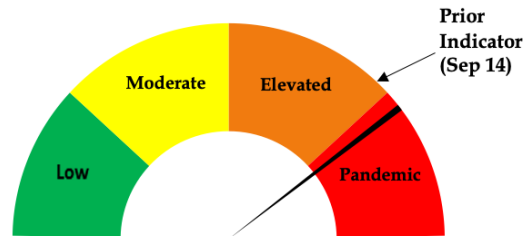




Risk Dial Sep 23, 2021



Risk Dial for COVID-19
Two Rivers Public Health
Published Sep 23, 2021

- 316 cases of COVID-19 were recorded in TRPHD between September 15 & 21; over 20% of tests conducted outside long term care facilities returned positive. In the past month, long term care testing (staff & residents) has returned over 45 positive results.
- Weekly COVID case counts in Lexington and Holdrege cities are over 4 times that recorded a month previously. Almost a quarter of total COVID cases recorded in Kearney city in this year were recorded in September.
- COVID-related hospitalizations account for over 20% of Medical/ Surgical bed occupancy; only a quarter of staffed beds are currently available in TRPHD. ICU availability has fallen further, only 6 out of 28 that are staffed are currently available (see <https://www.trphd.org/> for details).
- Hospitals in Kearney city and Phelps report near-capacity occupancy, bed availability has dropped across the entire district. 5 COVID patients are currently on ventilator support across TRPHD.
- Testing, contact tracing & case investigations continue to be constrained by personnel and organizational shortages.
- As of Sep 21, 2021, 44% 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. In light of rising incidence rates connected to the newer delta variant, 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 raised this week and enters 'pandemic' designation. The raised dial level reflects the continuing increase in cases, dramatically constrained Medical/Surgical bed availability and ICU utilization rates, reduced testing availability, insufficient contact tracing and rising COVID hospitalizations in the district.



Weekly report Sep 15 – Sep 21, 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 15 – Sep 21** (1 week) and **Aug 24 – Sep 21** (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** between **December 15, 2020 – Sep 20, 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 – Sep 21, 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 **average COVID test positivity rate (7-day rolling average)** from Apr 1, 2020 – Sep 21, 2020. COVID tests conducted in long term (residential) facilities are considered separately from other tests in the district; average total positivity rate (residential facilities and others) is also shown. 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- Sep 21, 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 24 – Sep 21**.
 - Progress is described by age & city of residence.

To conclude, 316 new COVID cases were detected in the Two Rivers area last week. Only 6 ICU beds are currently available in the Two Rivers area, ICU bed availability has dropped by a third due to staffing shortages. COVID cases account for over 20% of all hospital beds, only 55 beds are currently available across the 7-county region. 44% of the total population of TRPHD district and 55% 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.

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 Sep 21, 2021, over 51,000 residents of Two Rivers Health District were tested at least once for COVID-19. Over 164,000 tests have been conducted since March 1, 2020, almost 9500 persons have tested positive at least once and about 2,200 have tested COVID positive more than once.⁵ TRPHD has publicly notified 125 deaths due to COVID-19 across the district.
- As of Sep 20, 2021, 44% 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 | 9% | 12% | 6% | 7% | 7% | 11% | 6% | 10% |
| 18-29 YRS | 32% | 39% | 23% | 35% | 25% | 39% | 27% | 33% |
| 30-39 YRS | 45% | 45% | 37% | 28% | 38% | 40% | 38% | 44% |
| 40-49 YRS | 57% | 52% | 43% | 43% | 30% | 62% | 37% | 53% |
| 50-59 YRS | 62% | 56% | 43% | 45% | 45% | 52% | 49% | 57% |
| 60-69 YRS | 79% | 76% | 63% | 70% | 60% | 73% | 64% | 74% |
| 70-79 YRS | 97% | 87% | 88% | 55% | 87% | 81% | 91% | 90% |
| 80+ YRS | 89% | 77% | 77% | 76% | 58% | 69% | 74% | 79% |
| ALL AGES | 45% | 45% | 44% | 43% | 39% | 45% | 40% | 44% |

| | |
|--------------|----------------------------------|
| 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.) : “45% of Buffalo county residents in their 30s are fully vaccinated, however only 28% of 30 year-olds in Gosper county are fully vaccinated. While over half of Kearney county residents in their 50s are vaccinated, that proportion in Franklin is only 43%.”

