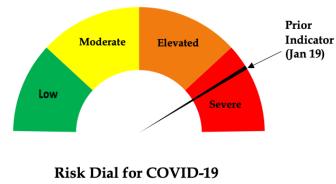


<u>Risk Dial Jan 26, 2022</u>



Two Rivers Public Health Published Jan 26, 2022

- 1172 cases of COVID-19 were recorded in TRPHD between January 19 January 25. Kearney and Lexington maintained their number of new cases for the third week running (about 500-550 for Kearney and about 100-110 for Lexington), but Holdrege saw a doubling of new cases in the past week compared to the previous three week average.
- The current COVID surge is similar in rapidity to the outbreak in April-May 2020 (mostly Dawson county); test positivity rates (excluding long term facilities) are the highest since the beginning of the pandemic
- As of Jan 25<sup>th</sup>, a little over half of the total population of TRPHD has received the minimum prescribed dose of the COVID-19 vaccine. 42% of vaccinated persons had also received booster shots, including 75% of residents aged 70+ years. The risk of hospitalization or serious illness following infection is significantly higher for unvaccinated persons.
- As of Wednesday morning, there were 2 available ICU beds in TRPHD. Med/Surg bed availability is over 33% across the district currently.
- COVID testing is now available at the Buffalo County Fairgrounds (Kearney city). Testing results the same day and are offered Mondays & Wednesdays 9:30AM -12:30PM. Those interested are required to register at <u>www.trphd.org</u> for scheduling.
- 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 <a href="http://www.trphd.org">www.trphd.org</a>
- For these reasons, the risk dial is unchanged from last week in the 'severe' (red) zone. The dial reflects the continued rapid increase in new cases and test positivity rate in TRPHD combined with lowered ICU bed availability.



## Weekly report Jan 19 - Jan 25, 2022

## **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 vaccination, total tests conducted and positive cases across TRPHD from Jan 19 Jan 25 (1 week) and Dec 29 Jan 25 (4 weeks). We describe new cases by age, gender and county of residence, and present weekly and monthly test positivity rates. We describe cases in residential facilities separately from tests in hospitals, & pharmacies<sup>1</sup>. Vaccination rates refer to persons who have received the minimum recommended dose.
- The first graphic describes **the vaccination rate of TRPHD residents by county of residence and age** between **Dec 15, 2020 – Jan 25, 2022**. We present the proportion of persons who have received the minimum recommended dose (2 for Pfizer & Moderna; 1 for Janssen vaccines)
- The second set of graphs look at the progress of the pandemic from **April 1, 2020 Jan 25, 2022** across all counties.
  - We describe the **7-day rolling average** <sup>2</sup> of positive cases across TRPHD since April, describing overall progress and cases by **age categories**
- The third set of graphs describe the daily number of negative and positive test results conducted outside residential facilities in TRPHD from March 15, 2020 January 25, 2022. <sup>1</sup> The graph also shows the average **COVID test positivity rate** in TRPHD during this time <sup>3</sup>
- 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- Jan 25, 2022) <sup>4</sup>
  - 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 daily cases (7-day rolling average) from Dec 29 Jan 25, 2022.
  Progress is described by age & county of residence.

To conclude, 1172 new COVID cases were detected in the Two Rivers area last week. Kearney and Lexington maintain their high case numbers while Holdrege doubled the number of new cases in the past week. ICU bed availability is 2 across the district.. Half of TRPHD's population is fully vaccinated and about 21% has received a booster dose. TRPHD has scheduled vaccination clinics across the district, schedule can be found at <u>https://www.trphd.org/covid-19/eventcalendar.html</u>. TRPHD is operating a public COVID testing site at the Buffalo County Fairgrounds 9:30 AM – 12:30 PM, Mondays and Wednesdays. Those eligible for vaccines or booster doses are advised to contact their physician or their local pharmacy. To access services through Two Rivers health department, residents are required to visit <u>www.trphd.org</u> to register an appointment (for COVID testing or vaccination).

