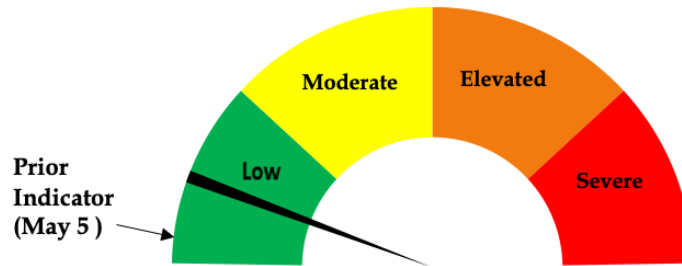




Risk Dial May 27, 2022



Risk Dial for COVID-19 Two Rivers Public Health Published May 27, 2022

- 155 cases of COVID-19 were recorded in TRPHD between April 28 - May 25 (4 weeks). Weekly COVID test positivity rate is just under 10% across the entire district.
- 70 cases were reported in the last week, the first time weekly cases have risen over 50 since February. This represents a fourfold increase compared to the previous 2 months.
- As of May 25, 52% of the total population of TRPHD has received the minimum prescribed dose of the COVID-19 vaccine. Booster doses of vaccines are recommended at 5 months after second dose (Pfizer/ Moderna) or 2 months after the first dose of Janssen COVID vaccine.
- As of Wednesday morning, 45% of ICU beds and 37% of Medical/surgical beds in TRPHD were available. 3 COVID patients are currently admitted inpatient in TRPHD.
- TRPHD offers COVID testing at the Two Rivers Public Health Department office at 516 W. 11th Street, Kearney. Testing is offered Mondays & Wednesdays 9:30AM - 10:30AM. Those interested are required to register at <https://login.registermytime.com/tw/2rphd> 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 www.trphd.org
- For these reasons, the risk dial is raised marginally compared to 2 weeks previously in the 'low risk' (green) zone. The dial reflects rising COVID incidence, low vaccination rates and persistent COVID-related morbidity across the district.



Weekly report May 19 - May 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 in past 1 week (**My 19 - May 25**) and past 4 weeks (**Apr 28 - May 25**). We describe new cases by age, gender and county of residence, and present bi-weekly and monthly **test positivity rates**. We describe cases in residential facilities separately from tests in hospitals, & pharmacies¹. 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 - May 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 - May 25, 2022** 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 daily case average (7-day rolling) across towns and cities in three urban areas (**Kearney, Lexington, Holdrege**) (Jul 1, 2020- May 25, 2022) ³
 - 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 fourth set of graphs describe daily cases (7-day rolling average) from **Apr 6 - May 25, 2022**.
 - Progress is described by age & county of residence.

To conclude, 70 new COVID cases were detected in the Two Rivers area in the last week. Weekly test Positivity Rates are just short of 10% across both long term facilities and routine testing. One COVID patient is currently admitted in-patient in TRPHD, none in ICU or on ventilator support. Over half of TRPHD's population is fully vaccinated. TRPHD has scheduled vaccination clinics across the district, schedule can be found at <https://www.trphd.org/covid-19/event-calendar.html>. TRPHD is operating a public COVID testing site at the TRPHD office in Kearney 9:30 AM - 10:30 AM, Mondays and Wednesdays. Those eligible for vaccines or booster doses are advised to contact TRPHD or their physician or local pharmacy. To access services through Two Rivers health department, residents are required to visit www.trphd.org

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 urban areas, please see appendix 5



Testing & Vaccination Overview

- As of May 25, 2022, around 65,800 unique persons in Two Rivers Health District have been tested at least once for COVID-19. More than 249,000 COVID tests have been conducted since March 1, 2020 and around 22,000 persons have tested positive at least once – at least 2050 have tested COVID positive more than once.⁴ TRPHD has publicly notified 206 deaths due to COVID-19 across the district.
- As of May 25, 2022, 52% of TRPHD’s entire population has received the minimum prescribed dose of vaccine.
- 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	22%	22%	17%	18%	15%	24%	17%	21%
18-29 YRS	40%	58%	32%	42%	31%	47%	37%	43%
30-39 YRS	54%	62%	46%	37%	46%	45%	49%	54%
40-49 YRS	66%	64%	50%	52%	34%	69%	47%	62%
50-59 YRS	69%	66%	47%	51%	48%	56%	57%	64%
60-69 YRS	83%	83%	66%	74%	65%	77%	68%	79%
70-79 YRS	100%	89%	91%	64%	87%	84%	97%	94%
80+ YRS	79%	66%	64%	69%	45%	58%	66%	69%
ALL AGES	53%	55%	49%	50%	43%	52%	48%	52%

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.) : “62% of all TRPHD residents aged 40-49 years have received the minimum recommended vaccine dose (2 for Moderna & Pfizer; 1 for Janssen) However only 34% of all residents in their 40s in Harlan county have received minimum recommended dose.”

