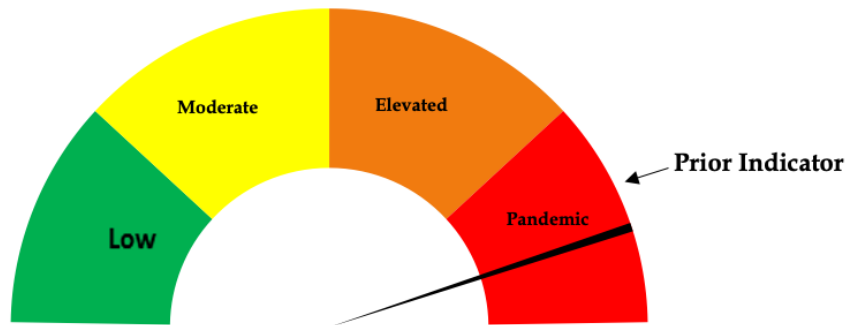


Risk Dial Nov 19, 2020



**Risk Dial for COVID-19
Two Rivers Public Health
Published November 19, 2020**

- COVID-19 cases have increased rapidly across TRPHD in the past 3 weeks. Daily case averages are doubling in 10-14 days, and the number of reported deaths has also risen in the past month.
- There are reports of multiple outbreaks across the district, including in more than one long term care facility.
- Around 40% of currently-occupied beds in TRPHD are occupied by COVID patients. ICU availability is at or around 20% since late October.
- Although testing availability has remained constant across the entire district, increased demand for testing has stressed services.
- Following recent changes in disease investigation procedures, and TRPHD sharing disease investigation and contact tracing with State agencies in Nebraska, outreach and follow-up to COVID-19 positive individuals is delayed and contact tracing through State agencies has stopped. TRPHD continues to contact trace.
- For these reasons, the risk dial is further elevated this week deeper within the 'pandemic' level.



Weekly report Nov 11 - Nov 17 2020

Overview

The weekly report will look at COVID-19 cases in TRPHD across three time periods, presenting graphs and tables before concluding with a weekly summary

- The first set of graphs look at the progress of the pandemic from **April – November 17** (33 weeks) across all counties.
 - We describe the 7-day rolling average ¹and the total (cumulative) deaths in TRPHD since March.
 - We describe the 7-day rolling average of cases by age categories (**Apr – Nov**)
 - We present the 7-day rolling average by age categories for the past 4 weeks (**Oct 21- Nov 17**)
- The second set of graphs look at the time from **March 19 – November 17** (35 weeks), describing the total (cumulative) cases² across all 7 counties and Nebraska and the United States.
 - For ease of comparison, total cases are presented per 100,000 population³
- The tables show positive cases and tests conducted by county, age and gender from **November 11 – November 17** (1 week) and **October 21 – November 17** (4 weeks).
- The last set of graphs look at daily cases (7-day rolling average) from **October 20 – November 17**. Progress of the pandemic is described by county and city of residence. Also depicted are countywide rates per 100,000 population and citywide rates per 10,000 population.

In conclusion, unlike the earlier outbreak in the Spring (Dawson county), the current outbreak of COVID-19 in TRPHD is widespread and disseminated, establishing in younger and older patients. Older residents are contracting the virus at rising rates, and cumulative mortality numbers have increased compared to two months previously. There appears to be early sign of increased pressure on the health system in the region. Residents are advised to exercise utmost caution and adhere to strict preventive measures (social distancing, correct and consistent masking) at all times to protect themselves.

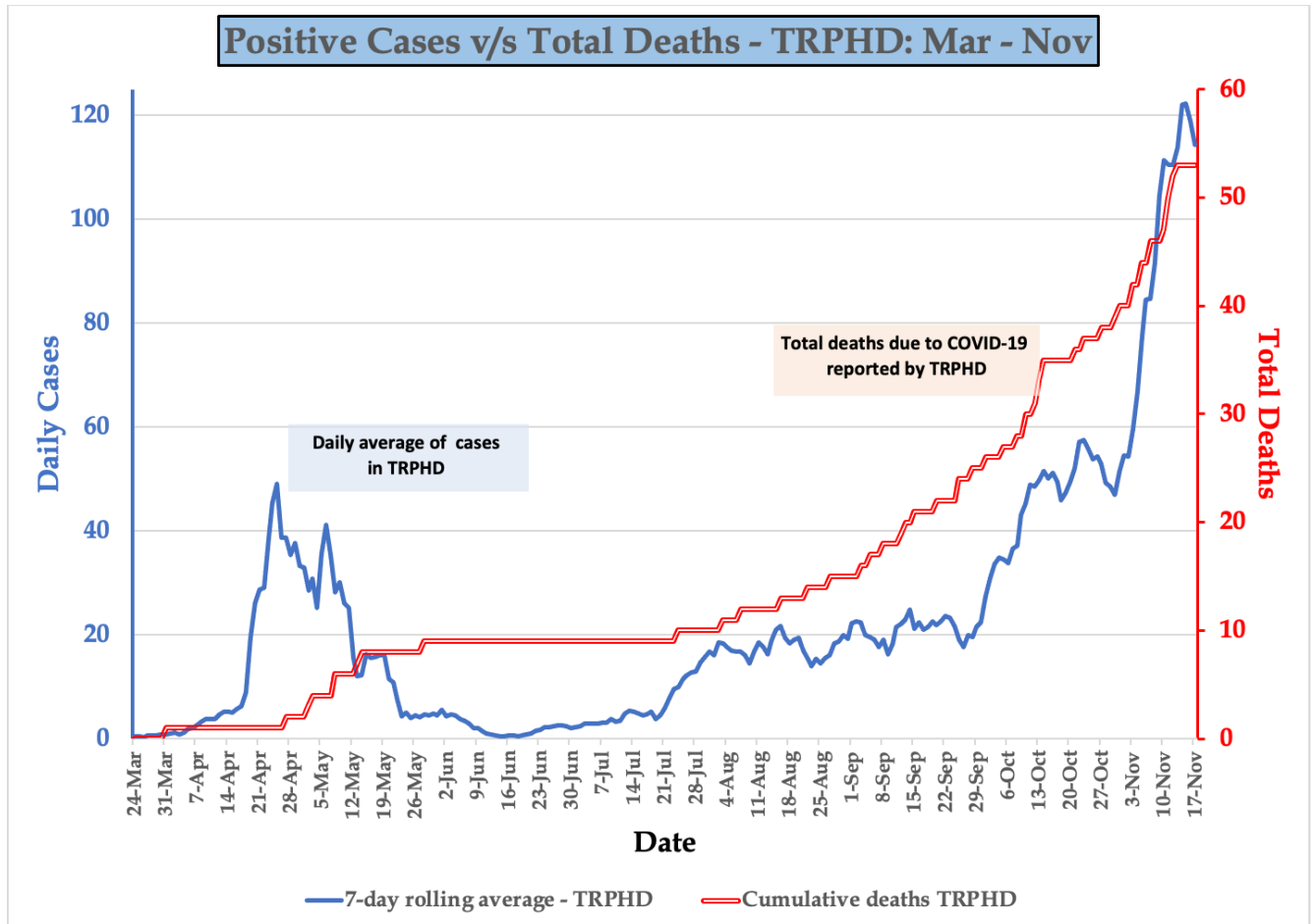
¹ 7-day rolling average refers to the sum of the cases reported on that day and the preceding 6 days divided by 7. This number is presented for each day to ‘smooth out’ the line for cases.

