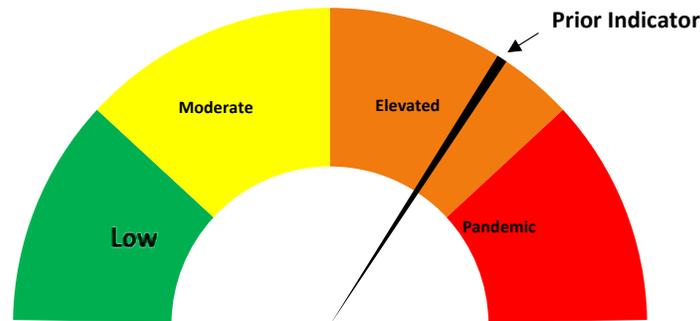


Risk Dial Oct 15 2020



**Risk Dial for COVID-19
Two Rivers Public Health
Published October 15, 2020**

- The test results received by Two Rivers Health Department in the past week was over double the previous 3-month average. Some part of this may be explained by results that entered into the data system later than usual due to delays in data entry or resolution. The issue was most pronounced in results reported by private labs and hospitals. Individuals tested have been contacted by lab staff regarding their results.
- To resolve these data issues, we conducted a separate analysis that considered only those test results where specimen collection occurred in the preceding two weeks. This analysis (presented in tables 1&2) guided the risk dial assessment for this week.
- The availability of medical and surgical beds has declined across the district. Although there appears to be some difference in reported occupancy rates, the acute care facilities in the district suggest that they are at or near capacity.
- The availability of intensive care (ICU) beds in the district area have bounced back to earlier levels, and critical care hospitals in the district do not report higher utilization.
- Although Buffalo County continues to lead in absolute cases overall, the positivity rates across Gosper, Harlan, Kearney and Franklin counties have risen dramatically. Absolute case counts in Phelps County (over 90% of which are in and around Holdrege), are a source of concern.
- Test availability continues to remain consistent across the district with the recent addition of a TestNebraska site in Cozad. However, turnaround time for test results still continues to lag.
- The course of the COVID-19 pandemic in TRPHD is displayed in Figure 1 below. The graph depicts the seven-day rolling average of positive cases from March 19 to October 6. The 7-day rolling average crossed 50 this last week, surpassing the previous highest daily levels seen in May.



- Figure 2 describes the pandemic from April 1 – Oct 13, breaking down the cases by age groups. Clearly noticeable is the higher contribution of persons aged 30-59 year olds in May. Also visible is the initial rise in positive 18-39 year olds followed by a more recent increase in 60-79 year old positive cases from August – October.
- The Risk Dial continues to remain elevated, unchanged from the previous week.

Fig 1 (below) describes the 7-day rolling average of cases in TRPHD from March 19 – October 13.

