What you need to know about coronavirus disease 2019 (COVID-19)

What is coronavirus disease 2019 (COVID-19)?

Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. The virus that causes COVID-19 is a novel coronavirus that was first identified during an investigation into an outbreak in Wuhan, China.

Can people in the U.S. get COVID-19?

Yes. COVID-19 is spreading from person to person in parts of the United States. Risk of infection with COVID-19 is higher for people who are close contacts of someone known to have COVID-19, for example healthcare workers, or household members. Other people at higher risk for infection are those who live in or have recently been in an area with ongoing spread of COVID-19. Learn more about places with ongoing spread at https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html#geographic.

Have there been cases of COVID-19 in the U.S.?

Yes. The first case of COVID-19 in the United States was reported on January 21, 2020. The current count of cases of COVID-19 in the United States is available on CDC's webpage at https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html.

How does COVID-19 spread?

The virus that causes COVID-19 probably emerged from an animal source, but is now spreading from person to person. The virus is thought to spread mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It also may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads. Learn what is known about the spread of newly emerged coronaviruses at https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html.

What are the symptoms of COVID-19?

Patients with COVID-19 have had mild to severe respiratory illness with symptoms of

- fever
- cough
- shortness of breath

What are severe complications from this virus?

Some patients have pneumonia in both lungs, multi-organ failure and in some cases death.

How can I help protect myself?

People can help protect themselves from respiratory illness with everyday preventive actions.

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Wash your hands often with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.

If you are sick, to keep from spreading respiratory illness to others, you should

- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.

What should I do if I recently traveled from an area with ongoing spread of COVID-19?

If you have traveled from an affected area, there may be restrictions on your movements for up to 2 weeks. If you develop symptoms during that period (fever, cough, trouble breathing), seek medical advice. Call the office of your health care provider before you go, and tell them about your travel and your symptoms. They will give you instructions on how to get care without exposing other people to your illness. While sick, avoid contact with people, don't go out and delay any travel to reduce the possibility of spreading illness to others.

Is there a vaccine?

There is currently no vaccine to protect against COVID-19. The best way to prevent infection is to take everyday preventive actions, like avoiding close contact with people who are sick and washing your hands often.

Is there a treatment?

There is no specific antiviral treatment for COVID-19. People with COVID-19 can seek medical care to help relieve symptoms.

cdc.gov/COVID19

CS 314937-A 03/20/2020

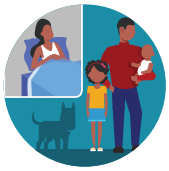
Steps to help prevent the spread of COVID-19 if you are sick

FOLLOW THE STEPS BELOW: If you are sick with COVID-19 or think you might have COVID-19, follow the steps below to help protect other people in your home and community.

Stay home except to get medical care

- **Stay home:** Most people with COVID-19 have mild illness and are able to recover at home without medical care. Do not leave your home, except to get medical care. Do not visit public areas.
- **Stay in touch with your doctor.** Call before you get medical care. Be sure to get care if you have trouble breathing, or have any other emergency warning signs, or if you think it is an emergency.
- **Avoid public transportation:** Avoid using public transportation, ride-sharing, or taxis.

Separate yourself from other people in your home, this is known as home isolation



- **Stay away from others:** As much as possible, stay away from others. You should stay in a specific "sick room" if possible, and away from other people in your home.
  Use a separate bathroom, if available.
  - See COVID-19 and Animals is you have questions about pets. https://www.cdc.gov/coronavirus/2019-ncov/faq.html#COVID19animals

Call ahead before visiting your doctor

- **Call ahead:** Many medical visits for routine care are being postponed or done by phone or telemedicine.
- If you have a medical appointment that cannot be postponed, call your doctor's office, and tell them you have or may have COVID-19. This will help the office protect themselves and other patients.

If you are sick wear a facemask in the following situations, if available.

- **If you are sick:** You should wear a facemask, if available, when you are around other people (including before you enter a healthcare provider's office).
- **If you are caring for others:** If the person who is sick is not able to wear a facemask (for example, because it causes trouble breathing), then as their caregiver, you should wear a facemask when in the same room with them. Visitors, other than caregivers, are not recommended.

