

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

August 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 (<https://www.wastewaterscan.org/en>) 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: We apply PMMoV (microbial) normalization, while CDC and the state use viral-activity normalization.**

## Executive Summary of August 18, 2025, Report

This report presents the most recent findings from pathogen surveillance conducted through wastewater sampling in Clark County, Nevada, with the final data collected on **August 13, 2025**. The analysis focuses on two sites: the Flamingo Water Reclamation District in Las Vegas and the City of Mesquite. Conducted by Wastewater SCAN and Verily, the surveillance aimed to monitor trends in SARS-CoV-2 and its variants, seasonal respiratory viruses like Influenza A/B and RSV, gastrointestinal pathogens such as Norovirus, Rotavirus, Enterovirus D68, and Hepatitis A, and to compare site-level differences while accounting for variations in sampling and analysis.

As of August 14, 2025, SARS-CoV-2 levels in wastewater remained elevated across Nevada, California, and Utah. In Nevada, Las Vegas (Flamingo) recorded the highest 5-day average at 499.84, while Mesquite peaked earlier in August and held at 395.30. California facilities showed lower but notable concentrations: Ontario (113.36), Los Angeles County (111.25), Hyperion (102.19), Riverside (73.48), and Indio (13.33). In Utah, Provo City (448.61) and Central Valley (264.98) trended upward, placing Provo just ahead of Las Vegas in resurgence indicators. Rapid variant shifts occurred, moving from LF.7 to JN.1 to XFG to LP.8.1, with XFG.3 now dominant.

Influenza activity in Flamingo and Mesquite followed typical seasonal patterns, with Influenza A peaking between January and March, and Influenza B reaching its highest levels in February. Both strains declined after May, and in Mesquite, Influenza B has not been reported since July.

RSV levels remained consistently low or undetectable at both sites, aligning with expected seasonal declines after early 2025 peaks. This indicates minimal ongoing RSV transmission in Southern Nevada during the summer. There was a single Detection of Measles at Flamingo water reclamation on August 1 but there was no other subsequent detection.

Norovirus levels at the Flamingo Wastewater Reclamation District have declined to 12,372.46 PMMoV-normalized units. In contrast, adenovirus group F levels are rising, indicating a resurgence of infections in the area. Although Mesquite was not tested for Norovirus, elevated concentrations detected in nearby Utah suggest broader regional activity. Additionally, Flamingo recorded high levels of Hepatitis A, alongside low to moderate detections of Rotavirus and Enterovirus D68. These findings point to an increased risk of gastrointestinal and liver-related illnesses across the community.

**Sampling methods differed:** Flamingo used 24-hour composite samples from solid waste analyzed by Wastewater SCAN, while Mesquite relied on liquid grab samples assessed by Verily. These methodological differences likely contributed to variations in measured pathogen levels and should be considered for site-to-site comparisons.

In brief, Las Vegas showed a more complex and elevated pathogen signal, especially for SARS-CoV-2, while Mesquite exhibited elevated SARS-CoV-2 with a bump in summer influenza. Most other pathogens, including RSV, remained low. Notably, a single measles detection was reported at the Flamingo Water Reclamation Facility on August 1.

## Summary of Select Pathogen Concentrations

Latest data point for Flamingo Water reclamation district plant is August 13, 2025

Latest data point for the City of Mesquite plant is August 12, 2025

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

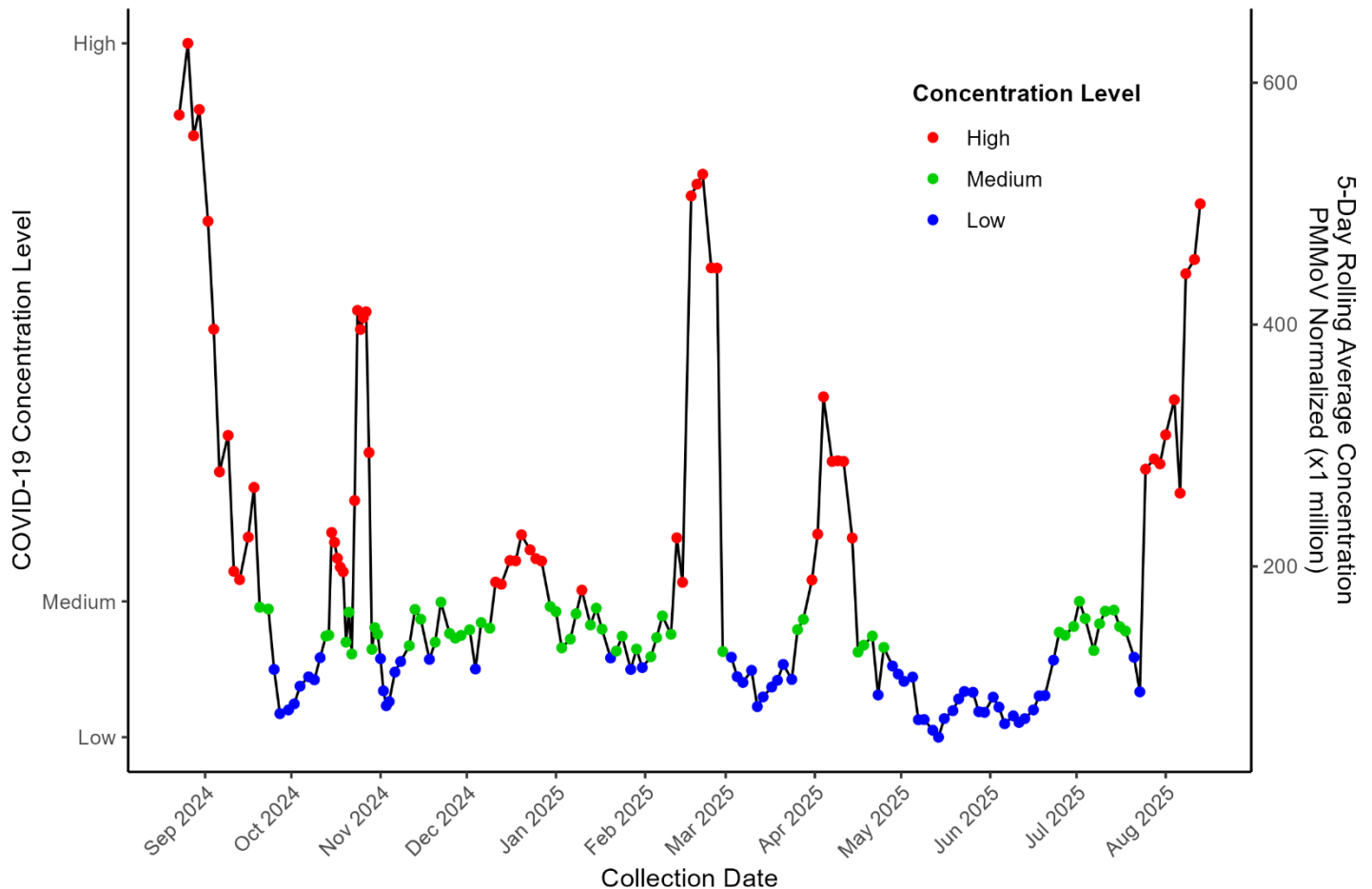
**Note:** The wastewater data for Las Vegas was collected from the Flamingo Water Reclamation District Plant, where samples were analyzed on solids and sourced from Wastewater SCAN. In contrast, data for the City of Mesquite was analyzed on liquid samples by Verily and provided by the State Wastewater 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.

## COVID-19 Viral Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

This chart tracks the 5-day rolling average concentration of COVID-19 in wastewater at the Clark County Flamingo Water Reclamation District from September 2024 through August 13, 2025. Concentration levels are classified as high (red), medium (green), and low (blue). Significant surges in high concentrations occurred in September 2024, November 2024, March 2025, and August 2025, marking distinct waves of infection. Lower activity periods were observed between December 2024 and February 2025, and again during June and July 2025. These recurring peaks underscore the value of wastewater monitoring in anticipating community-level transmission. Data were normalized using PMMoV, with the last sampling recorded on August 13, 2025.

