

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

July 29, 2025

Prepared by: Jeremiah Zablon

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



| Contents Definitions  | 2  |
|---|----|
| Purpose   | 2  |
| Executive Summary of July 29, 2025, Report  | 3  |
| Summary of Select Pathogen Concentrations / Presence for Clark County Flamingo Water F District Plant |    |
| Summary of Select Pathogen Concentrations / Presence for the City of Mesquite                         | 5  |
| COVID-19 Viral Concentration Trends in Clark County   | 6  |
| COVID-19 Viral Concentration Trends in Clark County   | 7  |
| SARS-CoV-2 Variants Circulating in Clark County, Nevada   | 8  |
| SARS-CoV-2 Variants Circulating in Clark County   | 8  |
| SARS-CoV-2 Variants Circulating in Clark County   | 9  |
| SARS – CoV-2 Concentrations Interpretation:   | 10 |
| Influenza A Viral Concentration Trends in Clark County  | 11 |
| Influenza A Viral Concentration Trends in Clark County  | 12 |
| Influenza A Concentrations Interpretation   | 13 |
| Influenza B Viral Concentration Trends in Clark County  | 14 |
| Influenza B Viral Concentration Trends in Clark County  | 15 |
| Interpretation of Influenza B Concentrations  | 16 |
| RSV Viral Concentration Trends in Clark County  | 17 |
| RSV Concentrations Interpretation   | 18 |
| Norovirus Viral Concentration Trends in Clark County  | 19 |
| Norovirus Concentrations Interpretation.  | 20 |
| Influenza H5 Viral Detection Comparing to Neighboring States  | 21 |
| MPOX Clade 1b Viral Detection Comparing to Neighboring States.  | 22 |
| Measles Viral Detection Comparing to Neighboring States.  | 23 |
| Appendix  | 24 |



#### **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.

## **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, Norovirus, and Mpox (clade II). All data was obtained from the Clark County Water Reclamation District, Flamingo Water Resource Center, City of Mesquite, selected Utah wastewater treatment facilities and California wastewater treatment facilities and is analyzed and reported by Wastewater Scan (<a href="https://www.wastewaterscan.org/en">https://www.wastewaterscan.org/en</a>) and Verily laboratories (<a href="https://verily.com/">https://verily.com/</a>). A map of wastewater treatment facilities in Nevada is provided in the appendix.



## **Executive Summary of July 29, 2025, Report**

This report summarizes pathogen trends from wastewater surveillance in Clark County, Nevada, specifically the Flamingo Water Reclamation District in Las Vegas and the City of Mesquite. The data collected and analyzed by Wastewater SCAN and Verily, covers SARS-CoV-2, Influenza A/B, RSV, Norovirus, Mpox, Measles, and Influenza H5.

As of July 2025, pathogen levels across both Las Vegas and Mesquite treatment plants show varying degrees of viral presence. The Flamingo Plant in Las Vegas exhibited **medium SARS-CoV-2 concentrations**, while the City of Mesquite showed **high levels**, peaking in early July, followed by a slight decline. Variant analysis from both plants reveals **rapid turnover in dominant SARS-CoV-2 strains**, with XFG.3 and XDV.1 becoming prevalent by late July.

Influenza A and B levels are currently low in both plants, with seasonal patterns evident. At the Flamingo Plant, Influenza A peaked in January–March 2025 and has remained low since May. Similarly, Influenza B showed a winter surge, peaking in February and tapering off by June. Mesquite reported **medium levels of both Influenza A and B in July**, indicating possible localized transmission.

**RSV concentrations are low or undetectable** across all reporting facilities, including Las Vegas and Mesquite. RSV activity peaked in early 2025 and has consistently declined since March. This trend aligns with historical seasonality, where RSV typically decreases in warmer months.

**Norovirus levels in Las Vegas are significantly elevated**, with the Flamingo Plant recording the highest concentration (65,387.92 PMMoV-normalized units) among all surveyed sites. Although Mesquite was not tested for Norovirus, data from Utah also reflects elevated viral presence. These findings point to a potentially concerning rise in gastrointestinal illness in parts of Nevada.

#### **Regional Comparisons:**

Compared to neighboring states, **Nevada exhibits some of the highest SARS-CoV-2 concentrations**, particularly in Las Vegas (280.36) and Provo, Utah (215.64), while California locations like Los Angeles, Ontario, and Riverside report lower values (ranging from 43.51 to 97.21). Influenza A and B levels across most facilities remain at or near zero, confirming low regional flu activity. RSV and Influenza H5 are likewise undetectable across all sites.