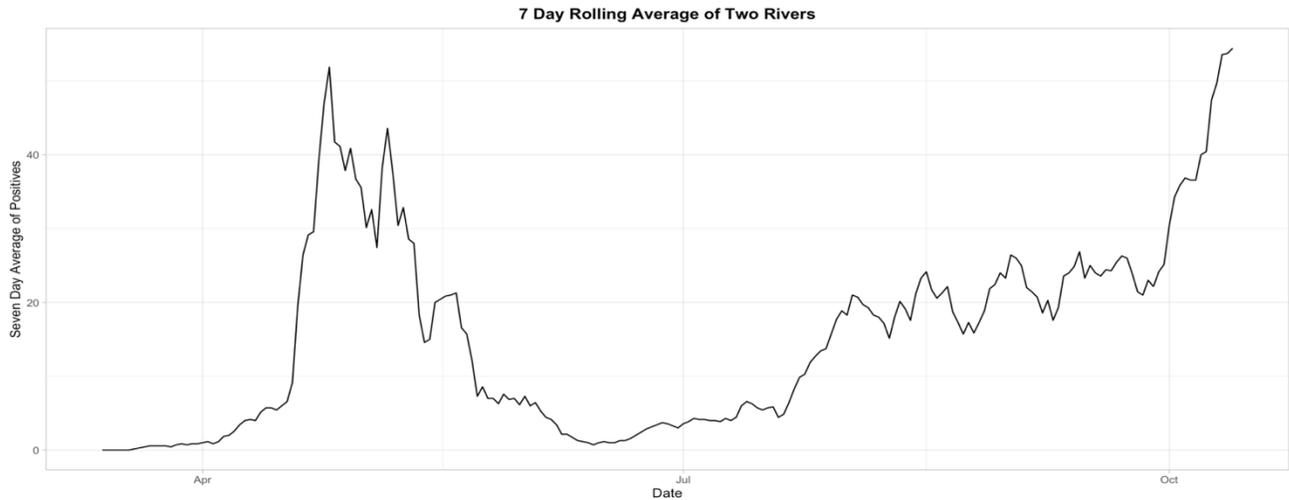
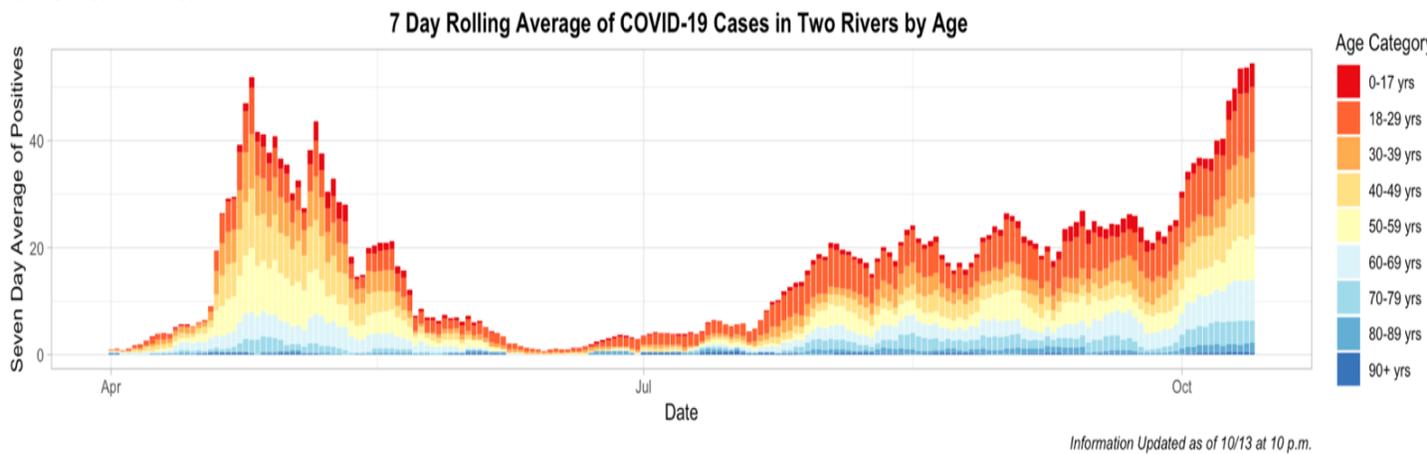


Fig 2 (below) describes the 7-day rolling average of positive cases from April 1 – Oct 13 broken up by age categories.



Weekly report Oct 7 - Oct 13 2020

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

Reporting period: Oct 7 – Oct 13 2020 (1 week)
& Sep 16 – Oct 13 2020 (4 weeks)

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

888-669-7154
trphd.org



Overall testing – previous week

A total of 2238 persons were tested in the past week, of whom 350 were positive, and 1888 were negative. However, data reporting and entry delays at testing sites and at the state data repository at DHHS resulted in late arrival of multiple cases into the data system this week. In some cases, the specimen was collected over two weeks previously.

The vast majority of these tests were negative, and individuals were contacted and informed of their results by the ordering facilities. However, data was entered in the system only the previous week.