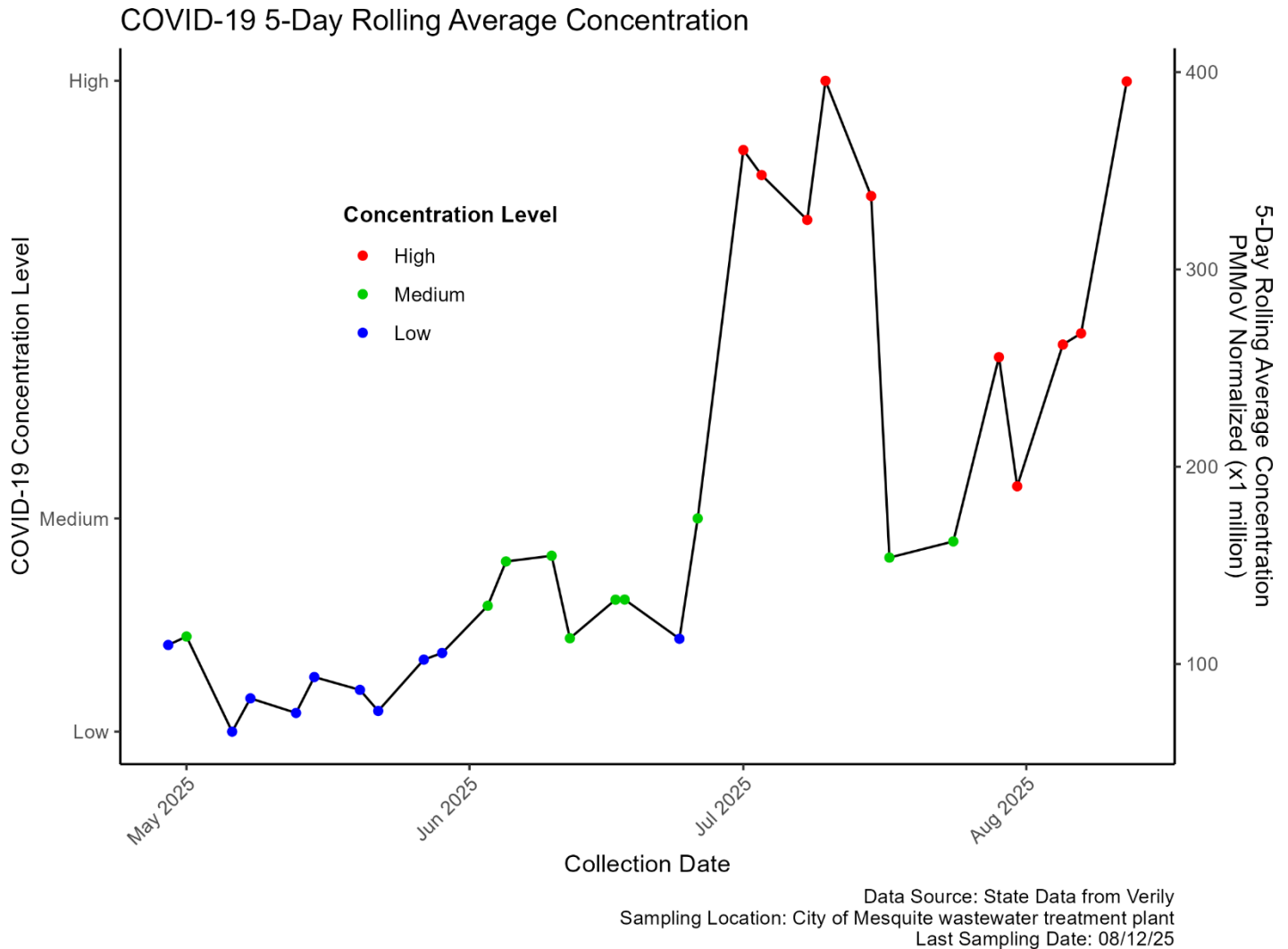
COVID-19 5-Day Rolling Average Concentration



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

## Mesquite Wastewater Treatment Plant

This chart shows the 5-day rolling average concentration of COVID-19 in wastewater collected from the City of Mesquite wastewater treatment plant between May and August 12, 2025. Concentration levels are categorized as high (red), medium (green), and low (blue). Early May 2025 data show mostly low to medium levels, but concentrations rose steadily through June. A sharp increase occurred in early July, reaching high levels and peaking mid-month. Although levels briefly declined, they rebounded again in late July and August, sustaining high concentrations. The pattern suggests escalating community transmission during the summer, with the last sample taken on August 12, 2025.





### SARS – CoV-2 Concentrations Interpretation:

As of August 14, 2025, wastewater surveillance indicates rising viral signals across nine facilities in Nevada, California, and Utah. In Nevada, Flamingo Water Resource Center in Las Vegas reported the highest 5-day rolling mean at 499.84, while Mesquite Wastewater Treatment Plant followed with 395.30. In California, A.K. Warren Water Resource Facility in Los Angeles County measured 111.25, Hyperion Water Reclamation Plant in Los Angeles 102.19, Regional Water Recycling Plant No.1 in Ontario 113.36, Riverside Water Quality Control Plant 73.48, and Valley Sanitary District in Indio 13.33. Utah facilities reported Central Valley 264.98 and Provo City 448.61, all trending upward.

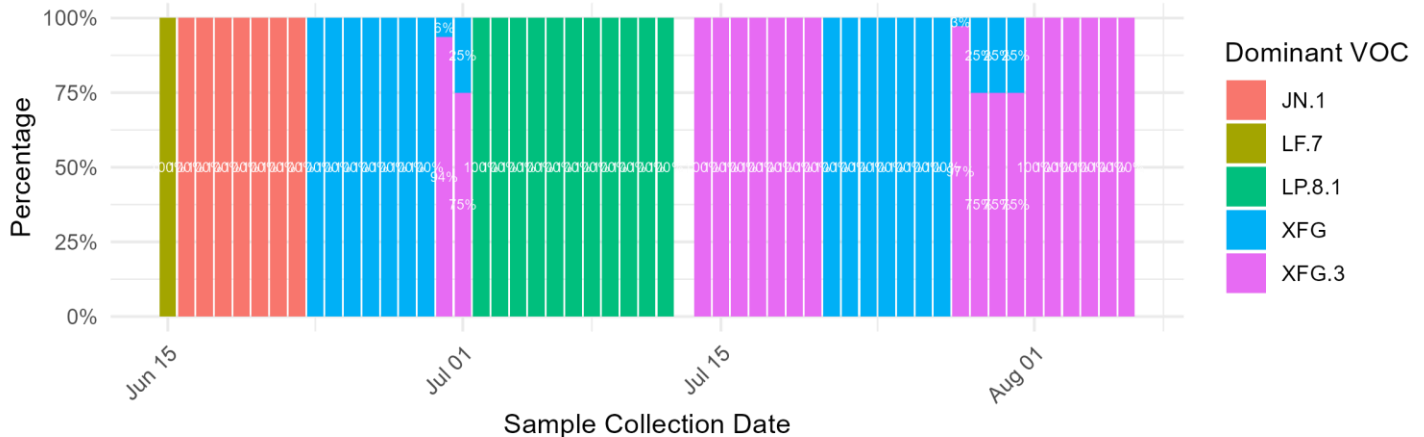
| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 499.84             | ↑            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | 395.30             | ↑            | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 111.25             | ↑            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 102.19             | ↑            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 264.98             | ↑            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 448.61             | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 113.36             | ↑            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 73.48              | ↑            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 13.33              | ↑            | August 14 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.

