicate strong Norovirus activity in late 2024 to early 2025, with reduced circulation later in the year.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 10/22/25

Interpretation of Norovirus Concentrations

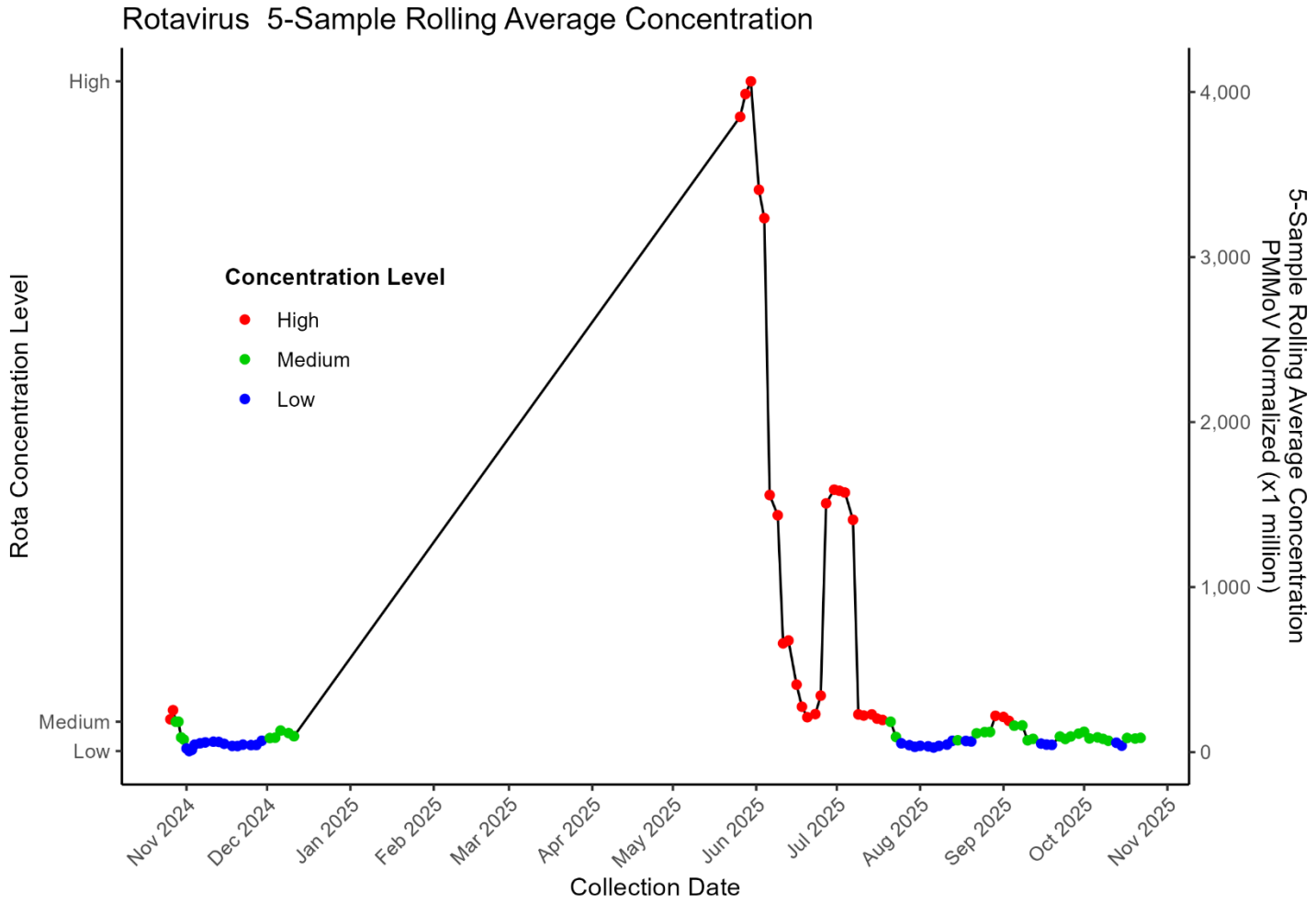
As of October 24, 2025, wastewater monitoring for Norovirus across Nevada, California, and Utah showed elevated concentrations with mixed trends. Nevada's Flamingo Water Resource Center reported a high 5-sample rolling mean of 7,648.51 and an upward trend, while Mesquite and Boulder City were not tested. In California, A.K. Warren increased (5,389.62), but Hyperion, Ontario RP-1, Riverside, and Indio showed declines. Utah recorded the highest levels, with Central Valley (13,900.64) decreasing and Provo (14,258.02)

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	7,648.51	↑	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	5,389.62	↑	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	5,281.92	↓	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	13,900.64	↓	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	14,258.02	↑	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	6,909.74	↓	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	4,380.32	↓	October 24 2025
Valley Sanitary District	Indio, CA	Current	1,599.19	↓	October 24 2025

