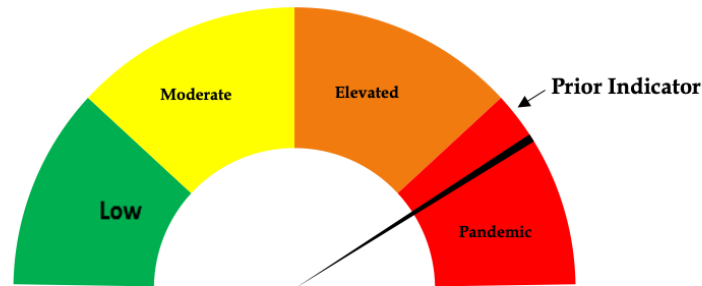




## Risk Dial Nov 5 2020



### **Risk Dial for COVID-19 Two Rivers Public Health Published November 5, 2020**

- Testing availability has expanded over the past week due to the addition of test appointments available to the public in Gothenburg and Kearney at TestNebraska sites. Testing turnaround time has increased, but not significantly.
- Reports of the shortage of testing supplies, and Personal Protective Equipment (PPE) continue to hamper testing efforts at private hospitals, clinics and labs.
- TRPHD saw an average of 51 individuals hospitalized due to COVID-19. ICU availability has dropped, and ventilator usage has increased, although prolonged hospitalizations are not seen currently.
- Multiple smaller outbreaks seem to be either ongoing or imminent across Buffalo, Phelps, Kearney and Franklin counties.
- The weekly positivity rates of tests are now consistently above the statewide average (see weekly report for details). Rates continue to climb among seniors aged over 60.
- Contact tracing staff report widespread community spread, with information regarding multiple outbreaks within a county, including at long term care facilities.
- For these reasons, we have shifted the risk dial to a position of heightened pandemic risk to reflect our assessment of increased infection rates among vulnerable age groups and populations.



