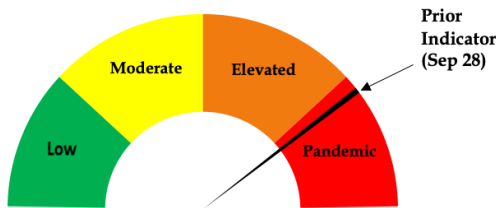




Risk Dial Oct 6, 2021



Risk Dial for COVID-19
Two Rivers Public Health
Published Oct 6, 2021

- 292 cases of COVID-19 were recorded in TRPHD between September 29- October 5. Weekly cases across TRPHD dropped to zero in mid-June. Since then, about 2700 positive tests have been detected across TRPHD, over a third of those were reported in the past three weeks.
- One out of every 9 COVID tests in Buffalo or Dawson counties in the past month was positive, over 43% of those among residents aged less than 30 years. Currently, no pediatric patients are hospitalized due to COVID.
- There are 23 adult COVID-related hospitalizations currently across TRPHD. Additionally, 3 pediatric patients are being monitored following COVID-related hospitalization. Only 15% of ICU beds are currently available across TRPHD, almost 40% of ICU beds in use are occupied by COVID patients.
- Hospitals report continuing pressure on inpatient services. Medical/ Surgical bed availability is about 45% across all hospitals in the district. Across TRPHD, 6 out of the 8 ventilators currently in use are for COVID patients.
- Starting October 11th, a new public COVID testing site will be open in Kearney city at the Buffalo County Fairgrounds. Testing results will be available the same day and are offered Mondays & Wednesdays 9:30AM - 12:30PM. Those desirous of COVID testing are requested register at www.trphd.org for scheduling.
- As of Oct 5, 2021, 45% of TRPHD's total population and almost 57% of the adult population (18+ years) has been fully vaccinated. TRPHD strongly urges all unvaccinated vaccine-eligible residents to avail of the COVID vaccination through their healthcare provider, pharmacy or TRPHD. For schedule of vaccination clinics, see www.trphd.org
- For these reasons, the risk dial is unchanged from last week and remains in the 'pandemic' zone. The dial has stayed in the red pandemic zone for three weeks now, reflecting weekly incidence and positivity rates, strained in-patient capacity and ICU utilization rates, and incomplete contact tracing and high rates of COVID hospitalizations in the district.



Weekly report Sep 29 – Oct 5, 2021

Overview

The weekly report will look at COVID-19 cases in TRPHD across different time periods, presenting graphs showing daily progress of cases and a weekly summary in conclusion

- The tables describe total tests conducted and positive cases across TRPHD from **Sep 29 – Oct 5** (1 week) and **Sep 7 – Oct 5** (4 weeks). We show the average daily number of new cases, overall test positivity rate and positivity rate for tests that are not conducted routinely (eg: tests in hospitals and clinics, and not in residential facilities¹)
- The first graphic describes **the vaccination coverage rate of TRPHD residents by county of residence and age** between **Dec 15, 2020 – Oct 4, 2021**. All residents are included to calculate the **proportion of total population partially or fully vaccinated**.
- The second set of graphs look at the progress of the pandemic from **April 1, 2020 – Oct 5, 2021** across all counties.
 - We describe the **7-day rolling average** ² of positive cases across TRPHD since April, describing overall progress and cases by **age categories**
- The third set of graphs describe the **COVID test positivity rate** in TRPHD from **March 15, 2020 – October 5, 2021**. The graph is modified to show residential, non-residential and overall positivity rates separately. ³
- The fourth set of graphs describe the daily case average (7-day rolling) across towns and cities in three urban areas (**Kearney, Lexington, Holdrege**) (Jul 1, 2020- Oct 5, 2021) ⁴
 - The cities described are **Kearney, Elm Creek, Pleasanton, Amherst, Riverdale, Gibbon, Shelton and Axtell** (total 39,412 people), **Lexington, Overton, Elwood, Johnson Lake and Cozad** (total 15,700 people), **Holdrege, Loomis and Funk** (total 5967 people).
- The fifth set of graphs describe the daily cases (7-day rolling average) from **Aug 31 – Oct 5**.
 - Progress is described by age & city of residence.

To conclude, 292 new COVID cases were detected in the Two Rivers area last week, equaling the past month's average. ICU availability, already constrained by staffing shortages in Nebraska and across the nation, is at 15%, 9 out of 24 occupied beds are being utilized by COVID patients. 6 COVID patients are currently on ventilator support. 45% of the total population of TRPHD district and 56% of all adults are fully vaccinated. TRPHD has scheduled mobile vaccination clinics 5 days a week at 9 different sites across the district, schedule can be found at <https://www.trphd.org/covid-19/event-calendar.html>. Starting October 11th, a new public COVID testing site will be open in Kearney city at the Buffalo County Fairgrounds, operational Monday and Wednesday mornings. In the meantime, unvaccinated residents are advised to follow strict preventive measures (social distancing, correct and consistent masking) at all times, especially in light of increased transmission of the delta variant and general relaxation of infection control practices.

¹ For information on residential facilities, please see appendix 3

² 7-day rolling average refers to the sum of the cases reported on that day and the preceding 6 days divided by 7.

This number is presented for each day to 'smooth out' the line for cases.

³ For information on "average positivity rate", please see appendix 2

⁴ For information on urban areas, please see appendix 5



Testing & Vaccination Overview

- As of Oct 5, 2021, over 58,000 residents of Two Rivers Health District were tested at least once for COVID-19. Almost 170,000 tests have been conducted since March 1, 2020 and over 13,300 persons have tested positive at least once - over 700 have tested COVID positive more than once.⁵ TRPHD has publicly notified 141 deaths due to COVID-19 across the district.
- As of Oct 4, 2021, 45% of TRPHD’s entire population has been fully vaccinated. ⁶ Details of vaccination rates by age in each of the seven counties in Two Rivers Health District is shown below. The legend for color codes used is also displayed. Percentages have been rounded off to the nearest whole number. Vaccines are currently available to all eligible residents aged 12 years and over.

| | BUFFALO | DAWSON | FRANKLIN | GOSPER | HARLAN | KEARNEY | PHELPS | TRPHD |
|-----------|---------|--------|----------|--------|--------|---------|--------|-------|
| 0-17 YRS | 10% | 13% | 6% | 7% | 7% | 12% | 7% | 10% |
| 18-29 YRS | 33% | 42% | 26% | 36% | 25% | 40% | 28% | 34% |
| 30-39 YRS | 47% | 49% | 39% | 29% | 40% | 41% | 39% | 45% |
| 40-49 YRS | 59% | 54% | 44% | 44% | 31% | 63% | 38% | 54% |
| 50-59 YRS | 63% | 57% | 43% | 45% | 45% | 53% | 50% | 58% |
| 60-69 YRS | 79% | 77% | 63% | 70% | 61% | 73% | 64% | 75% |
| 70-79 YRS | 97% | 87% | 88% | 55% | 87% | 82% | 92% | 91% |
| 80+ YRS | 89% | 77% | 77% | 75% | 58% | 69% | 73% | 79% |
| ALL AGES | 46% | 46% | 45% | 43% | 39% | 46% | 41% | 45% |

| | |
|--------------|----------------------------------|
| 0% - 33% | Less than 1/3rd fully vaccinated |
| 34% - 50% | 1/3rd to 1/2 fully vaccinated |
| 50%- 74% | 1/2 to 3/4ths fully vaccinated |
| 75% & higher | Over 3/4ths fully vaccinated |

- How to read this table: (For eg.) : “54% of Buffalo county residents in their 40s are fully vaccinated, however only 31% of 40 year-olds in Harlan county are fully vaccinated. While over 90% of all TRPHD residents in their 70s are fully vaccinated, only about a third of 20-year olds in the district are fully vaccinated.”

