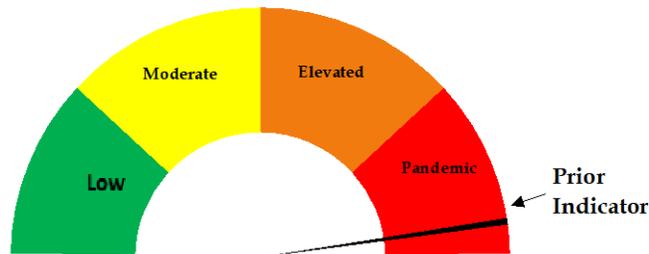**Risk Dial Dec 3 2020**

Risk Dial for COVID-19
Two Rivers Public Health
Published December 3, 2020

- COVID-19 cases have decreased across TRPHD in the past week, and the weekly average is less than the previous two weeks.
  - However, a large part of this drop can be explained by decreased access to testing, delayed reporting by laboratories. For more details on delays, see weekly report (Nov 25 - Dec 1).
  - TRPHD expects an increase in positive cases across the district because more testing is available this week. We may see an additional increase due to holiday travel and gathering.
- COVID-related hospital bed use accounts for about 35% of all hospital beds in the district and ICU availability is currently about 15%. (see https://www.trphd.org/covid-19/ for details)
- Deaths due to COVID-19 have increased across Two Rivers Health Department. 72 deaths due to COVID have been confirmed in the district, half of those occurring in the last six weeks.
- Although overall case counts have dropped over the past week, the proportion of persons testing positive aged 50-64 and 65+ years has risen (25% v/s 23% and 18% v/s 16%) compared to two weeks previously.
- For these reasons, the risk dial continues to remain elevated this week deeper within the 'pandemic' level.

Weekly report Nov 25 - Dec 1 2020
Overview

The weekly report will look at COVID-19 cases in TRPHD across three time periods, presenting graphs showing daily progress of cases and a weekly summary in conclusion

- The first set of graphs look at the progress of the pandemic from **April 1 – December 1** (35 weeks) across all counties.
  - We describe the 7-day rolling average [1]across TRPHD since April, describing cases by age categories **(Apr – Dec)**
  - We present the **7-day rolling average** plotted against **daily deaths** [2] in TRPHD from **March to December**.
  - We describe total (cumulative) cases/ 100,000 population [3], as well as the line for the United States and the state of Nebraska for comparison since Mar 19
- The second set of graphs look at daily cases (7-day rolling average) from **November 3 – December 1**. Progress 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.

- **There has been widespread data discontinuity across the country due to Thanksgiving week. Fewer testing sites were open last week, lab work was likely slower, and hospitalizations and deaths may not have been reported with immediate urgency. This may have resulted in lower testing and reporting within the system. Typically, this discrepancy corrects itself over the next few weeks as unmet testing demand is fulfilled and the reporting catches up with daily counts.**
- **Following a statewide change in conventions for data presentation, we are shifting from reporting** _case positivity rates_ **(positive cases/ all persons tested) to** _test positivity rates_ **(positive cases/ all tests conducted) in our weekly reports. We are in the process of updating datasets to reflect this change.**
- **For the above reasons, we will not be presenting tables showing total cases and positivity rate by county, age and gender this week. The graphs represent all positive cases recorded in the district since March 2020. We shall resume presentation of weekly case numbers next week.**

To conclude, even as data delays and testing shortfalls have likely disrupted daily reporting, long term trends seem to point towards rising case counts across all counties in Two Rivers District. Daily death counts have risen, even as incident cases among individuals aged 60 or more have increased. Half of all deaths in TRPHD occurred in the previous 6 weeks. There appears to be slightly improved ICU availability and COVID-related medical/surgical bed usage across hospitals in the district this week compared to previous weeks. 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.

