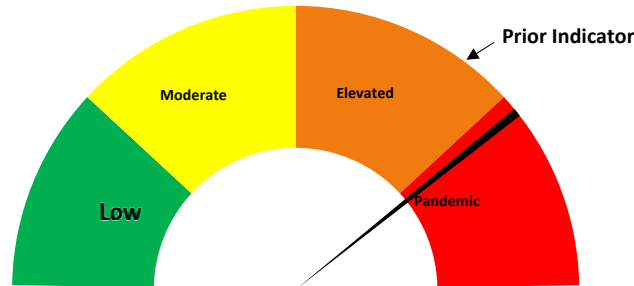


Risk Dial Oct 29 2020



Risk Dial for COVID-19
Two Rivers Public Health
Published October 29, 2020

- Testing availability and result turnaround time has improved considerably over the past two weeks. TestNebraska screening sites report adequate coverage across the district. On an average, test results were returned a little over 4 days in the previous week, which is a significant improvement over previous weeks.
- The number of people hospitalized due to COVID-related symptoms has doubled in the past week. There has not been a significant change from last week in ICU bed availability, and ventilator use is not significantly altered.
- Positivity rates and case numbers continue to climb from previous weeks. The rapid rate of increase across the entire district, especially among persons aged over 60 years is deeply concerning.
- While community spread seemed to have established itself among persons below 40 years old by early September, rates among persons above 60 years old are beginning to show similar trends.
- Contact tracing staff report broad community spread. There is a noted increase in the number of individuals not willing to report contacts.
- Of concern in the rise of cases across the district, is the number of newly diagnosed positives cases among 60-89-year olds and residents of smaller cities which are removed from the I-80 corridor. (see tables below for details).
- The increased number of COVID-related death reports and recent rise in case numbers in the TRPHD district point to a budding outbreak with the potential to become much more widespread.
- For these reasons, we have shifted the risk dial to red, “pandemic” to reflect our assessment of increased risk of infection for all residents of TRPHD



Weekly report Oct 21 - Oct 27 2020
Overview

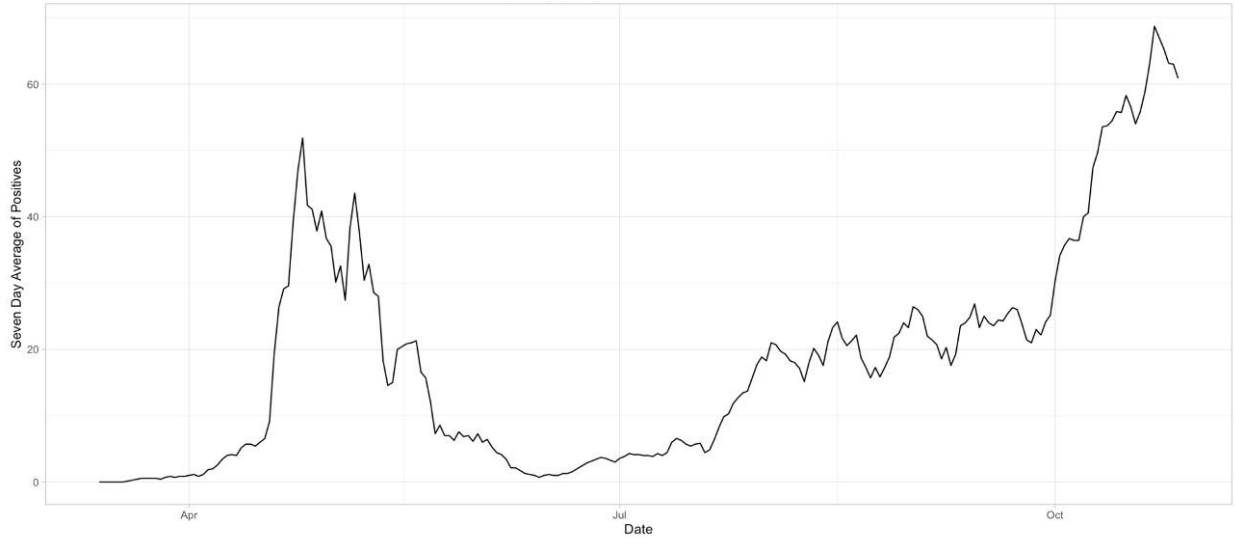
The weekly report will look at COVID-19 cases in the TRPHD district across three time periods, presenting graphs and tables before concluding with a weekly summary

- The first set of graphs look at the progress of the pandemic from April 1 - October 27 across all counties. There are two distinct 'waves' of the outbreak, and we focus on the second wave of cases following July 1st.
- The second set of graphs look at the time from July 1 - October 27, describing the total cases and positivity rates over time. We are most concerned with the most recent four weeks.
- The tables show actual positive cases and tests conducted by county, age and gender from September 30 - October 27. Also depicted are the proportion of tests done by provider.
- The last set of graphs look at daily cases from Sep 30 - Oct 27. Total tests and cases are shown, and progress described by age group, county and city of residence.

