
OHA COVID-19 Webinar Series for Healthcare Providers

September 3, 2020

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Agenda Items

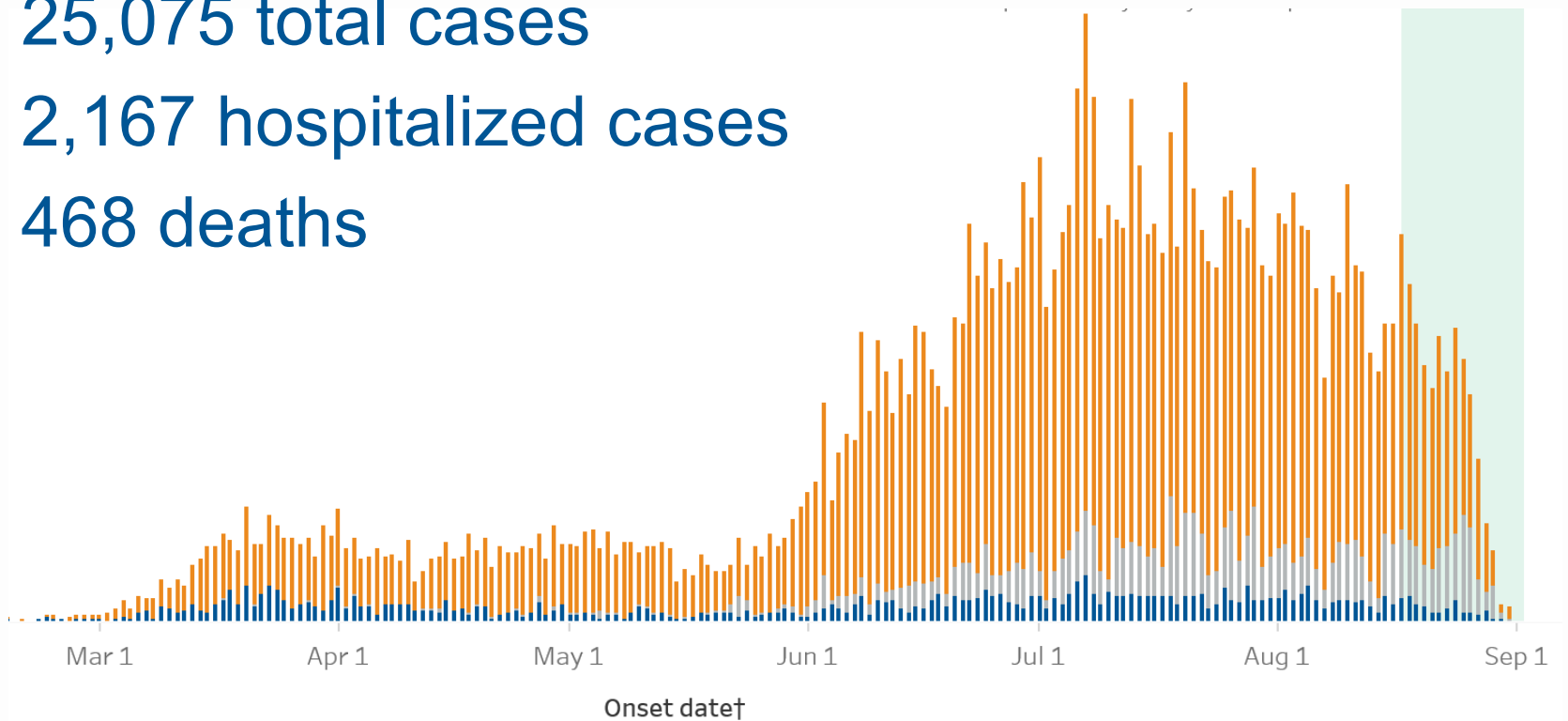
- COVID-19 situation update
- Addressing the disproportionate impact of COVID-19
- Oregon seroprevalence study
- Testing updates
- National guideline updates
- COVID-19 literature updates
- COVID-19 questions and answers
- Closing

Situation Update

COVID-19 Pandemic in Oregon

As of September 2:

- 25,075 total cases
- 2,167 hospitalized cases
- 468 deaths



COVID-19 Pandemic in Oregon

For the week of August 23-29:*

- 1,558 new cases were recorded
 - This is down 8.6% from the prior week, and Oregon's lowest weekly total since the end of June
- 4.4% of test results were positive
- The age group with the highest incidence of reported infection continues to be young adults aged 20 - 29

**Numbers may change as additional test results from specimens collected during the time period are reported.*

School Readiness Metrics

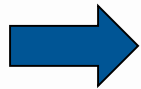
Required for return to in-person instruction, or a hybrid model of on-site and online learning:

State level

- COVID-19 test positivity $\leq 5\%$ in the preceding 7 days for 3 weeks in a row

County level

- ≤ 10 COVID-19 cases per 100,000 population in the preceding 7 days
- COVID-19 test positivity $\leq 5\%$ in the preceding 7 days for 3 weeks in a row



School Health and Safety Metrics

Oregon public health officials have developed evidence-based metrics to help school boards and school districts make decisions about how they can safely reopen schools. Visit ODE's [Ready Schools, Safe Learners web page](#) for more information.