To ensure standardization of results, we restricted this week’s report to cover only those tests where the specimen collection had occurred in the 14 days prior to the past week. The results are displayed below.

	Negative	Positive	Total
Number	1740	323	2063
Percentage	84.3%	15.7%	100.0%

Overall testing – previous month

A total of 5425 persons were tested in the past 4 weeks, of whom 900 were positive, and 4525 were negative. For the reasons described above, we are presenting data on persons whose test specimen was collected in the two weeks preceding two weeks the analysis period. The results are displayed below.

	Negative	Positive	Total
Number	5163	871	4292
Percentage	83.1%	16.9%	100.0%



Table 1 gives details of positive cases done by county, age categories and gender.

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

	Oct 7 – Oct 13 (1 week)			Sep 16 – Oct 13 (4 weeks)		
	Total persons tested	Positive cases	P. rate (%)	Total persons tested	Positive cases	P. rate (%)
County						
Buffalo	1068	171	16.0%	2896	507	17.5%
Dawson	305	43	14.1%	879	96	10.9%
Franklin	76	15	19.7%	200	41	20.5%
Gosper	15	3	20.0%	59	20	33.9%
Harlan	36	9	25.0%	140	23	16.4%
Kearney	109	34	31.2%	269	71	26.4%
Phelps	436	45	10.3%	625	99	15.8%
Data missing/ not disclosed	18	3	16.7%	95	14	14.7%
Total	2063	323	15.7%	5163	871	16.9%
Age (in yrs)						
0-17	199	29	14.6%	617	68	11.0%
18-29	426	73	17.1%	1126	200	17.8%
30-39	255	49	19.2%	673	128	19.0%
40-49	234	41	17.5%	591	122	20.6%
50-59	281	50	17.8%	665	121	18.2%
60-69	246	46	18.7%	609	127	20.9%
70-79	138	22	15.9%	337	69	20.5%
80-89	172	10	5.8%	336	30	8.9%
90+	112	3	2.7%	209	6	2.9%
Total	2063	323	15.7%	5163	871	16.9%
Gender						
Female	982	166	16.9%	2365	444	18.8%
Male	593	117	19.7%	1655	366	22.1%
Data missing/ not disclosed	488	40	8.2%	1143	61	5.3%
Total	2063	323	15.7%	5,163	871	16.9%



Fig 3 (below) describes the 7-day rolling average of persons tested across the district over the past 4 weeks, as well as the 7-day rolling average of positive cases. Plotted on the z-axis is the weekly positivity rate for the entire district.

