

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](https://www.cdc.gov/COVID19)

10 things you can do to manage your COVID-19 symptoms at home

If you have possible or confirmed COVID-19:

1. **Stay home** from work and school. And stay away from other public places. If you must go out, avoid using any kind of public transportation, ridesharing, or taxis.



2. **Monitor your symptoms** carefully. If your symptoms get worse, call your healthcare provider immediately.



3. **Get rest and stay hydrated.**



4. If you have a medical appointment, **call the healthcare provider** ahead of time and tell them that you have or may have COVID-19.



5. For medical emergencies, call 911 and **notify the dispatch personnel** that you have or may have COVID-19.



6. **Cover your cough and sneezes.**



7. **Wash your hands often** with soap and water for at least 20 seconds or clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol.



8. As much as possible, **stay** in a specific room and **away from other people** in your home. Also, you should use a separate bathroom, if available. If you need to be around other people in or outside of the home, wear a facemask.



9. **Avoid sharing personal items** with other people in your household, like dishes, towels, and bedding.



10. **Clean all surfaces** that are touched often, like counters, tabletops, and doorknobs. Use household cleaning sprays or wipes according to the label instructions.



Coronavirus Disease 2019 (COVID-19)

What to Do If You Are Sick

If you have a fever, cough or [other symptoms](#), you might have COVID-19. Most people have mild illness and are able to recover at home. If you think you may have been exposed to COVID-19, contact your healthcare provider immediately.

- Keep track of your symptoms.
- If you have [an emergency warning sign](#) (including trouble breathing), get medical attention right away.



Self-Checker

A guide to help you make decisions and seek appropriate medical care

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 care for yourself and 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 can recover at home without medical care. Do not leave your home, except to get medical care. Do not visit public areas.
- **Take care of yourself.** Get rest and stay hydrated. Take over-the-counter medicines, such as acetaminophen, to help you feel better.
- **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, ride-sharing, or taxis.**



Separate yourself from other people

As much as possible, **stay in a specific room** and away from other people and pets in your home. If possible, you should use a separate bathroom. If you need to be around other people or animals in or outside of the home, wear a cloth face covering.

- Additional guidance is available for those living in [close quarters](#) and [shared housing](#).
- See [COVID-19 and Animals](#) if you have questions about pets.



Monitor your symptoms

- **Symptoms** of COVID-19 include fever, cough, and shortness of breath but other symptoms may be present as well. Trouble breathing is a more serious symptom that means you should get medical attention.
- **Follow care instructions from your healthcare provider and local health department.** Your local health authorities may give instructions on checking your symptoms and reporting information.

When to Seek Medical Attention

If you have any of these **emergency warning signs*** for COVID-19 get **medical attention immediately**:

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

*This list is not all possible symptoms. Please call your medical provider for any other symptoms that are severe or concerning to you.

Call 911 if you have a medical emergency: Notify the operator that you have, or think you might have, COVID-19. If possible, put on a cloth face covering before medical help arrives.



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 cloth covering over your nose and mouth

- You should wear a **cloth face covering**, over your nose and mouth if you must be around other people or animals, including pets (even at home)
- You don't need to wear the cloth face covering if you are alone. If you can't put on a cloth face covering (because of trouble breathing, for example), cover your coughs and sneezes in some other way. Try to stay at least 6 feet away from other people. This will help protect the people around you.
- Cloth face coverings should not be placed on young children under age 2 years, anyone who has trouble breathing, or anyone who is not able to remove the covering without help.

Note: During the COVID-19 pandemic, medical grade facemasks are reserved for healthcare workers and some first responders. You may need to make a cloth face covering using a scarf or bandana.