² Cumulative cases refers to all COVID-19 cases since March 19

³ Total cases per 100,000 population = [(Cumulative cases)/2019 mid-year population] * 100,000



- The graph below describes 7-day rolling average of COVID-19 cases across TRPHD since April.
- Also depicted are the total deaths across the district (red). Date refers to the date of death; only deaths confirmed and reported by TRPHD have been included

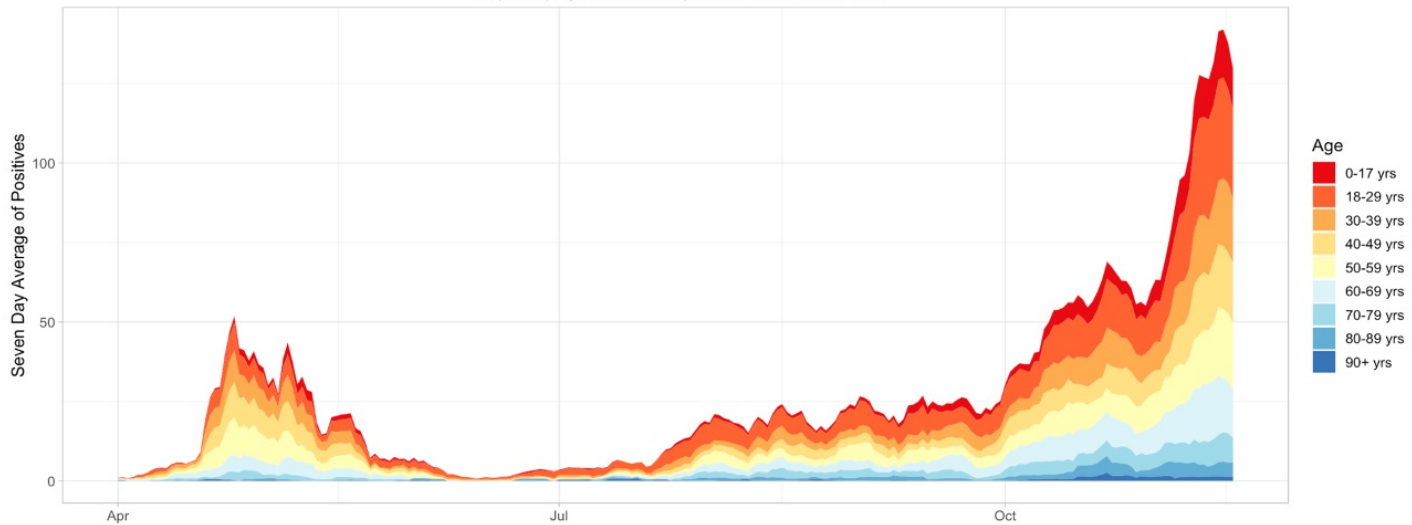




- The graph below describes cases from **April 1 - November 17** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.
- The second graph describes the same data for the last 4 weeks (**Oct 20 - Nov 17**)