⁴ 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 2 weeks (**May 19 – May 25**) and past 4 weeks (**Apr 28 – May 25**).
- Results are described by the site where tests were conducted, and include both antigen and PCR tests.

	May 19 – May 25 (1 week)			Apr 28 – May 25 (4 weeks)		
	Total Tests	Positive Results	Positivity Rate	Total Tests	Positive Results	Positivity Rate
Hospital/ Clinic	217	34	15.7%	776	73	9.4%
State Laboratory	19	5	26.3%	58	7	12.1%
Residential Facility	366	28	7.7%	2171	58	2.7%
Lab/ Pharmacy	15	1	6.7%	49	2	4.1%
Other	115	2	1.7%	278	15	5.4%
TOTAL	732	70	9.6%	3,332	155	4.7%

- A total of 2171 tests were availed by residents and staff of long-term care and other **residential facilities** ⁵ in the last 4 weeks, and were almost all antigen tests. Details are provided below:

Residential Facility In:	May 19 – May 25 (1 week)			Apr 28 – May 25 (4 weeks)		
	Total Tests	Positive Results	Positivity Rate	Total Tests	Positive Results	Positivity Rate
Buffalo	3	3	100.0%	815	11	1.3%
Dawson	44	0	0.0%	591	19	3.2%
Franklin	0	0	0.0%	0	0	0.0%
Gosper	1	1	0.0%	26	1	3.8%
Harlan	31	0	9.7%	169	0	0.0%
Kearney	247	24	0.0%	285	26	9.1%
Phelps	29	0	0.0%	197	1	0.5%
Outside TRPHD	11	0	0.0%	88	0	0.0%
TOTAL	366	28	7.7%	2,171	58	2.7%

- How to read this table: (For eg.) : “In the past week, 15.7% of tests conducted in hospitals and clinics across TRPHD were positive. In the past month, 9.4% of all tests in hospitals and clinics returned positive.”

⁵ For information on residential facilities, please see appendix 3
 516 W 11th Street, Suite 108
 Kearney, NE 68845



- Non-routine testing refers to tests that are **not** conducted in residential and long-term living facilities. ⁶ These COVID tests are conducted mainly in hospitals, clinics and pharmacies. Details are provided below.