<sup>&</sup>lt;sup>1</sup> For information on residential facilities, please see appendix 3

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> For information on "average positivity rate", please see appendix 2

<sup>&</sup>lt;sup>4</sup> For information on urban areas, please see appendix 5

<sup>516</sup> W 11<sup>th</sup> Street, Suite 108



#### **Testing & Vaccination Overview**

- As of Jan 25, 2022, over 61% of the total population of Two Rivers Health District has been tested at least once for COVID-19. More than 216,000 COVID tests have been conducted since March 1, 2020 and over 18,000 persons have tested positive at least once at least 1300 have tested COVID positive more than once.<sup>5</sup> TRPHD has publicly notified 180 deaths due to COVID-19 across the district.
- As of Jan 25, 2022, 50% of TRPHD's entire population has been fully vaccinated. <sup>6</sup> 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 5 years and over.

|           | BUFFALO | DAWSON | FRANKLIN | GOSPER | HARLAN | KEARNEY | PHELPS | TRPHD |
|-----------|---------|--------|----------|--------|--------|---------|--------|-------|
| 0-17 YRS  | 17%     | 18%    | 10%      | 12%    | 9%     | 18%     | 10%    | 16%   |
| 18-29 YRS | 37%     | 53%    | 30%      | 41%    | 31%    | 44%     | 33%    | 40%   |
| 30-39 YRS | 52%     | 59%    | 44%      | 36%    | 44%    | 44%     | 47%    | 52%   |
| 40-49 YRS | 64%     | 61%    | 47%      | 53%    | 33%    | 68%     | 44%    | 60%   |
| 50-59 YRS | 68%     | 63%    | 47%      | 49%    | 48%    | 55%     | 56%    | 62%   |
| 60-69 YRS | 82%     | 81%    | 65%      | 71%    | 63%    | 76%     | 68%    | 78%   |
| 70-79 YRS | 100%    | 89%    | 90%      | 61%    | 84%    | 84%     | 96%    | 93%   |
| 80+ YRS   | 95%     | 77%    | 76%      | 75%    | 58%    | 70%     | 79%    | 83%   |
| ALL AGES  | 51%     | 53%    | 47%      | 48%    | 41%    | 50%     | 46%    | 50%   |

| 0% - 33%     | Less than 1/3rd received 1 or 2 dose as recommended |
|--------------|---|
| 34% - 49%    | 1/3rd to 1/2 received 1 or 2 dose as recommended    |
| 50%- 74%     | 1/2 to 3/4ths received 1 or 2 dose as recommended   |
| 75% & higher | Over 3/4ths received 1 or 2 dose as recommended     |

• How to read this table: (For eg.) : "53% of all Dawson county residents aged 18-29 years have received the minimum recommended vaccine dose (2 for Moderna & Pfizer; 1 for Janssen) However only 33% of all adults under 30 in Phelps county have received minimum recommended dose."

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

<sup>&</sup>lt;sup>5</sup> Note: Data collection limitations (recording of different first names, alternate spellings, unrecorded or delayed antigen test results) hamper an exact count of measures like total persons tested, or number of distinct positive cases.



- The table below provides details of positive cases detected in 7 counties in TRPHD in the past week (Jan 19 Jan 25) and past 4 weeks (Dec 29 Jan 25).
- Results are described by the site where tests were conducted, and include both antigen and PCR tests.

|                  | Jan 19 – Jan 25 (1 week) |          |            | Dec 29 – Jan 25 (4 weeks) |          |            |
|------------------|--------------------------|----------|------------|---------------------------|----------|------------|
|                  | Total                    | Positive | Positivity | Total                     | Positive | Positivity |
|                  | Tests                    | Results  | Rate       | Tests                     | Results  | Rate       |
| Hospital/ Clinic | 1448                     | 635      | 43.9%      | 5059                      | 1,895    | 37.5%      |
| State            | 313                      | 104      | 33.2%      | 954                       | 275      | 28.8%      |
| Laboratory       |                          |          |            |                           |          |            |
| Residential      | 2248                     | 95       | 4.2%       | 6797                      | 206      | 3.0%       |
| Facility         |                          |          |            |                           |          |            |
| Lab/ Pharmacy    | 254                      | 133      | 52.4%      | 757                       | 317      | 41.9%      |
| Other            | 435                      | 205      | 47.1%      | 1852                      | 638      | 34.4%      |
| TOTAL            | 4,698                    | 1,172    | 24.9%      | 15,419                    | 3,331    | 21.6%      |

