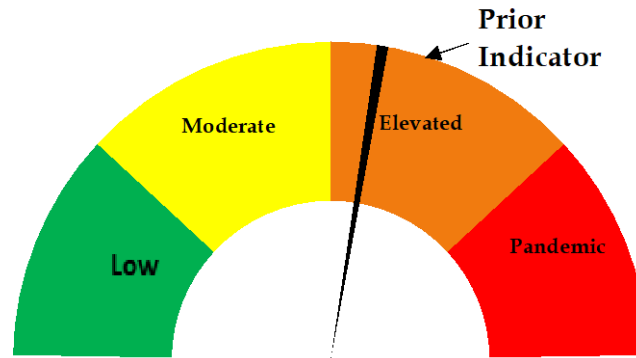




Risk Dial Jan 28, 2020



Risk Dial for COVID-19 Two Rivers Public Health Published January 28, 2021

- Half of all ICU beds across the district are available currently; COVID-related admissions account for less than 15% of all occupied beds (see <https://www.trphd.org/> for details)
- Weekly testing numbers have rallied to some extent, but overall testing levels continue to be low, about 60% of the number of tests conducted two months previously. For more details on testing, see weekly report (Jan 20 – Jan 26) <https://www.trphd.org/covid-19/weekly-reports.html>).
- Positivity rates have dropped across almost all counties in the district and weekly case counts have shown a decreasing trend across all age groups.
- COVID-19 vaccination has been successfully rolled out across the district since December 15, 2020. About 1.7% of all eligible people (aged 16 years and over) have received at least one dose of vaccine.
- Contact tracing and follow up has been strengthened, low daily case counts allow for faster outreach and follow up with test positive residents.
- For these reasons, the risk dial is further downgraded towards moderate risk this week, although overall risk still remains in the 'elevated' zone. TRPHD continues to monitor new cases and potential outbreaks across the district.



Weekly report Jan 20 - Jan 26, 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 **January 20 - January 26** (1 week) and **December 29 - January 26** (4 weeks). We describe cases in residential facilities separately from other residents of the district.
- The first set of graphs look at the progress of the pandemic from **April 1 - January 26** (43 weeks) across all counties.
 - We describe the 7-day rolling average ¹ of positive cases across TRPHD since April, describing cases by age categories (**Apr - Jan**)
- The second set of graphs look at the daily average of positive cases in TRPHD from **July 1 - January 26**.
 - We present the **daily average cases (7-day rolling) / 100,000 population** for Buffalo, Dawson, Franklin, Gosper, Harlan, Kearney and Phelps counties.²
 - Also depicted is the daily average/ 100,000 population for Nebraska and the USA.
- The third graph describes the tests conducted and positives detected among tests conducted outside residential facilities ³ from **November 11 - January 26** for Two Rivers Health District.
 - Also depicted is the weekly test positivity rate. Only tests conducted outside of residential facilities are considered.
- The fourth set of graphs describe the daily average of cases (7-day rolling average) from **December 29 - January 26**. Progress is described by age, county and city of residence. Also depicted are countywide rates per 100,000 population and citywide rates per 10,000 population.
- The fifth set of graphs look at Residential facilities in TRPHD (**Oct - Jan**) ³
 - We describe weekly positive cases detected in residential facilities (**Sep 30 - Jan 26**), and display each week's cases by the county where the facility is located. ⁴

Daily COVID case counts and positivity rates continue to drop across almost all seven counties in TRPHD. The winter storm early this week caused test site cancellations. In addition, generally lower demand for testing has resulted in lower COVID tests conducted last week, and this is expected to last into next week. COVID-19 vaccination has been rolled out across the district since December. About 1.7% of all eligible people (aged 16 years and over) in TRPHD have received at least one dose of vaccine. TRPHD will continue to work with partners to provide vaccinations as vaccine becomes available. Those eligible are advised to visit www.trphd.org for details about registration. 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

¹ 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.

² For details on daily average of cases/ 100,000 population, please see appendix 1 & 2

³ For information on residential facilities, please see appendix 3

⁴ For information on data sources, please see appendix 1



Testing Overview

- As of Jan 26, around 41,000 residents of Two Rivers Health District were tested at least once for COVID-19. Over 92,000 tests have been conducted since March 1, and 10,019 of these tests were positive.⁵ TRPHD has publicly notified 107 deaths due to COVID across the district.
- About 57% of all tests conducted since March 2020 have been laboratory-based Polymerase Chain Reaction (PCR) tests.
 - However, 70% of tests in the past 4 weeks have been rapid, or antigen tests. These are easier to administer and provide immediate results, but are not as sensitive as PCR tests that are used for laboratory confirmation of COVID.²

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

	Jan 20 - Jan 26 (1 week)			Dec 29 - Jan 26 (4 weeks)		
	Total Tests	Positive Results	Positivity Rate	Total Tests	Positive Results	Positivity Rate
Hospital/ Clinic	731	141	19.3%	2540	531	20.9%
TestNebraska	205	33	16.1%	1250	234	18.7%
Residential Facility	2303	2	0.1%	8208	43	0.5%
Lab/ Pharmacy	364	27	7.4%	1164	115	9.9%
Other	166	24	14.5%	291	71	24.4%
TOTAL	3769	227	6.0%	13,453	994	7.4%

- A total of 8208 tests were availed by residents and staff of long-term care and other **residential facilities** in the last 4 weeks. Details are provided below:

	Jan 20 - Jan 26 (1 week)			Dec 29 - Jan 26 (4 weeks)		
Residential Facility In:	Total Tests	Positive Results	Positivity Rate	Total Tests	Positive Results	Positivity Rate
Buffalo	1004	0	0.0%	3304	26	0.8%
Dawson	405	0	0.0%	1221	3	0.2%
Franklin	0	0	0.0	0	0	0.0
Gosper	103	1	1.0%	402	3	0.7%
Harlan	45	0	0.0%	307	0	0.0%
Kearney	224	1	0.4%	777	2	0.3%
Phelps	399	0	0.0%	1694	8	0.5%
Outside TRPHD	123	0	0.0%	503	1	0.2%
TOTAL	2303	2	0.1%	8208	43	0.5%

⁵ 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



Excluding residential facilities, a total of 5245 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.

	Jan 20 - Jan 26 (1 week)			Dec 29 - Jan 26 (4 weeks)		
	Total tests conducted	Positive cases	P. rate (%)	Total tests conducted	Positive cases	P. rate (%)
County						
Buffalo	830	128	15.4%	2890	488	16.9%
Dawson	380	42	11.1%	1439	246	17.1%
Franklin	39	2	5.1%	106	13	12.3%
Gosper	18	5	27.8%	70	22	31.4%
Harlan	31	8	25.8%	96	17	17.7%
Kearney	68	15	22.1%	211	51	24.2%
Phelps	95	25	26.3%	408	110	27.0%
Data missing/ not disclosed	5	0	0.0%	25	4	16.0%
Total	1,466	225	15.3%	5,245	951	18.1%
Age (in yrs)						
0-17	165	20	12.1%	552	81	14.7%
18-29	339	33	9.7%	1159	187	16.1%
30-39	207	46	22.2%	812	175	21.6%
40-49	177	35	19.8%	660	122	18.5%
50-59	199	35	17.6%	713	147	20.6%
60-69	147	21	14.3%	604	124	20.5%
70-79	103	27	26.2%	385	83	21.6%
80-89	86	7	8.1%	239	24	10.0%
90+	43	1	2.3%	121	8	6.6%
Total	1466	225	15.3%	5245	951	18.1%
Gender						
Female	797	110	13.8%	2908	496	17.1%
Male	659	114	17.3%	2302	452	19.6%
Data missing/ not disclosed	10	1	10.0%	35	3	8.6%
Total	1,466	225	15.3%	5,245	951	18.1%



- The graph below describes 7-day rolling average of COVID-19 across TRPHD from **April 1 – January 26**.
- 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.

