OKALOOSA COUNTY COVID-19 KEY METRICS Week 31

The information in this report is collected and monitored daily and updated weekly to the community. As of August 3, 2020, 3,031 COVID-19 cases are reported for Okaloosa County, an increase of 663 cases since July 25, 2020.

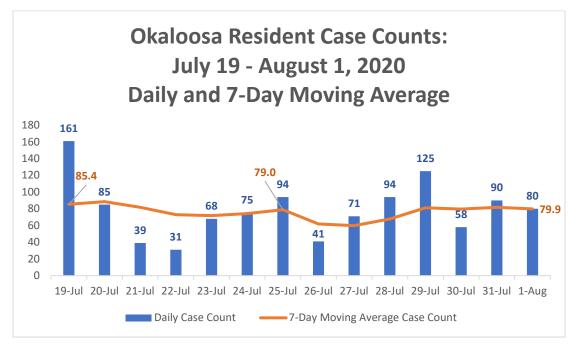
New Confirmed or Probable COVID-19+ Resident Cases over past 14 days:

Reports daily number and 7-day moving average of confirmed (PCR+) or probable (Antigen+) cases.

RATIONALE: Daily new cases reflect the proportion of the outbreak captured by surveillance systems. Number of new cases gives a sense of the size of the epidemic/outbreak in Okaloosa County.

TARGET: Decreasing case count over 14 days <u>or</u> at a low level (as defined by CDC* as below 10 cases per 100,000 population over 2 weeks).

*CDC Activities and Initiatives Supporting the COVID-19 Response and the President's Plan for Opening Up America Again. May 2020. Low incidence plateau defined as a very low number of new cases (below 10 cases per 100,000 population over 2 weeks with only minimal change in daily cases.



New resident cases remain flat. Okaloosa has not seen a sustained decrease in new cases per day in the past two weeks.

Cases are not at a low level.

- Total Cases in 2 weeks (July 19 August 1) = 1,112
- Rate: 530 cases/100,000 population in 2-week period
- Okaloosa Population = 210,000

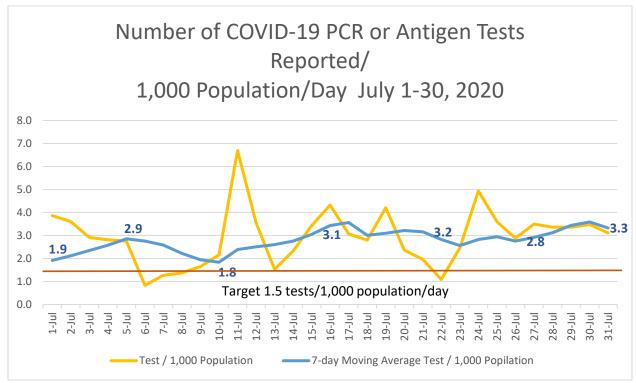
COVID-19 Diagnostic (PCR) and Screening (Antigen) Testing Per Capita

Reports daily and 7-day moving average total test results received / 1,000 population / day.

RATIONALE: The percent of positive tests (see metric below) can be interpreted only with comprehensive surveillance and testing of suspect cases in the order of 1.5 /1,000 population/day.

TARGET: 1.5 tests / 1,000 population / day*

*Resolve to Save Lives. Tracking COVID-19 in the United States. Essential Indicators. July 21, 2020.



Most days, Okaloosa County receives at least 1.5 COVID-19 diagnostic or screening tests (positive and negative results) per 1,000 population per day. The 7-day moving average tests per 1,000 population per day is above 1.5 tests per 1,000 population per day.

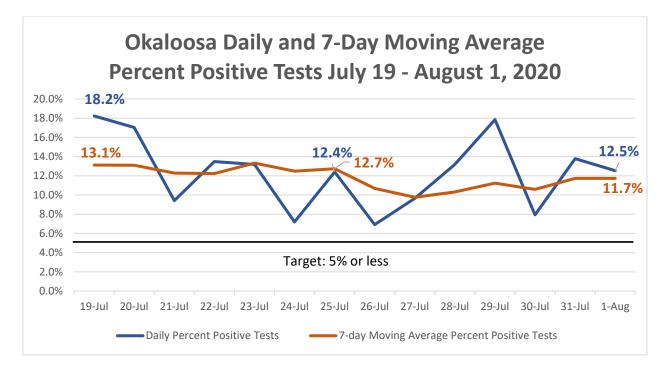
There is adequate testing of the population to be able to interpret the burden of disease in the County based on the percentage of positive COVID-19 diagnostic or screening tests received.

Percent Positive COVID-19 Tests:

Reports daily and 7-day moving average percentage of all positive COVID-19 diagnostic (PCR) and screening (Antigen) tests (regardless of provider) for Okaloosa County residents.