#### **Sampling Methodology Considerations:**

Las Vegas samples are taken from **solid matrices using 24-hour composite sampling**, analyzed by Wastewater Scan, while Mesquite relies on **liquid grab samples**, processed by Verily. These methodological differences may contribute to observed concentration variances and should be accounted for when interpreting cross-site comparisons.

#### **Conclusion:**

As of late July 2025, Clark County's wastewater surveillance reflects a moderate resurgence of SARS-CoV-2, likely driven by emerging variants, with Norovirus showing a substantial spike in Las Vegas. Most other monitored pathogens, including RSV, Measles, Influenza H5, and Mpox, show low or undetectable levels, indicating minimal widespread transmission.



Summary of Select Pathogen Concentrations / Presence for Clark County Flamingo Water Reclamation District Plant

Latest datapoint available:

July 25, 2025

| Pathogen<br>SARS-CoV-2 | Concentration Level / Presence High |
|------------------------|-------------------------------------|
| Influenza A            | Low                                 |
| Influenza B            | Low                                 |
| RSV                    | Low                                 |
| Norovirus              | Low                                 |
| Mpox – Clade I         | No Presence Last 30 Days            |
| Measles                | No Presence Last 30 Days            |
| Mpox – Clade II        | No Presence Last 30 Days            |
| Influenza H5           | No Presence Last 30 Days            |

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.



Summary of Select Pathogen Concentrations / Presence for the City of Mesquite Latest datapoint available:

July 17, 2025

Pathogen Concentration Level / Presence

SARS-CoV-2 High

Influenza A Medium

Influenza B Medium

RSV No Presence Last 30 Days

Norovirus Not Tested

Mpox – Clade I No Presence Last 30 Days

Measles Not Tested

Mpox – Clade II No Presence Last 30 Days

Influenza H5 No Presence Last 30 Days

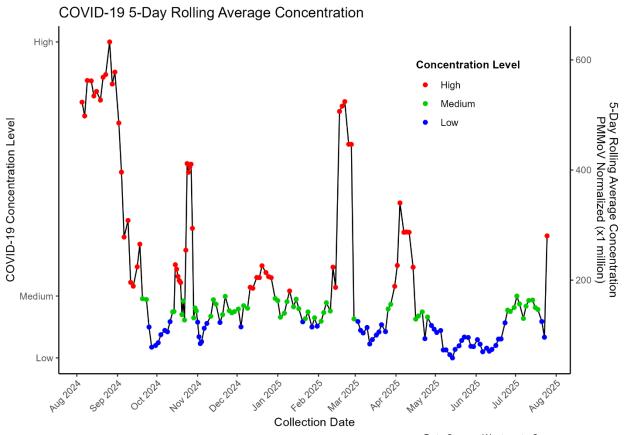
**Additional Notes:** This report was generated by the Southern Nevada Health District Office Epidemiology on July 29, 2025.

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**

The chart shows the 5-day rolling average concentration of COVID-19 in wastewater at the Clark County Water Reclamation District, measured from August 2024 to July 2025. Concentration levels are categorized as High (red), Medium (green), and Low (blue). The highest concentrations occurred in August–September 2024 and again in March–April 2025. Between those peaks, the levels dropped to Medium or Low, with short spikes observed in November 2024 and January 2025. The lowest sustained levels were recorded from May to mid-June 2025, followed by a slight upward trend in July.



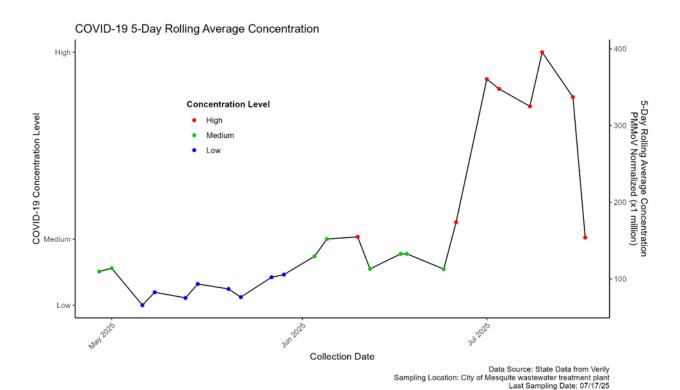
Data Source: WastewaterScan.org Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center Last Sampling Date: 07/25/25



# **COVID-19 Viral Concentration Trends in Clark County Mesquite Wastewater Treatment Plant**

The graph illustrates the 5-day rolling average concentration of COVID-19 detected in wastewater samples collected from the City of Mesquite wastewater treatment plant, with data sourced from Verily and the last sample dated July 17, 2025. The y-axis on the left shows COVID-19 concentration levels categorized as Low, Medium, or High, while the right y-axis quantifies the concentration (PMMoV normalized, x1 million). Each point is color-coded: blue for low, green for medium, and red for high concentrations.