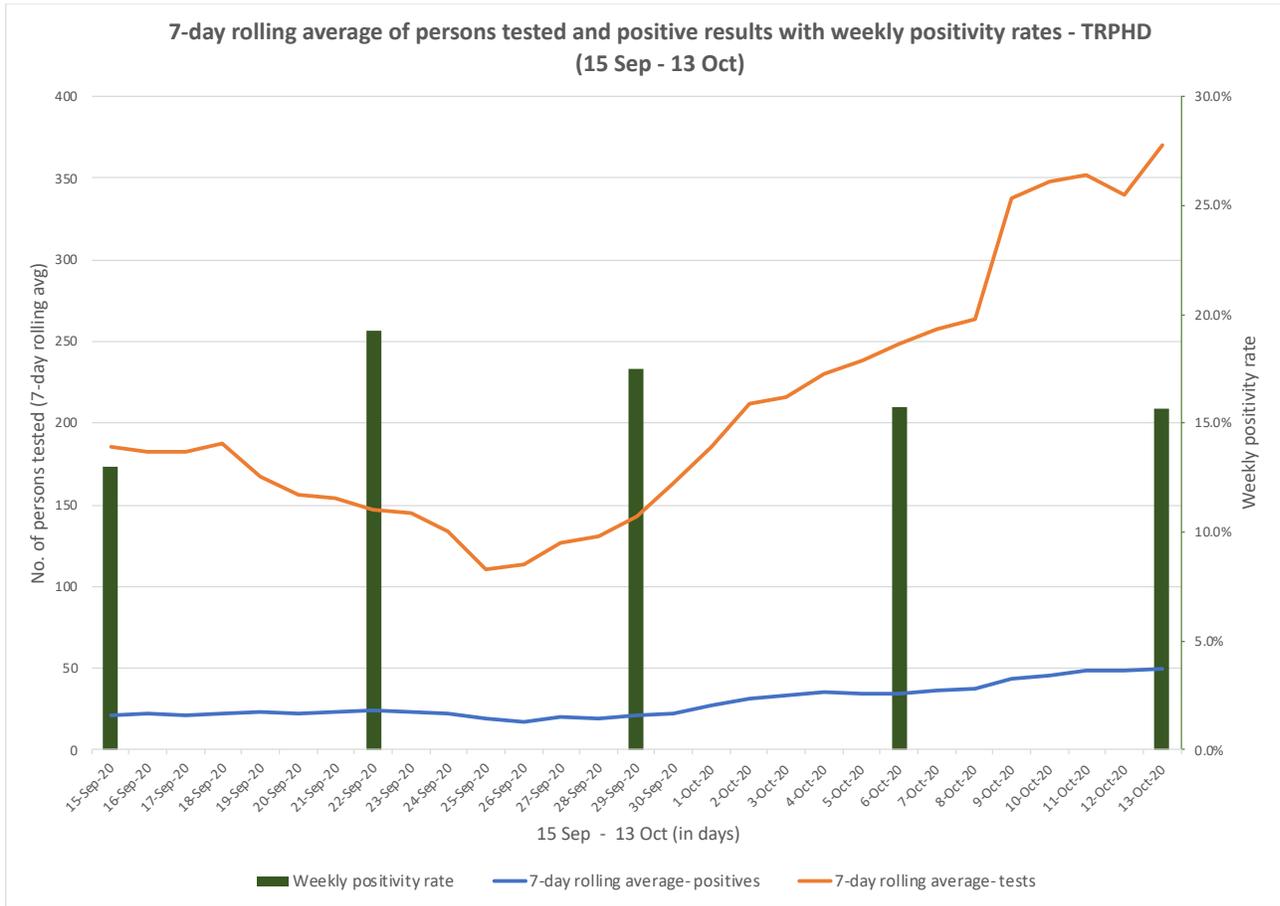


Fig 4 (below) describes 7-day rolling average of positive cases by age for the last 4 weeks.

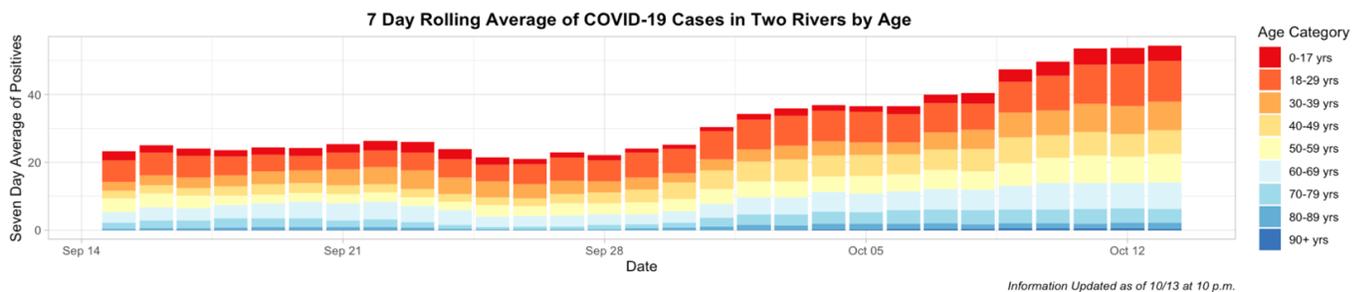




Fig 5 (below) describes the 7-day rolling average of cases per county for the last 4 weeks. The second graph presents the 7-day rolling average per 100,000 persons across seven counties for the last 4 weeks. Population estimates used are from the American Community Survey (ACS) mid-year estimate 2019