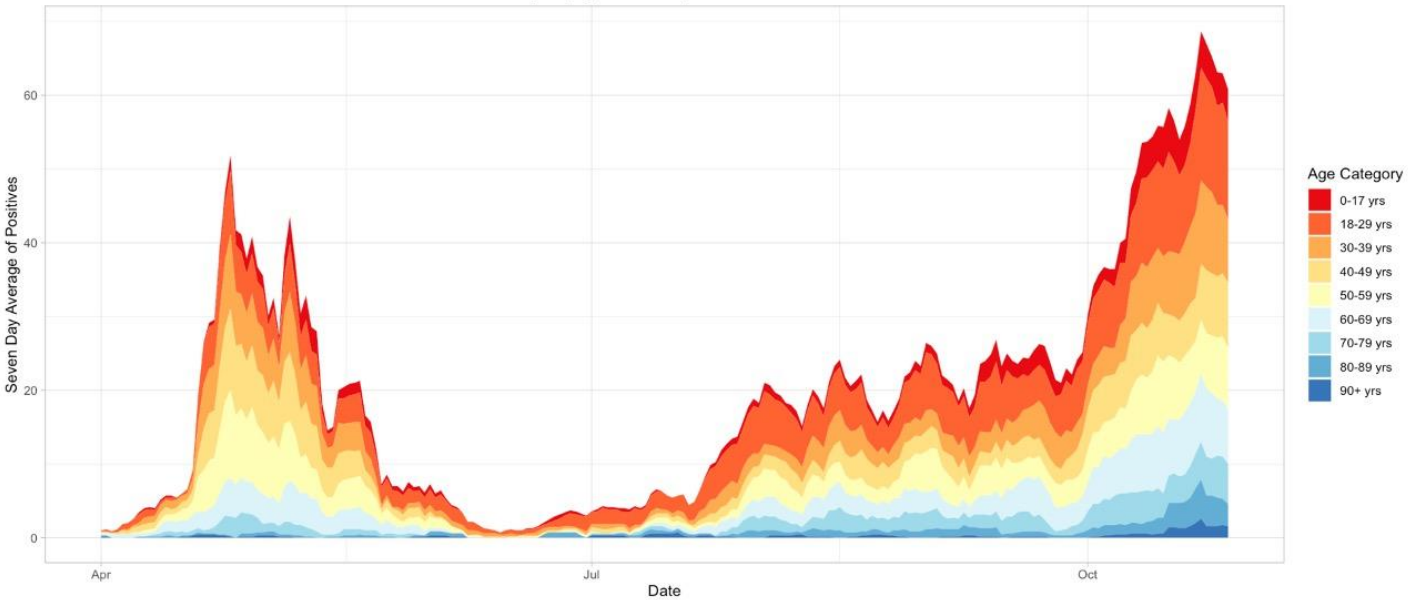


- The following line graph describes 7-day rolling average of COVID-19 cases across TRPHD since April
- The second graph describes cases across the same period by age

