



COVID-19 Surveillance Summary

Lyon County

October 10 – October 23, 2021

Contact Tracing and Disease Investigation Update

Beginning on August 8, 2021 Carson City Health and Human Services COVID-19 Disease Investigation Team began prioritizing pediatric and school staff associated cases to assist schools in their role in providing safe environment for students and staff. From October 10– October 23, 2021, the Carson City Health and Human Services COVID-19 Disease Investigation Team was able to attempt contact with sixty percent of school associated cases within twenty-four hours and successfully contacted sixty percent during this two-week period. Additionally, they were able to attempt contact with twenty-seven percent of all cases in the two-week period within twenty-four hours and successfully contacted thirty-eight percent. The Investigation Team continues to utilize the more expanded investigation to collect information such as symptomology, medical history, and refocused exposure questions. As always, the information reported here is based on preliminary laboratory findings and completed survey investigations and does not necessarily represent all cases during this two-week period.

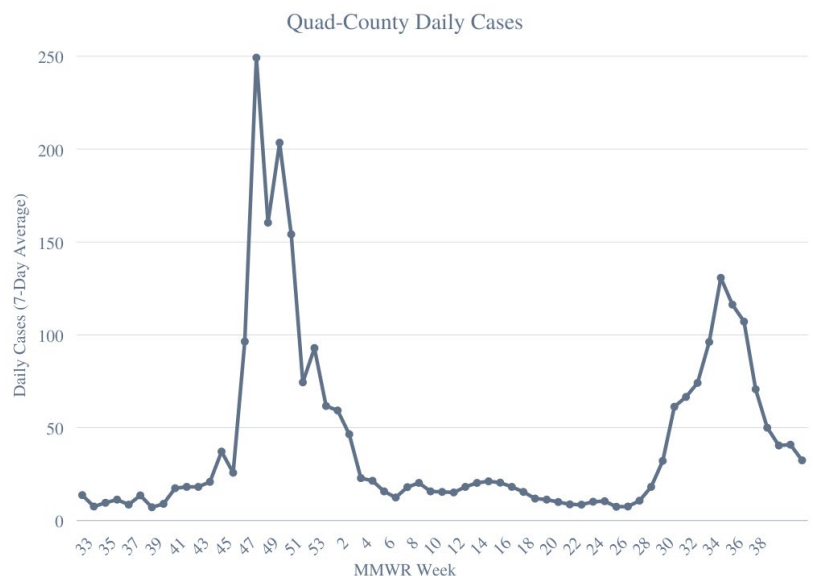
CCHHS continues to partner with the Nevada Resilience Project, who reaches out to cases, close contacts, and other members of the community impacted by COVID-19 that were identified as having challenges associated with the pandemic including, but not limited to, managing work or school, social isolation, mental health, and resource navigation. During this two-week period, the Resilience Ambassadors identified twenty-four individuals, families, or organizational groups that could benefit from their services and have done several community events.

Quad-County Area Demographics

Across the Quad-County area (Carson City, Douglas, Lyon, and Storey Counties), there were 513 new COVID-19 cases in the two-week period from October 10 – October 23, 2021. This is a ten percent decrease from the previously reported two-week period. The daily cases reported, based on a seven-day average, over this two-week period was thirty-six (Graph 1). This indicates that, on average, there have been thirty-six new cases each day throughout the Quad-County area.

Oftentimes, lab reports are received with incomplete data and our survey data is on a delay. As such, the following demographic data has a significant percentage of unknown or missing information.

The average age across all counties was forty-three years old with a range of less than one years old to ninety years old. Forty-four percent of cases were female, and fifty-six percent were male. Of the cases that reported their race, eighty-three percent were reported as White, nine percent of cases were reported as other, four percent reported American Indian or Alaskan