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 15 - Sep 21**) and past 4 weeks (**Aug 24 - Sep 21**).
- 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 15 - Sep 21 (1 week) | | | Aug 24 - Sep 21 (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 | 21.0 | 9.8% | 16.3% | 27.5 | 11.2% | 18.1% |
| Dawson | 14.7 | 13.2% | 26.8% | 12.3 | 11.3% | 19.6% |
| Franklin | 1.0 | 9.9% | 30.4% | 0.7 | 6.4% | 23.5% |
| Gosper | 0.7 | 4.7% | 20.0% | 1.0 | 6.2% | 29.2% |
| Harlan | 0.0 | 0.0% | 0.0% | 0.5 | 3.1% | 27.9% |
| Kearney | 2.4 | 6.4% | 25.9% | 2.1 | 9.1% | 22.5% |
| Phelps | 5.3 | 7.2% | 37.6% | 3.7 | 9.9% | 24.4% |
| Missing/ did not disclose | 0.0 | 0.0% | 0.0% | 0.2 | 17.2% | 17.2% |
| Age (in yrs) | | | | | | |
| 0-17 | 8.0 | 15.2% | 17.3% | 10.4 | 16.2% | 17.8% |
| 18-29 | 9.7 | 10.3% | 19.9% | 10.7 | 11.4% | 18.9% |
| 30-39 | 6.9 | 11.1% | 22.0% | 7.6 | 13.0% | 22.5% |
| 40-49 | 5.1 | 10.0% | 24.6% | 6.0 | 12.0% | 23.5% |
| 50-59 | 5.3 | 9.4% | 21.4% | 5.2 | 10.6% | 21.2% |
| 60-69 | 4.9 | 10.3% | 28.1% | 4.1 | 9.8% | 20.6% |
| 70-79 | 3.4 | 10.5% | 24.2% | 2.5 | 8.2% | 17.5% |
| 80+ yrs | 1.9 | 2.1% | 13.7% | 1.6 | 2.2% | 7.8% |
| TRPHD | 45.1 | 9.3% | 20.9% | 48.1 | 10.4% | 19.3% |

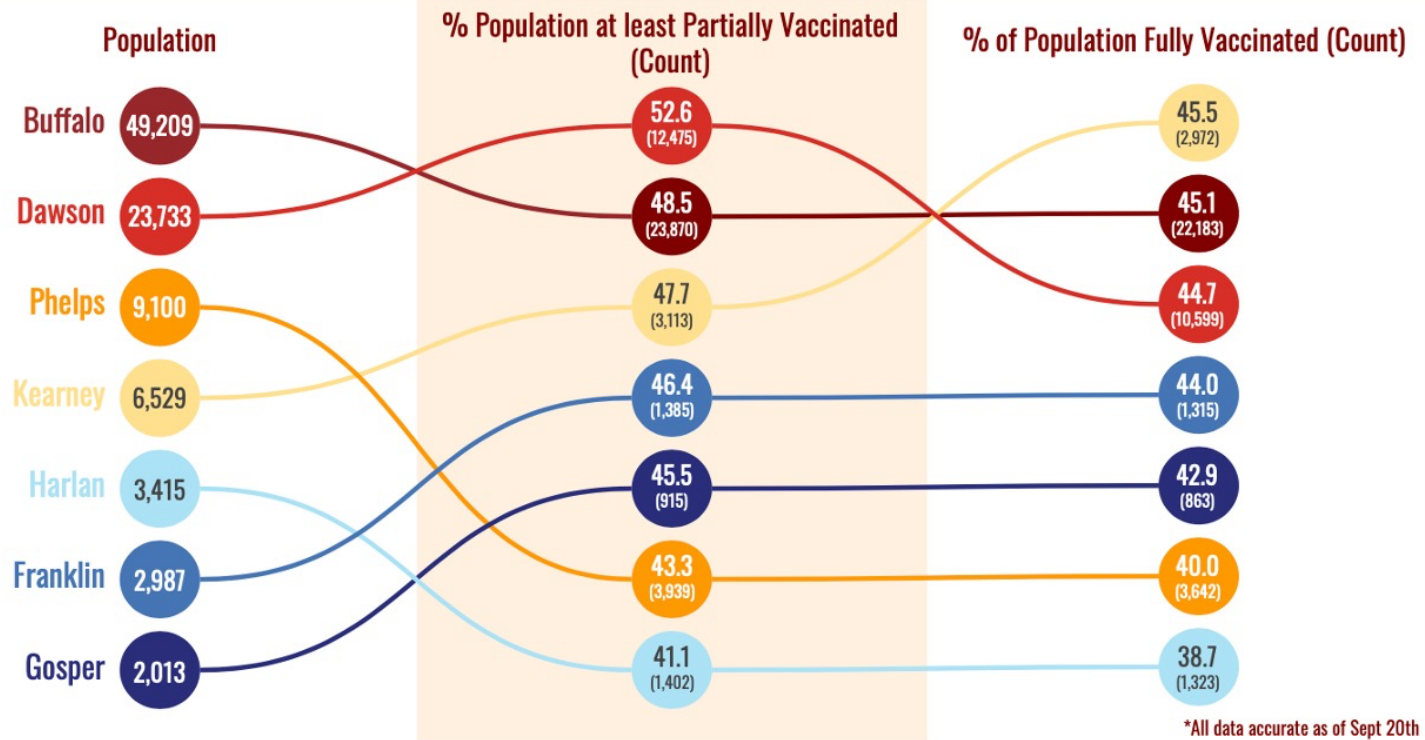
- How to read this table: (For eg.) : “Over the past month, 48 TRPHD residents tested positive for COVID-19 every day. In the past month, 10% of all tests conducted on Phelps county residents was positive. Excluding long term care testing, almost a quarter of all tests in Phelps county in the past month 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 – September 20, 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, 44.2% of TRPHD’s total population and 55.4% of all adult residents (18 years and over) are fully vaccinated.**