RATIONALE: Test positivity is an important indicator of the burden of disease in the area (county). The percent of positive tests can be interpreted only with comprehensive surveillance and testing of suspect cases in the order of 1.5 /1,000 population/day, which Okaloosa County achieves (see above metric).

TARGET: 5% or less of tests for COVID-19 are positive for at least 2 weeks.



*WHO. Public Health criteria to adjust public health and social measures in the context of COVID-19. May 2020.

Okaloosa has seen a modest decline in percent of positive tests over the past two weeks but remains above 10% and well above the 5% target. The burden of disease remains high in Okaloosa County.

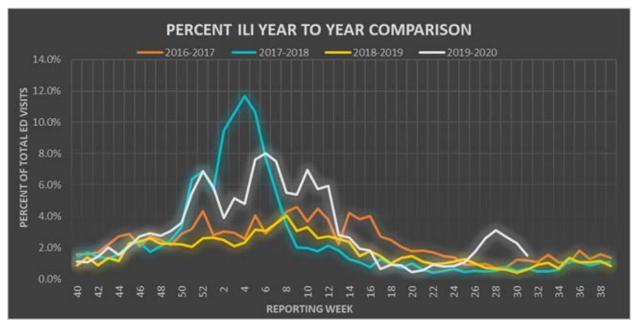
Influenza-Like Illness

Activity levels are based on the percent of emergency department visits due to influenza-like illness (ILI) compared with past year activity at the same time of the year.

RATIONALE: This type of syndromic surveillance* is used to monitor trends in emergency department visits and can be used to potentially detect a rise in COVID-19 cases before a rise in confirmed cases occurs. ILI is defined as fever (temperature of 100° F or greater with cough and/or sore throat without a known cause other than influenza).

TARGET: At or below baseline for the time of year based on past year trends for percent of ILI visits to emergency departments.

*Resolve to Save Lives. Tracking COVID-19 in the United States. Essential Indicators. July 21, 2020. White House Coronavirus Task Force. Guidelines for Opening Up American Again. Gating Criteria. May 2020.



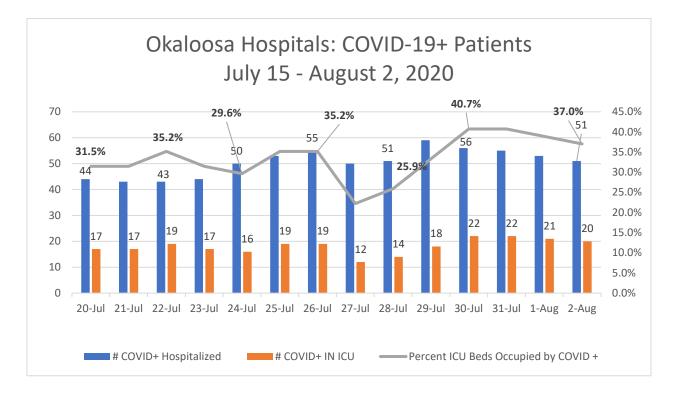
Prior to 2020, baseline ILI visits in July were consistently below 2%. During Week 27, ILI, as a percentage of all visits increased to 2.61%. A high of 3.12% was reached during Week 28. During Week 29 and 30, ILI remained above 2% at 2.69% and 2.27%, respectively. Week 31 sees the first decline below 2% in the past 5 weeks to 1.51%.

COVID-19 Hospital Admits

Number of COVID+ Hospitalized; Number of of COVID+ in ICU; and percentage of ICU beds occupied by COVID+ patients.

RATIONALE*: Declining hospitalization and use of ICU beds indicates a decline in the number of cases in community, with an approximately ~1-week lag and providing that the criteria for hospitalization has not changed.

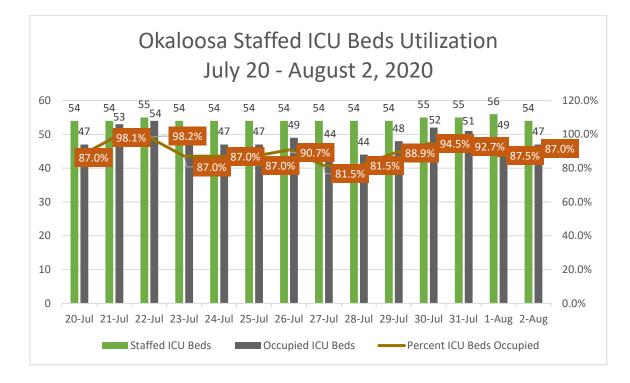
TARGET: Continuous decline in the number of hospitalized and ICU admissions of confirmed (PCR test) or probable (Antigen) COVID-19 cases for at least the past two weeks.