Rotavirus Viral Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

The chart illustrates Rotavirus 5- Sample rolling average concentrations in wastewater from the Flamingo Water Reclamation District in Clark County from November 2024 through October 22, 2025. Concentrations remained low to medium through late 2024 before rising sharply in early 2025, peaking at high levels between April and May. Afterward, concentrations declined steeply, with moderate fluctuations in June and July. From August through mid-October, levels stabilized within the low to medium range, suggesting reduced viral activity following earlier surges. The most recent sample, collected on October 22, 2025, showed increase of concentrations to medium.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 2025-10-22

Interpretation of Rotavirus Concentrations

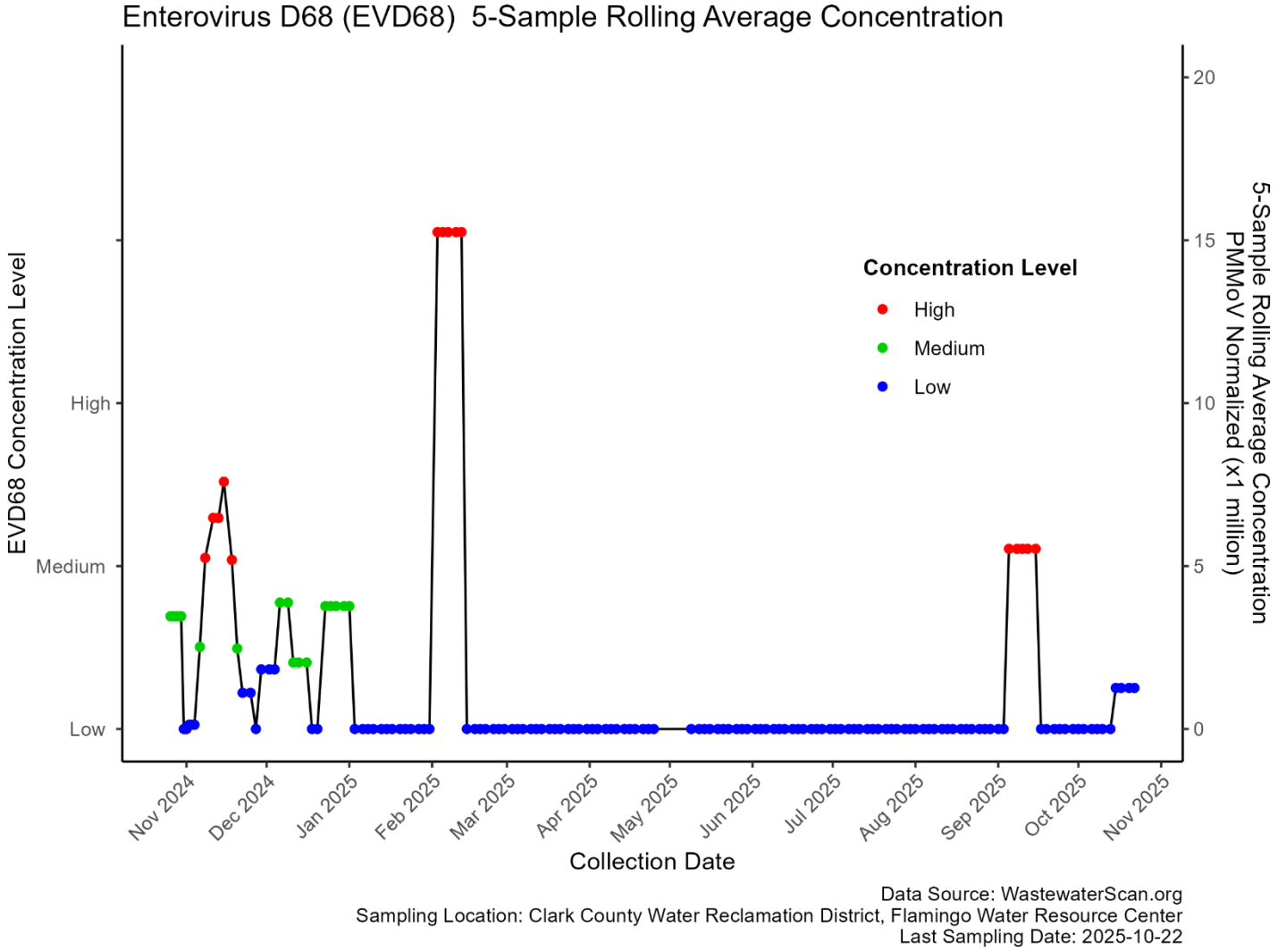
As of October 24, 2025, wastewater surveillance for Rotavirus across Nevada, California, and Utah showed elevated concentrations with mixed short-term trends. In Nevada, the Flamingo Water Resource Center reported a 5-sample rolling mean of 86.41 with an upward trend, while Mesquite and Boulder City were not tested. In California, A.K. Warren (63.66 ↑), Ontario RP-1 (9.68 ↑), and Indio (16.91 ↑) increased, while Hyperion (35.80 ↓) and Riverside (42.25 ↓) declined. In Utah, Central Valley (109.30 ↑) and Provo (60.79 ↑) both rose.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	86.41	↑	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	63.66	↑	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	35.80	↓	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	109.30	↑	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	60.79	↑	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	9.68	↑	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	42.25	↓	October 24 2025
Valley Sanitary District	Indio, CA	Current	16.91	↑	October 24 2025

