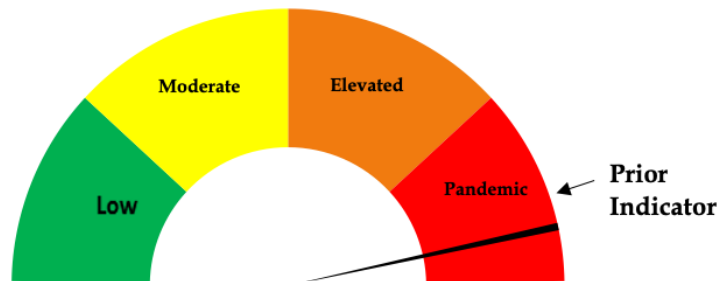


Risk Dial Nov 25 2020



Risk Dial for COVID-19
Two Rivers Public Health
Published November 25,
2020

- COVID-19 cases have increased rapidly across TRPHD in the past 4 weeks. Daily case averages have doubled in all counties except Dawson and Phelps in the past three weeks. Dawson and Phelps saw a roughly 50% increase in cases.
- There are reports of smaller clusters of new COVID cases in smaller cities in Kearney, Dawson and Buffalo counties.
- Over 40% of currently-occupied beds in TRPHD are for COVID-related hospitalizations. ICU availability is currently lower than 8%.
- Due to recent management issues with State COVID case investigation teams, dramatically increased volume of positive cases and the State's inability to complete disease investigation or contact tracing, public health efforts have been reduced across the district over the past month.
- Testing availability will be limited across the district for the remainder of this week due to the Thanksgiving Holiday.
- Test turnaround times from sample collection to contact tracing have increased. Although most patients are informed as soon as results become available, the contact tracing and subsequent follow-up by the department seems to be delayed over the past month.
- For these reasons, the risk dial is further elevated this week deeper within the 'pandemic' level.



Weekly report Nov 18 - Nov 24 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 1 - November 24** (36 weeks) across all counties.
 - We describe the 7-day rolling average ¹across TRPHD since April, describing cases by age categories (**Apr - Nov**)
 - We describe total (cumulative) cases² across all counties in TRPHD since Mar 19
- We present the 7-day rolling average by county from **July 1 - Nov 24** (21 weeks)
 - We describe the progression across 7 counties in TRPHD from July - Nov.
 - For ease of comparison, we present additional graphs describing 7-day rolling averages per 100,000 population³, as well as the graph for the United States and the state of Nebraska.
- The tables show positive cases and tests conducted by county, age and gender from **November 18 - November 24** (1 week) and **October 28 - November 24** (4 weeks).
- The last set of graphs look at daily cases (7-day rolling average) from **October 27 - November 24**. Progress of the pandemic 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.

To conclude, daily case counts continue to rise rapidly across TRPHD. Daily incidence rates have shown signs of sustained acceleration since early November. This trend is expected to continue for the upcoming week at least. There appears to be reduced ICU availability across hospitals in the district as well as sustained high rates of COVID-related medical/surgical bed usage. 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 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 Cumulative cases refers to all COVID-19 cases since March 19

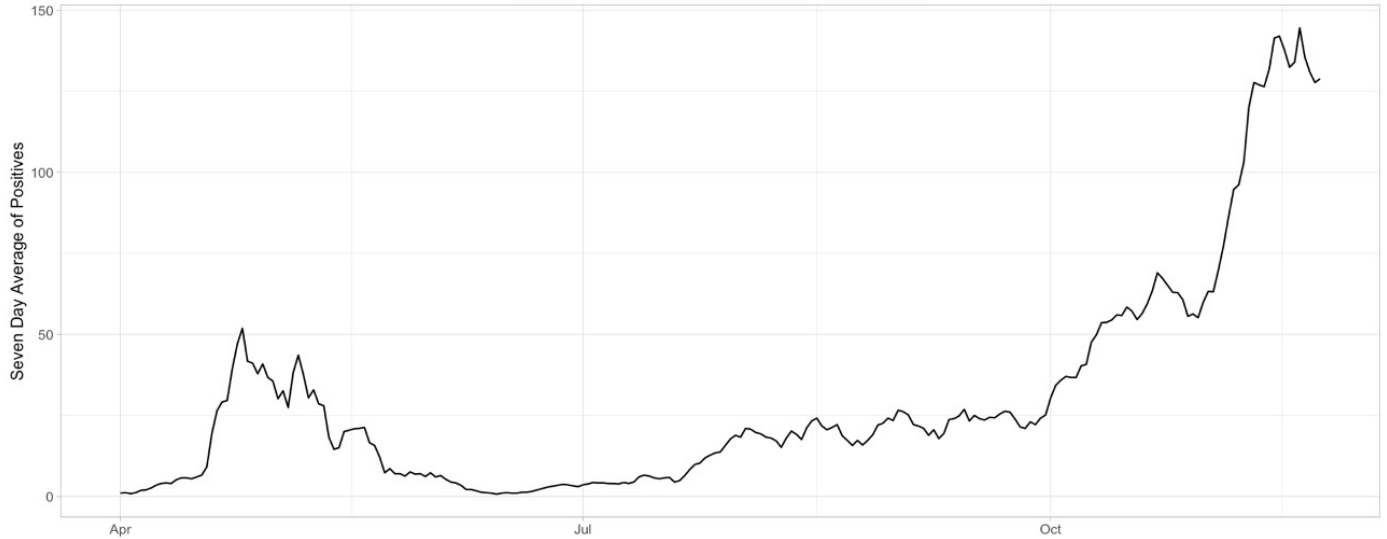
³ Total cases per 100,000 population = [(Cumulative cases)/2019 mid-year population] * 100,000



- The graph below describes 7-day rolling average of COVID-19 cases across TRPHD from **April 1 - November 17**.
- The second graph below describes cases by age 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.