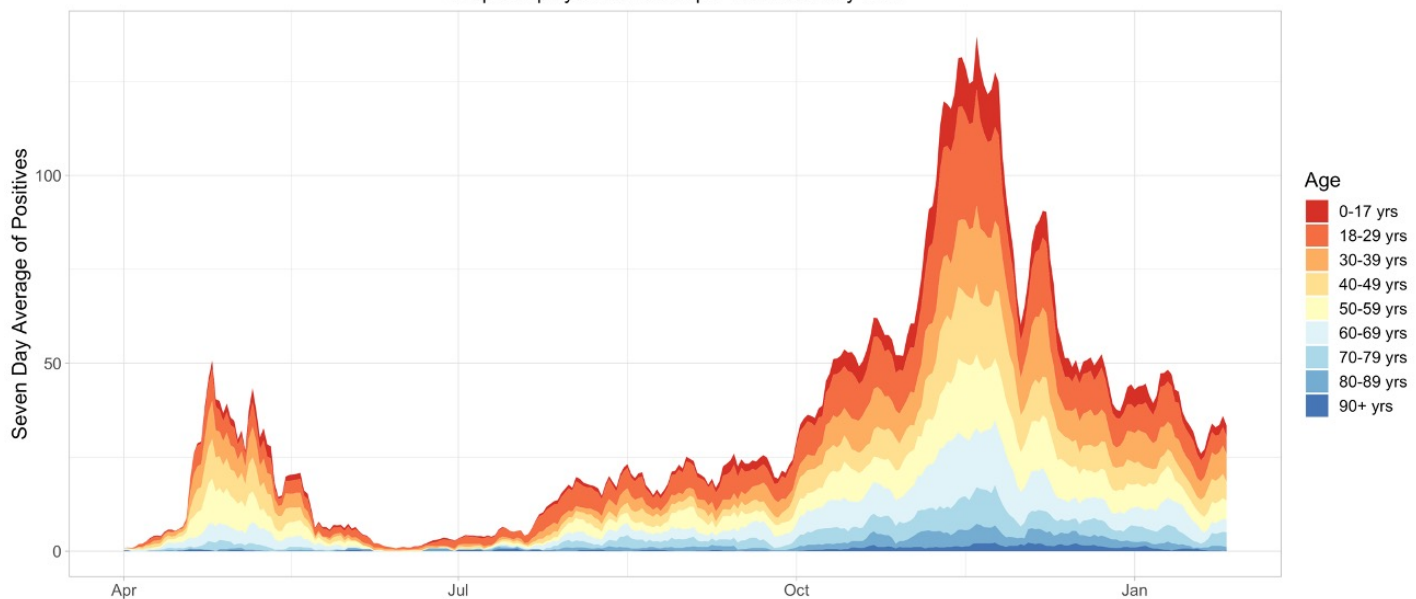
7 Day Rolling Average of Two Rivers

Graph displays data from April 1st to January 26th



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

Graph displays data from April 1st to January 26th



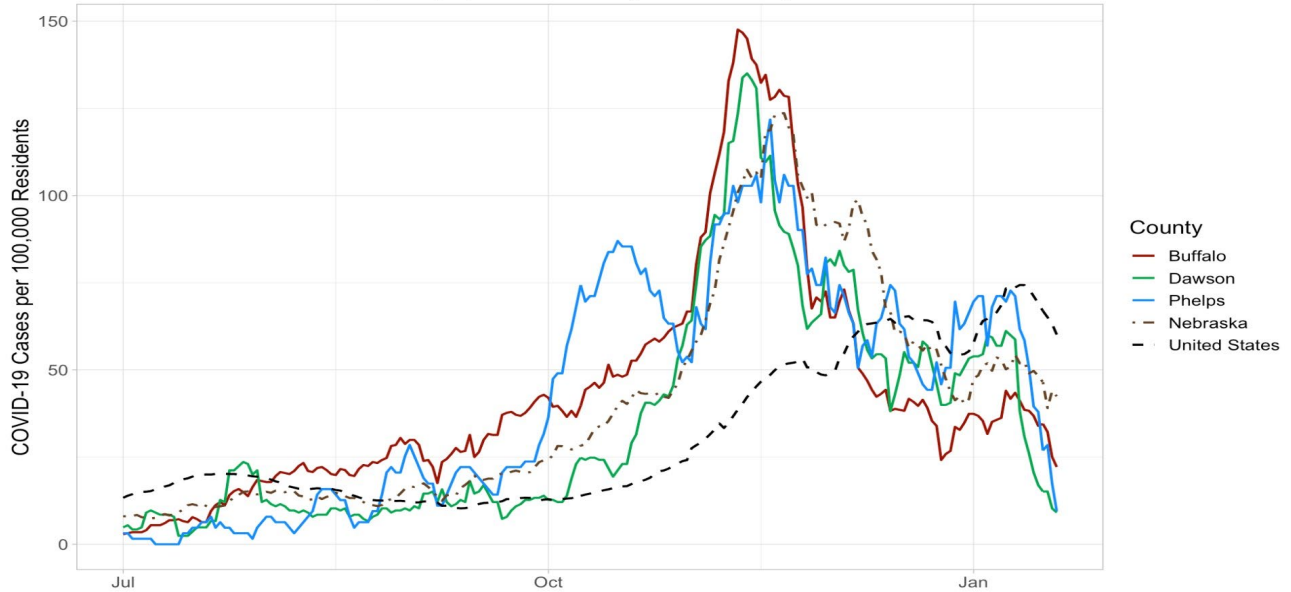
Information Updated as of 1/26 at 8 p.m.



- The graphs below describe the **7-day rolling average/100,000 population** of positive cases across each of the 7 counties in TRPHD from **July 1 to Jan 26**.
- Graphs are presented separately for **Buffalo, Dawson and Phelps**, and for **Franklin, Gosper, Harlan and Kearney** counties. **Nebraska state and the USA** are also presented for comparison. Scales are different for both graphs.

7 Day Rolling Average of COVID-19 Cases Per 100,000 Resident in Buffalo, Dawson, and Phelps County

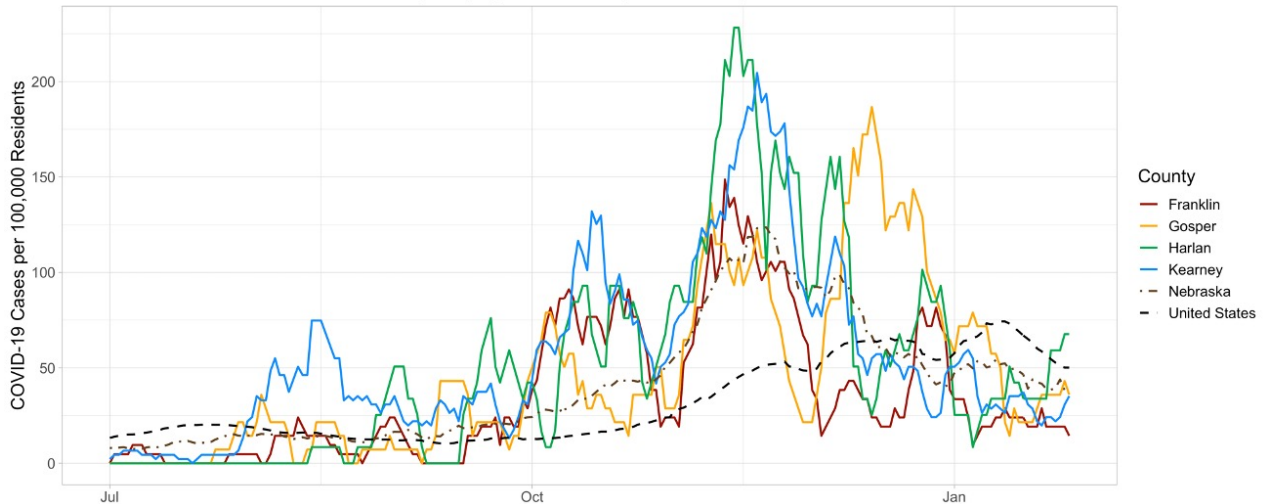
Graph displays data from July 1st to January 19th



Information Updated as of 1/19 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases Per 100,000 Resident in Franklin, Gosper, Harlan, and Kearney County