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

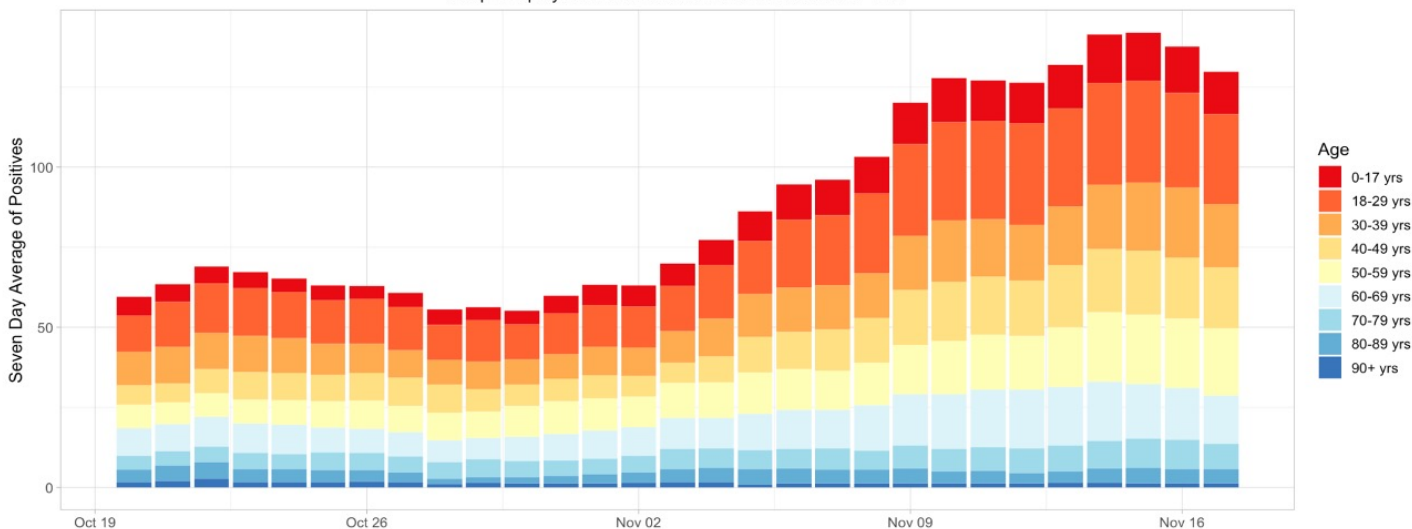
Graph displays data from April 1th to November 17th



Information Updated as of 11/17 at 8 p.m.

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

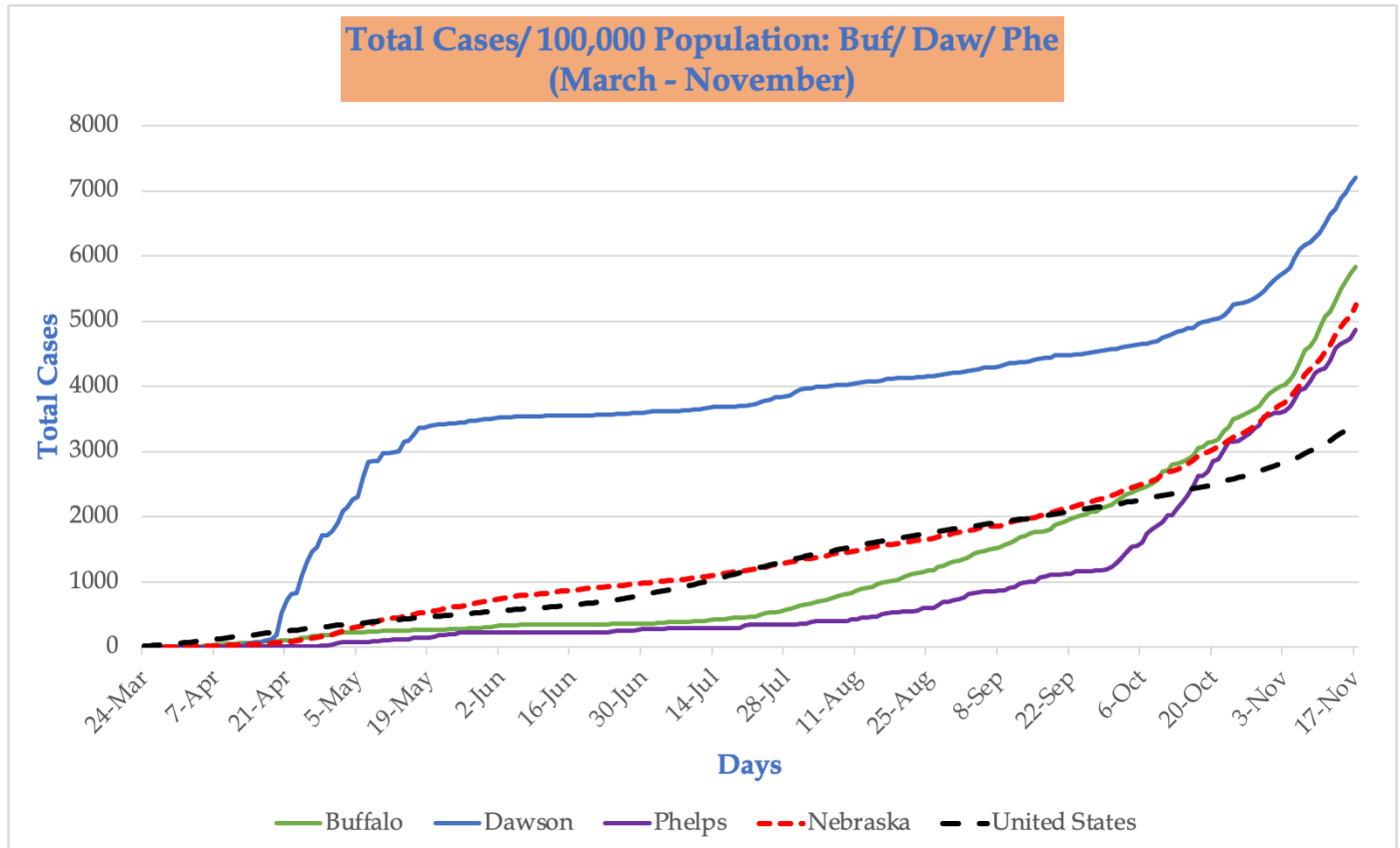
Graph displays data from October 20th to November 17th



Information Updated as of 11/17 at 8 p.m.