Learn About the Metrics ▾

County Case and Testing Rates

www.oregon.gov/ode/

Planning for 2020–21 School Year
> School Metrics Dashboard,
Metrics Explainer

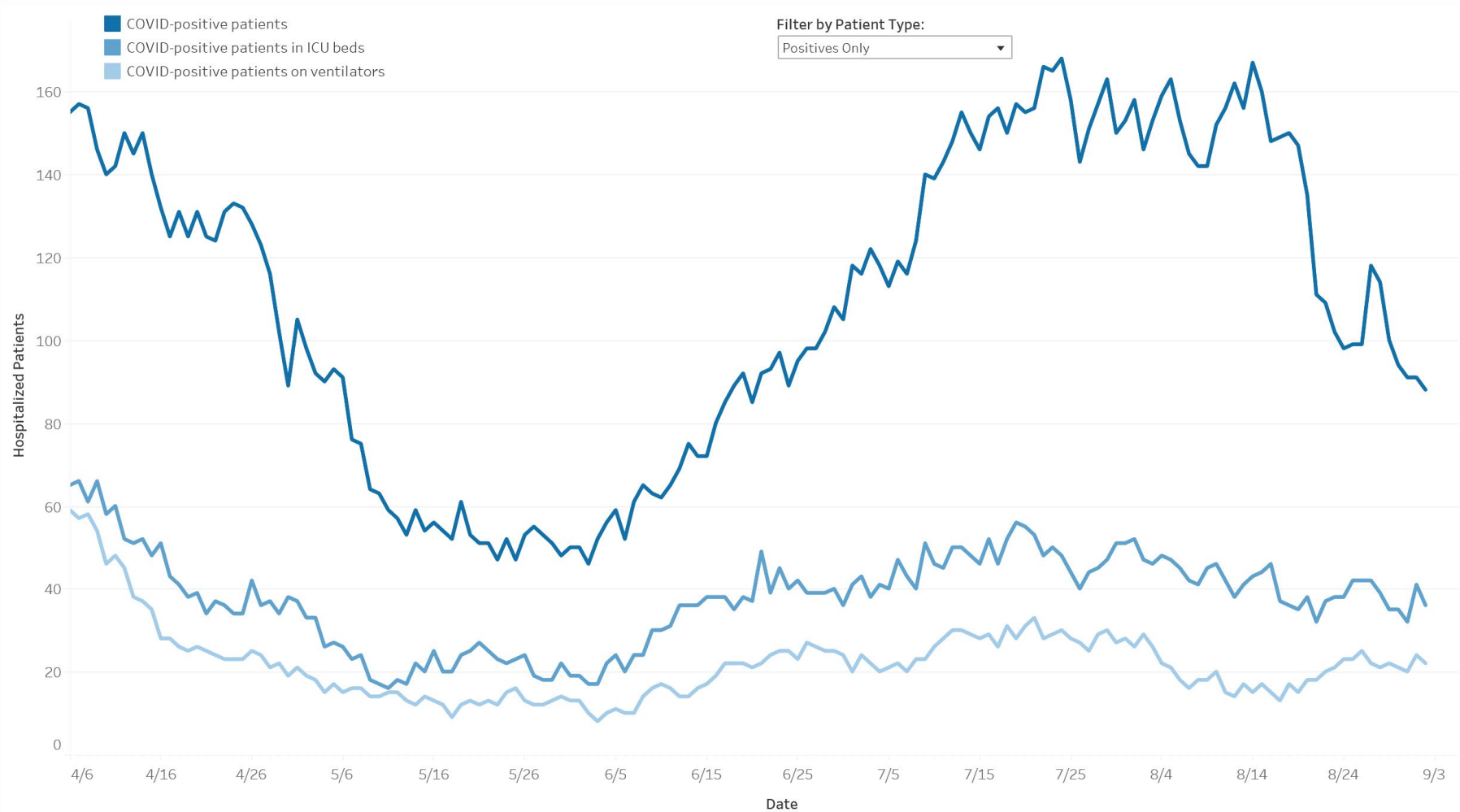
School Readiness Metrics

Oregon COVID-19 County Case Rates and Test Positivity by MMWR Week: July 5th - August 29th

This table is based on data pulled at 12:01 AM on August 31st, 2020. For county case rates, cases are assigned to a week based on their true case date, which is the date when public health first identified them as a confirmed or presumptive COVID-19 case. For percent positivity in testing, persons tested are assigned to a week based on their specimen collection date. All data are provisional and subject to change.