Note: During a public health emergency, facemasks may be reserved for healthcare workers. You may need to improvise a facemask using a scarf or bandana.

Cover your coughs and sneezes

- **Cover:** Cover your mouth and nose with a tissue when you cough or sneeze.
- **Dispose:** Throw used tissues in a lined trash can.
- **Wash hands:** Immediately wash your hands with soap and water for at least 20 seconds. If soap and water are not available, clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol.

Clean your hands often

- **Wash hands:** Wash your hands often with soap and water for at least 20 seconds. This is especially important after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- **Hand sanitizer:** If soap and water are not available, use an alcohol-based hand sanitizer with at least 60% alcohol, covering all surfaces of your hands and rubbing them together until they feel dry.
- **Soap and water:** Soap and water are the best option, especially if hands are visibly dirty.
- **Avoid touching:** Avoid touching your eyes, nose, and mouth with unwashed hands.

Avoid sharing personal household items

- **Do not share:** Do not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people in your home.
- **Wash thoroughly after use:** After using these items, wash them thoroughly with soap and water or put in the dishwasher.

cdc.gov/coronavirus

CS 316120-A 04/02/2020

Clean all "high-touch" surfaces everyday

Clean high-touch surfaces in your isolation area ("sick room" and bathroom) every day; let a caregiver clean and disinfect high-touch surfaces in other areas of the home.

- **Clean and disinfect:** Routinely clean high-touch surfaces in your "sick room" and bathroom. Let someone else clean and disinfect surfaces in common areas, but not your bedroom and bathroom.
  - If a caregiver or other person needs to clean and disinfect a sick person's bedroom or bathroom, they should do so on an as-needed basis. The caregiver/other person should wear a mask and wait as long as possible after the sick person has used the bathroom.
- High-touch surfaces include phones, remote controls, counters, tabletops, doorknobs, bathroom fixtures, toilets, keyboards, tablets, and bedside tables.
- **Clean and disinfect areas that may have blood, stool, or body fluids on them.**
- **Household cleaners and disinfectants:** Clean the area or item with soap and water or another detergent if it is dirty. Then, use a household disinfectant.
  - Be sure to follow the instructions on the label to ensure safe and effective use of the product. Many products recommend keeping the surface wet for several minutes to ensure germs are killed. Many also recommend precautions such as wearing gloves and making sure you have good ventilation during use of the product.
  - Most EPA-registered household disinfectants should be effective. A full list of disinfectants can be found hereexternal icon.

Monitor your symptoms

- Common symptoms of COVID-19 include fever and cough. Trouble breathing is a more serious symptom that means you should get medical attention.
- **If you are having trouble breathing, seek medical attention, but call first.**
  - Call your doctor or emergency room before going in and tell them your symptoms. They will tell you what to do.
- **Wear a facemask:** If available, put on a facemask before you enter the building. If you can't put on a facemask, cover your coughs and sneezes. Try to stay at least 6 feet away from other people. This will help protect the people in the office or waiting room.
- **Follow care instructions from your healthcare provider and local health department:** Your local health authorities will give instructions on checking your symptoms and reporting information.

If you develop **emergency warning signs** for COVID-19 get **medical attention immediately.**

Emergency warning signs include*:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

*This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.

Call 911 if you have a medical emergency: If you have a medical emergency and need to call 911, notify the operator that you have or think you might have, COVID-19. If possible, put on a facemask before medical help arrives.

How to discontinue home isolation

- People **with COVID-19 who have stayed home (home isolated)** can stop home isolation under the following conditions:
  - ***If you will not have a test*** to determine if you are still contagious, you can leave home after these three things have happened:
    - You have had no fever for at least 72 hours (that is three full days of no fever without the use medicine that reduces fevers)
      AND
    - other symptoms have improved (for example, when your cough or shortness of breath have improved)
      AND
    - at least 7 days have passed since your symptoms first appeared
  - ***If you will be tested*** to determine if you are still contagious, you can leave home after these three things have happened:
    - You no longer have a fever (without the use medicine that reduces fevers)
      AND
    - other symptoms have improved (for example, when your cough or shortness of breath have improved)
      AND
    - you received two negative tests in a row, 24 hours apart. Your doctor will follow CDC guidelines.