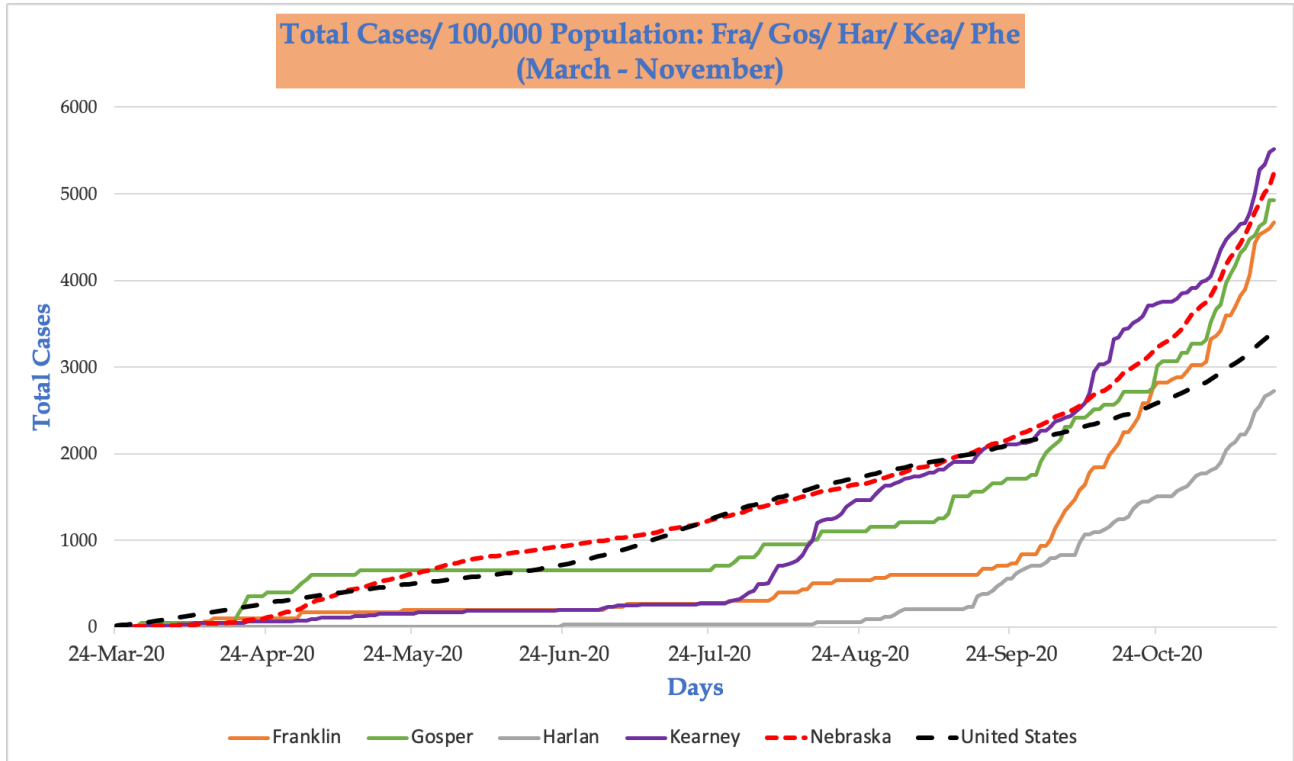
- The graph below describes the **total (cumulative) cases/ 100,000 population** across Buffalo, Dawson and Phelps counties from March 19 to Nov 17. ⁴ The height of the line corresponds to the total cases since March. The graphs are proportional to the population and standardized to 100,000 residents.
- The total cases/ 100,000 population for Nebraska and the USA are also included for comparison.



⁴ Total cases/ 100,000 population = [(Cumulative cases)/2019 mid-year population] * 100,000



- The graph below describes the **total (cumulative) cases/ 100,000 population** across Franklin, Gosper, Harlan and Kearney counties from March 19 to Nov 17. ⁵
- The total cases/ 100,000 population for Nebraska and the USA are also included for comparison.



⁵ Total cases/ 100,000 population = [(Cumulative cases)/2019 mid-year population] * 100,000. The height of the line corresponds to the total cases since March. The graphs are proportional to the population and standardized to 100,000 residents.



Weekly report Nov 11 - Nov 17 2020

Reporting tests done on patients residing in **Buffalo, Dawson, Franklin, Gosper, Harlan, Kearney and Phelps** counties

Reporting period : Nov 11 - Nov 17, 2020 (1 week)
& Oct 21 - Nov 17, 2020 (4 weeks)

Overall testing - previous week & month

A total of 1913 persons were tested in the past week, of whom 820 were positive, and 1093 were negative. A total of 6505 persons were tested in the past 4 weeks, of whom 2416 were positive, and 4089 were negative. Details are as below.

	Nov 11 - Nov 17 (1 week)			Oct 21 - Nov 17 (4 weeks)		
	Negative	Positive	Total	Negative	Positive	Total
Number	1093	820	1913	4089	2416	6505
Percentage	57.1%	42.8%	100.0%	62.8%	37.1%	100.0%

A total of 31,662 persons have been tested to date across TRPHD. Details are as below

	Total Population	Cumulative tests Mar 01- Nov 17	Cumulative Positives Mar 01- Nov 17	Cumulative Positivity Rate	7-Day Rolling Average (Nov 17, 2020)	7-Day Rolling Average/ 100000 population
Buffalo	49659	16,952	2,941	17.35%	61.57	123.99
Dawson	23595	7,827	1,720	21.98%	26.29	111.42
Franklin	2979	872	146	16.74%	4.14	138.97
Gosper	1990	522	99	18.97%	1.86	93.47
Harlan	3380	612	102	16.67%	3.00	88.76
Kearney	6495	2,171	366	16.86%	8.57	131.95
Phelps	9034	2,706	447	16.52%	9.00	99.62
Total	97,132	31,662	5,821	18.38%	114.43	117.80