County	Week Start Date	Case Count	Case rate per 100,000	Test Positivity (%)
Oregon, statewide	7/5/2020	1,937	46	5.7%
	7/12/2020	2,399	57	5.4%
	7/19/2020	2,176	51	5.7%
	7/26/2020	2,327	55	6.2%
	8/2/2020	2,175	51	5.2%
	8/9/2020	1,992	47	5.2%
	8/16/2020	1,685	40	5.0%
	8/23/2020	1,703	40	4.4%
Baker	7/5/2020	7	42	2.7%
	7/12/2020	1	6	7.0%
	7/19/2020	9	54	5.6%
	7/26/2020	8	48	6.2%
	8/2/2020	8	48	3.1%
	8/9/2020	15	89	7.3%
	8/16/2020	11	65	20.0%
	8/23/2020	6	36	4.0%

Hospital COVID Census: Statewide Trends



Addressing the Disproportionate Impact of COVID-19

Disproportionate Impact of COVID-19

Race	Cases	% of total cases	Cases per 100,000 ^b	Hospitalized	% Hospitalized	Deaths	Case fatality
White	10,688	40.0%	298.9	1154	10.8%	304	2.8%
Black	919	3.4%	1138.3	90	9.8%	11	1.2%
Asian	751	2.8%	414.7	85	11.3%	18	2.4%
American Indian/Alaska Native	652	2.4%	1337.8	67	10.3%	10	1.5%
Pacific Islander	521	2.0%	3136.3	71	13.6%	7	1.3%
Other	9,374	35.1%	n/a	515	5.5%	41	0.4%
>1 race	502	1.9%	249.8	26	5.2%	6	1.2%
Not available	3,306	12.4%	n/a	141	4.3%	62	1.9%
Total	26,713	100.0%	630.6	2,149	8.0%	459	1.7%

Ethnicity	Case count	% of total cases	Cases per 100,000 ^a	Hospitalized	% Hospitalized	Deaths	Case fatality
Hispanic	10,721	40.1%	1971.6	598	5.6%	55	0.5%
Non-Hispanic	12,721	47.6%	344.5	1363	10.7%	321	2.5%
Not available	3,271	12.2%	n/a	188	5.7%	83	2.5%
Total	26,713	100.0%	630.6	2,149	8.0%	459	1.7%

COVID-19 Funding for CBOs

- OHA has funded community-based organizations (CBOs) to help respond to COVID-19 in culturally and linguistically responsive ways across the state
- CBOs are contracted to help with one or more of the following areas:
 - Outreach and community engagement
 - Contact tracing together with local public health authorities; and
 - Providing people with social services/wraparound supports
- Organizations are located in every county in the state, with deep ties to the communities they serve.
- List of funded CBOs can be found here:
<https://www.oregon.gov/oha/PH/ABOUT/CETDocuments/COVID-19-CBO-grant-awards-funding.pdf>

Health Equity Grants

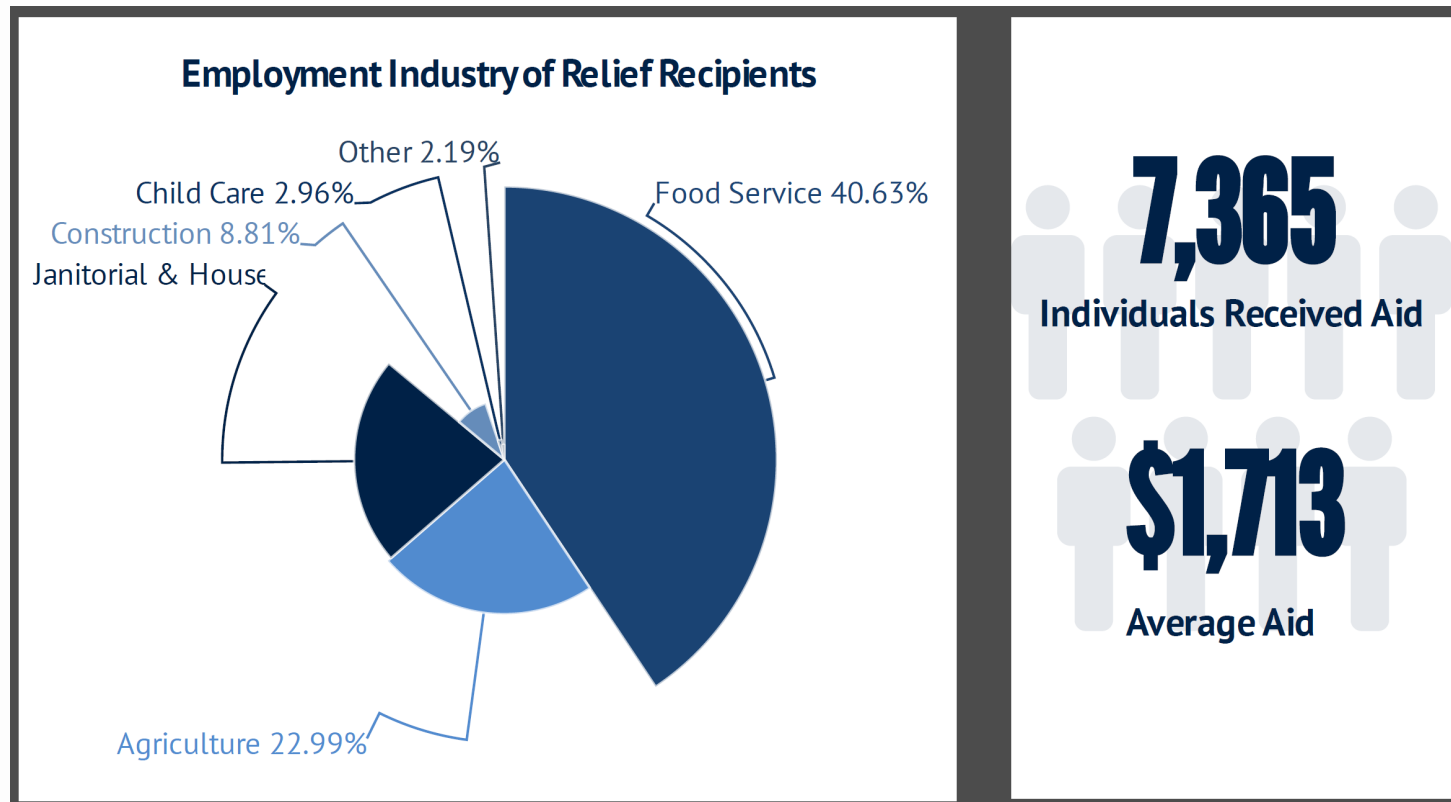
- On August 18th OHA opened grant applications to not-for-profit organizations statewide, Oregon's nine federally recognized Tribes and the Urban Indian Health Program.
- Grants are intended to address the disproportionate impact the COVID-19 pandemic continues to have on Oregon's tribal communities and communities of color.
 - The grants come from legislatively directed \$45 million in federal CARES ACT coronavirus relief funds.
- These grants can be used to help people address **health and economic disruption, food insecurity and housing, safety and violence prevention, and wage relief.**
- Applications were due on August 31st and funding decisions are underway. For more information visit:
<https://www.oregon.gov/oha/covid19/Pages/equity-grants-covid-19.aspx>