Cover your coughs and sneezes

- **Cover your mouth and nose** with a tissue when you cough or sneeze.
- **Throw away used tissues** in a lined trash can.
- **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 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.
- **Use 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** are the best option especially if hands are visibly dirty

- **Soap and water** are the best option, especially if hands are visibly dirty.
- **Avoid touching** your eyes, nose, and mouth with unwashed hands.
- [Handwashing Tips](#)



Avoid sharing personal household items

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



Clean all “high-touch” surfaces everyday

- **Clean and disinfect** high-touch surfaces in your “sick room” and bathroom. Let someone else clean and disinfect surfaces in common areas, but you should clean your bedroom and bathroom, if possible.
- **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 person who is sick has used the bathroom before coming in to clean and use 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.**
- **Use 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 [here](#) .
 - [Complete Disinfection Guidance](#)



How to discontinue home isolation

People with COVID-19 who have stayed home (home isolated) can leave home under the following conditions**:

- **If you have not had 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 of medicine that reduces fevers)
 - AND**
 - other symptoms have improved (for example, when your cough or shortness of breath have improved)
 - AND**
 - at least 10 days have passed since your symptoms first appeared
- **If you have had a test** 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 of 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, at least 24 hours apart. Your doctor will follow [CDC guidelines](#).

People who DID NOT have COVID-19 symptoms, but tested positive and have stayed home (home isolated) can leave home under the following conditions:**

- **If you have not had a test** to determine if you are still contagious, you can leave home after these two things have happened:
 - At least 10 days have passed since the date of your first positive test
AND
 - you continue to have no symptoms (no cough or shortness of breath) since the test.
- **If you have had a test** to determine if you are still contagious, you can leave home after:
 - You received two negative tests in a row, at least 24 hours apart. Your doctor will follow [CDC guidelines](#).

Note: if you develop symptoms, follow guidance above for people with COVID19 symptoms.

In all cases, **follow the guidance of your doctor 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. Some people, for example those with conditions that [weaken their immune system](#), might continue to shed virus even after they recover.

[Find more information on when to end home isolation.](#)

For any additional questions about your care, contact your healthcare provider or state or local health department.



For healthcare professionals

There is no specific antiviral treatment recommended for COVID-19. People with COVID-19 should receive supportive care to help relieve symptoms. For severe cases, treatment should include care to support vital organ functions.

- [Evaluating and Testing Patients for COVID-19](#)
- [Infection Prevention and Control in Healthcare Settings](#)
- [Discontinuing Isolation Guidance](#)

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

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 10 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 for Healthcare Personnel with confirmed or suspected COVID-19"



Coronavirus Disease 2019 (COVID-19)

Criteria for Return to Work for Healthcare Personnel with Suspected or Confirmed COVID-19 (Interim Guidance)

Summary of Recent Changes as of April 30, 2020

- Changed the name of the 'non-test-based strategy' to the 'symptom-based strategy' for those with symptoms and the 'time-based strategy' for those without symptoms, and updated these to extend the duration of exclusion from work to at least 10 days since symptoms first appeared. This update was made based on evidence suggesting a longer duration of viral shedding and will be revised as additional evidence becomes available.
- Based on this extension of the symptom-based and time-based strategies, language about the test-based strategy being preferred was removed.
- Removed specifying use of nasopharyngeal swab collection for the Test-Based Strategy and linked to the [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus \(2019-nCoV\)](#), so that the most current specimen collection strategies are recommended.

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 symptom-based (i.e., time-since-illness-onset and time-since-recovery strategy) or time-based strategy or a test-based strategy. Of note, there have been reports of prolonged detection of RNA without direct correlation to viral culture.

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

Symptomatic HCP with suspected or confirmed COVID-19 (Either strategy is acceptable depending on local circumstances):

- *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 (e.g., 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 (e.g., cough, shortness of breath), **and**
 - Negative results of an FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive respiratory 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 \(2019-nCoV\)](#). Of note, there have been reports of prolonged detection of RNA without direct correlation to viral culture.

HCP with laboratory-confirmed COVID-19 who have not had any symptoms (Either strategy is acceptable depending on local circumstances):

- *Time-based strategy.* Exclude 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 they develop symptoms, then the *symptom-based* or *test-based strategy* should be used. Note, because symptoms cannot be used to gauge where these individuals are in the course of their illness, 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.* Exclude from work until:
 - Negative results of an FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive respiratory specimens collected ≥ 24 hours apart (total of two negative specimens). Note, because of the absence of symptoms, it is not possible to gauge where these individual are in the course of their illness. There have been reports of prolonged detection of RNA without direct correlation to viral culture.