Vaccinations of Total Population in TRPHD

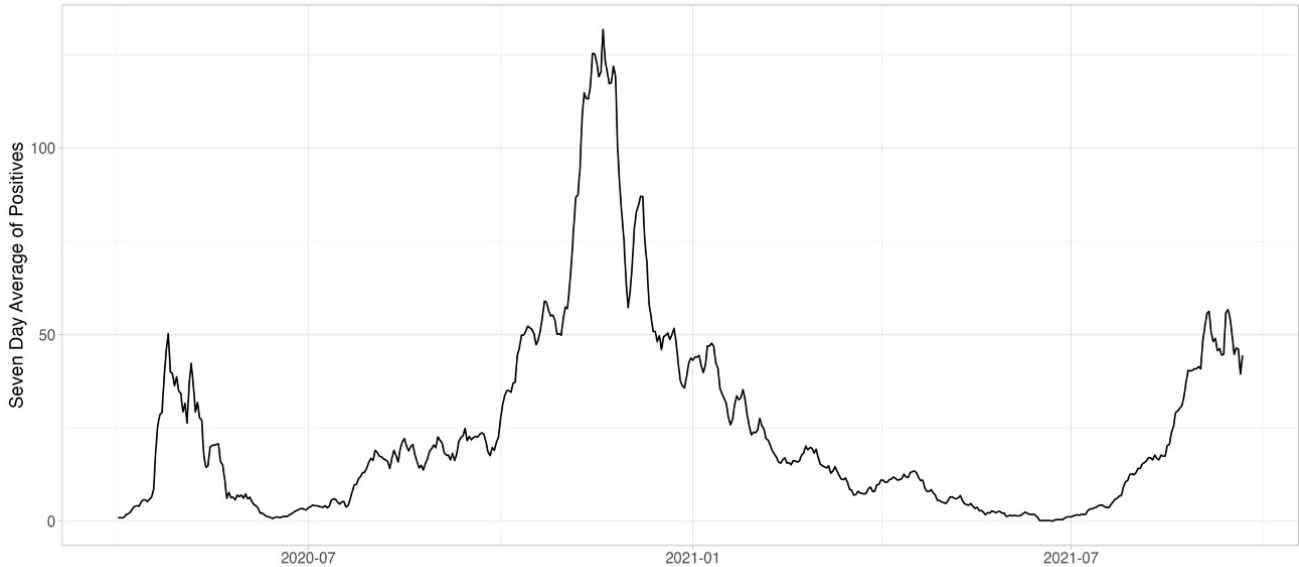




- The graph below describes 7-day rolling average of COVID-19 across TRPHD from **April 1, 2020 - Sep 21, 2021**.
- The second graph describes 7-day rolling average of COVID-19 cases by age across TRPHD for the same time period. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