Oregon Worker Relief Fund Assistance

- Administered by the Oregon Worker Relief Coalition, a collaboration of more than 100 community partners
- Provides temporary aid to undocumented immigrants who lost their wage because of the pandemic
- Unlike others who lost their jobs as a result of COVID-19, many immigrants were excluded from any federal aid, unemployment, and other safety-net programs
- Any Oregonian, 18 years or older, who lost their wage because of the COVID-19 pandemic and is excluded from the federal safety-net because of immigration status should apply when the fund opens.
- Visit: www.workerrelief.org

OWRF impact as of July 22, 2020

Had delivered over 12.6 million in disaster relief throughout Oregon's immigrant communities.



<https://innovationlawlab.org/media/OWRF-Interim-Report-JULY.pdf>

The Oregon Worker Relief Fund is endorsed by:



And over 100 more organizations!

Oregon Quarantine Fund

- Administered by community-based partners, supported with public dollars and working in collaboration with the State of Oregon and the Office of the Governor.
- The Oregon Worker Quarantine Fund offers up to \$1,290 in financial support to farmworkers who self-quarantine after being exposed to COVID-19.
- Who is eligible?
 - Any Oregonian, 18 years or older who:
 - Has had exposure to COVID-10 for which self-quarantining is recommended;
 - Is practicing self-quarantining;
 - Is seeking health care assistance during the period of self-quarantine

Visit: www.workerrelief.org

Oregon Seroprevalence Study

Seroprevalence Estimates of SARS-CoV-2 Infection in Convenience Sample - Oregon

- Random subsamples of deidentified sera from patients of all ages visiting any ambulatory, emergency, or inpatient health care setting among 19 facilities participating in CDC's Influenza-like Illness Surveillance Network and Oregon's Electronic Surveillance System for the Early Notification of Community-based Epidemics.
- A total of 898 samples collected May 11–June 15, 2020 were included in the study; one sample was discarded due to laboratory error.
- Testing was completed at the Oregon State Public Health Laboratory with the Abbott Architect Laboratories SARS-CoV-2 IgG immunoassay.
 - Abbott Laboratories reports a sensitivity of 96.8% at 14 or more days after a positive PCR test result and a specificity of 99.1%-100%.

