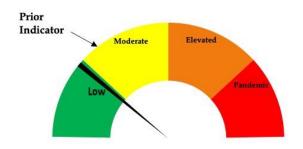


Risk Dial May 20, 2021



Risk Dial for COVID-19 Two Rivers Public Health Published May 20, 2021

- The weekly COVID test positivity rate for all tests conducted in TRPHD dropped below 1.5% for the first time in the past year. Less that 4% of tests conducted outside residential facilities tested positive, the first time since early July 2020. Franklin, Gosper, Harlan and Kearney reported six cases or fewer in the past month.
- COVID bed occupancy has remained below 10% for over 12 weeks now, and ventilator use has been nil for over 4 weeks (see https://www.trphd.org/ for details).
- No new COVID cases were reported from long term care facilities in the district in the previous three weeks. Weekly testing has dropped by 30-50% across facilities, and some have concluded routine testing for now.
- As of May 17, 2021, 43.5% of TRPHD's population aged 16 years and over has been fully vaccinated. Less than one-fifth of those aged 16-29 years are fully vaccinated, and the rate of new vaccinations in this age group has slowed dramatically this month. See weekly vaccination report at https://www.trphd.org/covid-19/vaccination-reports.html for details.
- For these reasons, the risk dial is lowered considerably from the previous week; risk in the district is assessed to be "low", downgraded from "moderate" risk of the past few months. The downgrade reflects expanded vaccination coverage, decreasing COVID-19 case and positivity rates, testing utilization, ICU and bed utilization in the district over the last 4 weeks."



Weekly report May 12 - May 18, 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. We show positive cases and tests conducted by county, age and gender from May 12 May 18 (1 week) and April 20 May 18 (4 weeks). We describe cases in residential facilities¹ separately from other tests conducted in the district.
- The first graphic describes the proportion of TRPHD residents vaccinated between December 15, 2020 - May 17, 2021. All residents of the seven counties over 16 years are included to calculate the eligible population.
- The second graph describes the **cumulative (total)** COVID cases in each of the seven counties in Two Rivers Health District from **March 24**, **2020 to May 18**, **2021**.
- The third graph depicts the **cumulative (total) COVID cases/ 100,000 persons** in each of the seven counties in TRPHD from **March 24, 2020 May 18, 2021.**
- The fourth set of graphs look at the progress of the pandemic from **April 1, 2020 May 18, 2021** across all counties.
 - We describe the 7-day rolling average ² of positive cases across TRPHD since April, describing cases by age categories (>1 year)
- The third set of graphs look at the daily average of positive cases in 7 counties in TRPHD from July 1, 2020 May 18, 2021
 - We present the **daily average cases (7-day rolling) / 100,000 population** for Buffalo, Dawson, Franklin, Gosper, Harlan, Kearney and Phelps counties.³
- The third set of graphs describe the daily average of cases (7-day rolling average) from **April 20 May 18**.
 - o Progress is described by age, county and city of residence.
- The final graph shows positive cases in **Residential facilities**, displaying each week's cases by the county where the facility is located (Oct May)

To conclude, COVID test positivity rate is at its lowest level since July 2020. The smallest five counties in TRPHD accounted for less than 25 new cases in the past month. Long term care facilities recorded no new cases for the third week in a row. 43.5% of the district is now fully vaccinated; COVID-related bed occupancy has been below 9% for over 12 weeks. TRPHD has scheduled mass vaccination clinics at multiple sites across seven counties. Those eligible for the vaccine are advised to contact their physician or refer to the vaccination clinic schedule at www.trphd.org. In the meantime, unvaccinated residents are advised to continue to adhere to

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 details on daily average of cases/ 100,000 population, please see appendix 1 & 2 516 W 11th Street, Suite 108



strict preventive measures (social distancing, correct and consistent masking) at all times to protect themselves and others.

Testing & Vaccination Overview

- As of May 18, over 45,000 residents of Two Rivers Health District were tested at least once for COVID-19. Over 133,000 tests have been conducted since March 1, 2020 and over 11,000 of these tests were positive.⁴ TRPHD has publicly notified 120 deaths due to COVID-19 across the district.
- As of May 18, 43.5% of TRPHD's eligible population has been fully vaccinated. ⁵ Details of vaccination progress are discussed separately.