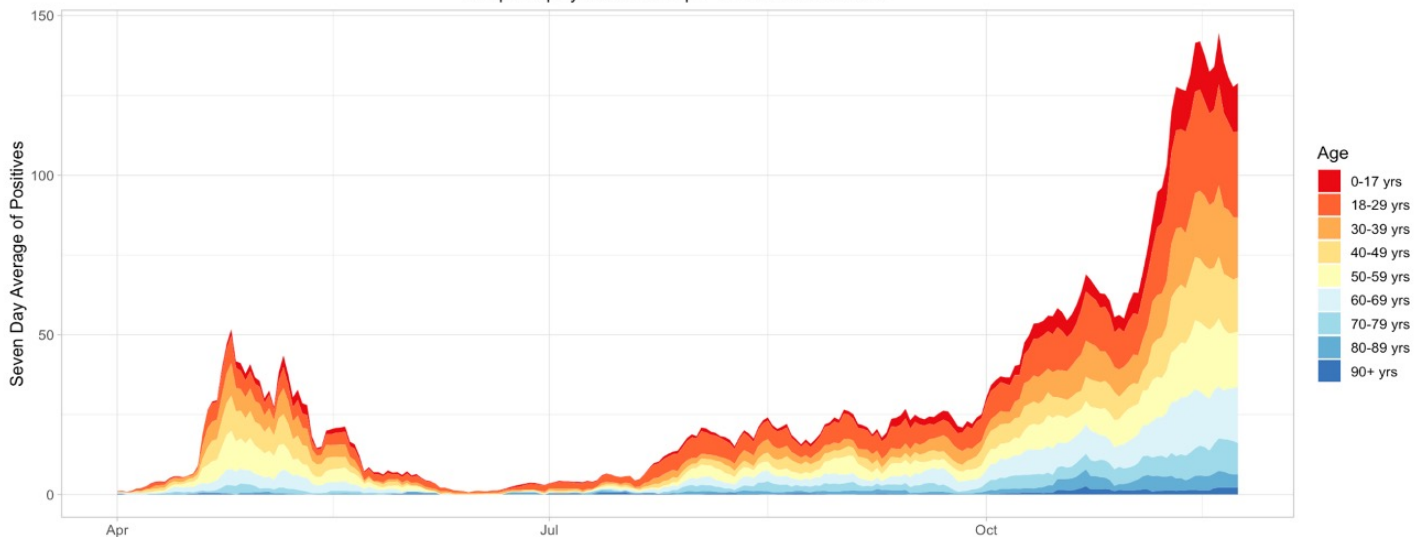
7 Day Rolling Average of Two Rivers

Graph displays data from April 1th to November 23rd



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

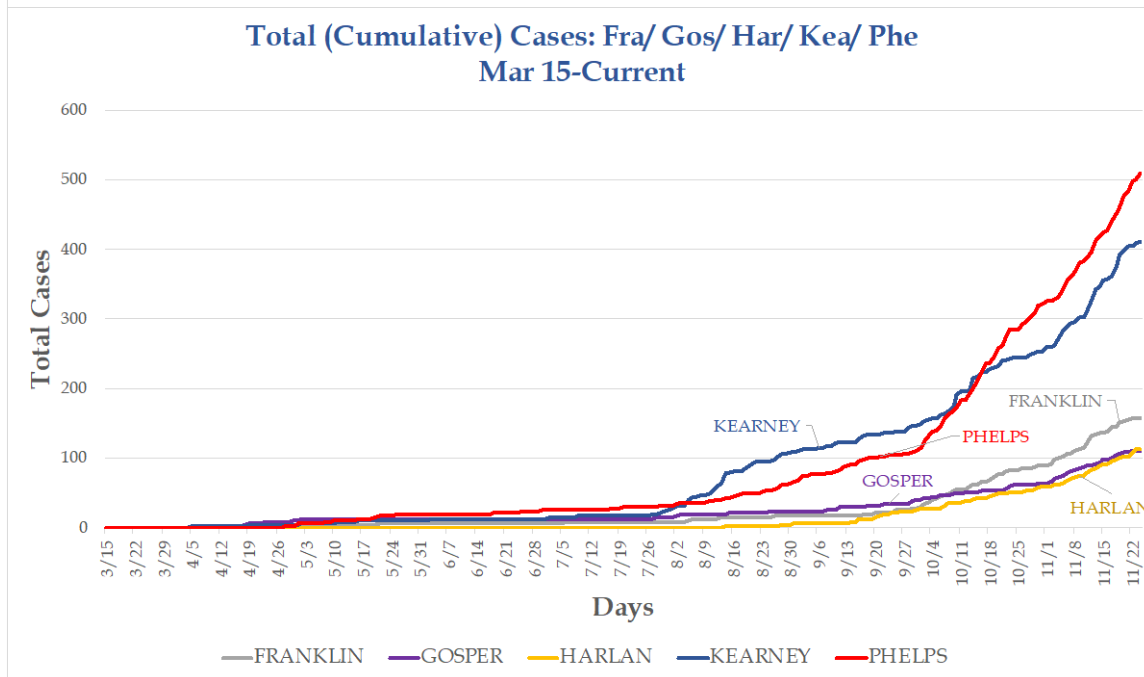
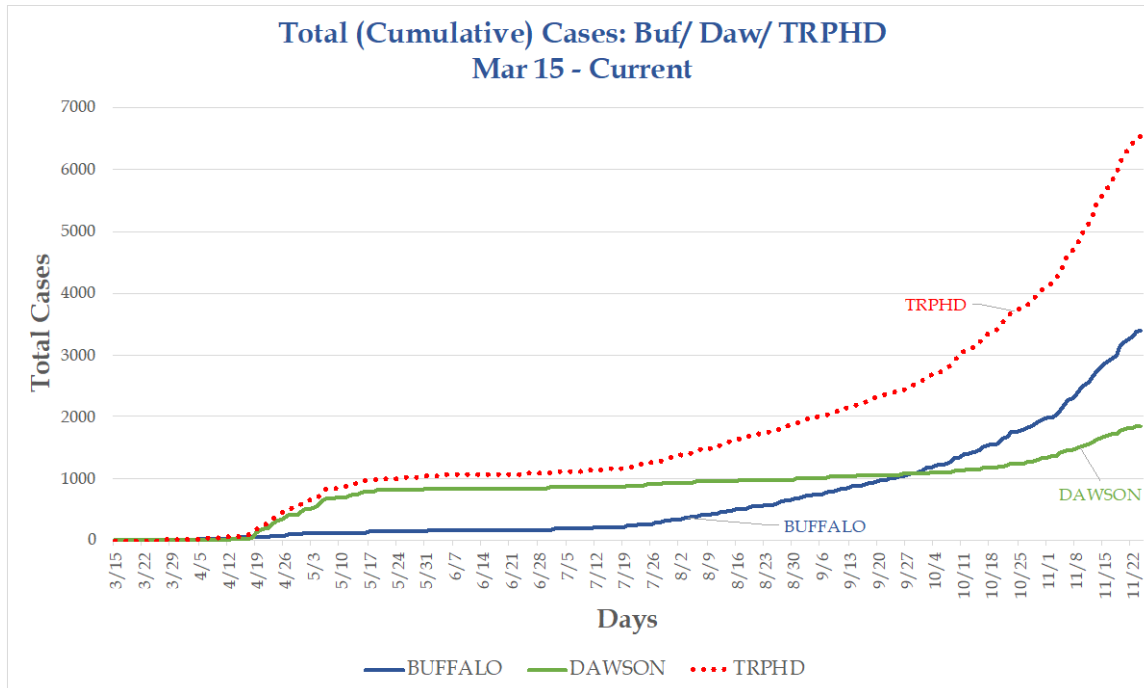
Graph displays data from April 1th to November 23rd



Information Updated as of 11/23 at 8 p.m.



- The graph below describes the **total (cumulative) cases** across all 7 counties from March 19 to Nov 17. The height of the line corresponds to all cases in the county since March.
- Graphs are presented separately for Buffalo and Dawson, and for Franklin, Gosper, Harlan, Kearney and Phelps counties. Scales are different for both graphs.