⁵ Note: The differences between the numbers reported and totals displayed on www.trphd.org dashboards is due to testing in residential facilities and isolated rapid test results not reflected in the state’s public dashboards. Tests of persons missing date of birth are excluded from the analysis

⁶ For information on vaccine-eligible population in each of the counties, please see appendix 4



- The table below provides details of positive cases detected in 7 counties in TRPHD in the past week (**Sep 29 - Oct 5**) and past 4 weeks (**Sep 7 - Oct 5**).
- The daily average refers to the average daily new COVID cases calculated either **weekly** (7-day average) or **monthly** (28-day average).
- All-test positivity rate refers to the proportion of all tests conducted that are positive, including regular testing, antigen and PCR.
- Positivity rate (non-routine testing) refers to tests that are **not** conducted in residential and long-term living facilities.⁷ These COVID tests are conducted mainly in hospitals, clinics and pharmacies. Details are provided below.

| | Sep 29 - Oct 5 (1 week) | | | Sep 7 - Oct 5 (4 weeks) | | |
|---------------------------|---------------------------|-----------------------------|---------------------------------------|----------------------------|-----------------------------|---------------------------------------|
| | Daily average (7-day avg) | Positivity Rate (All tests) | Positivity Rate (non-routine testing) | Daily average (28-day avg) | Positivity Rate (All tests) | Positivity Rate (non-routine testing) |
| County | | | | | | |
| Buffalo | 21.4 | 11.9% | 18.3% | 24.8 | 11.3% | 18.2% |
| Dawson | 9.1 | 11.1% | 21.6% | 12.2 | 12.0% | 21.1% |
| Franklin | 1.0 | 5.8% | 31.8% | 0.8 | 6.7% | 29.6% |
| Gosper | 1.0 | 9.2% | 46.7% | 1.0 | 5.7% | 30.9% |
| Harlan | 0.9 | 3.4% | 17.2% | 0.5 | 3.2% | 21.9% |
| Kearney | 2.3 | 8.5% | 22.9% | 2.0 | 7.6% | 21.7% |
| Phelps | 5.9 | 4.5% | 16.3% | 5.5 | 7.7% | 27.5% |
| Missing/ did not disclose | 0.1 | 14.3% | 14.3% | 0.2 | 17.9% | 17.9% |
| Age (in yrs) | | | | | | |
| 0-17 | 8.4 | 16.1% | 18.8% | 9.2 | 16.6% | 18.9% |
| 18-29 | 7.7 | 9.4% | 15.3% | 10.4 | 11.3% | 19.0% |
| 30-39 | 9.0 | 15.1% | 28.0% | 8.2 | 13.7% | 24.5% |
| 40-49 | 5.6 | 11.0% | 23.1% | 5.9 | 11.5% | 23.5% |
| 50-59 | 5.4 | 9.1% | 21.5% | 5.2 | 9.5% | 20.1% |
| 60-69 | 3.4 | 6.3% | 17.0% | 4.3 | 8.9% | 20.3% |
| 70-79 | 1.6 | 4.8% | 14.1% | 2.5 | 8.1% | 19.2% |
| 80+ yrs | 0.6 | 0.7% | 8.0% | 1.2 | 1.7% | 10.2% |
| TRPHD | 41.7 | 8.8% | 19.4% | 46.8 | 10.1% | 20.1% |

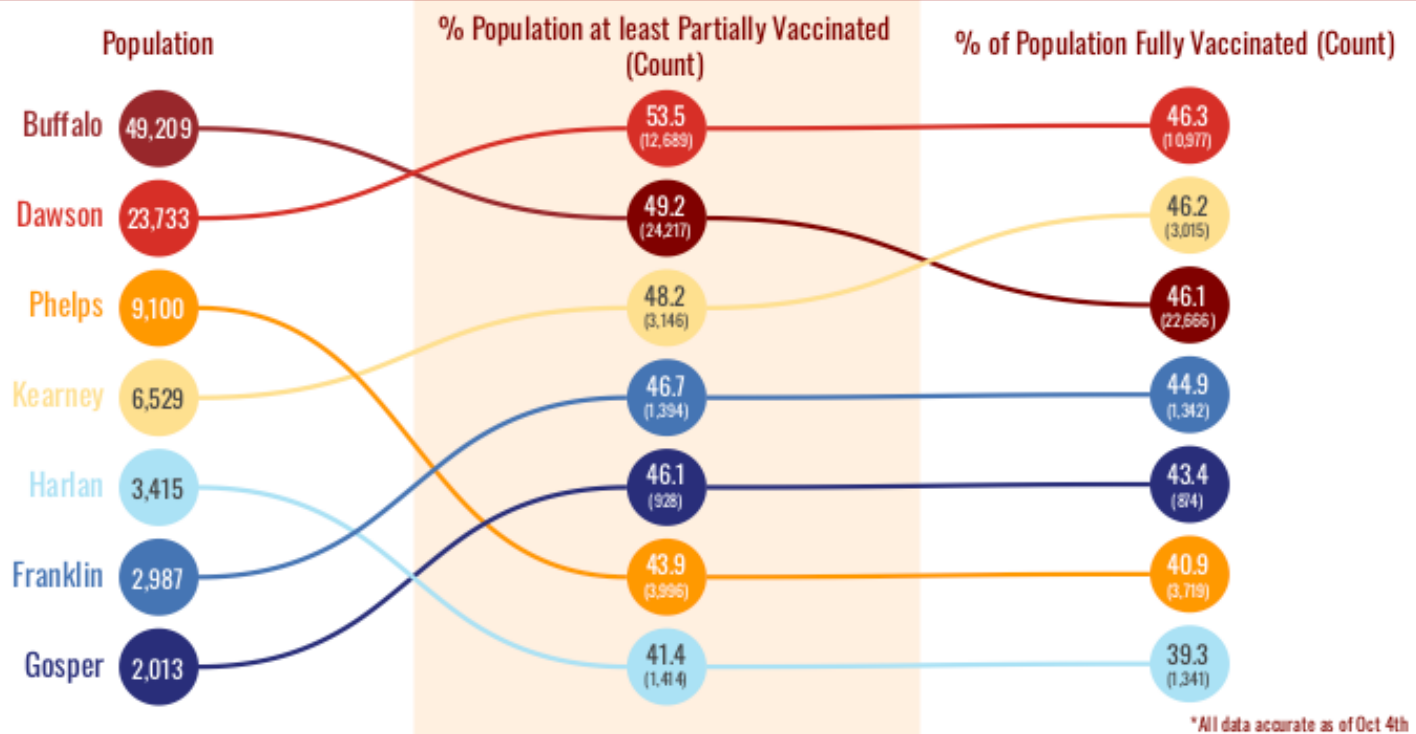
- How to read this table: (For eg.) : “Over the past week, 42 TRPHD residents tested positive for COVID-19 every day, on average. In the past month, 12% of all tests conducted on Dawson county residents was positive. Excluding long term care testing, a little more than a fifth of all tests in Dawson county in the past month were positive.”