7 Day Rolling Average of Two Rivers
Graph displays data from March 19th to October 27th



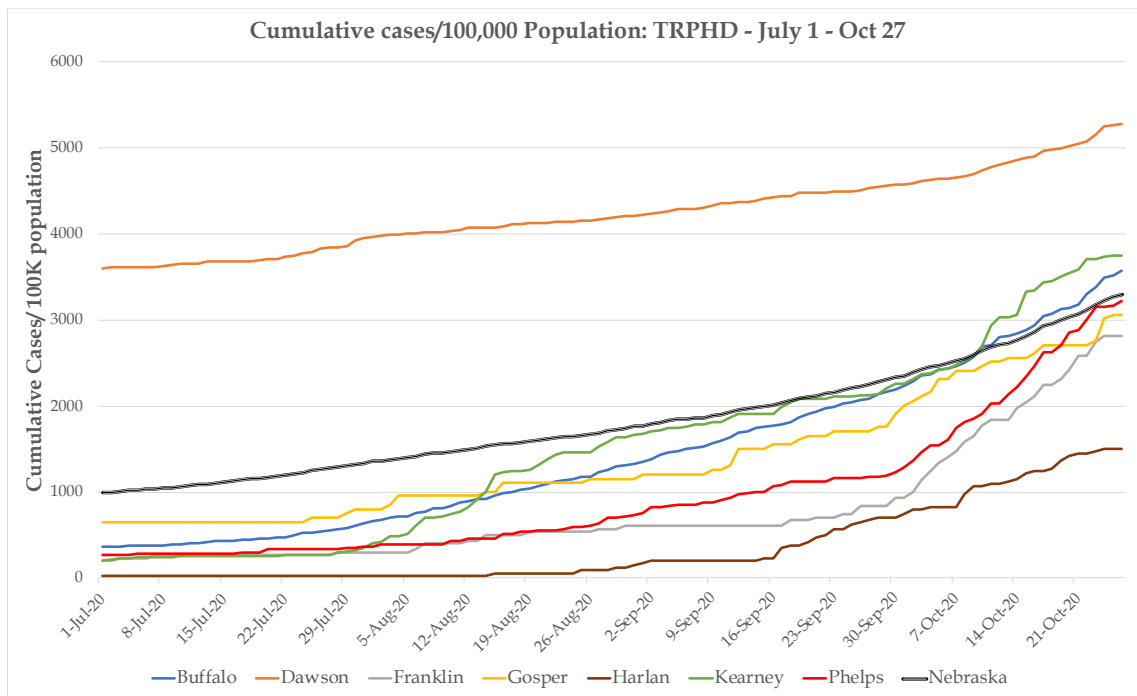
7 Day Rolling Average of COVID-19 Cases in Two Rivers by Age
Graph displays data from April 1st to October 27th



Information Updated as of 10/27 at 8 p.m.

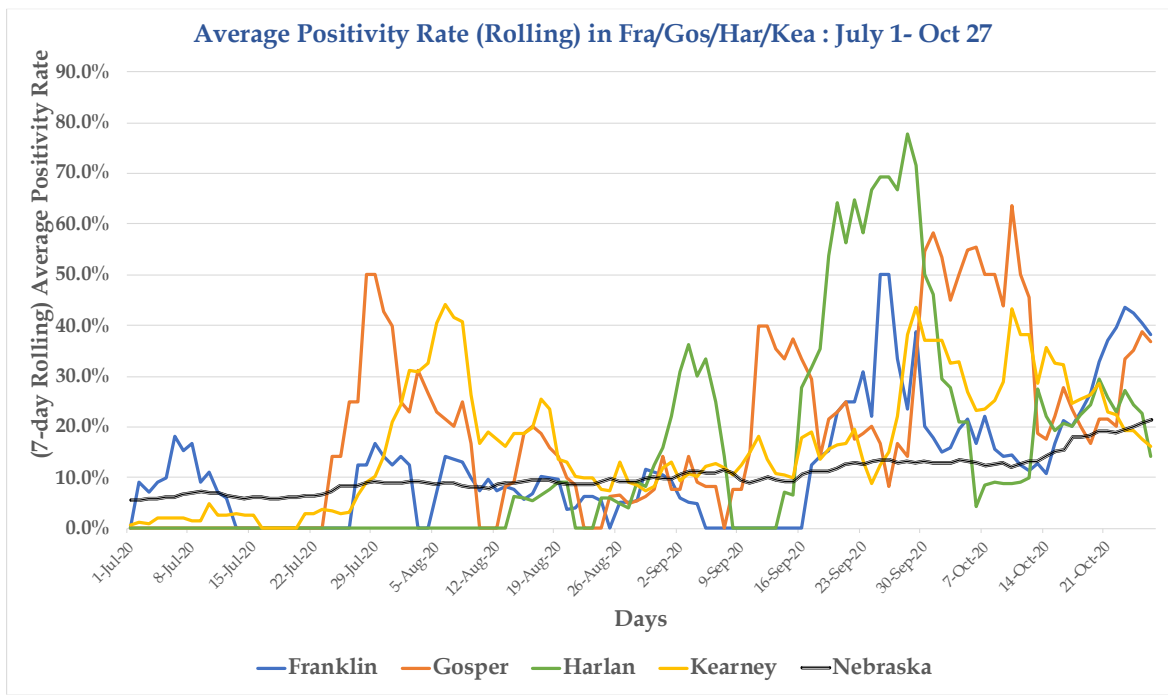
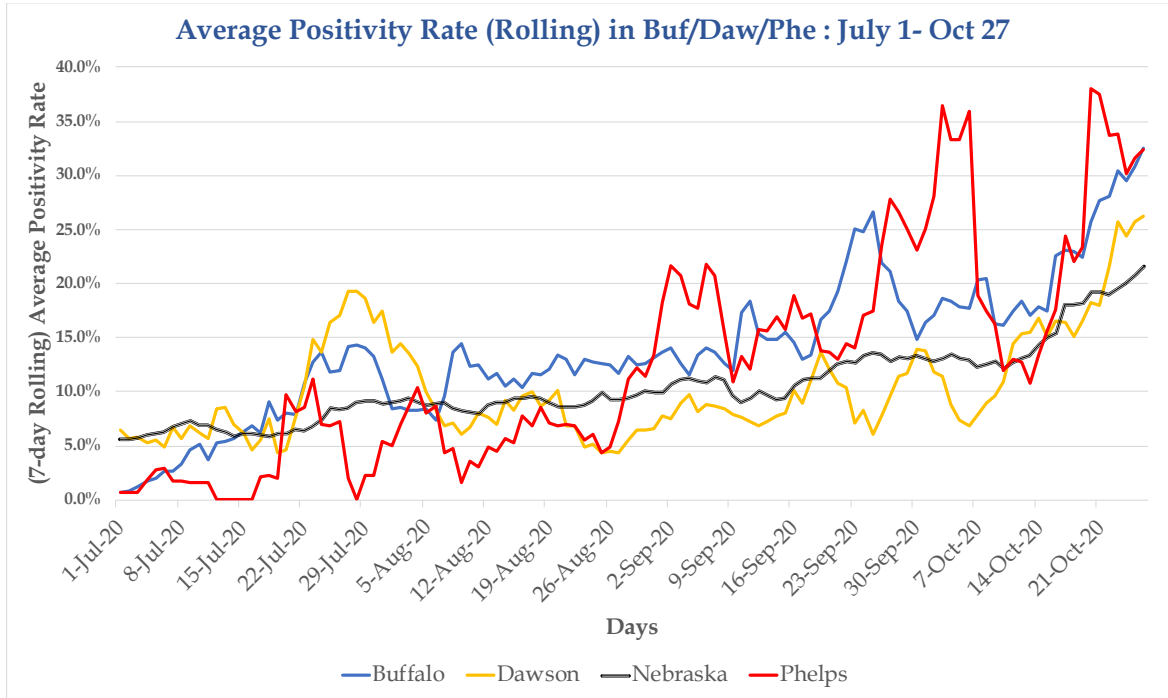