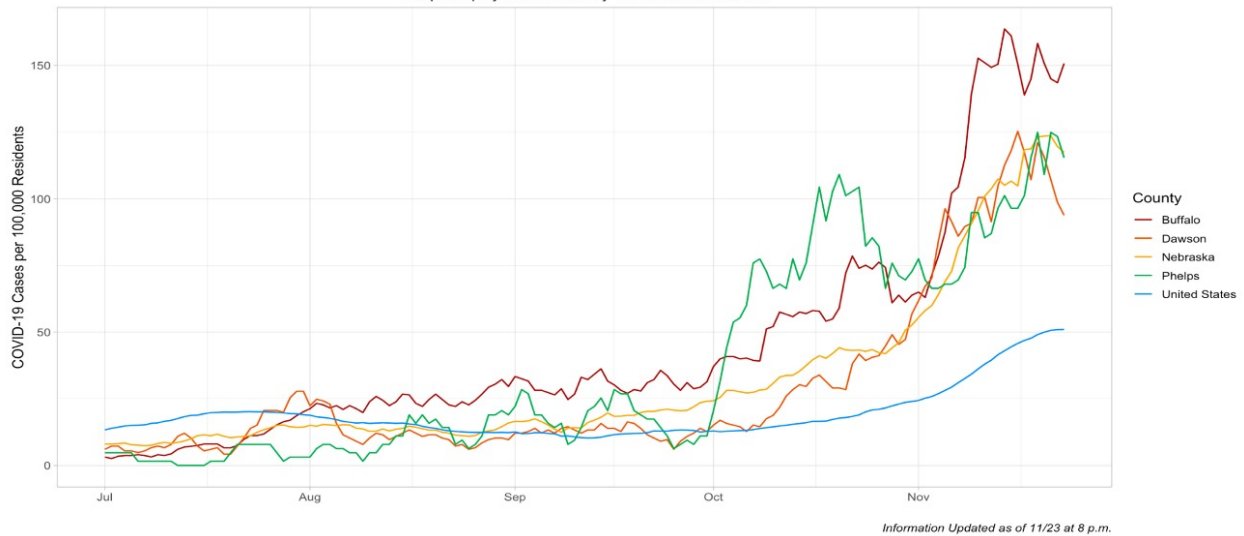




- The graph below describes the **7-day rolling average / 100,000 population** ⁴ across all counties in TRPHD from **July 1 to November 24**. Total cases/ 100,000 population for Nebraska and the USA are also included for comparison.
- Graphs are presented separately for Buffalo, Dawson and Phelps, and for Franklin, Gosper, Harlan and Kearney counties. Scales are different for both graphs.

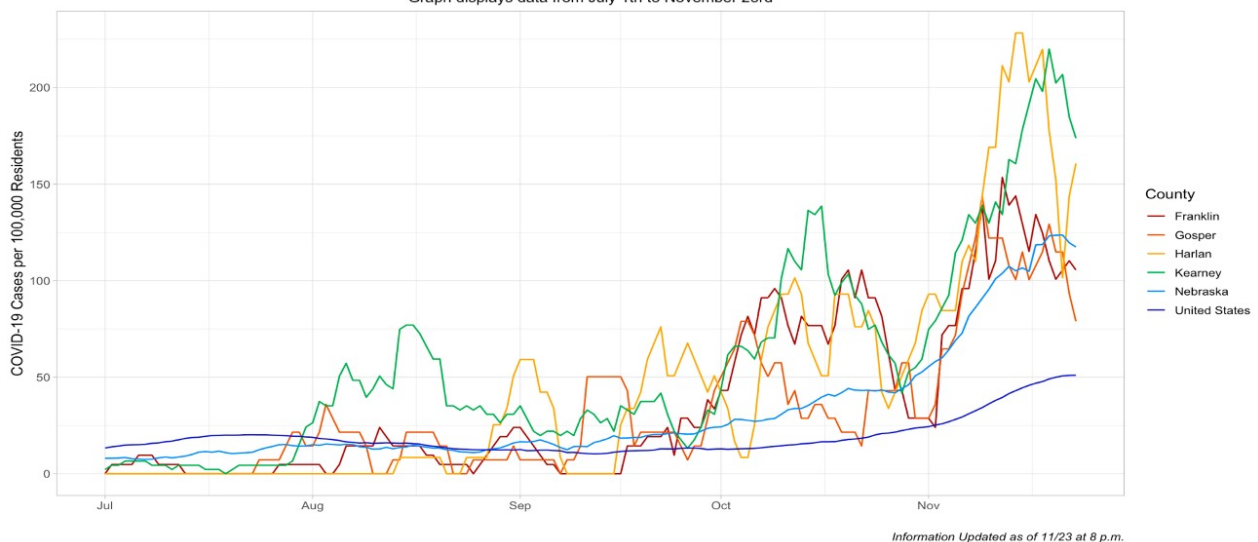
7 Day Rolling Average of COVID-19 Cases Per 100,000 Resident in Buffalo, Dawson, and Phelps County

Graph displays data from July 1th to November 23rd



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

Graph displays data from July 1th to November 23rd



⁴ 7-day rolling average/ 100,000 population = [(Average cases over current day and previous six)/(2019 mid-year population)] * 100,000.



Weekly report Nov 18 - Nov 24 2020

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

Reporting period : Nov 18 - Nov 24, 2020 (1 week)
& Oct 28 - Nov 24, 2020 (4 weeks)

Overall testing - previous week & month

A total of 1812 persons were tested in the past week, of whom 732 were positive, and 1080 were negative. A total of 6956 persons were tested in the past 4 weeks, of whom 2767 were positive, and 4189 were negative. Details are as below.

	Nov 18 - Nov 24 (1 week)			Oct 28 - Nov 24 (4 weeks)		
	Negative	Positive	Total	Negative	Positive	Total
Number	1080	732	1812	4189	2767	6956
Percentage	59.6%	40.4%	100.0%	60.22%	39.78%	100.0%

A total of 6590 persons have tested positive to date across TRPHD. Excluding those cases missing details of county and city of residence(48 cases), they are as below:

	Total Population	Cumulative Positives Mar 01- Nov 24	7-Day Rolling Average (Nov 23, 2020)	7-Day Rolling Average/ 100000 population
Buffalo	49659	3,381	68.14	137.22
Dawson	23595	1,855	21.14	89.60
Franklin	2979	159	2.71	90.97
Gosper	1990	109	1.71	85.93
Harlan	3380	119	2.86	84.62
Kearney	6495	411	7.29	112.24
Phelps	9034	508	9.71	107.48
Total	97,132	6,542	113.57	116.92