⁷ For information on residential facilities, please see appendix 3
 516 W 11th Street, Suite 108
 Kearney, NE 68845



- The graph below describes **all TRPHD residents who are fully vaccinated** against COVID-19 between **December 15, 2020 - October 5, 2021**. All residents of the seven counties are included although the vaccine is currently available only to those 12 years or over.
- Each county is depicted by a colored circle, and the relative position of each corresponds to the proportion vaccinated. Actual numbers (count) are included in parenthesis.
- **Overall, 44.8% of TRPHD’s total population and 56.0% of all adult residents (18 years and over) are fully vaccinated.**

Vaccinations of Total Population in TRPHD

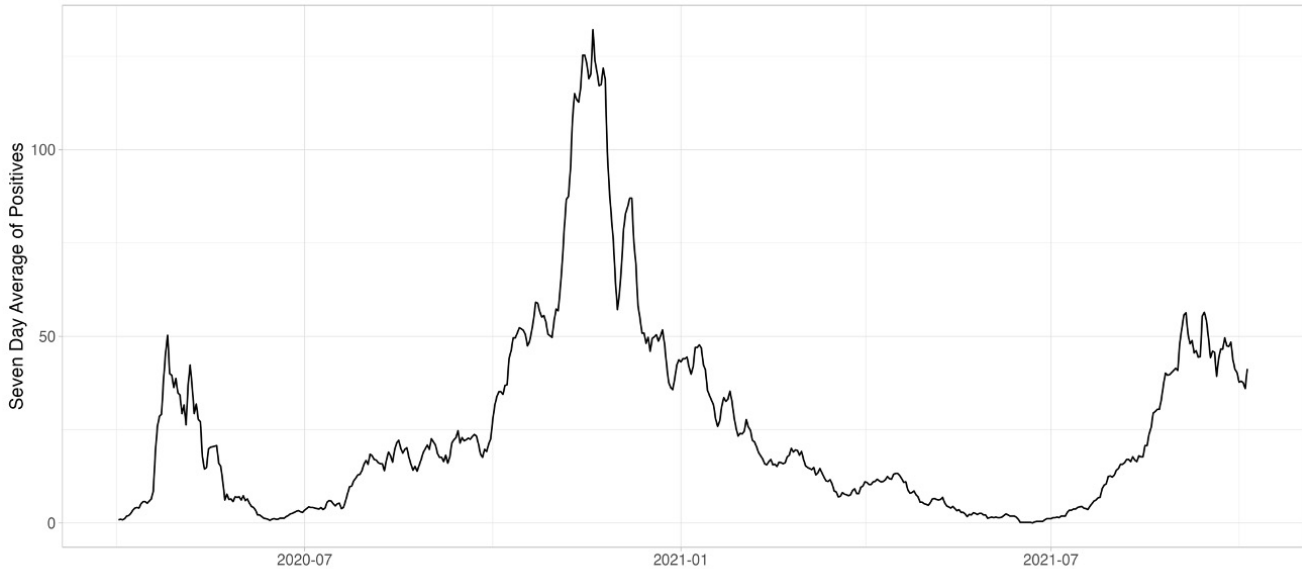




- The graph below describes 7-day rolling average of COVID-19 across TRPHD from **April 1, 2020 - Oct 5, 2021.**
- The second graph describes 7-day rolling average of COVID-19 cases by age across TRPHD for the same time period. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