- The graph below describes **cumulative cases per 100,000 population** from July 1-October 27. Also shown is cumulative cases per 100,000 population for the state of Nebraska
- Thus the line depicts overall cases since February, but divides the value by the county (or state) population and presents it per 100,000 population.
- This allows us to standardize comparison of counties and the whole state. Of particular interest is the slope of each line, corresponding to the rate of increase in cases.
- Dawson county's outbreak in the Spring accounts for the higher overall numbers, although the slope is less steep than other counties.
- Rate of increase for most counties has been dramatic over the past 4 weeks, especially in Phelps and Franklin counties
- Buffalo county's sustained increase over the past four months seems to have accelerated in recent weeks.





- The following line graph describes the average positivity rate (7-day rolling) by county since July 1 compared to the Nebraska for the same period.
- The top graph shows Buffalo, Dawson & Phelps counties & the one below shows Franklin, Gosper, Harlan, Kearney and Phelps.





Weekly report Oct 14 - Oct 20 2020

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

Reporting period: Oct 21 – Oct 27, 2020 (1 week)
& Sep 30 – Oct 27, 2020 (4 weeks)

Overall testing – previous week

A total of 1356 persons were tested in the past week, of whom 380 were positive, and 976 were negative. Details are as below.

	Negative	Positive	Total
Number	976	380	1356
Percentage	72.0%	28.0%	100.0%

Overall testing – previous month

A total of 6292 persons were tested in the past 4 weeks, of whom 1312 were positive, and 4980 were negative. The results are displayed below.

	Negative	Positive	Total
Number	4980	1312	6292
Percentage	79.1%	20.9%	100.0%

Table 1 gives details of positive cases done by county, age categories and gender. Table 2 describes the proportion of tests conducted by age, county and gender.