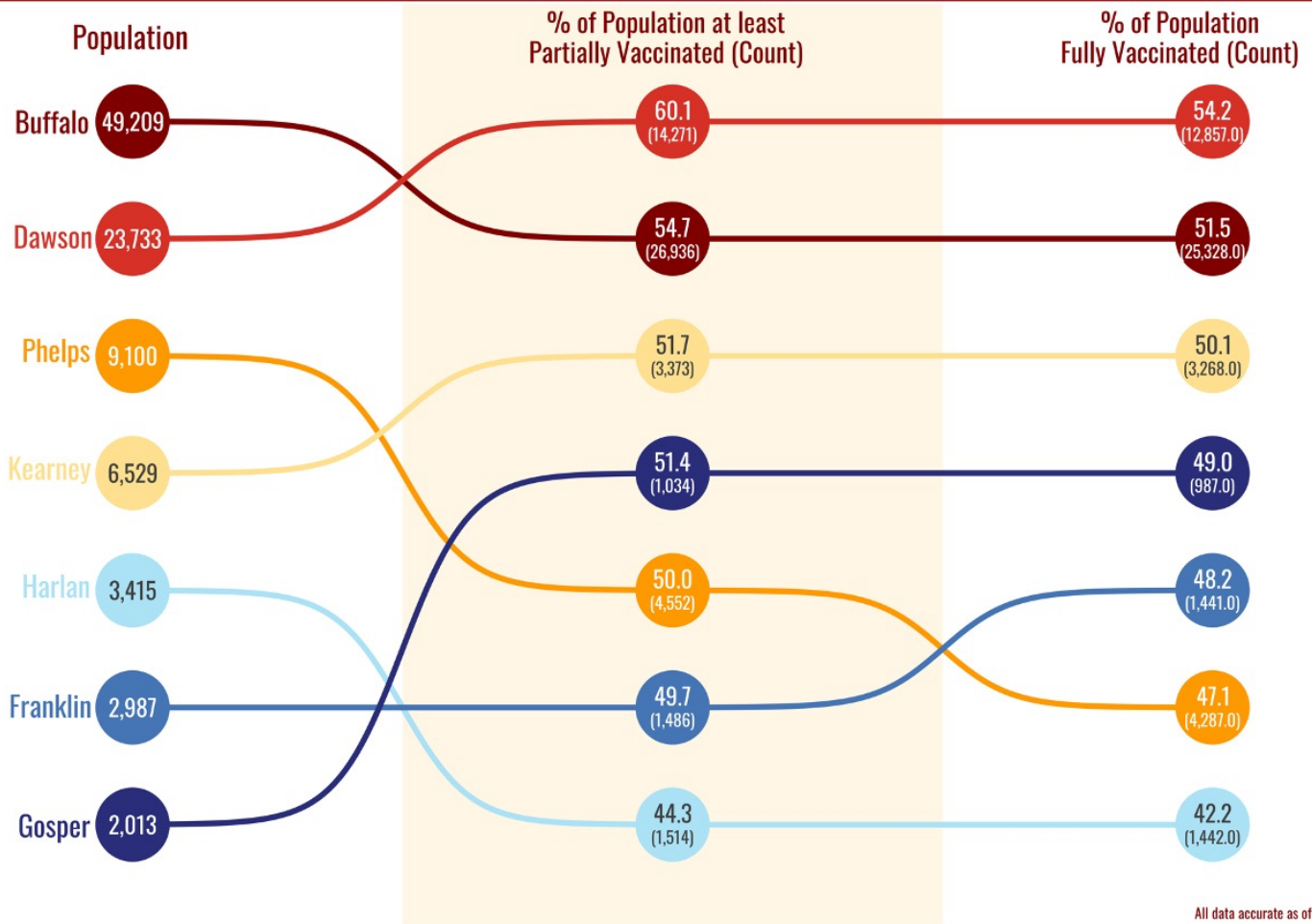
	May 19 – May 25 (1 week)			Apr 28 – May 25 (4 weeks)		
	Total tests conducted	Positive cases	P. rate (%)	Total tests conducted	Positive cases	P. rate (%)
County						
Buffalo	245	34	13.9%	778	72	9.3%
Dawson	43	5	11.6%	203	13	6.4%
Franklin	4	0	0.0%	26	1	3.8%
Gosper	5	0	0.0%	13	0	0.0%
Harlan	11	0	0.0%	20	0	0.0%
Kearney	18	1	5.6%	52	6	11.5%
Phelps	38	1	2.6%	65	4	6.2%
Data missing/ not disclosed	2	1	50.0%	4	1	25.0%
Total	366	42	11.5%	1,161	97	8.4%
Age (in yrs)						
0-17	73	1	1.4%	214	7	3.3%
18-29	73	5	6.8%	223	14	6.3%
30-39	38	3	7.9%	137	12	8.8%
40-49	52	8	15.4%	115	11	9.6%
50-59	49	6	12.2%	146	13	8.9%
60-69	25	6	24.0%	134	19	14.2%
70-79	37	7	18.9%	107	12	11.2%
80-89	19	6	31.6%	85	9	10.6%
Total	366	42	11.5%	1,161	97	8.4%
Gender						
Female	208	24	11.5%	692	56	8.1%
Male	158	18	11.4%	468	41	8.8%
Data missing/ not disclosed	0	0	0.0	1	0	0.0%
Total	366	42	11.5%	1,161	97	8.4%

⁶ 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 – May 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, 52% of TRPHD's total population and 63% 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 - May 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.