Enterovirus D68 Viral Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

Enterovirus D68 (EVD68) concentrations in wastewater at the Flamingo Water Reclamation District in Clark County fluctuated between November 2024 and October 22, 2025. Sharp peaks occurred in November 2024, and again in February 2025. From March through early September 2025, levels declined and remained low. A brief resurgence was observed around September 10, followed by a return to low concentrations in early October. These patterns suggest seasonal variation and highlight the value of wastewater surveillance.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 2025-10-22

Interpretation of *Enterovirus D68* Concentrations

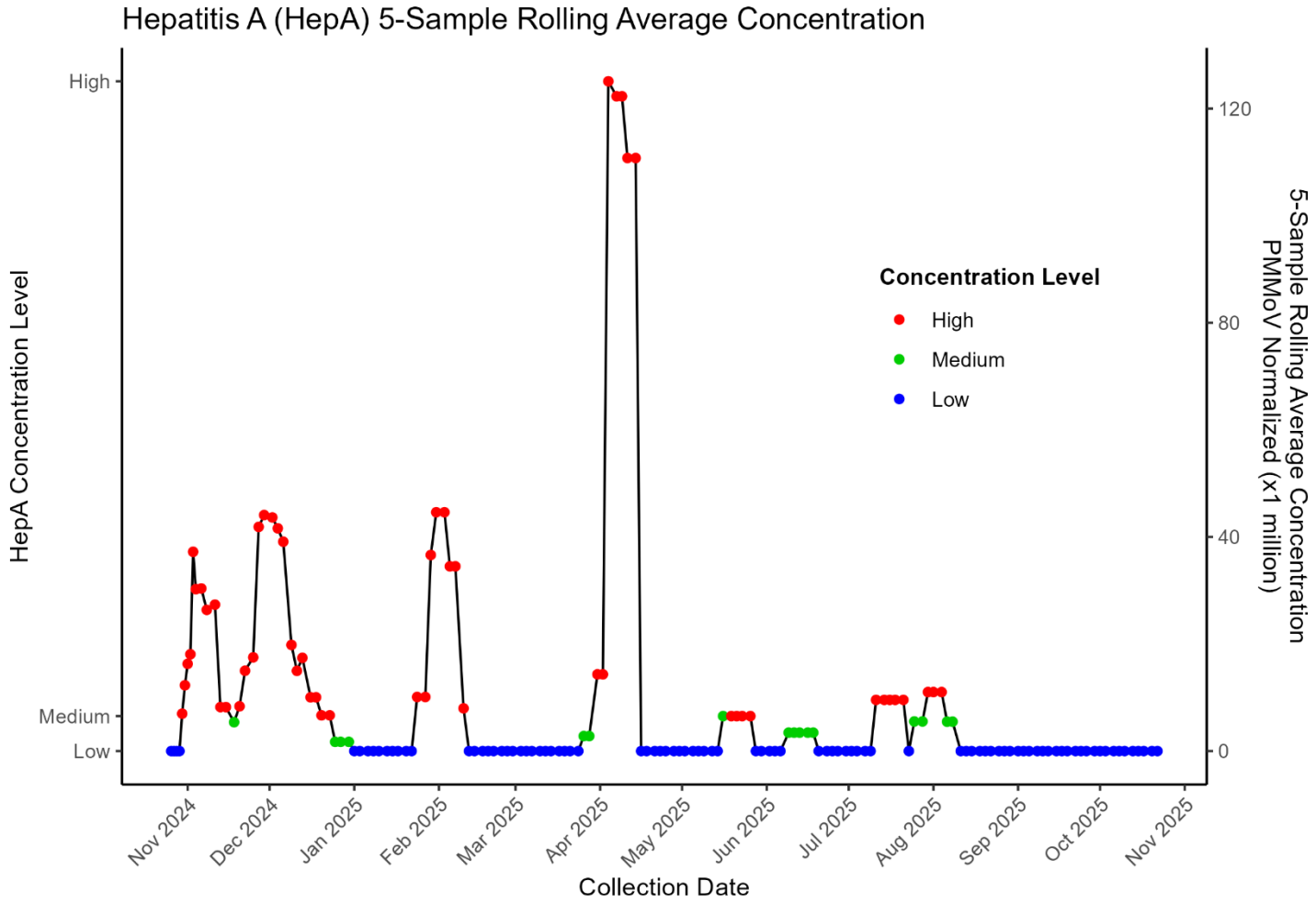
As of October 24, 2025, wastewater surveillance for Enterovirus D68 across Nevada, California, and Utah showed low to moderate concentrations with mostly increasing trends. Nevada's Flamingo Water Resource Center reported a low level (1.26, stable), while Mesquite and Boulder City were not tested. In California, rising levels were observed at A.K. Warren (12.63), Hyperion (8.24), Ontario RP-1 (41.25), and Riverside (20.62), while Indio (8.89) showed a slight decline. Utah sites Central Valley (2.87) and Provo (7.15) also trended upward.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	1.26	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	12.63	↑	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	8.24	↑	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	2.87	↑	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	7.15	↑	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	41.25	↑	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	20.62	↑	October 24 2025
Valley Sanitary District	Indio, CA	Current	8.89	↓	October 24 2025