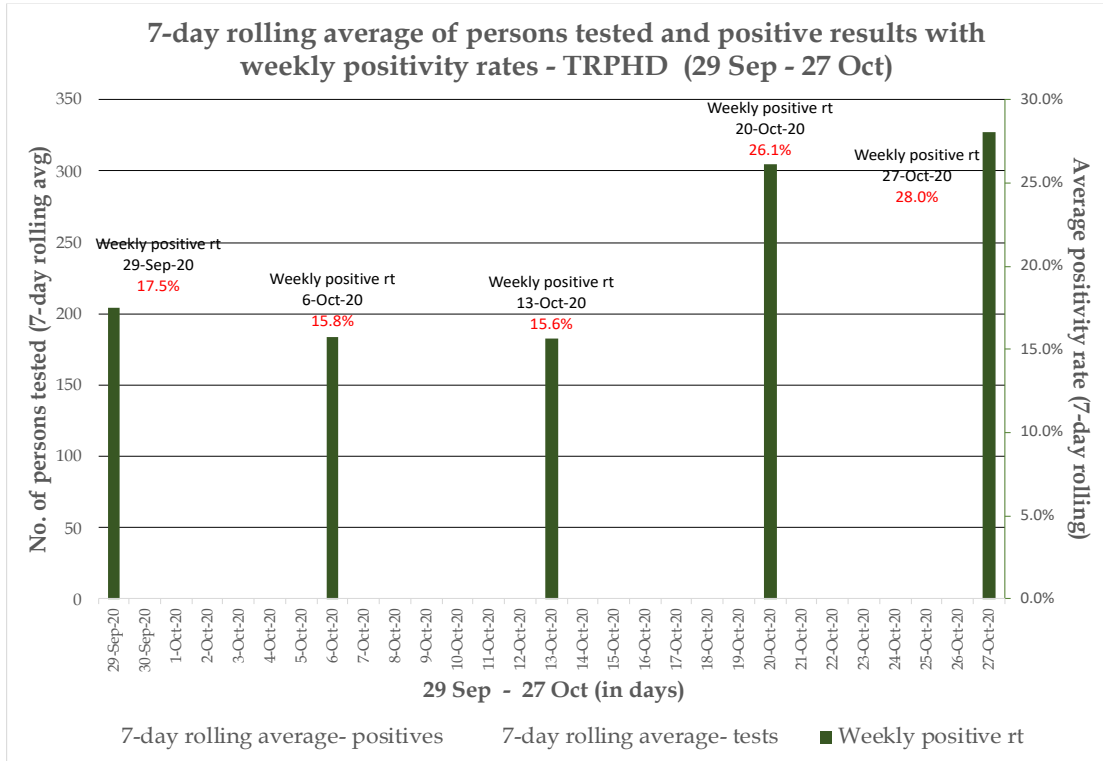


Table 1: Details of total and positive tests - 1 week and 4 weeks

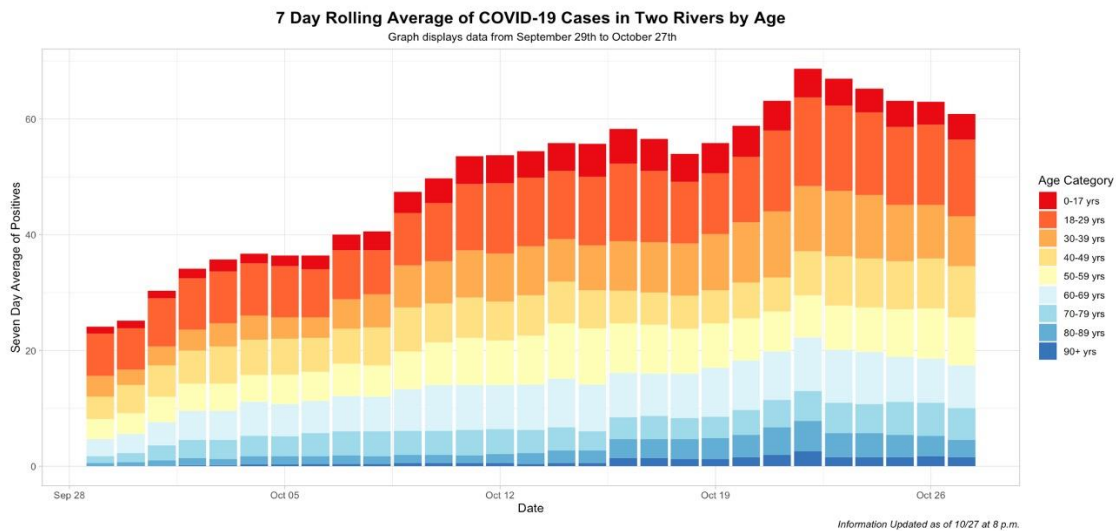
	Oct 21 - Oct 27 (1 week)			Sep 30 - Oct 27 (4 weeks)		
	Total persons tested	Positive cases	P. rate (%)	Total persons tested	Positive cases	P. rate (%)
County						
Buffalo	702	226	32.2%	3226	719	22.3%
Dawson	332	73	22.0%	1162	184	15.8%
Franklin	31	8	25.8%	299	57	19.1%
Gosper	35	7	20.0%	83	23	27.7%
Harlan	18	5	27.8%	182	30	16.5%
Kearney	61	14	23.0%	373	100	26.8%
Phelps	139	38	27.3%	858	188	21.9%
Data missing/ not disclosed	38	9	23.7%	109	11	10.1%
Total	1356	380	28.0%	6292	1312	20.9%
Age (in yrs)						
0-17	187	28	15.0%	740	104	14.1%
18-29	291	83	28.5%	1361	277	20.4%
30-39	194	54	27.8%	836	196	23.4%
40-49	176	58	33.0%	765	185	24.2%
50-59	164	52	31.7%	829	182	22.0%
60-69	169	49	29.0%	766	180	23.5%
70-79	97	32	33.0%	439	111	25.3%
80-89	60	16	26.7%	353	55	15.6%
90+	18	8	44.4%	203	22	10.8%
Total	1356	380	28.0%	6292	1312	20.9%
Gender						
Female	763	217	28.4%	3188	684	21.5%
Male	568	159	28.0%	2243	545	24.3%
Data missing/ not disclosed	25	4	16.0%	861	83	9.6%
Total	1356	380	28.0%	6,292	1,312	20.9%