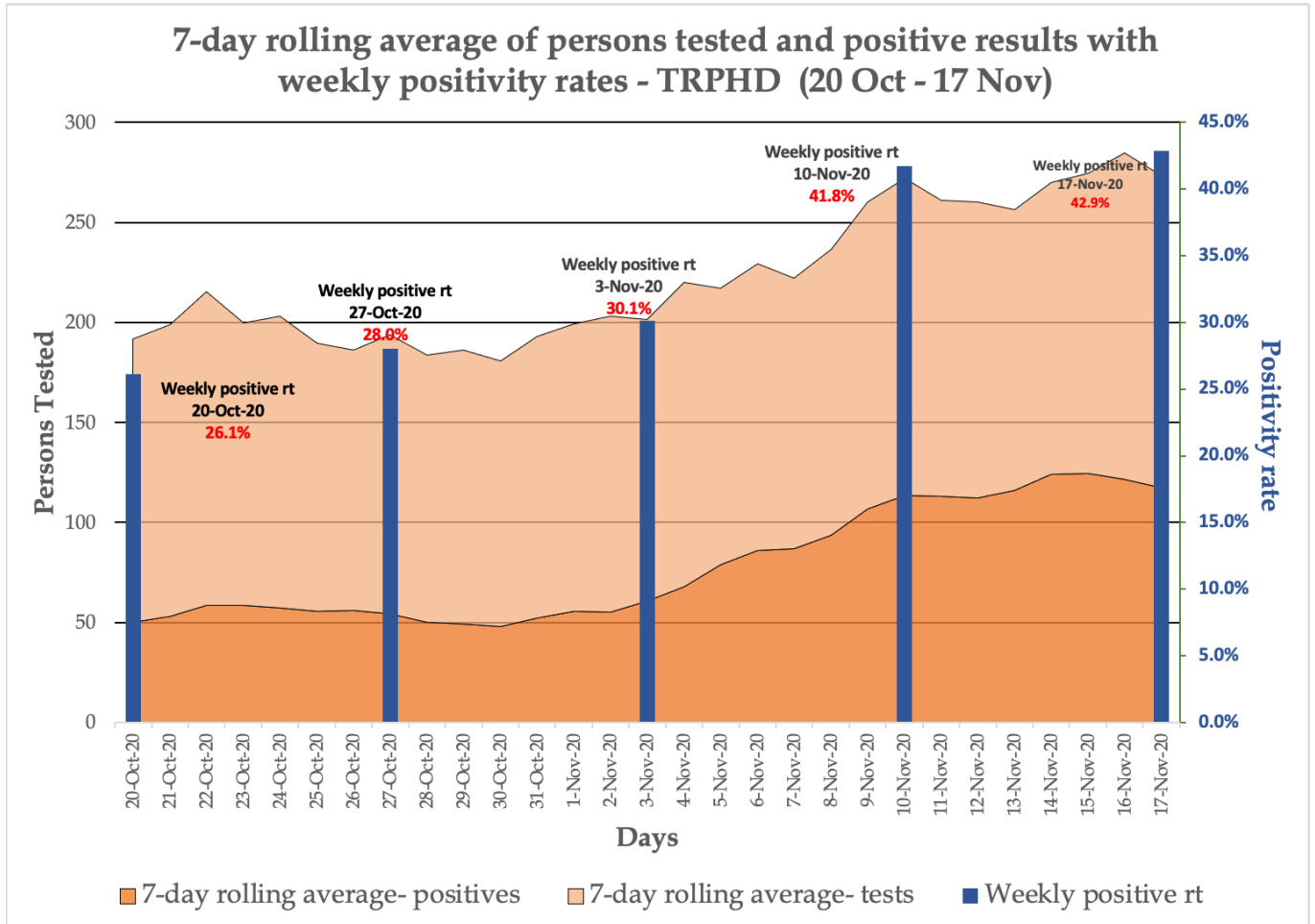


The following table gives details of positive cases in the past week and past 4 weeks by county, age categories and gender

	Nov 11 - Nov 17 (1 week)			Oct 21 - Nov 17 (4 weeks)		
	Total persons tested	Positive cases	P. rate (%)	Total persons tested	Positive cases	P. rate (%)
County						
Buffalo	1108	433	39.1%	3583	1,361	38.0%
Dawson	377	182	48.3%	1405	526	37.4%
Franklin	74	29	39.2%	192	69	35.9%
Gosper	29	13	44.8%	127	45	35.4%
Harlan	39	20	51.3%	113	53	46.9%
Kearney	120	62	51.7%	438	135	30.8%
Phelps	122	62	50.8%	497	189	38.0%
Data missing/ not disclosed	44	19	43.2%	150	38	25.3%
Total	1913	820	42.9%	6505	2416	37.1%
Age (in yrs)						
0-17	243	70	28.8%	937	222	23.7%
18-29	428	185	43.2%	1453	548	37.7%
30-39	286	119	41.6%	980	354	36.1%
40-49	272	119	43.8%	809	333	41.2%
50-59	262	132	50.4%	825	359	43.5%
60-69	214	105	49.1%	739	318	43.0%
70-79	100	50	50.0%	394	157	39.8%
80-89	77	29	37.7%	250	94	37.6%
90+	31	11	35.5%	118	31	26.3%
Total	1913	820	42.9%	6505	2416	37.1%
Gender						
Female	1028	446	43.4%	3603	1,340	37.2%
Male	878	369	42.0%	2828	1,043	36.9%
Data missing/ not disclosed	7	5	71.4%	74	33	44.6%
Total	1913	820	42.9%	6,505	2,416	37.1%



- The following bar graph describes the 7-day rolling averages of **total tests** and **positive COVID-19 cases** in **TRPHD** for the past four weeks (Oct 20 - Nov 17). Also shown is the **weekly positivity rate**

