

South Carolina Department of Health and Environmental Control

COVID-19 Update and Recommendations

Jane Kelly, MD, and Rebecca Walker, RN, CIC August 18, 2021



Disclaimer

Our understanding of this virus, disease, and the situation continues to *evolve*.

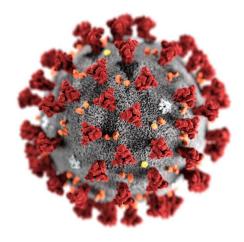
All the information presented here is based on the most current available information and is **subject to change** as more becomes known.

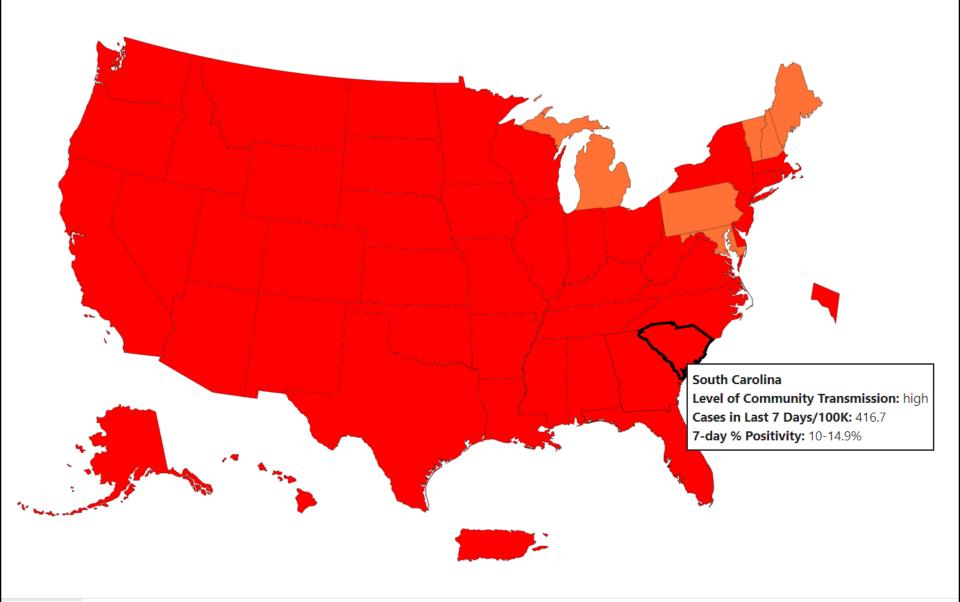


South Carolina Department of Health and Environmental Control

COVID-19 Update

Jane Kelly, MD Assistant State Epidemiologist SC DHEC August 18, 2021



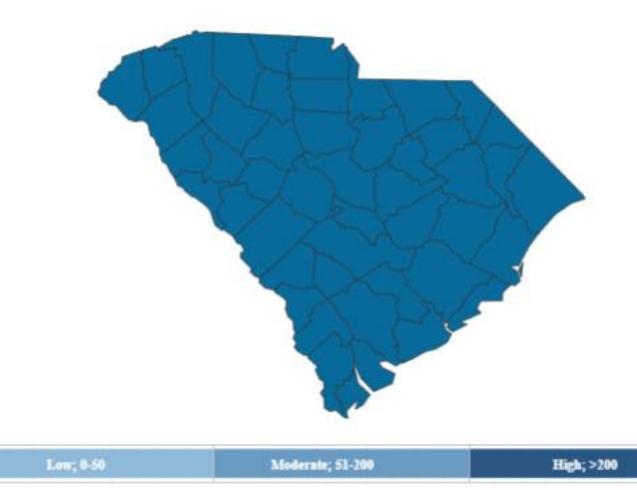


Two Week Cumulative Incidence Rate

The Two-Week Cumulative Incidence Rate includes new (confirmed & probable) cases reported in the past two weeks (7/25/2021 - 8/7/2021) per 100,000 people. The rate describes recent incidence of COVID-19 infection to capture the potential burden of currently ill people who may be infectious and/or accessing healthcare.