Details of all tests conducted in Two Rivers' Health District the past 1 week and 4 weeks is displayed below

	May 12 - May 18 (1 week)			Apr 20 - May 18 (4 weeks)		
	Total	Positive	Positivity	Total	Positive	Positivity
	Tests	Results	Rate	Tests	Results	Rate
Hospital/Clinic	326	14	4.3%	1687	104	6.2%
TestNebraska	33	2	6.1%	181	13	7.2%
Residential	951	0	0.0%	5156	2	0.0%
Facility						
Lab/ Pharmacy	69	1	1.4%	453	14	3.1%
Other	104	3	2.9%	475	16	3.4%
TOTAL	1,483	20	1.3%	7952	149	1.9%

• A total of 5156 tests were availed by residents and staff of long-term care and other residential facilities 6 in the last 4 weeks. Details are provided below:

	May 12 - May 18 (1 week)			Apr 20 - May 18 (4 weeks)		
	Total	Positive	Positivity	Total Tests	Positive	Positivity
Residential	Tests	Results	Rate		Results	Rate
Facility In:						
Buffalo	687	0	0.0%	3502	2	0.1%
Dawson	27	0	0.0%	415	0	0.0%
Franklin	0	0	0.0	0	0	0.0
Gosper	9	0	0.0%	35	0	0.0%
Harlan	28	0	0.0%	120	0	0.0%
Kearney	63	0	0.0%	306	0	0.0%
Phelps	118	0	0.0%	660	0	0.0%
Outside TRPHD	19	0	0.0%	118	0	0.0%
TOTAL	951	0	0.0%	5156	2	0.0%

⁴ Note: The minor differences between the numbers reported and totals displayed on www.trphd.org dashboards is explained by testing in residential facilities and isolated rapid test results that are not reflected in the state's public dashboards. Tests of persons missing date of birth are excluded from the analysis

⁵ For information on vaccine-eligible population in each of the counties, please see appendix 4

⁶ For information on residential facilities, please see appendix 3



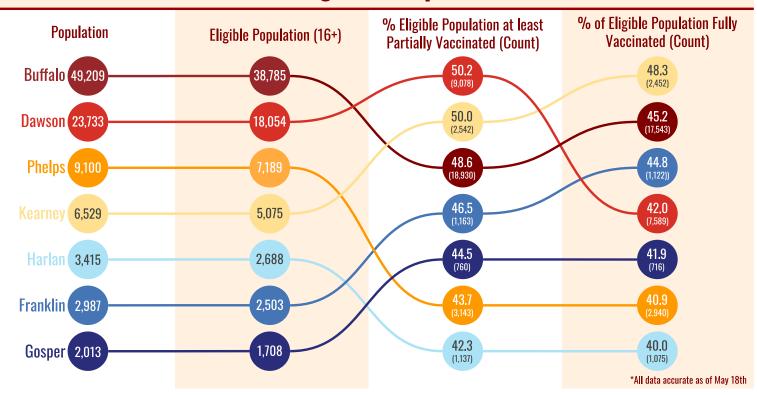
Excluding residential facilities, a total of 2796 tests were conducted in the past 4 weeks. The following table gives details of positive cases in the past week and past 4 weeks by county, age categories and gender.

	May 12 - May 18 (1 week)			Apr 20 - May 18 (4 weeks)			
	Total tests	Positive	P. rate	Total tests		P. rate (%)	
	conducted	cases	(%)	conducted	cases		
County							
Buffalo	308	16	5.2%	1681	100	5.9%	
Dawson	104	3	2.9%	622	20	3.2%	
Franklin	10	1	10.0%	52	4	7.7%	
Gosper	7	0	0.0%	24	3	12.5%	
Harlan	5	0	0.0%	26	0	0.0%	
Kearney	25	0	0.0%	104	6	5.8%	
Phelps	49	0	0.0%	272	11	4.0%	
Data missing/ not disclosed	4	0	0.0%	15	3	20.0%	
Total	512	20	3.9%	2,796	147	5.3%	
Age (in yrs)	012	20	0.5 70	2,7 50	117	0.0 70	
0-17	64	5	7.8%	376	25	6.6%	
18-29	137	6	4.4%	798	36	4.5%	
30-39	83	2	2.4%	442	26	5.9%	
40-49	56	1	1.8%	320	16	5.0%	
50-59	76	2	2.6%	373	21	5.6%	
60-69	41	2	4.9%	238	14	5.9%	
70-79	28	1	3.6%	142	6	4.2%	
80-89	22	1	4.5%	80	3	3.8%	
90+	5	0	0.0%	27	0	0.0%	
Total	512	20	3.9%	2,796	147	5.3%	
Gender							
Female	283	8	2.8%	1502	69	4.6%	
Male	229	12	5.2%	1281	78	6.1%	
Data	0	0	0%	13	0	0.0%	
missing/ not disclosed							
Total	512	20	3.9%	2,796	147	5.3%	