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[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] Daily Deaths = COVID deaths in TRPHD since March (scale presented on z-axis, date indicates date of death)
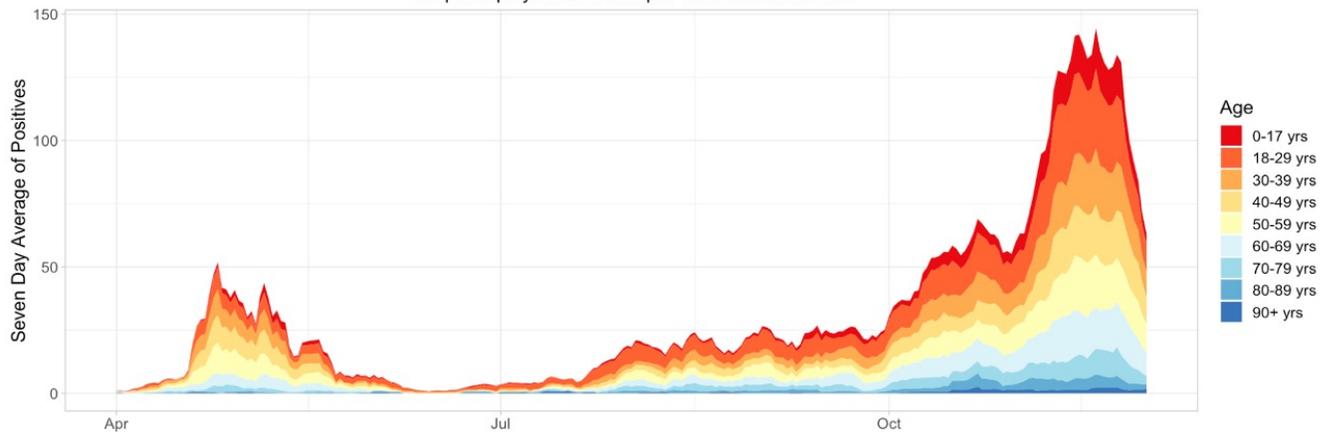[3] Total cases per 100,000 population = [(Cumulative cases)/2019 mid-year population] * 100,000