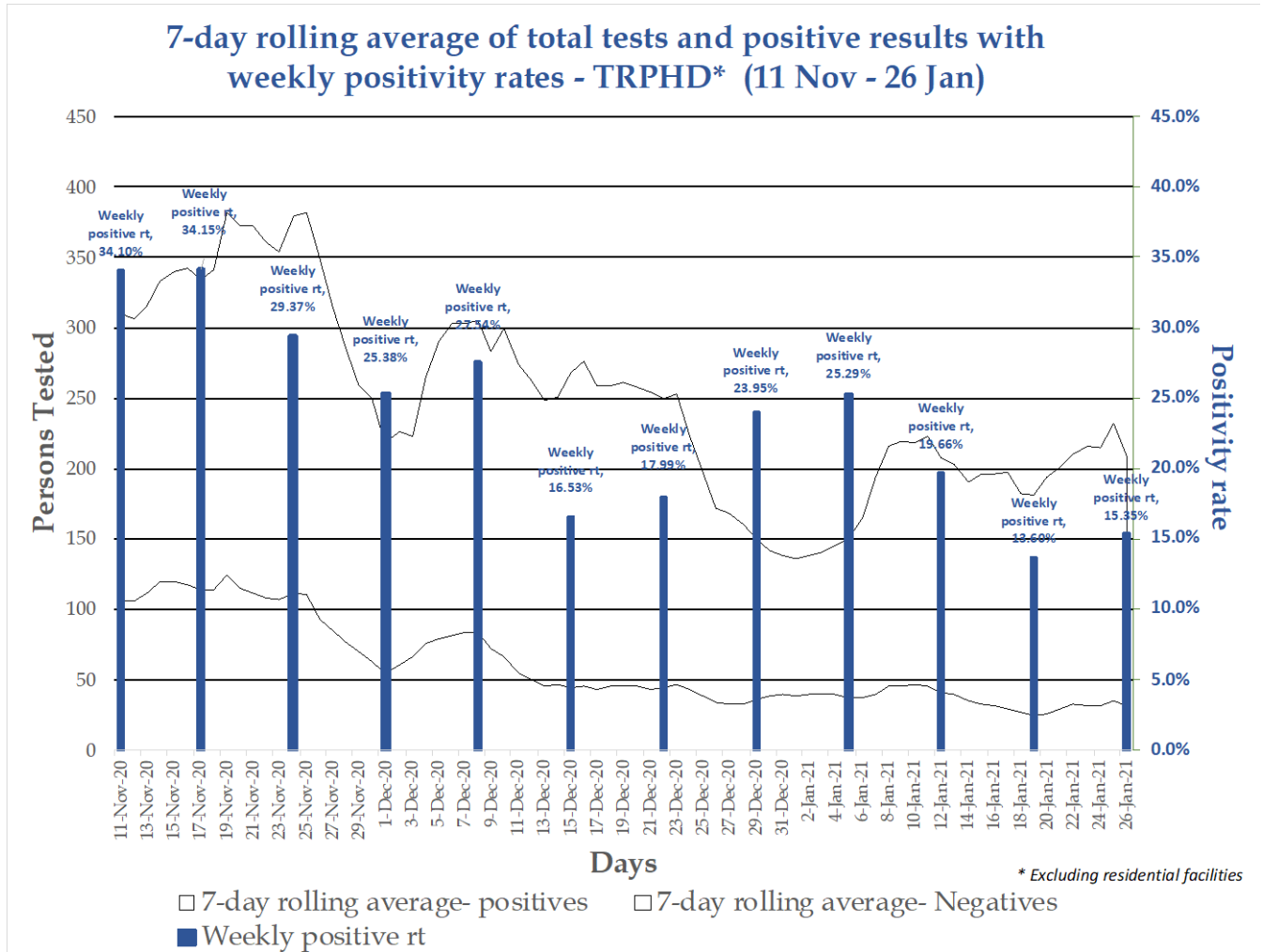
Graph displays data from July 1st to January 26th



Information Updated as of 1/26 at 8 p.m.



- The graph below describes the **total tests conducted** across Two Rivers Health District, divided into **negative and positive results received** ⁶ from **November 11 to Jan 12**. The height of the graph corresponds to all tests done that week (7-day rolling average) and the two colors denote negative and positive results.
- Also shown is the **weekly test positivity rate**, denoted by vertical bars on the x-axis. Only tests outside of residential facilities were included in the analysis. ⁷



