COVID Situation Report Update

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November 13, 2020

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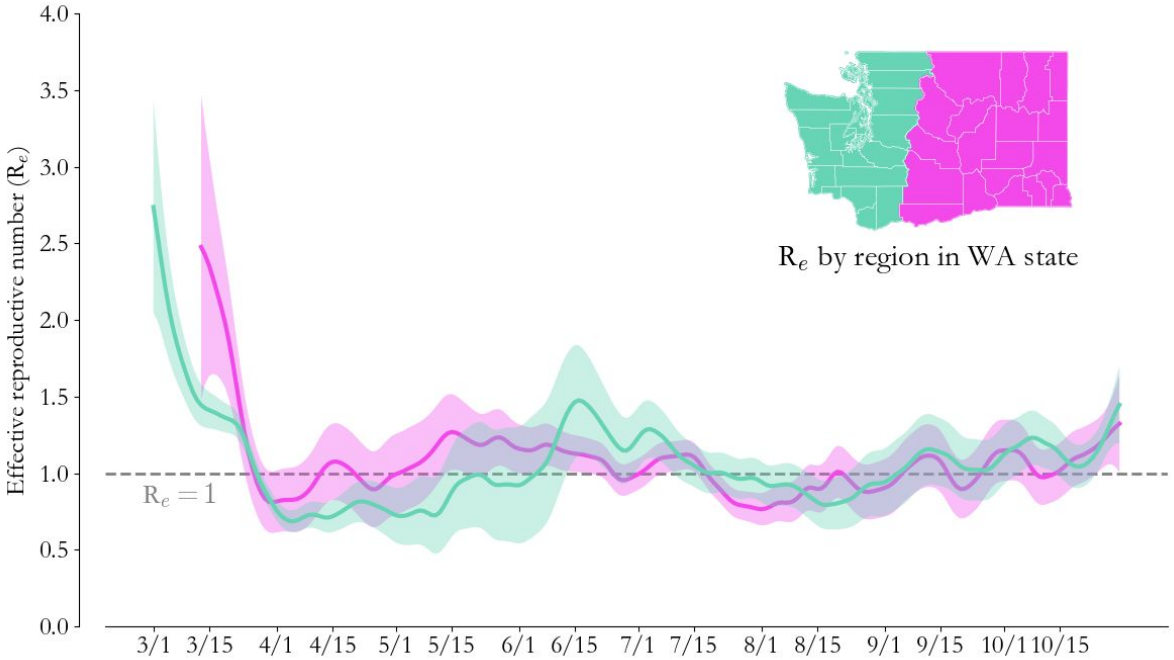
Current situation

