

Missouri Department of Health & Senior Services

Health Update:

Discontinuation of Isolation for Persons with COVID-19

Health Update
July 27, 2020

**FROM: RANDALL W. WILLIAMS, MD, FACOG
DIRECTOR**

SUBJECT: Discontinuation of Isolation for Persons with COVID-19

July 27, 2020

This document will be updated as new information becomes available. The current version can always be viewed at <http://www.health.mo.gov>.

The Missouri Department of Health & Senior Services (DHSS) is now using four types of documents to provide important information to medical and public health professionals, and to other interested persons:

Health Alerts convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies or the public.

Health Advisories provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

Health Guidances contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

Health Updates provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

The Missouri Department of Health and Senior Services (DHSS) is issuing this health update notification to Missouri clinicians, physicians, public health practitioners, employers and the public regarding the discontinuation of isolation for persons with COVID-19. The guidance included is in accordance with updates to guidance issued by the Centers for Disease Control and Prevention (CDC) released on July 17, 2020. A summary of current evidence and rationale for these changes is described by CDC in a decision memo "Duration of Isolation and Precautions for Adults with COVID-19", is available at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html>.

Assessment

Available data indicate that persons with mild to moderate COVID-19 remain infectious no longer than 10 days after symptom onset. Persons with more severe to critical illness or are severely immunocompromised likely remain infectious no longer than 20 days after symptom onset. Recovered persons can continue to shed detectable SARS-CoV-2 RNA in upper respiratory specimens for up to 3 months after illness onset, albeit at concentrations considerably lower than during illness, in ranges where replication-competent virus has not been reliably recovered and infectiousness is unlikely. The etiology of this persistently detectable SARS-CoV-2 RNA has yet to be determined. Studies have not found evidence that clinically recovered persons with persistence of viral RNA have transmitted SARS-CoV-2 to others. These findings strengthen the justification for relying on a symptom based, rather than test-based strategy for ending isolation of these patients, so that persons who are by current evidence no longer infectious are not kept unnecessarily isolated and excluded from work or other responsibilities.

Reinfection with SARS-CoV-2 has not yet been definitively confirmed in any recovered persons to date. If, and if so when, persons can be reinfected with SARS-CoV-2 remains unknown and is a subject of investigation. Persons infected with related endemic human betacoronavirus appear to become susceptible again at around 90 days after onset of infection. Thus, for persons recovered from SARS-CoV-2 infection, a positive PCR during the 90 days after illness onset more likely represents persistent shedding of viral RNA than reinfection.

Office of the Director
912 Wildwood
P.O. Box 570
Jefferson City, MO 65102
Telephone: 800-392-0272
Fax: 573-751-6041

Website: <http://www.health.mo.gov>

- If such a person remains asymptomatic during this 90-day period, then any re-testing is unlikely to yield useful information, even if the person had close contact with an infected person.
- If such a person becomes symptomatic during this 90-day period and an evaluation fails to identify a diagnosis other than SARS-CoV-2 infection (e.g., influenza), then the person may warrant evaluation for SARS-CoV-2 reinfection in consultation with an infectious disease or infection control expert. Isolation may be warranted during this evaluation, particularly if symptoms developed after close contact with an infected person.

Correlates of immunity to SARS-CoV-2 infection have not been established. Specifically, the utility of serologic testing to establish the absence or presence of infection or reinfection remains undefined.

Recommendations:

The recommendations below are based on the best information available in mid-July 2020 and reflect the realities of an evolving pandemic. Even for pathogens for which many years of data are available, it may not be possible to establish recommendations that ensure 100% of persons who are shedding replication-competent virus remain isolated. CDC and DHSS will continue to closely monitor the evolving science for information that would warrant reconsideration of these recommendations. For additional recommendations see the additional references in the healthcare and non-healthcare sections provided below.

1. Duration of isolation and precautions

- For most persons with COVID-19 illness, isolation and precautions can generally be discontinued 10 days *after symptom onset*¹ and resolution of fever for at least 24 hours, without the use of fever-reducing medications, and with improvement of other symptoms.
- A limited number of persons with severe illness² may produce replication-competent virus beyond 10 days that may warrant extending duration of isolation and precautions for up to 20 days after symptom onset; consider consultation with infection control experts.
- For persons who never develop symptoms, isolation and other precautions can be discontinued 10 days *after the date of their first positive RT-PCR test for SARS-CoV-2 RNA*.

2. Role of PCR testing³ to discontinue isolation or precautions

- For persons who are severely immunocompromised⁴, a test-based strategy could be considered in consultation with infectious diseases experts.
- For all others, a test-based strategy is no longer recommended except to discontinue isolation or precautions earlier than would occur under the strategy outlined in Part 1, above.

3. Role of PCR testing³ after discontinuation of isolation or precautions

- For persons previously diagnosed with symptomatic COVID-19 who remain asymptomatic after recovery, retesting is not recommended within 3 months after the date of symptom onset for the initial COVID-19 infection. In addition, quarantine is not recommended in the event of close contact with an infected person.