Hepatitis A (HepA) Viral Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

The chart illustrates Hepatitis A (HepA) 5- Sample rolling average concentrations in wastewater from the Flamingo Water Reclamation District in Clark County from November 2024 through October 22, 2025. Concentrations peaked sharply in November and December 2024, declined to low levels in January, and rose again in February and April 2025. From May through October, values fluctuated between low and medium, with brief spikes in late May, late July, and early August. Since September, concentrations have remained consistently low. Overall, the data indicates multiple short-term outbreaks followed by a sustained period of low activity, with the most recent sample collected on October 22, 2025.



Data Source: WastewaterScan.org
Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 2025-10-22

Interpretation of Hepatitis A Concentrations

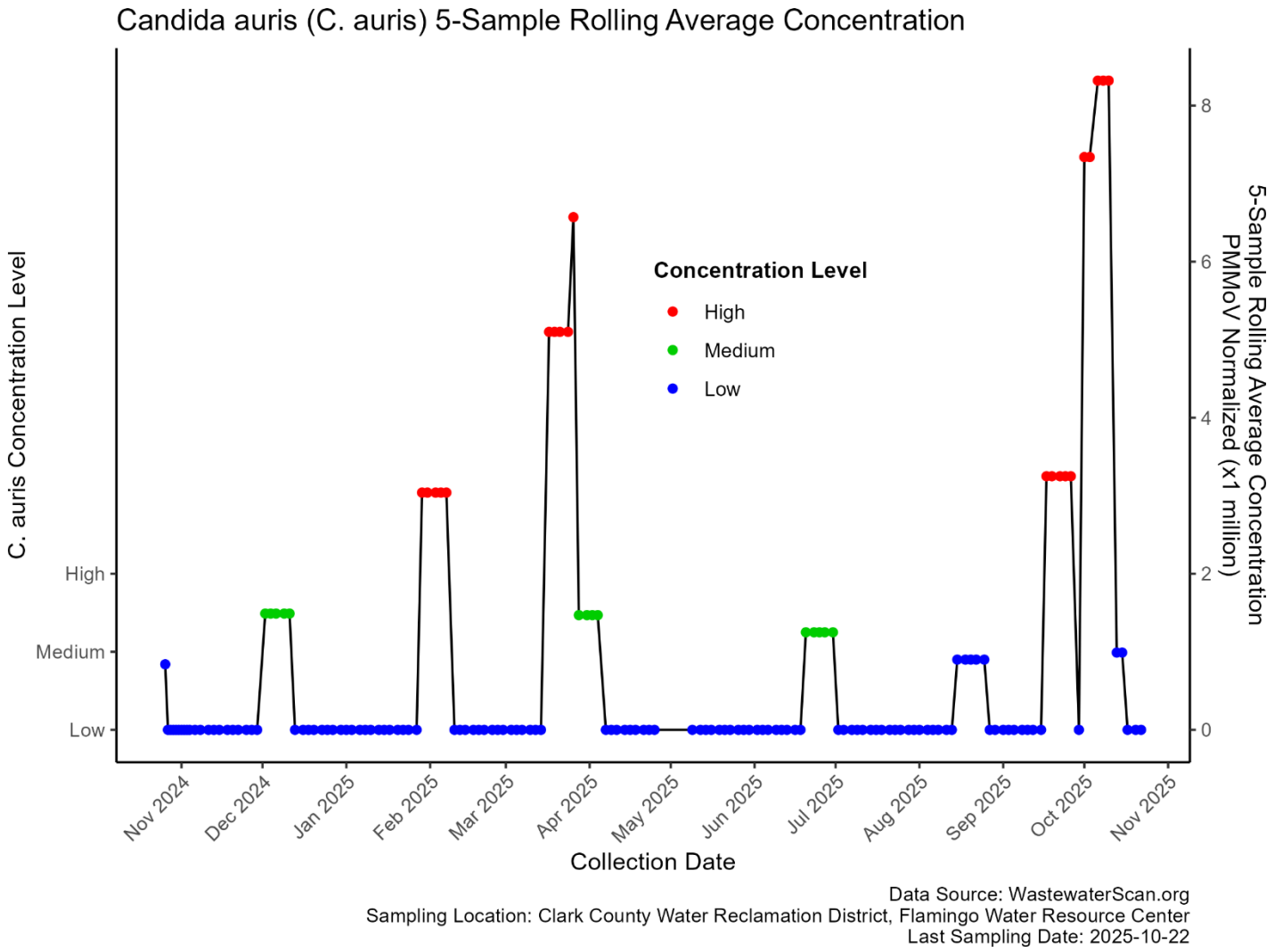
As of October 24, 2025, wastewater surveillance for Hepatitis A across Nevada, California, and Utah indicated very low to non-detectable concentrations. Most sites—including those in Las Vegas, Riverside, Indio, Los Angeles County, and Utah—reported 5-sample rolling means of 0.00 with stable trends. In California, Hyperion Water Reclamation Plant showed a small but declining signal (20.45 ↓), while Ontario's RP-1 recorded a minor decrease (2.86 ↓). Mesquite and Boulder City were not tested during this period.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	20.45	↓	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	→	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	2.86	↓	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	October 24 2025