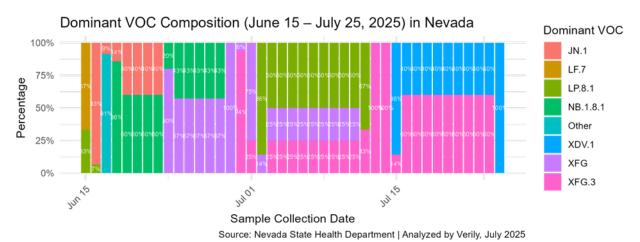
From May to mid-June 2025, concentrations remained mostly low to medium. However, in late June, a sharp rise began, peaking in early July with high concentration levels exceeding 400. After the peak, the levels declined slightly but remained elevated. This trend indicates a significant spike in COVID-19 prevalence within the community during early July.





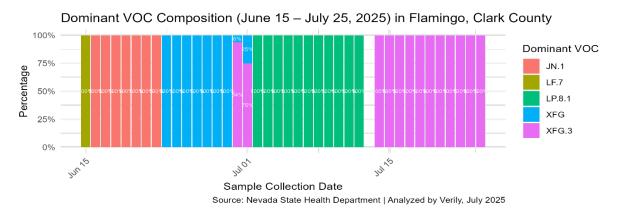
## SARS-CoV-2 Variants Circulating in Clark County, Nevada.

The stacked bar chart illustrates the daily distribution of SARS-CoV-2 Variants of Concern (VOCs) from mid-June to late July. Each color segment within the bars represents a specific VOC and its relative prevalence on a given day. In mid-June, the variant landscape is highly diverse, with NB.1.8.1 (green), XFG (light purple), and several others including teal and orange variants showing notable presence. As the timeline advances to early July, L.P.8.1 rises to dominance. However, this surge is brief. From mid-July, a clear shift occurs with the emergence of two leading variants: XDV.1 (blue), which maintains a steady presence at around 40%, and XFG.3 (pink), which increases rapidly to become the dominant strain at 60% by late July. This progression highlights the dynamic and competitive nature of SARS-CoV-2 evolution, as newer variants replace earlier ones over short time frames, reflecting their potential advantages in transmission or immune escape.



# SARS-CoV-2 Variants Circulating in Clark County Flamingo Water Reclamation District Plant

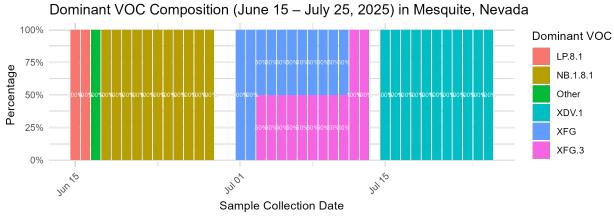
The stacked bar chart shows the daily distribution of SARS-CoV-2 Variants of Concern (VOCs) from mid-June to late July, highlighting significant shifts in variant dominance. JN.1 (orange) is initially the dominant strain, briefly preceded by LF.7 (yellow). By late June, XFG (blue) becomes fully dominant. In early July, XFG.3 (pink) emerges, followed by the rise of LP.8.1 (green), which leads until mid-July. Around July 15, XFG.3 takes over completely and remains dominant through the end of the month, reflecting rapid variant transitions.





# SARS-CoV-2 Variants Circulating in Clark County Mesquite Wastewater Treatment Plant

The stacked bar chart illustrates the daily distribution of SARS-CoV-2 Variants of Concern (VOCs) from mid-June to late July, showing clear shifts in variant dominance. LP.8.1 (orange) is initially the leading variant, briefly followed by Other (green) and NB.1.8.1 (yellow). In early July, XFG (blue) and XFG.3 (pink) gain prominence. By late July, XDV.1 (turquoise) becomes the dominant strain, highlighting the fast-paced changes in variant circulation during the observed timeframe.