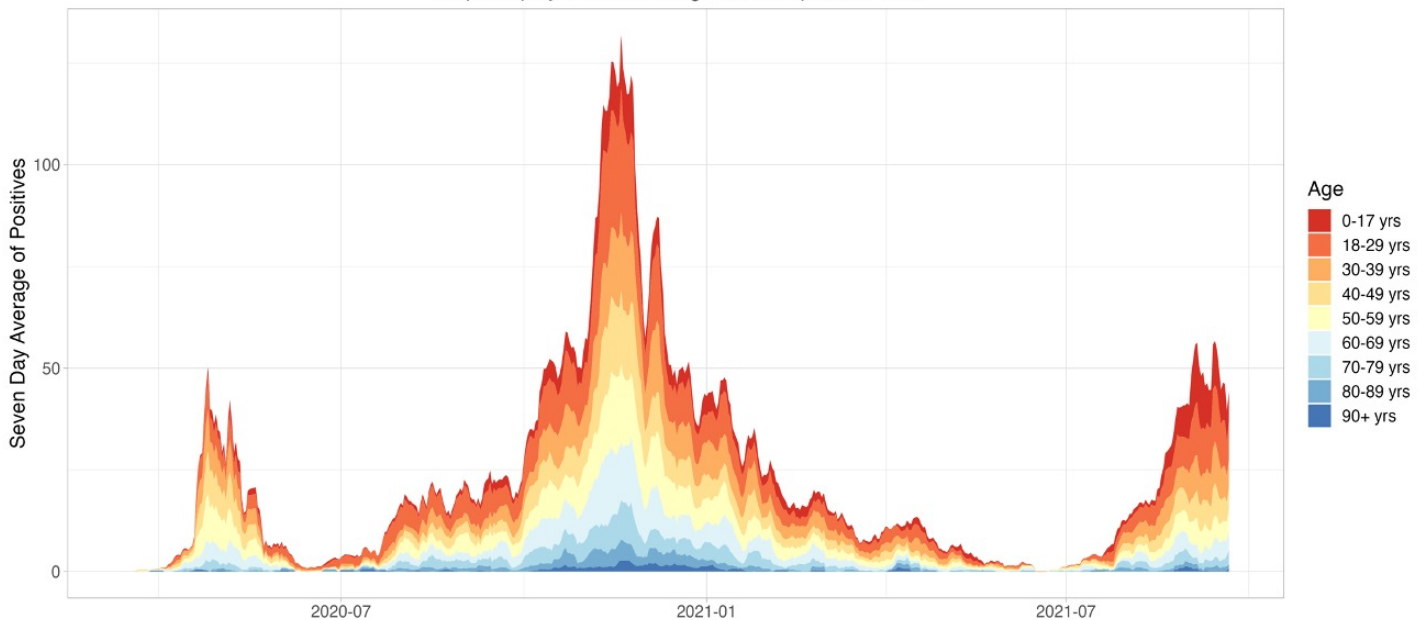
7 Day Rolling Average of Two Rivers

Graph displays data from April 1st to September 21st

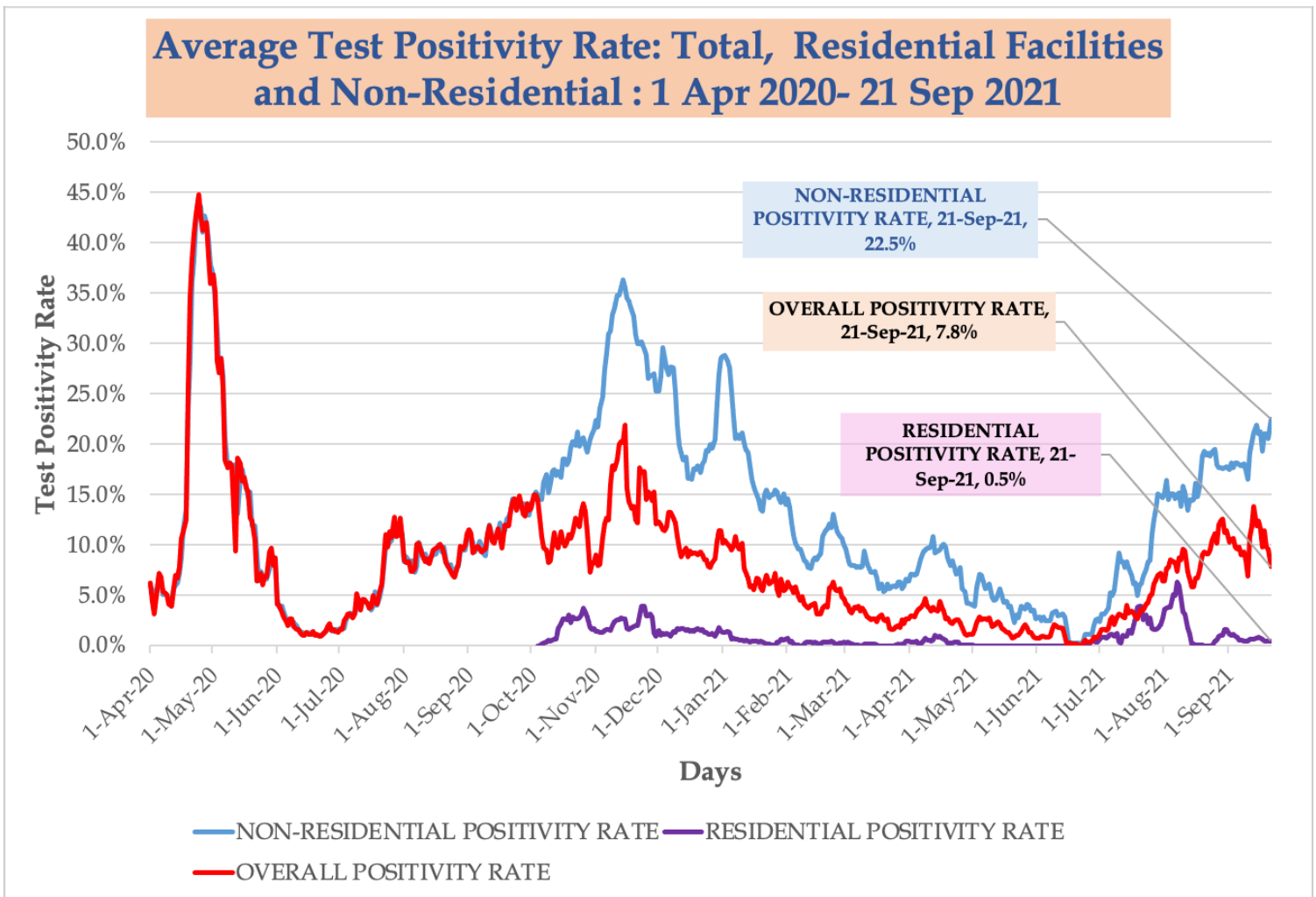


Daily Average of COVID-19 Cases in TRPHD by Age

Graph displays data from Aug 24th to September 21st



- The graphs below describe the average **test positivity rate (7-day rolling average)**⁸ in TRPHD from **April 1, 2020 – Sep 21, 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 18 months⁹
- Graph may be read thus (for eg): “In the week Sep 15- Sep 21, **8% of all COVID tests** conducted in TRPHD were positive; excluding long term care and other residential facilities, **over 22% of COVID tests** were positive.”