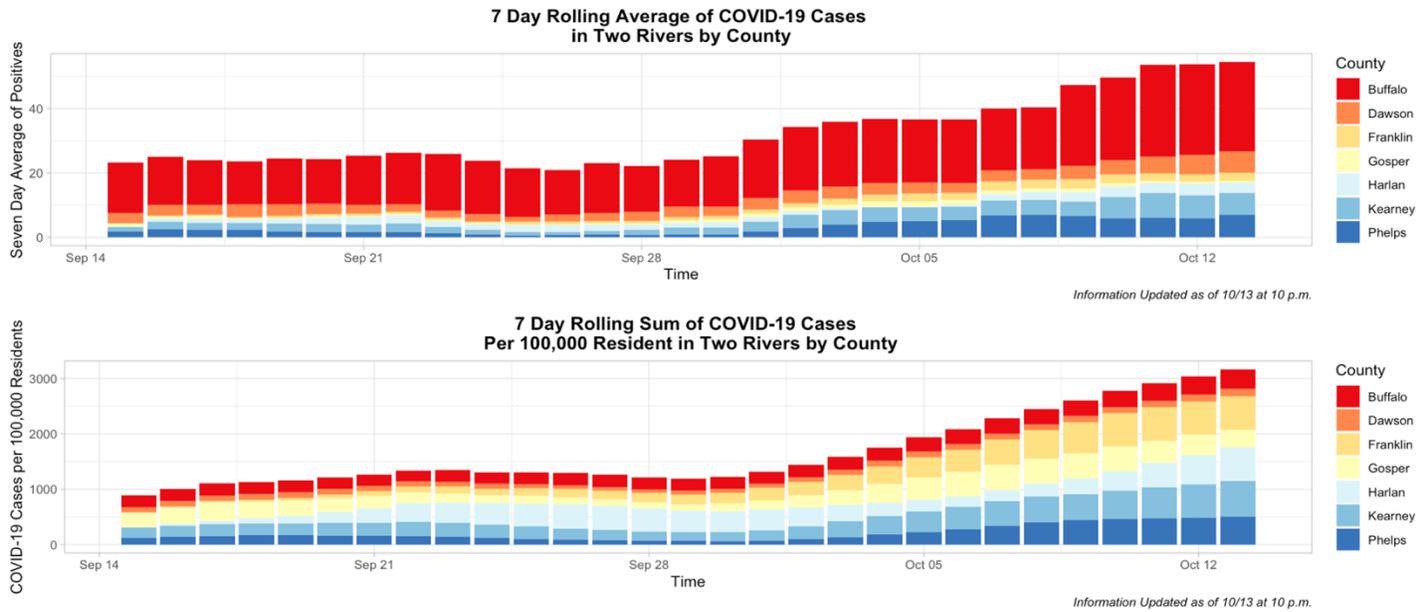




Table 2: Total tests in TRPHD – past week and past 4 weeks – proportions by county, age and gender

	Oct 7 – Oct 13 (1 week)		Sep 16 – Oct 13 (4 weeks)	
	Total persons tested	Percentage of tests by county/ age group/ gender (%)	Total persons tested	Percentage of tests by county/ age group/ gender (%)
County				
Buffalo	1068	51.8%	2896	56.1%
Dawson	305	14.8%	879	17.0%
Franklin	76	3.7%	200	3.9%
Gosper	15	0.7%	59	1.1%
Harlan	36	1.7%	140	2.7%
Kearney	109	5.3%	269	5.2%
Phelps	436	21.1%	625	12.1%
Data missing/ not disclosed	18			
		0.9%	95	1.8%
Total	2063	100.0%	5163	100.0%
Age (in yrs)				
0-17	199	9.6%	617	12.0%
18-29	426	20.6%	1126	21.8%
30-39	255	12.4%	673	13.0%
40-49	234	11.3%	591	11.4%
50-59	281	13.6%	665	12.9%
60-69	246	11.9%	609	11.8%
70-79	138	6.7%	337	6.5%
80-89	172	8.3%	336	6.5%
90+	112	5.4%	209	4.0%
Total	2063	100.0%	5163	100.0%
Gender				
Female	982	47.6%	2365	45.8%
Male	593	28.7%	1655	32.1%
Data missing/ not disclosed	488			
		23.7%	1143	22.1%
Total	2063	100.0%	5,163	100.0%
Testing facility				
Private facility - Phe/Kea/Fra/Gos/Har	49	2.4%	137	2.7%
Private facility - Buffalo	415	20.1%	1,203	23.3%
Private facility - Dawson	106	5.1%	365	7.1%
Private facility - TRPHD	106	5.1%	312	6.0%
TestNebraska.com	882	42.8%	2,327	45.1%
Other	505	24.5%	819	15.9%