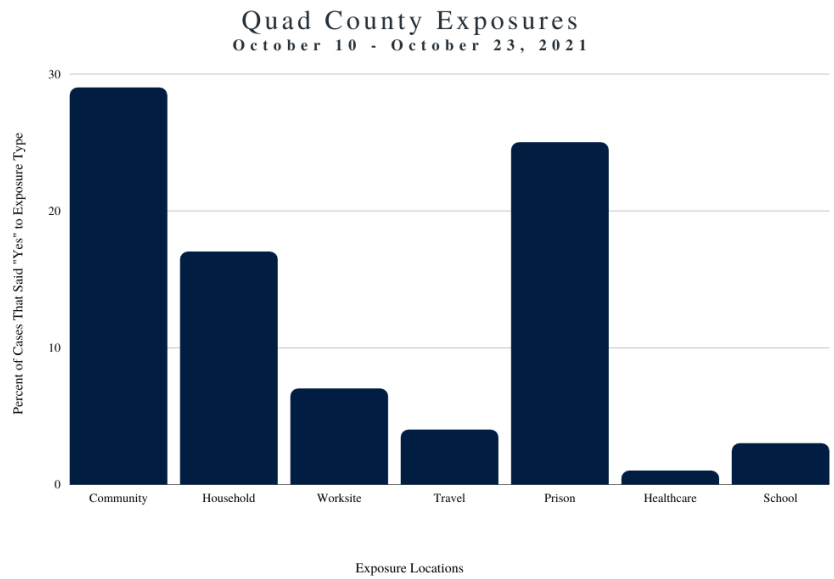


Graph 1: 7-day Average per Week

Native, less than one percent reported as Native Hawaiian or other Pacific Islander, two percent reported Black or African American, and two percent Asian. Of those who reported their ethnicity, eighty percent reported as Non-Hispanic or Latino/a, nineteen percent reported as Hispanic or Latino/a, and less than one percent preferred not to answer. There were seven known hospitalizations across all counties during this two-week period. This is a thirty percent decrease from the previous two-week period. According to the Nevada Hospital Association report on October 20, 2021, hospitalizations are slowly beginning to decline in Northern Nevada. Hospitals are reporting significant staffing shortages resulting in downstream patient care effects. There were four COVID-19 related deaths across the four counties. Morbidity data is often delayed, so this number only represents the data that has been made available for this two-week period.

Quad-County Area Exposure

Among cases with complete information, the most common, known COVID-19 exposures were community, household, and prisons (Graph 2). Cases can have more than one exposure. The information on the graph and below indicates the percentage of cases that said “yes” to each question, independently. Approximately twenty-nine percent of cases had related community exposure. This can be family gatherings, weddings, funerals, birthday parties, political events, or any other similar activity. Community exposure, as defined by the state, also refers to individuals that did not know where they were exposed. Seventeen percent of cases had an exposure with someone that tested positive within their household.



Graph 2: Case Exposures

Quad-County Area Schools

Carson City, Douglas County, and Lyon County school districts are using the Abbott BinaxNOW, a rapid antigen test that detects a specific viral antigen for the virus that causes COVID-19. In alignment with the CDC guidance, schools are utilizing the BinaxNOW for faculty and students to quickly isolate positive individuals and end quarantine for close contacts after seven days. School cases represented in this report are PCR, molecular positive cases, the Abbott BinaxNOW test, and other FDA approved antigen tests.

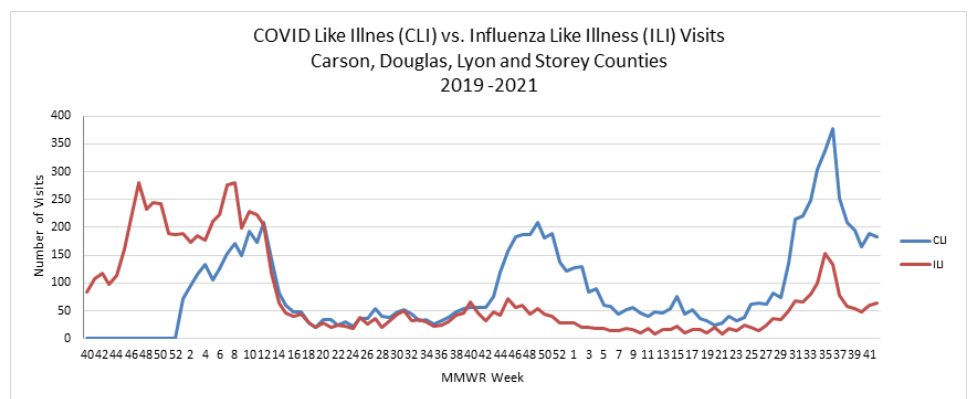
There were thirty-four cases from October 10 – October 23, 2021. Of these student cases, seventy-nine percent attended school during their infectious period. There were also three school faculty cases who tested positive for COVID-19. Of these faculty cases, sixty-seven percent attended school while infectious. Our school biostatistician works closely with schools to help with contact tracing, case surveillance, and the implementation of mitigation strategies.