TABLE. Estimated seroprevalence of SARS-CoV-2 immunoglobulin G (IgG) antibodies among a convenience sample of deidentified serum specimens from 19 facilities participating in the Influenza-like Illness Surveillance Network, by age group* — Oregon, May 11–June 15, 2020



Age group (yrs)	No. of samples tested	SARS-CoV-2 IgG-positive [†]	
		No.	% (95% CI)
0–4	5	0	0 (0–52)
5–17	24	0	0 (1–14)
18–49	274	1	0.4 (0–2.0)
50–64	211	1	0.5 (0–2.6)
65–74	178	3	1.7 (0.3–4.8)
75–84	144	3	2.1 (0.4–6.0)
≥85	61	1	1.6 (0–8.8)
Total	897	9	1.0 (0.2–1.8)

Seroprevalence Estimates of SARS-CoV-2 Infection in Convenience Sample – con'd

- The estimated seroprevalence of SARS-CoV-2 antibodies (1.0%) was approximately 10 times the measured cumulative COVID-19 incidence obtained by nucleic acid testing during that time period.
- Data suggest that a substantial number of COVID-19 cases in Oregon have gone undiagnosed and not reported, and that a large portion of Oregon's population remains susceptible to COVID-19 infection.
- Sutton M, Cieslak P, Linder M. Notes from the Field: Seroprevalence Estimates of SARS-CoV-2 Infection in Convenience Sample — Oregon, May 11–June 15, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1100–1101. DOI: <http://dx.doi.org/10.15585/mmwr.mm6932a4external icon>

Testing Updates

Interim Guidance for Rapid Antigen Testing for SARS- CoV-2

Using antigen testing for SARS- CoV-2:

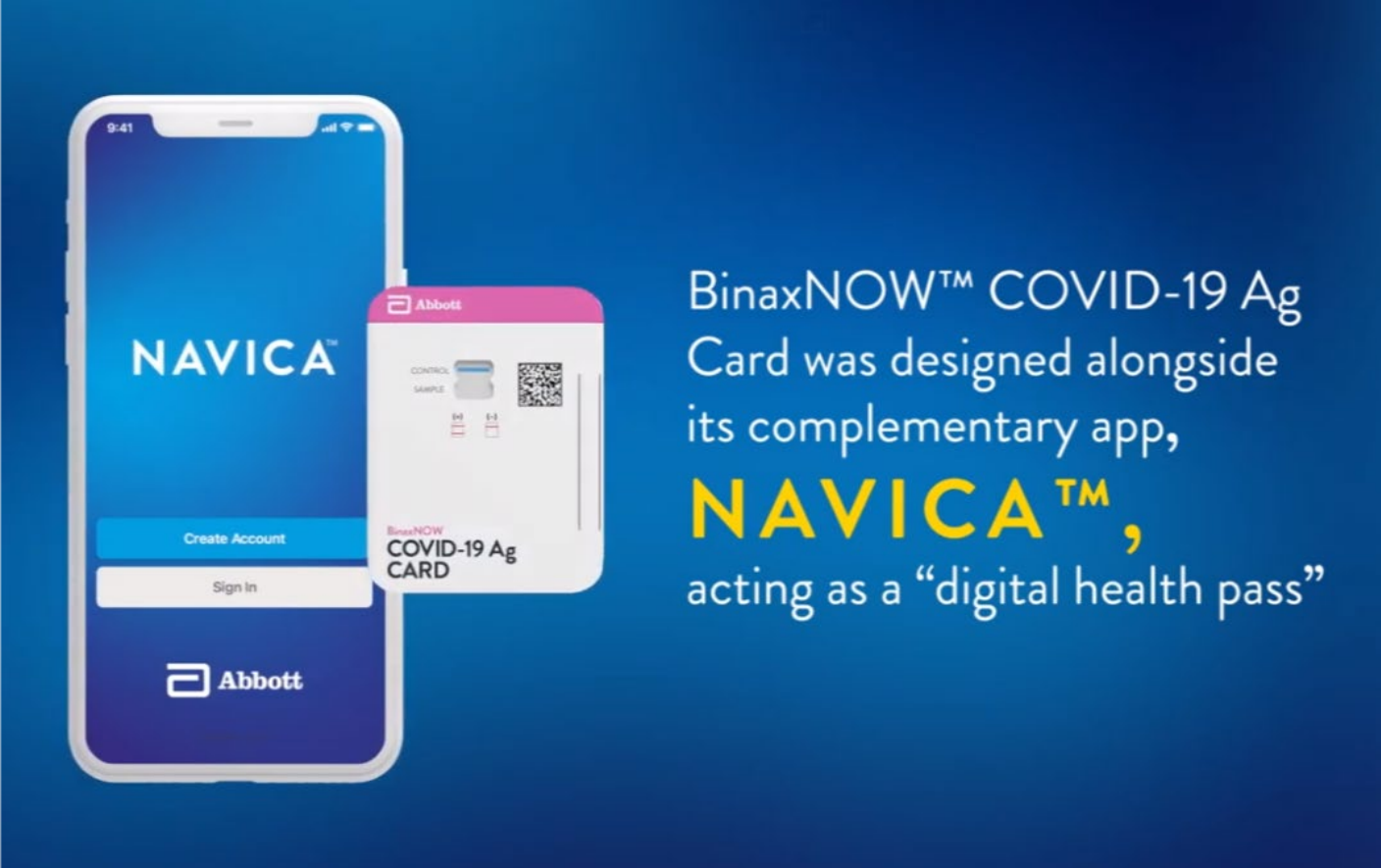
- The sensitivity of rapid antigen tests is generally lower than RT-PCR
- Currently, the rapid antigen tests that have received EUAs from FDA are limited to diagnostic testing on symptomatic persons within 5–12 days of symptom onset.
 - When used for screening testing, results should be considered presumptive. Confirmatory nucleic acid testing following a positive antigen test may not be necessary when the pretest probability is high especially if the person is symptomatic or has a known exposure.