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



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

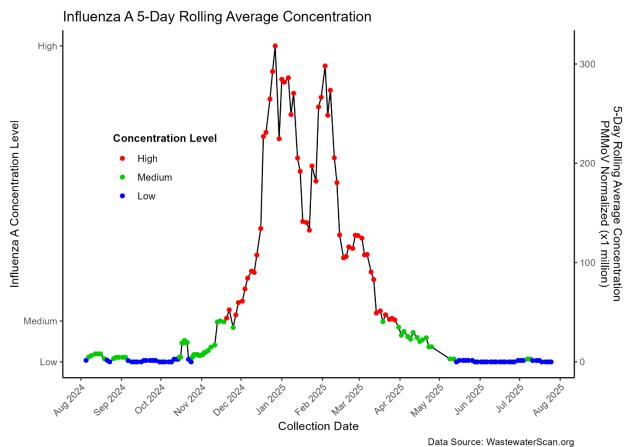
As of late July 2025, SARS-CoV-2 wastewater surveillance data from treatment plants across Nevada, California, and Utah show a range of viral concentrations. The Flamingo Water Resource Center in Las Vegas, NV, reports the highest 5-day rolling mean at 280.36, followed by Provo, UT (215.64), and Central Salt Lake Valley, UT (207.99). Mesquite, NV shows a level of 153.92. In contrast, facilities in Los Angeles County—A.K. Warren and Hyperion—report lower concentrations of 47.09 and 43.51, respectively. Southern California sites in Ontario (61.68), Riverside (97.21), and Indio (8.29) show moderate to low levels. Most sampling occurred on July 25, 2025, except for Mesquite (July 17) and the Los Angeles plants (July 23). These results suggest elevated viral activity in parts of Nevada and Utah, while California locations, particularly in the south, exhibit generally lower concentrations, pointing to possible regional variations in infection trends.

| Plant Name   | City                               | Time frame | 5 Day Rolling<br>Mean | 14 Day Trend | Last Sampling<br>Dates |
|--|------------------------------------|------------|-----------------------|--------------|------------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas, NV                      | Current    | 280.36                |              | July 25, 2025          |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of<br>Mesquite, NV            | Current    | 153.92                |              | July 17, 2025          |
| A.K. Warren<br>Water Resource<br>Facility          | Los Angeles<br>County, CA          | Current    | 47.09                 |              | July 23, 2025          |
| Hyperion Water<br>Reclamation<br>Plant (HWRP)      | Los Angeles,<br>CA                 | Current    | 43.51                 |              | July 23, 2025          |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt<br>Lake Valley,<br>UT | Current    | 207.99                |              | July 25, 2025          |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                          | Current    | 215.64                |              | July 25, 2025          |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                        | Current    | 61.68                 | 1            | July 25, 2025          |
| Riverside Water<br>Quality Control<br>Plant        | Riverside, CA                      | Current    | 97.21                 |              | July 25, 2025          |
| Valley Sanitary<br>District                        | Indio, CA                          | Current    | 8.29                  |              | July 25, 2025          |



# Influenza A Viral Concentration Trends in Clark County Flamingo Water Reclamation District Plant

This chart tracks Influenza A levels in wastewater from August 2024 to July 2025 at the Clark County Water Reclamation District. Concentrations were low from August through November, peaked at high levels from December to March, and declined to low levels again by June. The highest spike occurred in January 2025. Data is presented as a 5-day rolling average, normalized by PMMOV. The pattern reflects a typical flu season trend, with activity peaking in winter and dropping in warmer months.

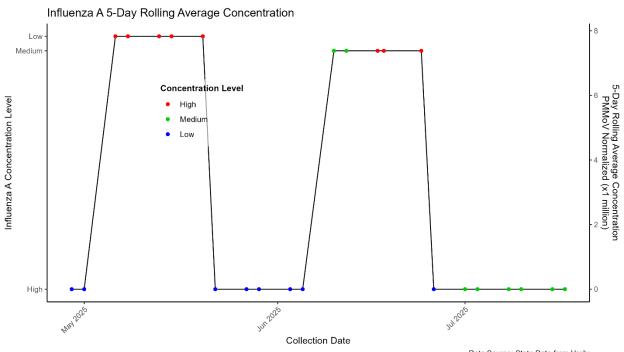


Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 07/25/25



# Influenza A Viral Concentration Trends in Clark County Mesquite Wastewater Treatment Plant

The chart displays a 5-day rolling average of Influenza A concentration levels in wastewater from May to July 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 and July show low levels. Data comes from Verily and the last sample was taken on July 17, 2025.