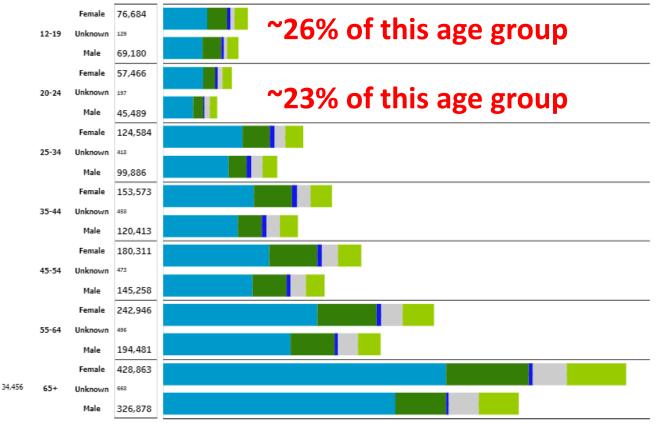
Select a county to display county-specific information

Click the county again to return to the full state map









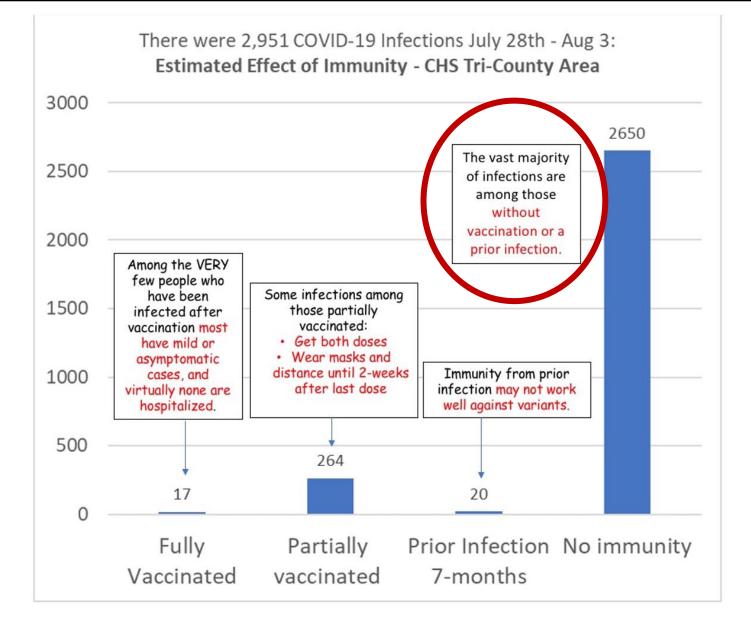
As of 8/7/2021, 45.2% of SC aged 12+ are fully vaccinated

https://scdhec.gov/covid19/covid-19-vaccination-dashboard

Myths

- Most new infections among the vaccinated
- Vaccination is more dangerous than COVID
- If prior infection, no need for vaccine
- Vaccine affect fertility
- Kids don't get sick





https://web.musc.edu/coronavirus-updates/epidemiology-project

Vaccination is more dangerous than COVID?

- COVID deaths: 616,493 (1.7% of those who tested positive)
- >350 million doses of COVID-19 vaccines given in the US since December 14, 2020
- 1-5 severe allergic reactions/million doses
- 28 cases of rare disorder with blood clots and low platelet count (thrombosis with thrombocytopenia syndrome or TTS) associated with Janssen vaccine
- What about myocarditis and Pfizer vaccine?

Benefits/risks COVID vaccination

TABLE 2. Individual-level estimated number of COVID-19 cases and COVID-19–associated hospitalizations, intensive care unit admissions, and deaths prevented after use of 2-dose mRNA COVID-19 vaccine for 120 days and number of myocarditis cases expected per million second mRNA vaccine doses administered, by sex and age group* — United States, 2021

	No. per million vaccine doses administered in each age group (yrs) ⁺)†	
Sex/Benefits and harms from mRNA vaccination	12-29	12-17	18-24	25-29	≥30
Male					
Benefit					
COVID-19 cases prevented [§]	11,000	5,700	12,100	15,200	15,300
Hospitalizations prevented	560	215	530	936	4,598
ICU admissions prevented	138	71	127	215	1,242
Deaths prevented	6	2	3	13	700
Harms					
Myocarditis cases expected [¶]	39-47	56-69	45-56	15-18	3-4
Female					
Benefit					
COVID-19 cases prevented [§]	12,500	8,500	14,300	14,700	14,900
Hospitalizations prevented	922	183	1,127	1,459	3,484
ICU admissions prevented	73	38	93	87	707
Deaths prevented	6	1	13	4	347
Harm					
Myocarditis cases expected [¶]	4-5	8-10	4–5	2	1

Abbreviations: ICU = intensive care unit; VAERS = Vaccine Adverse Event Reporting System.

* This analysis evaluated direct benefits and harms, per million second doses of mRNA COVID-19 vaccine given in each age group, over 120 days. The numbers of events per million persons aged 12–29 years are the averages of numbers per million persons aged 12–17 years, 18–24 years, and 25–29 years.

[†] Receipt of 2 doses of mRNA COVID-19 vaccine, compared with no vaccination.