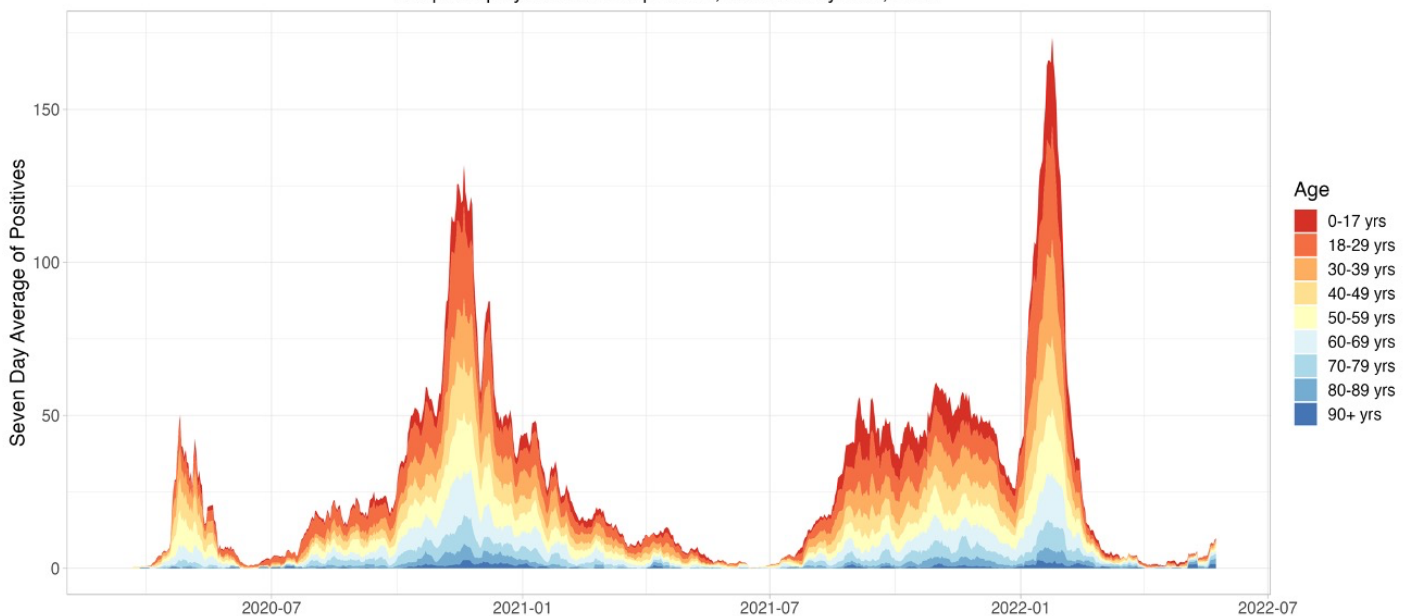
7 Day Rolling Average of Two Rivers

Graph displays data from April 1st, 2020 to May 24th, 2022



Daily Average of COVID-19 Cases in TRPHD by Age

Graph displays data from April 26th, 2022 to May 24th, 2022

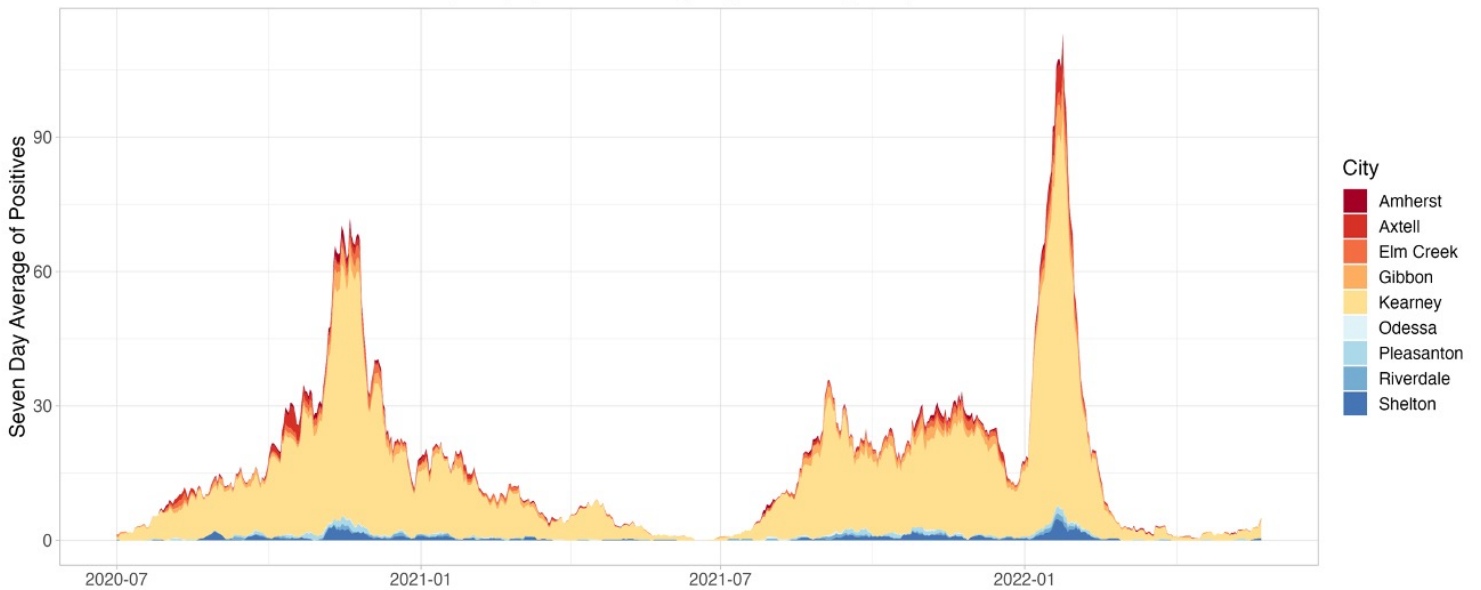




- The following graphs describe the average **daily COVID cases (7-day rolling)** in three urban areas in Two Rivers Health Department.
- The urban areas are Kearney city and surrounding towns (**Kearney, Elm Creek, Pleasanton, Amherst, Riverdale, Gibbon, Shelton and Axtell - total 39,412 people**), 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**).⁷