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

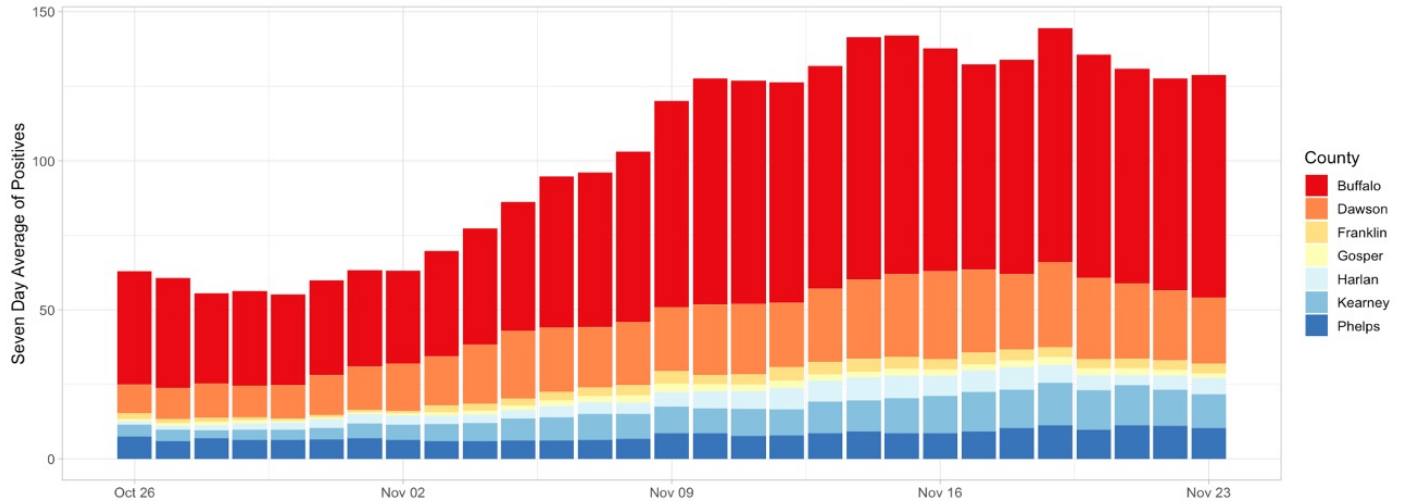
	Nov 18 - Nov 24 (1 week)			Oct 28 - Nov 24 (4 weeks)		
	Total persons tested	Positive cases	P. rate (%)	Total persons tested	Positive cases	P. rate (%)
County						
Buffalo	1070	443	41.4%	3934	1,574	40.0%
Dawson	350	134	38.3%	1438	587	40.8%
Franklin	31	13	41.9%	190	71	37.4%
Gosper	19	10	52.6%	110	49	44.5%
Harlan	38	16	42.1%	134	64	47.8%
Kearney	113	47	41.6%	488	169	34.6%
Phelps	138	59	42.8%	497	212	42.7%
Data missing/ not disclosed	53	10	18.9%	165	41	24.8%
Total	1812	732	40.4%	6956	2767	39.8%
Age (in yrs)						
0-17	273	93	34.1%	1017	285	28.0%
18-29	428	153	35.7%	1591	618	38.8%
30-39	238	108	45.4%	1023	409	40.0%
40-49	248	101	40.7%	881	376	42.7%
50-59	204	90	44.1%	856	397	46.4%
60-69	215	95	44.2%	788	364	46.2%
70-79	110	58	52.7%	410	184	44.9%
80-89	55	23	41.8%	249	100	40.2%
90+	41	11	26.8%	141	34	24.1%
Total	1812	732	40.4%	6956	2767	39.8%
Gender						
Female	986	375	38.0%	3830	1,499	39.1%
Male	810	352	43.5%	3063	1,235	40.3%
Data missing/ not disclosed	16	5	31.3%	63	33	52.4%
Total	1812	732	40.4%	6,956	2,767	39.8%



- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **county** for the past four weeks (Oct 26 – Nov 23).
- The line graph describes the same data per 100,000 population.⁵ 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

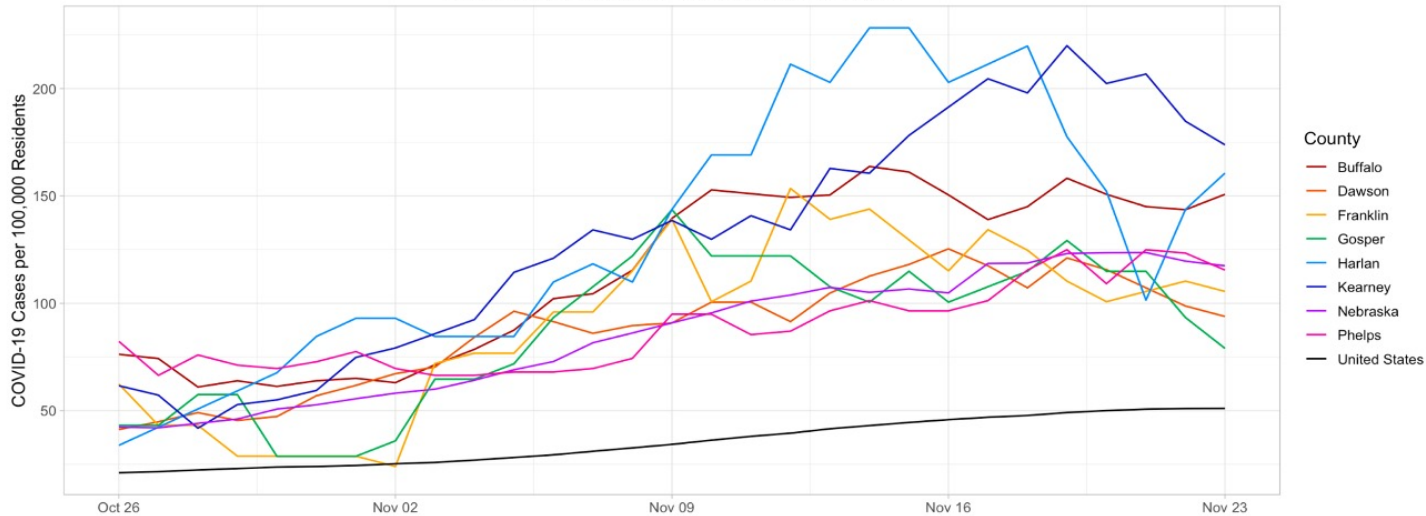
Graph displays data from October 26th to November 23rd