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- The graph below describes 7-day rolling average of COVID-19 cases by age across TRPHD from **April 1 – December 1**. 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 7-day rolling average plotted against the daily deaths in the district. **Scale for deaths is on the z-axis.** Date indicates date of demise of the individual due to COVID-19. **Note: daily case counts are plotted on the y-axis.**
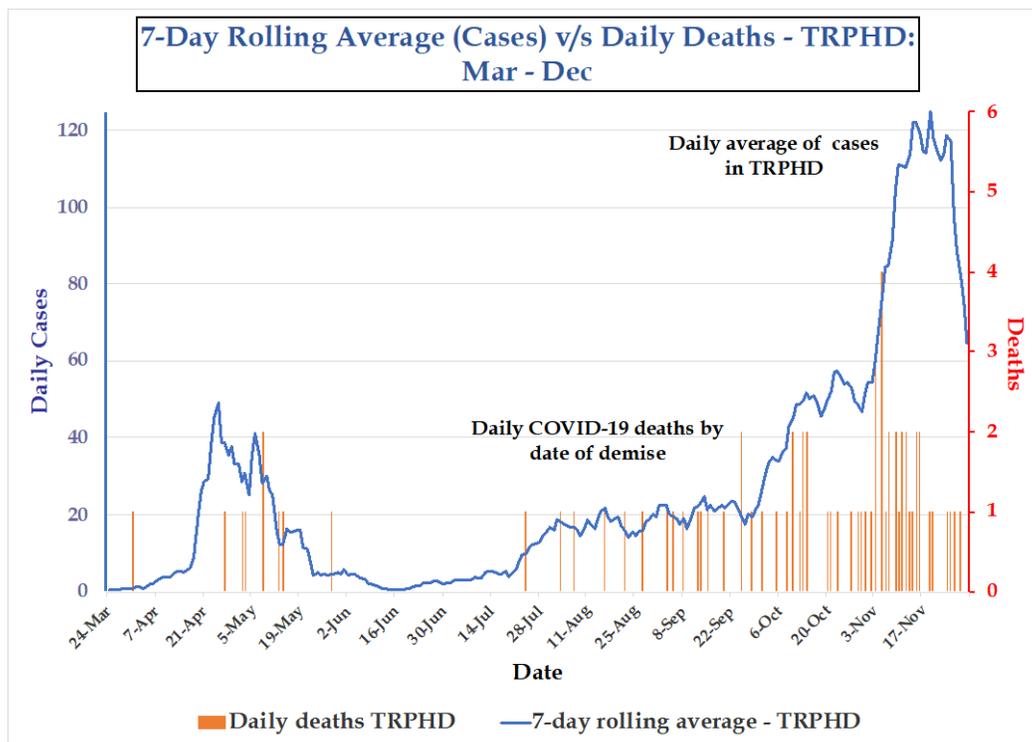
7 Day Rolling Average of COVID-19 Cases in Two Rivers by Age
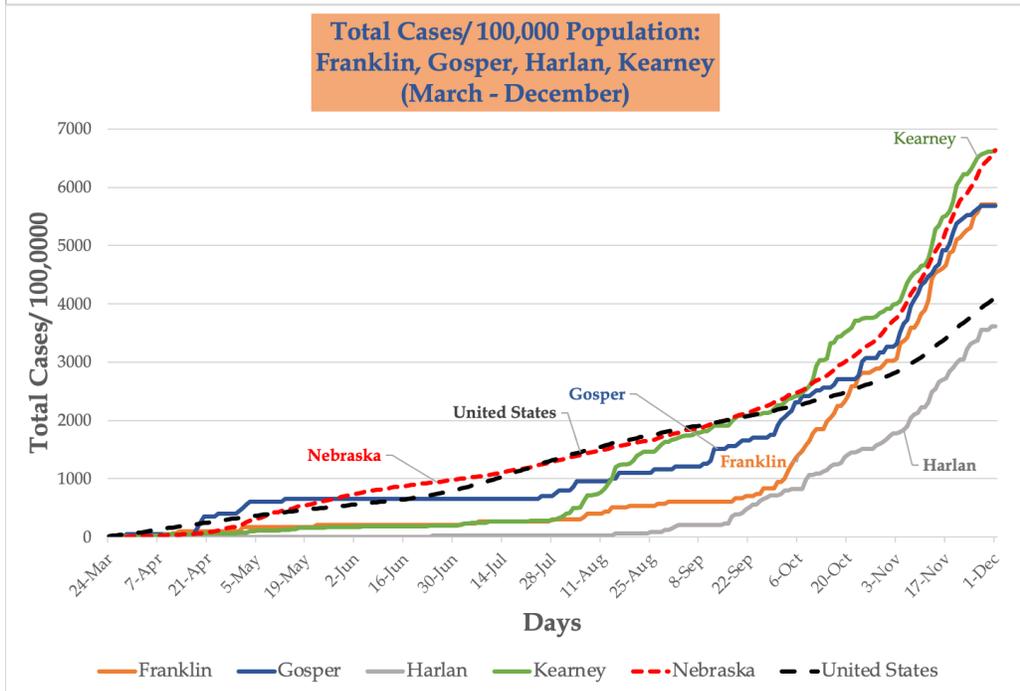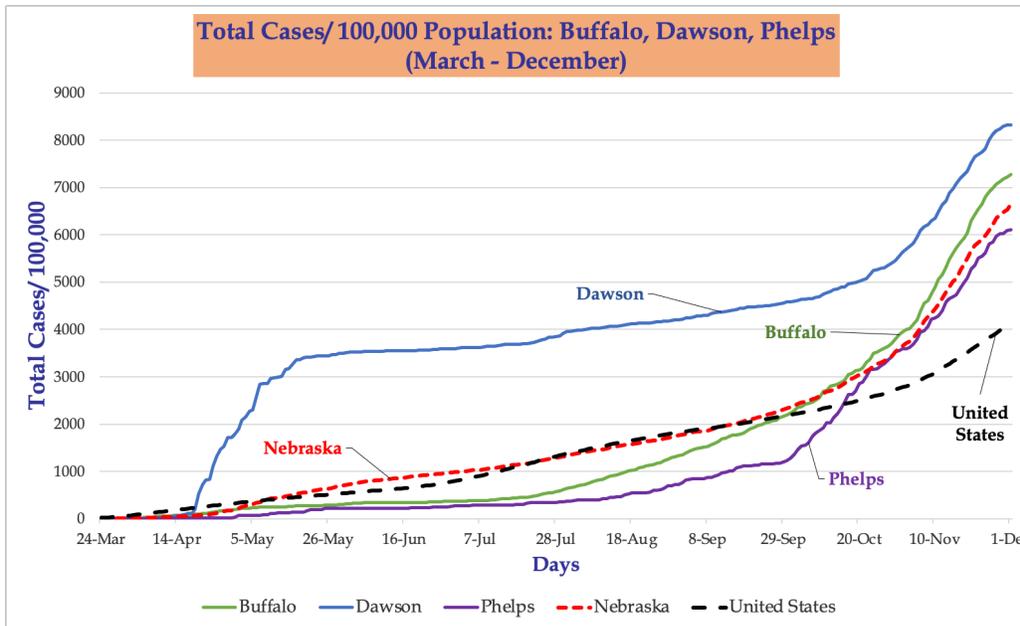
Graph displays data from April 1st to December 1st