Total	2063	100.0%	5163	100.0%
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Fig 6 (below) depicts the 7-day rolling average by city. Cities with cumulative count over 30 are included. The top graph shows cities in Buffalo and Dawson counties and the bottom shows all other cities. The scale is identical for both graphs.

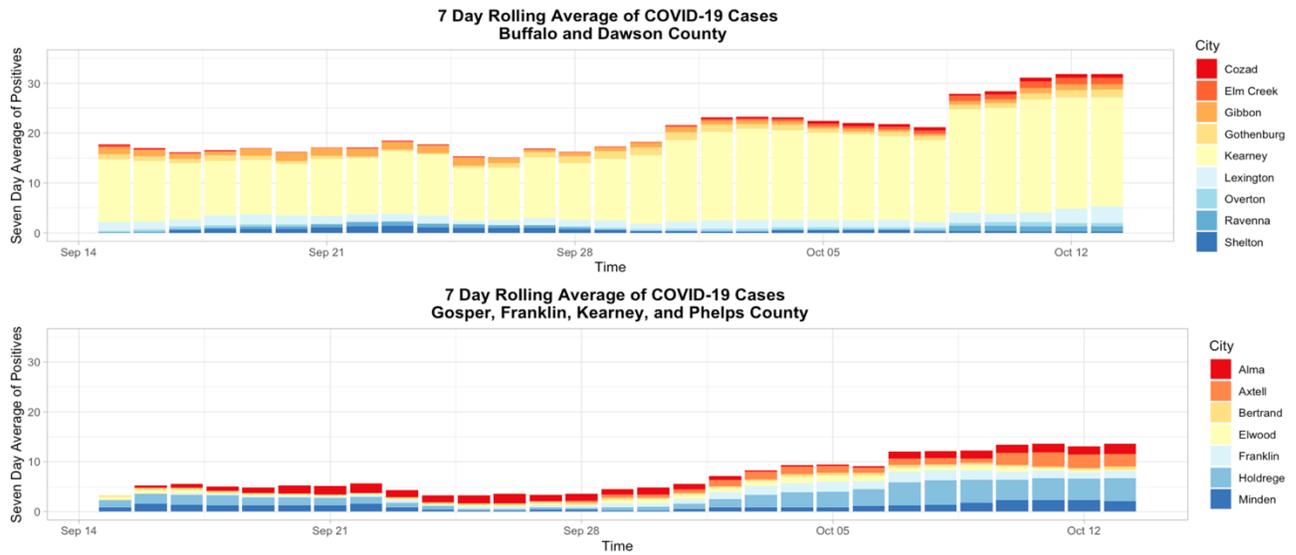
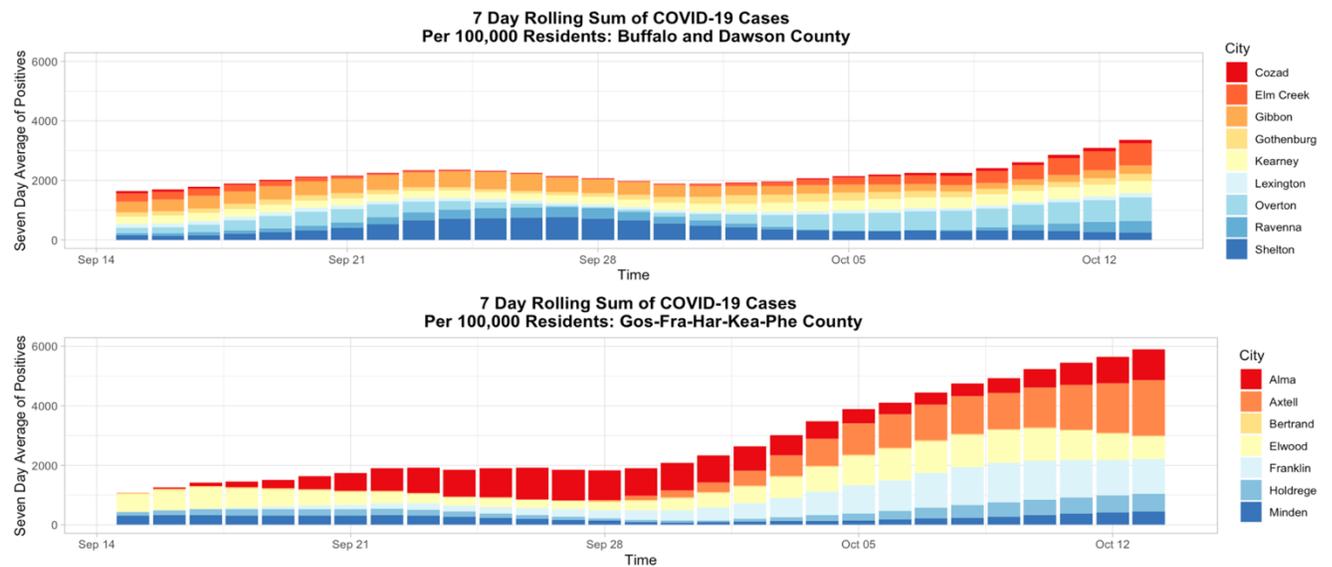