Dominant VOC Composition (June 15 – August 06, 2025) in Flamingo, Clark County

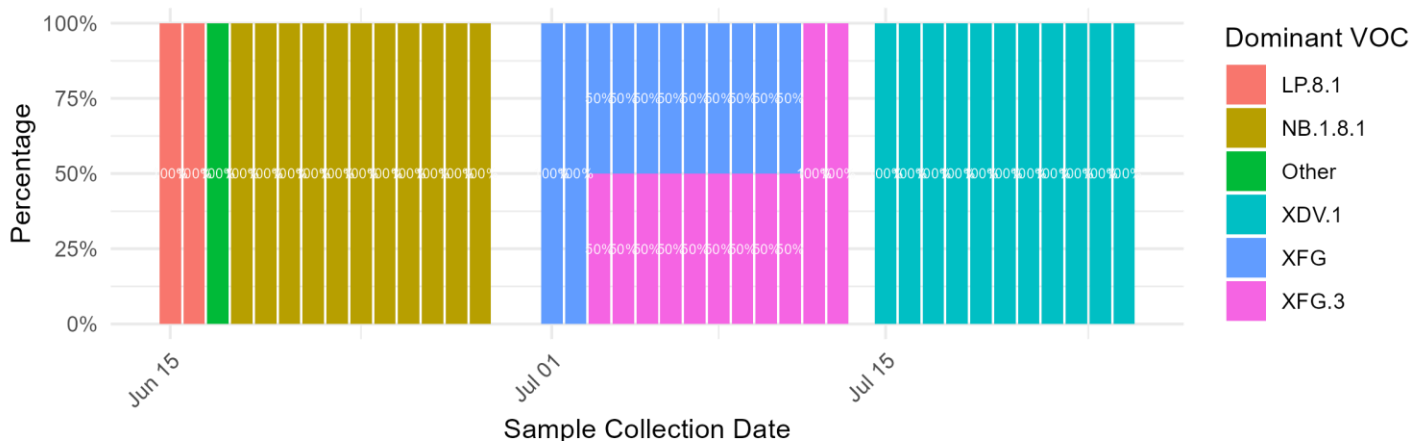


Source: Nevada State Health Department | Analyzed by Verily, August 2025

### 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 (teal) takes over and it remains the dominant strain.

Dominant VOC Composition (June 15 – August 06, 2025) in Mesquite, Nevada



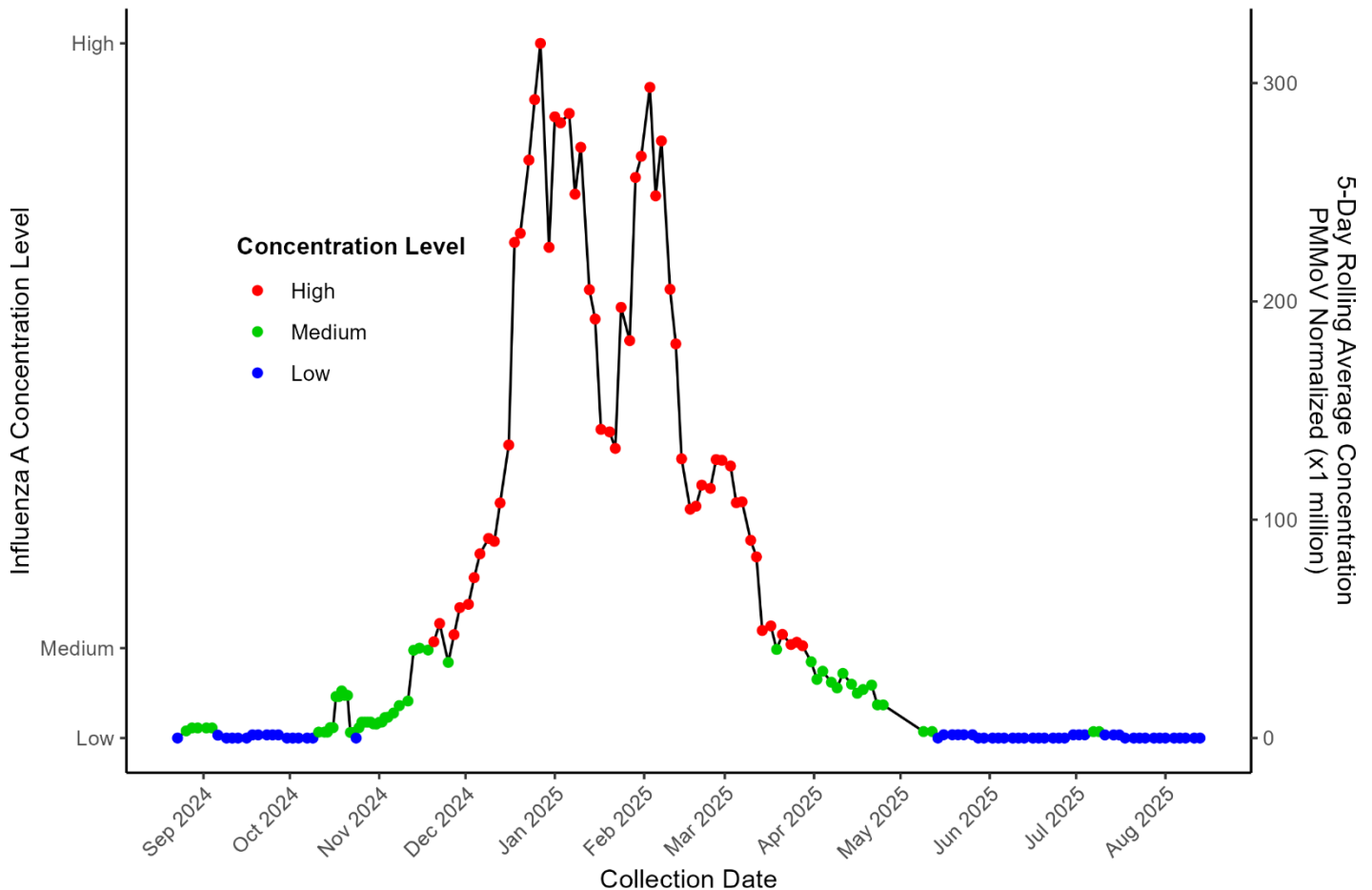
Source: Nevada State Health Department | Analyzed by Verily, August 2025

## Influenza A Viral Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

This chart shows Influenza A concentrations in wastewater at the Flamingo Water Resource Center (Clark County, NV) from September 2024 to August 2025. Levels were low through early November, rose to medium in late November, and peaked at high levels from December 2024 through March 2025, with multiple spikes exceeding 300 PMMoV-normalized units. Concentrations then steadily declined through April and May, returning to low levels by June 2025. From June through August, measurements remained consistently low. This seasonal trend highlights a pronounced winter surge in influenza activity, followed by a sharp reduction into the summer months.

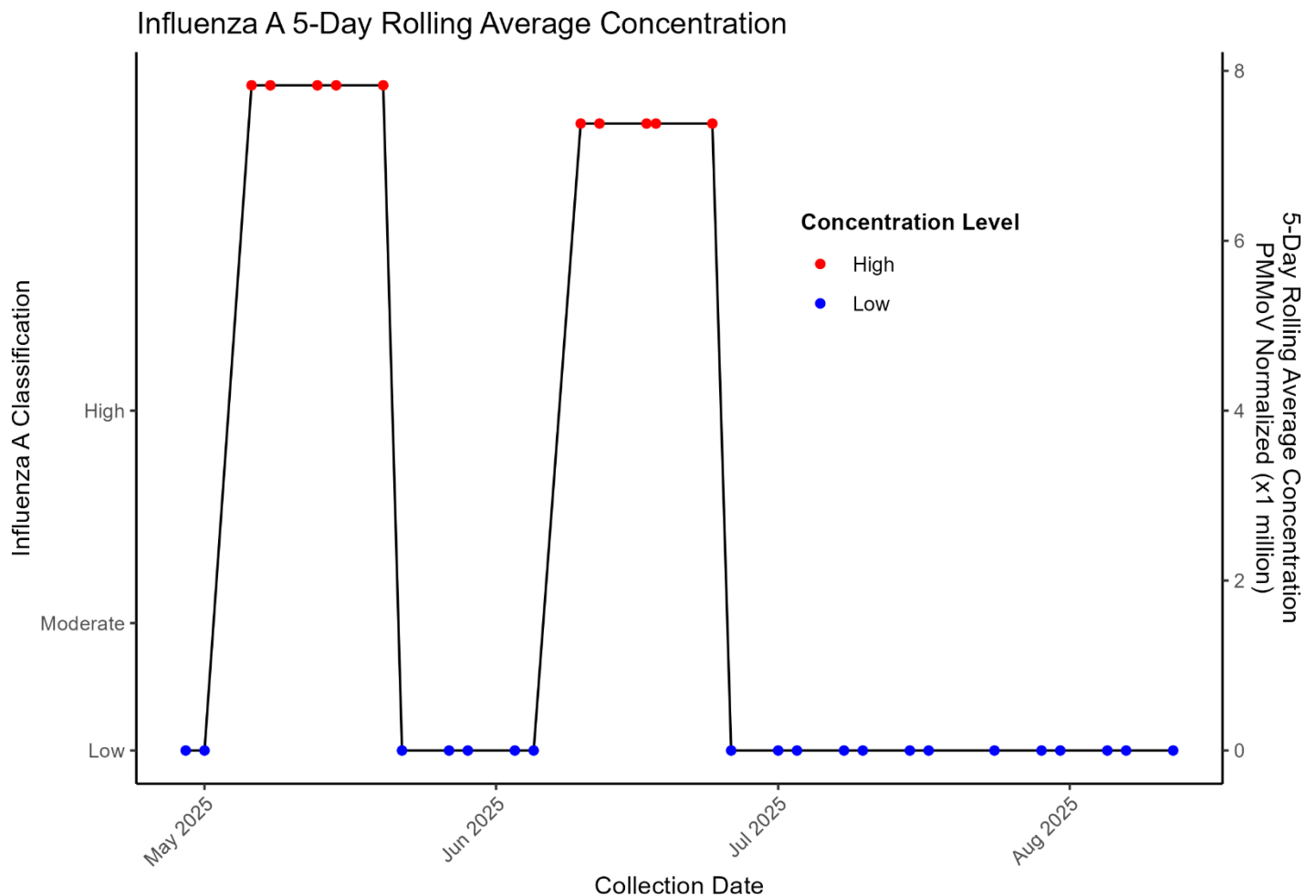
Influenza A 5-Day Rolling Average Concentration



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

## Mesquite Wastewater Treatment Plant

The chart displays a 5-day rolling average of Influenza A concentration levels in wastewater from May to August 2025 in Mesquite. Concentration levels fluctuated between high (red), medium (green), and low (blue). Peaks in early May and mid-June show high levels, while late May to August 12, 2025, show low levels.



Data Source: State Data from Verily  
 Sampling Location: City of Mesquite wastewater treatment plant  
 Last Sampling Date: 08/12/25

### Influenza A Concentrations Interpretation

As of August 14, 2025, Influenza A Concentrations wastewater data from nine plants in Nevada, California, and Utah indicate mostly stable trends, with five facilities including Las Vegas, Mesquite, Hyperion in Los Angeles, Riverside, and Indio showing flat levels, several at zero. The A.K. Warren facility in Los Angeles County shows a modest signal (1.47) but is trending downward. In contrast, Utah's Central Valley (0.77) and Provo (1.15) report rising activity, while Ontario's Regional Plant No. 1 shows the highest level (3.19, rising). Samples collected August 12 -13 suggest overall stability, with localized increases requiring closer monitoring.