⁶ For information on total tests and test positivity rate, please see appendix 1

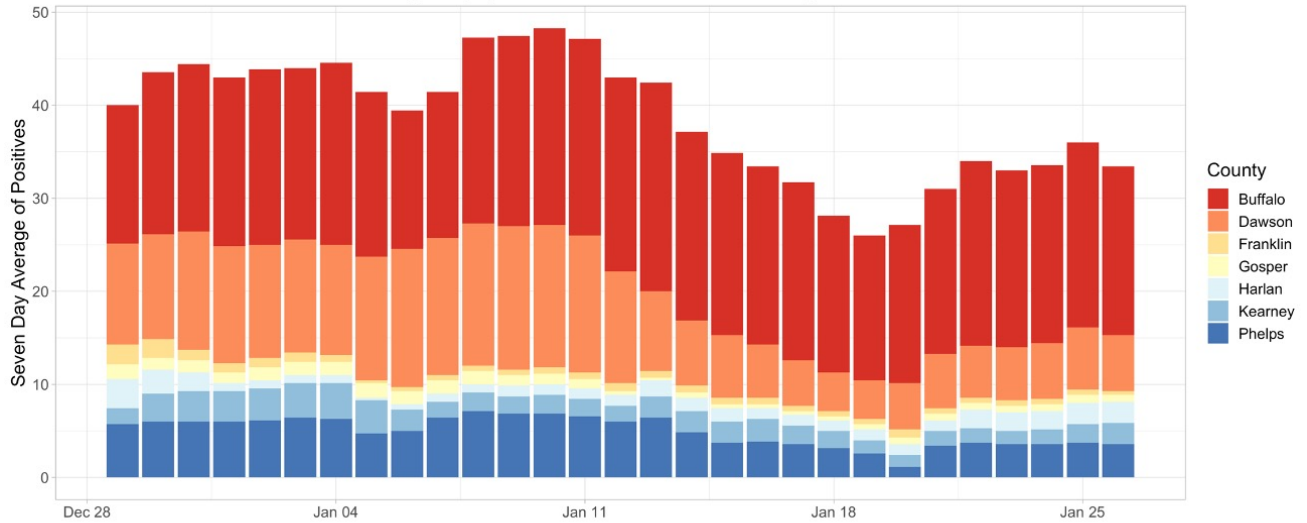
⁷ For information on residential facilities, please see appendix 3



- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **county** for the past four weeks (Dec 29 – Jan 26).
- The second graph describes the same data per 100,000 population.⁸ The graph also depicts the line for the United States and Nebraska.

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

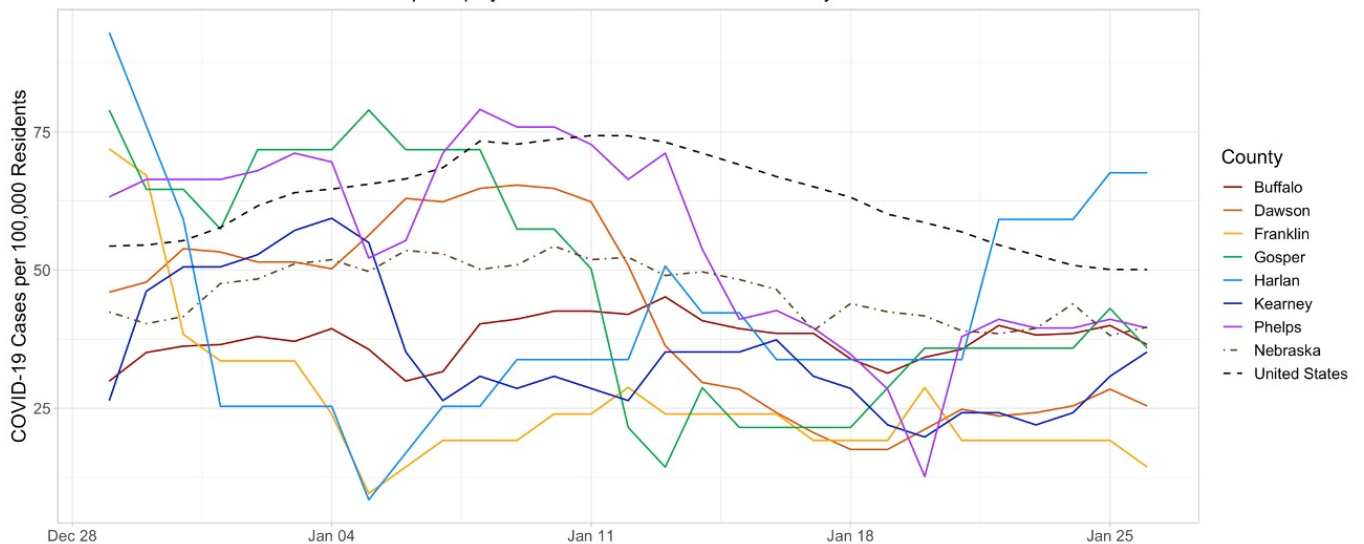
Graph displays data from December 29th to January 26th



Information Updated as of 1/26 at 8 p.m.

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

Graph displays data from December 29th to January 26th



Information Updated as of 1/26 at 8 p.m.

