COVID-19 Surveillance Summary

Lyon County

August 22 – September 4, 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 August 22 – September 4, 2021, the Carson City Health and Human Services COVID-19 Disease Investigation Team was able to attempt contact with thirty-one percent of school associated cases within twenty-four hours and successfully contacted sixty-six percent. Additionally, they were able to attempt contact five percent of all cases in the two-week period within twenty-four hours and successfully contacted sixteen 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 eleven 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 1,594 new COVID-19 cases in the two-week period from August 22 – September 4, 2021. This is a twenty-five percent increase from the previously reported two-week period. The daily cases reported, based on a seven-day average, over this two-week period was 114 (Graph 1). This indicates that, on average, there have been 114 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 thirty-four years old with a range of less than one years old to one hundred years old. Fifty-two percent of cases were female, and forty-seven percent were male. Of the cases that reported their race, eighty-three percent were reported as White, eleven percent of cases were reported as other, two percent reported American Indian or
Alaskan Native, less than one percent reported as Native Hawaiian or other Pacific Islander, three percent reported Black or African American, less than one percent Asian. Of those who reported their ethnicity, seventy-seven percent reported as Non-Hispanic or Latino/a, twenty-three percent reported as Hispanic or Latino/a. There was one known hospitalization across all counties during this two-week period. This is an eighty percent decrease from the previous two-week period. According to the Nevada Hospital Association report on September 1, 2021, hospitalizations remain stable in Northern Nevada but are increasing in COVID-19 patients. Ventilator use as well as ICU occupancy continues to increase. There was ten percent increase from the previous week. There were eight COVID-19 related death 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 and school (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 fifty-three 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. Thirty-one percent of cases had an exposure with someone that tested positive in their school indicating that the transmission occurred from one or more of the students or faculty.

**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 one hundred and nineteen student case investigations completed from August 22 – September 4, 2021. Of these student cases, eighty-nine percent attended school during their infectious period. There were also fifteen school faculty cases who tested positive for COVID-19. Of these faculty cases, eighty-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 followed by the newly classified variant of concern, B.1.1.7 also known as the Alpha (UK) variant. The Quad-County reported zero B.1.1.7 variant cases and approximately fourteen B.1.167.2 variant cases from August 22 – September 4, 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 34 and 35, the Quad Counties continue to see an increase in COVID like Illness (CLI) and Influenza like Illness (ILI) in emergency departments compared to previous weeks and is slightly higher.

Quad-County Vaccinations

According to the Nevada State COVID-19 Dashboard, approximately forty-six percent of Quad County residents are fully vaccinated as of August 24, 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 Surveillance Summary

From August 22 – September 4, 2021, there were 646 confirmed cases reported in Lyon County. This represents approximately twenty-eight percent of all Quad-County cases during this two-week period. This is a thirty percent increase 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).

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

Lyon County Schools

There were thirty-four student case investigations completed from August 22 – September 4, 2021. Of these student cases, seventy-six percent attended school while infectious. Additionally, there were eight school faculty members that tested positive for COVID-19 and eighty-eight percent attended school while infectious.

<table>
<thead>
<tr>
<th>Zip Codes</th>
<th>Cases Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>89403</td>
<td>155</td>
</tr>
<tr>
<td>89408</td>
<td>255</td>
</tr>
<tr>
<td>89428</td>
<td>1</td>
</tr>
<tr>
<td>89429</td>
<td>44</td>
</tr>
<tr>
<td>89430</td>
<td>3</td>
</tr>
<tr>
<td>89444</td>
<td>16</td>
</tr>
<tr>
<td>89447</td>
<td>165</td>
</tr>
<tr>
<td>89706</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 1. Lyon County Cases by Zip Code
Lyon County Exposure

Of those with known exposures, fifty-six percent were exposed in the community. Sixteen percent of cases were exposed to someone in their household who tested positive. Twenty-three 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 percent of Lyon County residents are fully vaccinated as of August 24, 2021. Carson City Health and Human Services continues to work with community stakeholders on vaccination outreach to increase vaccination rates among the community.