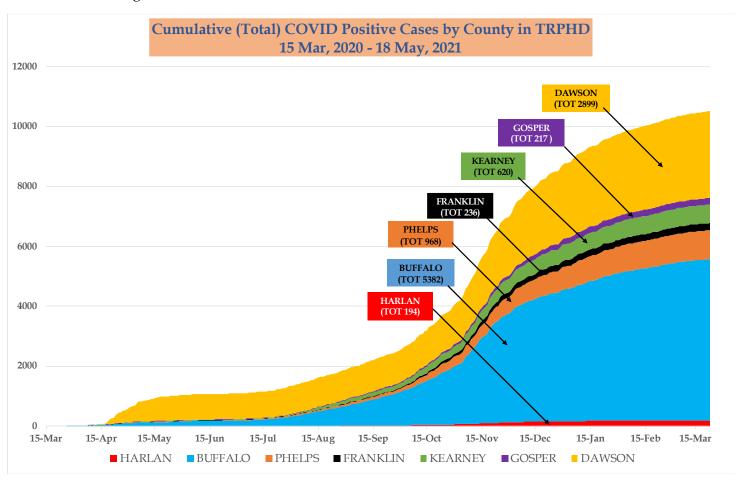
- The graph below describes all TRPHD residents vaccinated between December 15, 2020 May 17, 2021. All residents of the seven counties over 16 years are included.
- Each county is depicted by a colored circle, and the relative position of each corresponds to the proportion vaccinated. Actual numbers (count) are included in parenthesis.
- Overall, 43.5% of the eligible population in Two Rivers Health District is now fully vaccinated.

Vaccinations of Eligible Population in TRPHD



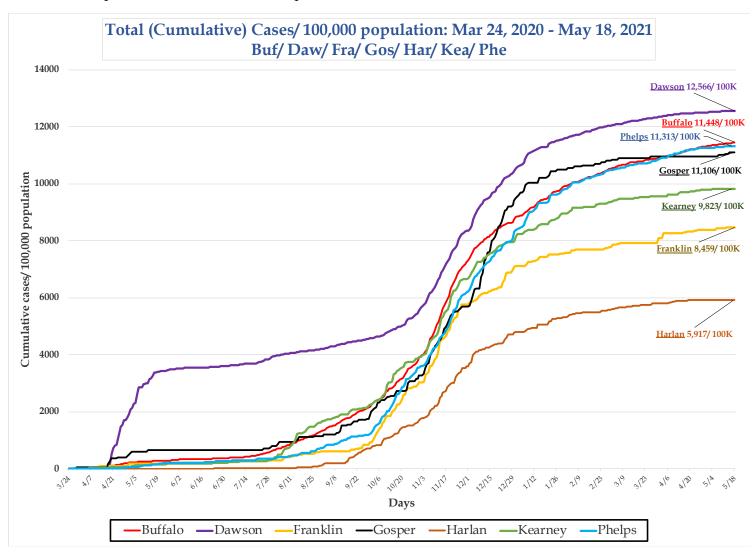


- The graphs below describe the **cumulative (total) COVID** positive cases across each of the 7 counties in TRPHD from **March 24, 2020 to May 18, 2021**.
- Graphs are presented separately for **Buffalo**, **Dawson**, **Phelps**, **Franklin**, **Gosper**, **Harlan** and **Kearney** counties. Cumulative cases are indicated in parenthesis.
- Although Dawson and Harlan are moderate outliers, the cumulative COVID cases recorded per county are roughly proportional to the share of the district's population living there.





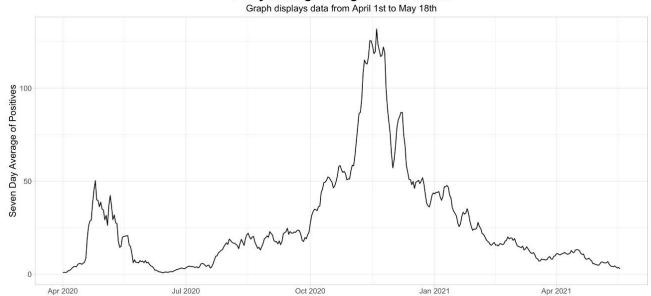
- The graphs below describe the **cumulative COVID cases/100,000 population** of positive cases across each of the 7 counties in TRPHD from **March 24, 2020 to May 18, 2021**.
- Graphs are presented separately for **Buffalo**, **Dawson**, **Phelps**, **Franklin**, **Gosper**, **Harlan** and **Kearney** counties. Cumulative positive cases/ 100,000 population are indicated in line.
- About one out of every eight persons living in Dawson county tested COVID positive at some point in the last year, and about one in twelve living in Franklin tested positive during that period. Overall, about one out of every nine (11%) TRPHD residents tested positive for COVID-19 in the previous 13 months.