<https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antigen-tests-guidelines.html>

Antigen tests with FDA EUA

	Quidel Sofia 2	BD Veritor	LumiraDx	Abbott BinaxNOW
Point of care	Yes	Yes	Yes	Yes
Machine required	Yes	Yes	Yes	No
Specimen type	NP or nasal swab	Nasal swab	Nasal swab	Nasal swab
Sensitivity	96.7%	83.9%	97.6%	97.1%
Specificity	100%	100%	96.6%	98.5%
Tested in asymptomatic	No	No	No	Yes (7/102)
Tested in children	Yes	Unknown	Yes	No

Abbott BinaxNOW advertising



The advertisement features a smartphone and a BinaxNOW COVID-19 Ag Card against a blue gradient background. The smartphone screen displays the NAVICA app interface with the time 9:41 at the top. The app has a blue header with the word "NAVICA" in white. Below the header are two buttons: "Create Account" in a blue bar and "Sign In" in a white bar. At the bottom of the screen is the Abbott logo. The BinaxNOW COVID-19 Ag Card is positioned to the right of the phone. It has a pink top with the Abbott logo. The card shows a "CONTROL" window with a blue line, a "SAMPLE" window with a red line, and a QR code. The text "BinaxNOW COVID-19 Ag CARD" is printed at the bottom of the card.

BinaxNOW™ COVID-19 Ag Card was designed alongside its complementary app, **NAVICA™**, acting as a “digital health pass”

Abbott BinaxNOW advertising

NAVICA Pass

NAVICA™

NAME
Jane Doe

RESULT	DATE TESTED	TEST TYPE
Negative	Wed, Aug 12	BinaxNOW™ COVID-19

Th F **Sa** Su M T W

Expires in 5 days on
Wed, Aug 19 at 1:23 PM CST

Negative test results will generate a
TEMPORARY MOBILE PASS

Table 2. Summary of Some Differences between RT-PCR Tests and Antigen Tests

	RT-PCR Tests	Antigen Tests
Intended Use	Detect current infection	Detect current infection
Analyte Detected	Viral RNA	Viral Antigens
Specimen Type(s)	Nasal Swab, Sputum, Saliva	Nasal Swab
Sensitivity	High	Moderate
Specificity	High	High
Test Complexity	Varies	Relatively easy to use
Authorized for Use at the Point-of-Care	Most devices are not, some devices are	Yes
Turnaround Time	Ranges from 15 minutes to >2 days	Approximately 15 minutes
Cost/Test	Moderate	Low

Table 3. Relationship between pre-test probability and the likelihood of positive and negative predictive values

Pretest Probability*	Negative Predictive Value**	Positive Predictive Value**	Impact on Test Results
Low	High	Low	Increased likelihood of False Positives Increased likelihood of True Negatives
High	Low	High	Increased likelihood of True Positives Increased likelihood of False Negatives

National Guideline Updates

CDC: Can someone be re-infected with SARS-CoV-2?

- Per CDC, in a response to questions about recently updated de-isolation guidance:
 - At this time, we do not know if someone can be re-infected
 - There are no confirmed reports to date of a person being re-infected within 3 months of initial infection, although research is ongoing
 - Data to date show that a person who has had and recovered from COVID-19 may have low levels of virus in their bodies for up to 3 months after diagnosis, and may continue to have a positive test result if retested within 3 months of infection even if though they are not spreading COVID-19
 - CDC recommends that all people, whether or not they have had COVID-19, continue to take safety measures to avoid becoming infected with SARS-CoV-2

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html>

Case reports on re-infection with SARS-CoV-2

- To et al, August 25, 2020
 - 33 year old Hong Kong patient, ill in March and August
 - The second episode of asymptomatic infection occurred 142 days after the first symptomatic episode in an apparently immunocompetent patient
 - Viral genomes from first and second episodes belong to different clades/lineages.
 - Conclusions: Epidemiological, clinical, serological and genomic analyses confirmed that the patient had re-infection instead of persistent viral shedding from first infection.
- Press reports
 - 25 year old Nevada patient
 - Ill in May and June; June illness more severe
 - Genetic testing confirmed that the two virus strains were genetically unique
 - Not yet peer reviewed

CDC: Criteria for Return to Work for Healthcare Personnel with SARS-CoV-2 Infection (Interim Guidance), updated

Summary of recent changes as of August 10, 2020:

- For HCP with mild to moderate illness who are not severely immunocompromised:
 - At least 10 days have passed *since symptoms first appeared* **and**
 - At least 24 hours have passed *since last* fever without the use of fever-reducing medications **and**
 - Symptoms (e.g., cough, shortness of breath) have improved
- For HCP with severe to critical illness or who are severely immunocompromised:
 - The recommended duration for work exclusion was changed to at least 10 days and up to 20 days after symptom onset, with recommendation to consider consultation with infection control experts

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>

COVID-19 Literature Updates

Association Between Administration of Systemic Corticosteroids and Mortality Among Critically Ill Patients With COVID-19: A Meta-analysis

The WHO Rapid Evidence Appraisal for COVID-19
Therapies (REACT) Working Group

JAMA. Published online September 2, 2020

Corticosteroids and COVID-19

- REACT Prospective meta-analysis
 - 7 randomized clinical trials (1703 critically ill patients with COVID-19)
 - The trials were conducted in 12 countries from February 26, 2020, to June 9, 2020
 - Patients had been randomized to receive systemic dexamethasone, hydrocortisone, or methylprednisolone (678 patients) or to receive usual care or placebo (1025 patients).
 - There were 222 deaths among the 678 patients randomized to corticosteroids and 425 deaths among the 1025 patients randomized to usual care or placebo (summary OR, 0.66 [95% CI, 0.53-0.82]; $P < .001$ based on a fixed-effect meta-analysis).
 - **Conclusions and Relevance** In this prospective meta-analysis of clinical trials of critically ill patients with COVID-19, administration of systemic corticosteroids, compared with usual care or placebo, was associated with lower 28-day all-cause mortality.

Evaluation for SARS-CoV-2 in Breast Milk From 18 Infected Women

JAMA Online. Chambers et al.

August 19, 2020

Evaluation for SARS-CoV-2 in Breast Milk From 18 Infected Women

- 18 women with PCR-confirmed SARS-CoV-2 infection; 17 were symptomatic
- 1 to 12 breast milk samples per mother for a total of 64 samples were collected March 27 to May 6
- Only 1 sample had detectable RNA virus by PCR, but viral culture was negative
- Even when breast milk was spiked with replication-competent SARS-CoV-2 RNA, a standardized pasteurization method was sufficient in killing the virus
- These findings suggest that breastmilk is not a factor in transmission of the coronavirus

<https://jamanetwork.com/journals/jama/fullarticle/2769825>

Plans of US Parents Regarding School Attendance for Their Children in the Fall of 2020

A National Survey

JAMA Pediatrics Online. Kroshus et al.

August 14, 2020

Plans of US Parents Regarding School Attendance for Their Children, Fall 2020

- Recruited 730 parents of kids 5–17 years with sufficient representation of black (28%) and Hispanic (27%) families; 53% female parents
- Data were collected June 2–5
- 31% planned to keep their kids at home while 49% planned on sending their kids to school
- Only 29% of parents were confident or very confident that their child's school would be able to prevent students from spreading COVID-19.
- Other factors included socioeconomic status, medical vulnerability, worry about COVID-19/multisystem inflammatory syndrome, confidence in their child's school, and homeschooling difficulties

Plans of US Parents Regarding School Attendance for Their Children, Fall 2020

- Lower socioeconomic status was associated with wanting to keep kids at home
- Take-home point: under-resourced families need more wraparound services to ensure that their kids can access school equitably

<https://jamanetwork.com/journals/jamapediatrics/fullarticle/2769634>

Mortality outcomes for COVID-19 patients in intensive care units

Armstrong RA, Kane AD, Cook TM. Anaesthesia. 2020
Jun 30

ICU Outcomes

- Systematic review
 - 24 studies (total: 10,150 patients) from Canada (1 study), China (8), Denmark (1), France (2), Hong Kong (1), Italy (1), the Netherlands (1), Singapore (1), Spain (1), UK (1) and USA (6).
 - the meta-analysis of the included studies showed that the ICU mortality rate in COVID-19 patients with a completed ICU stay was 41.6%
 - the included studies showed that the reported ICU mortality rates fell from above 50% in March 2020 to approximately 40% at the end of May 2020
 - the ICU mortality was broadly similar in different countries

Convalescent Plasma

Cochrane Living Systematic Review of Convalescent Plasma for COVID-19

- Piechotta et al 2020 (most recent update July 10, 2020)
- 20 studies (1 RCT, 3 controlled NRSIs, 16 non-controlled NRSIs) with 5443 participants, of whom 5211 received convalescent plasma, and identified a further 98 ongoing studies evaluating convalescent plasma or hyperimmune immunoglobulin, of which 50 are randomised.
- *All-cause mortality at hospital discharge (1 controlled NRSI, 21 participants)*
 - We are very uncertain whether convalescent plasma has any effect on all-cause mortality at hospital discharge (risk ratio (RR) 0.89, 95% confidence interval (CI) 0.61 to 1.31; very low-certainty evidence).