• A total of 6797 tests were availed by residents and staff of long-term care and other **residential facilities** <sup>7</sup> in the last 4 weeks, and were almost all antigen tests. Details are provided below:

|               | Jan 19 – Jan 25 (1 week) |          |              | Dec 29 – Jan 25 (4 weeks) |          |            |
|---------------|--------------------------|----------|--------------|---------------------------|----------|------------|
|               | Total                    | Positive | Positivity   | <b>Total Tests</b>        | Positive | Positivity |
| Residential   | Tests                    | Results  | Rate         |                           | Results  | Rate       |
| Facility In:  |                          |          |              |                           |          |            |
| Buffalo       | 545                      | 22       | 4.0%         | 1824                      | 61       | 3.3%       |
| Dawson        | 650                      | 47       | 7.2%         | 1386                      | 82       | 5.9%       |
| Franklin      | 0                        | 0        | 0.0%         | 0                         | 0        | 0.0%       |
| Gosper        | 136                      | 3        | 2.2%         | 297                       | 6        | 2.0%       |
| Harlan        | 220                      | 2        | 0.9%         | 408                       | 7        | 1.7%       |
| Kearney       | 225                      | 9        | 4.0%         | 794                       | 21       | 2.6%       |
| Phelps        | 391                      | 12       | 3.1%         | 1772                      | 25       | 1.4%       |
| Outside TRPHD | 81                       | 0        | 0.0%         | 316                       | 4        | 1.3%       |
| TOTAL         | 2248                     | 95       | <b>4.2</b> % | 6,797                     | 206      | 3.0%       |

• How to read this table: (For eg.) : "In the past week, 42% of tests conducted in hospitals and clinics across TRPHD were positive. In the past week, 73 positive COVID results were reported among staff and residents of residential facilities (mostly long-term living) across TRPHD"

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



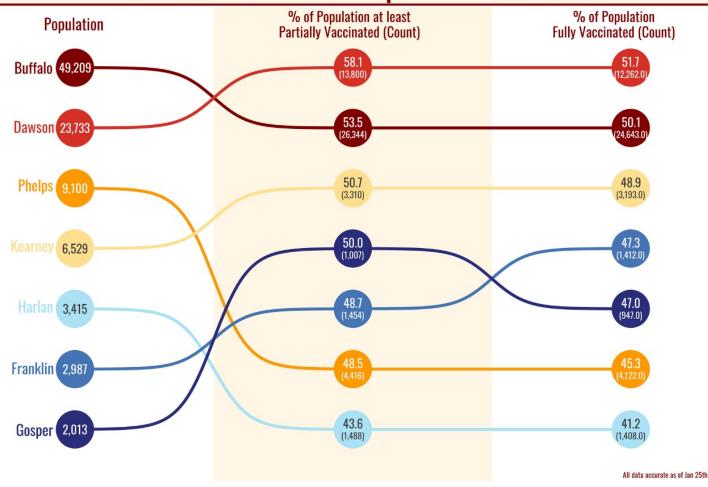
• Non-routine testing refers to tests that are <u>not</u> conducted in residential and long-term living facilities. <sup>8</sup> These COVID tests are conducted mainly in hospitals, clinics and pharmacies. Details are provided below.