Note that detecting viral RNA via PCR does not necessarily mean that infectious virus is present.

Consider consulting with local infectious disease experts when making decisions about discontinuing Transmission-Based Precautions for individuals who might remain infectious longer than 10 days (e.g., severely immunocompromised).

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 at baseline. 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.
- 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 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. As part of this, asymptomatic HCP with a recognized COVID-19 exposure might be permitted to work in a [crisis capacity strategy to address staffing shortages](#) if they wear a facemask for source control for 14 days after the exposure. This time period is based on the current incubation period for COVID-19 which is 14 days.

Footnotes

¹All 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 specimens.

Definitions

Cloth face covering: Textile (cloth) covers 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.** CDC has guidance available on [design, use, and maintenance of cloth face coverings](#).

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: May 2, 2020



Coronavirus Disease 2019 (COVID-19)

Strategies to Mitigate Healthcare Personnel Staffing Shortages

Who is this for: Healthcare facilities who may be experiencing staffing shortages due to COVID-19

What is it for: To assist healthcare facilities in mitigating healthcare personnel staffing shortages that might occur because of COVID-19.

Summary of Recent Changes as of April 30, 2020

- Updated to align with changes to [Return to Work Criteria](#)

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 these, including communicating with HCP about actions the facility is taking to address shortages and maintain patient and HCP safety and providing [resources](#) to assist HCP with anxiety and stress.

There are Contingency and Crisis Capacity Strategies that healthcare facilities should consider in these situations. For example, if, despite efforts to mitigate, HCP staffing shortages occur, healthcare systems, facilities, and the appropriate state, local, territorial, and/or tribal health authorities might determine that HCP with suspected or confirmed COVID-19 could return to work before the full [Return to Work Criteria](#) have been met. Several of the Crisis Capacity Strategies are dependent on HCP wearing a facemask for source control while at work. Given ongoing shortages of personal protective equipment (PPE), facilities should refer to and implement relevant [Strategies for Optimizing the Supply of Facemasks](#).

Contingency Capacity Strategies to Mitigate Staffing Shortages

When staffing shortages are anticipated, healthcare facilities and employers, in collaboration with human resources and occupational health services, should use contingency capacity strategies to plan and prepare for mitigating this problem. At baseline, healthcare facilities must:

- Understand their staffing needs and the minimum number of staff needed to provide a safe work environment and patient care.
- Be in communication with local healthcare coalitions, federal, state, and local public health partners (e.g., public health emergency preparedness and response staff) to identify additional HCP (e.g., hiring additional HCP, recruiting retired HCP, using students or volunteers), when needed.

Contingency capacity strategies for healthcare facilities include:

Adjusting staff schedules, hiring additional HCP, and rotating HCP to positions that support patient care activities.

- Cancel all non-essential procedures and visits. Shift HCP who work in these areas to support other patient care activities in the facility. Facilities will need to ensure these HCP have received appropriate orientation and training to work in these areas that are new to them.
- Attempt to address social factors that might prevent HCP from reporting to work such as transportation or housing if HCP live with vulnerable individuals.
- Identify additional HCP to work in the facility. Be aware of state-specific emergency waivers or changes to licensure requirements or renewals for select categories of HCP.
- Request that HCP postpone elective time off from work.

Developing regional plans to identify designated healthcare facilities or [alternate care sites](#) with adequate staffing to care for patients with COVID-19.

Developing plans to allow asymptomatic HCP who have had an [unprotected exposure to SARS-CoV-2](#) (the virus that causes COVID-19) but are not known to be infected to continue to work.