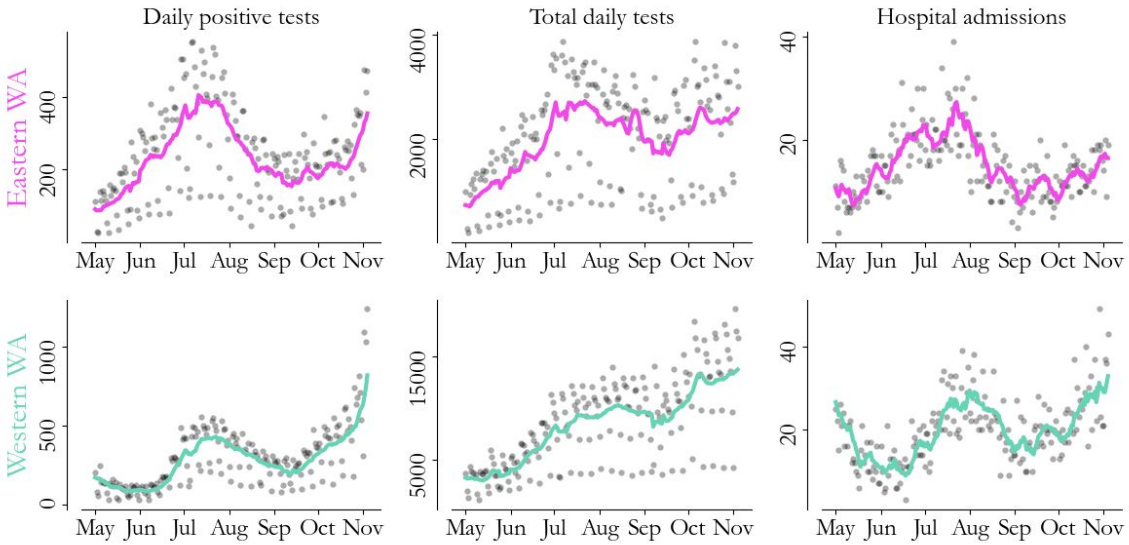


Using data to November 4, we estimate the effective reproductive number (Re) in eastern Washington on October 29 was likely between 1.04 and 1.56, with a best estimate of 1.30.

We estimate that in western Washington, Re was likely between 1.19 and 1.60, with a best estimate of 1.40.

Estimates of Re have been above one since the mid October in eastern Washington, and have been above one since the beginning of October in western Washington, indicating that we are in a period of sustained transmission in both eastern and western Washington.

Details



Both eastern and western Washington are seeing exponential growth in cases.

The seven-day rolling average case count in eastern Washington has increased from 153 cases per day on September 13 to 309 on November 1, and this increase is continuing in the incomplete data subsequent to that date.

These growing trends have been mirrored in gradual increases in hospital admissions over this same time period.

Case counts in western Washington have been steadily increasing since September 12, and this increase has accelerated since October 24, increasing from a seven-day moving average of 196 cases per day on September 12 to 462 cases on October 24 to 644 cases on November 1, and is already at 894 cases in the incomplete data on November 7.

Daily hospitalizations in western Washington have been increasing since the beginning of October, increasing from a seven-day rolling average of 15 on October 2 to 27 on November 1. This increase is continuing in the incomplete data, and has reach 35 admissions on November 7.

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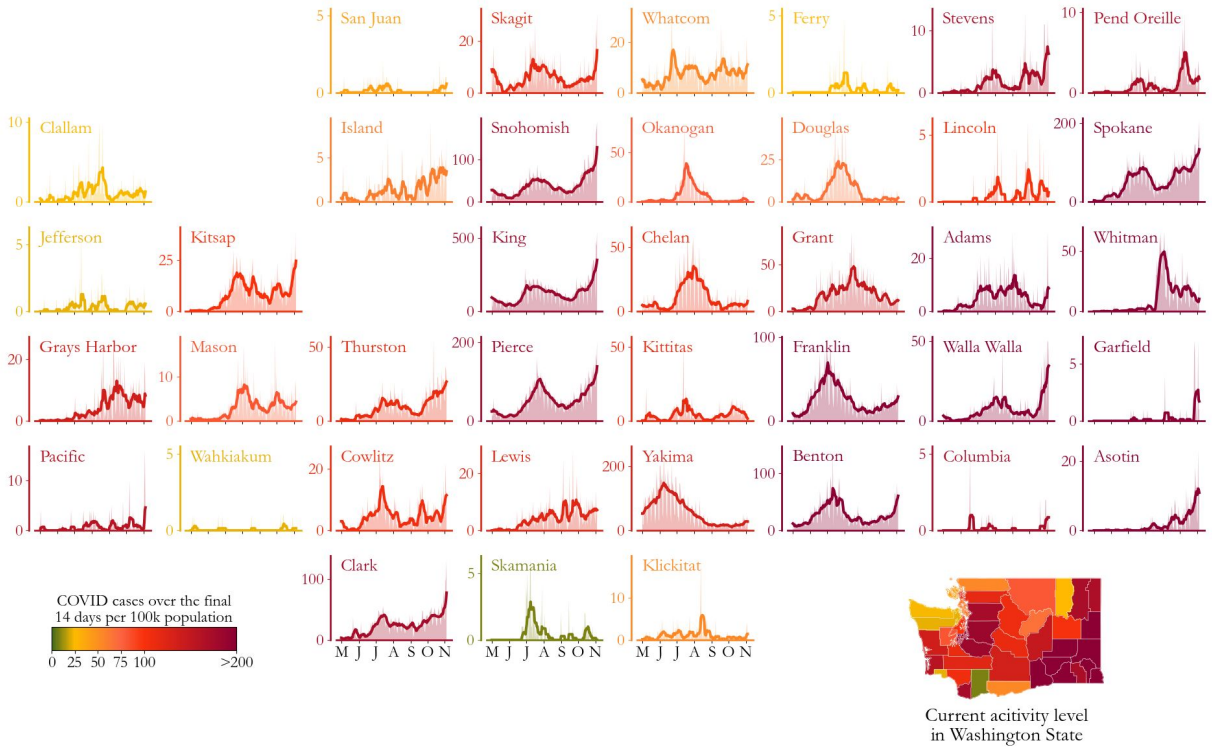

