STANDARD WORK: Discontinuation of Isolation Precautions for COVID-19 Patients

Purpose: Provide guidance for discontinuing isolation (transmission-based) precautions for patients with COVID-19

Inputs: COVID-19 test results

CONTENT in SEQUENCE

quence	Brief summary of task
1.	The decision to discontinue isolation precautions for patients with confirmed COVID-19 infection should be made using a symptom-based strategy , as described below, in collaboration with the treating provider.
	A test-based strategy is no longer recommended (except as noted below) because, in the majority of cases, the test will continue to be positive even after the patient has met criteria for discontinuation of isolation per the symptom-based strategy. Many patients will continue to shed detectable SARS-CoV-2 RNA but are no longer infectious .
	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 severe immunocompromise likely remain infectious no longer than 20 days after symptom onset.*
	* Some conditions such as receiving chemotherapy for cancer, hematologic malignancies, 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 taking immunosuppressive medications (e.g., drugs to suppress rejection of transplanted organs or to treat rheumatologic conditions such as mycophenolate and rituximab, receipt of prednisone >20mg/day for more than 14 days prior to admission), may cause a higher degree of immunocompromise and thus may shed virus longer than 20 days.
2.	Symptomatic patients with COVID-19 should remain in isolation precautions until all of the criteria in the symptom-based strategy below are met. The time period used depends on the patient's severity of illness and if they are severely immunocompromised.
3.	Once a patient has been removed from isolation based on the symptom-based strategy, they should not be placed back into isolation even with a change in medical condition such as need for oxygen or development of fever. The patient is deemed no longer at risk of exposure to staff, patients and visitors and does not require isolation for COVID. Isolation should only be ordered for these patients due to other infectious disease processes.
4.	For patients who have met the symptom-based strategy for discontinuing isolation and receive another COVID test (i.e., for placement or surgical screening) within 90 days of the initial test or symptom onset, and the result is positive, the patient may remain out of isolation unless the patient is symptomatic and new infection is suspected.
	Please see "Retesting and Isolation of COVID-19 Patients after Discontinuation of Isolation Precautions or Readmission" standard work for additional information.

5. Of note: Patients being tested for COVID for **elective procedures** should be quarantined/self-isolated and tested in accordance with the operating room pre-surgical protocol, as intubation is a high-risk exposure event.

Symptom-Based Strategy for Discontinuation of Isolation

- 6. **Patients with mild to moderate illness** (see illness severity definitions in #9) **who are not severely immunocompromised**¹ (see footnotes in #11) or who have tested positive at screening and remain asymptomatic:
 - 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** and who were **asymptomatic** throughout their infection, isolation precautions may be discontinued when at least 10 days have passed since the date of their first positive viral diagnostic test.

- 7. **Patients with severe to critical illness** (see illness severity definitions in #10) (see footnotes in #12):
 - At least 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.

** Note:

For **severely immunocompromised(*)**¹ patients who were **asymptomatic** throughout their infection, isolation precautions may be discontinued when at least 20 days have passed since the date of their first positive viral diagnostic test.

- 8. **Patients with severe to critical illness** (see illness severity definitions in #10) **and who are severely immunocompromised**¹(see footnotes in #12) ** <u>see note below for one exception</u>:
 - At least 30 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 and
- Patient has 2 negative COVID tests completed 30 days or greater from first symptoms or

positive test, whichever is first, and which meets the test based strategy in #.

** Note:

For **severely immunocompromised(*)**¹ patients who were **asymptomatic** throughout their infection, isolation precautions may be discontinued when at least 20 days have passed since the date of their first positive viral diagnostic test.

* Some conditions such as receiving chemotherapy for cancer, hematologic malignancies, 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 taking immunosuppressive medications (e.g., drugs to suppress rejection of transplanted organs or to treat rheumatologic conditions such as mycophenolate and rituximab, receipt of prednisone >20mg/day for more than 14 days prior to admission), may cause a higher degree of immunocompromise and thus may shed virus longer than 20 days. Consideration should be made to keep these patients in isolation for the duration of the admission.

Test-Based Strategy for Discontinuation of Isolation

9. Many individuals will have prolonged viral shedding, limiting the utility of the test-based strategy. This strategy should only be considered for some patients (e.g., severely immunocompromised¹) in consultation with an Infection Preventionist 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.

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

Although not developed to inform decisions about duration of isolation 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 isolation precautions.

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- 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, nausea, vomiting, diarrhea, loss of taste and smell) but who do not have shortness of breath, dyspnea, or abnormal chest imaging.
- Moderate Illness: Individuals who show evidence of lower respiratory disease during clinical
 assessment or imaging and who have an oxygen saturation (SpO2) ≥94% on room air at sea
 level.
- **Severe Illness:** Individuals who have SpO2 <94% on room air at sea level, a ratio of arterial partial pressure of oxygen to fraction of inspired oxygen (PaO2/FiO2) <300 mm Hg, a respiratory rate >30 breaths/min, lung infiltrates >50% and/or required intensive level of care admission.
- *Critical Illness:* Individuals who have respiratory failure (including intubation, BiPAP (not home CPAP), and/or high-flow O₂), septic shock, and/or multiple organ dysfunction.

Note: 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.

11. COVID positive infection should automatically resolve in EPIC storyboard 21 days after COVID positive test or discharge from hospitalization, whichever is later. If COVID confirmed banner remains after this 21-day timeframe, please discuss with provider and Infection Prevention to resolve infection and determine need for isolation precautions.