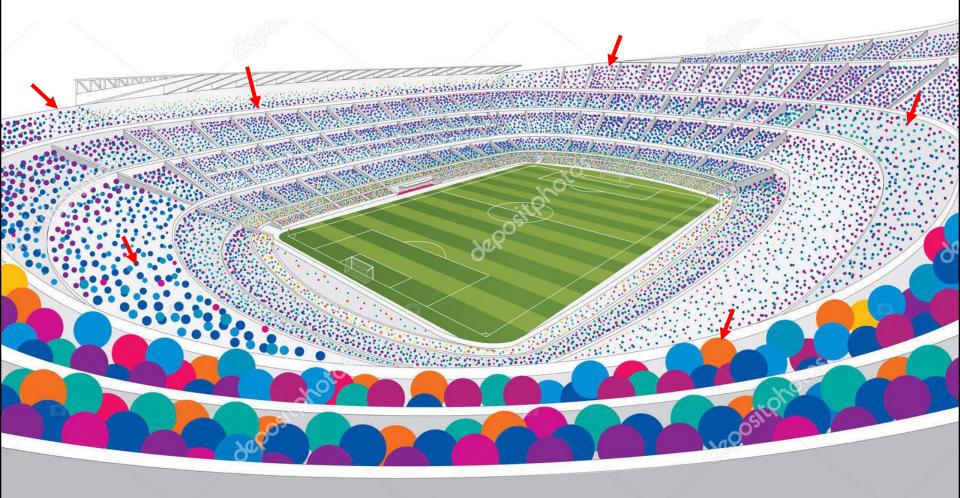
[§] Case numbers have been rounded to the nearest hundred.

[¶] Ranges calculated as ±10% of crude VAERS reporting rates. Estimates include cases of myocarditis, pericarditis, and myopericarditis.

American Heart Association, American Academy of Pediatrics, and CDC all agree benefits outweigh the risk of myocarditis

http://dx.doi.org/10.15585/mmwr.mm7027e2external icon

80,000 boys ages 12-17 all vaccinated – 5-6 would experience myocarditis



Almost all (95%) of cases have been mild and have resolved

80,000 boys ages 12-17 NOT vaccinated – 456 would get COVID, 18 hospitalized, 5 in the ICU, and 0.2 deaths over the next 3 months



Based on data before Delta was widespread

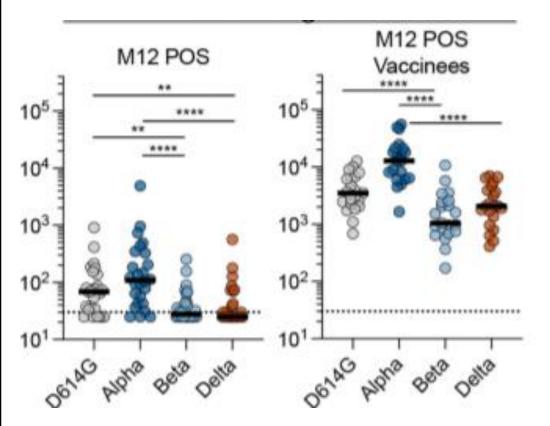
Do I need the COVID-19 vaccine if I already had COVID?

vaccines.gov

Why isn't a positive antibody test enough to avoid quarantine?

- Re-infection is rare if within 90 days of prior infection
- Antibody test doesn't indicate when prior infection
- Not clear what the correlate of protection is
- High variability of immune response depending on severity of infection
- Vaccines engineered to give very high neutralizing antibody levels and robust B and T cell responses
- Prior infection from wild type or different variant may not protect against Delta

Variant sensitivity to neutralizing antibodies



- Convalescent sera from individuals having prior wild type infection (12 months post onset of symptoms) did not neutralize Beta and Delta variants
- Convalescent sera from prior infection, later vaccinated, did

https://www.nature.com/articles/s41586-021-03777-9

If prior infection, no need for vaccine?

- Study published Aug 6, 2021
- Compared Kentucky residents infected with SARS-CoV-2 in May-June 2020 and reinfected May-June 2021 to those not re-infected
- Unvaccinated people were more that twice as likely to get re-infected than vaccinated
- Vaccination does improve protection for people previously infected
- This was before Delta was the predominant variant
- Infection with a different variant will not protect you as well against Delta but vaccine will

http://dx.doi.org/10.15585/mmwr.mm7032e1

COVID VACCINE AND FERTILITY



During the Pfizer vaccine studies, 23 women volunteers became pregnant, and the only one who suffered a pregnancy loss was in the placebo group

Where did the fertility rumor begin?