- These HCP should still report temperature and absence of symptoms each day before starting work. These HCP should wear a facemask (for source control) while at work for 14 days (this is the time period during which exposed HCP might develop symptoms, i.e., the current incubation period for the virus) after the exposure event. 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 PPE) when indicated, including for the care of patients with suspected or confirmed COVID-19.
 - Of note, N95 or other respirators with an exhaust valve might not provide source control.
- If HCP develop even mild symptoms consistent with COVID-19, they must cease patient care activities and notify their supervisor or occupational health services prior to leaving work. These individuals should be prioritized for testing.

If HCP are tested and found to be infected with SARS-CoV-2, they should be excluded from work until they meet all [Return to Work Criteria Prioritizing HCP with suspected COVID-19 for testing](#), as testing results will impact when they may return to work and for which patients they might be permitted to provide care.

Developing criteria to determine which HCP with suspected or confirmed COVID-19 (who are well enough to work) could return to work in a healthcare setting before meeting all [Return to Work Criteria](#)—if shortages continue despite other mitigation strategies.

- Considerations include:
 - The type of HCP shortages that need to be addressed.
 - Where HCP are in the course of their illness (e.g., viral shedding appears to be higher earlier in the course of illness).
 - The types of symptoms they are experiencing (e.g., persistent fever).
 - Their degree of interaction with patients and other HCP in the facility. For example, are they working in telemedicine services, providing direct patient care, or working in a satellite unit reprocessing medical equipment?
 - The type of patients they care for (e.g., immunocompromised patients).
- As part of planning, healthcare facilities (in collaboration with risk management) should create messaging for patients and HCP about actions that will be taken to protect them from exposure to SARS-CoV-2 if HCP with suspected or confirmed COVID-19 are allowed to work.

Crisis Capacity Strategies to Mitigate Staffing Shortages

When staffing shortages are occurring, healthcare facilities and employers (in collaboration with human resources and occupational health services) may need to implement crisis capacity strategies to continue to provide patient care.

When there are no longer enough staff to provide safe patient care:

- Implement regional plans to transfer patients with COVID-19 to designated healthcare facilities, or [alternate care sites](#) with adequate staffing
- If not already done, allow asymptomatic HCP who have had an [unprotected exposure to SARS-CoV-2](#) but are not known to be infected to continue to work.
 - These HCP should still report temperature and absence of symptoms each day before starting work. These HCP should wear a facemask (for source control) while at work for 14 days after the exposure event. 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 PPE) when indicated, including for the care of patients with suspected or confirmed COVID-19

- Of note, N95 or other respirators with an exhaust valve might not provide source control.
 - If HCP develop even mild symptoms consistent with COVID-19, they must cease patient care activities and notify their supervisor or occupational health services prior to leaving work. These individuals should be prioritized for testing.
 - If HCP are tested and found to be infected with SARS-CoV-2, they should be excluded from work until they meet all [Return to Work Criteria](#) (unless they are allowed to work as described below).
- If shortages continue despite other mitigation strategies, consider implementing criteria to allow HCP with suspected or confirmed COVID-19 who are well enough to work but have not met all [Return to Work Criteria](#) to work. If HCP are allowed to work before meeting all criteria, they should be restricted from contact with severely immunocompromised patients (e.g., transplant, hematology-oncology) and facilities should consider prioritizing their duties in the following order:
 1. If not already done, allow HCP with suspected or confirmed COVID-19 to perform job duties where they do not interact with others (e.g., patients or other HCP), such as in telemedicine services.
 2. Allow HCP with confirmed COVID-19 to provide direct care only for patients with confirmed COVID-19, preferably in a cohort setting.
 3. Allow HCP with confirmed COVID-19 to provide direct care for patients with suspected COVID-19.
 4. As a last resort, allow HCP with confirmed COVID-19 to provide direct care for patients *without* suspected or confirmed COVID-19.