*WHO. Public Health criteria to adjust public health and social measures in the context of COVID-19. May 2020.

Okaloosa continues to see ongoing admissions to area hospitals for COVID-19 including a large percentage (generally more than 33% of ICU beds) with no signs of a continuous decline in the number of people admitted to the hospitals over a 2-week period.

During most days in the past 2 weeks, Okaloosa ICU beds have exceeded 85% occupancy. Two days out of the past 14, only one ICU bed was available in the county. There was a high of 10 beds available two days out of the last 2-week period. On average during this 2-week, 6 ICU beds were vacant per day. This gives the hospitals little surge capacity in ICU beds and our ICU facilities could be quickly stressed if any of the 82 COVID-19 positive residents of long-term facilities in Okaloosa County needed admission and ICU care.



Deaths

By August 2, 2020 Okaloosa County had 30 COVID-19 deaths to Okaloosa residents. This is an increase of 10 deaths since the Week 30 report or one week ago. To date, 70% of the deaths have occurred to people 75 years and older. Persons 45 – 74 account for 23% of our resident deaths and 7% to individuals age 25-34 years. Today, many family members are suffering the loss of a loved one due to COVID-19. Every one of these deaths was preventable.

<u>Children</u>

There have been 224 cases of COVID-19 diagnosed in children from birth to age 17 years in Okaloosa County since March. With the end of school and the start of traditional summer, Memorial Day weekend (May 23, 2020), Okaloosa began to see a major shift in cases among children. Prior to May 23, there were 6 cases of COVID-19 in children 0-17 years. Since that time 219 children have been diagnosed with COVID-19. This coincides with children participating in summer recovery programs, summer camps, and other group activities, such as dance and sports.

Age Group	Pre-May 23, 2020	May 22, 2020 and onward	Total Cases
0 – 4 years	3	31	34
5 – 9 years	2	42	44
10-17 years	1	145	146

Two recent publications have demonstrated the transmission of the virus that causes COVID-19 spread efficiently in a youth-centric overnight setting as well as in a high school in Jerusalem, Israel. Mild and asymptomatic infections were common. Contrary to prior reports, children may play an important role in transmission. High school in Israel is grades 7 - 12. The high school outbreak had 153 students and 25 staff infected. Attack rates were highest in $7 - 9^{th}$ grade. Within about 2 weeks of the outbreak, 89 additional confirmed COVID-19 cases occurred including siblings attending other schools, friends, and participants in sports and dancing classes, students' parents and family members of staff.

The youth-centric camp had taken many of the measures recommended by the CDC to prevent transmission. However, campers (youth) were not required to wear cloth face coverings, only the counselors. The camp involved significant singing and cheering. The attack rate among campers (6 - 17 years) was 49%. Attack rates were highest in cabins with 16-26 persons per cabin.

- Szablewski, C, Chang, K, et al. SARS-CoV-2 Transmission and Infection Among Attendees of an Overnight Camp. CDC Morbidity and Mortality Weekly Report. 2020; July 21; Early Release.
- Stein-Zamir, C, Abramson, N, et al. A large COVID-19 outbreak in a high school 10 days after schools' reopening, Israel, May 2020. Eurosurveillance. 2020;25(29), 2001352.

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SUMMARY

Okaloosa has widespread ongoing transmission of the virus that causes COVID-19. The situation has flattened although the number of cases per day and cases per 100,000 population per 2 weeks is high and the positivity rate remains well above the target of 5%.

There is an ongoing need to maintain physical distancing (6 feet or more) and to wear cloth face masks. Cloth face coverings or masks should be worn in all public spaces, especially when maintaining physical distancing is difficult. Failure of most of the population to follow these two critical mitigation measures is significantly contributing to the spread of COVID-19 in Okaloosa County. It is estimated that anywhere between 80-90% of the population needs to adopt cloth face masks in order to significantly reduce the spread of the virus. By reducing the spread of the virus, we could reduce our case counts and, by default, our positivity rate.

The community heard a lot of debate on cloth face coverings or masks in the past couple of weeks. There is a growing body of evidence that cloth face coverings do work for this virus. WHO and the CDC recommend that all people wear cloth face coverings in public settings and whenever around people who don't live in their household, especially when physical distancing is difficult to maintain. **The masks are used for source control**. That is, they serve as a simple barrier to help prevent respiratory droplets (which carry the virus) from the mouth and nose from traveling into the air and onto other people when the person wearing the cloth face covering coughs, sneezes, talks, or raises their voice.

This recommendation is based on current knowledge of the role of respiratory droplets in the spread of the virus that causes COVID-19. It is also paired with emerging evidence from clinical and laboratory studies that shows cloth face coverings reduce the spray of droplets when worn over the nose and mouth. Because this virus spreads with close contact (within 6 feet), the use of cloth face coverings is particularly important in settings where people are close to each other and physical distancing is difficult.