December 2020, a physician and an ex-Pfizer employee wrote a letter to the European equivalent of the FDA:

- Claiming that the spike protein is similar in structure to a placenta protein, and vaccine would cause a woman to make antibodies to the placenta
- There is no evidence that this is true

In the same letter they made other claims that never happened

- That 70% of people would have allergic reactions "Pfizer/BioNTech mRNA vaccine [has] polyethylene glycol...Seventy percent of people make antibodies to PEG and most do not know it...many could have allergic, potentially deadly, reactions to a PEG-containing vaccine"
 - This has not happened
- That the vaccine has a glow-in-the-dark ingredient "Pfizer/BioNTech is also inserting a [bioluminescent] ingredient derived from a marine invertebrate, mNeonGreen, into its vaccine."
 - This is not true. The vaccine does not glow in the dark

If COVID vaccine affected the placenta...

You would expect more miscarriages

Table 4. Pregnancy Loss and Neonatal Outcomes in Published Studies and V-safe Pregnancy Registry Participants.				
Participant-Reported Outcome	Published Incidence*	V-safe Pregnancy Registry†		
	%	no./total no. (%)		
Pregnancy loss among participants with a completed pregnancy				
Spontaneous abortion: <20 wk ¹⁵⁻¹⁷	10–26	104/827 (12.6)‡		
Stillbirth: ≥ 20 wk ¹⁸⁻²⁰	<1	1/725 (0.1)§		
Neonatal outcome among live-born infants				
Preterm birth: <37 wk ^{21,22}	8–15	60/636 (9.4)¶		
Small size for gestational age ^{23,24}	3.5	23/724 (3.2)		
Congenital anomalies ²⁵ **	3	16/724 (2.2)		
Neonatal death²º††	<1	0/724		

• No increase in miscarriage, still birth, premature birth, small babies, birth defects, or newborn death

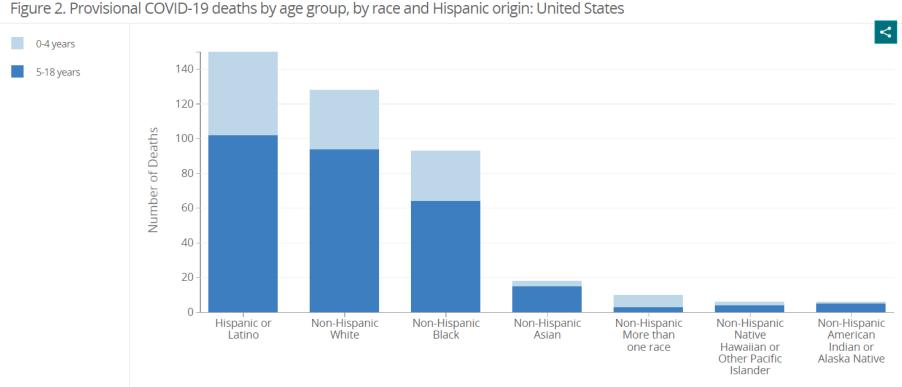
https://www.nejm.org/doi/full/10.1056/NEJMoa2104983

No increase in miscarriage

- We have many years of data on miscarriages by the mother's age, what week of pregnancy she miscarried
- In high income countries like the US, the 11-16% of pregnancies end in miscarriage
- Among 2,456 pregnant women who received an mRNA COVID-19 vaccine before conceiving or prior to 20 weeks' gestation, risk of miscarriage between 6–19 weeks was 12.8%

https://www.researchsquare.com/article/rs-798175/v1

Kids don't get sick?



Race and Hispanic Origin Group

>4 million children infected >15,000 hospitalized >4000 MIS-C >300 deaths

https://data.cdc.gov/NCHS/Deaths-by-Race-and-Hispanic-Origin-Ages-0-18-Years/32c3-mvuz

Long COVID



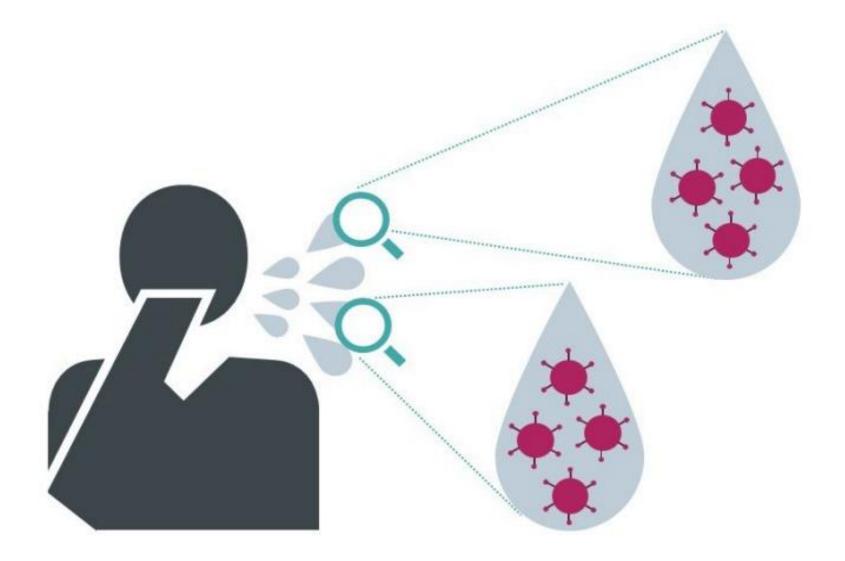
Home	About	Visitors	Data	News	Resources	Contact	Blog
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Long-Lasting Symptoms of COVID-19 in Children