Information Updated as of 11/23 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 26th to November 23rd



Information Updated as of 11/23 at 8 p.m.

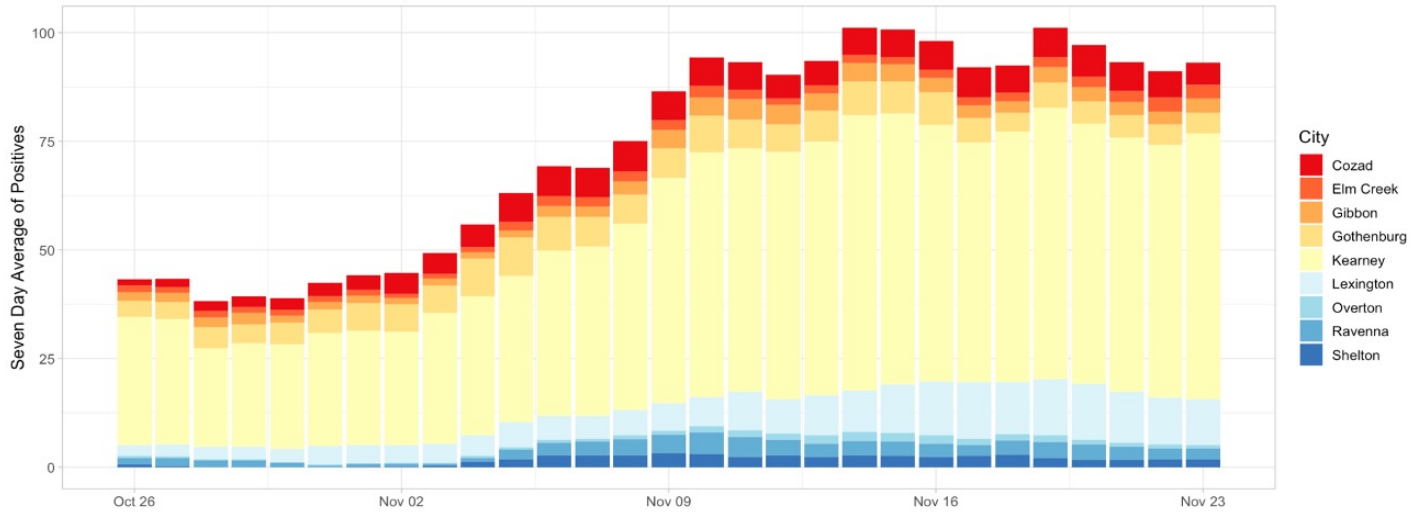
⁵ Please note: When comparing counties, we describe rates per 100,000 population. This is roughly equal to the total population of TRPHD (~97,000)
 516 W 11th Street, Suite 108
 Kearney, NE 68845



- The following bar graph describes the 7-day rolling averages by city for the past four weeks (Oct 26 - Nov 23) 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

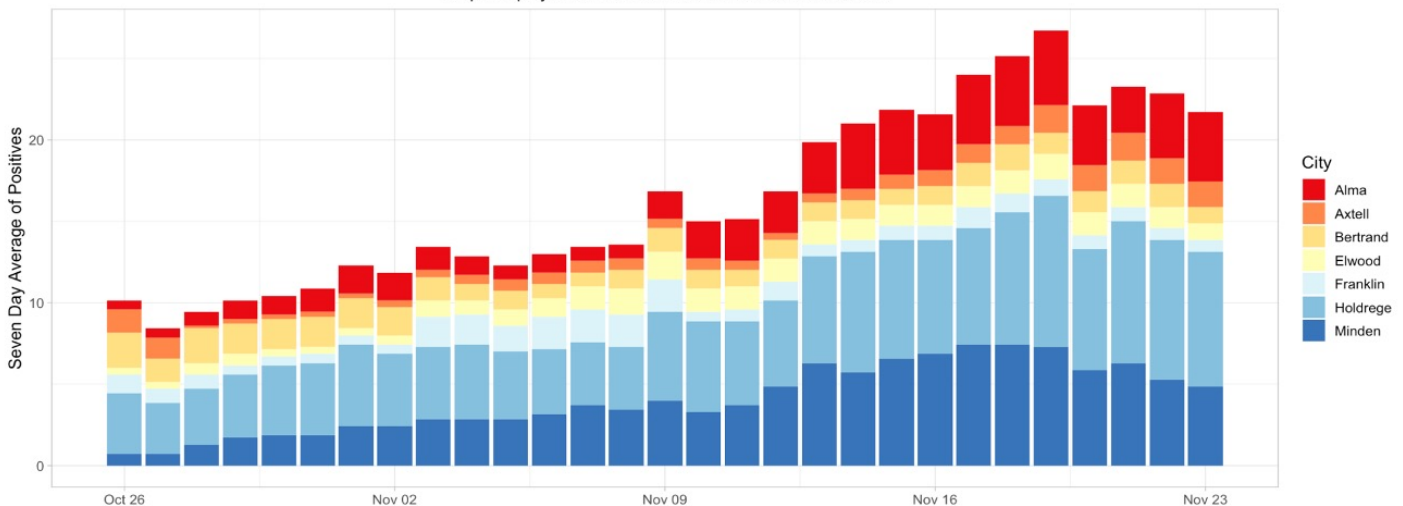
Graph displays data from October 26th to November 23rd