In all cases, follow the guidance of your healthcare provider and local health department. The decision to stop home isolation should be made in consultation with your healthcare provider and state and local health departments. Local decisions depend on local circumstances.

More information is available https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html.

Additional information for healthcare providers: Interim Healthcare Infection Prevention and Control Recommendations for Persons Under Investigation for 2019 Novel Coronavirus.

Know the Difference

Isolation vs. Quarantine

Isolation

For people who are ill with COVID-19 symptoms

- Separates people who have a very contagious disease from those who are healthy.
- Restricts the movement of people who have a contagious disease to stop the spread of illness.
- Protects healthy people from getting a contagious disease.
- Lets people who have a contagious disease be cared for in their homes, hospitals or a designated facility.
- Is usually voluntary, but federal, state and local laws may require isolation of people who have a contagious disease to protect the public.

COVID-19 symptoms typically include fever (≥100.4) or one or more of the following:

- Cough
- Difficulty breathing or shortness of breath

Quarantine

For people who have been exposed, but are not ill with COVID-19 symptoms

- Applies to people who are not yet ill, but have been exposed to a very contagious disease that could be spread to others.
- Applies to the separation and restriction of movements of people.
- Is a public health strategy to stop the spread of a very contagious disease.
- Protects the public from very contagious diseases.

Social Distancing

One way to help stop the spread of a very contagious disease such as COVID-19 is to limit close contact of people with each other also known as social distancing. Social distancing can include:

- Work telecommuting
- School cancellations
- Cancellation of public gatherings
- Isolation of people who have a contagious disease
- Liberal work leave policies
- Quarantine of people exposed to contagious disease

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Adapted from a document created by the U.S. Department of Veterans Affairs; 3/18/2020

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ANDREW J. GINTHER, MAYOR
COLUMBUS PUBLIC HEALTH

Stopping Home Isolation

If you are isolating due to COVID-19:

Persons with suspected COVID-19 who have symptoms and were directed to care for themselves at home may discontinue home isolation when:

- At least 3 days (72 hours) have passed since recovery (temperature below 100.4°F without the use of fever-reducing medications) **AND**
- There is an improvement in respiratory symptoms (e.g., cough, shortness of breath) AND
- At least 7 days have passed since symptoms first appeared

If you tested positive for COVID-19:

Talk to your health care provider about when you can stop home isolation and return to your normal activities.

Your doctor may have you come in to be tested again to make sure you are well. In addition to negative test results, you'll need to have:

- Temperature below 100.4°F without the use of fever-reducing medications **AND**
- Improvement in respiratory symptoms (e.g., cough, shortness of breath)

If you are not being tested again by your doctor, you should follow the guidelines at the top of this page to know when you can stop home isolation.

Health Care workers have additional requirements. Please, see the documentation provided "Return to work fro Healthcare Personnel with confirmed or suspected COVID-19"

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3/20/2020

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Centers for Disease Control and Prevention

Coronavirus Disease 2019 (COVID-19)

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

Summary of Recent Changes as of April 13, 2020

- Indicates a preference for use of the Test-based strategy to determine when HCP may return to work in healthcare settings
- Adds return to work criteria for HCP with laboratory-confirmed COVID-19 who have not had any symptoms
- Aligns with recommendations for universal source control for everyone in a healthcare facility during the pandemic.

CDC guidance for COVID-19 may be adapted by state and local health departments to respond to rapidly changing local circumstances.

Who this is for: Occupational health programs and public health officials making decisions about return to work for healthcare personnel (HCP) with confirmed COVID-19, or who have suspected COVID-19 (e.g., developed symptoms of a respiratory infection [e.g., cough, sore throat, shortness of breath, fever] but did not get tested for COVID-19).

Decisions about return to work for HCP with confirmed or suspected COVID-19 should be made in the context of local circumstances. Options include a test-based strategy or a non-test-based strategy (i.e., time-since-illness-onset and time-since-recovery strategy).