- 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. Also shown is the **weekly positivity rate**

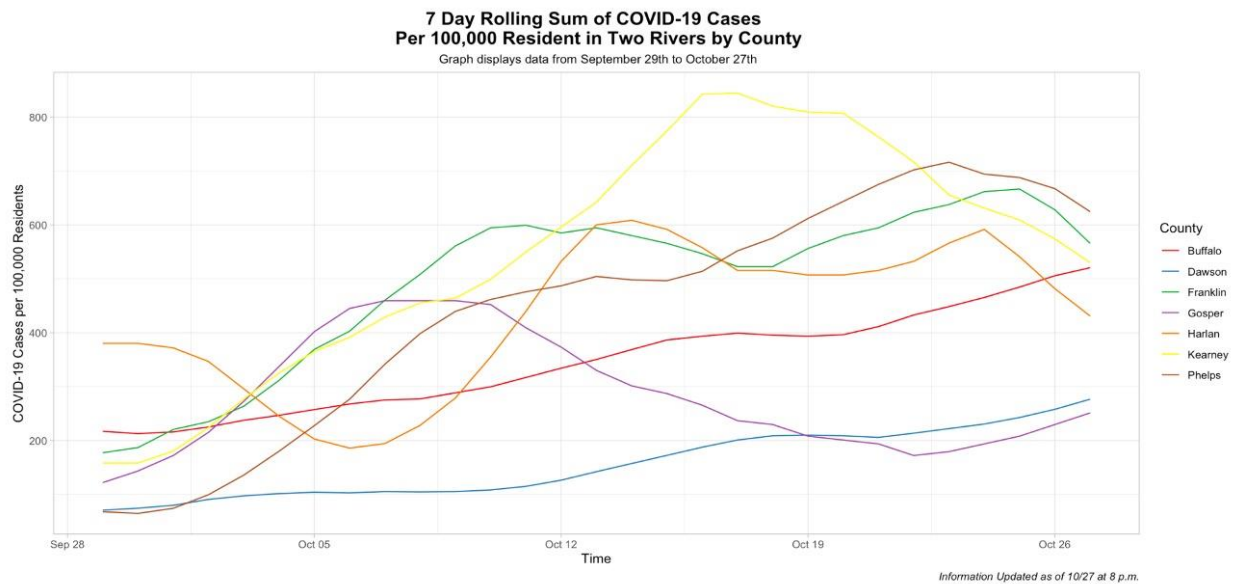
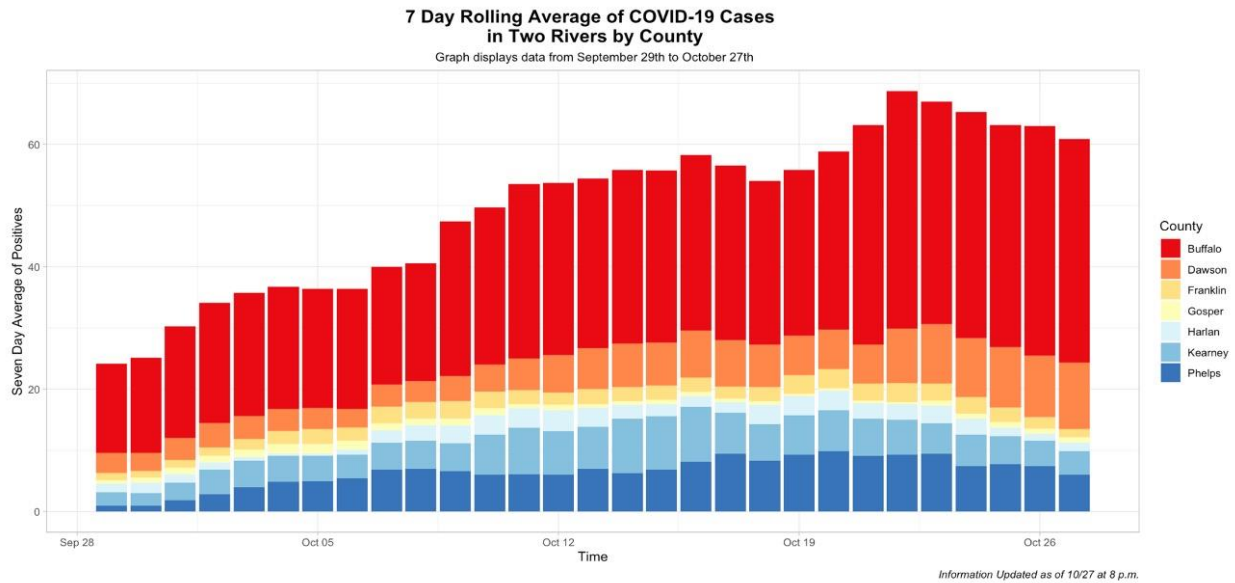


- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **age** for the past four weeks.





- The following bar graph describes the 7-day rolling averages of COVID-19 cases by county for the past four weeks.
- The line graph describes the same data per 100,000 population





- The following bar graph describes the 7-day rolling averages by **city** for the past four weeks. The top graph shows cities in Buffalo and Dawson counties & the one below shows cities in Franklin, Gosper, Harlan, Kearney and Phelps. Scale is identical for both graphs.
- The line graph describes the same data per 100,000 population

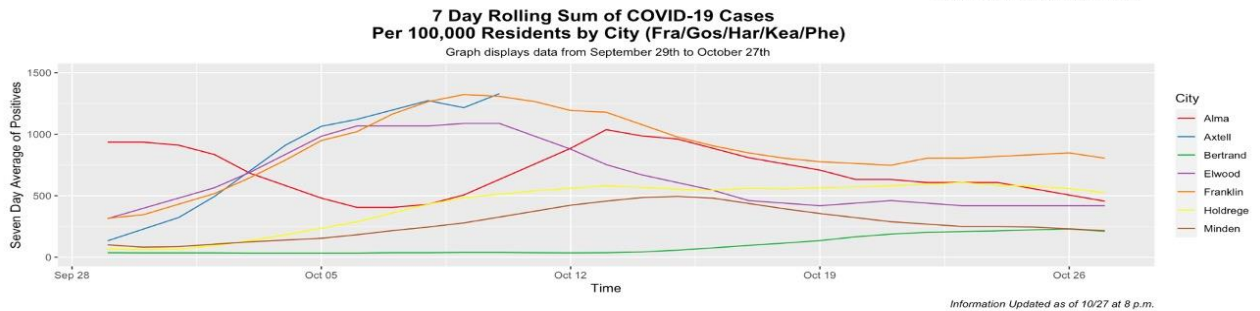
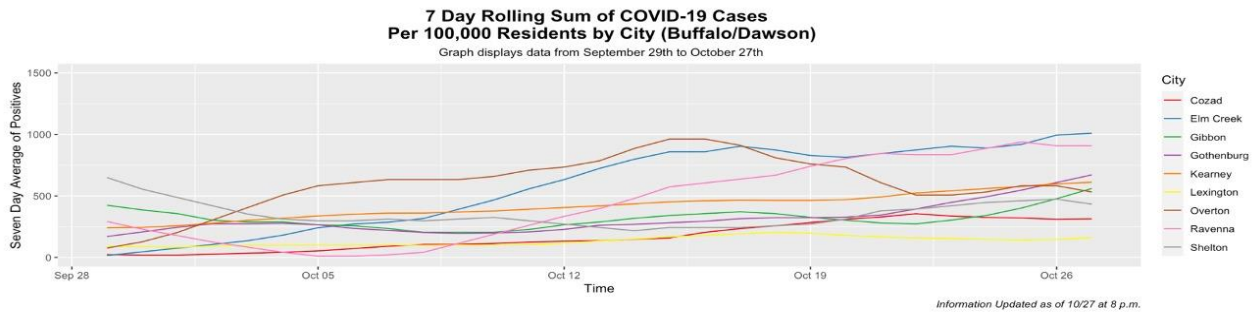
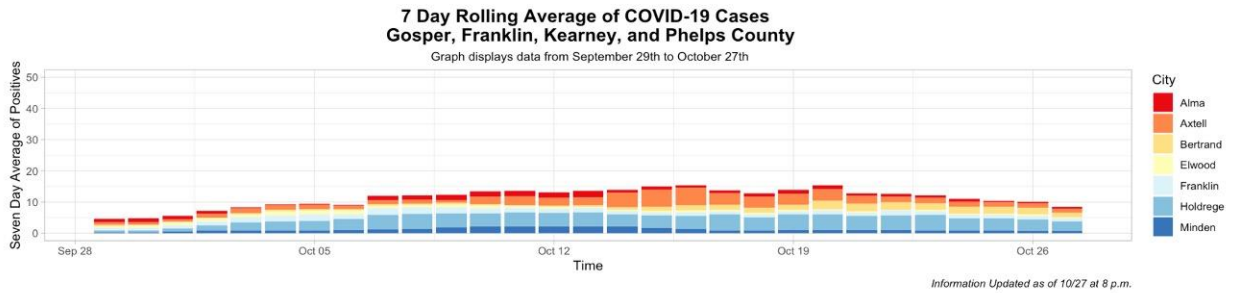
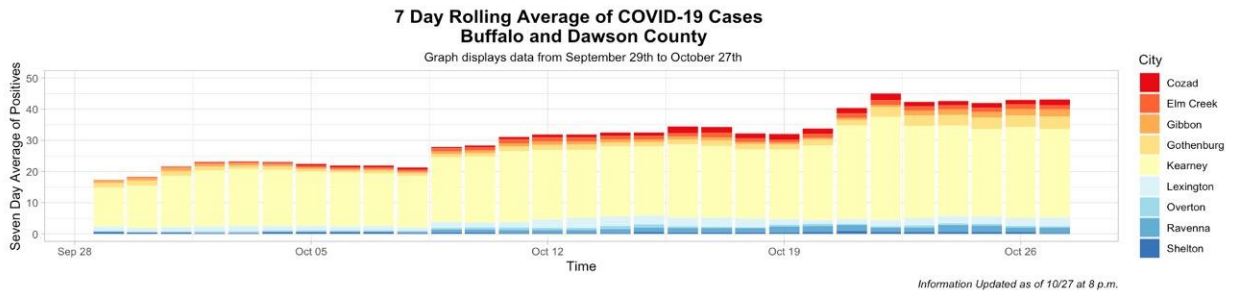