|              | Jan 19 – Jan 25 (1 week) |          |         | Dec 29 – Jan 25 (4 weeks) |          |             |
|--------------|--------------------------|----------|---------|---------------------------|----------|-------------|
|              | Total tests              | Positive | P. rate | Total tests               | Positive | P. rate (%) |
|              | conducted                | cases    | (%)     | conducted                 | cases    |             |
| County       |                          |          |         |                           |          |             |
| Buffalo      | 1591                     | 673      | 42.3%   | 5,620                     | 1912     | 34.0%       |
| Dawson       | 472                      | 182      | 38.6%   | 1,770                     | 660      | 37.3%       |
| Franklin     | 22                       | 6        | 27.3%   | 88                        | 25       | 28.4%       |
| Gosper       | 39                       | 16       | 41.0%   | 105                       | 46       | 43.8%       |
| Harlan       | 10                       | 6        | 60.0%   | 49                        | 15       | 30.6%       |
| Kearney      | 120                      | 67       | 55.8%   | 371                       | 169      | 45.6%       |
| Phelps       | 180                      | 121      | 67.2%   | 566                       | 282      | 49.8%       |
| Data         | 16                       | 6        | 37.5%   | 52                        | 16       | 30.2%       |
| missing/ not |                          |          |         |                           |          |             |
| disclosed    |                          |          |         |                           |          |             |
| Total        | 2,450                    | 1,077    | 44.0%   | 8,621                     | 3,125    | 36.2%       |
| Age (in yrs) |                          |          |         |                           |          |             |
| 0-17         | 442                      | 192      | 43.4%   | 1,378                     | 441      | 32.0%       |
| 18-29        | 495                      | 232      | 46.9%   | 1,924                     | 780      | 40.5%       |
| 30-39        | 430                      | 212      | 49.3%   | 1,343                     | 567      | 42.2%       |
| 40-49        | 296                      | 132      | 44.6%   | 1,006                     | 422      | 41.9%       |
| 50-59        | 289                      | 136      | 47.1%   | 1,015                     | 375      | 36.9%       |
| 60-69        | 225                      | 105      | 46.7%   | 858                       | 319      | 37.2%       |
| 70-79        | 135                      | 48       | 35.6%   | 542                       | 149      | 27.5%       |
| 80-89        | 138                      | 20       | 14.5%   | 555                       | 72       | 13.0%       |
| Total        | 2450                     | 1077     | 44.0%   | 8,621                     | 3125     | 36.2%       |
| Gender       |                          |          |         |                           |          |             |
| Female       | 1446                     | 594      | 41.1%   | 5,101                     | 1733     | 34.0%       |
| Male         | 996                      | 481      | 48.3%   | 3,476                     | 1384     | 39.8%       |
| Data         | 8                        | 2        | 25.0%   | 44                        | 8        | 18.2%       |
| missing/ not |                          |          |         |                           |          |             |
| disclosed    |                          |          |         |                           |          |             |
| Total        | 2450                     | 1077     | 44.0%   | 8,621                     | 3,125    | 36.2%       |



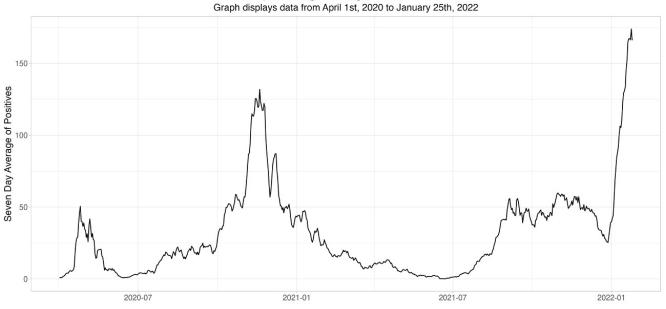
- The graph below describes **all TRPHD residents who are fully vaccinated** against COVID-19 between **December 15, 2020 – January 25, 2022**. All residents of the seven counties are included although the vaccine is currently available only to those 5 years or over.
- Each county is depicted by a colored circle, and the relative position of each corresponds to the proportion vaccinated. Actual numbers (count) are included in parenthesis.
- Overall, 50% of TRPHD's total population and 61.4% of all adult residents (18 years and over) have received the minimum prescribed dose of vaccine (2 for Pfizer, Moderna, 1 for Janssen).