## Weekly report Oct 28 - Nov 3 2020

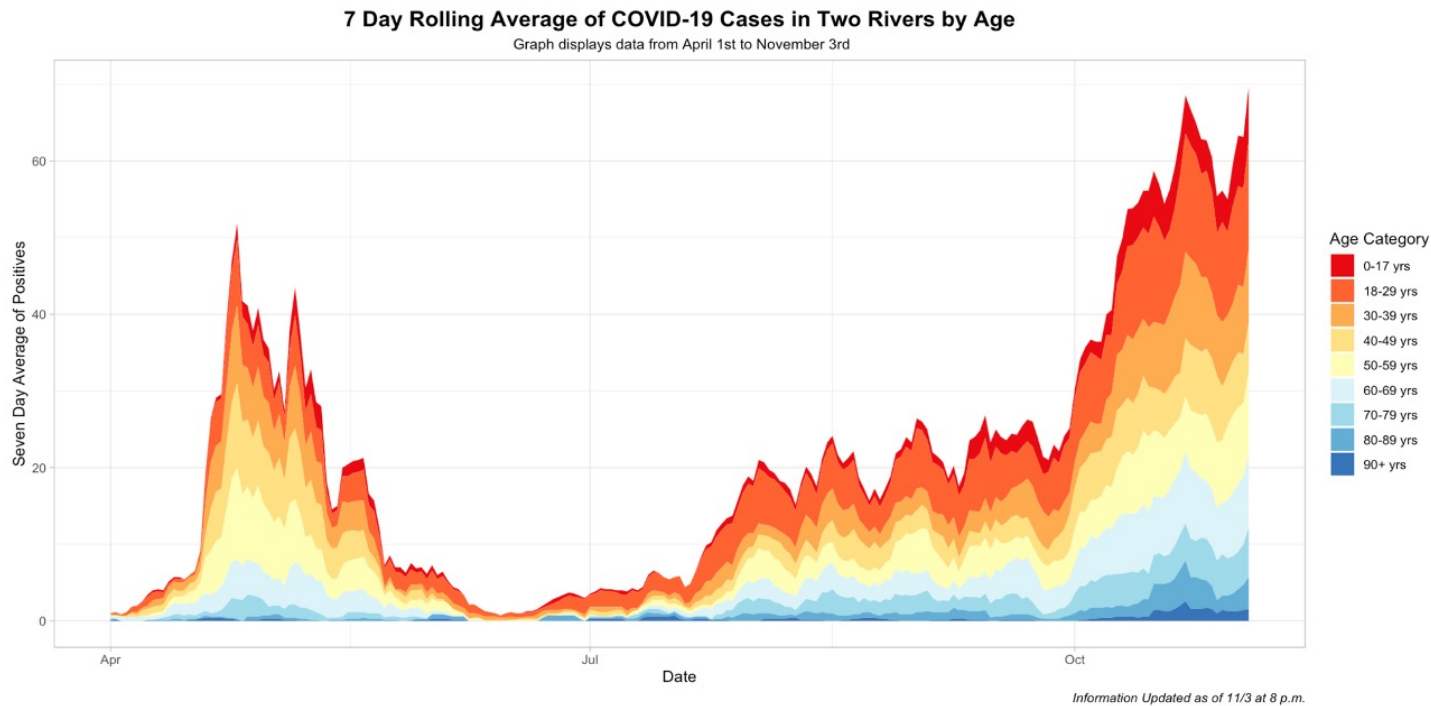
### Overview

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 3** across all counties. There are two distinct 'waves' of the outbreak, and we focus on the second wave of cases following July 1.
- The second set of graphs look at the time from **July 1 - November 3** (18 weeks), describing the total cases and positivity rates over time. We are most concerned with the recent four weeks.
- The tables show positive cases and tests conducted by county, age and gender from **October 28 - November 3** (1 week) and **October 7 - November 3** (4 weeks).
- The last set of graphs look at daily cases from **October 7 - November 3**. Total tests and cases are shown, and progress described by age group, county and city of residence. Also depicted are rates per 100,000 population.

