COVID-19 (SARS-CoV-2)
Pacific Region

Releasings Patients From Care
July 2020
C. Patricia Macias, MD
Cook County Health, Chicago, IL USA
No conflict of interest to declare
Objectives

• Determining Resolution of COVID-19 Infection.

• Discontinuation of Transmission-Based Precautions for COVID-19 Patients

• Disposition of Patients with COVID-19

• Assess the Suitability of the Residential Setting for Home Care

• Criteria for Return to Work for Healthcare Personnel with Suspected or Confirmed COVID-19
Determining Resolution of COVID-19 Infection. Changes to guidance as April 30, 2020

Strategies used to determine when a person with SARS-CoV-2 infection no longer requires isolation or work exclusion.

1. A test-based strategy, which requires serial tests

2. A symptom-based strategy (for those with symptoms) centered in transmission-based precautions to at least 10 days since symptoms first appeared.

3. Time-based strategy (for those without symptoms).

Symptomatic patients with COVID-19 should remain in TBP until either:

Symptom-based strategy

- At least 3 days (72 hours) have passed *since recovery* defined as resolution of fever *without the use of fever-reducing medications* and improvement in respiratory symptoms (cough, shortness of breath); and,

- At least 10 days have passed *since symptoms first appeared*

Meeting criteria for discontinuation of TBP is *not a prerequisite* for discharge.

Discontinuation of Transmission-Based Precautions (TBP) for COVID-19 Patients

Symptomatic patients with COVID-19 should remain in TBP until either:

**Test-based strategy**

- Resolution of fever without the use of fever-reducing medications and
- Improvement in respiratory symptoms (e.g., cough, shortness of breath), and
- Negative results of an authorized COVID-19 molecular assay from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens).

Of note, there have been reports of prolonged detection of RNA without direct correlation to viral culture.

Discontinuation of Transmission-Based Precautions (TBP) for COVID-19 Patients

Patients with laboratory-confirmed COVID-19 who have no symptoms should remain in TBP until either:

**Time-based strategy**
- 10 days since the first positive COVID-19 test, if they have not developed any symptoms since their positive test. Without symptoms, it is possible that the duration of viral shedding could be longer or shorter than 10 days after their first positive test.

**Test-based strategy**
- Negative COVID-19 molecular assay from at least two consecutive specimens collected ≥24 hours apart (total of two negative specimens).
- There have been reports of prolonged detection of RNA with negative viral culture.

Discontinuation of Empiric Transmission-Based Precautions (TBP) for Patients Suspected of Having COVID-19

The decision to discontinue empiric TBP on a suspected patient, can be based on a negative result from one COVID-19 molecular assay.

- If a higher level of clinical suspicion for COVID-19 exists, consider maintaining TBP and performing a second test for COVID-19.

- If a patient suspected of having COVID-19 is never tested, the decision to discontinue TBP can be made using the symptom-based strategy described earlier.

Ultimately, clinical judgement and suspicion of COVID-19 infection determine whether to continue or discontinue empiric TBP.

Patients can be **discharged** from the healthcare facility **whenever clinically indicated**. If discharged to home:

- **Isolation** should be maintained at home if the patient returns before discontinuation of TBP.

- Assessing the **home’s suitability** and capability to adhere to the recommended home care isolation.

- **Caregivers may wear a cloth face covering** when caring for a sick person.

- **Medical facemasks are reserved for healthcare workers and first responders.**

Assess the Suitability of the Residential Setting for Home Care

Considerations for care at home:

• The **patient is stable enough** to receive care at home.

• **Appropriate caregivers** are available at home.

• There is a **separate bedroom/space** where the patient can recover without sharing immediate space with others.

• **Access to food** and other necessities are available.

• Household members at increased **risk of complications** from COVID-19 are: people **>65 years old**, young children, pregnant women, people who are **immunocompromised** or who have chronic heart, lung, diabetes or kidney conditions.

Disposition of Patients with COVID-19

If discharged to a nursing home or other long-term care facility, AND

- **TBP are still required**, they should go to a facility with ability to adhere to infection control. Preferably a location designated to care for COVID-19 residents.

- **TBP have been discontinued**, but the patient has symptoms, they should be placed in a single room, be restricted to their room, and wear a facemask during care activities until all symptoms are completely resolved.

- **TBP have been discontinued** and the patient’s symptoms have resolved, they do not require further restrictions, based upon their history of COVID-19.

Assess the Suitability of the Residential Setting for Home Care

A healthcare professional should review these resources


Additional Resources

• Interim Healthcare Infection Prevention and Control Recommendations for Persons Under Investigation for Coronavirus Disease 2019 (COVID-19)
• Interim Guidance for Healthcare Professionals
• [https://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf?ua=1](https://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf?ua=1)  (hand rub)
Home care for people with suspected or confirmed COVID-19
Take care of yourself and your family

All members of the household

Wash hands with soap and water regularly, especially:
- after coughing or sneezing
- before, during and after you prepare food
- before eating
- after using the toilet
- before and after caring for the ill person
- when hands are visibly dirty

Avoid unnecessary exposure to the ill person and avoid sharing items, such as eating utensils, dishes, drinks and towels.

When coughing or sneezing, cover mouth and nose with flexed elbow or use a disposable tissue and discard immediately after use.