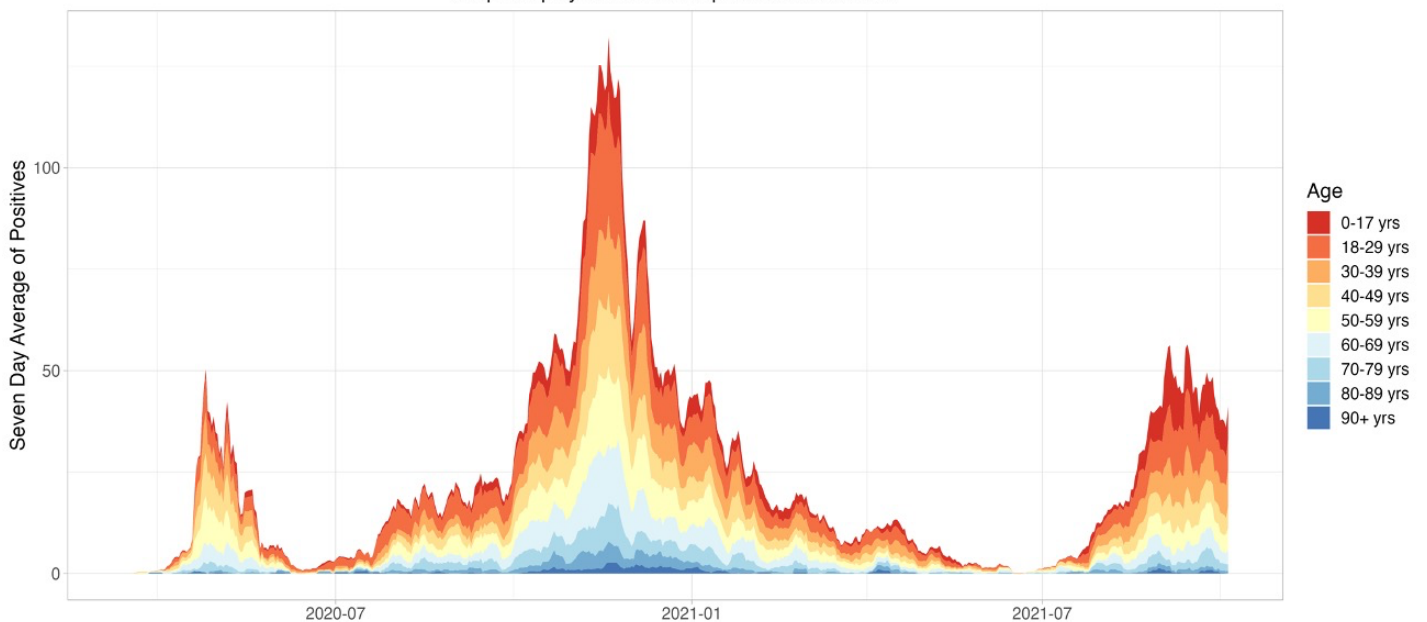
7 Day Rolling Average of Two Rivers

Graph displays data from April 1st to October 5th



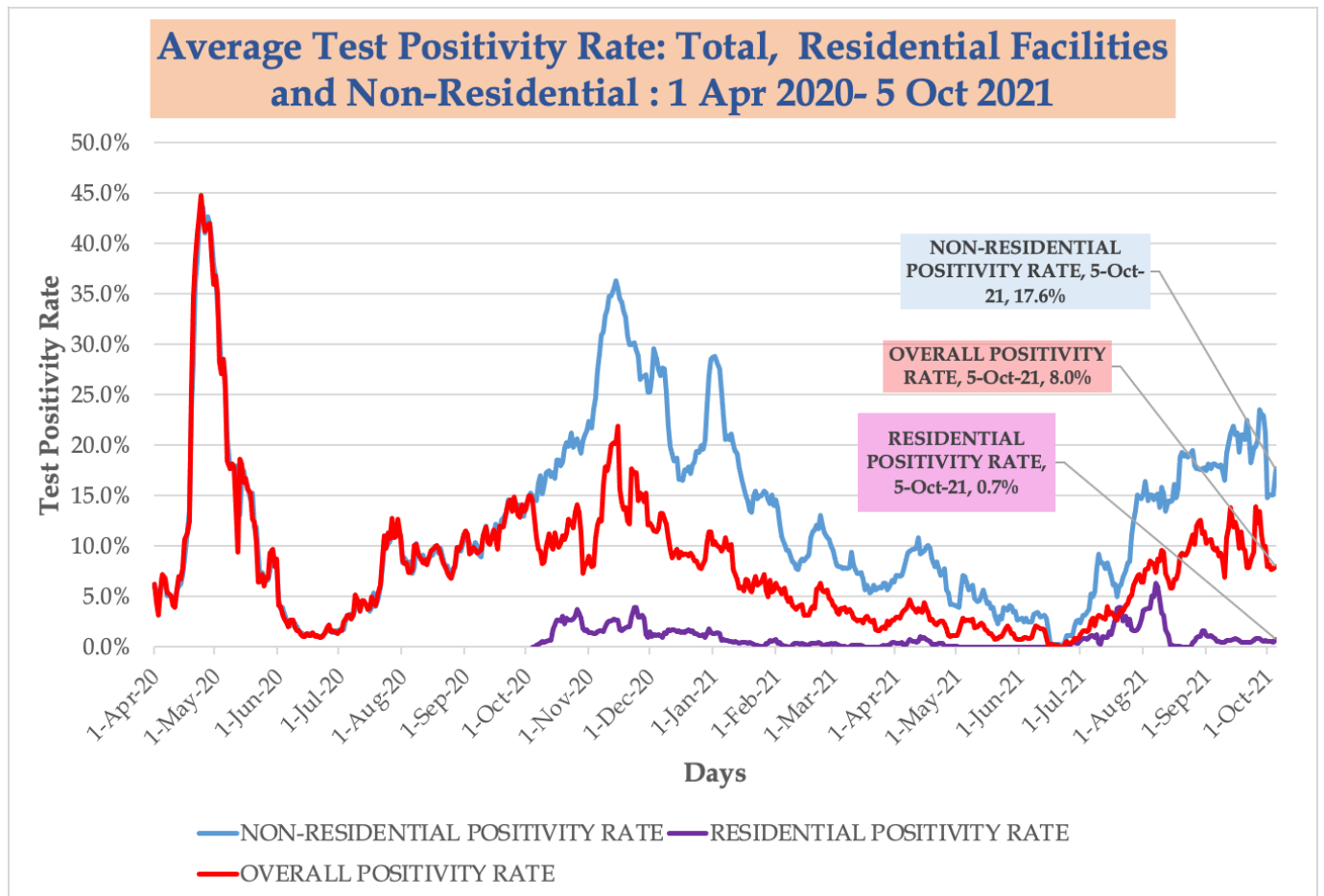
Daily Average of COVID-19 Cases in TRPHD by Age

Graph displays data from Sept 8th to October 5th





- The graphs below describe the average **test positivity rate (7-day rolling average)**⁸ in TRPHD from **April 1, 2020 - Oct 5, 2021**. The graph depicts the entire county including Buffalo, Dawson, Phelps, Franklin, Gosper, Harlan and Kearney counties.
- Graph describes all tests (overall positivity rate), those conducted **in residential facilities**, and those conducted outside residential facilities in the last 17 months⁹
- Graph may be read thus (for eg): “In the week Sep 29 – Oct 5, **8% of all COVID tests** conducted in TRPHD was positive; excluding long term care and other residential facilities, **18% of tests** was positive.”



⁸ For description of average positivity rate, see appendix 1

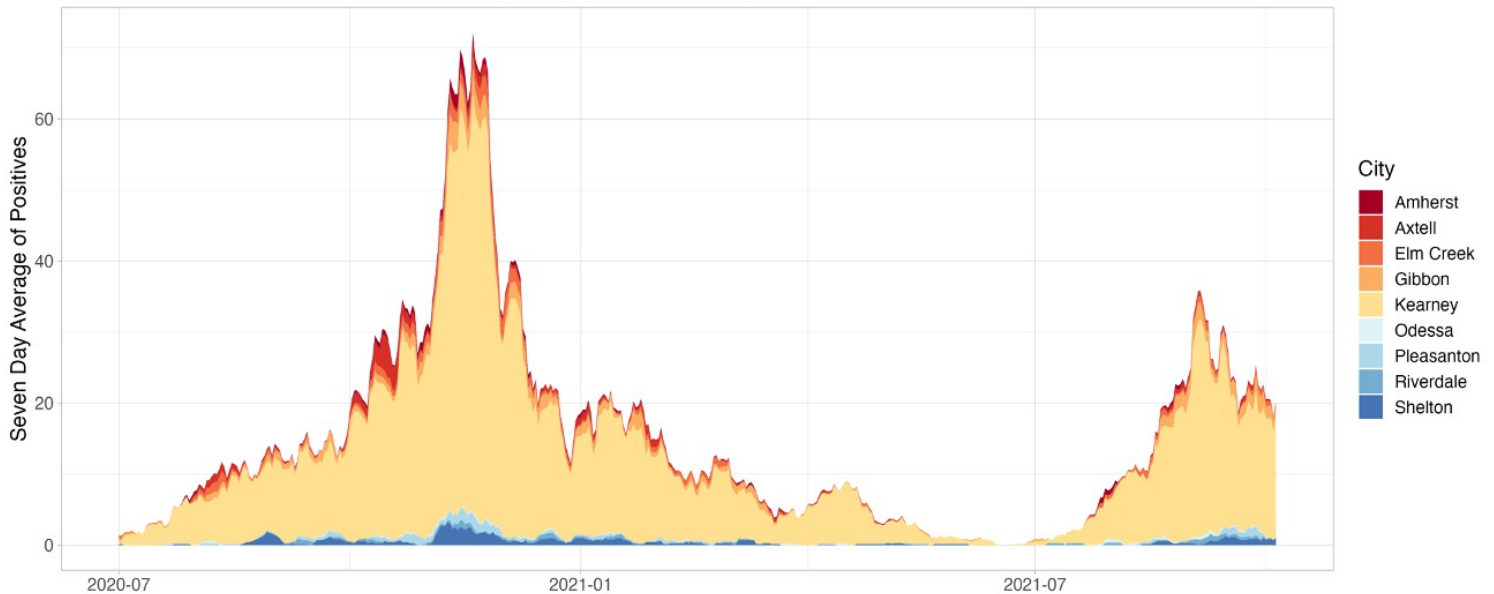
⁹ For information on residential facilities, please see appendix 3



- The following graphs describe the average **daily COVID cases (7-day rolling)** in three urban areas in Two Rivers Health Department.
- The urban areas are Kearney city and surrounding towns (**Kearney, Elm Creek, Pleasanton, Amherst, Riverdale, Gibbon, Shelton and Axtell - total 39,412 people**), Lexington city and surrounding towns (**Lexington, Overton, Elwood, Johnson Lake and Cozad - total 15,700 people**), Holdrege city and surrounding towns (**Holdrege, Loomis and Funk - total 5967 people**).¹⁰
- Time considered is from **July 1, 2020 - Oct 5, 2021**. Scales are different for all three graphs
- The graph for Kearney city and surrounding areas is presented below.