FREE Awareness Pack

😑 Chat to one of our team

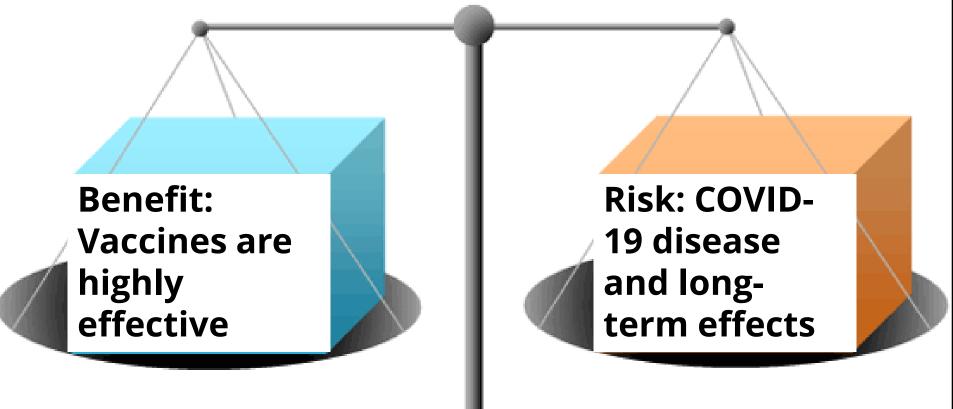
New variants spread more easily



Will vaccine still work against variants? Yes

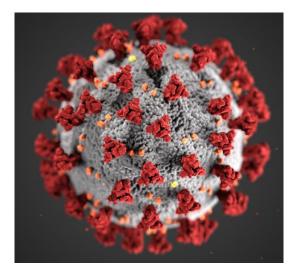


Weigh benefits and risks





Infection Prevention (IP)





Key Principles

- Older adults and those who are medically vulnerable living in congregate settings are at high risk of being affected by SARS-CoV-2.
- Fully vaccinated older adults and those immunocompromised may have a lower level of immunity and be more susceptible to breakthrough cases.
- A single new case of SARS-CoV-2 infection in any staff or a facility-onset SARS-CoV-2 infection in a consumer should be considered an outbreak.
- Performing viral testing of all consumers as soon as there is a newly confirmed case in the facility will identify infected asymptomatic consumers quickly.



Core Principles for COVID-19 IP

- Screening everyone upon entry
- Hand hygiene
- Face covering or mask use (covering mouth and nose)
- Physical distancing (aka social distancing)
- Instructional sign usage throughout the facility
 - I.e., visitor education, IP precautions, other applicable practices
- Cleaning and disinfection of frequently touched surfaces
- Appropriate use of personal protective equipment (PPE)
- Effective cohorting of consumers
- Consumer and staff testing

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OSHA ETS (29 CFR 1910) Occupational Exposure to COVID-19 for Healthcare Settings Published June 21, 2021

All subparts effective 7/6/2021, except:

- Paragraph (*i*) Physical Barriers
- Paragraph (k) Ventilation
- Paragraph (*n*) Training

Effective 7/21/2021



OSHA ETS Components

Part	Description
Subpart U	ETS Scope
1910.502	Healthcare Requirements
1910.504	Mini Respiratory Protection Program (RPP)
1910.505	Severability
1910.509	Incorporation by Reference

- COVID -19 refers to virus and disease
- Intent for healthcare settings includes:
 - COVID-19 risk determination for healthcare workers (HCWs) and support employees
 - Provision of protection from hazard (COVID-19)
 - Notification to HCWs/support employees of their rights

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1910.502 Healthcare

Overlap Core Principles

- Scope
- Definitions
- COVID-19 Plan
- Patient Screening & Management
- Standard and Transmissionbased Precautions
- PPE, including facemasks & respirators
- Aerosol-generating Healthcare/Postmortem Procedures

- Physical Distancing
- Physical Barriers
- Cleaning & Disinfection
- Ventilation
- Health Screening & Management
- Vaccination
- Training
- Requirement at no cost
- Record keeping
- Reporting