If HCP are permitted to return to work before meeting all [Return to Work Criteria](#), they should still adhere to all [Return to Work Practices and Work Restrictions](#) recommendations described in that guidance. These include:

- Wear a facemask for source control at all times while in the healthcare facility until they meet the full [Return to Work Criteria](#) and all symptoms are completely resolved or at baseline. 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 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.
- They should be reminded that in addition to potentially exposing patients, they could also expose their co-workers.
 - Facemasks should be worn even when they are in non-patient care areas such as breakrooms.
 - If they must remove their facemask, for example, in order to eat or drink, they should separate themselves from others.
- Being restricted from contact with severely immunocompromised patients (e.g., transplant, hematology-oncology) until the full [Return to Work Criteria](#) have been met.
- Self-monitoring for symptoms and seeking re-evaluation from occupational health if respiratory symptoms recur or worsen.

Definitions

Cloth face covering: Textile (cloth) covers 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.** CDC has guidance available on [design, use, and maintenance of cloth face coverings](#).

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, including those intended for use in healthcare are certified by the CDC/NIOSH.

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

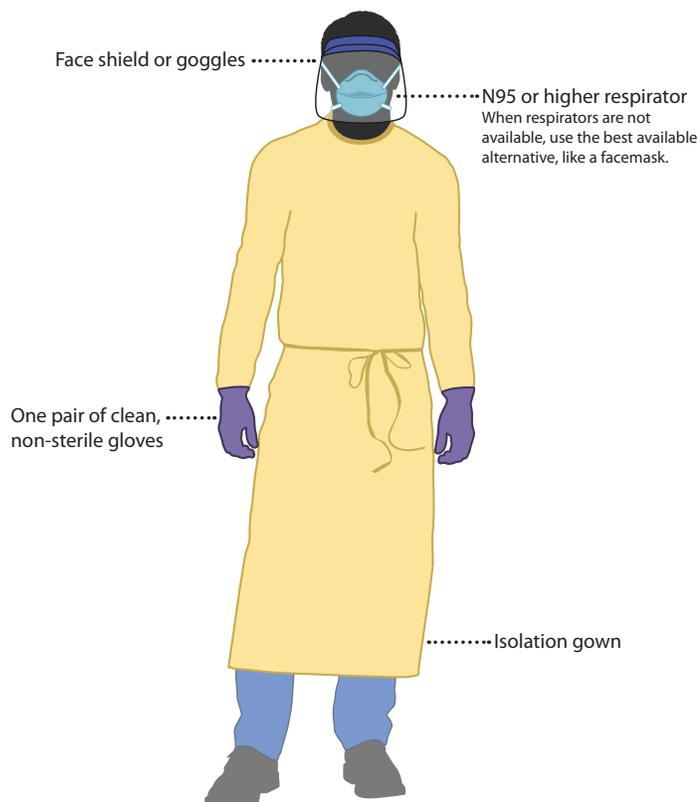
Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- **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



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.

COVID-19 Testing in Ohio

Help prevent the spread of COVID-19



Priority 1

Ohioans with symptoms who are:

- Hospitalized.
- Healthcare workers. This includes behavioral health providers, home health workers, nursing facility and assisted living employees, emergency medical technicians (EMTs), housekeepers and others who work in healthcare and congregate living settings.*

Priority 2

Ohioans with symptoms who are:

- Residents of long-term care/congregate living settings.
- First responders/public health workers/critical infrastructure workers.
- 65 and older.
- Living with underlying conditions.
 - Consideration should be given for testing racial and ethnic minorities with underlying illness, as they are at increased risk for COVID-19 and more severe illness.

Ohioans without symptoms who are:

- Residents or staff directly exposed during an outbreak in long-term care/congregate living settings.

Other Ohioans who are:

- Designated by public health officials to evaluate/manage community outbreaks (such as in workplaces, other large gatherings).

Priority 3

Ohioans with and without symptoms who are:

- Receiving essential surgeries/procedures, including those that were reassessed after a delay.
- Receiving other medically necessary procedures not requiring an overnight stay/inpatient hospital admission, as defined by their providers' process for COVID-19 testing.

*Congregate living settings are those where more than six people live and where there is a propensity for rapid person-to-person spread of infectious disease. (Some examples are assisted living/nursing centers; Ohio Veterans Homes; residential facilities for mental health/substance use treatment; psychiatric hospitals/group homes; centers/facilities/group homes for people with intellectual disabilities; homeless and domestic violence shelters; youth detention centers; prisons; and jails.)