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

Use the *Test-based strategy* as the preferred method for determining when HCP may return to work in healthcare settings:

1. *Test-based strategy.* Exclude from work until
    - 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 FDA Emergency Use Authorized molecular assay for COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart (total of two negative specimens) [1]. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus (2019-nCoV).

If the *Test-based strategy* cannot be used, the *Non-test-based strategy* may be used for determining when HCP may return to work in healthcare settings:

2. Non-test-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 (e.g., cough, shortness of breath); **and**,
    - At least 7 days have passed *since symptoms first appeared*

HCP with laboratory-confirmed COVID-19 who have not had any symptoms should be excluded from work until 10 days have passed since the date of their first positive COVID-19 diagnostic test assuming they have not subsequently developed symptoms since their positive test.

If HCP had COVID-19 ruled out and have an alternate diagnosis (e.g., tested positive for influenza), criteria for return to work should be based on that diagnosis.

Return to Work Practices and Work Restrictions

After returning to work, HCP should:

- Wear a facemask for source control at all times while in the healthcare facility until all symptoms are completely resolved or until 14 days after illness onset, whichever is longer. A facemask instead of a cloth face covering should be used by these HCP for source control during this time period while in the facility. After this time period, these HCP should revert to their facility policy regarding universal source control during the pandemic.
  - A facemask for source control does not replace the need to wear an N95 or higher-level respirator (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.
- Be restricted from contact with severely immunocompromised patients (e.g., transplant, hematology-oncology) until 14 days after illness onset
- Self-monitor for symptoms, and seek re-evaluation from occupational health if respiratory symptoms recur or worsen

Strategies to Mitigate Healthcare Personnel Staffing Shortages

Maintaining appropriate staffing in healthcare facilities is essential to providing a safe work environment for healthcare personnel (HCP) and safe patient care. As the COVID-19 pandemic progresses, staffing shortages will likely occur due to HCP exposures, illness, or need to care for family members at home. Healthcare facilities must be prepared for potential staffing shortages and have plans and processes in place to mitigate them, including considerations for permitting HCP to return to work without meeting all return to work criteria above. Refer to the *Strategies to Mitigate Healthcare Personnel Staffing Shortages* document for information.

Footnotes

[1]All test results should be final before isolation is ended. Testing guidance is based upon limited information and is subject to change as more information becomes available. In persons with a persistent productive cough, SARS-CoV-2-RNA might be detected for longer periods in sputum specimens than in upper respiratory tract (nasopharyngeal swab) specimens.

Definitions

Cloth face covering: Textile (cloth) cover that are intended to keep the person wearing one from spreading respiratory secretions when talking, sneezing, or coughing. **They are not PPE and it is uncertain whether cloth face coverings protect the wearer.** Guidance on design, use, and maintenance of cloth face coverings is available.

Facemask: Facemasks are PPE and are often referred to as surgical masks or procedure masks. Use facemasks according to product labeling and local, state, and federal requirements. FDA-cleared surgical masks are designed to protect against splashes and sprays and are prioritized for use when such exposures are anticipated, including surgical procedures. Facemasks that are not regulated by FDA, such as some procedure masks, which are typically used for isolation purposes, may not provide protection against splashes and sprays.

Respirator: A respirator is a personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles (including dust particles and infectious agents), gases, or vapors. Respirators are certified by the CDC/NIOSH, including those intended for use in healthcare.

Page last reviewed: April 13, 2020

Guidance for Management of Healthcare Personnel with Potential Exposure to Patients with Coronavirus Disease (COVID-19)

In the setting of community transmission, all Healthcare Personnel (HCP) are at some risk for exposure to COVID-19, whether in the workplace or in the community.

Facilities should shift emphasis to more routine practices, which include asking HCP to report recognized exposures, regularly monitoring themselves for fever and symptoms of respiratory infection, and not reporting to work when ill.

Facilities also should develop a plan for how they will screen for symptoms and evaluate ill HCP, which could include having HCP report absence of fever and symptoms prior to starting work each day.