7 Day Rolling Average of COVID-19 Cases by City

Graph displays data from July 1st to October 5th



Information Updated as of 10/5 at 8 p.m.

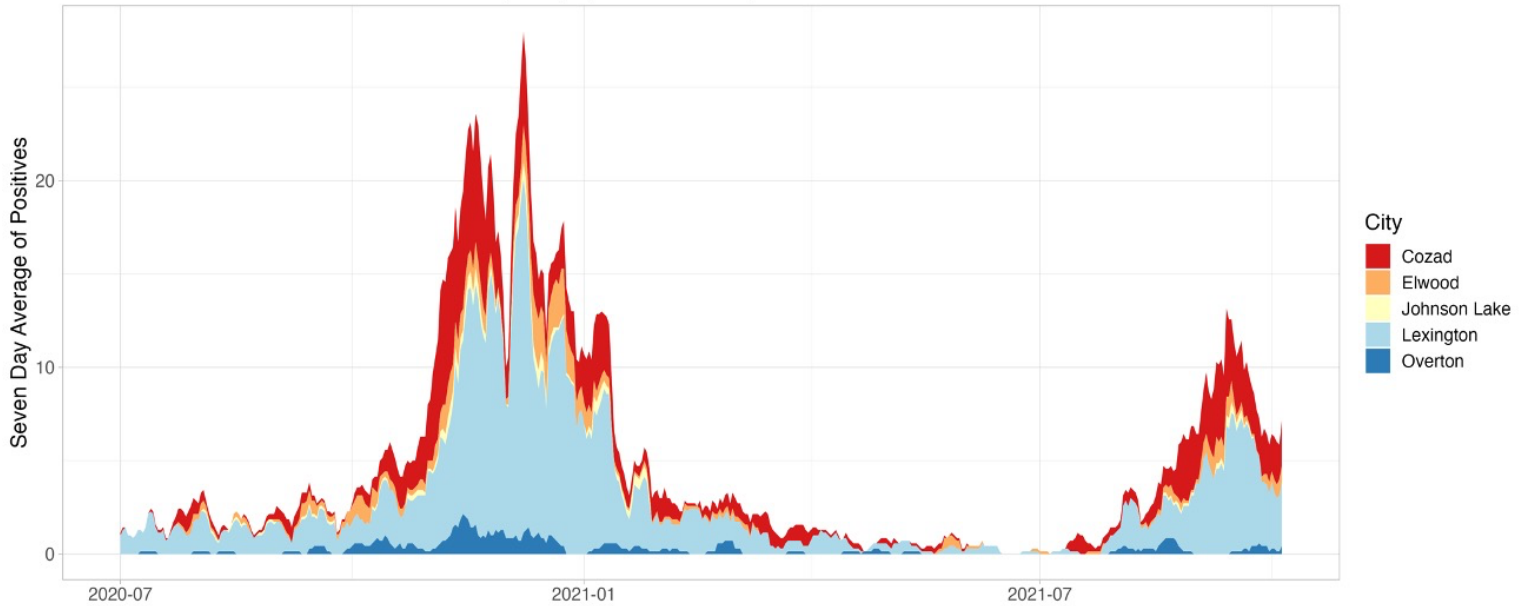
¹⁰ For details about each of the urban areas, please see appendix 5
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Kearney, NE 68845



- The **daily average (7-day rolling)** of positive cases in **Lexington** and **Holdrege** cities and surrounding towns between July 1, 2020 – Oct 5, 2021 are presented below.

7 Day Rolling Average of COVID-19 Cases by City

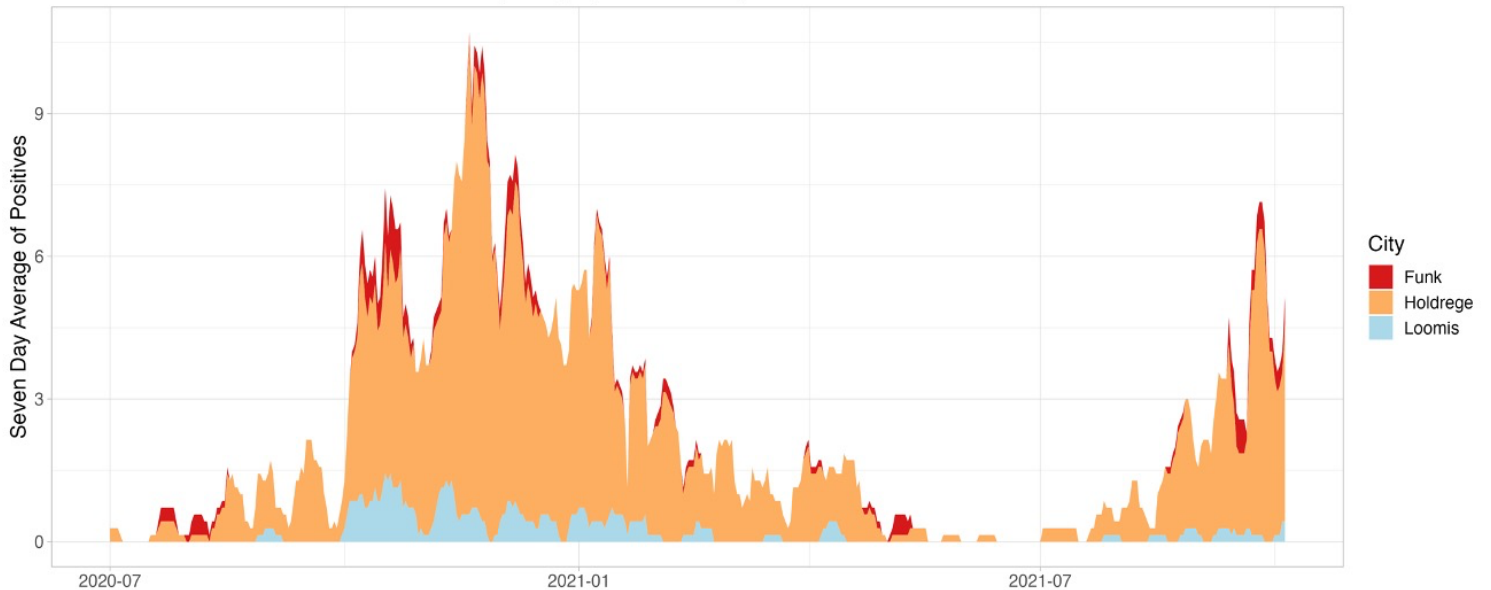
Graph displays data from July 1st to October 5th



Information Updated as of 10/5 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases by City