COVID-19 Variants of Concern

The Nevada State Public Health Laboratory (NSPHL) conducts genome sequencing from a sample of confirmed COVID-19 cases as part of disease surveillance which helps identify new and emerging variants. The emergence of new variants is a natural occurrence in infectious diseases. According to the CDC, there are currently four COVID-19 variants of concern across the United States. Knowledge of emerging SARS-CoV-2 variants is quickly evolving, however there is evidence indicating that these variants are more transmissible. According to the NSPHL, B.1.167.2, also known as the Delta (India.) variant, is the most prevalent SARS-CoV-2 variant among all the samples sequences in Nevada. The Quad-County reported thirty-six B.1.167.2 variant cases from October 10 – October 23, 2021. Data is often delayed due to the sequencing processes. Additionally, sequencing is conducted using only samples submitted to the NSPHL, which may not always include commercial laboratory samples and does not include Abbott BinaxNOW tests or other rapid antigen tests.

Quad-County COVID-19 Syndromic Surveillance

CCHHS utilizes the Nevada ESSENCE system for syndromic surveillance. Syndromic surveillance provides public health officials with a timely system for detecting, understanding, and monitoring health events. By tracking symptoms of patients in emergency departments and urgent cares—before a diagnosis



is confirmed—public health can detect unusual levels of illness to determine whether a response is warranted. Syndromic data can serve as an early warning system for public health concerns such as flu outbreaks and other infectious disease such as COVID-19. The following CDC syndromic surveillance definitions (CLI CC with CLI DD and Coronavirus DD v1 and ILI) were plotted (Graph 3). For MMWR weeks 41 and 42, the Quad Counties are seeing a slight increase in COVID like Illness (CLI) and Influenza like Illness (ILI) in emergency departments compared to previous weeks.

Quad-County Vaccinations

According to the Nevada State COVID-19 Dashboard, approximately fifty percent of Quad County residents are fully vaccinated as of October 20 2021. Carson City Health and Human Services continues to work with community stakeholders on vaccination outreach to increase vaccination rates among the community.

Quad-County Breakthrough Cases

Vaccine breakthrough cases are U.S. residents with a SARS-CoV2 RNA or antigen detected in a respiratory specimen collected greater than or equal 14 days after they have completed all recommended doses of an FDA authorized COVID-19 vaccine. A complete vaccination is two doses of the Pfizer or Moderna vaccine or one dose of the Johnson and Johnson (Janssen) vaccine. Since February 1, 2021, the overall vaccinated case rate for the Quad County region is 1,380 per 100k population. This means that out of the total population in the quad county region who are fully vaccinated, approximately 1,380 people out of 100k are cases. Since February 1, 2021, the overall unvaccinated case rate for the Quad County region is approximately 9,262 people out of 100k are cases. It is important to note that no vaccine is 100 percent effective at preventing illness. As the number of fully vaccinated people increases and community transmission increase, breakthrough cases are expected rise.