COVID-19 symptoms typically include fever (≥100.4°F) or one or more of the following:

- Cough
- Difficulty breathing or shortness of breath
- Gastrointestinal symptoms

According to the Centers for Disease Control and Prevention (CDC), f**acilities could consider allowing asymptomatic HCP who have had an exposure to a COVID-19 patient to continue to work** after options to improve staffing have been exhausted and in consultation with their occupational health program.

These HCP should:

- Report temperature and absence of symptoms each day prior to starting work.
- If supplies are available, exposed HCP should wear a facemask while at work for 14 days after the exposure event.
- If even mild symptoms consistent with COVID-19 develop, exposed HCP should:
    - Cease all patient care activities immediately and wear a facemask (if not already wearing one), and;
    - Report symptoms to their supervisor or occupational health services.

4/2/2020

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Use Personal Protective Equipment (PPE) When Caring for Patients with Confirmed or Suspected COVID-19

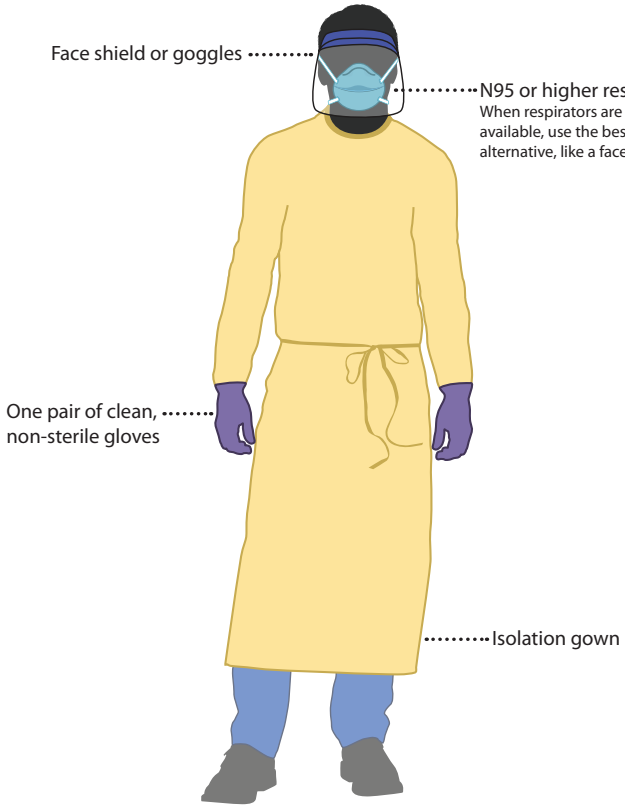
Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- **Receive comprehensive training** on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE.
- **Demonstrate competency** in performing appropriate infection control practices and procedures.

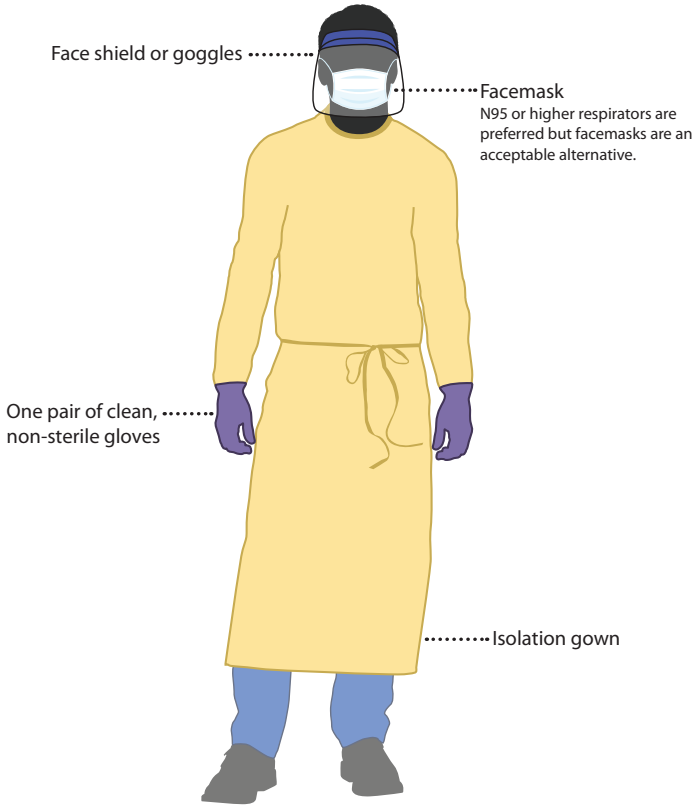
Remember:

- PPE must be donned correctly before entering the patient area (e.g., isolation room, unit if cohorting).
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (e.g., retying gown, adjusting respirator/facemask) during patient care.
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

Preferred PPE – Use N95 or Higher Respirator



Acceptable Alternative PPE – Use Facemask



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Donning (putting on the gear):

More than one donning method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of donning.

1. **Identify and gather the proper PPE to don.** Ensure choice of gown size is correct (based on training).
2. **Perform hand hygiene using hand sanitizer.**
3. **Put on isolation gown.** Tie all of the ties on the gown. Assistance may be needed by another HCP.
4. **Put on NIOSH-approved N95 filtering facepiece respirator or higher (use a facemask if a respirator is not available).** If the respirator has a nosepiece, it should be fitted to the nose with both hands, not bent or tented. Do not pinch the nosepiece with one hand. Respirator/facemask should be extended under chin. Both your mouth and nose should be protected. Do not wear respirator/facemask under your chin or store in scrubs pocket between patients.*
   - » **Respirator:** Respirator straps should be placed on crown of head (top strap) and base of neck (bottom strap). Perform a user seal check each time you put on the respirator.
   - » **Facemask:** Mask ties should be secured on crown of head (top tie) and base of neck (bottom tie). If mask has loops, hook them appropriately around your ears.
5. **Put on face shield or goggles.** Face shields provide full face coverage. Goggles also provide excellent protection for eyes, but fogging is common.
6. **Perform hand hygiene before putting on gloves.** Gloves should cover the cuff (wrist) of gown.
7. **HCP may now enter patient room.**

Doffing (taking off the gear):

More than one doffing method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of doffing.

1. **Remove gloves.** Ensure glove removal does not cause additional contamination of hands. Gloves can be removed using more than one technique (e.g., glove-in-glove or bird beak).
2. **Remove gown.** Untie all ties (or unsnap all buttons). Some gown ties can be broken rather than untied. Do so in gentle manner, avoiding a forceful movement. Reach up to the shoulders and carefully pull gown down and away from the body. Rolling the gown down is an acceptable approach. Dispose in trash receptacle.*
3. **HCP may now exit patient room.**
4. **Perform hand hygiene.**
5. **Remove face shield or goggles.** Carefully remove face shield or goggles by grabbing the strap and pulling upwards and away from head. Do not touch the front of face shield or goggles.
6. **Remove and discard respirator (or facemask if used instead of respirator).*** Do not touch the front of the respirator or facemask.
   - » **Respirator:** Remove the bottom strap by touching only the strap and bring it carefully over the head. Grasp the top strap and bring it carefully over the head, and then pull the respirator away from the face without touching the front of the respirator.
   - » **Facemask:** Carefully untie (or unhook from the ears) and pull away from face without touching the front.
7. **Perform hand hygiene after removing the respirator/facemask** and before putting it on again if your workplace is practicing reuse.

****Facilities implementing reuse or extended use of PPE will need to adjust their donning and doffing procedures to accommodate those practices.***

HEALTH ALERT
Coronavirus Disease 2019 (COVID-19): Updated Guidance for Testing

April 1, 2020
Update from Health Alert about testing procedures released March 20, 2020

Summary and Action Items

- On March 24, 2020, the Centers for Disease Control and Prevention (CDC) revised guidance for "Evaluating and Testing Persons for COVID-19" to update priorities for testing patients with suspected COVID-19 infection.
- The Ohio Department of Health (ODH) has updated testing procedures at the ODH Public Health Laboratory.
- On March 24, 2020, CDC also updated, "Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for COVID-19" to allow for self- or healthcare worker-collected nasal or nasal turbinate swab as an acceptable specimen type if nasopharyngeal (NP) swab is not possible.

Updated Criteria for COVID-19 Testing at the ODH Laboratory

Clinicians should use their judgment to determine if a patient has signs and symptoms compatible with COVID-19 and whether the patient should be tested. Most patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing).