Information Updated as of 12/01 at 8 p.m.

7-Day Rolling Average (Cases) v/s Daily Deaths - TRPHD: Mar - Dec

- The graph below describes the **total (cumulative) cases/ 100,000 population** across all 7 counties from March 19 to Dec 1. The height of the line corresponds to the cumulative case counts relative to the county's population. Nebraska and USA are shown for comparison.
- Graphs are presented separately for Buffalo and Dawson, and for Franklin, Gosper, Harlan, Kearney and Phelps counties. <u>Scales are different for both graphs.</u>
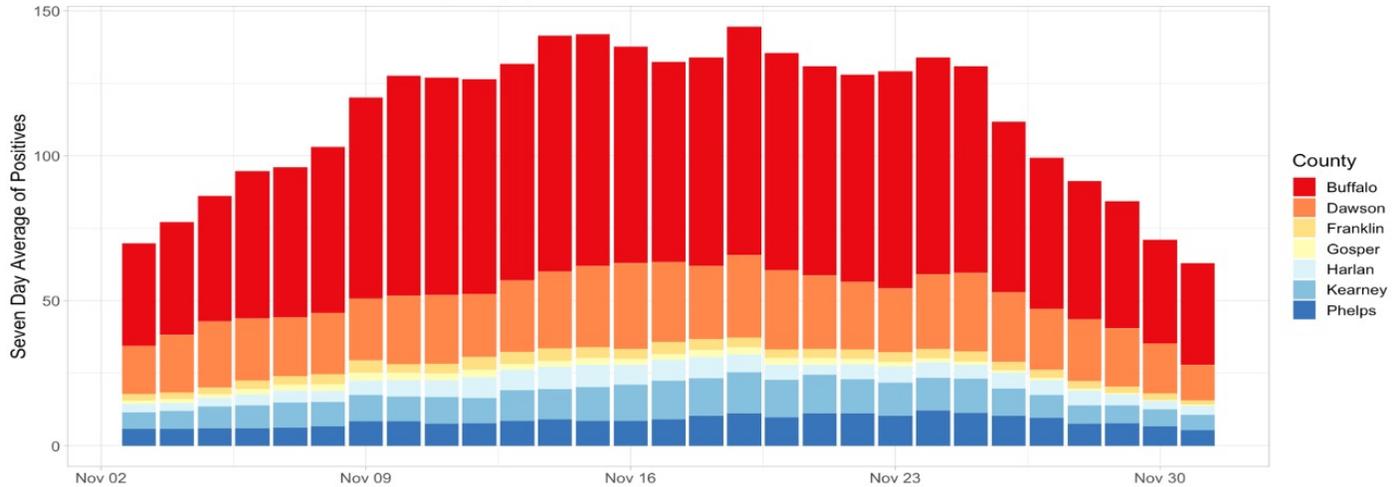
Total Cases/ 100,000 Population: Buffalo, Dawson, Phelps
(March – December)