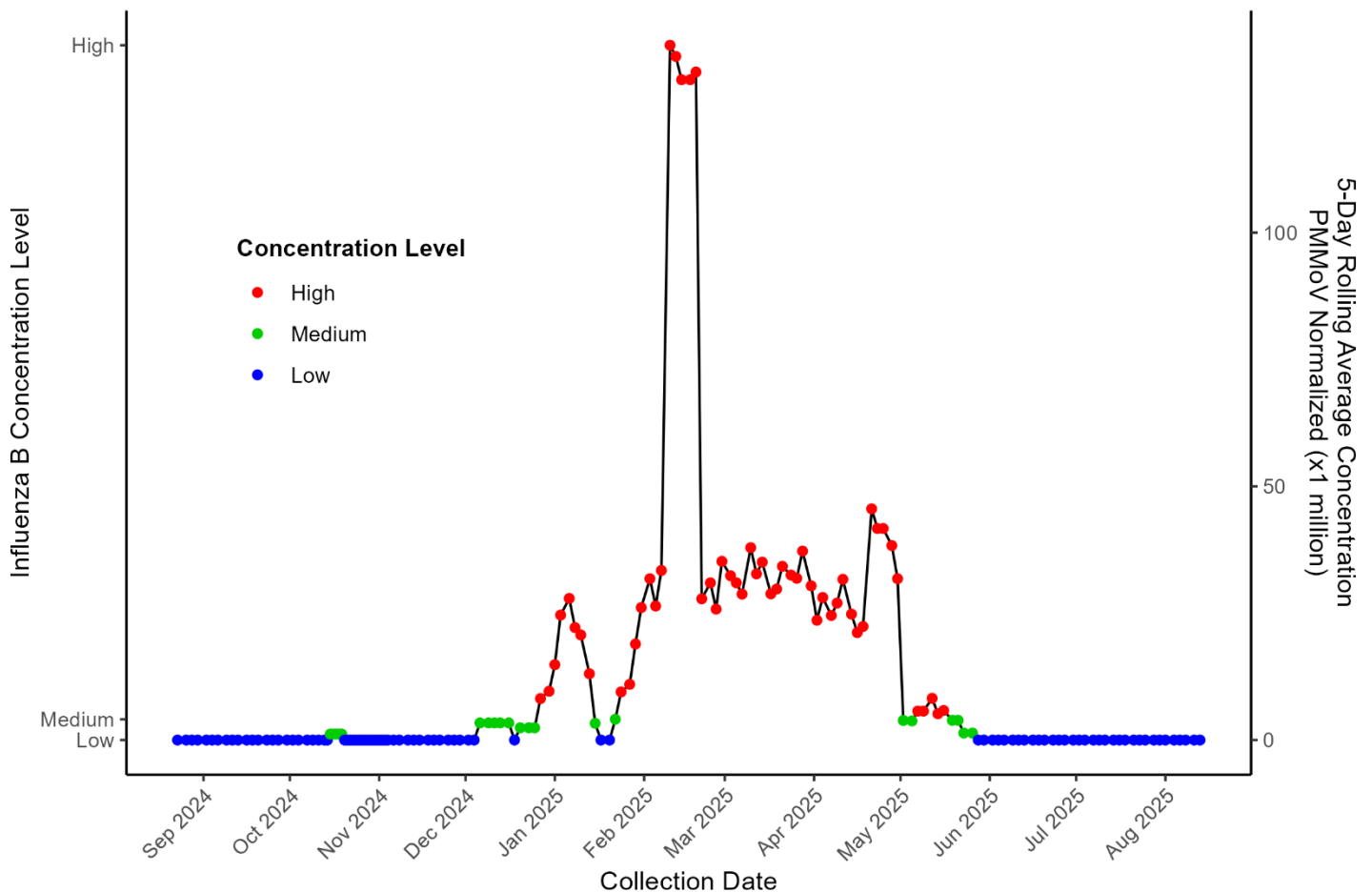
| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 0.00               | →            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | 0.00               | →            | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 1.47               | ↓            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 1.35               | →            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0.77               | ↑            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 1.15               | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 3.19               | ↑            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 0.00               | →            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.00               | →            | August 14 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 September 2024 to August 13, 2025. Levels remained low through late 2024, with only brief medium detections in November–December. A sharp rise began in early 2025, peaking in March with sustained high concentrations. Moderate but elevated activity persisted into April and May before declining rapidly. By June 2025, signals returned to low or undetectable levels, where they remained through August. The last sampling date was August 13, 2025.

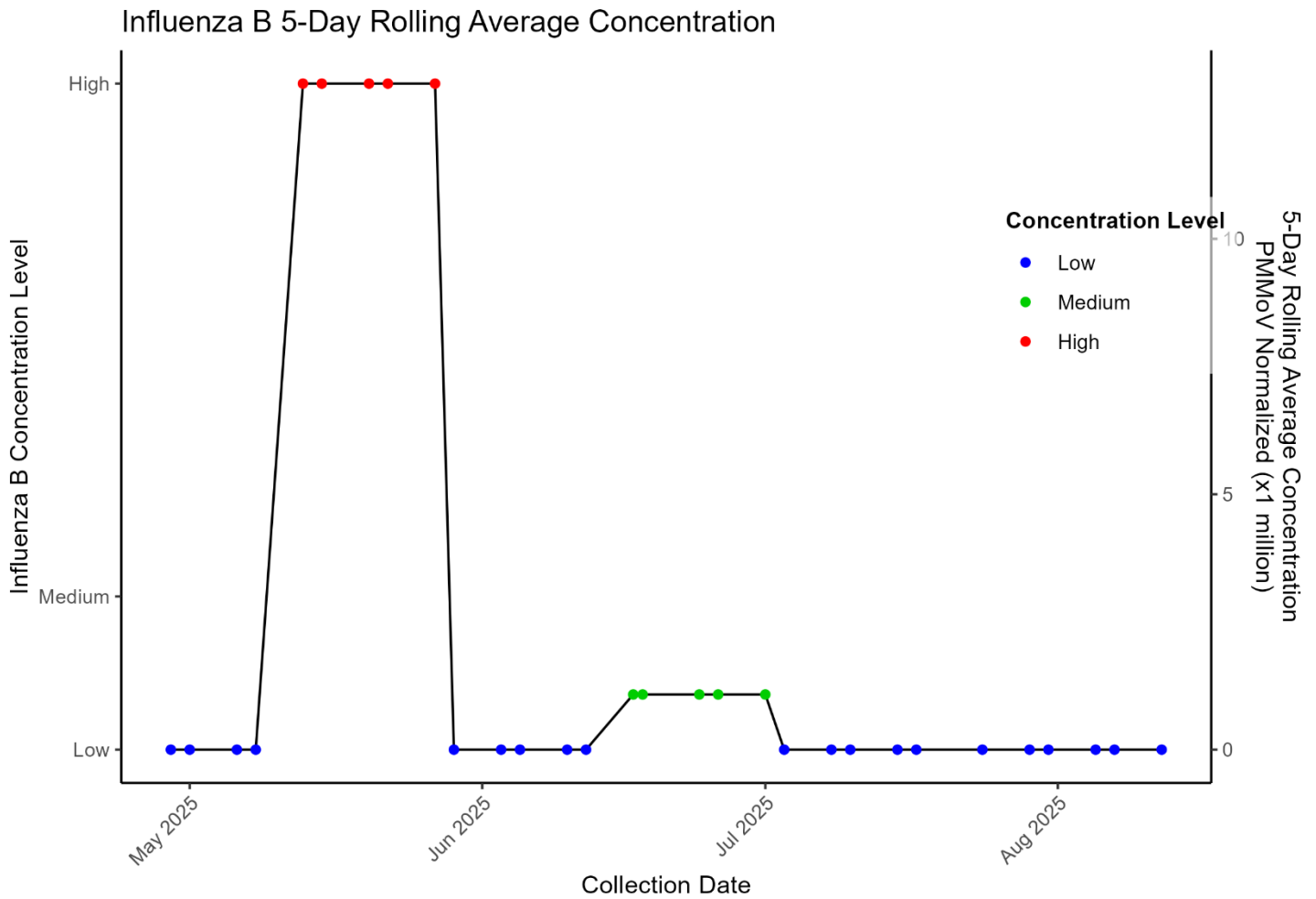
Influenza B 5-Day Rolling Average Concentration



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### Mesquite Wastewater Treatment Plant

The chart displays Influenza B 5-day rolling average concentrations at the City of Mesquite wastewater treatment plant from May to August 6, 2025. Levels were low (blue) in early May, spiked to high (red) mid-May, then dropped back to low by June. A brief increase to medium (green) and high levels occurred in late June and early July. From mid-July onward, concentrations returned to low. Overall, the data shows brief periods of elevated Influenza B activity with a return to lower levels by late July. Data were normalized using PMMoV, with the last sampling recorded on August 12, 2025.



Data Source: State Data from Verily  
 Sampling Location: City of Mesquite wastewater treatment plant  
 Last Sampling Date: 08/12/25

### Interpretation of Influenza B Concentrations

As of August 14, 2025, Influenza B wastewater data from nine treatment plants in Nevada, California, and Utah show mostly stable trends with limited activity. Seven Las Vegas, Mesquite, A.K. Warren (Los Angeles County), Hyperion (Los Angeles), Central Valley (UT), and Ontario's RP-1 report no detectable concentrations. Valley Sanitary District (Indio) is also flat at zero. In contrast, Provo City (UT) shows the highest signal at 1.88 and rising, while Riverside (CA) records 1.26 with an upward trend. Sampling dates from August 12 -14 highlight generally low influenza levels, with localized increases in Provo and Riverside.