Priorities for testing at the ODH Laboratory include:

PRIORITY 1: To ensure optimal care options for all hospitalized patients, lessen the risk of nosocomial infections, and maintain the integrity of the healthcare system

- Hospitalized patients
- Symptomatic healthcare workers

PRIORITY 2: To ensure those who are at highest risk of complication of infection are rapidly identified and appropriately triaged

- Patients in long-term care facilities with symptoms
- First responders with symptoms
- Patients 65 years of age and older with symptoms and testing referred from a hospital, including ED
- Patients with underlying conditions with symptoms and testing referred from a hospital, Including ED

Hospitals should refer the testing that meets the above criteria to a laboratory that can return results promptly, including ODH laboratory and larger laboratories with this ability that have agreed to perform testing. Clinicians considering testing of persons with possible COVID-19 through ODH lab should contact the ODH Bureau of Infectious Diseases at 614-995-5599 to coordinate; please use COVID-19 diagnostic testing authorized by the Food and Drug Administration under an Emergency Use

Authorization (EUA) through clinical laboratories for individuals not included in priorities 1 and 2 for ODH Lab testing.

Sample Collection

All testing for COVID-19 should be conducted in consultation with a healthcare provider, and only for patients demonstrating symptomatic disease. The guidance below addresses options for self-collection of specimens once a clinical determination has been made to pursue COVID-19 testing. For initial diagnostic testing for COVID-19, CDC recommends collecting and testing an upper respiratory specimen. **Nasopharyngeal (NP) specimen is the preferred choice for swab-based SARS-CoV-2 testing**. When collection of an NP swab is not possible, the following are acceptable alternatives:

- An oropharyngeal (OP) specimen collected by a healthcare professional, or
- A nasal mid-turbinate (NMT) swab collected by a healthcare professional or by onsite self-collection (using a flocked tapered swab), or
- An anterior nares specimen (NS) collected by a healthcare professional or by onsite self-collection (using a round foam swab).

For NS, a single polyester swab with a plastic shaft should be used to sample both nares. NS or NMT swabs should be placed in a transport tube containing either viral transport medium, Amies transport medium, or sterile saline.

If both NP and OP swabs are collected, they should be combined in a single tube to maximize test sensitivity and limit testing resources.

CDC also recommends testing lower respiratory tract specimens, if available. For patients who develop a productive cough, sputum should be collected and tested for SARS-CoV-2. The induction of sputum is not recommended. When it is clinically indicated (e.g., those receiving invasive mechanical ventilation), a lower respiratory tract aspirate or bronchoalveolar lavage sample should be collected and tested as a lower respiratory tract specimen.

CDC guidance for collecting, handling, and testing clinical specimens from persons for COVID-19 is available here.

Contact

Immediately report all confirmed cases of COVID-19 to the local health department in the jurisdiction in which the case resides. To locate a local health department, please visit https://odhgateway.odh.ohio.gov/lhdinformationsystem/Directory/GetMyLHD.

For general questions related to COVID-19, healthcare providers and facilities should contact their local health department. Ohio local health departments should contact the ODH Bureau of Infectious Diseases at 614-995-5599.

For testing at ODH Laboratory, contact the ODH Bureau of Infectious Diseases at 614-995-5599 and complete the ODH Microbiology Specimen Submission Form (attached) for each specimen.

Attachments

- ODHL COVID-19 Testing Procedures (UPDATED April 1, 2020)
- Sample Microbiology Specimen Submission Form

Criteria to Guide Evaluation and Laboratory Testing for COVID-19 at the Ohio Department of Health (ODH) Laboratory*

Clinicians considering testing of persons with possible COVID-19 should contact the ODH Bureau of Infectious Diseases at 614-995-5599 to coordinate testing through the Ohio Department of Health (ODH) Laboratory for the two priorities listed below; please use COVID-19 diagnostic testing authorized by the Food and Drug Administration under an Emergency Use Authorization (EUA) through clinical laboratories for individuals not included in priorities 1 and 2 for ODH Lab testing.