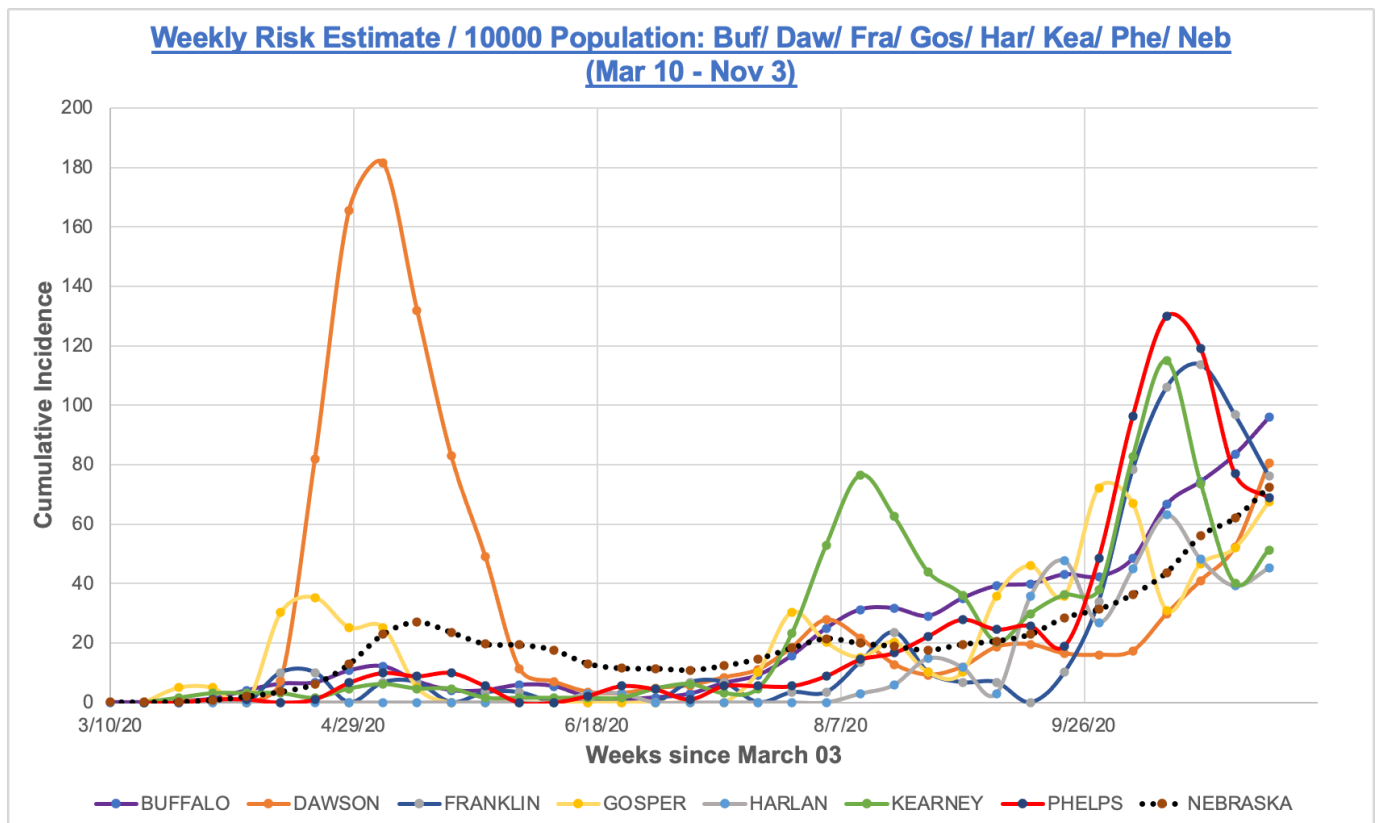


- The following line graph describes 7-day rolling average of COVID-19 cases across TRPHD since April
- The second graph describes cases across the same period by age





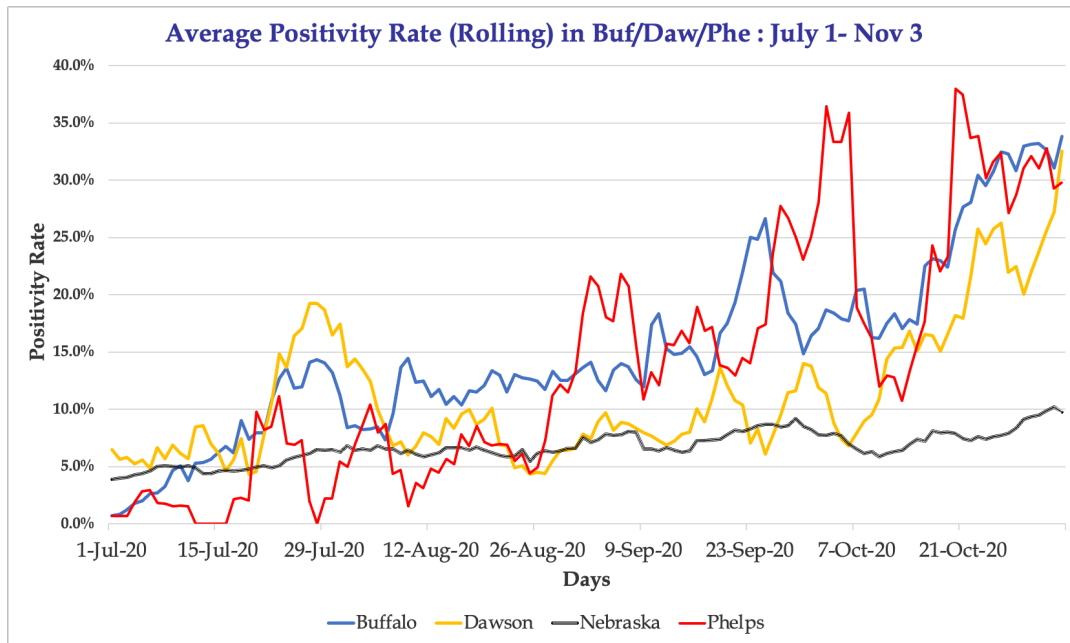
- The graph below describes the **weekly attack rate** or **weekly risk** across all 7 counties in TRPHD and the state of Nebraska from **Mar 10 - Nov 3**
- The graph is a scatter plot with fitted line, showing the weekly **cumulative incidence**<sup>1</sup> calculated using a 14-day case total. This describes the ratio of people who have newly contracted COVID-19 to all persons at risk of developing the disease. To better compare the different counties and the state of Nebraska, we have represented **weekly risk** per 10,000 residents.
- The spikes correspond to outbreaks in each of the counties. Following the outbreak in Lexington and Dawson counties in the Spring, weekly cumulative incidence numbers were lower than the statewide average, except for brief outbreaks in Kearney county (Minden) in August.
- Beginning late September and continuing into October, there have been multiple spikes, in the adjoining counties of Kearney, Phelps and Franklin, along with the steady rise of **weekly risk** in Buffalo, and more recently, Dawson county.