12. **Footnotes**:

¹CDC used the following definition for "severely immunocompromised":

- Some conditions such as receiving chemotherapy for cancer, hematologic malignancies, 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 taking immunosuppressive medications (e.g., drugs to suppress rejection of transplanted organs or to treat rheumatologic conditions such as mycophenolate and rituximab, receipt of prednisone >20mg/day for more than 14 days prior to admission), may cause a higher degree of immunocompromise and thus may shed virus longer than 20 days. Consideration should be made to keep these patients in isolation for the duration of the admission.
- 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
 isolation 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.

Frequency of Use: As needed

Output: Isolation precautions will be removed and PPE use will be discontinued when patient meets criteria

Process Owner: Infection Prevention

References:

CDC. Coronavirus Disease 2019 (COVID-19). Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance).

<u>Discontinuation of Transmission-Based Precautions and Disposition of Patients with SARS-CoV-2 Infection in Healthcare</u>
<u>Settings (cdc.gov)</u> Updated 9/10/2021

NIH. COVID-19 Treatment Guidelines. Clinical Spectrum of SARS-CoV-2 Infection. <u>Clinical Spectrum of SARS-CoV-2</u> Infection Last Updated: October 19, 2021

OHA. Novel Coronavirus Disease 2019 (COVID-19) Interim Investigative Guidelines. September 18, 2020. https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/COMMUNICABLEDISEASE/REPORTINGCOMMUNICABLEDISEASE/

Aydillo, A., Gonzalez-Reiche, A., Aslam, S., et al. Shedding of Viable SARS-CoV-2 after Immunosuppressive Therapy for Cancer. December 24, 2020. N Engl J Med; 383:2586-2588. https://www.nejm.org/doi/full/10.1056/NEJMc2031670

Wölfel, R., Corman, V.M., Guggemos, W. et al. Virological assessment of hospitalized patients with COVID-2019. Nature (2020). https://doi.org/10.1038/s41586-020-2196-x.

American Association for Cancer Research. COVID-19 Prolonged in Patients with Cancer. May 2021. https://cancerdiscovery.aacrjournals.org/content/11/5/OF7

Criteria for Discontinuation of Isolation Precautions for COVID-19 Patients

Patient with mild to moderate COVID illness and who are not severely immunocompromised (** see note below):

ASYMPTOMATIC

(immunocompromised)

Discontinue isolation

when at least 20 days have passed since first

positive test

SYMPTOMATIC

Discontinue isolation when:

- 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

ASYMPTOMATIC

Discontinue isolation when at least 10 days have passed since first positive test

**Patients who are symptomatic and are severely immunocompromised (per the below) need to remain in isolation for a minimum of 30 days and then considered for removal from isolation after 2 negative tests done greater than 24 hours apart per the test based strategy

Severely immunocompromised individuals are defined as having conditions such as receiving chemotherapy for cancer, hematologic malignancies, 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 taking immunosuppressive medications (e.g., drugs to suppress rejection of transplanted organs or to treat rheumatologic conditions such as mycophenolate and rituximab, receipt of prednisone >20mg/day for more than 14 days prior to admit)

SYMPTOMATIC

Discontinue isolation when:

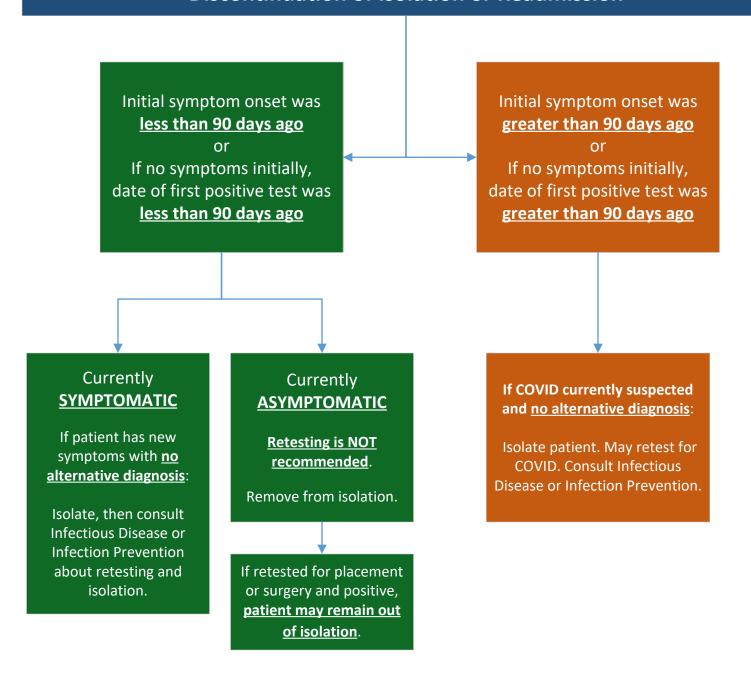
- At least 20 days have passed since symptoms first appeared
 - <u>and</u>
- At least 24 hours have passed since last fever without the use of fever-reducing medications

and

 Symptoms (e.g., cough, shortness of breath) have improved

See next page for guidance on retesting COVID patients after removal of isolation or readmission

Retesting COVID-19 Patients after Discontinuation of Isolation or Readmission



If additional guidance is needed, contact Infection Prevention or consult Infectious Disease