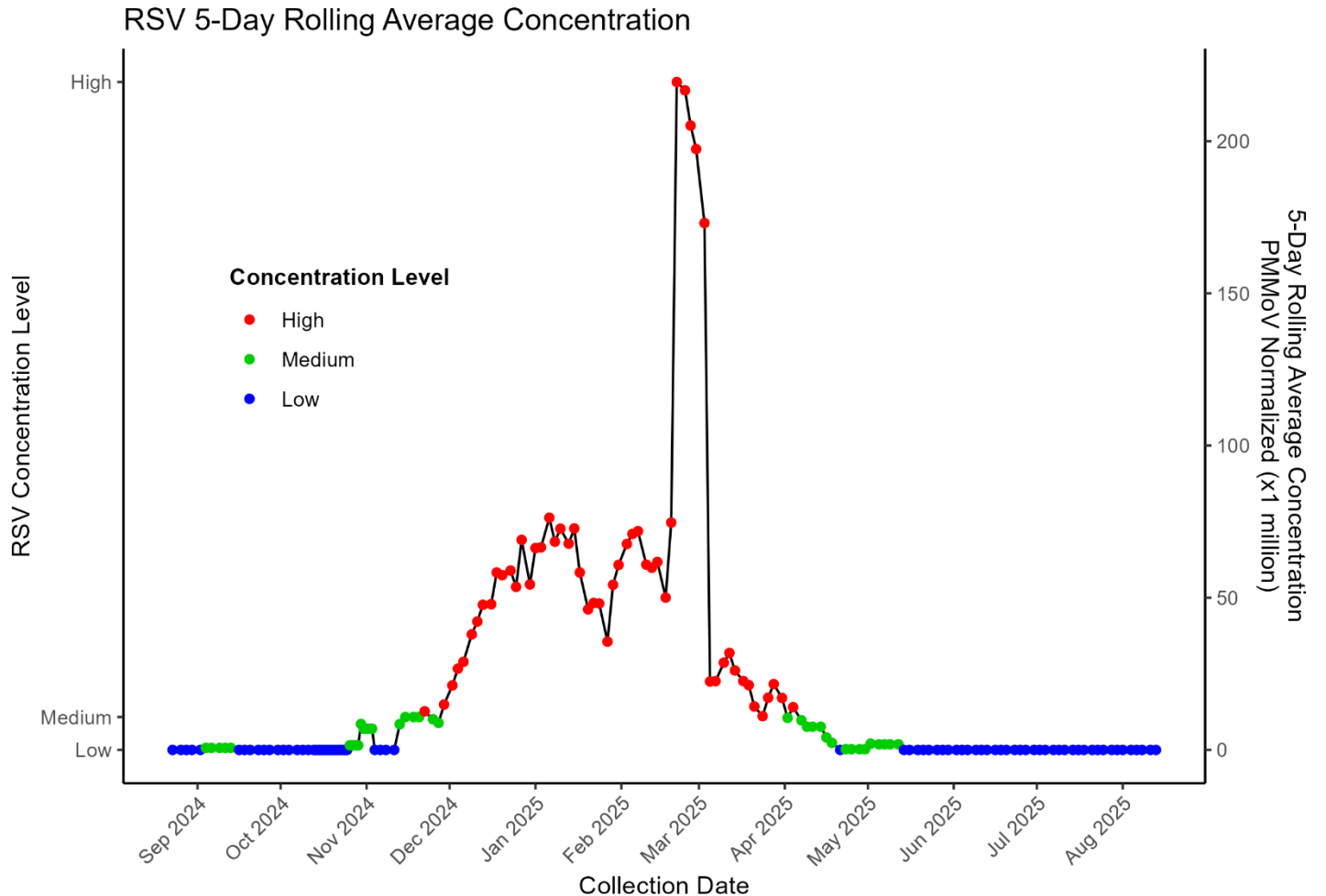
| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 0.00               | →            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | 0.00               | →            | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 0.00               | →            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 0.00               | →            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0.00               | →            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 1.88               | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0.00               | →            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 1.26               | ↑            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.00               | →            | August 14 2025      |



## RSV Viral Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

The chart shows RSV levels at the Clark County Water Reclamation District (Flamingo site) from August 2024 to August 13, 2025. RSV concentrations remained low through October, began rising in November, and peaked sharply in March 2025. Levels declined through April and returned to low by June 2025, remaining low through the end of July. Most of the RSV activity was concentrated between November and April, with a sustained period of high concentration during the winter months. Data were normalized using PMMoV, with the last sampling recorded on August 13, 2025.



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### RSV Concentrations Interpretation

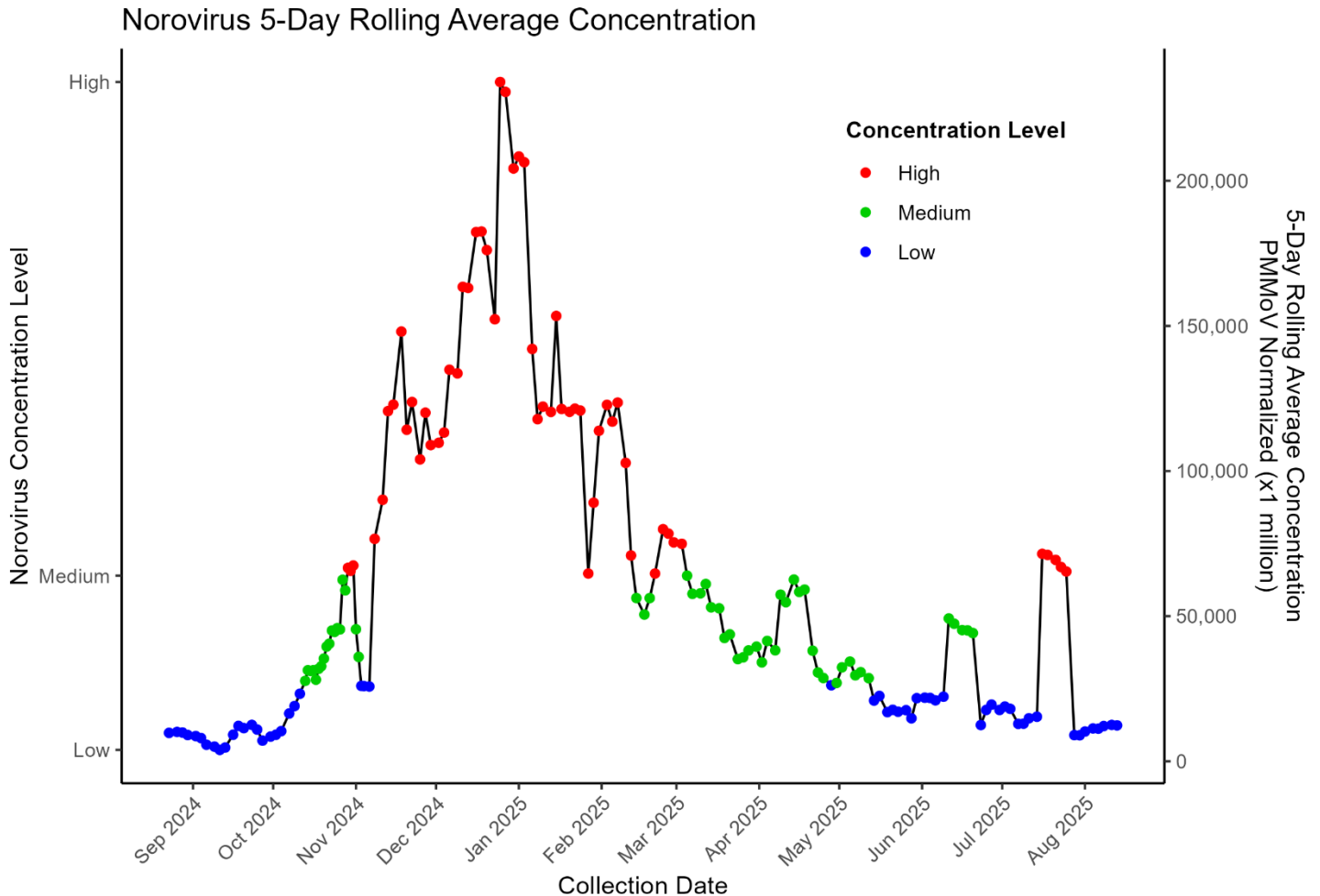
As of August 14, 2025, Respiratory Syncytial Virus (RSV) and COVID-19 viral concentrations remained undetectable across all monitored wastewater treatment plants in Nevada, California, and Utah. Facilities including the Flamingo Water Resource Center, Mesquite Wastewater Plant, and sites in Los Angeles, Riverside, and Salt Lake Valley each reported a 5-day rolling mean of 0.00 for COVID-19. No significant 14-day trends were observed, indicating stable viral levels.

| 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               | ➔            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | 0.00               | ➔            | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 0.00               | ➔            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 0.00               | ➔            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0.00               | ➔            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 0.00               | ➔            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0.00               | ➔            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 0.00               | ➔            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.00               | ➔            | August 14 2025      |

## Norovirus Viral Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

The chart shows Norovirus concentrations at the Flamingo Water Resource Center from August 2024 to July 2025. Levels were low through October, then rose sharply to high (red) in November, peaking in January 2025. Concentration declined gradually from February to May, with intermittent medium (green) and low (blue) levels. A slight resurgence occurred in July but remained below peak levels. The trend reflects a strong winter surge followed by seasonal decline. Data were normalized using PMMoV, with the last sampling recorded on August 13, 2025.