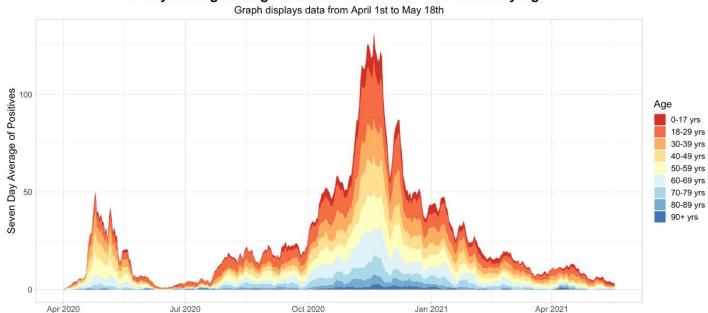


- The graph below describes 7-day rolling average of COVID-19 across TRPHD from April 1, 2020 - May 18, 2021.
- The second graph describes 7-day rolling average of COVID-19 cases by age across TRPHD for the same time period. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

7 Day Rolling Average of Two Rivers



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

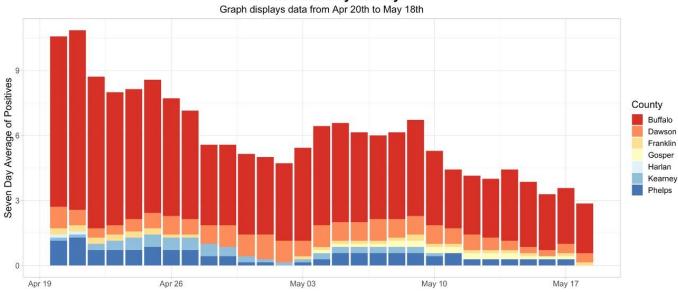


Information Updated as of 5/18 at 8 p.m.



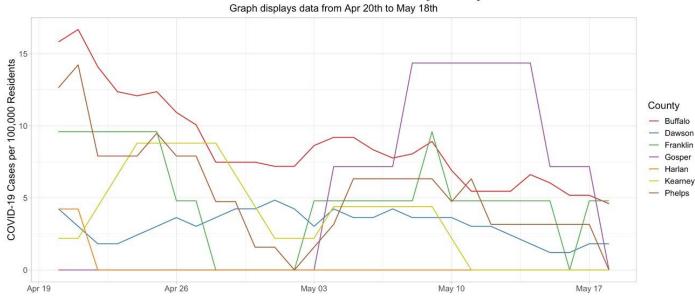
- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **county** for the past four weeks **(Apr 20 May 18)**.
- The second graph describes the same data per 100,000 population.⁷

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



Information Updated as of 5/18 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases Per 100,000 Resident in Two Rivers by County



Information Updated as of 5/18 at 8 p.m.

516 W 11th Street, Suite 108 Kearney, NE 68845

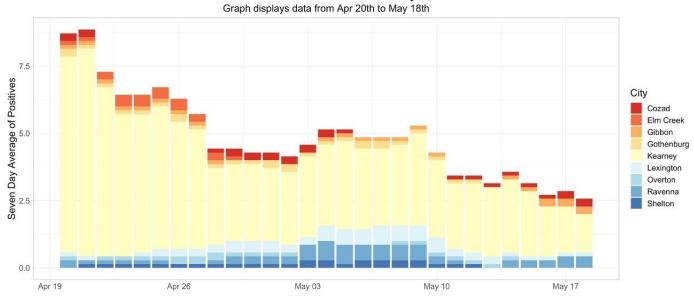
888-669-7154 trphd.org

 $^{^{7}}$ Please note: When comparing counties, we describe rates per 100,000 population. This is roughly equal to the total population of Two Rivers Health Department (\sim 97,000)



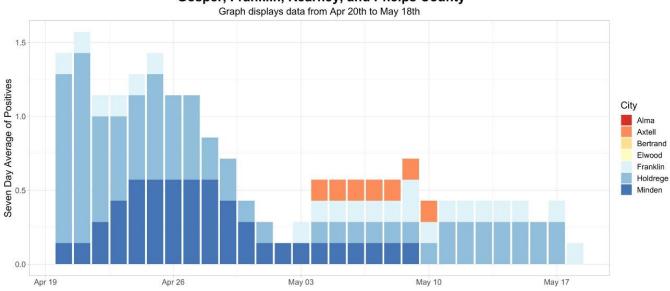
• The following bar graphs describes the 7-day rolling averages by <u>city</u> for the past four weeks (Apr 20 – May 18) in TRPHD. The graph above shows cities in **Buffalo and Dawson** counties and the one below shows the graph for cities in **Gosper**, **Harlan**, **Kearney and Phelps** counties. <u>The scale is different for both graphs</u>.