⁸ For description of average positivity rate, see appendix 1

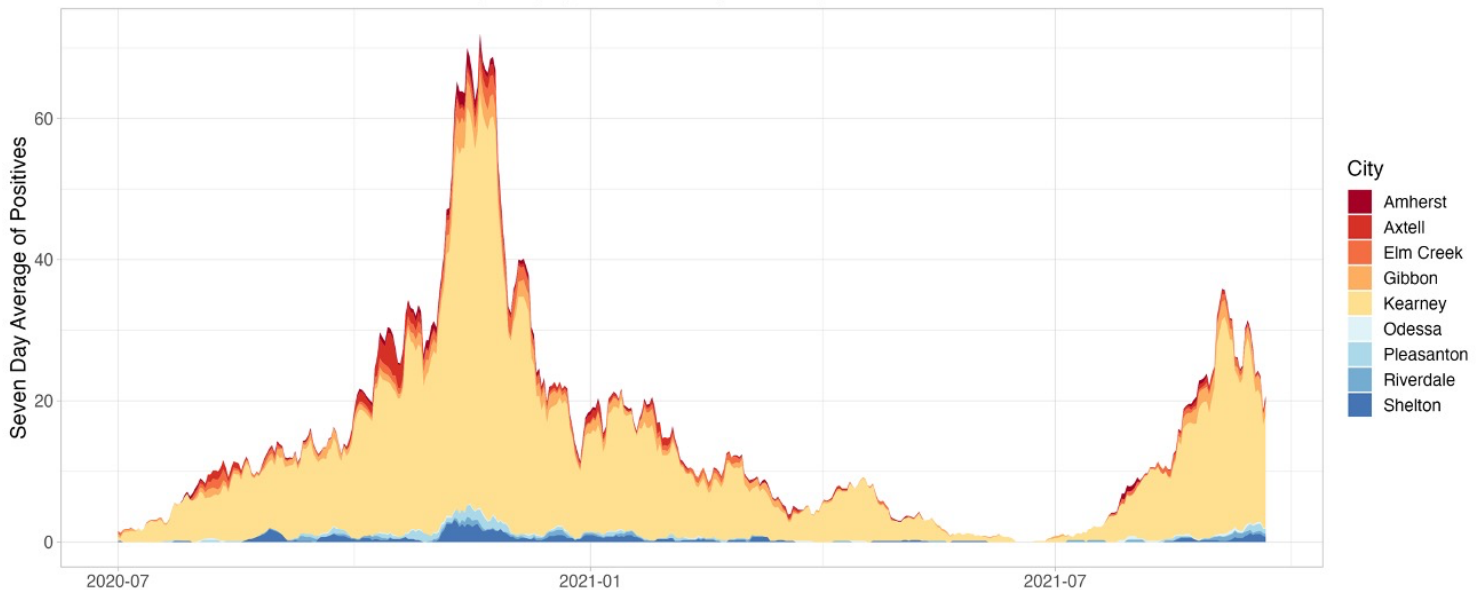
⁹ For information on residential facilities, please see appendix 3



- 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 - Sep 21, 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 September 21st



Information Updated as of 9/21 at 8 p.m.

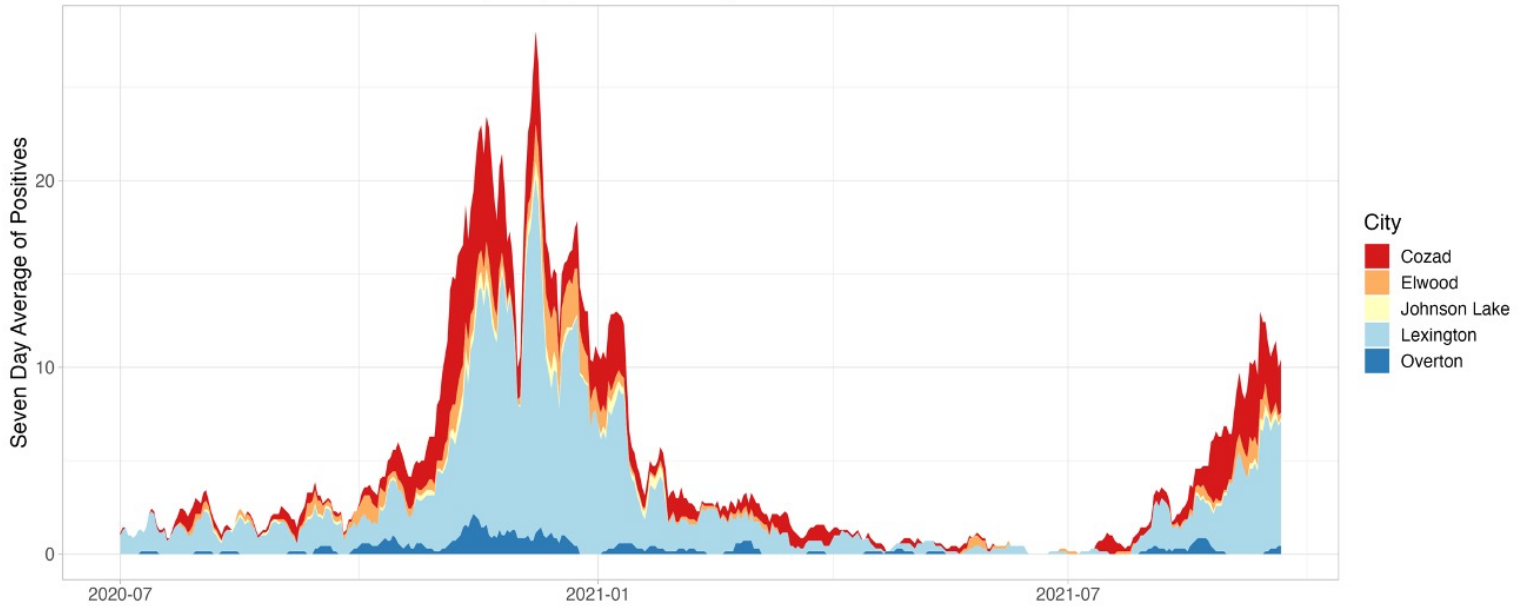
¹⁰ For details about each of the urban areas, please see appendix 5
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- The daily average (7-day rolling) of positive cases in Lexington and Holdrege cities and surrounding towns between July 1, 2020 – Sep 21, 2021 are presented below.