Total Cases/ 100,000 Population:
Franklin, Gosper, Harlan, Kearney
(March – December)

- The following bar graph describes the 7-day rolling averages of COVID-19 cases by **county** for the past four weeks **(Nov 3 – Dec 1).**
- The line graph describes the same data per 100,000 population.[4] 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
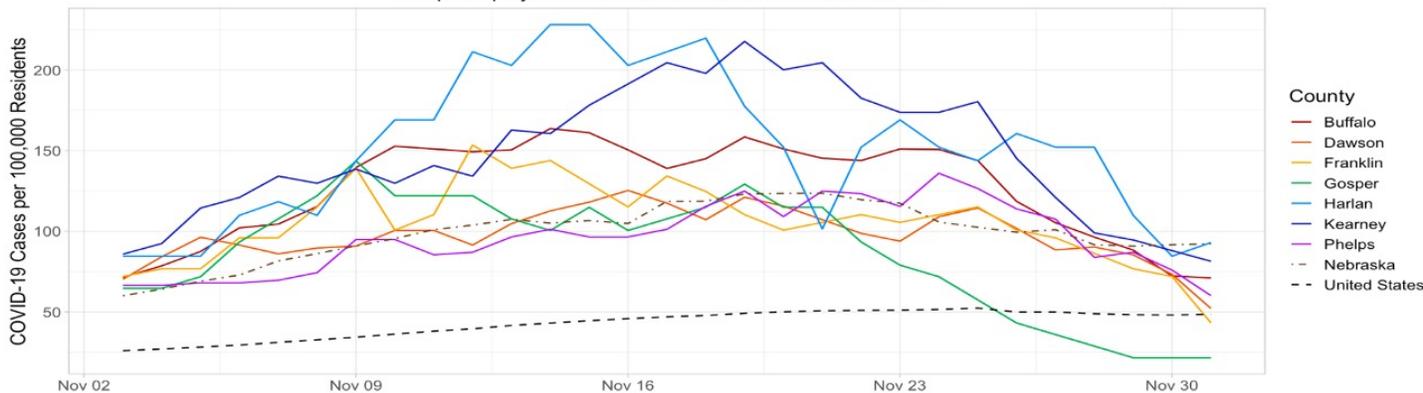Graph displays data from November 3rd to December 1st

Information Updated as of 12/01 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 November 3rd to December 1st
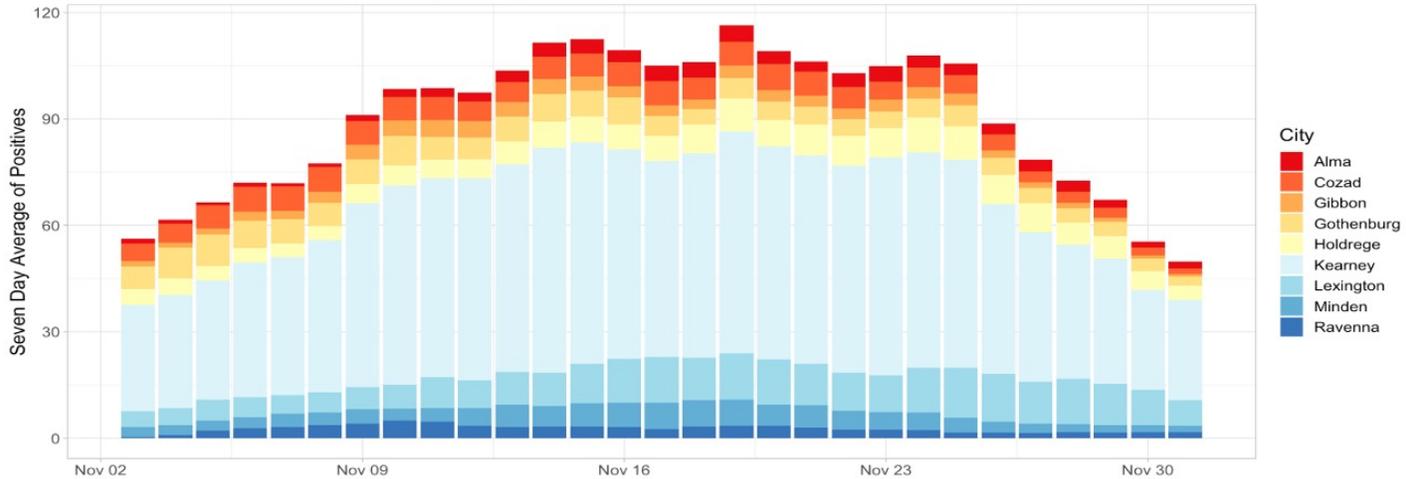
Information Updated as of 12/01 at 8 p.m.