<u>CMS QSO-21-19-NH</u>

- Released May 11, 2021
- <u>CMS-3414-IFC</u> published May 13, 2021
 - Open for public comments until July 12, 2021
- As Condition of Participation (CoP), ICFs/IIDs to:
 - Provide education on benefits and potential side effects for all consumers, representatives, and staff
 - Offer vaccination to clients and staff
 - Document education, offering, administration, refusals
 - Report adverse events via VAERS

• Reporting, not required, but strongly encouraged

• Requires <u>NHSN enrollment</u> and SAMS registration



Testing Guidance

- Create a testing plan
- Test consumers and staff:
 - Immediately upon developing COVID-like symptoms
 - And if identified as close contact to confirmed case
 - Unprotected exposure within 6 feet for 15 mins or longer
- Initiate outbreak testing of consumers and staff:
 - As soon as identify first case
 - Include those not recently recovered in past 90 days regardless of vaccination status
 - Continue testing every 3-7 days until no new positive cases identified for at least 14-days



Expanded Testing of Staff

- Routine testing of unvaccinated staff
- Frequency determined by county positivity
 - Utilize <u>DHEC's Recent Activity report</u>

County Activity Level	County Positivity Rate	Minimum Testing Frequency
Low	<5%	Monthly
Medium	5-10%	Weekly*
High	>10%	Bi-weekly*

*Should have point-of-care testing availability or off-site testing turn-around times < 48 hours.

Fully vaccinated staff should not be excluded from outbreak testing or testing resulting from higher risk exposure; may be considered for expanded testing when indicated by county level data or as recommended by public health.



Visitation

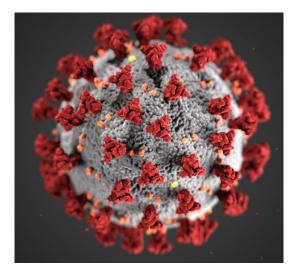
- <u>CMS QSO-21-14-ICF/IID & PRTF</u> (revised 6/3/2021)
- DHEC Updated Guidelines for Visitation

Type of Visitation	Not in Outbreak	Outbreak
Indoor Visitation	With Precautions	Restrict
Outdoor Visitation	With Precautions	With Precautions
Compassionate Care	With Precautions	With Precautions

Compassionate care visits should be allowed at all times, regardless of a consumer's vaccination status, the county's COVID-19 positivity rate, or an outbreak.



Consumer Management





Consumer Management

- Assist with hand hygiene & respiratory etiquette
- Promote vaccination of those \geq 12 years
- Encourage source control
- Promote physical distancing
- Actively screen all upon entry for risk/symptoms
- Take precautions for off-site medical care visits
- Monitor for COVID symptoms
- Isolate suspect and confirmed consumers
- Quarantine close contacts



Close Contact Management*

*Applies to all consumers, vaccinated or not vaccinated, that that have contact with a COVID-19 case for ≥15 minutes in 24 hours.

Consumer	Quarantine Period	Comments/Recommendations
Asymptomatic & fully vaccinated or recovered in past 90 days	14 days from last exposure	 Monitor for symptoms 14 days from last exposure. Immediately test if develop symptoms. Not recommended, but shortened period may be considered to mitigate PPE or staffing shortages or space limitations.
Asymptomatic & unvaccinated or NOT recovered in past 90 days	14 days from last exposure	 Monitor for symptoms 14 days from last exposure. Shortened quarantine not recommended. Immediately test if develop symptoms.
Symptomatic – vaccinated & unvaccinated	Indefinitely	Isolate.Immediately test.Cohort if test positive.



End Transmission-Based Precautions

Status	Criteria
Asymptomatic; not immunocompromised	 10 days or more since collection date of first positive SARS-CoV-2 viral test
Symptomatic with mild to moderate illness; not immunocompromised	 10 days or more since symptoms began, AND No fever for the previous 24 hours, without taking medications to lower fever, AND Respiratory symptoms (e.g., cough or shortness of breath) are improved.
Symptomatic with severe or critical illness or immunocompromised	 10-20 days since symptoms began, AND No fever for the previous 24 hours, without taking medications to lower fever, AND Respiratory symptoms (e.g., cough or shortness of breath) are improved. Consider infection control consultation.