Graph displays data from July 1st to October 5th



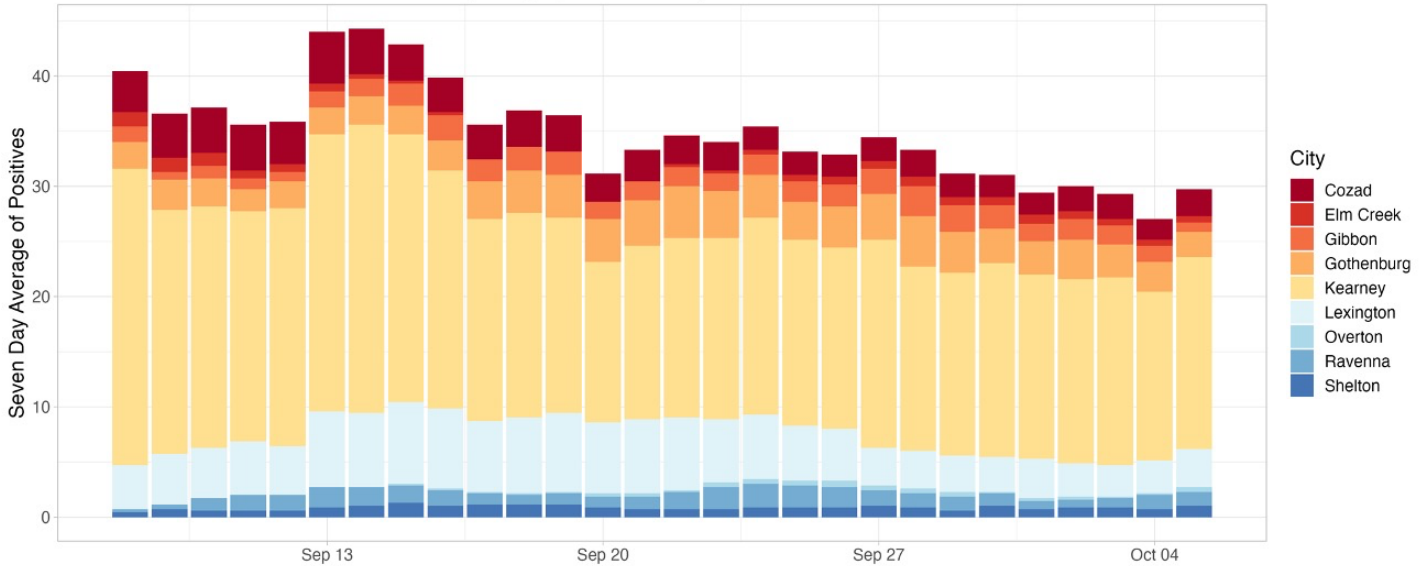
Information Updated as of 10/5 at 8 p.m.



- The following bar graphs describes the 7-day rolling averages by city for the past four weeks (Sep 7 - Oct 5) in TRPHD. The graph above shows cities in **Buffalo and Dawson** counties and the one below shows the graph for cities in **Gosper, Harlan, Kearney and Phelps** counties. The scale is different for both graphs.

7 Day Rolling Average of COVID-19 Cases Buffalo and Dawson County

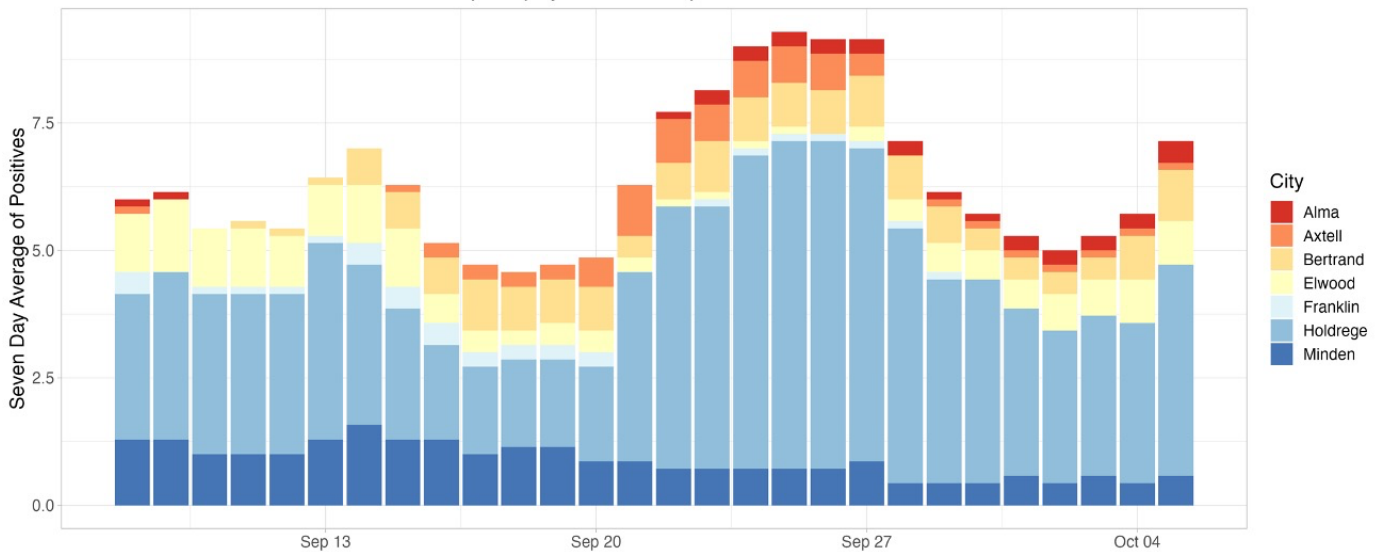
Graph displays data from Sept 8th to October 5th



Information Updated as of 10/5 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases Gosper, Franklin, Kearney, and Phelps County