Data Source: State Data from Verily Sampling Location: City of Mesquite wastewater treatment plant Last Sampling Date: 07/17/25



# **Influenza A Concentrations Interpretation**

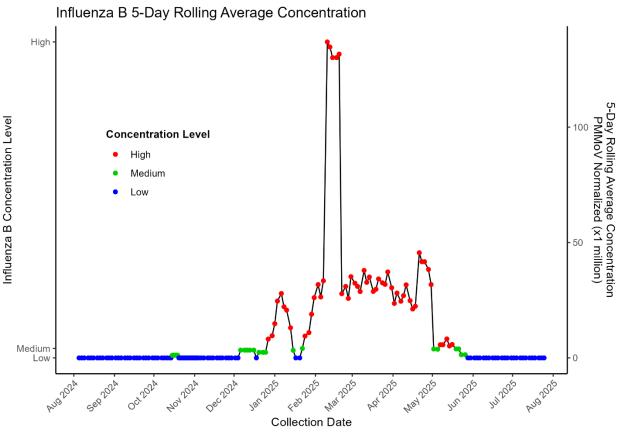
As of July 25, 2025, Influenza A concentrations in wastewater remain low across most Western U.S. cities. Facilities in Las Vegas, Los Angeles, Provo, Riverside, Indio, and Mesquite reported a 5-day rolling mean of 0.00, indicating no detectable virus levels. The A.K. Warren Water Resource Facility in Los Angeles County reported the highest concentration at 6.91. Moderate levels were observed at Regional Water Recycling Plant No.1 in Ontario (1.23), while Central Valley Water Reclamation Facility in Salt Lake Valley reported a low level of 0.42.

| Plant Name   | City                               | Time frame | 5 Day Rolling<br>Mean | 14 Day Trend | Last Sampling<br>Dates |
|--|------------------------------------|------------|-----------------------|--------------|------------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas,<br>NV                   | Current    | 0.00                  |              | July 25, 2025          |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of<br>Mesquite,<br>NV         | Current    | 0.00                  |              | July 17, 2025          |
| A.K. Warren Water<br>Resource Facility             | Los<br>Angeles<br>County, CA       | Current    | 6.91                  |              | July 23, 2025          |
| Hyperion Water<br>Reclamation Plant<br>(HWRP)      | Los<br>Angeles,<br>CA              | Current    | 0.00                  |              | July 23, 2025          |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt<br>Lake<br>Valley, UT | Current    | 0.42                  |              | July 25, 2025          |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                          | Current    | 0.00                  |              | July 25, 2025          |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                        | Current    | 1.23                  |              | July 25, 2025          |
| Riverside Water<br>Quality Control<br>Plant        | Riverside,<br>CA                   | Current    | 0.00                  |              | July 25, 2025          |
| Valley Sanitary<br>District                        | Indio, CA                          | Current    | 0.00                  |              | July 25, 2025          |



# Influenza B Viral Concentration Trends in Clark County Flamingo Water Reclamation District Plant

The chart shows Influenza B concentrations at the Flamingo Water Resource Center from August 2024 to July 2025. From August to December 2024, levels remained low (blue), with occasional medium (green) readings in November and December. Concentrations began increasing in January 2025, peaking sharply in February with sustained high levels (red) through April. Levels declined in May and returned to mostly low or medium by June and July. The highest activity was observed in early 2025, followed by a consistent drop, indicating a seasonal surge and decline. The last sample was collected on July 25, 2025.

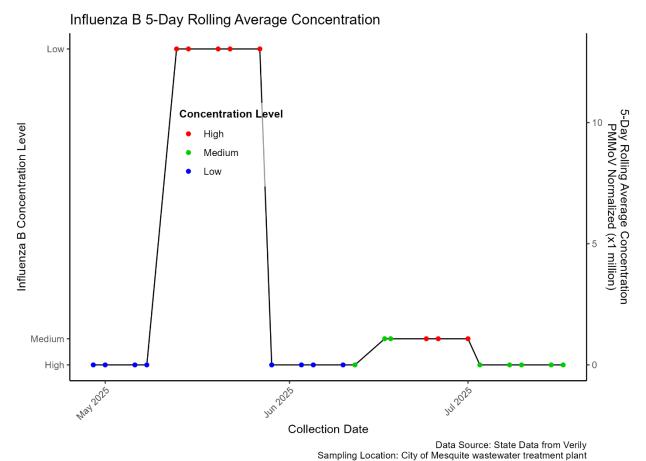


Data Source: WastewaterScan.org Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center Last Sampling Date: 07/25/25



# Influenza B Viral Concentration Trends in Clark County 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 July 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 medium and low. Overall, the data shows brief periods of elevated Influenza B activity with a return to lower levels by late July. The last sampling date was July 17, 2025.