Table 2: Total tests in TRPHD - past 1 week & 4 weeks - by county, age & gender

	Oct 21 - Oct 27 (1 week)		Sep 30 - Oct 27 (4 weeks)	
	Total persons tested	Percentage tests by county/ age gp/ gender (%)	Total persons tested	Percentage tests by county/ age gp/ gender (%)
County				
Buffalo	702	51.8%	3226	51.3%
Dawson	332	24.5%	1162	18.5%
Franklin	31	2.3%	299	4.8%
Gosper	35	2.6%	83	1.3%
Harlan	18	1.3%	182	2.9%
Kearney	61	4.5%	373	5.9%
Phelps	139	10.3%	858	13.6%
Data missing/ not disclosed	38	2.8%	109	1.7%
Total	1356	100.0%	6292	100.0%
Age (in yrs)				
0-17	187	13.8%	740	11.8%
18-29	291	21.5%	1361	21.6%
30-39	194	14.3%	836	13.3%
40-49	176	13.0%	765	12.2%
50-59	164	12.1%	829	13.2%
60-69	169	12.5%	766	12.2%
70-79	97	7.2%	439	7.0%
80-89	60	4.4%	353	5.6%
90+	18	1.3%	203	3.2%
Total	1356	100.0%	6292	100.0%
Gender				
Female	763	56.3%	3188	50.7%
Male	568	41.9%	2243	35.6%
Data missing/ not disclosed	25	1.8%	861	13.7%
Total	1356	100.0%	6,292	100.0%
Testing facility				
Private facility - Phe/Kea/Fra/Gos/Har	76	5.6%	271	4.3%
Private facility - Buffalo	509	37.5%	1,659	26.4%
Private facility - Dawson	120	8.9%	391	6.2%
Private facility - outside TRPHD	101	7.5%	479	7.6%
TestNebraska.com	302	22.3%	2,323	36.9%
Other	248	18.3%	1,169	18.6%
Total	1356	100.0%	6292	100.0%



Weekly summary

- Cumulative cases across all counties show a clear upward trend.
- The rate of increase of cases proportional to population is dramatic in Franklin and Phelps counties. Increases in case numbers across Buffalo county seem to have accelerated in the past 2 weeks.
- Average positivity rates for all counties used to hover below the statewide average till early - Mid September, but have now surpassed the statewide positivity rate over the past month.
- The average tests conducted per week have more than doubled since early July, thus the persistently high positivity rate is cause for concern.
- Incidence rates among 50-59, 60-69, 70-79 and 80-89-year olds, all of whom had positivity rates over 28% for the past 2 weeks is extremely concerning.
- Absolute numbers across Phelps and Franklin seem set to increase further, and Buffalo county's increase seems to be accelerating.