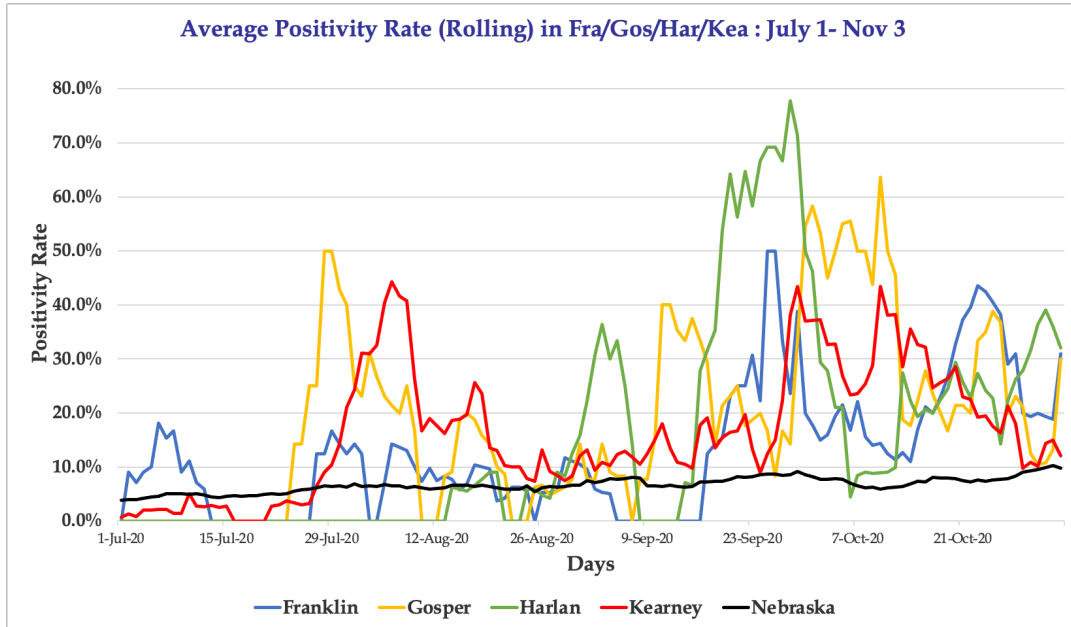
<sup>1</sup> For further details on calculating **risk** (or **cumulative incidence**, or **attack rate**), please see CDC webpage <https://www.cdc.gov/csels/dsepd/ss1978/lesson3/section2.html>



- The following line graph describes the average positivity rate (7-day rolling) by **county** from **July 1 - Nov 3** and the state of Nebraska<sup>2</sup> for the same period.
- The top graph shows Buffalo, Dawson & Phelps counties & the one below shows Franklin, Gosper, Harlan and Kearney counties. Scales are different for both.



<sup>2</sup> Errata: An earlier version of this graph misrepresented the positivity rates for Nebraska. The error has been rectified. For data about Nebraska and other states COVID-19 testing and cases, visit the covid tracking project:



**Weekly report Oct 28 - Nov 3 2020**

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

**Reporting period :** Oct 28 - Nov 3, 2020 (1 week)  
& Oct 7 - Nov 3, 2020 (4 weeks)

**Overall testing - previous week**

A total of 1411 persons were tested in the past week, of whom 435 were positive, and 986 were negative. Details are as below.

	Negative	Positive	Total
<b>Number</b>	986	435	1411
<b>Percentage</b>	69.9%	30.1%	100.0%

**Overall testing - previous month**

A total of 6234 persons were tested in the past 4 weeks, of whom 1501 were positive, and 4733 were negative. The results are displayed below.

	Negative	Positive	Total
<b>Number</b>	4733	1501	6234
<b>Percentage</b>	75.9%	24.1%	100.0%