HEALTH ALERT

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

May 5, 2020

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

Summary and Action Items

- The Ohio Department of Health (ODH) has issued updated COVID-19 testing guidance.
- This guidance applies to all COVID-19 testing in the State of Ohio.
- ODH continues to prioritize testing for symptomatic individuals in Priority 1 and Priority 2 at the ODH Public Health Laboratory (ODHL).
- Antibody test results should not be used as the sole basis to diagnose someone with an active SARS-CoV-2 infection. Please visit the CDC website for more information on [serology testing for COVID-19](#) and [serology surveillance strategy](#).

Updated COVID-19 Testing Guidance

The Centers for Disease Control and Prevention (CDC) has established [priority groups for testing](#). Ohio has modified these groups to meet the specific needs of our state considering changes in testing availability and evolving knowledge of COVID-19 and its impact on Ohioans. The state continues to emphasize testing of patients who are most severely ill, patients who are moderately ill with a high risk of complications – such as those who are elderly and those with serious medical issues – and individuals who are critical to providing care and service to those who are ill. Expanded test availability will allow individuals in lower risk tiers to be tested and help to further contain and respond to COVID-19 in Ohio. COVID-19 Hospital Preparedness Zones/Regions and community-based coalitions will work together to ensure equitable implementation of effective testing strategies that align with Ohio’s cohesive statewide plan.

Testing is only one component of Ohio’s response to COVID-19. The role of testing is to quickly identify individuals infected with COVID-19, promptly isolate them and trace and quarantine any contacts to minimize spread of the virus to others. Testing does not change treatment in any way, nor does it replace comprehensive infection control and prevention activities.

Testing must be first available to individuals described in **Priorities 1, 2 and 3**. At a later date yet to be determined, testing for other groups will be implemented. The purpose of this prioritization is to assure access to testing for the most ill and vulnerable Ohioans and those who care for them in order to limit the risk of spread in congregate living environments and communities. The prioritization also recognizes the appropriate use and preservation of personal protection equipment (PPE) across all health care and community settings to ensure safety.

Priority 1 is to ensure optimal and safe care for all hospitalized patients, lessen the risk of hospital-acquired infections, and ensure staff safety. Testing for Priority 1 includes:

- Hospitalized patients with symptoms.
- Healthcare personnel with symptoms. This includes behavioral health providers, home health workers, nursing facility and assisted living employees, emergency medical technicians (EMTs), housekeepers and others who work in healthcare and congregate living settings¹.

Priority 2 is to ensure that people at highest risk of complications from COVID-19 and those who provide essential public services are rapidly identified and appropriately prioritized in accordance with the [CDC's April 30 guidance for testing in nursing homes](#)². Testing for Priority 2 includes:

- Residents of long-term care facilities and other congregate living settings¹ who are symptomatic.
- Residents and staff of long-term care facilities and congregate living settings¹ who are asymptomatic with known exposure to COVID-19 in the context of an outbreak (e.g., two or more cases in the same area, wing or building). The purpose of testing individuals who are exposed and asymptomatic is to facilitate more specific isolation and quarantine within the congregate living setting to reduce the risk of virus transmission to other residents³. In these cases, the extent of testing will be determined by the local health department in consultation with the facility medical director or other clinical leadership.
- Patients 65 years of age and older with symptoms.
- Patients with underlying conditions with symptoms.
 - Consideration should be given for testing racial and ethnic minority groups with underlying illness who are disproportionately affected by adverse COVID-19 outcomes – currently African Americans, Hispanics and Latinos, some American Indian tribes (e.g., Navajo Nation).
- First responders, public health workers, and [critical infrastructure workers](#) with symptoms.
- Other individuals or groups designated by public health authorities to evaluate and manage community outbreaks, including those within workplaces and other large gatherings.