Graph displays data from Sept 8th to October 5th



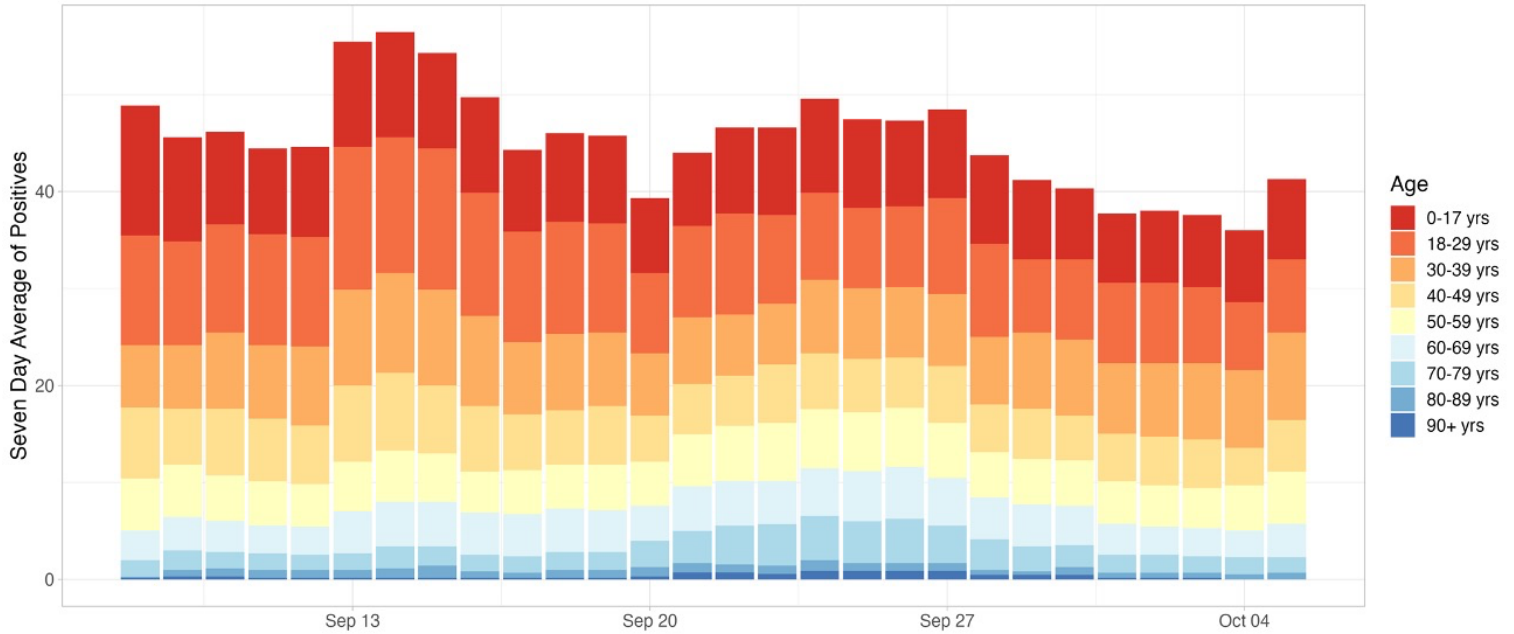
Information Updated as of 10/5 at 8 p.m.



- The graph below describes the **7-day rolling average** of cases from **Sep 7 – Oct 5** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

7 Day Rolling Average of COVID-19 Cases in Two Rivers by Age

Graph displays data from Sept 8th to October 5th



Information Updated as of 10/5 at 8 p.m.



Weekly summary

- 313 cases of COVID-19 were recorded in TRPHD between September 22-28. Since mid-August, about 3000 tests have been conducted in TRPHD per week on an average, about 10% of those tests were positive.
- Weekly COVID case counts in Holdrege are 3.5 times that recorded a month previously. 27% of all COVID cases recorded in the city of Holdrege in 2021 were recorded in September.
- COVID-related hospitalizations account for about a fifth of Medical/ Surgical bed occupancy; about 28% of staffed hospital beds are currently available across TRPHD. Staffed ICU beds in TRPHD have dropped to 28, a one-third drop from the average available number of ICU beds in 2020.
- Hospitals in the city of Kearney and Phelps County report continuing pressure on in-patient services. Across TRPHD, there are 5 COVID patients currently on ventilator support and 10 admitted in ICU.
- Smaller outbreaks in counties other than Buffalo and Dawson seem to be driving the newly detected cases in TRPHD. Phelps county in particular has seen an outbreak of cases in the past 2 weeks, especially among under 30 year olds.
- As of Sep 28, 2021, 45% of TRPHD's total population and almost 56% of the adult population (18+ years) has been fully vaccinated across the district. See weekly vaccination report at <https://www.trphd.org/covid-19/vaccination-reports.html> for details. TRPHD strongly urges all unvaccinated vaccine-eligible residents to avail of the COVID vaccination through their healthcare provider, pharmacy or TRPHD. For schedule of vaccination clinics, see www.trphd.org
- All persons aged 12 and over are eligible for the vaccine. TRPHD has scheduled mobile vaccination clinics at over 15 sites across seven counties to distribute vaccines and to focus on areas of potential shortfall. Those eligible for the vaccine are advised to refer to the vaccination clinic schedule at www.trphd.org

To conclude, 313 new COVID cases were detected in the Two Rivers area last week. The incidence of COVID cases among residents less than 30 years in the past two months is the primary driver for rising case counts. ICU availability continues to suffer from staffing shortages, only 28 beds are currently available, compared to about 40 in September 2020. COVID cases account for over 20% of all hospital beds. 45% of the total population of TRPHD district and 56% of all adults are fully vaccinated. TRPHD has scheduled mobile vaccination clinics 5 days a week at 9 different sites across the district, schedule can be found at <https://www.trphd.org/covid-19/event-calendar.html>. Those eligible are advised to contact their physician or refer to the vaccination clinic schedule. In the meantime, unvaccinated residents are advised to follow strict preventive measures (social distancing, correct and consistent masking) at all times, especially in light of increased transmission of the delta variant and general relaxation of infection control practices.



APPENDIX 1

Background

The Two Rivers Public Health Department (TRPHD) covers 7 counties in central Nebraska, reaching 97,132 people who live and work in the health district spread across roughly 4663 square miles. Over three quarters of residents live in Buffalo and Dawson county, a tenth live in Phelps county, and the remaining 15% is spread somewhat comparably among the four counties of Kearney, Harlan, Franklin and Gosper in decreasing order of population. The largest cities are Holdrege (pop. 5408), Lexington (pop. 10115) and Kearney (pop. 33867) meaning that well over half the residents of TRPHD live in three cities, and over a third are in Kearney alone. The population of all 7 counties in TRPHD are shown below.

| County | Population |
|--------------------|---------------|
| Buffalo | 49,659 |
| Dawson | 23,595 |
| Franklin | 2,979 |
| Gosper | 1,990 |
| Harlan | 3,380 |
| Kearney | 6,495 |
| Phelps | 9,034 |
| TRPHD total | 97,132 |
| Nebraska state | 1,934,408 |
| United States | 328,239,523 |

- Data is presented as 7-day rolling averages for daily numbers and absolute counts for cumulative cases. The 7-day rolling average is the sum of all cases reported on that day plus the previous six divided by 7.
- Total (cumulative) cases refer to all COVID cases that have been confirmed by testing in the district since the beginning of the pandemic in TRPHD (March 19)
- All tests refers to all types of tests conducted across the Health District, including laboratory-based PCR and rapid antigen.
- Average positivity rate refers to a seven-day rolling average positivity rate, which is the sum of all cases for that day and the previous six divided by the sum of all tests done in that day and the previous six. This is also the same as the “weekly positivity rate”
- In cases that call for comparison across larger areas (counties v/s state of Nebraska, for eg), we present the count per 100,000 population. 100,000 roughly corresponds to the population of Two Rivers Health District (97,132)
- In cases that call for comparison between cities, (Kearney v/s Minden for eg), we present a count per 10,000 population. 10,000 roughly corresponds to the population of Lexington (10,115), the second largest city in TRPHD.
- Deaths due to COVID-19 are identified in death certificates (usually COVID -19 is the Underlying Cause of Death) and attested by the attending physician or medical examiner/ coroner. Each case is further investigated by TRPHD over telephone - the next



of kin is contacted, condolences conveyed and exit interviews conducted by Department staff before releasing a public notification. For further details on the procedure for COVID-19 death certification, please see <https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf>

- For calculation, we use the 2019 mid- year census estimate (American Community Survey, ACS) and data from The Atlantic’s COVID tracking project (<https://covidtracking.com/data>)

APPENDIX 2

Total (cumulative) cases per 100,000 population

The total/ cumulative case counts are the **total** cases confirmed by testing in an area (county, city, state or health district) calculated from the first recorded case (in case of TRPHD this is March 19, 2020). This is expressed as a fraction of the total population of the area and standardized to 100,000 persons. A population of 100,000 is used to compare counties as it is comparable to the overall population of Two Rivers Health District (97,032).