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



Information Updated as of 5/18 at 8 p.m.

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

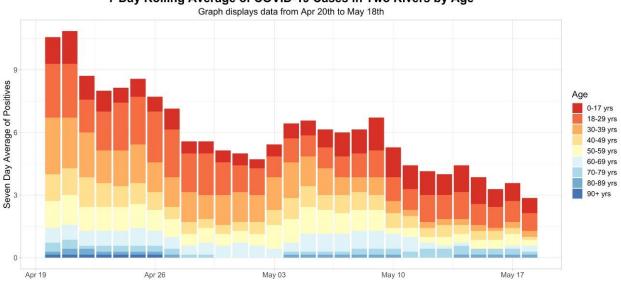


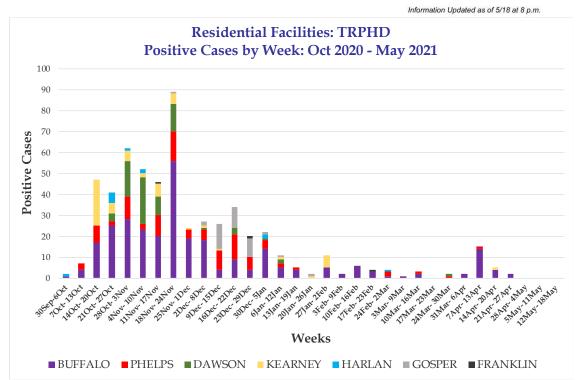
Information Updated as of 5/18 at 8 p.m.



- The graph below describes the **7-day rolling average** of cases from **Apr 20 May 18** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.
- The second graph shows the distribution of cases per week in **residential facilities** in the district, broken up by county (**Sep 30 May 18**). Regular and widespread testing in long term care facilities in TRPHD began in early October.









Weekly summary

- The weekly COVID test positivity rate for all tests conducted in TRPHD dropped below 1.5% for the first time in the previous year. Less than 4% of tests conducted outside residential facilities tested positive, the first time since early July 2020. Franklin, Gosper, Harlan and Kearney reported six cases or fewer in the past month.
- About 1 out of every 8 persons living in Dawson county tested COVID positive at some point in the last year, and about 1 in 12 living in Franklin tested positive during that period. Overall, about 1 out of every 9 (11%) TRPHD residents tested positive for COVID-19 in the previous 13 months.
- COVID bed occupancy has remained below 10% for over 12 weeks now, and ventilator use has been nil for over 4 weeks (see https://www.trphd.org/ for details). About half the ICU beds in the district are currently available. No ICU beds in the larger Tri-City Medical Response System are currently occupied by COVID patients.
- No new COVID cases were reported from long term care facilities in the district in the previous three weeks. Weekly testing has dropped by 30-50% across facilities, and some have concluded routine testing for now.
- As of May 17, 2021, 43.5% of TRPHD's population aged 16 years and over has been fully vaccinated. The anticipated addition of younger age groups to eligible residents (children 12-15 years added to eligible list) will reduce overall vaccination rates in the weeks to come. Less than one-fifth of those aged 16-29 years are fully vaccinated, and the rate of new vaccinations in this age group has slowed dramatically this month. See weekly vaccination report at https://www.trphd.org/covid-19/vaccination-reports.html for details.
- COVID-19 vaccination continues to be provided via through private clinics, hospitals, and
 Vaccines For Children (VFC) clinics across the district, including by Two Rivers Health
 Department. All persons aged 16 and over are eligible for the vaccine. TRPHD has
 scheduled mass vaccination clinics at multiple 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, COVID test positivity rate is at its lowest level since July 2020. The smallest five counties in TRPHD accounted for less than 25 new cases in the past month. Long term care facilities recorded no new cases for the third week in a row. 43.5% of the district is now fully vaccinated; COVID-related bed occupancy has been below 9% for over 12 weeks. TRPHD has scheduled mass vaccination clinics at multiple sites across seven counties. Those eligible for the vaccine are advised to contact their physician or refer to the vaccination clinic schedule at www.trphd.org. In the meantime, unvaccinated residents are advised to continue to adhere to strict preventive measures (social distancing, correct and consistent masking) at all times to protect themselves and others.





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.