Priority 3 is to test individuals with and without symptoms to implement health care services across all health care settings, as outlined in the [Stay Safe Ohio Order](#) and [Governor DeWine's Responsible RestartOhio Guide for Health Care](#). The purpose of Priority 3 testing is to minimize risk of post-procedure complications and transmission of COVID-19. Testing for Priority 3 includes:

- Individuals receiving essential surgeries and procedures, including those that were reassessed after a delay, as outlined in Responsible RestartOhio for Health Care Step 1.
- Individuals receiving all other medically necessary procedures that do not require an overnight stay or an inpatient hospital admission, as outlined in Responsible RestartOhio for Health Care Step 2, which became effective on May 1, 2020.
- Providers/facilities should develop policies to define the necessity for testing based on procedural and individual patient risk factors. Zone/region leaders may be consulted for alignment with best practices.

Footnotes:

¹ Congregate living settings are those where more than 6 persons reside with a propensity for rapid person-to-person spread, including but not limited to: assisted living, nursing facilities, Ohio Veterans Homes, residential mental health and substance use treatment facilities, psychiatric hospitals and group home settings, developmental centers, intermediate care facilities and group homes for individuals with intellectual disabilities, facilities operated by the Ohio Department of Youth Services, facilities operated by the Department of Rehabilitation and Corrections, homeless and domestic violence shelters, and jails.

² The CDC's April 30 Guidance for Nursing Facilities states at (3): the first step of a test-based prevention strategy is a Point Prevalence Survey (PPS). Performing PPS on units with symptomatic residents should be prioritized.

³ Following testing for this group:

- Exposed but asymptomatic residents who test negative still should be quarantined for 14 days and monitored for symptoms, as they could test positive later during the 14-day incubation period.
- Exposed but asymptomatic staff who test negative should be assessed to determine need for quarantine and symptom monitoring based on CDC's "[Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in Healthcare Settings to Patients with COVID-19](#)". They may be permitted to work, adhering to CDC's "[Strategies to Mitigate Healthcare Personnel Staffing Shortages](#)".
- Exposed but asymptomatic staff who test positive should remain off work for ten (10) days following the date of the test, assuming they remain asymptomatic. Under certain circumstances they may be permitted to work, adhering to CDC's "[Strategies to Mitigate Healthcare Personnel Staffing Shortages](#)".

Providers should work with their regional hospital leads on issues related to testing and use hospital labs and private labs preferentially. The regional leads in collaboration with ODH will be assessing laboratory capacity and assessing supplies on hand to ensure each region is maximizing their testing capacity. All specimens referred to ODHL require approval of the ODH Bureau of Infectious Diseases for processing and will focus on symptomatic patients in Priorities 1 and 2.

Serology Testing for COVID-19

Antibody test results should not be used as the sole basis to diagnose someone with an active SARS-CoV-2 infection. It typically takes 1 to 3 weeks after someone becomes infected with SARS-CoV-2 for their body to make antibodies; some people may take longer to develop antibodies. Depending on when someone was infected and the timing of the test, the test may not find antibodies in someone with an active infection.

- Check FDA's website to see antibody tests with [emergency use authorization](#) (EUA). FDA has reviewed the validation of these tests.
- Check FDA's website for a list [of other antibody tests on the market](#). FDA has not reviewed the validation of tests by these developers, who may not be pursuing EUAs.
- Read FDA's letter to healthcare providers: [Important Information on the Use of Serological \(Antibody\) Tests for COVID-19](#).

Please visit the CDC website for more information on [serology testing for COVID-19](#) and [serology surveillance strategy](#).

Local health jurisdictions: Please report all positive serological tests in the Ohio Disease Reporting System (ODRS). For case classification, detection of specific antibody in serum, plasma, or whole blood using a serological test with FDA EUA meets presumptive laboratory evidence and can be considered as a probable case if either clinical criteria OR epidemiologic evidence are also met.