Fig 7 (below) is the 7-day rolling average per 100,000 population at the city level. The top graph shows cities in Buffalo and Dawson counties and the bottom shows all other cities. The scale is identical for both graphs. Population estimates are from the American Community Survey (ACS) mid-year estimate 2019





Weekly summary

- The numbers above depict the total persons tested over the past week and the past 4 weeks in Two Rivers Health District along with positivity rates. Also displayed are the proportion of tests performed per county, per age category and for males v/s females.
- The test results received by Two Rivers Health Department in the past week was over double the previous 3-month average. Some part of this may be explained by results that entered into the data system later than usual due to delays in data entry or resolution. The issue was most pronounced in results reported by private labs and hospitals. Individuals tested have already been contacted by lab staff regarding their results.
- To resolve these data issues, we conducted a separate analysis that considered only those test results where specimen collection occurred in the preceding two weeks.
- Although Buffalo county continues to lead in absolute cases overall, the positivity rates across Gosper, Harlan, Kearney and Franklin counties have risen dramatically. Absolute case counts in Phelps county (over 90% of which are in and around Holdrege), are a source of concern.
- As can be seen in figures 5 & 7, the 7-day per-capita rolling average across counties and cities has been steadily rising across TRPHD. The more recent rise in Kearney and Franklin counties (fig 5) are mirrored in the rise in per capita rolling averages in Axtell and Franklin cities (fig 7)
- The 7-day rolling average of cases in the district by age category (fig 4) shows clearly how the burden of disease has shifted from 18-29 year olds to 50-79 year olds over the past month. 50-79 year olds accounted for almost 40% of cases this past week.
- This pattern of 18-29 year olds whose rising positivity rates seem to foretell higher infection rates among 50-59, 60-69 and 70-79 year olds reflect a broader trends across the district (see figure 2), and represent heightened risk to older and more vulnerable populations.