Last Sampling Date: 07/17/25



## **Interpretation of Influenza B Concentrations**

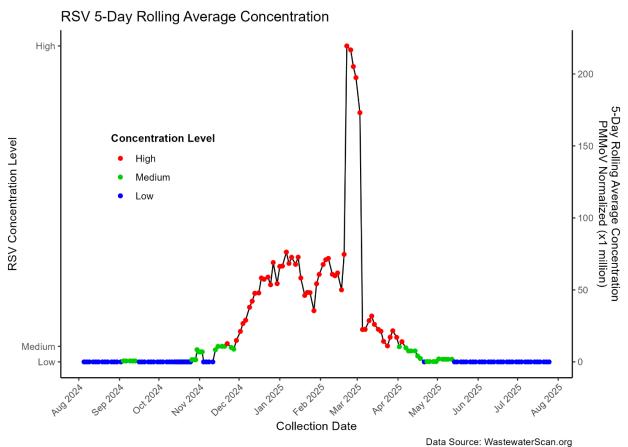
As of July 10, 2025, Influenza B levels in wastewater across monitored treatment facilities remain low overall. Most plants, including those in Las Vegas, Los Angeles County, Ontario, Riverside, and Indio, report a 5-day rolling mean of 0.00 with no change in trend, indicating stable or absent viral presence. The Mesquite, NV plant shows a slight detection (1.08) but also no trend change. Notably, two facilities in Utah—Central Valley Water Reclamation (1.52) and Provo City Water Reclamation (19.99)—report increasing trends, with Provo showing the highest levels among all sites. These increases may indicate localized upticks in community transmission. Sampling dates range from July 8 to July 14, 2025, with most recent data coming from July 14.

| Plant Name   | City                               | Time frame | 5 Day Rolling<br>Mean | 14 Day Trend | Last Sampling Dates |
|--|------------------------------------|------------|-----------------------|--------------|---------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas,<br>NV                   | Current    | 0.00                  |              | July 25, 2025       |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of<br>Mesquite,<br>NV         | Current    | 0.00                  |              | July 17, 2025       |
| A.K. Warren<br>Water Resource<br>Facility          | Los Angeles<br>County, CA          | Current    | 0.00                  |              | July 23, 2025       |
| Hyperion Water<br>Reclamation<br>Plant (HWRP)      | Los<br>Angeles, CA                 | Current    | 0.00                  |              | July 23, 2025       |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt<br>Lake Valley,<br>UT | Current    | 0.00                  |              | July 25, 2025       |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                          | Current    | 0.00                  |              | July 25, 2025       |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                        | Current    | 0.00                  |              | July 25, 2025       |
| Riverside Water<br>Quality Control<br>Plant        | Riverside,<br>CA                   | Current    | 0.00                  |              | July 25, 2025       |
| Valley Sanitary<br>District                        | Indio, CA                          | Current    | 0.00                  |              | July 25, 2025       |



# RSV Viral Concentration Trends in Clark County Flamingo Water Reclamation District Plant

The chart shows RSV concentrations at the Flamingo Water Resource Center from August 2024 to July 2025. Levels were low through October, rising to high in December and peaking sharply in early March 2025. After this spike, concentrations declined rapidly, dropping to medium in April and stabilizing at low levels from May through July. The data reflects a strong winter RSV surge, followed by a steady decline into summer. The most recent sample, collected July 25, 2025, showed continued low activity.



Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center
Last Sampling Date: 07/25/25



# **RSV Concentrations Interpretation**

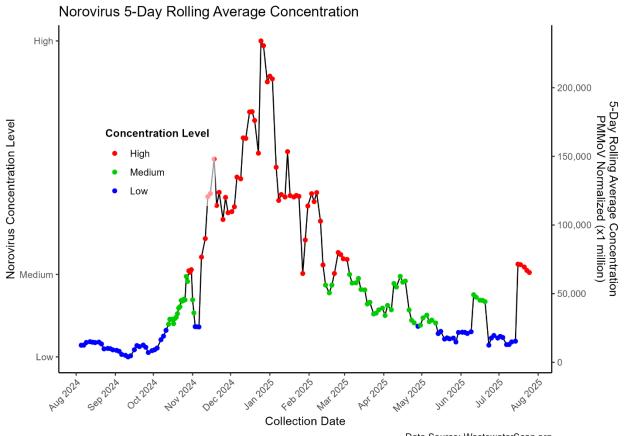
As of July 25, 2025, Respiratory Syncytial Virus (RSV) and COVID-19 viral concentrations remained undetectable across all monitored wastewater treatment plants in Nevada, California, and Utah. Facilities—including the Flamingo Water Resource Center, Mesquite Wastewater Plant, and sites in Los Angeles, 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. Sampling dates ranged from July 17 to July 25, 2025.