- For persons who develop new symptoms consistent with COVID-19 during the 3 months after the date of initial symptom onset, if an alternative etiology cannot be identified by a provider, then the person may warrant retesting; consultation with infectious disease or infection control experts is recommended. Isolation may be considered during this evaluation based on consultation with an infection control expert, especially in the event symptoms develop within 14 days after close contact with an infected person.
- For persons who never developed symptoms, the date of first positive RT-PCR test for SARS-CoV-2 RNA should be used in place of the date of symptom onset.

4. **Role of serologic testing**

- Serologic testing should not be used to establish the presence or absence of SARS-CoV-2 infection or reinfection.

1. *Symptom onset is defined as the date on which symptoms first began, including non-respiratory symptoms.*

2. *An option for defining the severity of illness involves definitions as provide by The [National Institutes of Health \(NIH\) COVID-19 Treatment Guidelines](#). The NIH Guidance was not developed to inform decisions about duration of Transmission-Based Precautions. However, the conservative approach described in this guidance can be informed by NIH. The highest level of illness severity experienced by the patient at any point in their clinical course should be used when determining the duration of Transmission-Based Precautions.*

Mild Illness: Individuals who have any of the various signs and symptoms of COVID-19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain) without shortness of breath, dyspnea, or abnormal chest imaging.

Moderate Illness: Individuals who have evidence of lower respiratory disease by clinical assessment or imaging, and a saturation of oxygen (SpO₂) ≥94% on room air at sea level.

Severe Illness: Individuals who have respiratory frequency >30 breaths per minute, SpO₂ <94% on room air at sea level (or, for patients with chronic hypoxemia, a decrease from baseline of >3%), ratio of arterial partial pressure of oxygen to fraction of inspired oxygen (PaO₂/FiO₂) <300 mmHg, or lung infiltrates >50%.

Critical Illness: Individuals who have respiratory failure, septic shock, and/or multiple organ dysfunction.

In pediatric patients, radiographic abnormalities are common and, for the most part, should not be used as the sole criteria to define COVID-19 illness category. Normal values for respiratory rate also vary with age in children, thus hypoxia should be the primary criterion to define severe illness, especially in younger children

3. *PCR testing is defined as the use of an RT-PCR assay to detect the presence of SARS-CoV-2 RNA.*

4. *Based on available data in the medical literature and ID expert opinion, severely immunocompromised patients include:*

- *Those with neutropenia (ANC or WBC < 500/mm³)*

- *Those with leukemia/lymphoma undergoing chemotherapy*
- *HIV patients with CD4 count <200*
- *Transplant patients who have undergone solid organ or allogeneic stem cell transplant on immunosuppressive therapy or who have GVHD*
- *Transplant patients who have undergone autologous transplant less than 6 months from transplant*
- *Those on high dose steroids steroid dose of either >2 mg/kg of body weight or ≥20 mg per day of prednisone or equivalent in people who weigh >10 kg, when administered for ≥2 weeks*

Please note: Patients with autoimmune diseases requiring treatment with immunosuppressive medications such as TNF alpha inhibitors, should be reviews with ID specialists for further direction.

Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance) available at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html>. Updates to the previous guidance includes the following:

- Except for rare situations, a test-based strategy is no longer recommended to determine when to discontinue Transmission-Based Precautions.
- For patients with severe to critical illness or who are severely immunocompromised¹, the recommended duration for Transmission-Based Precautions was extended to 20 days after symptom onset (or, for asymptomatic severely immunocompromised¹ patients, 20 days after their initial positive SARS-CoV-2 diagnostic test).
- Other symptom-based criteria were modified as follows: ◦Changed from “at least 72 hours” to “at least 24 hours” have passed since last fever without the use of fever-reducing medications.
- Changed from “improvement in respiratory symptoms” to “improvement in symptoms” to address expanding list of symptoms associated with COVID-19.

Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings is available <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html>. Updates to the previous guidance includes the following:

- A test-based strategy is no longer recommended to determine when to discontinue home isolation, except in certain circumstances.
- Symptom-based criteria were modified as follows: ◦Changed from “at least 72 hours” to “at least 24 hours” have passed since last fever without the use of fever-reducing medications.
- Changed from “improvement in respiratory symptoms” to “improvement in symptoms” to address expanding list of symptoms associated with COVID-19.
- For patients with severe illness, duration of isolation for up to 20 days after symptom onset may be warranted. Consider consultation with infection control experts.
- For persons who never develop symptoms, isolation and other precautions can be discontinued 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.

Missouri healthcare providers and public health practitioners: Please contact your local public health agency or the Missouri Department of Health and Senior Services' (DHSS') Bureau of Communicable Disease Control and Prevention at 573-751-6113 or 800-392-0272 (24/7) with questions regarding this Alert.