# Vaccinations of Total Population in TRPHD



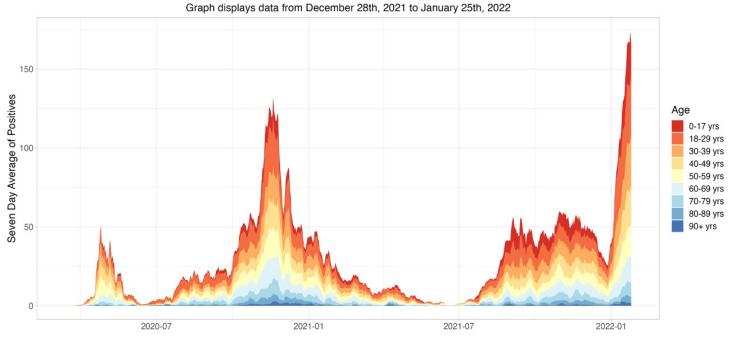


- The graph below describes 7-day rolling average of COVID-19 across TRPHD from April 1, • 2020 - Jan 25, 2022.
- The second graph describes 7-day rolling average of COVID-19 cases by age across TRPHD • for the same time period. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.



#### 7 Day Rolling Average of Two Rivers

Daily Average of COVID-19 Cases in TRPHD by Age

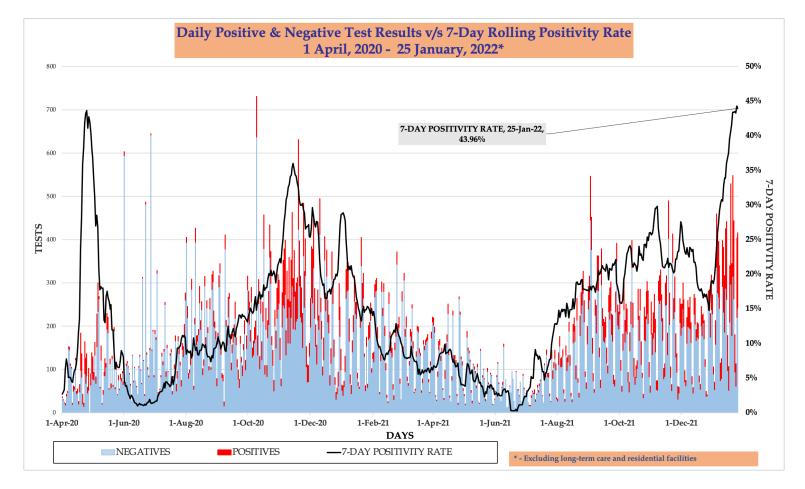


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- The graphs below describe the daily COVID tests in TRPHD from April 1, 2020 January 25, 2022 further divided as positive or negative. It also describes the average test positivity rate (7-day rolling average)<sup>9</sup> The graph depicts the entire county, ie Buffalo, Dawson, Phelps, Franklin, Gosper, Harlan and Kearney counties.
- The height of the bar graph represents the total tests conducted on that day. The running line graph tracks 7-day positivity rate among all tests <u>except</u> those conducted **in** residential facilities in the last 17 months <sup>10</sup>.
- In the week Jan 19 Jan 25, 44% of COVID tests outside residential facilities was positive.



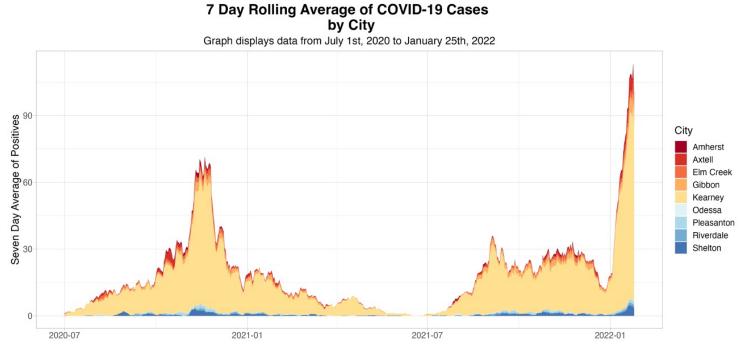
<sup>9</sup> For description of average positivity rate, see appendix 1

<sup>10</sup> For information on residential facilities, please see appendix 3

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- 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). <sup>11</sup>
- Time considered is from July 1, 2020 Jan 25, 2022. Scales are different for all three graphs
- The graph for Kearney city and surrounding areas is presented below.