| Plant Name   | City                               | Time frame | 5 Day Rolling<br>Mean | 14 Day Trend | Last Sampling<br>Dates |
|--|------------------------------------|------------|-----------------------|--------------|------------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas,<br>NV                   | Current    | 0.00                  |              | July 25, 2025          |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of<br>Mesquite,<br>NV         | Current    | 0.00                  |              | July 17, 2025          |
| A.K. Warren Water<br>Resource Facility             | Los<br>Angeles<br>County, CA       | Current    | 0.00                  |              | July 23, 2025          |
| Hyperion Water<br>Reclamation Plant<br>(HWRP)      | Los<br>Angeles,<br>CA              | Current    | 0.00                  |              | July 23, 2025          |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt<br>Lake<br>Valley, UT | Current    | 0.00                  |              | July 25, 2025          |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                          | Current    | 0.00                  |              | July 25, 2025          |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                        | Current    | 0.00                  |              | July 25, 2025          |
| Riverside Water<br>Quality Control<br>Plant        | Riverside,<br>CA                   | Current    | 0.00                  |              | July 25, 2025          |
| Valley Sanitary<br>District                        | Indio, CA                          | Current    | 0.00                  |              | July 25, 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 Source: WastewaterScan.org Sampling Location: Clark County Water Reclamation District, Flamingo Water Resource Center Last Sampling Date: 07/25/25



# **Norovirus Concentrations Interpretation.**

As of July 25, 2025, wastewater surveillance from nine treatment facilities in Nevada, California, and Utah shows varied Norovirus levels. The highest concentration was observed at Flamingo Water Resource Center in Las Vegas (65,387.92), indicating significant viral presence. Utah facilities in Salt Lake Valley and Provo also reported elevated levels (18,004.83 and 17,758.45, respectively). California showed moderate concentrations, ranging from 1,778.02 in Indio to 6,263.89 in Ontario. Mesquite, NV was not tested.

| Plant Name   | City                               | Time frame | 5 Day Rolling<br>Mean | 14 Day Trend | Last Sampling<br>Dates |
|--|------------------------------------|------------|-----------------------|--------------|------------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas,<br>NV                   | Current    | 65387.92              |              | July 25, 2025          |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of<br>Mesquite, NV            | Current    | -                     | Not Tested   | July 17, 2025          |
| A.K. Warren<br>Water Resource<br>Facility          | Los Angeles<br>County, CA          | Current    | 3156.30               |              | July 23, 2025          |
| Hyperion Water<br>Reclamation<br>Plant (HWRP)      | Los Angeles,<br>CA                 | Current    | 3368.46               |              | July 23, 2025          |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt<br>Lake Valley,<br>UT | Current    | 18004.83              | 1            | July 25, 2025          |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                          | Current    | 17758.45              |              | July 25, 2025          |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                        | Current    | 6263.89               |              | July 25, 2025          |
| Riverside Water<br>Quality Control<br>Plant        | Riverside,<br>CA                   | Current    | 5429.43               | 1            | July 25, 2025          |
| Valley Sanitary<br>District                        | Indio, CA                          | Current    | 1778.02               | 1            | July 25, 2025          |



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

As of July 25<sup>th</sup>, 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<br>Mean | 14 Day Trend | Last Sampling<br>Dates |
|--|------------------------------------|------------|-----------------------|--------------|------------------------|
| Flamingo Water<br>Resource Center                | Las<br>Vegas, NV                   | Current    | 0                     |              | July 25, 2025          |
| Mesquite<br>Wastewater<br>Treatment Plant        | City of<br>Mesquite,<br>NV         | Current    | 0                     |              | July 17, 2025          |
| A.K. Warren Water<br>Resource Facility           | Los<br>Angeles<br>County,<br>CA    | Current    | 0                     |              | July 23, 2025          |
| Hyperion Water<br>Reclamation Plant<br>(HWRP)    | Los<br>Angeles,<br>CA              | Current    | 0                     |              | July 23, 2025          |
| Central Valley<br>Water Reclamation<br>Facility  | Central<br>Salt Lake<br>Valley, UT | Current    | 0                     |              | July 25, 2025          |
| Provo City Water<br>Reclamation<br>Facility      | Provo, UT                          | Current    | 0                     |              | July 25, 2025          |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1) | Ontario,<br>CA                     | Current    | 0                     |              | July 25, 2025          |
| Riverside Water<br>Quality Control<br>Plant      | Riverside,<br>CA                   | Current    | 0                     |              | July 25, 2025          |
| Valley Sanitary<br>District                      | Indio, CA                          | Current    | 0                     |              | July 25, 2025          |



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

As of July 25, 2025, wastewater surveillance from nine facilities across California, Nevada, and Utah shows no detectable levels of Mpox 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.