Candida Auris Fungal Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

The graph illustrates *Candida auris* (C. auris) 5- Sample rolling average concentrations in wastewater at the Flamingo Water Resource Center from November 2024 through October 22, 2025. Concentrations were mostly low or undetectable, with brief medium-level increases in December 2024, March–April, and July 2025. High peaks occurred in October 2024, February2025, and October 2025, with the mid-October 2025 spike marking the year's highest level before returning to low levels. Overall, *C. auris* activity was intermittent, showing sporadic surges in community shedding.



Interpretation of *Candida Auris* Concentrations

As of October 24, 2025, wastewater monitoring for Candida auris across Nevada, California, and Utah showed minimal to non-detectable concentrations. Most sites including those in Las Vegas, Los Angeles County, Riverside, Indio, and Utah reported 0.00 5-sample rolling means with stable trends, indicating no detectable activity. The only site with a measurable signal was Ontario's Regional Water Recycling Plant No. 1, which recorded a low level of 1.89 with an upward trend. Mesquite and Boulder City were not tested during this period.

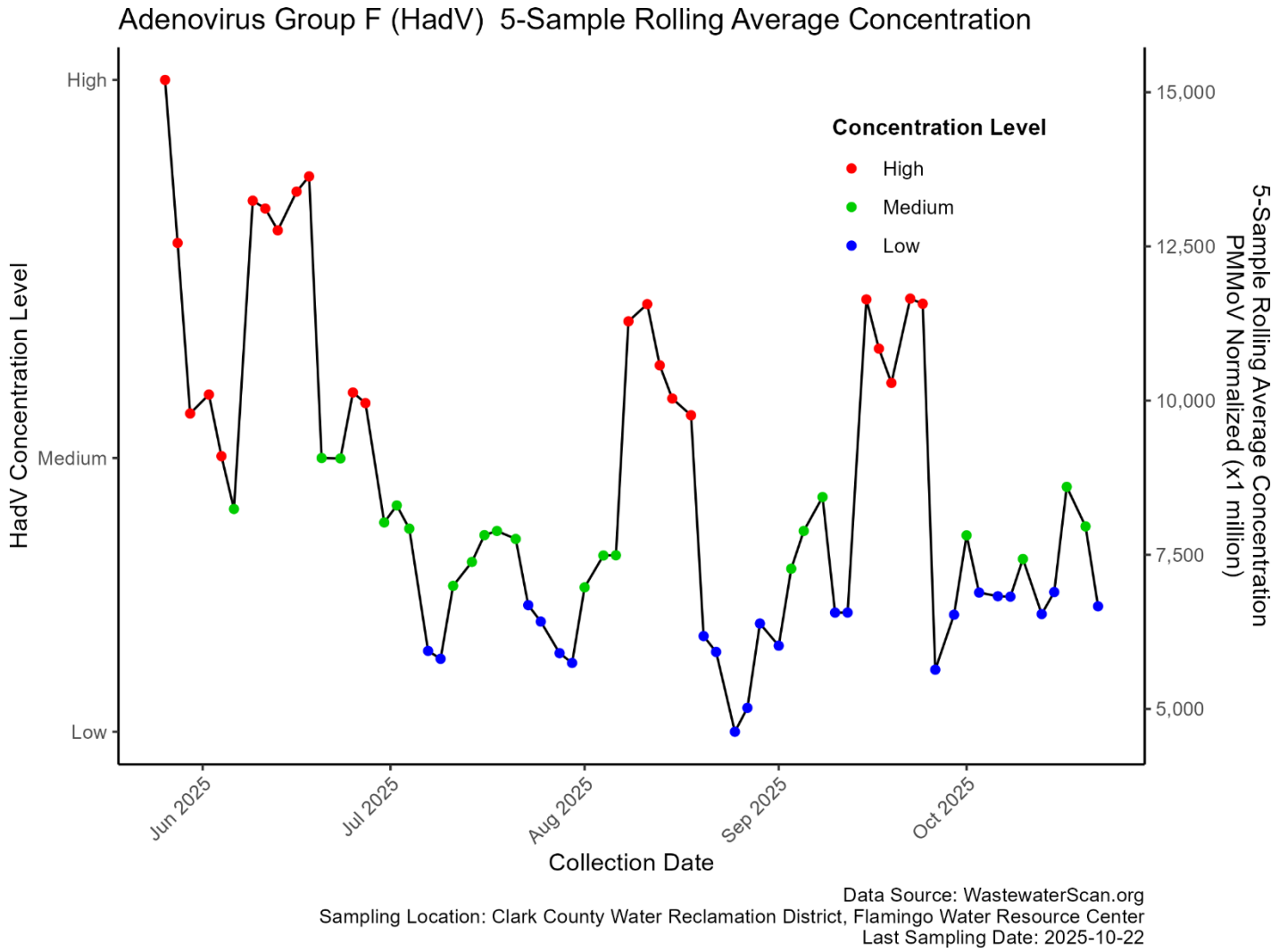
Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	→	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.00	→	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0.00	→	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	1.89	↑	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	October 24 2025