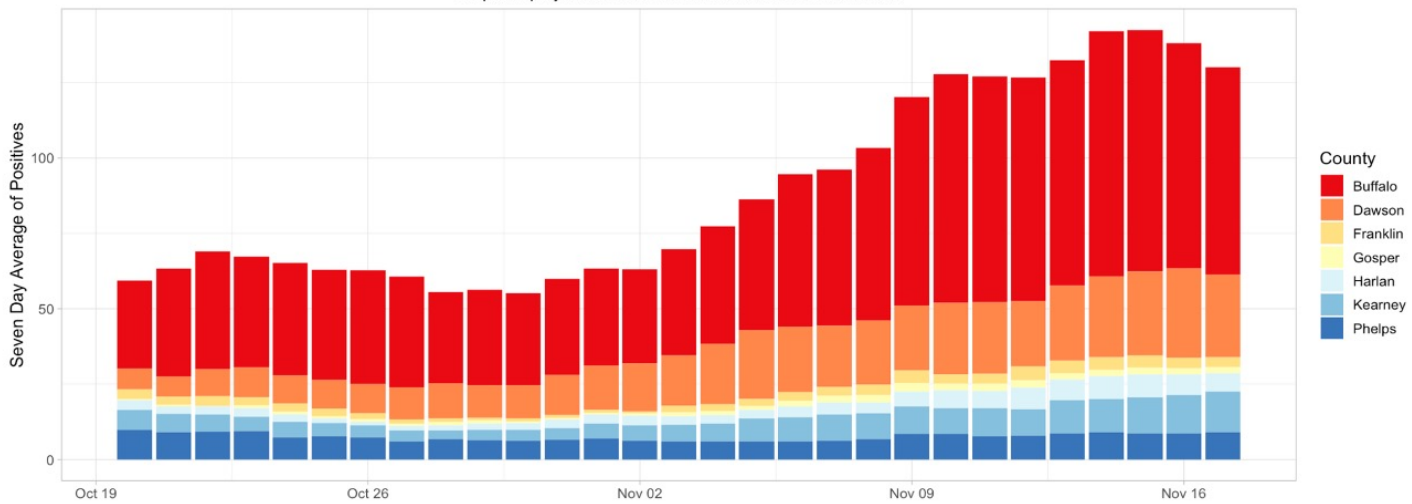




- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **county** for the past four weeks (Oct 20 – Nov 17).
- The line graph describes the same data per 100,000 population⁶

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

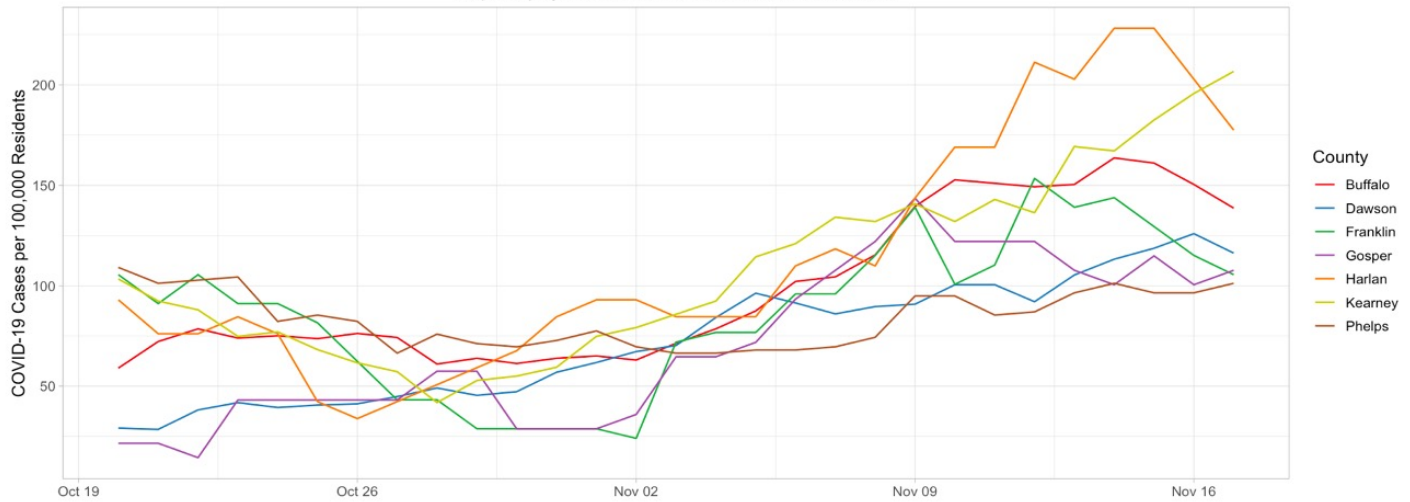
Graph displays data from October 20th to November 17th



Information Updated as of 11/17 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 October 20th to November 17th



Information Updated as of 11/17 at 8 p.m.