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[4] Please note: When comparing counties, we describe rates per 100,000 population. This is roughly equal to the total population of Two Rivers Health Department (~97,000)

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Two Rivers
PUBLIC HEALTH DEPARTMENT

- The following bar graph describes the 7-day rolling averages by **city** for the past four weeks **(Nov 3 – Dec 1)** across all counties in TRPHD. The graph above shows cities with population above 1100 and the one below shows the graph for cities with under 1100 residents. The **scale is different** for both graphs.

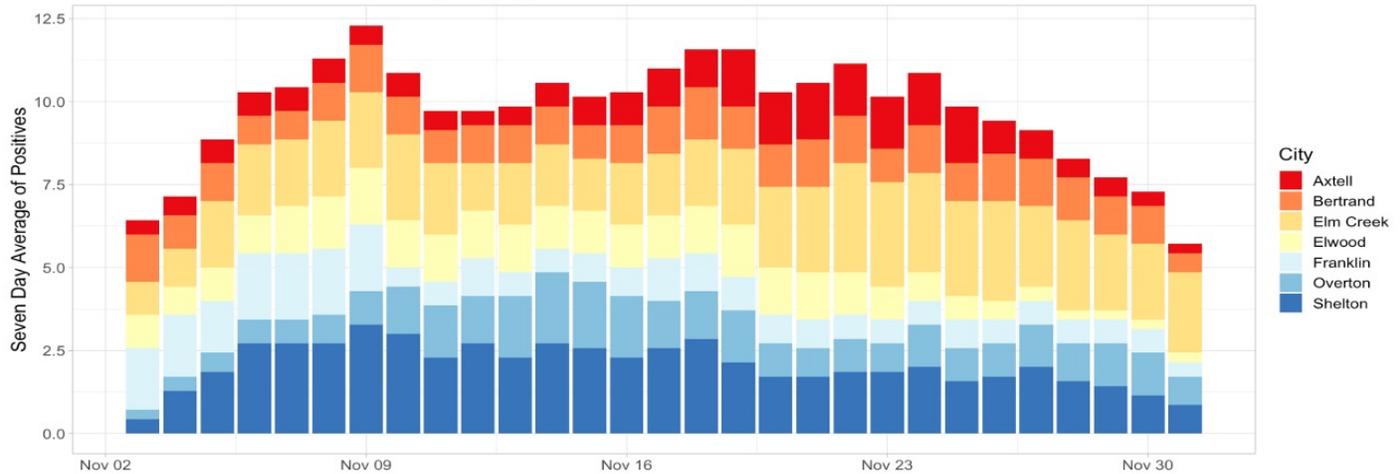**7 Day Rolling Average of COVID-19 Cases
in Cities > 1,100 Residents**
Graph displays data from November 3rd to December 1st

City
- Alma
- Cozad
- Gibbon
- Gothenburg
- Holdrege
- Kearney
- Lexington
- Minden
- Ravenna

Information Updated as of 12/01 at 8 p.m.

**7 Day Rolling Average of COVID-19 Cases
in Cities with 500-1,099 in Residents**
Graph displays data from November 3rd to December 1st

City
- Axtell
- Bertrand
- Elm Creek
- Elwood
- Franklin
- Overton
- Shelton

Information Updated as of 12/01 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 **(Nov 3 – Dec 1)** [5]
- The top graph describes shows cities with population above 1100 and the one below shows the graph for cities with under 1100 residents. The **scale is different** for both graphs.