- Time considered is from **July 1, 2020 - May 25, 2022**. 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, 2020 to May 24th, 2022



Information Updated as of 5/24 at 8 p.m.

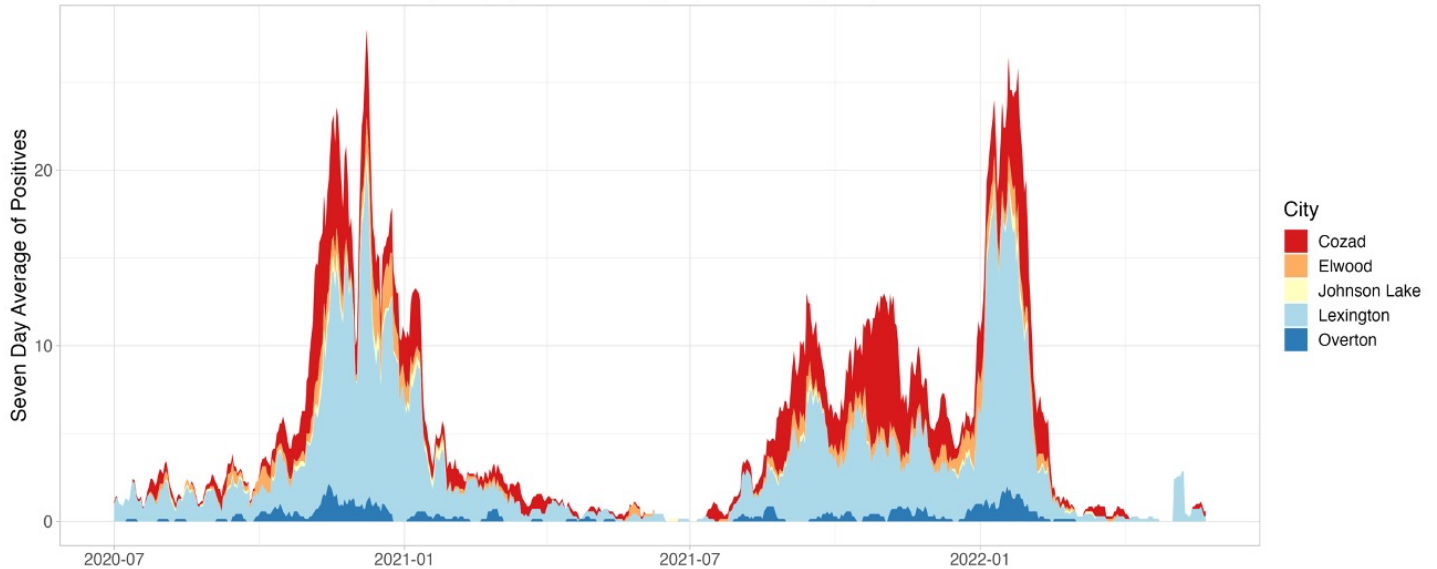
⁷ For details about each of the urban areas, please see appendix 5
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Kearney, NE 68845



- The **daily average (7-day rolling)** of positive cases in **Lexington** and **Holdrege** cities and surrounding towns between July 1, 2020 – May 25, 2022 are presented below.