COVID-19 PPE Considerations

• Facilities should:

- Implement policies/procedures
 - Required PPE for certain situations
 - Preferred donning and doffing sequence
- Bundle care to minimize unnecessary entries
- Anticipate shortages
- Implement optimization strategies when indicated
- Implement universal PPE in areas with moderate to substantial activity to prevent asymptomatic/pre-symptomatic transmission
- Wear well-fitting medical device for source control and according to exposure risk

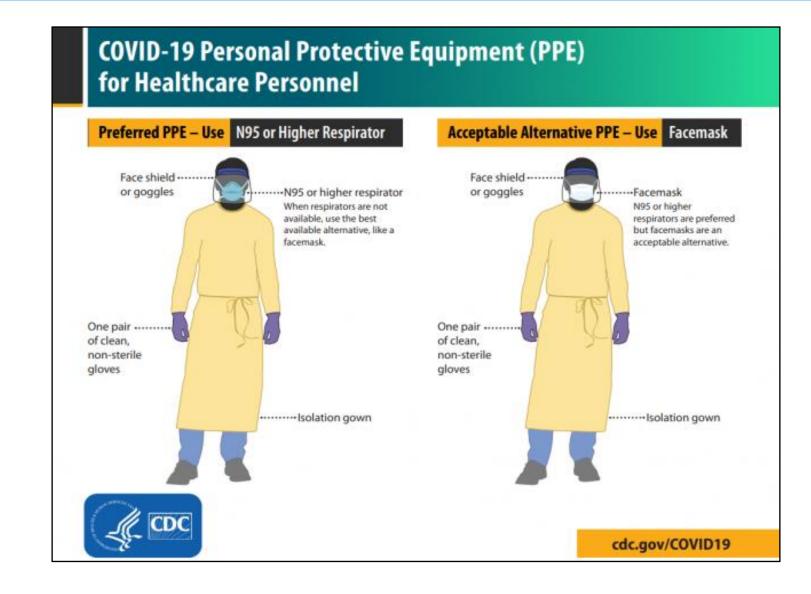


Personal Protective Equipment

• Required for suspect and confirmed COVID-19



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Measure	Minimal to No Community Transmission	Moderate to Substantial Community Transmission
Standard Precautions	 All patients regardless of infectious status Per anticipated tasks 	 All patients regardless of infectious status Per anticipated tasks
Transmission- based Precautions	 Per suspect/confirmed diagnosis Suspect/confirmed COVID: N95 or higher-level respirator Eye protection Gown Gloves 	 Per suspect/confirmed diagnosis Suspect/confirmed COVID: N95 or higher-level respirator Eye protection Gown Gloves
Other N95 or Higher-level Respirator Use	Aerosol-generating procedures	 Aerosol-generating procedures Surgical procedures with increased COVID risk
Source Control	 For patient encounters: N95 or high-level respirator or well-fitting facemask May include eye protection 	 Facility-wide: N95 or high-level respirator, respirator from other country w/similar standards, or well-fitting facemask Eye protection



Cohorting Principles

- Group like consumers together
 - COVID-positive
 - COVID-negative
- Segregate consumers
 - Facility-wide vs. building-specific
- Isolate in-place symptomatic consumers while awaiting test results
- Shelter in-place roommates of confirmed cases
- Consider risk-benefit analysis
- Minimize movement



Disinfect Contact Surfaces

- Doorknobs
- Light switches
- Handrails
- Bedrails
- Telephones
- Computers
- Remotes
- Patient Charts





6 Steps for Safe & Effective Disinfectant Use



Step 1: Check that your product is EPA-approved

Find the EPA registration number on the product. Then, check to see if it is on EPA's list of approved disinfectants at: *epa.gov/listn*





Step 2: Read the directions

Follow the product's directions. Check "use sites" and "surface types" to see where you can use the product. Read the "precautionary statements."

Step 3: Pre-clean the surface

Make sure to wash the surface with soap and water if the directions mention pre-cleaning or if the surface is visibly dirty.





Step 4: Follow the contact time

You can find the contact time in the directions. The surface should remain wet the whole time to ensure the product is effective.

Step 5: Wear gloves and wash your hands

For disposable gloves, discard them after each cleaning. For reusable gloves, dedicate a pair to disinfecting COVID-19. Wash your hands after removing the gloves.



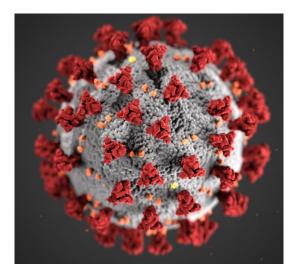


Step 6: Lock it up Keep lids tightly closed and store out of reach of children.

coronavirus.gov



Staff Management





Protect Yourself & Others

- Get vaccinated.
- Stay at least 6 feet from others.
- Wear a well-fitting cloth face covering or mask that covers your nose and mouth in public settings.
- Avoid touching your eyes, nose, and mouth.
- Use an alcohol-based hand sanitizer containing at least 60% alcohol or wash hands with soap and water for at least 20 seconds.
- Clean and disinfect frequently touched surfaces.
- Stay home when sick unless seeking medical care.