Monitor everyone’s health for symptoms such as fever, cough and if difficult breathing appear, call your health care facility immediately.

For caregivers

Ensure the ill person rests, drinks plenty of fluids and eats nutritious food.

Frequently clean hands with soap and water or alcohol-based rub, especially:
- after any type of contact with the ill person or their surroundings
- before, during and after preparing food
- before eating
- after using the toilet

Identify frequently touched surfaces by the ill person and clean and disinfect them daily.

Use dedicated dishes, cups, eating utensils, towels and bedlinens for the ill person. Wash dishes, cups, eating utensils, towels, or bedlinens used by the ill person with soap and water.

Wear a medical mask when in the same room with an ill person. Do not touch the mask or face during use and discard it afterward.

Call your health care facility immediately if the ill person worsens or experiences difficulty breathing.
How to Make Strong (0.5%) Chlorine Solution from Liquid Bleach

Use strong (0.5%) chlorine solution to clean and disinfect surfaces, objects, and body fluid spills.

Make new strong (0.5%) chlorine solution every day. Throw away any leftover solution from the day before.

1. Make sure you are wearing extended PPE.
2a. Pour 2 parts liquid bleach and 3 parts water into a bucket. Repeat until full.
2b. Pour 1 part liquid bleach and 4 parts water into a bucket. Repeat until full.
2c. Pour 1 part liquid bleach and 6 parts water into a bucket. Repeat until full.
2d. Pour 1 part liquid bleach and 9 parts water into a bucket. Repeat until full.
3. Stir well for 10 seconds.
4. Label bucket “Strong (0.5%) Chlorine Solution - Cleaning.”
5. Cover bucket with lid.

Supplies Needed:
- Measuring cup or liter bottle
- Bucket with lid
- Water
- Liquid bleach
- Stick for stirring
- Label
How to Make Strong (0.5%) Chlorine Solution from 70% Chlorine Powder

Use strong (0.5%) chlorine solution to clean and disinfect surfaces, objects, and body fluid spills.

Make new strong (0.5%) chlorine solution every day. Throw away any leftover solution from the day before.

1. Make sure you are wearing extended PPE.
2. Add 10 tablespoons of HTH (70% chlorine) to 20 liters of water in a bucket.
3. Stir well for 10 seconds, or until the HTH has dissolved.
4. Wait 30 minutes before use.
5. Label bucket “Strong (0.5%) Chlorine Solution - Cleaning.”
6. Cover bucket with lid.
7. Store in shade. Do not store in direct sunlight.

Supplies Needed

- Tablespoon
- Bucket with lid
- Water
- 70% HTH
- Stick for stirring
- Label

WARNING
Do NOT drink chlorine water. Do NOT put chlorine water in mouth or eyes.

Criteria for Return to Work for Healthcare Personnel with Suspected or Confirmed COVID-19

- Symptomatic HCW with suspected or confirmed COVID-19 (Either strategy):

- **Symptom-based strategy.** Exclude from work until:
  - At least 3 days (72 hours) have passed *since recovery* defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (cough, shortness of breath); and,
  - At least 10 days have passed *since symptoms first appeared*

- **Test-based strategy.** Exclude from work until:
  - Resolution of fever without the use of fever-reducing medications and
  - Improvement in respiratory symptoms (cough, shortness of breath), and
  - Negative results of a COVID-19 molecular assay from at least two consecutive respiratory specimens collected ≥24 hours apart (*total of two negative specimens*)

Return to Work Practices and Work Restrictions

• After returning to work, HCW should:
• Wear a facemask (instead of cloth covering) for source control at all times while in the healthcare facility until all symptoms are completely resolved or at baseline.
• After this time period, the HCW should revert to their facility source control policy.

• Facemask for source control does not replace the need to wear an N95 or other recommended PPE when indicated, including when caring for patients with suspected or confirmed COVID-19.

• Of note, N95 or other respirators with an exhaust valve might not provide source control.

• Self-monitor for symptoms, and seek re-evaluation from occupational health if respiratory symptoms recur or worsen

Other Considerations

- The symptom-based, time-based, and test-based strategies may result in different timeframes for discontinuation of isolation post-recovery.

- CDC recommends 14 days of quarantine after exposure based on the time it takes to develop illness if infected.

- Thus, it is possible that a person known to be infected could leave isolation earlier than a person who is quarantined because of the possibility they are infected.

- The risk of transmission after recovery is substantially less than during illness; recovered persons will not shed large amounts of virus, if at all.

Does protective immunity develop after COVID-19? Can reinfection occur?

• Preliminary evidence suggests that antibodies are protective, **but this remains to be definitively established**. It is unknown if all infected patients mount a protective response and how long it will last.

• WHO is reviewing the evidence on antibody responses. Most studies show that **people who have recovered have antibodies to the virus**.

• However, **some have very low levels of neutralizing antibodies**, suggesting that **cellular immunity** may be critical for recovery.

• As of April 2020, no study has evaluated whether the presence of antibodies to COVID-19 confers immunity to subsequent infection in humans.
• This recommendation will prevent most, but cannot prevent all secondary spread.

• Clinicians and public health authorities can choose to apply more stringent criteria when a higher threshold to prevent transmission is warranted.

• Thank you!