Information Updated as of 11/23 at 8 p.m.

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

Graph displays data from October 26th to November 23rd



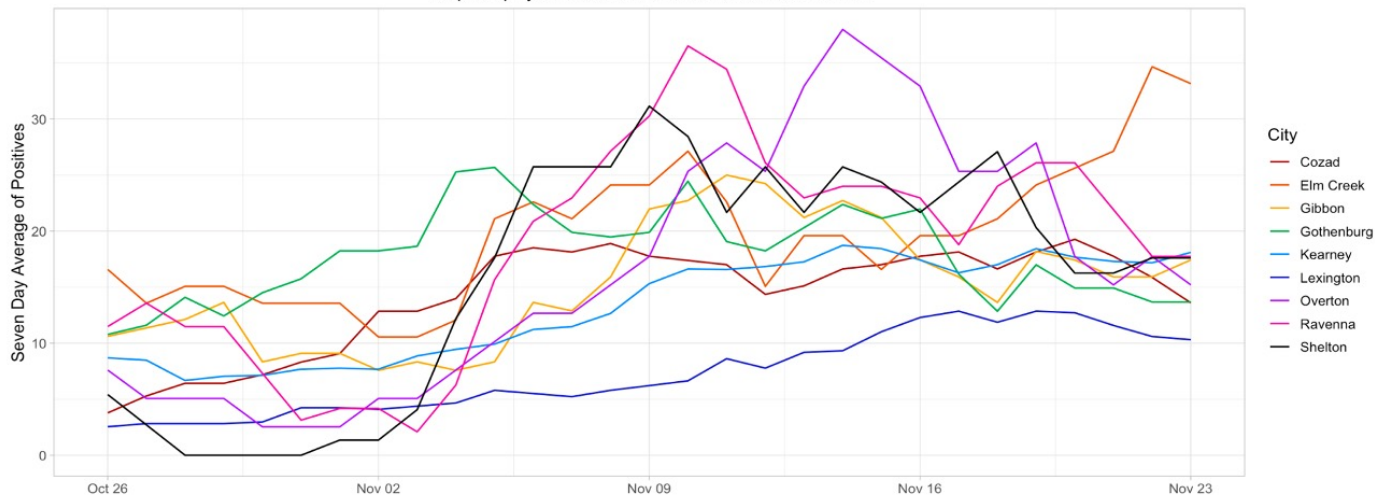
Information Updated as of 11/23 at 8 p.m.



- 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 26 – Nov 23) ⁶
- The top graph describes cities in Buffalo and Dawson counties and the graph below describes cities in Franklin, Gosper, Harlan, Kearney and Phelps. The **scale is identical** for both graphs.

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

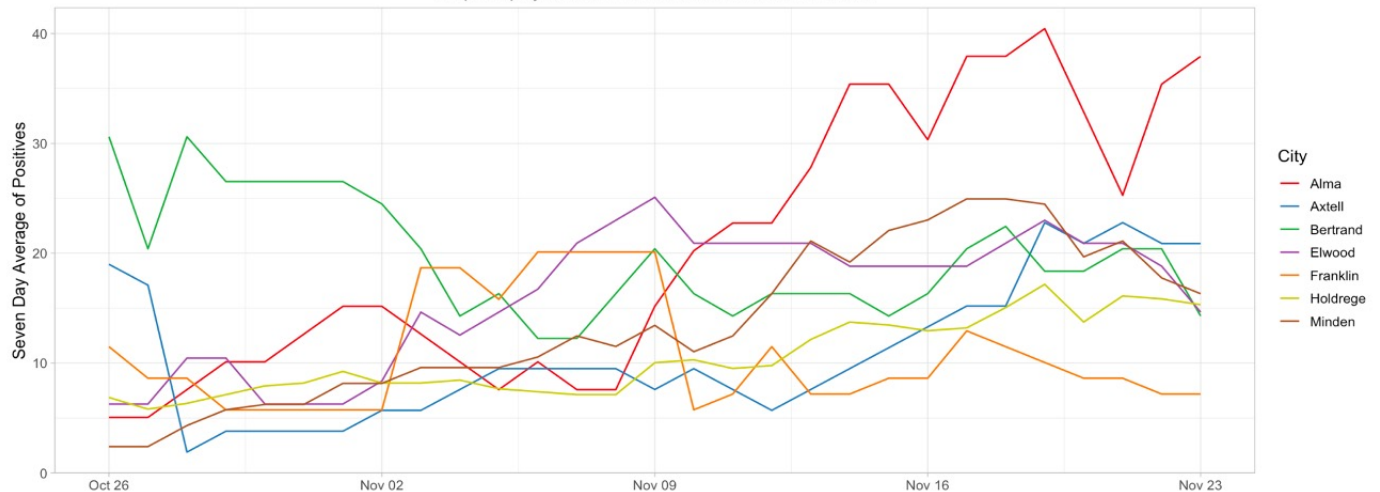
Graph displays data from October 26th to November 23rd