7 Day Rolling Average of COVID-19 Cases Per 10,000 Residents in Cities > 1,100 Residents
Graph displays data from November 3rd to December 1st

Information Updated as of 12/01 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 November 3rd to December 1st
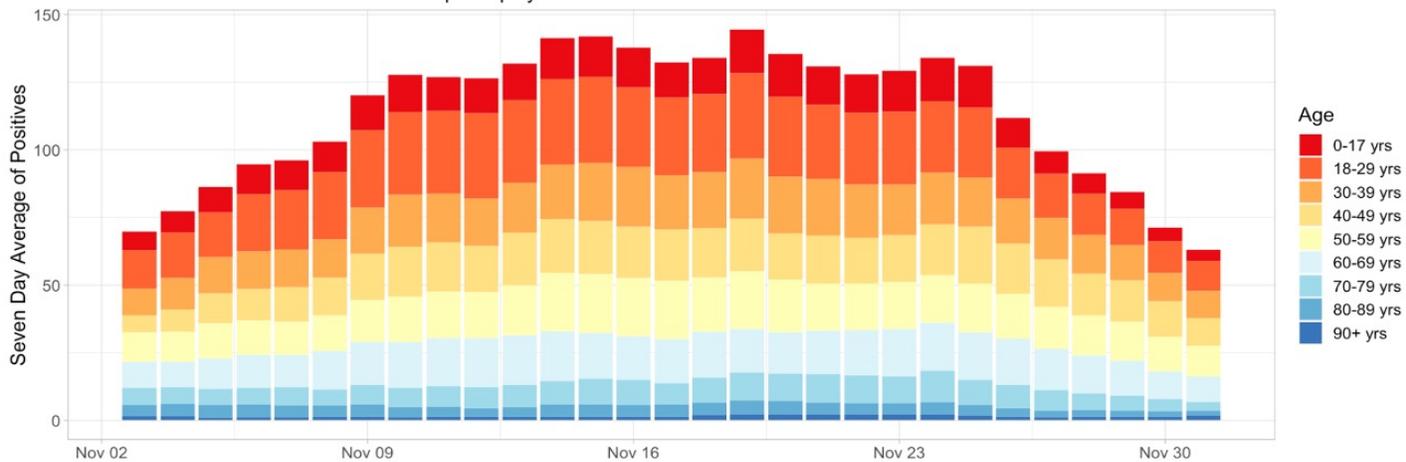
Information Updated as of 12/01 at 8 p.m.

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[5] 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 **November 3 – December 1** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

Weekly summary

- A little under 35,000 persons have been tested across Two Rivers Health District, and 7095 have tested positive. The Health Department has announced a total of 72 deaths thus far in the district.
- Case counts have decreased across all counties and cities in TRPHD, although this is almost certainly due to delays in data reporting and collection. Cumulative cases, trending upwards across all counties in the district prior to last week are likely to rebound and continue their increase following resumption of regular testing and reporting.
- A little over 1000 persons were tested in the previous week, as compared to about double that number two weeks previously. However, the age breakup of persons testing positive remained similar. The proportion of persons over 65 years testing positive in the past week was slightly higher (18% v/s 16%) compared to two weeks previously.
- Deaths due to COVID-19 have increased across the district. The graph attached depicts only those deaths that have been reported by Two Rivers. This number is almost certain to increase as more deaths are cleared for announcement to the public.
- Availability of staffed medical/ surgical beds has dropped by about a tenth across the district, partly because of staffing pressures and partly because of special requirements for current inpatients (including COVID patients)
- COVID-related utilization accounts for about 35% of all hospital beds in TRPHD and ICU availability is currently about 15%. (see https://www.trphd.org/covid-19/ for details)

To conclude, even as data delays and testing shortfalls have likely disrupted daily reporting, long term trends seem to point towards rising case counts across all counties in Two Rivers District. Daily death counts have risen, even as incident cases among individuals aged 60 or more have increased. Half of all deaths in TRPHD occurred in the previous 6 weeks. There appears to be slightly improved ICU availability and COVID-related medical/surgical bed usage across hospitals in the district this week compared to previous weeks. 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.