Current acitivity level
in Washington State

-Our five largest counties (Clark, King, Pierce,Snohomish and Spokane) are seeing steep increases in case counts through November 1 that are continuing in the incomplete data. These counties are also among those with the highest per capita case rates.

- Several medium sized counties (Benton, Franklin, Kitsap, Skagit and Thurston) are seeing similar increasing trends.

-Asotin and Walla Walla counties are seeing steep increases in cases in both complete and incomplete data.

-Several other small counties (Adams, Chelan, Cowlitz, Garfield, Grant, Island, Lewis, Pacific, Stevens, Whitman and Yakima) are seeing increasing numbers of cases either in the incomplete data or in both complete and incomplete data, however absolute numbers of cases are still low.

-Almost no counties have low (<25 cases per 100,000 population) per capita rates

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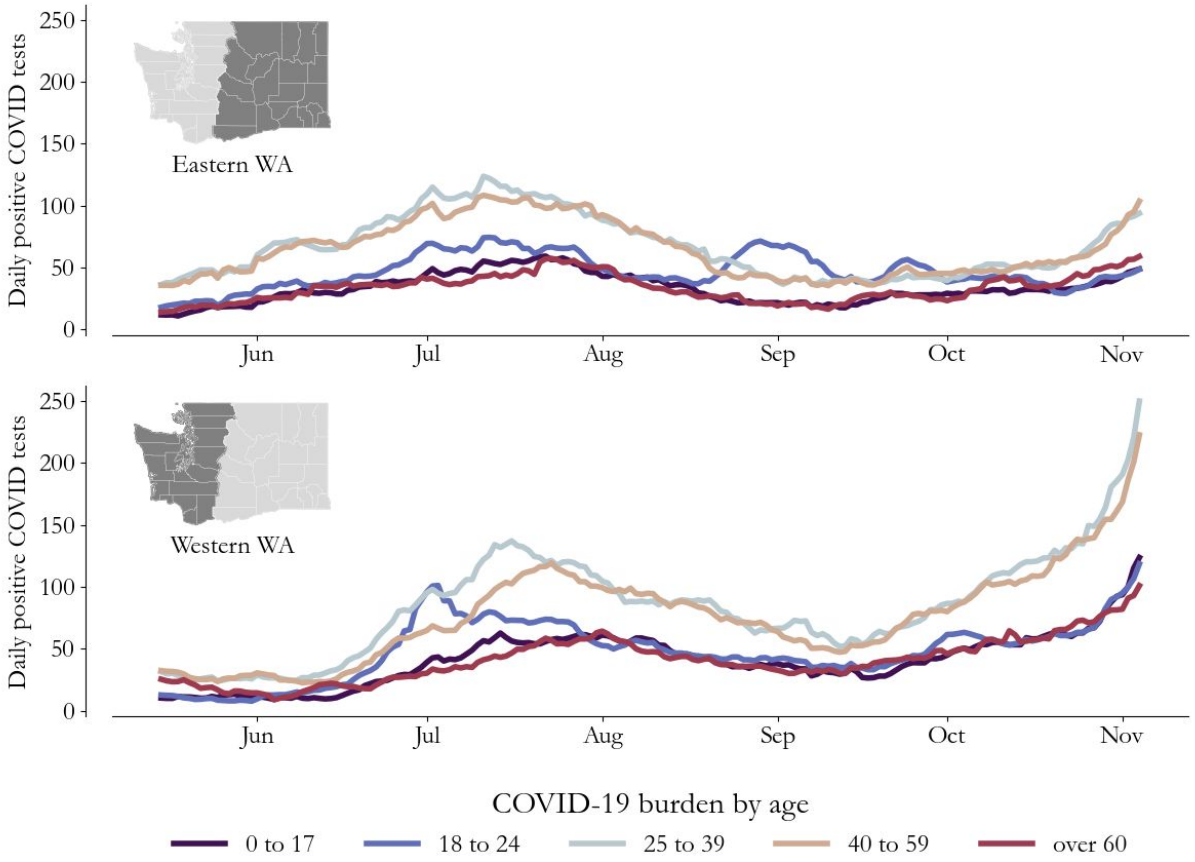