Information Updated as of 11/23 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 October 26th to November 23rd

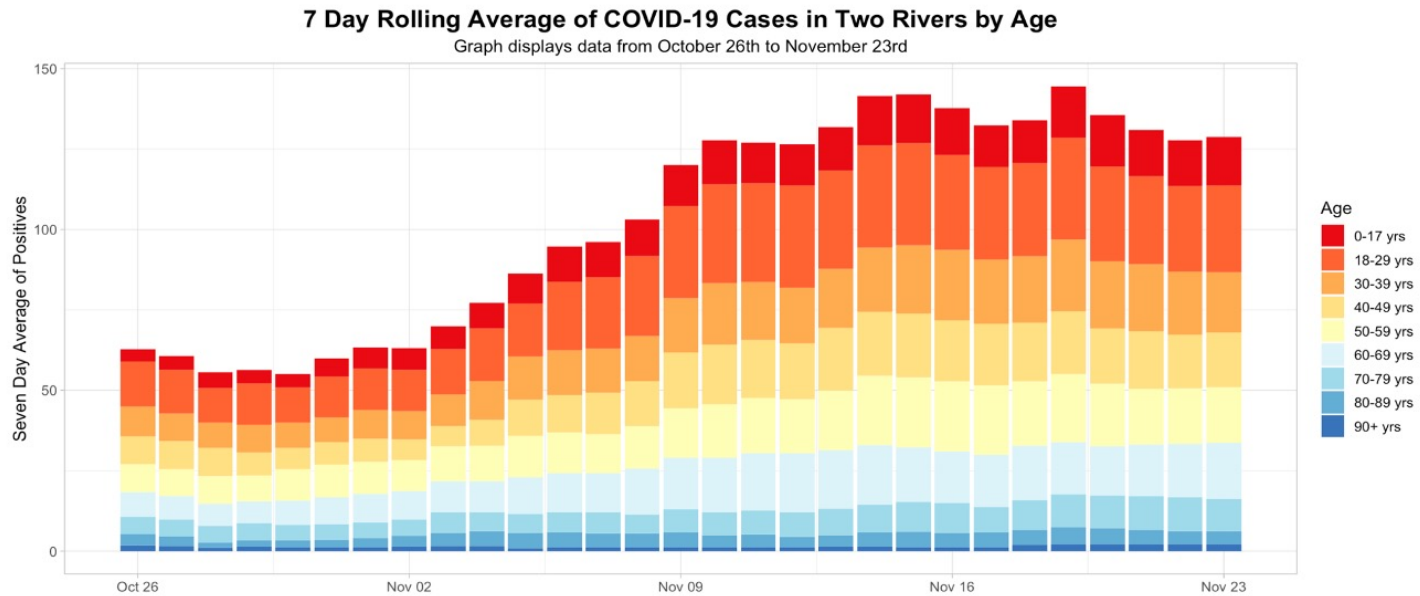


Information Updated as of 11/23 at 8 p.m.

⁶ 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 graph below describes cases from **October 26 - November 23** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.



Information Updated as of 11/23 at 8 p.m.



Weekly summary

- Seven-Day Rolling Averages across TRPHD has roughly doubled from 60 cases/ day to 120 per day in the past 4 weeks.
- Case counts have increased across all counties in TRPHD, both in absolute and relative terms. Although Buffalo county continues to account for the largest proportion of new cases, the rapid rate of increase in Dawson and Kearney counties over the past week is concerning.
- Multiple cities show an upward trend in total and per-capita cases. Of concern is an ongoing surge of cases in Alma and Gibbon. Per capita case counts have remained equal to or higher than the Statewide daily average for almost all counties in TRPHD in the past month.
- Cumulative cases are increasing across the United States, including Nebraska. The graph describing cumulative cases shows a steep rise roughly from the beginning of November across all counties in TRPHD, signaling a possible new phase of rapid increase of cases across the district.
- Cases have increased among 50-80-year olds in the past two weeks, even as other age groups maintain a steady rate comparable to the previous month.
- COVID-related utilization accounts for over 40% of all hospital beds in TRPHD and ICU availability is currently less than 8%.

To conclude, daily case counts continue to rise rapidly across TRPHD. Daily incidence rates have shown signs of sustained acceleration since early November. This trend is expected to continue for the upcoming week at least. There appears to be reduced ICU availability across hospitals in the district as well as sustained high rates of COVID-related medical/surgical bed usage. 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 and others.