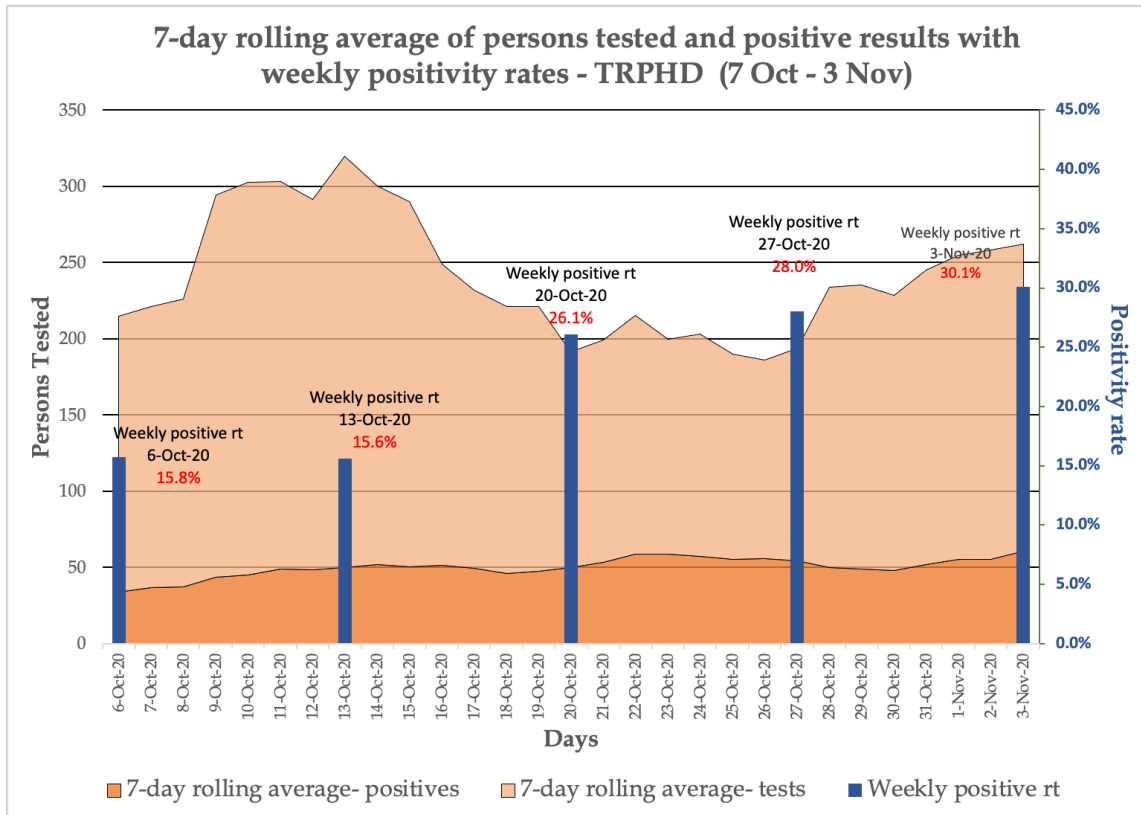


Table 1 gives details of positive cases done by county, age categories and gender. Table 2 describes the proportion of tests conducted by age, county and gender.

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

	Oct 28 - Nov 3 (1 week)			Oct 7 - Nov 3 (4 weeks)		
	Total persons tested	Positive cases	P. rate (%)	Total persons tested	Positive cases	P. rate (%)
<b>County</b>						
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%
<b>Total</b>	<b>1356</b>	<b>380</b>	<b>28.0%</b>	<b>6292</b>	<b>1312</b>	<b>20.9%</b>
<b>Age (in yrs)</b>						
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%
<b>Total</b>	<b>1356</b>	<b>380</b>	<b>28.0%</b>	<b>6292</b>	<b>1312</b>	<b>20.9%</b>
<b>Gender</b>						
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%
<b>Total</b>	<b>1356</b>	<b>380</b>	<b>28.0%</b>	<b>6,292</b>	<b>1,312</b>	<b>20.9%</b>

- 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 7 - Nov 3). Also shown is the **weekly positivity rate**