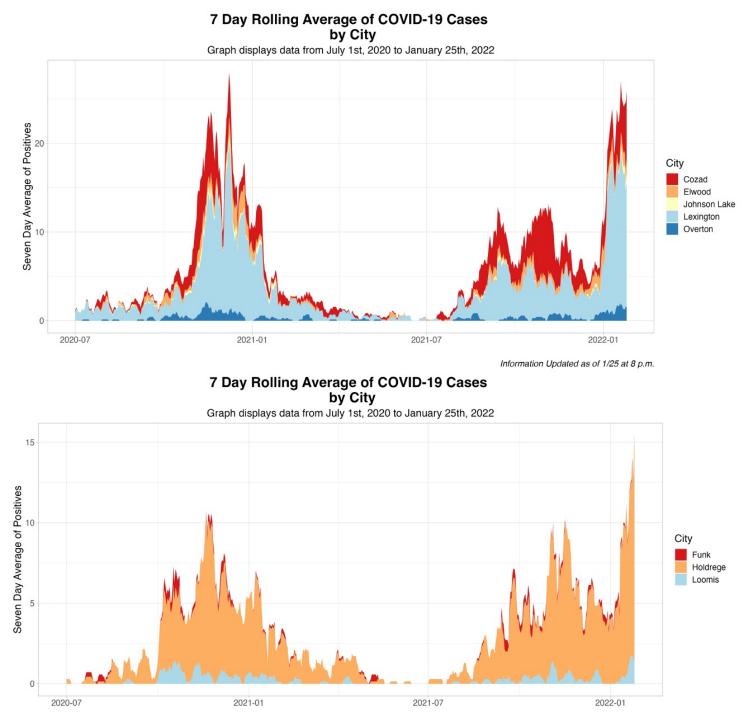


Information Updated as of 1/25 at 8 p.m.

 <sup>&</sup>lt;sup>11</sup> 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 – Jan 25, 2022 are presented below.

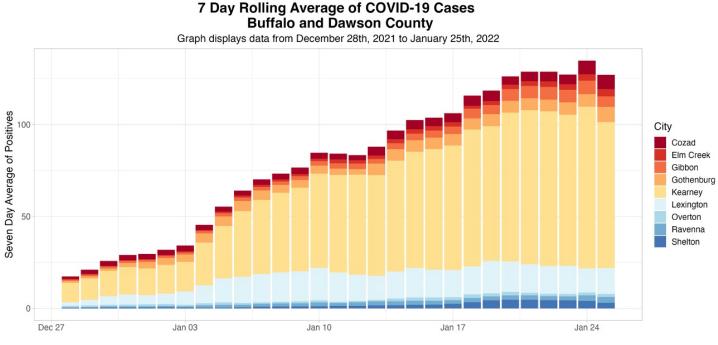


Information Updated as of 1/25 at 8 p.m.

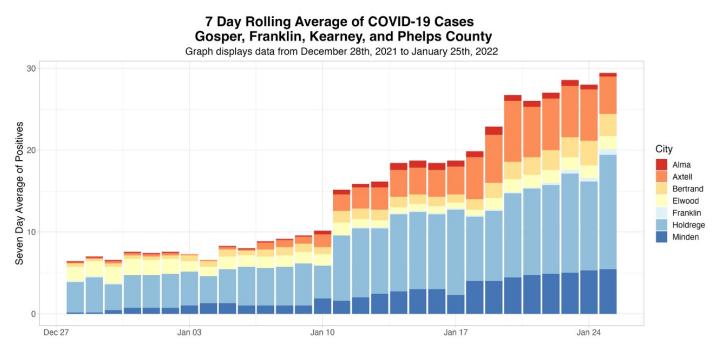
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The following bar graphs describes the 7-day rolling averages by <u>city</u> for the past four weeks (Dec 28 – Jan 25) in TRPHD. The graph above shows cities in Buffalo and Dawson counties and the one below shows the graph for cities in Gosper, Harlan, Kearney and Phelps counties. <u>The scale is different for both graphs</u>.