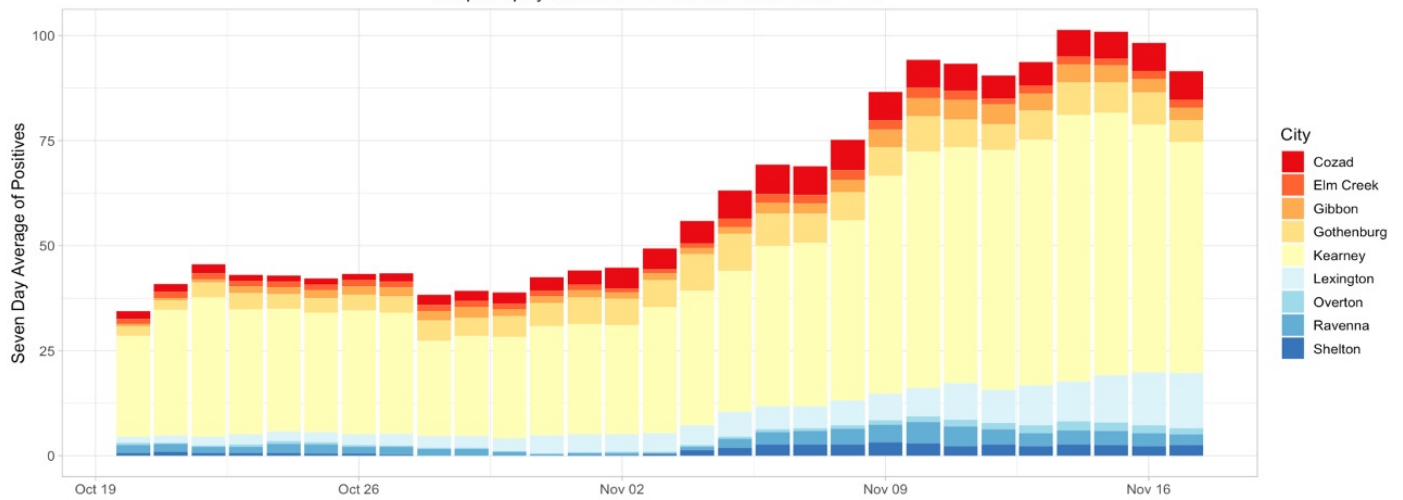
⁶ Please note: an earlier edition of this graph represented the same data per 10,000 population. In general, counties are described per 100,000 population and cities per 10,000 population.



- The following bar graph describes the 7-day rolling averages by city for the past four weeks (Oct 20 – Nov 17) in Buffalo and Dawson counties & the one below shows cities in Franklin, Gosper, Harlan, Kearney and Phelps. The **scale is different** for both graphs.

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

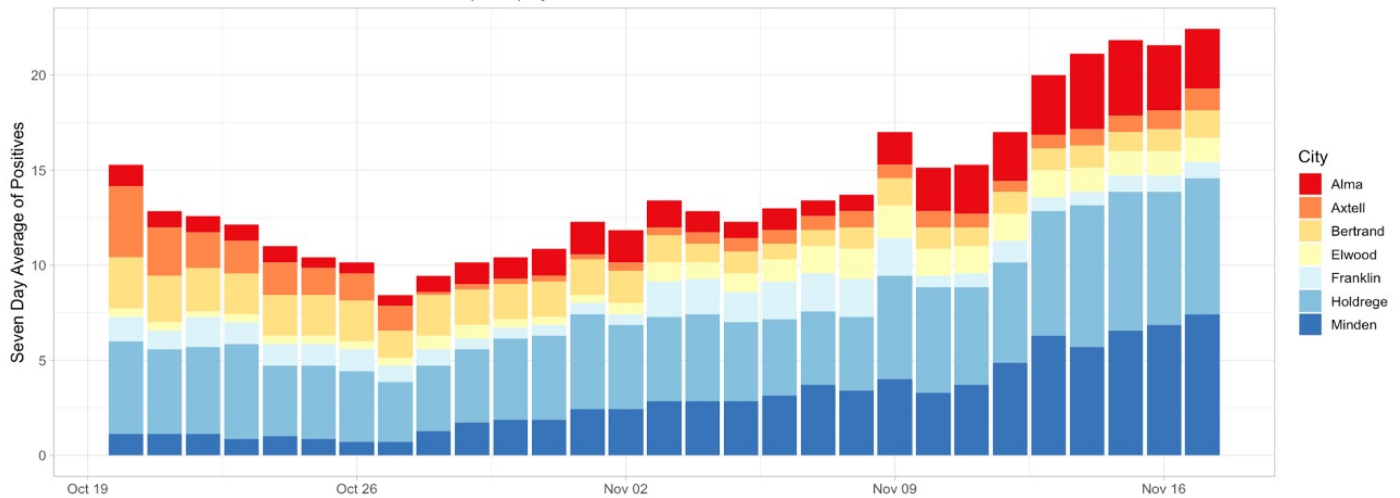
Graph displays data from October 20th to November 17th



Information Updated as of 11/17 at 8 p.m.

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

Graph displays data from October 20th to November 17th



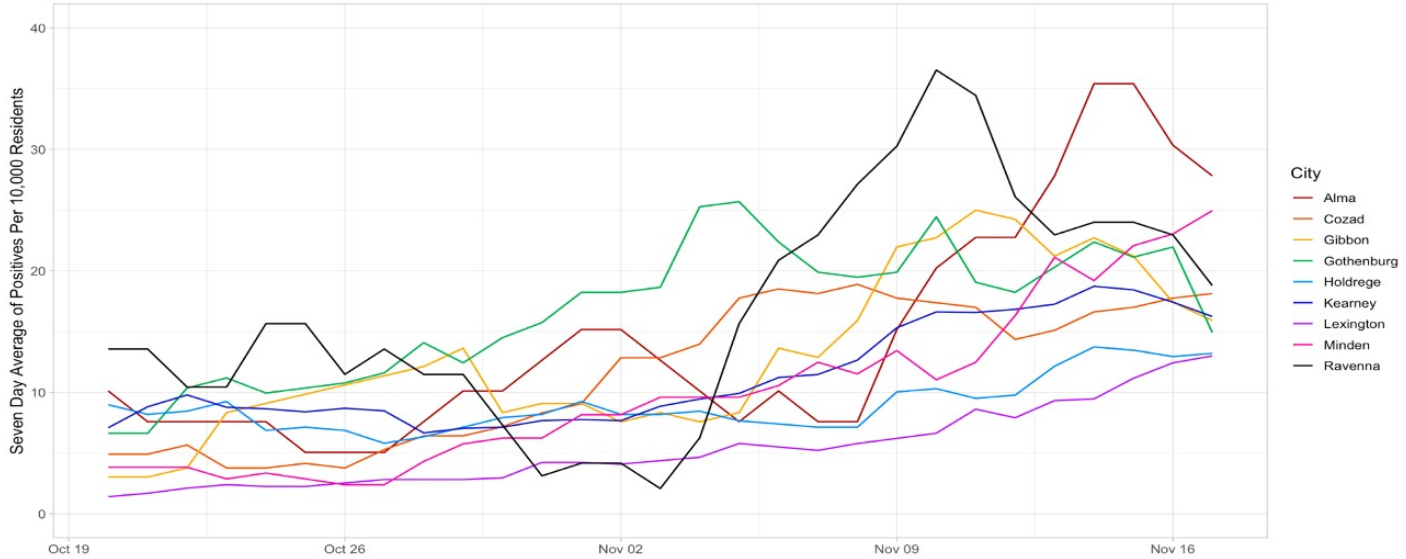
Information Updated as of 11/17 at 8 p.m.