Adenovirus Group F Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

The chart illustrates Adenovirus Group F (HadV) concentrations in wastewater from Clark County's Flamingo Water Reclamation District, spanning June through October 22, 2025. The 5- Sample rolling average shows fluctuating viral levels ranging from high to low. Concentrations were high in early June but declined to medium and low by late June. July showed mostly medium levels trending downward, followed by low levels in August that briefly rebounded to medium. September exhibited variable activity with mid- and late-month peaks at high levels. In October, concentrations ranged between low and medium, with the last sample collected on October 22

, 2025.



Interpretation of Adenovirus Group F Concentrations

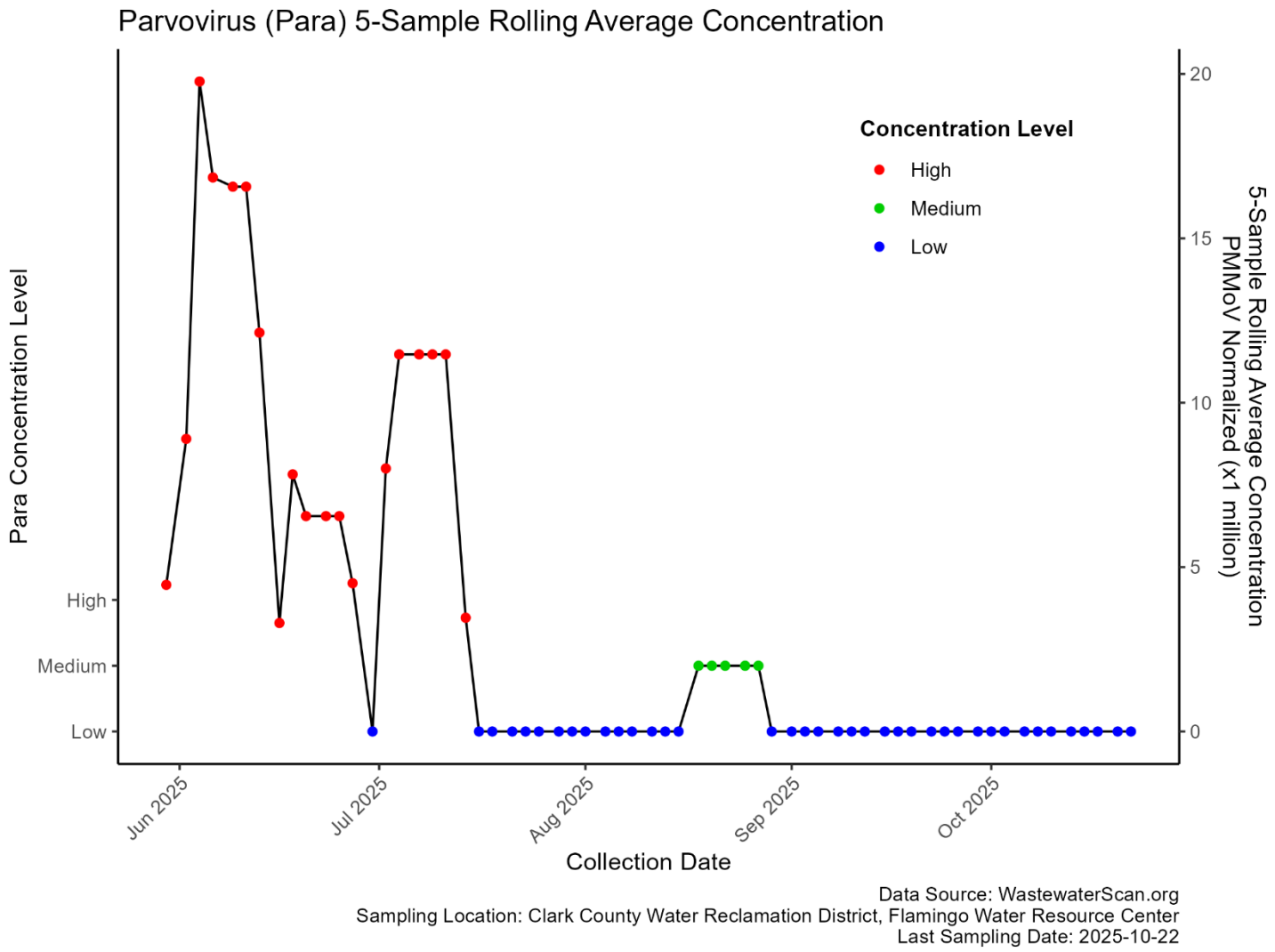
As of October 24, 2025, wastewater monitoring for Adenovirus Group F across Nevada, California, and Utah showed elevated concentrations with mixed regional trends. In Nevada, the Flamingo Water Resource Center reported 6,664.49 with a declining trend, while Mesquite and Boulder City were not tested. In California, A.K. Warren (9,481.86 ↓) and Hyperion (5,462.83 ↓) showed decreases, whereas Ontario RP-1 (19,577.33 ↑), Riverside (14,055.72 ↑), and Indio (3,104.32 ↑) exhibited rising levels. Utah sites recorded the highest concentrations, with Central Valley (23,131.12 ↑) and Provo (22,857.04 ↑) increasing.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	6,664.49	↓	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	9,481.86	↓	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	5,462.83	↓	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	23,131.12	↑	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	22,857.04	↑	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	19,577.33	↑	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	14,055.72	↑	October 24 2025
Valley Sanitary District	Indio, CA	Current	3,104.32	↑	October 24 2025