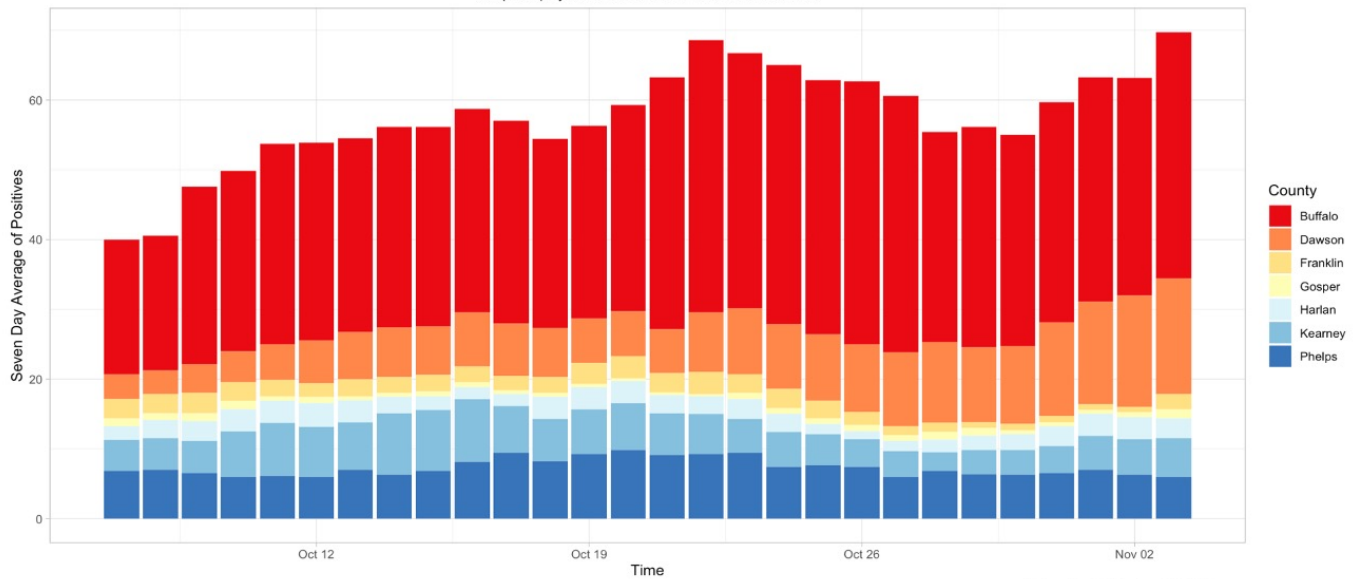
- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **county** for the past four weeks (Oct 7 – Nov 3).
- The line graph describes the same data per 100,000 population





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

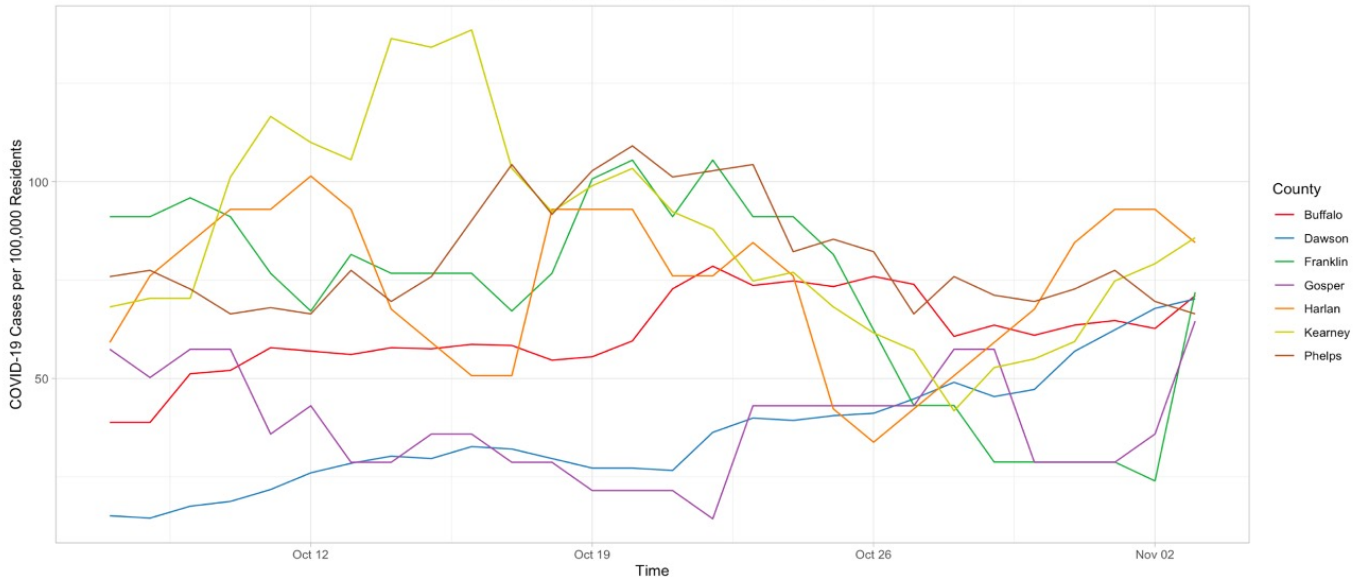
Graph displays data from October 7th to November 3rd