While at Work





Wash hands often



Clean and disinfect frequently touched objects and surfaces



Stay home while you are sick; avoid others



Staffing Considerations

- Develop staffing plans
- Dedicate staff to COVID-positive cohort
- Minimize staff movement/float assignments
- Consider contingency and crisis needs
 - Identify alternative staffing source(s)
 - Utilize <u>CDC's staffing shortage mitigation strategies</u>



Staff Exclusions When Exposed*

*Applies to unprotected staff for prolonged (≥15 mins in 24 hrs) period or any length of time during an aerosol generating procedure (AGP).

Unprotected = Not wearing facemask/respirator, without eye protection when case not using source control, or not wearing recommended PPE for AGP.

Staff	Exclusion Time	Comments/Recommendations
Asymptomatic & fully vaccinated or recovered in past 90 days	None	 Monitor for symptoms 14 days from last exposure. Immediately test if develop symptoms.
Asymptomatic & unvaccinated or NOT recovered in past 90 days	14 days from last exposure	 Shortened quarantine not recommended unless in staffing crisis; see <u>CDC staffing</u> <u>shortage mitigation strategies</u>. Monitor for symptoms 14 days from last exposure. Immediately test if develop symptoms.
Symptomatic – vaccinated & unvaccinated	Indefinitely	Self isolate and avoid others.Immediately test.Seek medical care as needed.



What To Do If You Test Positive

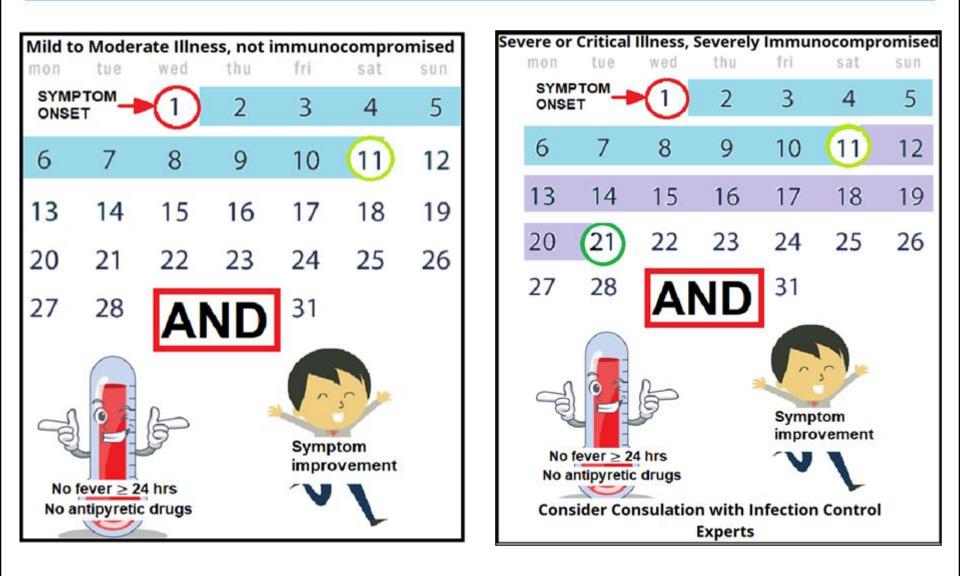
- Stay home
- Self-isolate
- Avoid other people
- Seek medical care if needed
- Provide information to DHEC about your close contacts while you were contagious



Return-to-Work Criteria

Status	Criteria
Asymptomatic; not immunocompromised	 10 days or more since collection date of first positive SARS-CoV-2 viral test
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Symptomatic with severe or critical illness or immunocompromised	 10-20 days since symptoms began, AND No fever for the previous 24 hours, without taking medications to lower fever, AND Respiratory symptoms (e.g., cough or shortness of breath) are improved. Consider infection control consultation.

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Resources

- <u>CDC Discontinuation of Transmission-based</u> <u>Precautions</u>
- <u>CDC Hand Hygiene Guidance</u>
- <u>CDC PPE Optimization Strategies</u>
- <u>CDC Return-to-Work Criteria</u>
- <u>CDC Staffing Shortage Mitigation Strategies</u>
- <u>CDC Domestic Travel Recommendations</u>
- <u>CMS QSO-21-14-ICF/IID & PRTF</u>
- <u>CMS QSO-21-19-NH</u>



Resources

- DHEC Recent Activity Report
- DHEC Updated Guidelines for Visitation
- EPA List N: Disinfectants for COVID-19
- <u>OSHA ETS (29 CFR 1910)</u>



Thank you! Questions?

South Carolina Department of Health and Environmental Control



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