Information Updated as of 1/25 at 8 p.m.

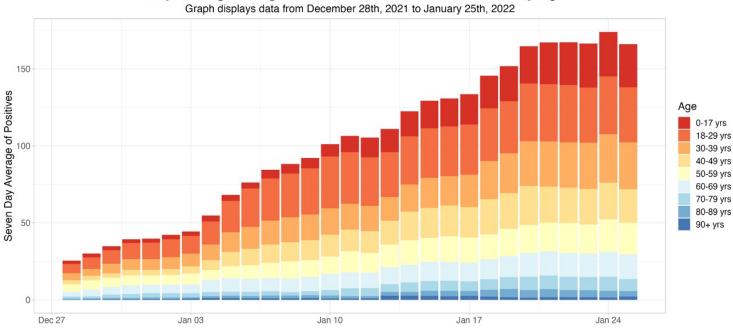


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• The graph below describes the **7-day rolling average** of cases from **Dec 28 – Jan 25** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.



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

Information Updated as of 1/25 at 8 p.m.



#### Weekly summary

- 1172 cases of COVID-19 were recorded in TRPHD between January 19 January 25. Kearney and Lexington maintained their number of new cases for the third week running (about 500-550 for Kearney and about 100-110 for Lexington), but Holdrege saw a doubling of new cases in the past week compared to the previous three week average.
- The current COVID surge is similar in rapidity to the outbreak in April-May 2020 (mostly Dawson county); test positivity rates (excluding long term facilities) are the highest since the beginning of the pandemic
- As of Jan 25<sup>th</sup>, a little over half of the total population of TRPHD has received the minimum prescribed dose of the COVID-19 vaccine. 42% of vaccinated persons had also received booster shots, including 75% of residents aged 70+ years. The risk of hospitalization or serious illness following infection is significantly higher for unvaccinated persons.
- As of Wednesday morning, there were 2 available ICU beds in TRPHD. Med/Surg bed availability is over 33% across the district currently.
- COVID testing is now available at the Buffalo County Fairgrounds (Kearney city). Testing results the same day and are offered Mondays & Wednesdays 9:30AM -12:30PM. Those interested are required to register at www.trphd.org for scheduling.
- All persons aged 5 and over are eligible for the vaccine. 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 <a href="http://www.trphd.org">www.trphd.org</a>

To conclude, 1172 new COVID cases were detected in the Two Rivers area last week. Kearney and Lexington maintain their high case numbers while Holdrege doubled the number of new cases in the past week. ICU bed availability is 2 across the district.. Half of TRPHD's population is fully vaccinated and about 21% has received a booster dose. TRPHD has scheduled vaccination clinics across the district, schedule can be found at <u>https://www.trphd.org/covid-19/eventcalendar.html</u>. TRPHD is operating a public COVID testing site at the Buffalo County Fairgrounds 9:30 AM – 12:30 PM, Mondays and Wednesdays. Those eligible for vaccines or booster doses are advised to contact their physician or their local pharmacy. To access services through Two Rivers health department, residents are required to visit <u>www.trphd.org</u> to register an appointment (for COVID testing or vaccination).

Background

516 W 11<sup>th</sup> Street, Suite 108 Kearney, NE 68845 **APPENDIX 1** 



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-



19deathcertification,pleaseseehttps://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 i**s 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**

#### 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        | 49209      |
| Dawson         | 23733      |
| Franklin       | 2987       |
| Gosper         | 2013       |
| Harlan         | 3415       |
| Kearney        | 6529       |
| Phelps         | 9100       |
| TRPHD total    | 96986      |
| 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 (<u>https://covidtracking.com/data</u>)