7 Day Rolling Average of COVID-19 Cases by City

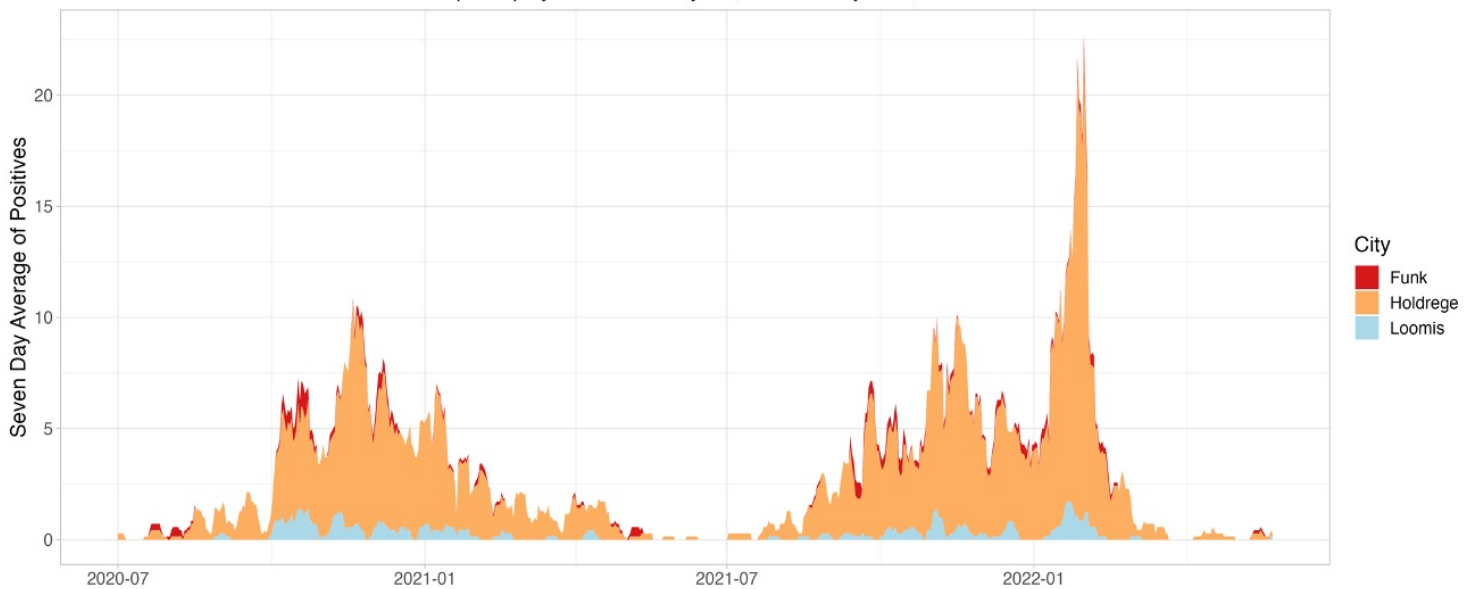
Graph displays data from July 1st, 2020 to May 24th, 2022



Information Updated as of 5/24 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases by City

Graph displays data from July 1st, 2020 to May 24th, 2022



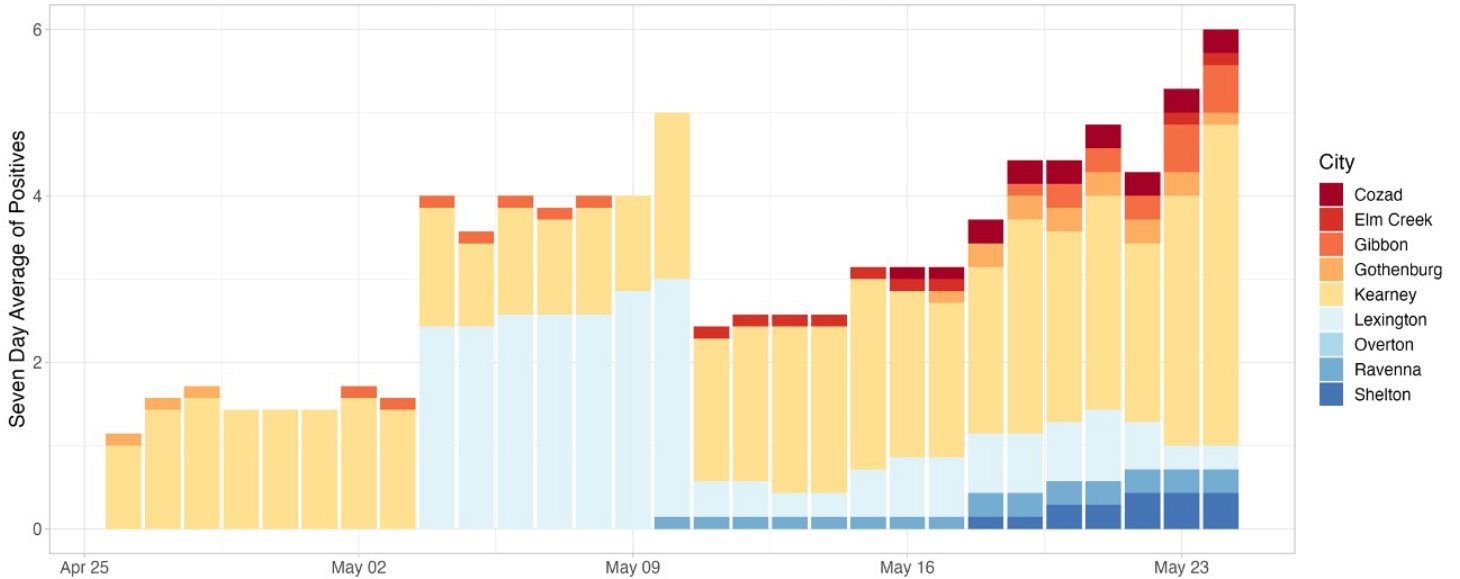
Information Updated as of 5/24 at 8 p.m.