7 Day Rolling Average of COVID-19 Cases by City

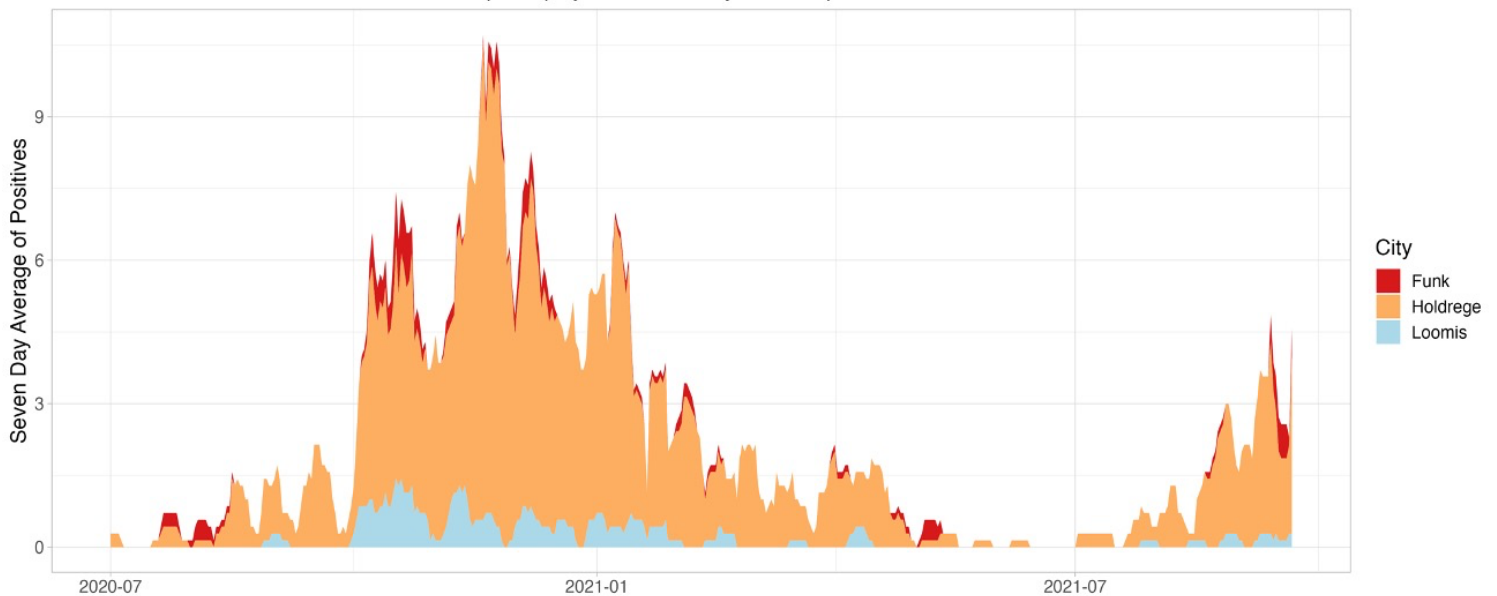
Graph displays data from July 1st to September 21st



Information Updated as of 9/21 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases by City