Information Updated as of 11/3 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 7th to November 3rd



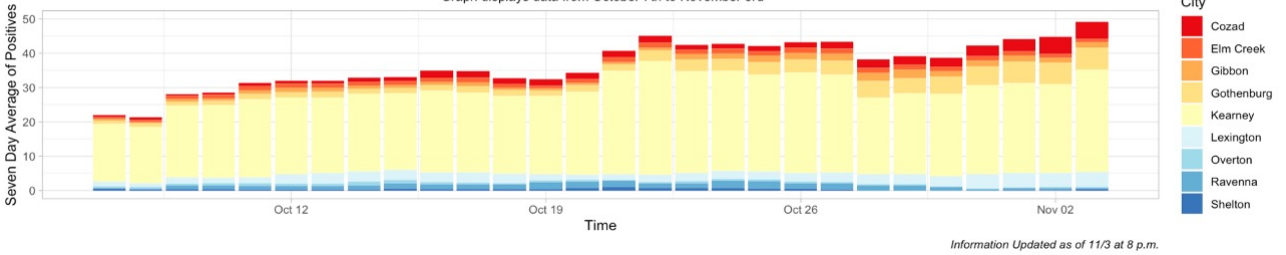
Information Updated as of 11/3 at 8 p.m.

- The following bar graph describes the 7-day rolling averages by **city** for the past four weeks (**Oct 7 - Nov 3**). 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



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

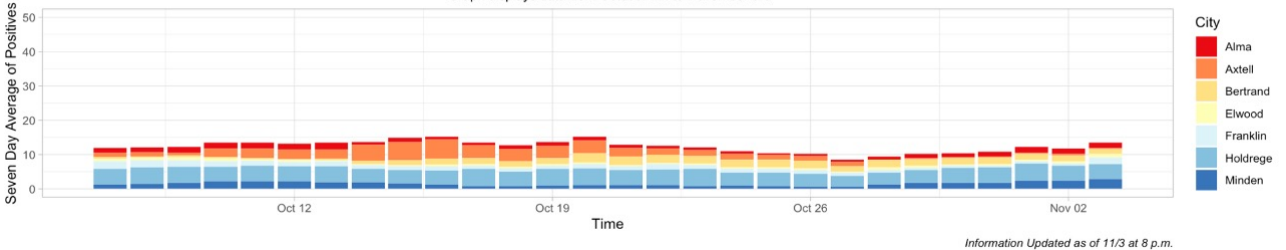
Graph displays data from October 7th to November 3rd



Information Updated as of 11/3 at 8 p.m.

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

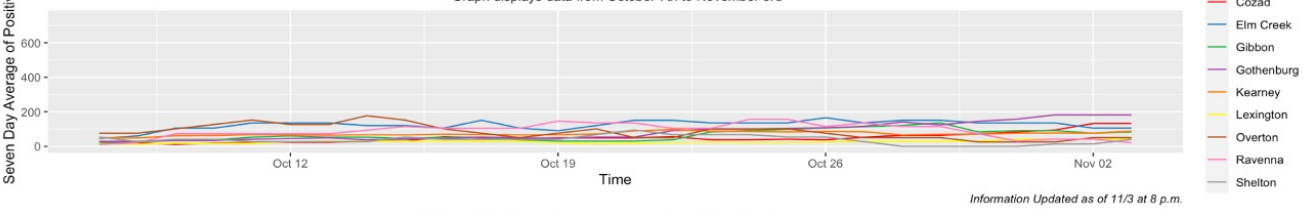
Graph displays data from October 7th to November 3rd



Information Updated as of 11/3 at 8 p.m.