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/06 08/13/25

### Norovirus Concentrations Interpretation.

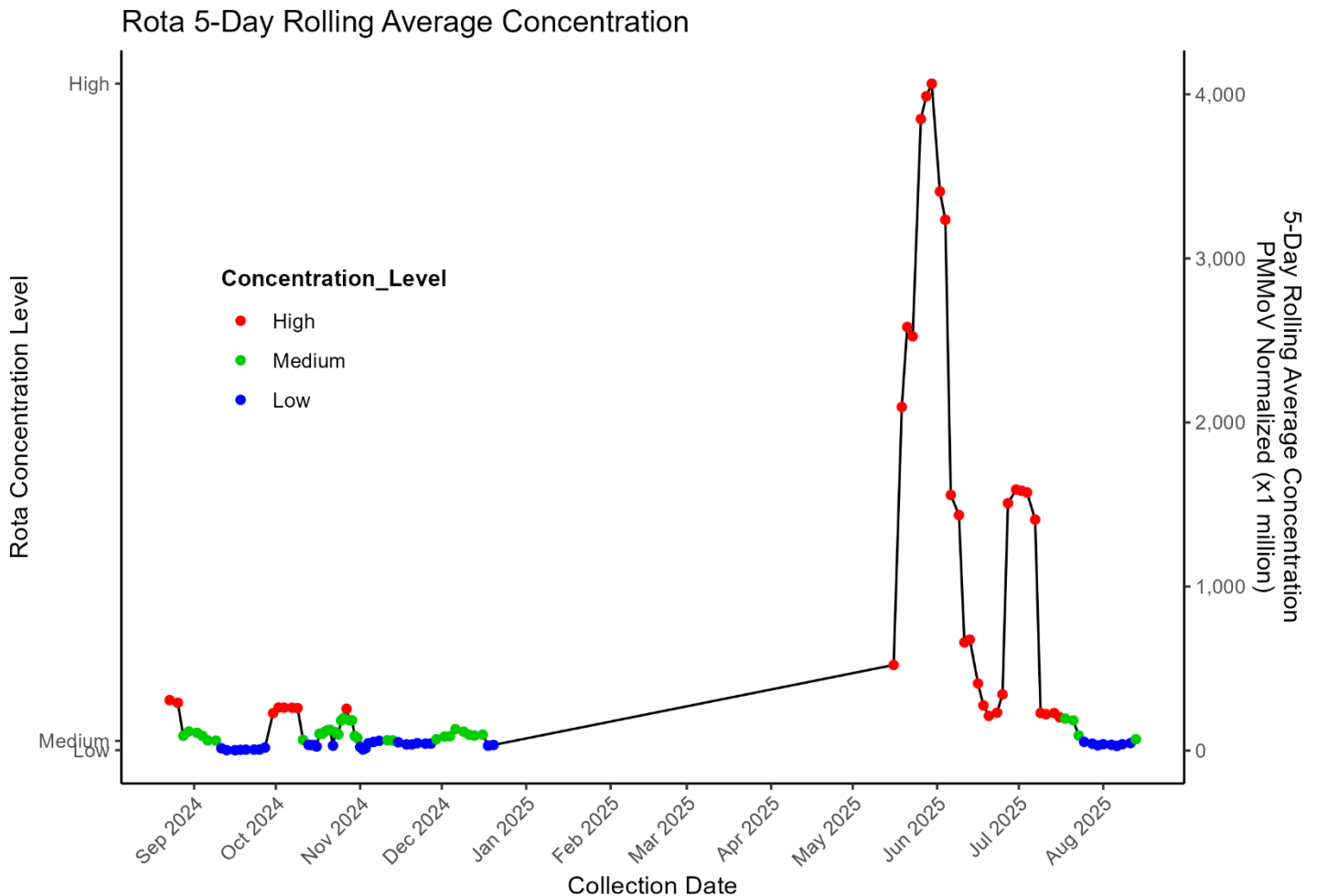
As of August 14, 2025, wastewater monitoring across Nevada, California, and Utah shows elevated norovirus concentrations with consistent 14-day upward trends. Flamingo (Las Vegas, NV) measured 12,372.46 copies/L, while Mesquite (NV) was not tested. In California, A.K. Warren reported 3,441.04, Hyperion 3,791.47, Ontario RP-1 4,390.15, Riverside 6,903.32, and Valley Sanitary District (Indio) 2,557.40. Utah plants showed the highest values: Central Valley 18,487.85 and Provo 14,581.80. These findings highlight widespread viral activity, particularly severe in Utah, with notable increases in Southern California and Las Vegas, underscoring the need for sustained monitoring and proactive public health response.

| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 12372.46           | ↓            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 3441.04            | ↑            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 3791.47            | ↑            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 18487.85           | ↑            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 14581.80           | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 4390.15            | ↑            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 6903.32            | ↑            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 2557.40            | ↑            | August 14 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 September 2024 through August 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 were normalized using PMMoV, with the last sampling recorded on August 13, 2025.



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### Rotavirus Concentrations Interpretation.

As of August 14, 2025, wastewater monitoring revealed varied rotavirus concentrations across western U.S. plants. Several facilities showed decreasing 14-day trends, including Central Valley WRF, UT (194.57), A.K. Warren, CA (118.57), Regional Water Recycling Plant No. 1, Ontario, CA (47.14), Hyperion, CA (78.86), Riverside Water Quality Control Plant, CA (19.43), and Valley Sanitary District, Indio, CA (14.13). In contrast, rising levels were observed at Provo City WRF, UT (107.97) and Flamingo, NV (69.05), both trending upward. Concentrations ranged from moderate to high across sites, with notable variability by region. Mesquite, NV, was not tested during this period.

| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 69.05              | ↑            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 118.57             | ↓            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 78.86              | ↓            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 194.57             | ↓            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 107.97             | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 47.14              | ↓            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 19.43              | ↓            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 14.13              | ↓            | August 14 2025      |

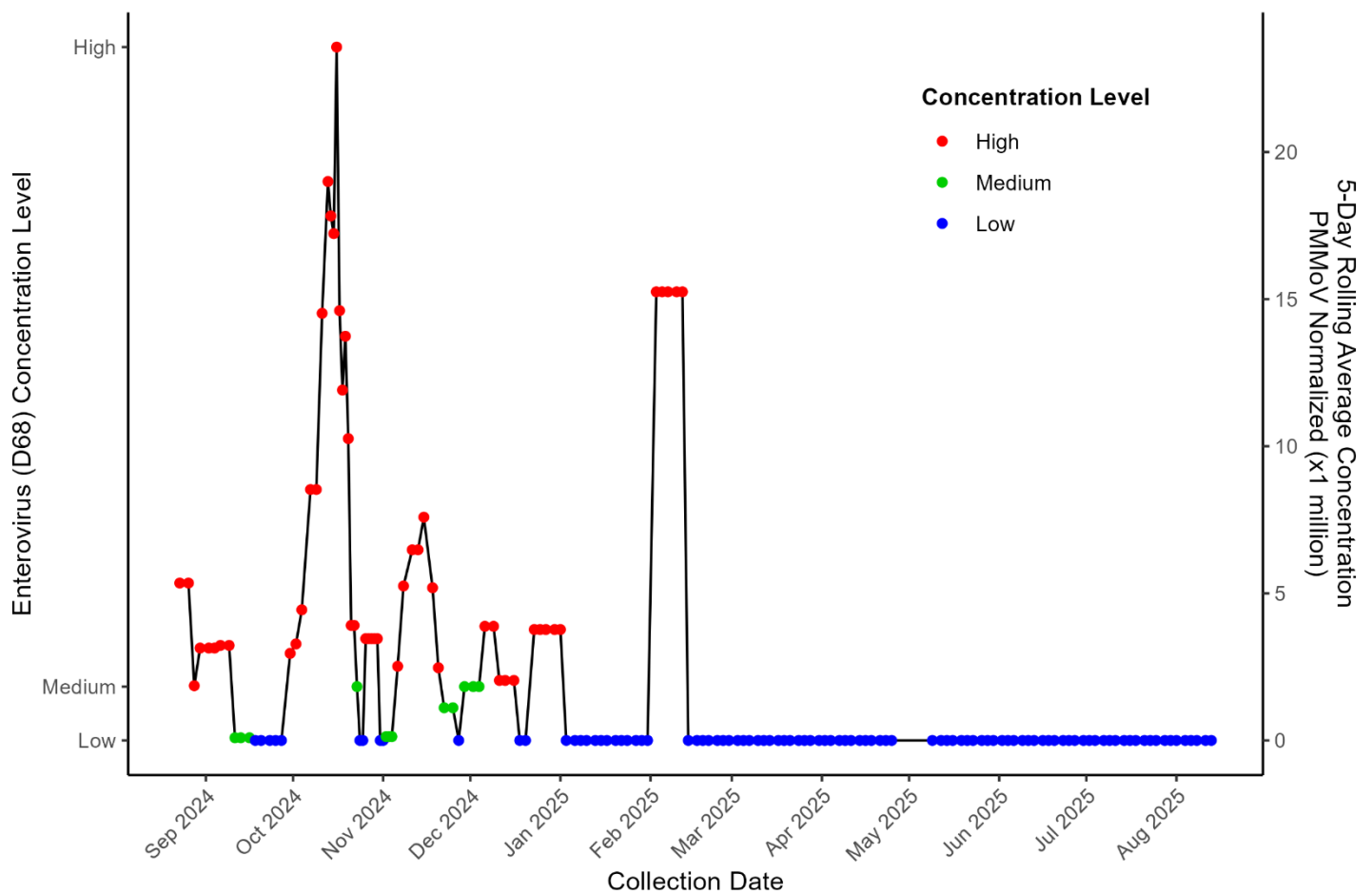
## Enterovirus D68 Viral Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

The chart illustrates Enterovirus D68 (EVD68) concentrations in wastewater at the Flamingo Water Reclamation District in Clark County from September 2024 through August 2025. Between September 2024 and January 2025, concentrations fluctuated sharply, reaching peak levels in late October and November. Additional spikes were observed in December, though these were generally lower to moderate in intensity. From February 2025 onward, concentrations declined to consistently low levels, with no notable resurgence through August 2025. Overall, the data indicates a significant outbreak in late 2024, followed by a steady decline and minimal community circulation in 2025.

### Enterovirus (EVD68)

#### Enterovirus (D68) 5-Day Rolling Average Concentration



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### Enterovirus D68 Concentrations Interpretation.