Parvovirus Concentration Trends in Clark County

Flamingo Water Reclamation District Plant

The chart illustrates Parvovirus (Para) 5- Sample rolling average concentrations in wastewater at Clark County's Flamingo Water Reclamation District from June through October 22, 2025. Concentration fluctuated significantly in the monitoring period, with several high spikes during June and early July, followed by brief declines. Levels rose again mid-July before dropping sharply to low by late July. From August onward, concentrations remained consistently low, with only a small resurgence to medium levels in early September. No further increases were detected through October. The most recent sample was collected on October 22, 2025, showing continued low activity.



Parvovirus Concentrations Interpretation

As of October 24, 2025, wastewater monitoring for Parvovirus across Nevada, California, and Utah showed very low or non-detectable concentrations. Most facilities including those in Las Vegas, Los Angeles County, Riverside, Indio, and Utah reported 0.00 5-sample rolling means with stable trends, indicating no measurable activity. Only minimal detections were observed at Ontario's Regional Water Recycling Plant No. 1 (0.48, stable), Central Valley (0.76, stable), and Provo (1.53, stable). Mesquite and Boulder City were not tested during this period.

Plant Name	City	Time frame	5 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0.00	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Not Tested		October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Not Tested		October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0.00	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0.00	→	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0.76	→	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	1.53	→	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0.48	→	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0.00	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0.00	→	October 24 2025

Influenza H5 Viral Detection Comparing to Neighboring States

As of October 24, 2025, wastewater surveillance from ten 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 Sample Rolling Mean	14 Day Trend	Last Sampling Dates
Flamingo Water Resource Center	Las Vegas, NV	Current	0	→	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	0	→	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	0	→	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	0	→	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	0	→	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	0	→	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	0	→	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	0	→	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	0	→	October 24 2025
Valley Sanitary District	Indio, CA	Current	0	→	October 24 2025

MPOX Clade 1b Viral Detection Comparing to Neighboring States

As of October 24, 2025, wastewater surveillance from ten 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	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Non-detect	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Non-detect	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	Non-detect	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	Non-detect	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	Non-detect	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	Non-detect	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	Non-detect	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	Non-detect	October 24 2025
Valley Sanitary District	Indio, CA	Current	Non-detect	October 24 2025