Contact

Immediately report all confirmed or probable 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

- COVID-19 Testing in Ohio Graphic (UPDATED May 4, 2020)
- Sample Microbiology Specimen Submission Form



Ohio Department of Health Laboratory
 8995 East Main Street
 Building 22
 Reynoldsburg, OH 43068

CLIA Certification # 36D0655844
 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)		Date of Birth* (mm/dd/year)	
Address		County	Sex* <input type="checkbox"/> Female <input type="checkbox"/> Male
City	State	Zip	Chart or* Patient ID#

Section 2: Submitter Information

Agency* Name		Contact* Name	
Address		Fax* Number	
City	State	Zip	Phone* Number

Section 3: Specimen Information (Complete all that apply)

Collection* Date	Onset* Date	ODH Outbreak#
Specimen* Type <input type="checkbox"/> Clinical <input type="checkbox"/> Isolate	Submitter* Specimen ID#	Agent* Suspected
*Specimen Site (Check all that apply)		
<input type="checkbox"/> Abscess-Specify (<input type="checkbox"/> Aspirate <input type="checkbox"/> Swab)	<input type="checkbox"/> Respiratory, Upper-Specify (<input type="checkbox"/> NP swab <input type="checkbox"/> OP swab)	<input type="checkbox"/> Tissue-Specify: _____
<input type="checkbox"/> Blood-Specify (<input type="checkbox"/> Plasma <input type="checkbox"/> Whole)	<input type="checkbox"/> Respiratory, Lower-Specify Below: <input type="checkbox"/> Sputum (<input type="checkbox"/> Induced <input type="checkbox"/> Expectorated) <input type="checkbox"/> BAL <input type="checkbox"/> TA For mycobacteria only: <input type="checkbox"/> Processed <input type="checkbox"/> Unprocessed	<input type="checkbox"/> Urine
<input type="checkbox"/> Body Fluid-Specify Below: <input type="checkbox"/> CSF <input type="checkbox"/> Other: _____	<input type="checkbox"/> Stool-Specify Below: <input type="checkbox"/> Cary Blair <input type="checkbox"/> Enteric Broth <input type="checkbox"/> 10% Formalin <input type="checkbox"/> Bulk	<input type="checkbox"/> Wound-Specify: _____
<input type="checkbox"/> Serum-Specify (<input type="checkbox"/> Acute <input type="checkbox"/> Conv.)		<input type="checkbox"/> Other: _____

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

Microbiology			
<input type="checkbox"/> Biothreat Agent-Specify Below:	<input type="checkbox"/> <i>Clostridium botulinum</i> **	<input type="checkbox"/> <i>Neisseria meningitidis</i>	<input type="checkbox"/> <i>Shigella</i>
	<input type="checkbox"/> Enteric Pathogen Panel**	<input type="checkbox"/> Norovirus**	<input type="checkbox"/> <i>Vibrio</i>
<input type="checkbox"/> Bacterial Strain Typing**	<input type="checkbox"/> <i>Escherichia coli</i> (STEC)	<input type="checkbox"/> <i>Salmonella</i>	<input type="checkbox"/> <i>Yersinia</i>
<input type="checkbox"/> <i>Campylobacter</i>	<input type="checkbox"/> <i>Listeria monocytogenes</i>	<input type="checkbox"/> Other:	
Mycobacteriology			
<input type="checkbox"/> Mycobacterial Smear and Culture	<input type="checkbox"/> <i>M. tuberculosis</i> Nucleic Acid Amplification (NAA)	<input type="checkbox"/> <i>M. tuberculosis</i> , Genotyping only	
<input type="checkbox"/> Mycobacterial Identification	<input type="checkbox"/> <i>M. tuberculosis</i> Susceptibility Testing (SM, INH, RIF, EMB, PZA)	<input type="checkbox"/> Other:	
Parasitology		Virology	
<input type="checkbox"/> <i>Cryptosporidium</i>	<input type="checkbox"/> <i>Giardia</i>	<input type="checkbox"/> Other:	<input type="checkbox"/> Respiratory Virus
			<input type="checkbox"/> Other:

Comments:	For Use by the Ohio Department of Health Laboratory Only	
	Date Received	Date Reported
	Fee Due MI	ODH LAB ID
Exemption		