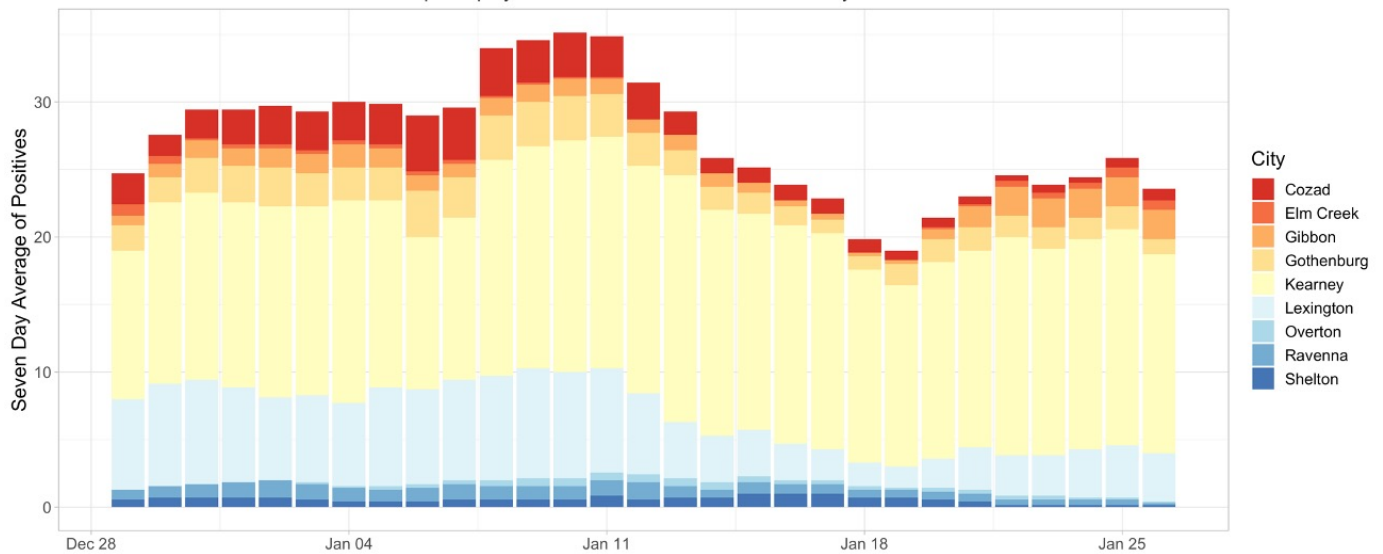
⁸ Please note: When comparing counties, we describe rates per 100,000 population. This is roughly equal to the total population of Two Rivers Health Department (~97,000)



- The following bar graph describes the 7-day rolling averages by **city** for the past four weeks (**Dec 29 - Jan 26**) in TRPHD.
- The graph above shows cities in Buffalo and Dawson counties and the one below shows the graph for cities in Franklin, 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

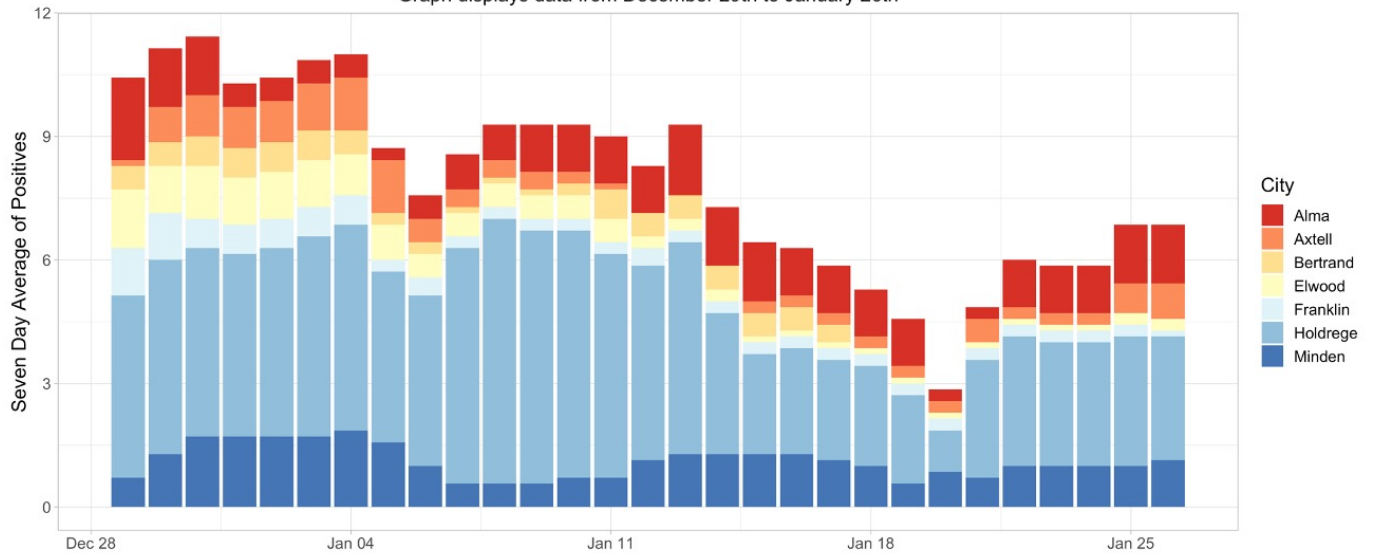
Graph displays data from December 29th to January 26th



Information Updated as of 1/26 at 8 p.m.

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

Graph displays data from December 29th to January 26th



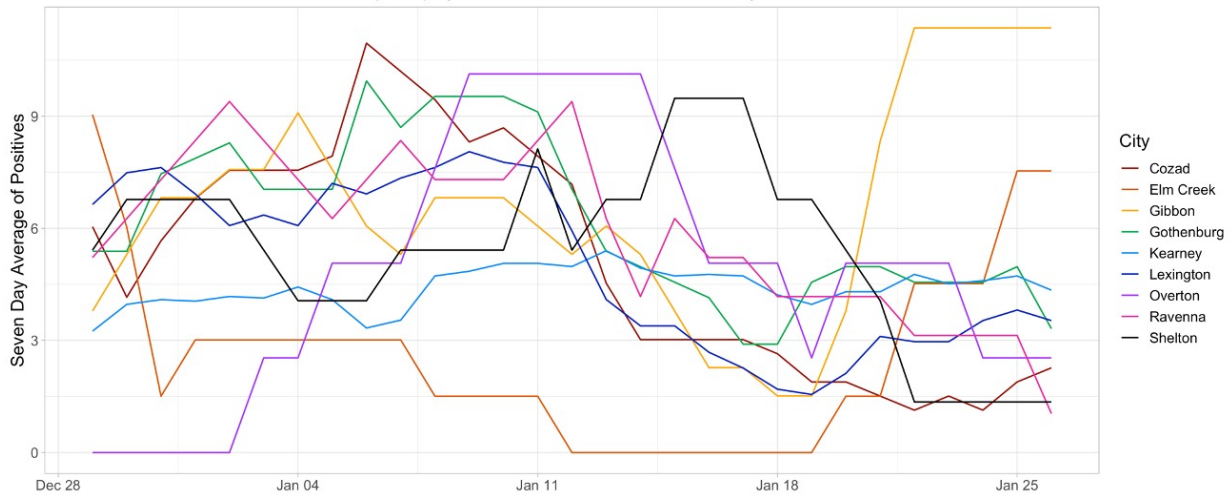
Information Updated as of 1/26 at 8 p.m.