Below is a listing of recent studies supporting the use of cloth face coverings for source control:

- Rothe C, Schunk M, Sothmann P, et al. Transmission of 2019-nCoV Infection from an Asymptomatic Contact in Germany. The New England journal of medicine. 2020;382(10):970-971. <u>PMID: 32003551</u>
- Zou L, Ruan F, Huang M, et al. SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients. The New England journal of medicine. 2020;382(12):1177-1179. <u>PMID: 32074444</u>
- Pan X, Chen D, Xia Y, et al. Asymptomatic cases in a family cluster with SARS-CoV-2 infection. The Lancet Infectious diseases. 2020. <u>PMID: 32087116</u>
- Bai Y, Yao L, Wei T, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. Jama. 2020. <u>PMID: 32083643</u>
- Kimball A HK, Arons M, et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. MMWR Morbidity and mortality weekly report. 2020; ePub: 27 March 2020. <u>PMID: 32240128</u>
- Wei WE LZ, Chiew CJ, Yong SE, Toh MP, Lee VJ. Presymptomatic Transmission of SARS-CoV-2 Singapore, January 23–March 16, 2020. MMWR Morbidity and Mortality Weekly Report. 2020;ePub: 1 April 2020. <u>PMID: 32271722</u>
- Li R, Pei S, Chen B, et al. Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). Science (New York, NY). 2020. <u>PMID:</u> <u>32179701</u>
- Furukawa NW, Brooks JT, Sobel J. Evidence Supporting Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 While Presymptomatic or Asymptomatic [published online ahead of print, 2020 May 4]. Emerg Infect Dis. 2020;26(7):10.3201/eid2607.201595. <u>Link</u>
- Oran DP, Topol Prevalence of Asymptomatic SARS-CoV-2 Infection: A Narrative Review [published online ahead of print, 2020 Jun 3]. Ann Intern Med. 2020;M20-3012. <u>PMID:</u> <u>32491919</u>
- National Academies of Sciences, Engineering, and Medicine. 2020. Rapid Expert Consultation on the Possibility of Bioaerosol Spread of SARS-CoV-2 for the COVID-19 Pandemic (April 1, 2020). Washington, DC: The National Academies Press. <u>https://doi.org/10.17226/25769</u>.
- Schwartz KL, Murti M, Finkelstein M, et al. Lack of COVID-19 transmission on an international flight. CMAJ. 2020;192(15):E410. <u>PMID: 32392504</u>
- Anfinrud P, Stadnytskyi V, Bax CE, Bax A. Visualizing Speech-Generated Oral Fluid Droplets with Laser Light Scattering. N Engl J Med. 2020 Apr 15. doi:10.1056/NEJMc2007800. <u>PMID: 32294341</u>
- Davies A, Thompson KA, Giri K, Kafatos G, Walker J, Bennett A. Testing the efficacy of homemade masks: would they protect in an influenza pandemic? Disaster Med Public Health Prep. 2013;7(4):413-8. <u>PMID: 24229526</u>
- Konda A, Prakash A, Moss GA, Schmoldt M, Grant GD, Guha S. Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks. ACS Nano. 2020 Apr 24. <u>PMID: 32329337</u>

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- Aydin O, Emon B, Saif MTA. Performance of fabrics for home-made masks against spread of respiratory infection through droplets: a quantitative mechanistic study. medRxiv preprint doi: <u>https://doi.org/10.1101/2020.04.19.20071779</u>, posted April 24, 2020.
- Ma QX, Shan H, Zhang HL, Li GM, Yang RM, Chen JM. Potential utilities of mask-wearing and instant hand hygiene for fighting SARS-CoV-2. J Med Virol. 2020. <u>PMID: 32232986</u>
- Leung, N.H.L., Chu, D.K.W., Shiu, E.Y.C. *et al*.Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nat Med*. 2020. <u>PMID: 32371934</u>
- Johnson DF, Druce JD, Birch C, Grayson ML. A quantitative assessment of the efficacy of surgical and N95 masks to filter influenza virus in patients with acute influenza infection. Clin Infect Dis. 2009 Jul 15;49(2):275-7. <u>PMID: 19522650</u>
- Green CF, Davidson CS, Panlilio AL, et al. Effectiveness of selected surgical masks in arresting vegetative cells and endospores when worn by simulated contagious patients. Infect Control Hosp Epidemiol. 2012;33(5):487-494. <u>PMID: 22476275</u>

To date, only the City of Mary Esther Council has enacted a mandatory cloth face covering/maks ordinance for all businesses.