| Plant Name   | City                            | Time frame | Detect/<br>Non-detect | Last Sampling Dates |
|--|---------------------------------|------------|-----------------------|---------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas, NV                   | Current    | Non-detect            | July 25, 2025       |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of Mesquite,<br>NV         | Current    | Non-detect            | July 17, 2025       |
| A.K. Warren<br>Water Resource<br>Facility          | Los Angeles<br>County, CA       | Current    | Non-detect            | July 23, 2025       |
| Hyperion Water<br>Reclamation Plant<br>(HWRP)      | Los Angeles, CA                 | Current    | Non-detect            | July 23, 2025       |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt Lake<br>Valley, UT | Current    | Non-detect            | July 25, 2025       |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                       | Current    | Non-detect            | July 25, 2025       |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                     | Current    | Non-detect            | July 25, 2025       |
| Riverside Water<br>Quality Control<br>Plant        | Riverside, CA                   | Current    | Non-detect            | July 25, 2025       |
| Valley Sanitary<br>District                        | Indio, CA                       | Current    | Non-detect            | July 25, 2025       |



# Measles Viral Detection Comparing to Neighboring States.

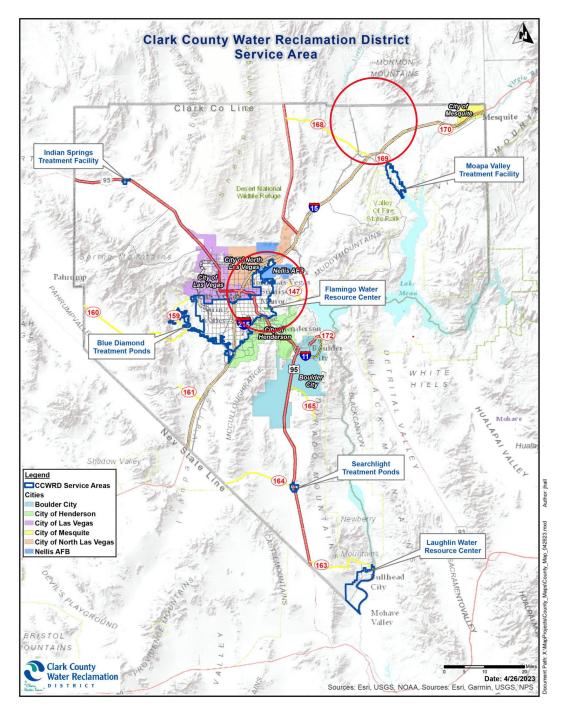
As of July 25, 2025, wastewater surveillance data from nine facilities across California, Nevada, and Utah indicate minimal measles activity. Most locations, including Las Vegas, Los Angeles County, Ontario, Riverside, Indio, and Central Salt Lake Valley, report non-detectable levels of measles in recent samples. The Mesquite facility in Nevada did not conduct measles testing. While Provo City, Utah, showed a recent **detection** as of July 14, 2025, no other sites reported current measles presence, though some had detections earlier within the past 14 days.

| Plant Name   | City                            | Time frame | Detect/<br>Non-detect | Last Sampling Dates |
|--|---------------------------------|------------|-----------------------|---------------------|
| Flamingo Water<br>Resource Center                  | Las Vegas, NV                   | Current    | Non-detect            | July 25, 2025       |
| Mesquite<br>Wastewater<br>Treatment Plant          | City of Mesquite,<br>NV         | Current    | Not Tested            | July 17, 2025       |
| A.K. Warren<br>Water Resource<br>Facility          | Los Angeles<br>County, CA       | Current    | Non-detect            | July 23, 2025       |
| Hyperion Water<br>Reclamation Plant<br>(HWRP)      | Los Angeles, CA                 | Current    | Non-detect            | July 23, 2025       |
| Central Valley<br>Water<br>Reclamation<br>Facility | Central Salt Lake<br>Valley, UT | Current    | Non-detect            | July 25, 2025       |
| Provo City Water<br>Reclamation<br>Facility        | Provo, UT                       | Current    | Non-detect            | July 25, 2025       |
| Regional Water<br>Recycling Plant<br>No.1 (RP-1)   | Ontario, CA                     | Current    | Non-detect            | July 25, 2025       |
| Riverside Water<br>Quality Control<br>Plant        | Riverside, CA                   | Current    | Non-detect            | July 25, 2025       |
| Valley Sanitary<br>District                        | Indio, CA                       | Current    | Non-detect            | July 25, 2025       |



# **Appendix**

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



Source: Clark County Water Reclamation District