Graph displays data from July 1st to September 21st



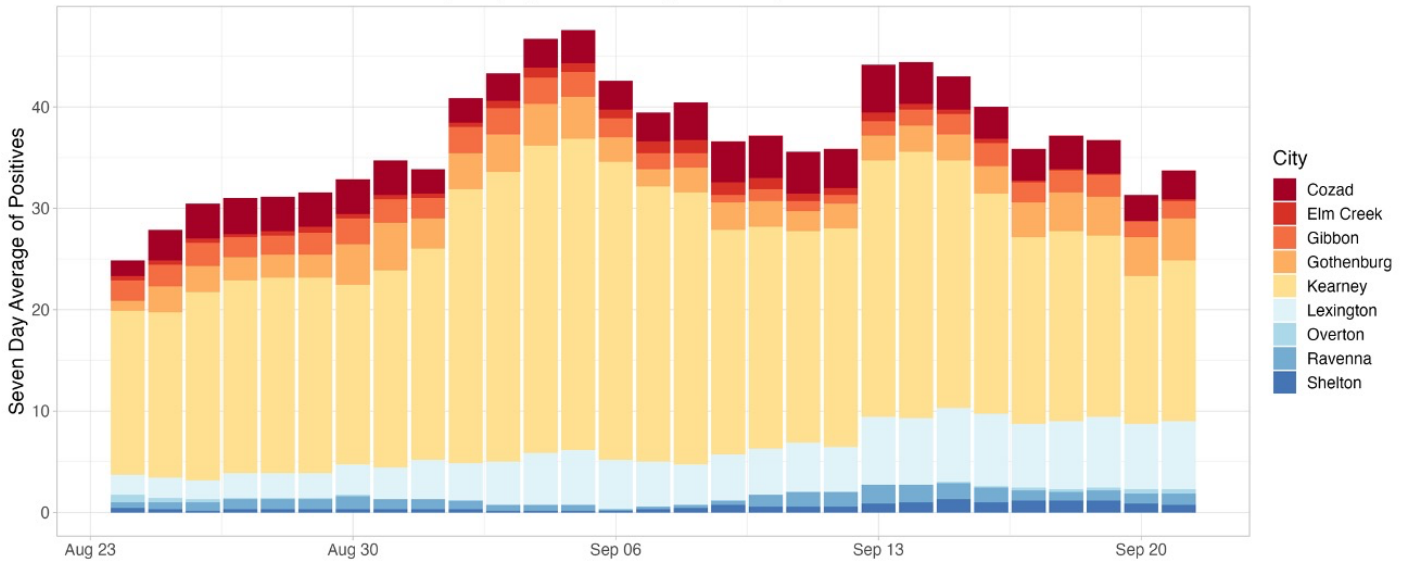
Information Updated as of 9/21 at 8 p.m.



- The following bar graphs describes the 7-day rolling averages by city for the past four weeks (**Aug 24 – Sep 21**) 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

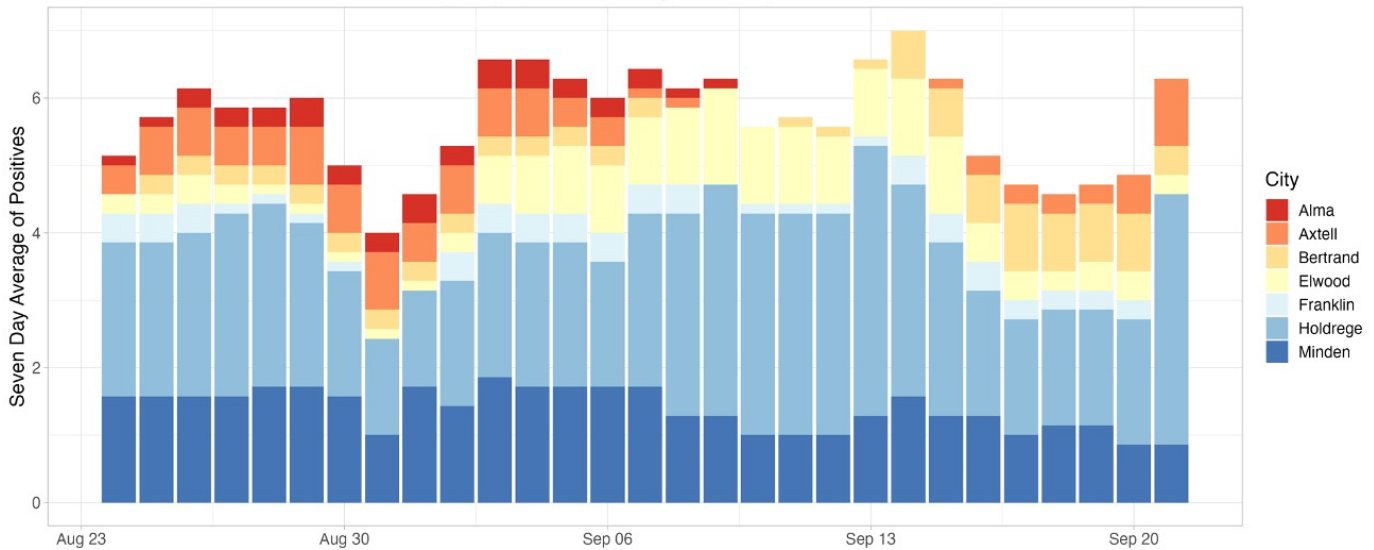
Graph displays data from Aug 24th to September 21st



Information Updated as of 9/21 at 8 p.m.