Cochrane Living Review con'd

- *Time to death (1 RCT, 103 participants; 1 controlled NRSI, 195 participants)*
 - We are very uncertain whether convalescent plasma prolongs time to death (RCT: hazard ratio (HR) 0.74, 95% CI 0.30 to 1.82; controlled NRSI: HR 0.46, 95% CI 0.22 to 0.96; very low-certainty evidence).
- *Improvement of clinical symptoms, assessed by need for respiratory support (1 RCT, 103 participants; 1 controlled NRSI, 195 participants)*
 - We are very uncertain whether convalescent plasma has any effect on improvement of clinical symptoms at seven days (RCT: RR 0.98, 95% CI 0.30 to 3.19), 14 days (RCT: RR 1.85, 95% CI 0.91 to 3.77; controlled NRSI: RR 1.08, 95% CI 0.91 to 1.29), and 28 days (RCT: RR 1.20, 95% CI 0.80 to 1.81; very low-certainty evidence).

Cochrane Living Review con'd

- Fourteen studies (5201 participants) reported on serious adverse events. There were 15 reported deaths, four of which were classified as potentially, probably or definitely related to transfusion. Other serious adverse events reported in all studies were predominantly allergic or respiratory in nature, including anaphylaxis, transfusion-associated dyspnoea, and transfusion-related acute lung injury (TRALI).
- We are very uncertain whether or not convalescent plasma affects the number of serious adverse events.

Convalescent plasma for COVID-19 RCT

- Li et al. **Effect of Convalescent Plasma Therapy on Time to Clinical Improvement in Patients With Severe and Life-threatening COVID-19.** JAMA. 2020;324(5):460-470
 - RCT of 52 patients treated with convalescent plasma vs 51 controls (standard therapy)
 - There was no significant difference in 28-day mortality (15.7% vs 24.0%; OR, 0.59 [95% CI, 0.22-1.59]; $P = .30$) or time from randomization to discharge (51.0% vs 36.0% discharged by day 28; HR, 1.61 [95% CI, 0.88-2.95]; $P = .12$).
 - Two patients in the convalescent plasma group experienced adverse events within hours after transfusion that improved with supportive care.

Convalescent Plasma Safety

- Joyner et al, **Safety Update: COVID-19 Convalescent Plasma in 20,000 Hospitalized Patients**. Mayo Clinic Proceedings. 2020 Sep;95(9):1888-1897
 - convenience sample of 20,000 hospitalized patients with COVID-19 convalescent plasma
 - The incidence of all serious adverse events was low; these included transfusion reactions (n=78; <1%), thromboembolic or thrombotic events (n=113; <1%), and cardiac events (n=677, ~3%).
 - The 7-day mortality rate was 13.0% (12.5%, 13.4%), and was higher among more critically ill patients relative to less ill counterparts, including patients admitted to the intensive care unit versus those not admitted (15.6 vs 9.3%), mechanically ventilated versus not ventilated (18.3% vs 9.9%), and with septic shock or multiple organ dysfunction/failure versus those without dysfunction/failure (21.7% vs 11.5%).

COVID-19 Questions and Answers

Clinical Care Questions

What is the role for healthcare providers with regards to counseling on isolation and quarantine? Is this counseling a billable service?

- Centers for Medicare and Medicaid Services (CMS) and the Centers for Disease Control and Prevention (CDC) have announced that payment is available to physicians and health care providers to counsel patients, at the time of coronavirus disease 2019 (COVID-19) testing, about the importance of self-isolation after they are tested and prior to the onset of symptoms.
- CMS will use existing evaluation and management (E/M) payment codes to reimburse providers who are eligible to bill CMS for counseling services no matter where a test is administered, including doctor's offices, urgent care clinics, hospitals and community drive-thru or pharmacy testing sites.

CMS: Counseling Check List Resource

Counseling Check List



Discuss the need for immediate isolation, even before results of the test are available.



Advise patients to inform their immediate household/contacts that they may [wish to be tested](#) and quarantine as well. Review locations and people they have been in contact with in the past two weeks.



Review the [signs and symptoms](#) of COVID-19.



Inform patients that if positive, they will likely be contacted by a public health worker and asked to provide a list of the people they've been with for contact tracing, encourage them to 'answer the call'.



Discuss services that might help the patient successfully isolate and quarantine at home.

Closing

Feedback Requested

- OHA will be redesigning its health care provider website soon

<http://healthoregon.org/coronavirushcp>

- If you have input or ideas for how to improve this resource, please enter them in the chat box or e-mail Health.webmaster@state.or.us

Healthcare Provider Weekly Webinars

- **Oregon Health Authority COVID-19 Information Sessions for Oregon Health Care Providers**
 - 1st and 3rd Thursdays, noon-1 p.m.
 - Weekly session information, slides and recordings at:
www.healthoregon.org/coronavirushcp
- **OHSU's COVID-19 Response ECHO for Oregon Clinicians Part 2**
 - 2nd and 4th Thursdays, noon-1:15 p.m.
 - For full resources and benefits, register at:
<https://connect.oregonechonetwork.org/Series/Registration/278>

Thank you