Coronavirus Disease 2019 (COVID-19)

Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance)

Updated Aug. 10, 2020 Print

CDC guidance for SARS-CoV-2 infection may be adapted by state and local health departments to respond to rapidly changing local circumstances.

Summary of Recent Changes

Updates as of August 10, 2020

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Changes to more closely align guidance with Decision Memo:

- For patients with severe to critical illness or who are severely immunocompromised[1], the recommended duration for Transmission-Based Precautions was changed to at least 10 days and up to 20 days after symptom onset.
- Recommendation to consider consultation with infection control experts.
- Added example applying disease severity in determining duration of isolation using Transmission-Based Precautions.
- Added hematopoietic stem cell or solid organ transplant to severely immunocompromised conditions.

Discontinuation of Transmission-Based Precautions for Patients with Confirmed SARS-CoV-2 Infection

The decision to discontinue Transmission-Based Precautions for patients with confirmed SARS-CoV-2 infection should be made using a symptom-based strategy as described below. The time period used depends on the patient's severity of illness and if they are severely immunocompromised.[1] **Meeting criteria for discontinuation of Transmission-Based Precautions is not a prerequisite for discharge from a healthcare facility.**

A test-based strategy is no longer recommended (except as noted below) because, in the majority of cases, it results in prolonged isolation of patients who continue to shed detectable SARS-CoV-2 RNA but are no longer infectious.

Symptom-Based Strategy for Discontinuing Transmission-Based Precautions.

Patients 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

Note: For patients who are **not severely immunocompromised[1]** and who were **asymptomatic** throughout their infection, Transmission-Based Precautions may be discontinued when at least 10 days have passed since the date of their first positive viral diagnostic test.

Patients with severe to critical illness or who are severely immunocompromised[1]:

- At least 10 days and up to 20 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
- Consider consultation with infection control experts

Note: For **severely immunocompromised[1]** patients who were **asymptomatic** throughout their infection, Transmission-Based Precautions may be discontinued when at least 10 days and up to 20 days have passed since the date of their first positive viral diagnostic test.

As described in the Decision Memo, an estimated 95% of severely or critically ill patients, including some with severe immunocompromise, no longer had replication-competent virus 15 days after onset of symptoms; no patients had replication-competent virus more than 20 days after onset of symptoms. The exact criteria that determine which patients will shed replication-competent virus for longer periods are not known. Disease severity factors and the presence of immunocompromising conditions should be considered in determining the appropriate duration for specific

patient populations. For example, patients with characteristics of severe illness may be most appropriately managed with at least 15 days of isolation under Transmission-Based Precautions.

Test-Based Strategy for Discontinuing Transmission-Based Precautions.

In some instances, a test-based strategy could be considered for discontinuing Transmission-based Precautions earlier than if the symptom-based strategy were used. However, as described in the Decision Memo, many individuals will have prolonged viral shedding, limiting the utility of this approach. A test-based strategy could also be considered for some patients (e.g., those who are severely immunocompromised[1]) in consultation with local infectious diseases experts if concerns exist for the patient being infectious for more than 20 days.

The criteria for the test-based strategy are:

Patients who are symptomatic:

- Resolution of fever without the use of fever-reducing medications **and**
- Symptoms (e.g., cough, shortness of breath) have improved, **and**
- Results are negative from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens) tested using an FDA-authorized molecular viral assay to detect SARS-CoV-2 RNA. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus (2019-nCoV).

Patients who are not symptomatic:

- Results are negative from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens) tested using an FDA-authorized molecular viral assay to detect SARS-CoV-2 RNA. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus (2019-nCoV).

Discontinuation of empiric Transmission-Based Precautions for Patients Suspected of Having SARS-CoV-2 Infection

The decision to discontinue empiric Transmission-Based Precautions by excluding the diagnosis of current SARS-CoV-2 infection for a patient with suspected SARS-CoV-2 infection can be made based upon having negative results from at least one respiratory specimen tested using an FDA-authorized molecular viral assay to detect SARS-CoV-2 RNA.

- If a higher level of clinical suspicion for SARS-CoV-2 infection exists, consider maintaining Transmission-Based Precautions and performing a second test for SARS-CoV-2 RNA.
- If a patient suspected of having SARS-CoV-2 infection is never tested, the decision to discontinue Transmission-Based Precautions can be made using the *symptom-based strategy* described above.

Ultimately, clinical judgement and suspicion of SARS-CoV-2 infection determine whether to continue or discontinue empiric Transmission-Based Precautions.

Disposition of Patients with SARS-CoV-2 Infection

Patients can be discharged from the healthcare facility whenever clinically indicated.

If discharged to home:

- The decision to send the patient home should be made in consultation with the patient's clinical care team and local or state public health departments. It should include considerations of the home's suitability for and patient's ability to adhere to home isolation recommendations. Guidance on implementing home care of persons who do not require hospitalization and the discontinuation of home isolation for persons with COVID-19 is available.

If discharged to a nursing home or other long-term care facility (e.g., assisted living facility), **AND**

- If Transmission-Based Precautions *are still required*, the patient should go to a facility with an ability to adhere to infection prevention and control recommendations for the care of residents with SARS-CoV-2 infection. Preferably, the patient would be placed in a location designated to care for residents with SARS-CoV-2 infection.
- If Transmission-Based Precautions *have been discontinued*, the patient does not require further restrictions, based upon their history of SARS-CoV-2 infection.

SARS-CoV-2 Illness Severity Criteria (adapted from the NIH COVID-19 Treatment Guidelines)

Note: The studies used to inform this guidance did not clearly define "severe" or "critical" illness. This guidance has taken a conservative approach to define these categories. Although not developed to inform decisions about duration of Transmission-Based Precautions, the definitions in the National Institutes of Health (NIH) COVID-19 Treatment Guidelines are one option for defining severity of illness categories. 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.

[1]The studies used to inform this guidance did not clearly define "severely immunocompromised." For the purposes of this guidance, CDC used the following definition:

- Some conditions, such as being on chemotherapy for cancer, being within one year out from receiving a hematopoietic stem cell or solid organ transplant, untreated HIV infection with CD4 T lymphocyte count < 200, combined primary immunodeficiency disorder, and receipt of prednisone >20mg/day for more than 14 days, may cause a higher degree of immunocompromise and inform decisions regarding the duration of Transmission-Based Precautions.
- Other factors, such as advanced age, diabetes mellitus, or end-stage renal disease, may pose a much lower degree of immunocompromise and not clearly affect decisions about duration of Transmission-Based Precautions.
- Ultimately, the degree of immunocompromise for the patient is determined by the treating provider, and preventive actions are tailored to each individual and

situation.

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