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

Graph displays data from Aug 24th to September 21st



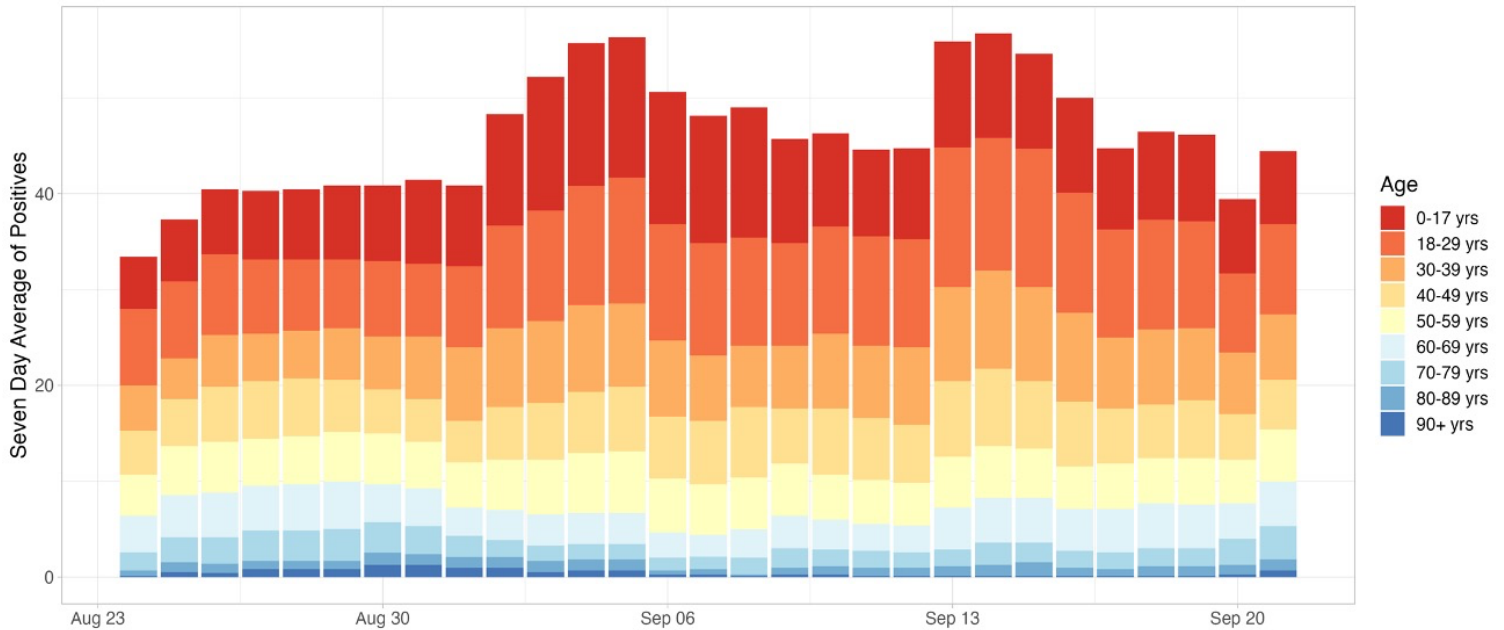
Information Updated as of 9/21 at 8 p.m.



- The graph below describes the **7-day rolling average** of cases from **Aug 24 – Sep 21** 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 Aug 24th to September 21st



Information Updated as of 9/21 at 8 p.m.



Weekly summary

- 316 cases of COVID-19 were recorded in TRPHD between September 15 & 21; over 20% of tests conducted outside long term care facilities returned positive. In the past month, long term care testing (staff & residents) has returned over 45 positive results.
- Weekly COVID case counts in Lexington and Holdrege cities are over 4 times that recorded a month previously. Almost a quarter of COVID cases recorded in Kearney city in 2021 were recorded in September.
- Over a quarter of cases recorded after July 1, 2021 were among persons aged less than 30 years of age.
- COVID-related hospitalizations account for over 20% of Medical/ Surgical bed occupancy; only a quarter of staffed beds are currently available in TRPHD. ICU availability has fallen further, only 6 out of 28 that are staffed are currently available (see <https://www.trphd.org/> for details).
- Hospitals in Kearney city and Phelps report near-capacity occupancy, bed availability has dropped across the entire district. 5 COVID patients are currently on ventilator support across TRPHD.
- Testing, contact tracing & case investigations continue to be constrained by personnel and organizational shortages.
- As of Sep 21, 2021, 44% 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. In light of rising incidence rates connected to the newer delta variant, 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, 316 new COVID cases were detected in the Two Rivers area last week. Only 6 ICU beds are currently available in the Two Rivers area, ICU bed availability has dropped by a third due to staffing shortages. COVID cases account for over 20% of all hospital beds, only 55 beds are currently available across the 7-county region. 44% of the total population of TRPHD district and 55% 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.



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:

[(Total positive test results for residents in the region)] / (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:

[(7-day rolling average of cases among residents)] / (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>)