Cases are increasing across age groups in both eastern and western Washington, with the largest increases occurring in those ages 25 to 39 and 40 to 59.

In eastern Washington, per capita case rates are highest in those ages 25 to 39, and lowest in those less than 18 years old. Test positive rates are lowest in those 60 or older and highest in those 18 to 24.

In western Washington, per capita case rates are highest in those ages 18 to 24, and lowest in those 60 and older and in those under 18. Test positive rates are also lowest in those 60 and older, but highest in those under 18.

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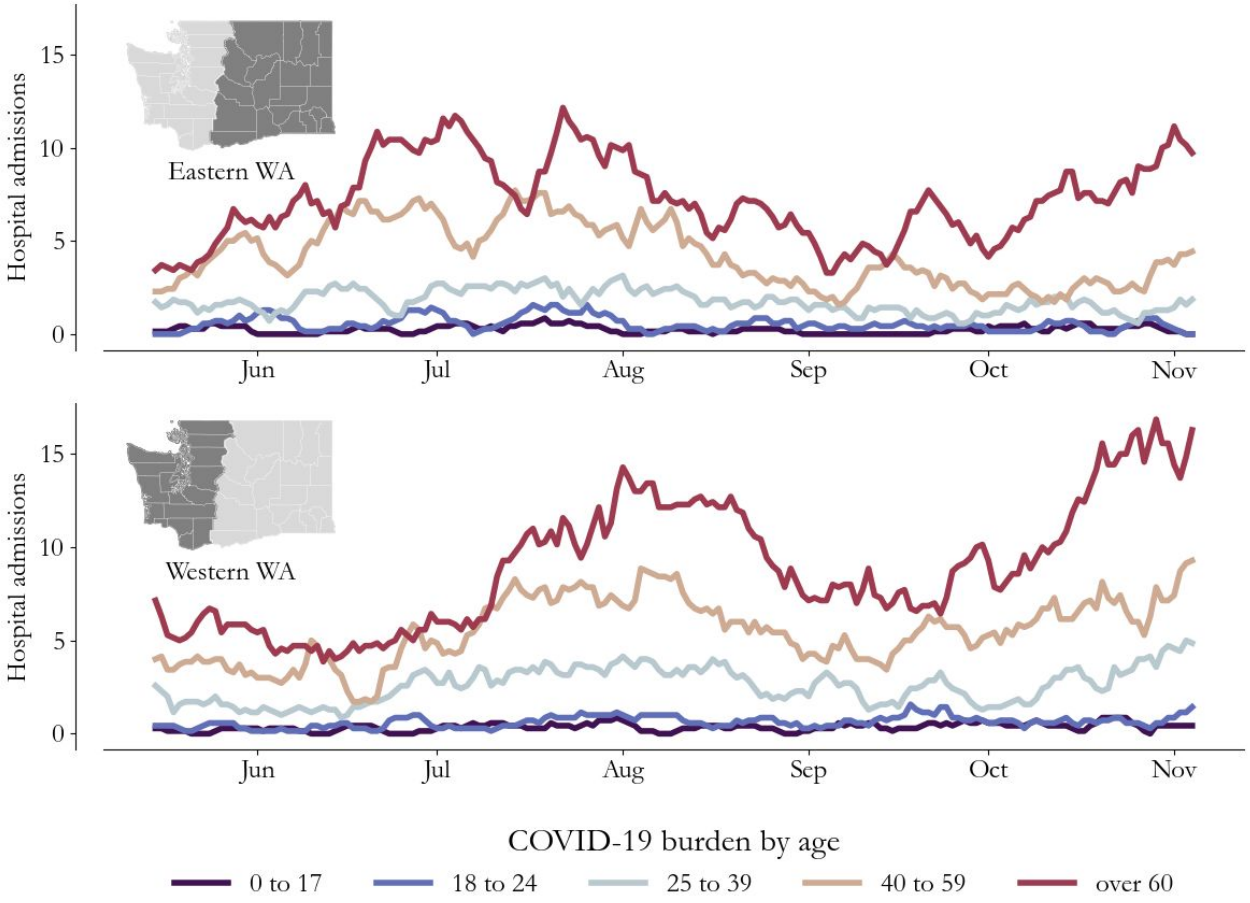
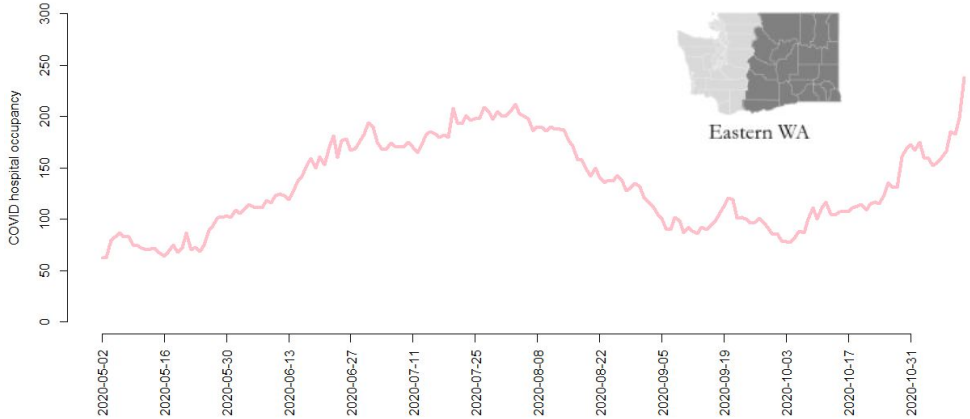


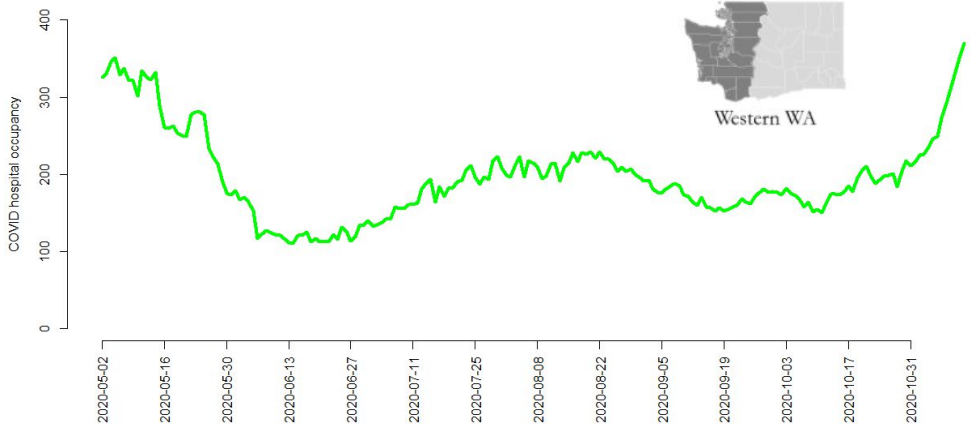
In both eastern and western Washington, increases in hospitalizations are primarily being driven by increases in those age 60 and older.