Measles Viral Detection Comparing to Neighboring States

As of October 24, 2025, wastewater monitoring at ten 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	October 22 2025
Mesquite Wastewater Treatment Plant	City of Mesquite, NV	Current	Non-detect	October 21 2025
Boulder Wastewater Treatment Plant	Boulder City, NV	Current	Non-detect	October 22 2025
A.K. Warren Water Resource Facility	Los Angeles County, CA	Current	Non-detect	October 24 2025
Hyperion Water Reclamation Plant (HWRP)	Los Angeles, CA	Current	Non-detect	October 24 2025
Central Valley Water Reclamation Facility	Central Salt Lake Valley, UT	Current	Non-detect	October 24 2025
Provo City Water Reclamation Facility	Provo, UT	Current	Non-detect	October 24 2025
Regional Water Recycling Plant No.1 (RP-1)	Ontario, CA	Current	Non-detect	October 24 2025
Riverside Water Quality Control Plant	Riverside, CA	Current	Non-detect	October 24 2025
Valley Sanitary District	Indio, CA	Current	Non-detect	October 24 2025

References

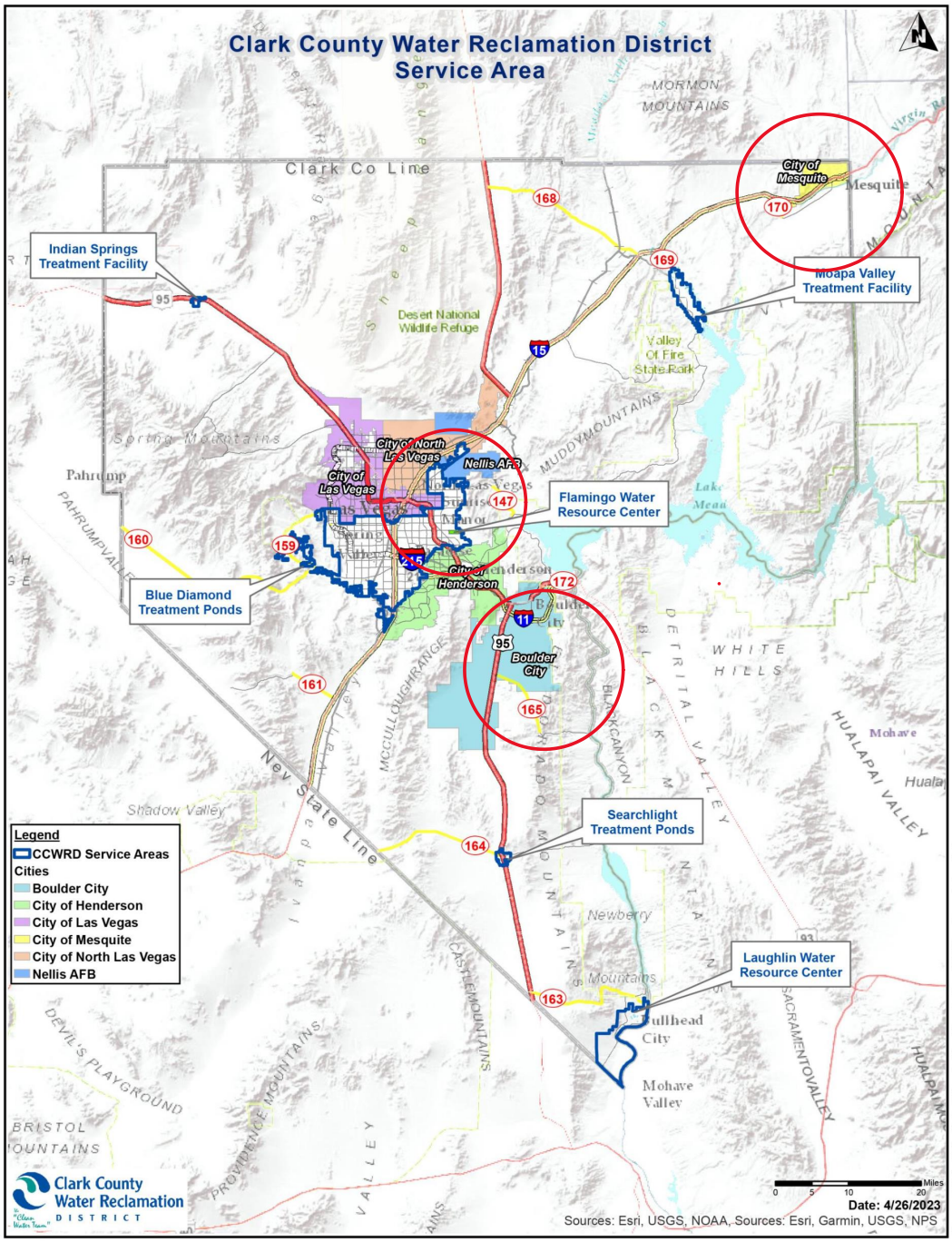
1) Verily Laboratories. *Public health: wastewater-based epidemiology (WBE)*. https://verily.com/solutions/sightline/wastewater. Published 2025. Accessed January 1, 2024.

2) WastewaterSCAN. WastewaterSCAN: wastewater surveillance for community-level disease monitoring. https://www.wastewaterscan.org. Accessed July 3, 2025.

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