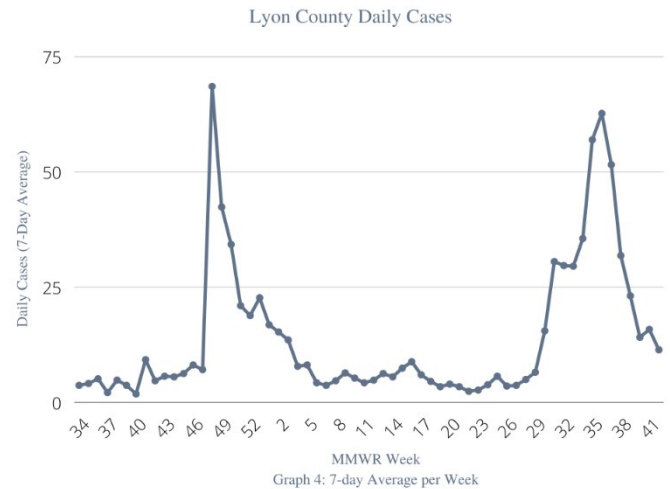
Lyon County Surveillance Summary

From October 10 – October 23, 2021, there were 185 confirmed cases reported in Lyon County. This represents approximately thirty-six percent of all Quad-County cases during this two-week period. This is a twelve percent decrease from the previous two-week period. The zip code in Lyon County that reported the highest number of cases during this two-week period was zip code 89408 (Table 1).

Zip Codes	Cases
89403	22
89408	123
89429	27
89430	2
89444	2
89447	9
89706	4

Table 1. Lyon County Cases by Zip Codes

The daily cases reported, based on a seven-day average, over this two-week period was thirteen. This indicates that, on average, there have been thirteen new cases each day throughout Lyon County. Lyon County is seeing a decrease in the average number of cases reported each week (Graph 4). Fifty-two percent of cases were female, and forty-eight percent were male. The average age of Lyon County cases was thirty-nine years old.



Lyon County Schools

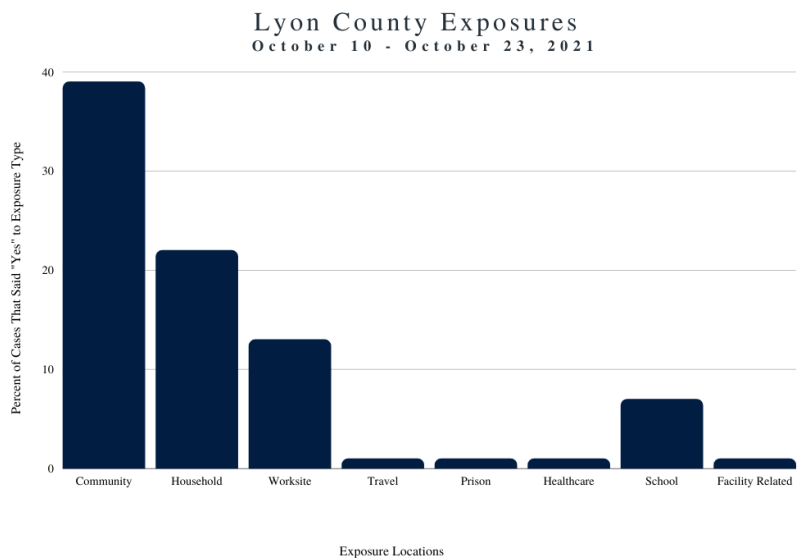
There were fourteen student cases from October 10 – October 23, 2021. Of these student cases, seventy-nine percent attended school while infectious. Additionally, there were no school faculty members that tested positive for COVID-19 or attended school while infectious.

Lyon County Exposure

Of those with known exposures, thirty-nine percent were exposed in the community, twenty-two percent of cases were exposed to someone in their household who tested positive, seven percent were exposed in school. The graph shows more information on Lyon County exposures (Graph 5). Just as above, exposure questions are independent, meaning an individual can answer “yes” to more than one exposure type.

CCHHS’s COVID-19 Epidemiologist is working closely with the state and the facilities to track the transmission and ensure mitigation efforts are in place.

Transmission trends are challenging to track or predict.



Lyon County Vaccinations

According to the Nevada State COVID-19 Dashboard, approximately forty-four percent of Lyon County residents are fully vaccinated as of October 20, 2021. Carson City Health and Human Services continues to work with community stakeholders on vaccination outreach to increase vaccination rates among the community.

Lyon County Breakthrough Cases

Carson City represents thirty-one percent of the total known breakthrough cases from the Quad County region reported since February 1, 2021. The overall vaccinated case rate for Carson City is 1,335 per 100k population compared to the overall unvaccinated case rate of 10,514 per 100k population. COVID-19 vaccines continue to be highly effective at protecting people against severe illness and death. Getting vaccinated is still the best way to slow the spread of COVID-19.