As of August 14, 2025, Enterovirus D68 levels in wastewater remained generally low across monitoring sites in Nevada, California, and Utah. Flamingo (Las Vegas), Hyperion (Los Angeles), Central Valley (Salt Lake), and RP-1 (Ontario) all reported non-detectable concentrations with stable or declining trends, while Mesquite was not tested. Detectable but modest levels were observed at A.K. Warren (0.98, rising), Provo (3.95, declining), Riverside (1.12, stable), and Indio (0.30, stable). Provo recorded the highest concentration, though trending downward. Overall, detections are sporadic and low, with isolated increases in select California and Utah facilities warranting continued 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               | →            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 0.98               | ↑            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 0.00               | →            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0.00               | →            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 3.95               | ↓            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0.00               | ↓            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 1.12               | →            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.30               | →            | August 14 2025      |





### Hepatitis A Concentrations Interpretation.

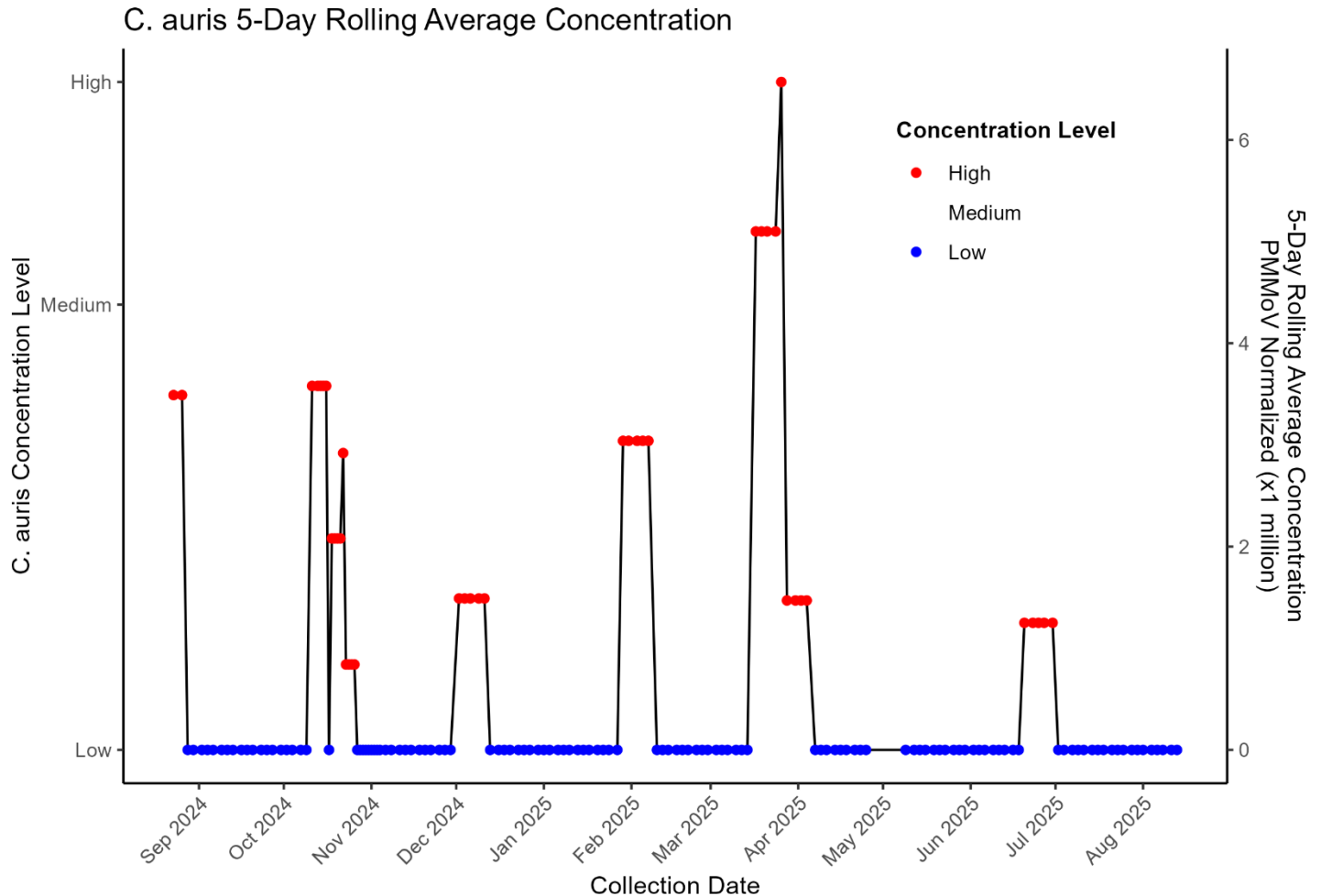
As of August 14, 2025, wastewater monitoring across western U.S. facilities indicated varied Hepatitis A activity. Las Vegas' Flamingo Water Resource Center recorded 11.01 with a declining trend, while Mesquite was not tested. In California, A.K. Warren registered 10.55, trending downward, and Hyperion remained elevated at 41.12, also declining. Riverside detected 2.25 with a downward trend, while Ontario's RP-1, Indio's Valley Sanitary District, Provo, and Central Valley all reported 0.00, showing stability. Overall, most facilities showed declines or no detection, with Los Angeles sites continuing to exhibit higher viral signals compared to other mostly stable locations.

| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 11.01              | ↓            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 10.55              | ↓            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 41.12              | ↓            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0.00               | →            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 0.00               | →            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0.00               | →            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 2.25               | ↓            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.00               | →            | August 14 2025      |

## Candida Auris Fungal Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

The graph shows *Candida auris* (C\_auris) 5-day rolling average concentrations at the Flamingo Water Resource Center from August 2024 to July 2025. High levels (red) were observed in September, November, March, and May. Medium (green) and low (blue) levels occurred intermittently, with predominantly low concentrations from October 2024 through February 2025 and again from April to August 2025. The right axis displays normalized PMMoV values. The last sample was taken on August 13, 2025, showing low concentration.



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### **Candida Auris Concentrations Interpretation.**

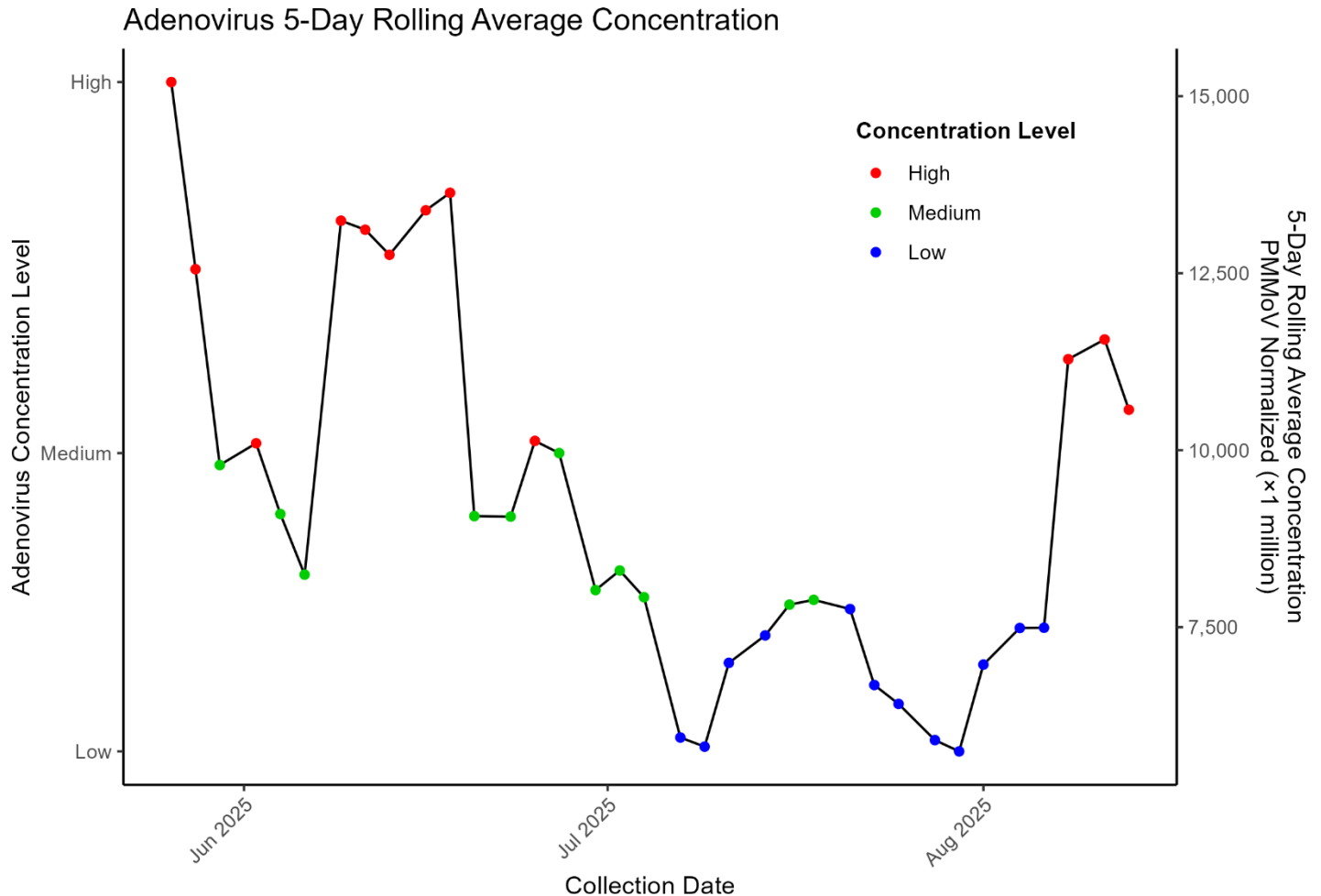
As of August 13, 2025, *Candida auris* (C\_auris) levels were undetectable (0.00) at all tested wastewater treatment plants across Nevada, California, and Utah. This includes facilities in Las Vegas, Los Angeles County, Ontario, Riverside, Indio, Provo, and Central Salt Lake Valley. The Mesquite Wastewater Treatment Plant was not tested.

| 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               | ➔            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 0.00               | ➔            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 0.00               | ➔            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0.00               | ➔            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 0.00               | ➔            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0.00               | ➔            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 0.00               | ➔            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.00               | ➔            | August 14 2025      |

## Adenovirus Group F Concentration Trends in Clark County

### Flamingo Water Reclamation District Plant

The graph shows adenovirus group F (HadV) 5-day rolling average concentrations at the Flamingo Water Resource Center from June to August 14, 2025. Levels were high in early June, then declined to medium and low by early July. A temporary rise occurred mid-July, followed by another drop to low levels in early August. By mid-August, concentrations rose sharply again, reaching high levels. These shifts illustrate recurring cycles of decline and resurgence. The latest data from August 13, 2025, indicate elevated concentrations, highlighting persistent variability and a recent upward trend with possible implications for public health monitoring.