- The following bar graphs describes the 7-day rolling averages by city for the past four weeks (Apr 28 - May 22) 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

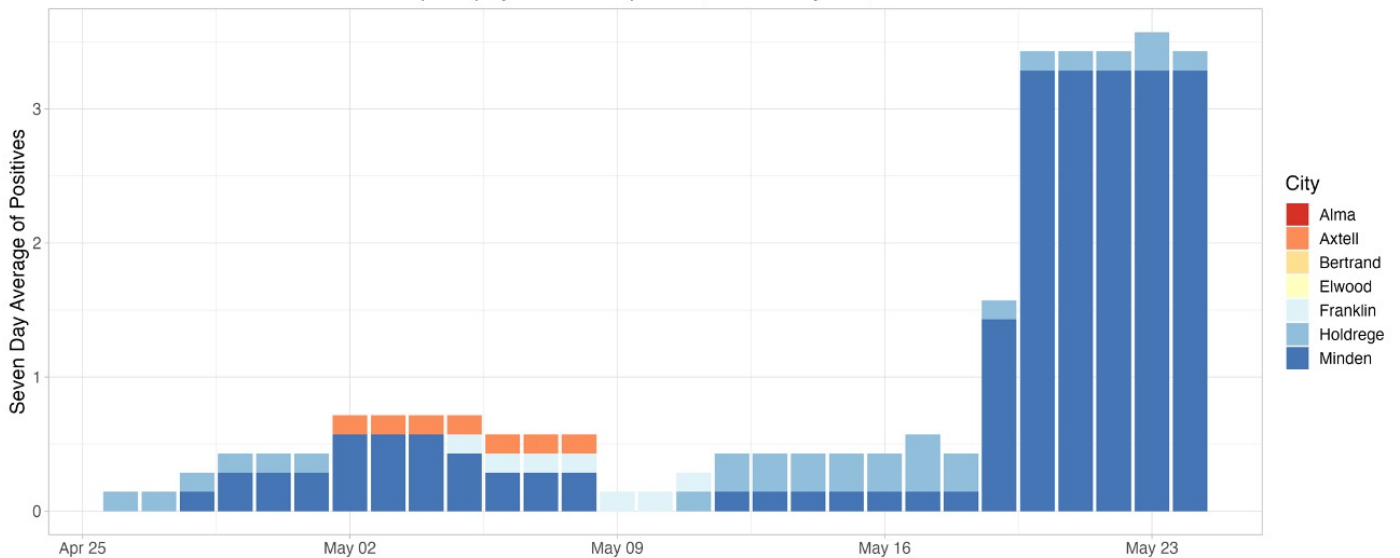
Graph displays data from April 26th, 2022 to May 24th, 2022



Information Updated as of 5/24 at 8 p.m.