- The following line graph describes the 7-day rolling average of COVID cases per 10,000 population in **cities** across TRPHD for the past four weeks (**Dec 29 – Jan 26**)⁹
- The graph above shows cities in Buffalo and Dawson counties and the one below shows the graph for cities in Franklin, Gosper, Harlan, Kearney and Phelps counties. The scale is different for both graphs.

7 Day Rolling Average of COVID-19 Cases Per 10,000 Residents by City (Buffalo/Dawson)

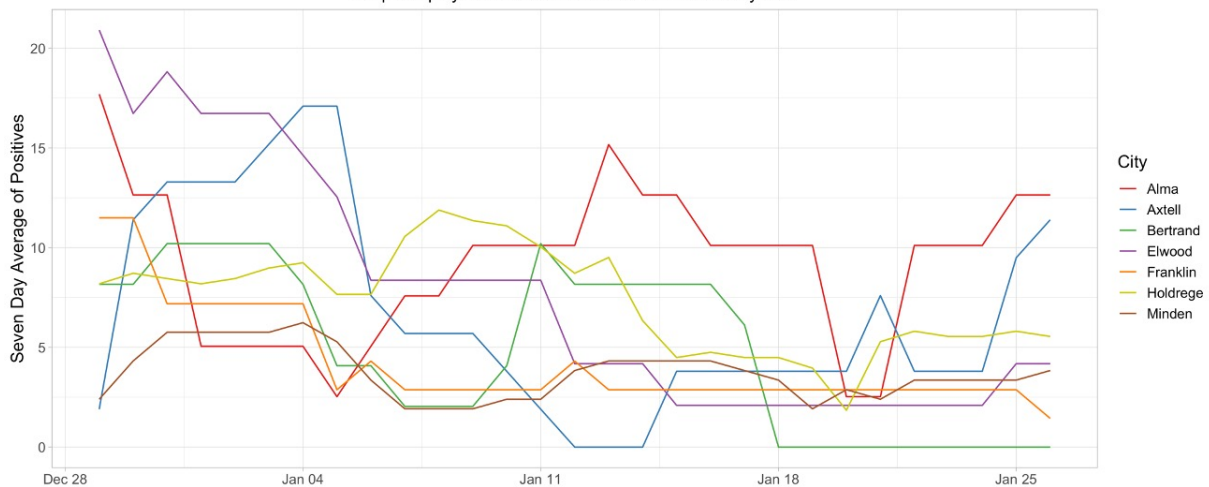
Graph displays data from December 29th to January 26th



Information Updated as of 1/26 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases Per 10,000 Residents by City (Fra/Gos/Har/Kea/Phe)

Graph displays data from December 29th to January 26th



Information Updated as of 1/26 at 8 p.m.

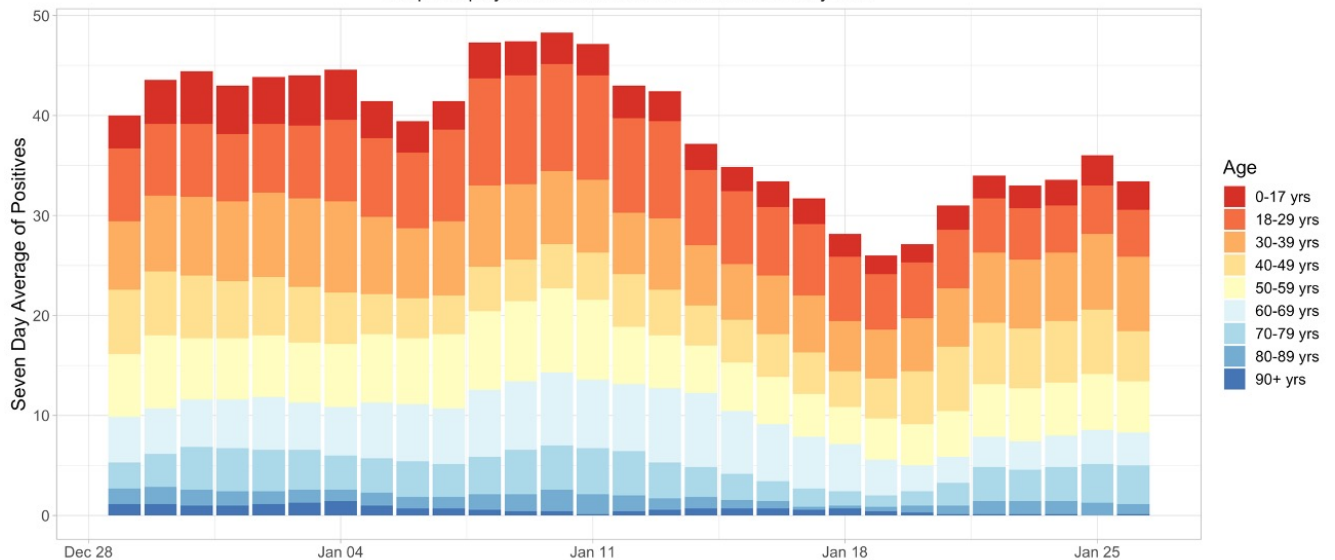
⁹ Please note: When comparing cities, we describe rates per 10,000 population. This is roughly equal to the total population of Lexington (~10,000)