Total (cumulative) cases / 100,000 persons is calculated as:

$$[(\text{Total positive test results for residents in the region}) / (\text{mid-year population}) * 100,000]$$

Daily average of cases per 100,000 population

The daily average (7-day rolling) of cases is the sum of all cases reported on that day plus the previous six divided by 7. This is expressed as a fraction of the total population of the area and standardized to 100,000 persons. A population of 100,000 is used to compare counties as it is comparable to the overall population of Two Rivers Health District (97,032).

Daily average of cases / 100,000 persons is calculated as:

$$[(\text{7-day rolling average of cases among residents}) / (\text{mid-year population}) * 100,000]$$

APPENDIX 3

About a third of all tests conducted since March in the district have been availed by residents or staff of residential facilities. “Residential facilities” include long-term care facilities, in-patient psychiatry services, retirement villages, veterans’ homes and correctional facilities within Two Rivers Health District.

Considering the specific nature of COVID risk of long-term residents of institutional facilities and taking into account the frequent testing performed at facilities, we present numbers separately for long term care facilities and others in the district.



APPENDIX 4

Vaccine-eligible population

The total COVID-19 vaccine-eligible population of Two Rivers Health District is about 76,002. This includes all residents over the age of 16 years living in the seven counties that make up the district. The table below describes the eligible population in each of the seven counties divided by age category.

| | 16-29 YRS | 30-49 YRS | 50-64 YRS | 65+ YRS | TOTAL(16+ YRS) |
|-----------------|--------------|--------------|--------------|--------------|----------------|
| TRPHD | 19580 | 22863 | 17760 | 15799 | 76002 |
| BUFFALO | 11828 | 11910 | 8184 | 6863 | 38785 |
| DAWSON | 4301 | 5723 | 4334 | 3696 | 18054 |
| FRANKLIN | 391 | 586 | 717 | 809 | 2503 |
| GOSPER | 232 | 418 | 532 | 526 | 1708 |
| HARLAN | 459 | 649 | 735 | 845 | 2688 |
| KEARNEY | 985 | 1508 | 1343 | 1239 | 5075 |
| PHELPS | 1384 | 2069 | 1915 | 1821 | 7189 |

Vaccines used in TRPHD

In the first phase, COVID-19 vaccines have been approved for use in all persons over the age of 16 years. Currently, Pfizer and Moderna vaccine formulations are being offered in Two Rivers Health District. Use of the Johnson & Johnson (Janssen) vaccine formulation has been paused pending further scrutiny by the Food and Drug Administration (FDA).

The Nebraska Department of Health and Human Services paused use of the Johnson & Johnson (Janssen) COVID-19 vaccine after Centers for Disease Control and Prevention (CDC) and Food and Drug Administration (FDA) recommendations following reports of six women who have been hospitalized with severe blood clots after receiving the vaccine dose, including one woman in Douglas county. The women were aged between 18-48 years. Vaccine use was reinstated on April 26, 2021 and is now available at private pharmacies across the state.

To date, over 6.8 million doses of Janssen vaccine have been administered in the United States, over 31,500 in Nebraska, and 1560 in Two Rivers Health District.

Symptoms in the 6 hospitalized individuals included headache, back pain, other unexplained pain. Symptoms typically began 6-13 days after vaccination, and hospital admission was within 15 days, on average. More than 55% of the Janssen vaccine was administered before 22nd of March in Two Rivers Health District.



APPENDIX 5

Methods & Definitions

To better understand the course of the COVID-19 pandemic in Kearney, Lexington and Holdrege, we created ‘urban areas’ that included both the city and its surrounding towns. We included all towns within 20 miles of Kearney city, 15 miles of Lexington and 10 miles of Holdrege within each city’s urban area. The respective populations of all 7 counties in TRPHD are shown below. Kearney city accounts for over third of the population of TRPHD.

| County | Population |
|--------------------|---------------|
| Buffalo | 49,659 |
| Dawson | 23,595 |
| Franklin | 2,979 |
| Gosper | 1,990 |
| Harlan | 3,380 |
| Kearney | 6,495 |
| Phelps | 9,034 |
| TRPHD total | 97,132 |
| Nebraska state | 1,934,408 |

Thus “Kearney area” includes Kearney city as well as Elm Creek, Pleasanton, Amherst, Riverdale, Odessa, Gibbon, Shelton and Axtell.

“Lexington area” includes Lexington city as well as Overton, Johnson Lake and Cozad.

“Holdrege area” includes Holdrege city, Loomis and Funk.

The populations of cities and villages is described below. Also included are Minden and Gothenburg, used as comparison points in descriptive statistics about the area.

| CITY | POPULATION |
|-----------------------------------|--------------|
| Kearney | 33867 |
| Elm Creek | 949 |
| Axtell | 751 |
| Pleasanton | 359 |
| Riverdale | 179 |
| Amherst | 253 |
| Gibbon | 1869 |
| Shelton | 1055 |
| Odessa | 130 |
| KEARNEY URBAN AREA (TOTAL) | 39412 |
| Lexington | 10115 |
| Overton | 567 |
| Johnson Lake | 600 |



| | |
|-------------------------------------|---------------|
| Elwood | 683 |
| Cozad | 3735 |
| LEXINGTON URBAN AREA (TOTAL) | 15,700 |
| Holdrege | 5408 |
| Funk | 183 |
| Loomis | 376 |
| HOLDREGE URBAN AREA (TOTAL) | 5967 |
| Gothenburg | 3489 |
| Minden | 2890 |

For presenting data, we selected 3 time frames:

- a) April 1 - current (From the beginning of the pandemic to most recent Tuesday)
- b) July 01 - current (From the beginning of second sustained 'wave' in daily case counts to current)
- c) Previous 4 weeks
 - Data is presented as 7-day rolling averages for daily numbers and absolute counts for cumulative cases. The 7-day rolling average is the sum of all cases reported on that day plus the previous six divided by 7.
 - Cumulative cases refer to all cases that have been confirmed in the district since the beginning of the pandemic in TRPHD (March 19)
 - Average positivity rate refers to a seven-day rolling average positivity rate, which is the sum of all cases for that day and the previous six divided by the sum of all tests done in that day and the previous six
 - Average positivity rate (in %) = (Sum of positive cases for current day + previous 6 days) / (Sum of total tests for current day + previous six days)
 - In cases that call for comparison across larger areas (counties v/s state of Nebraska, for eg), we present the count per 100,000 population. 100,000 roughly corresponds to the population of Two Rivers Health District (97,132)
 - In cases that call for comparison between cities, (Kearney v/s Minden for eg), we present a count per 10,000 population. 10,000 roughly corresponds to the population of Lexington (10,115), the second largest city in TRPHD.
 - For calculation, we use the 2019 mid- year estimate (American Community Survey, ACS) and data from The Atlantic's COVID tracking project (<https://covidtracking.com/data>)