Those 60 and older now account for 62% of admissions in eastern Washington and 60% of admissions in western Washington.

Increases are also being observed in those ages 40 to 59 and to a lesser extent in those ages 25 to 39.

Hospital Occupancy





The number of hospital beds occupied by patients with COVID-19 has risen steeply since November 1 in both eastern and western Washington.

When hospital admissions are increasing, hospital occupancy will rise at a faster rate than admissions as the mean length of stay of patients admitted with COVID-19 is longer than one day.

Implications for public health practice

Although cases are higher now compared to the summer wave due to increased testing volume, Re in western Washington is approaching peak values seen in mid-June, and in eastern Washington Re has now exceeded the peak value that occured in mid-May.

Also of great concern, daily hospitalizations in western Washington are at similar levels to those seen around the peak we saw over the summer (seven-day moving average of 27 cases on November 1 compared to 26 cases on August 1). Peak hospitalizations over summer occurred approximately two weeks after the peak in cases, suggesting that hospitalizations will continue to rise in western Washington even if cases start to plateau. Because patients may stay in the hospital for up to several weeks, hospital occupancy will continue to rise for some time after hospital admissions level off.

Although estimates for R_e have generally been lower in eastern Washington than western Washington since the start of October, the higher test positivity rates and per capita rates remain highly concerning, and Re has been rising in eastern Washington since October 15.

Implications for public health practice

Case investigation data from around the nation suggest that transmission is increasingly occurring in small, private social gatherings. Some areas are also seeing increases in the numbers of close contacts identified through contact tracing. The confluence of increasing prevalence of COVID-19 in a community and the possibility of increased gathering sizes during the holiday season has the potential to greatly accelerate transmission beyond current levels.

The Canadian Thanksgiving (held October 12) resulted in increases in case counts in some areas of Canada, and we expect a similar increase could occur subsequent to the United States Thanksgiving unless we adapt our plans for the holidays accordingly, avoiding large and even modest-size gatherings, and not convening intergenerational celebrations that bring participants together from different locations where they may have unwittingly been exposed.

There is a broad understanding that wearing masks while out in commercial or social situations is highly effective in preventing COVID transmission and it is important to increase the use of masks in these settings as much as possible. What is less well known is that mask use while socializing indoors even at home, and increasing ventilation will also help to prevent infections in small-group settings.

Avoiding gatherings entirely is recommended for individuals in categories at high risk for severe illness from COVID-19 infection, and if you decide to host or attend a gathering, reducing the size of the gathering and careful pre-planning of the event may help reduce the risk of spreading COVID-19.

Outlook

Both the short term and long term outlooks are alarming.

The latest estimates of R_e in western Washington suggest that R_e has been sustained above one since the start of October, and recent increases in Re mean that we expect cases and hospitalizations to continue to steeply rise in the near term.

In eastern Washington, recent estimates of Re are similar to those in western Washington, and we expect to see increases in cases to continue to accelerate. We expect hospitalizations to continue to increase in the near future in both due to the increases in cases in older adults and general lag between infection and hospitalization.

It is possible that the surge will accelerate over the next few weeks due to a combination of increased social gatherings over Thanksgiving together with increases in community prevalence.