- 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 (Oct 20 - Nov 17) ⁷
- The top graph describes cities with more than 1100 residents and the graph below describes smaller cities (<1100 residents). The **scale is identical** for both graphs.

7 Day Rolling Average of COVID-19 Cases Per 10,000 Residents in Cities > 1,100 Residents

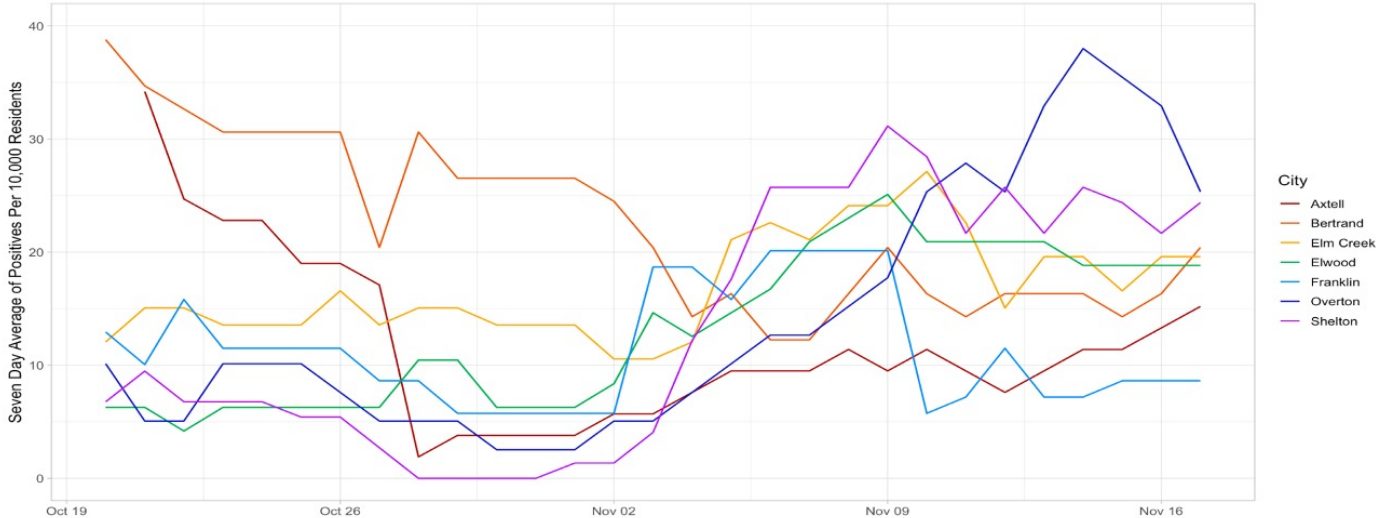
Graph displays data from October 20th to November 17th



Information Updated as of 11/17 at 8 p.m.

7 Day Rolling Average of COVID-19 Cases Per 10,000 Residents in Cities with 500-1,099 in Residents

Graph displays data from October 20th to November 17th



Information Updated as of 11/17 at 8 p.m.

⁷ In general, counties are described per 100,000 population and cities per 10,000 population.



Weekly summary

- Rising daily case counts and persistently high positivity rates continue across all districts in Two Rivers Health District.
- Positivity rates across the district were over 40% for the second week overall, even as the average number of tests conducted a week have risen by a third in the past month.
- Total COVID deaths across the district were less than 10 through the Spring and the Summer, continuing this trend till early August. Cumulative death counts have started to rise. Deaths shown are only ones reported publicly by the health department, hence this number is certain to increase as cases currently being processed are reported to the public
- Case counts have increased across all counties in TRPHD, both in absolute and relative terms. Larger cities all show an upward trend in total and per-capita cases. The relentlessly upward trend of cases in cities like Kearney is now being replicated in other cities like Lexington and Minden.
- A similar trend is seen with cumulative cases per 100,000 population. Cumulative rates are increasing across the United States, and Nebraska has seen a sharp increase in the past month. However, the counties in TRRPHD also showed commensurate case growth during this time. Currently, Buffalo, Dawson and Kearney counties have a cumulative case rate that is higher than the statewide average.
- The high positivity rates among persons aged 60 years and over is cause for concern, This population might include persons like residents of long term care facilities who are regularly tested, but also at greater risk of developing complications of COVID-19 infection
- Daily rolling average calculated for 10,000 population show a steady upward trend across the district. The increase is secular across all 7 counties and seems to continue the rising trend of the past two weeks.
- Increased COVID hospitalization rates and ICU usage across the district point to signs of strain on intensive and medical/ surgical bed capacity.
- *To conclude, unlike the earlier outbreak in the Spring (Dawson county), the current outbreak of COVID-19 in TRPHD is widespread and disseminated, establishing in younger and older patients. Older residents are contracting the virus at rising rates, and cumulative mortality numbers have increased compared to two months previously. There appears to be early sign of increased pressure on the health system in the region. Residents are advised to exercise utmost caution and adhere to strict preventive measures (social distancing, correct and consistent masking) at all times to protect themselves*