Clinicians should use their judgment to determine if a patient has signs and symptoms compatible with COVID-19 and whether the patient should be tested. Most patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing).

Priorities for testing at the ODH Laboratory include:

PRIORITY 1: To ensure optimal care options for all hospitalized patients, lessen the risk of nosocomial infections, and maintain the integrity of the healthcare system

- Hospitalized patients
- Symptomatic healthcare workers

PRIORITY 2: **To ensure those who are at highest risk of complication of infection are rapidly identified and appropriately triaged**

- Patients in long-term care facilities with symptoms
- First responders with symptoms
- Patients 65 years of age and older with symptoms and testing referred from a hospital, including ED
- Patients with underlying conditions with symptoms and testing referred from a hospital, including ED

*This testing guidance is subject to further revision

Ohio Department of Health Laboratory
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Phone: 888-634-5227
Fax: 614-387-1505
Email: odhlabs@odh.ohio.gov

Microbiology Specimen Submission Form

Note: Fields marked with an asterisk (*) must be completed. Please print.

Section 1: Patient Information

Patient Name* (Last, First, MI) John Q. Public			Date of Birth* (mm/dd/year) 01/01/1963
Address 123 Elm ST		County Franklin	Sex* ☐ Female ☑ Male
City Columbus	State OH	Zip 43219	Chart or* Patient ID# 12345678

Section 2: Submitter Information

Agency* Name Agency			Contact* Name Joan Q. Healthcare
Address 234 Health AVE			Fax* Number 614-555-1234
City Columbus	State OH	Zip 43201	Phone* Number 614-555-2345

Section 3: Specimen Information (Complete all that apply)

Collection* Date 3/30/2020	Onset* Date 3/28/20	ODH Outbreak#
Specimen* Type ☑ Clinical ☐ Isolate	Submitter* Specimen ID# ABC-1234567	Agent* Suspected SARS-CoV-2

***Specimen Site (Check all that apply)**

☐ Abscess-Specify (☐ Aspirate ☐ Swab)	☑ Respiratory, Upper-Specify (☑ NP swab ☐ OP swab)	☐ Tissue-Specify:_____
☐ Blood-Specify (☐ Plasma ☐ Whole)	☐ Respiratory, Lower-Specify Below: ☐ Sputum (☐ Induced ☐ Expectorated) ☐ BAL ☐ TA For mycobacteria only: ☐ Processed ☐ Unprocessed	☐ Urine
☐ Body Fluid-Specify Below: ☐ CSF ☐ Other:_____		☐ Wound-Specify:_____
☐ Serum-Specify (☐ Acute ☐ Conv.)	☐ Stool-Specify Below: ☐ Cary Blair ☐ Enteric Broth ☐ 10% Formalin ☐ Bulk	☐ Other:

Section 4: Exam Requested (Check all that apply) **ODH approval required prior to submission; Contact 614-995-5599

Microbiology			
☐ Biothreat Agent-Specify Below:	☐ *Clostridium botulinum***	☐ *Neisseria meningitidis*	☐ *Shigella*
	☐ Enteric Pathogen Panel**	☐ Norovirus**	☐ *Vibrio*
☐ Bacterial Strain Typing**	☐ *Escherichia coli* (STEC)	☐ *Salmonella*	☐ *Yersinia*
☐ *Campylobacter*	☐ *Listeria monocytogenes*	☐ Other:	

Mycobacteriology		
☐ Mycobacterial Smear and Culture	☐ *M. tuberculosis* Nucleic Acid Amplification (NAA)	☐ *M. tuberculosis* , Genotyping only
☐ Mycobacterial Identification	☐ *M. tuberculosis* Susceptibility Testing (SM, INH, RIF, EMB, PZA)	☐ Other:

Parasitology			Virology	
☐ *Cryptosporidium*	☐ *Giardia*	☐ Other:	☐ Respiratory Virus	☐ Other:

Comments:

Approved by epi: _____ (who in BID approved this)
Approved date: _____ (when it was approved)

For Use by the Ohio Department of Health Laboratory Only

Date Received	**Date Reported**
Fee Due MI	ODH LAB ID
Exemption	