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### Adenovirus Group F Concentrations Interpretation.

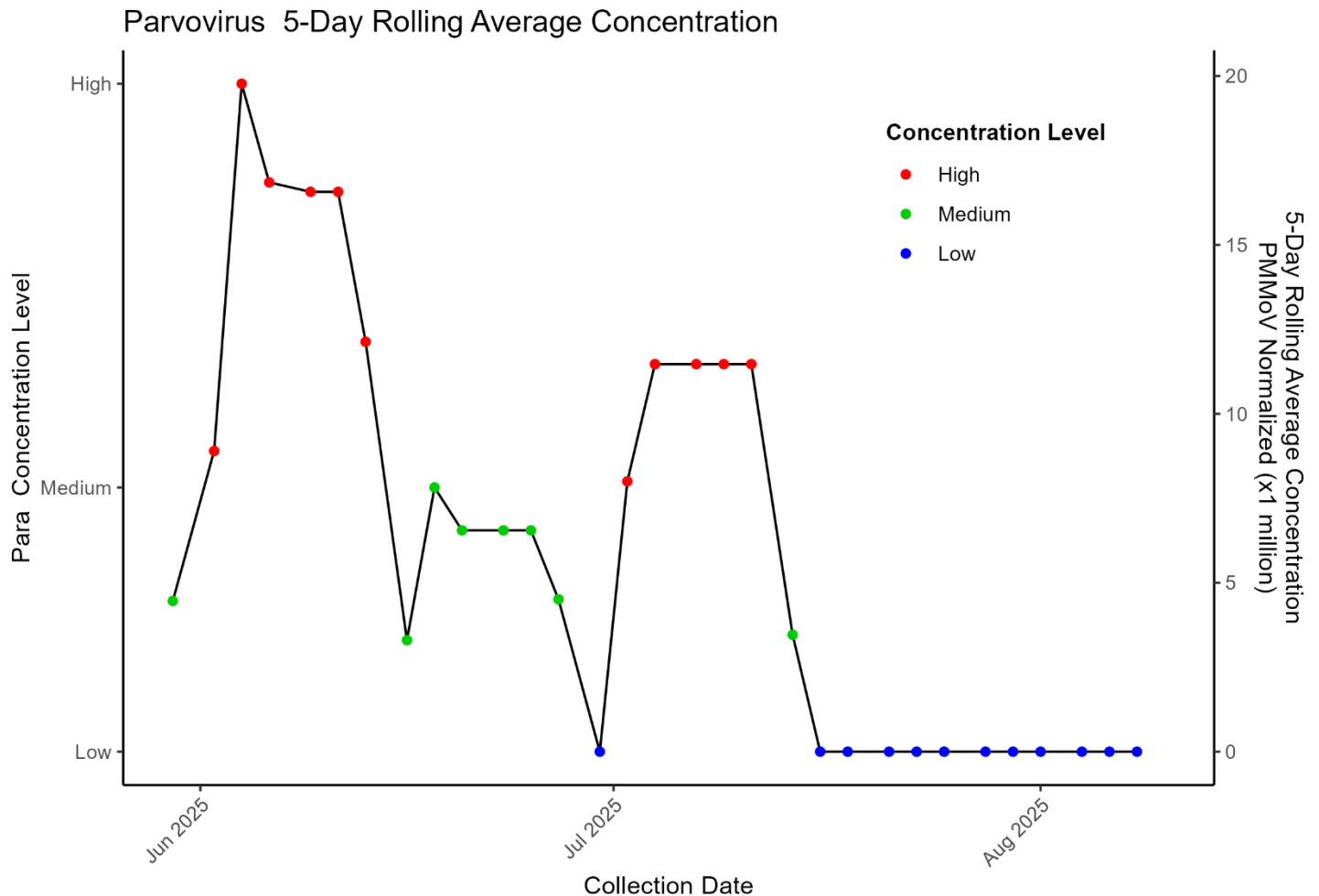
As of August 14, 2025, adenovirus group F (HadV) levels in wastewater showed mixed trends across Nevada, California, and Utah. In Nevada, Flamingo Water Resource Center reported elevated levels (10,571.58), while Mesquite was not tested. California plants varied: A.K. Warren (7,904.97), Hyperion (2,574.63), Regional Plant No.1 (17,392.43), Riverside (4,854.76), and Valley Sanitary District (1,935.61). Utah plants also showed divergence, with Central Valley (9,626.83) and Provo (10,710.48).

| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 10571.58           | ↑            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 7,904.97           | ↑            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 2,574.63           | ↓            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 9,626.83           | ↓            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 10,710.48          | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 17,392.43          | ↑            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 4,854.76           | ↓            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 1,935.61           | ↓            | August 14 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 August 13, 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 August 13, 2025, showed medium concentration.



Data Source: WastewaterScan.org  
 Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center  
 Last Sampling Date: 08/13/25

### Parvovirus Concentrations Interpretation.

As of August 14, 2025, wastewater monitoring across Nevada, California, and Utah showed generally low parvovirus concentrations with notable exceptions. Most sites, including Flamingo (Las Vegas), RP-1 (Ontario), Riverside, and Indio, reported zero levels with flat trends. Mesquite was not tested. A.K. Warren (Los Angeles County) and Central Valley (Salt Lake Valley) showed modest concentrations around 0.33–1.12 with stable trends, while Hyperion (Los Angeles) reported a slight upward trend at 1.12. The most significant elevation was in Provo, Utah, with 10.21 and rising.

| 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               | →            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | -                  | Not Tested   | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 0.33               | →            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 1.12               | ↑            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 1.12               | →            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 10.21              | ↑            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0.00               | →            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 0.00               | →            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0.00               | →            | August 14 2025      |



### Influenza H5 Viral Detection Comparing to Neighboring States

As of August 14, 2025, wastewater surveillance from nine treatment facilities across California, Nevada, and Utah showed no detectable levels of Influenza H5. All sites reported a 5-day rolling mean of zero with no change in the 14-day trend, indicating consistent and stable conditions with no current Influenza H5 activity observed m

| Plant Name                                 | City                         | Time frame | 5 Day Rolling Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------|------------|--------------------|--------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | 0                  | ➔            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | 0                  | ➔            | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | 0                  | ➔            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | 0                  | ➔            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | 0                  | ➔            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | 0                  | ➔            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | 0                  | ➔            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | 0                  | ➔            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | 0                  | ➔            | August 14 2025      |

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

As of August 14, 2025, wastewater surveillance from nine facilities across California, Nevada, and Utah shows no detectable levels of Mpxv clade 1b, with all sites. Both Las Vegas and Mesquite reported no detection. While locations like Los Angeles and Provo, UT had detections within the past 90 days, no recent presence was observed.

| <b>Plant Name</b>                          | <b>City</b>                  | <b>Time frame</b> | <b>Detect/<br/>Non-detect</b> | <b>Last Sampling Dates</b> |
|--|------------------------------|-------------------|-------------------------------|----------------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current           | Non-detect                    | August 13 2025             |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current           | Non-detect                    | August 12 2025             |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current           | Non-detect                    | August 13 2025             |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current           | Non-detect                    | August 13 2025             |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current           | Non-detect                    | August 13 2025             |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current           | Non-detect                    | August 13 2025             |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current           | Non-detect                    | August 14 2025             |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current           | Non-detect                    | August 14 2025             |
| Valley Sanitary District                   | Indio, CA                    | Current           | Non-detect                    | August 14 2025             |

### Measles Viral Detection Comparing to Neighboring States.

As of August 14, 2025, wastewater surveillance at nine facilities across California, Nevada, and Utah shows minimal measles activity. The Flamingo Water Resource Center in Las Vegas detected measles 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 latest samples, indicating no evidence of widespread measles in the region.

| Plant Name                                 | City                         | Time frame | Detect/<br>Non-detect | Last Sampling Dates |
|--|------------------------------|------------|-----------------------|---------------------|
| Flamingo Water Resource Center             | Las Vegas, NV                | Current    | Non-detect            | August 13 2025      |
| Mesquite Wastewater Treatment Plant        | City of Mesquite, NV         | Current    | Non-detect            | August 12 2025      |
| A.K. Warren Water Resource Facility        | Los Angeles County, CA       | Current    | Non-detect            | August 13 2025      |
| Hyperion Water Reclamation Plant (HWRP)    | Los Angeles, CA              | Current    | Non-detect            | August 13 2025      |
| Central Valley Water Reclamation Facility  | Central Salt Lake Valley, UT | Current    | Non-detect            | August 13 2025      |
| Provo City Water Reclamation Facility      | Provo, UT                    | Current    | Non-detect            | August 13 2025      |
| Regional Water Recycling Plant No.1 (RP-1) | Ontario, CA                  | Current    | Non-detect            | August 14 2025      |
| Riverside Water Quality Control Plant      | Riverside, CA                | Current    | Non-detect            | August 14 2025      |
| Valley Sanitary District                   | Indio, CA                    | Current    | Non-detect            | August 14 2025      |