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

Graph displays data from April 26th, 2022 to May 24th, 2022



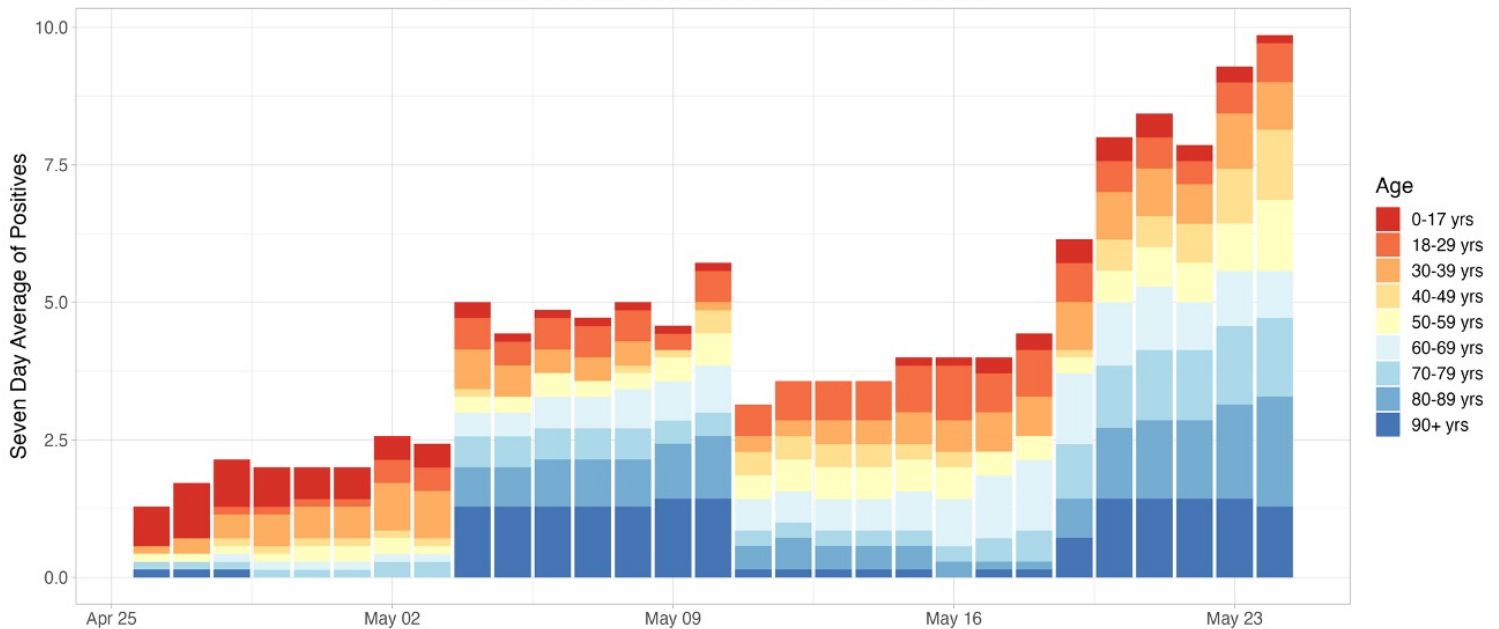
Information Updated as of 5/24 at 8 p.m.



- The graph below describes the **7-day rolling average** of cases from **Apr 28 – May 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

Graph displays data from April 26th, 2022 to May 24th, 2022



Information Updated as of 5/24 at 8 p.m.



Weekly summary

- 155 cases of COVID-19 were recorded in TRPHD between April 28 - May 25 (4 weeks). Weekly COVID test positivity rate is just under 10% across the entire district.
- 70 cases were reported in the last week, the first time weekly cases have risen over 50 since February. This represents a fourfold increase compared to the previous 2 months.
- As of May 25, 52% of the total population of TRPHD has received the minimum prescribed dose of the COVID-19 vaccine. Booster doses of vaccines are recommended at 5 months after second dose (Pfizer/ Moderna) or 2 months after the first dose of Janssen COVID vaccine.
- As of Wednesday morning, 45% of ICU beds and 37% of Medical/surgical beds in TRPHD were available. 3 COVID patients are currently admitted inpatient in TRPHD.
- TRPHD offers COVID testing at the Two Rivers Public Health Department office at 516 W. 11th Street, Kearney. Testing is offered Mondays & Wednesdays 9:30AM - 10:30AM. Those interested are required to register at <https://login.registermytime.com/tw/2rphd> 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 www.trphd.org

To conclude, 70 new COVID cases were detected in the Two Rivers area in the last week. Weekly test Positivity Rates are just short of 10% across both long term facilities and routine testing. One COVID patient is currently admitted in-patient in TRPHD, none in ICU or on ventilator support. Over half of TRPHD's population is fully vaccinated. TRPHD has scheduled vaccination clinics across the district, schedule can be found at <https://www.trphd.org/covid-19/event-calendar.html>. TRPHD is operating a public COVID testing site at the TRPHD office in Kearney 9:30 AM - 10:30 AM, Mondays and Wednesdays. Those eligible for vaccines or booster doses are advised to contact TRPHD or their physician or local pharmacy. To access services through Two Rivers health department, residents are required to visit www.trphd.org



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

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 (<https://covidtracking.com/data>)