- The first graph below describes the **7-day rolling average** of cases from **December 29 – January 26** by age. Tests were conducted among all persons, including residents of long-term residential facilities. 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 – Jan 26**). Regular and widespread testing in long term care facilities in TRPHD began in early October.

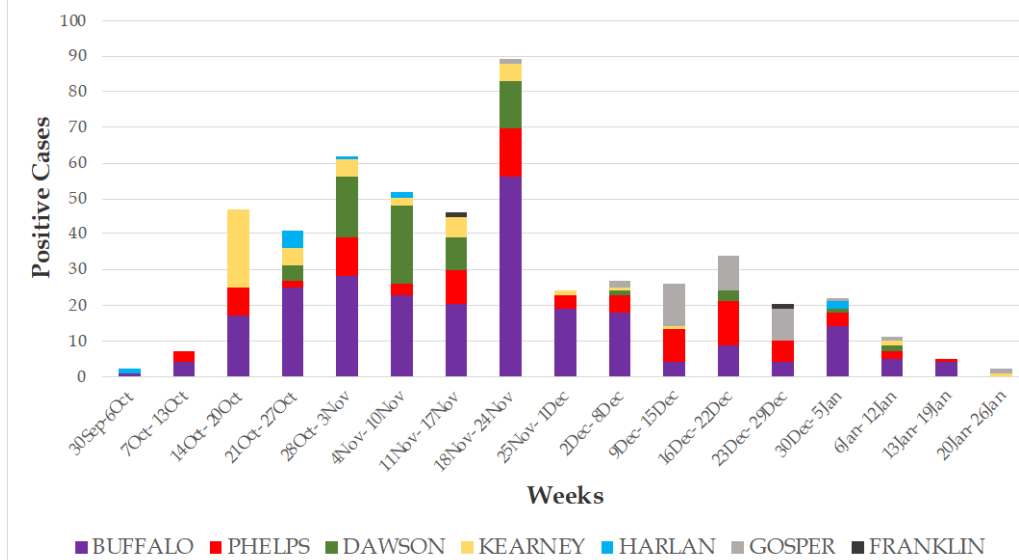
7 Day Rolling Average of COVID-19 Cases in Two Rivers by Age

Graph displays data from December 29th to January 26th



Information Updated as of 1/26 at 8 p.m.

Residential Facilities: TRPHD Positive Cases by Week: Oct 2020 - Jan 2021





Weekly summary

- The daily average of positive cases across Two Rivers Health District continues to decrease. This drop is seen across all counties in the district except Harlan, which continues to have high test positivity rates.
 - Over a quarter of all tests conducted in Harlan county since mid-September have returned positive results, mostly from Alma, Oxford and Republican city.
- There are virtually no COVID positive cases detected in residential and long-term facilities in the past week.
- Testing numbers have increased across the district although testing utilization remains far less than previous. The average tests conducted outside residential facilities is about 60% the number 2 months previously.
- Disruptions due to snow days have resulted in cancellation of scheduled TestNebraska sites in Franklin and Gothenburg. Testing access is expected to remain lower than usual for the next week at least.
- Starting December 15, COVID-19 vaccines have been offered to Phase 1A eligible recipients who are desirous of vaccinations in the district. This is through private clinics, hospitals, and Vaccines For Children (VFC) clinics across the district, including Two Rivers Health Department.
 - The Two Rivers district is just beginning to transition to Phase 1B eligible individuals. (<http://dhhs.ne.gov/Documents/COVID-19-Vaccine-Phase-1B-Prioritization.pdf>)
- To date, 7357 residents have received one or both doses of the vaccine. This accounts for 1.65% of all eligible persons living in Two Rivers Health District. There are over 76,000 persons over 16 years of age living in TRPHD.
- Half of all ICU beds across the district are available currently; COVID-related admissions account for less than 15% of all occupied beds (see <https://www.trphd.org/covid-19/> for details)

To conclude, daily COVID case counts and positivity rates continue to drop across almost all seven counties in TRPHD. The winter storm early this week caused test site cancellations. In addition, generally lower demand for testing has resulted in lower COVID tests conducted last week, and this is expected to last into next week. COVID-19 vaccination has been rolled out across the district since December. About 1.7% of all eligible people (aged 16 years and over) in TRPHD have received at least one dose of vaccine. TRPHD will continue to work with partners to provide vaccinations as vaccine becomes available. Those eligible are advised to visit www.trphd.org for details about registration. 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

- 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).

Population numbers used are from the American Community Survey (ACS 2019 mid-year estimates). For further detail, see: <https://www.census.gov/programs-surveys/acs/data.html>

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.