**7 Day Rolling Average of COVID-19 Cases  
Per 100,000 Residents by City (Buffalo/Dawson)**

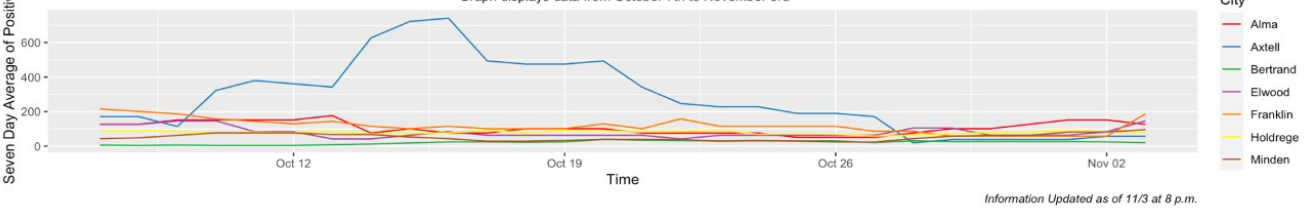
Graph displays data from October 7th to November 3rd



Information Updated as of 11/3 at 8 p.m.

**7 Day Rolling Average of COVID-19 Cases  
Per 100,000 Residents by City (Fra/Gos/Har/Kea/Phe)**

Graph displays data from October 7th to November 3rd



Information Updated as of 11/3 at 8 p.m.

**Weekly summary**

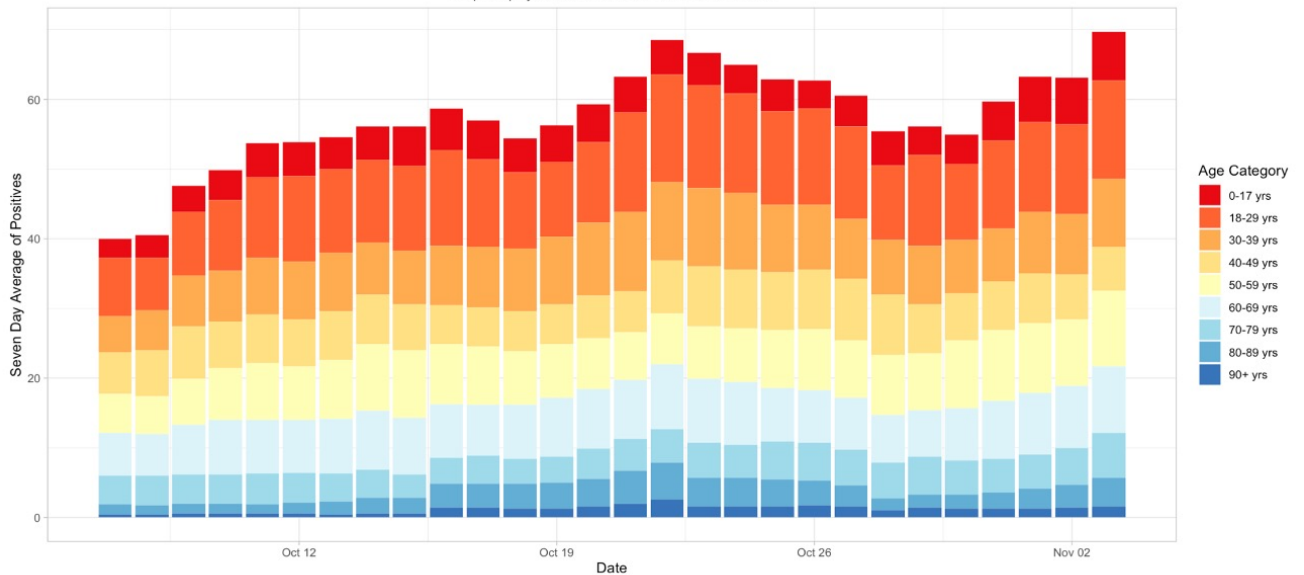
- October marked the onset of the second wave of covid infections in Two Rivers Health District, and spread is now widespread across community and possibly facility settings..



- Positivity rates across the district have risen, each county now has a weekly positive rate consistently above the statewide average.
- Increases in case numbers across Buffalo county seem to have accelerated in the past 2 weeks. Dawson county seems to be seeing a slight surge in cases, especially in Gothenburg and Cozad.
- Weekly cumulative incidence across districts shows a steady upward trend consolidating for Buffalo county, possibly presaging a rapid increase in cases.
- Increased COVID hospitalization rates and ICU usage across the district point to early signs of strain on intensive and medical/ surgical bed capacity.
- Incidence rates among residents aged 65 and over is extremely concerning. Almost a third of test reports in the previous week among this age group were positive, representing a clear upward trend.

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

Graph displays data from October 7th to November 3rd



Information Updated as of 11/3 at 8 p.m.