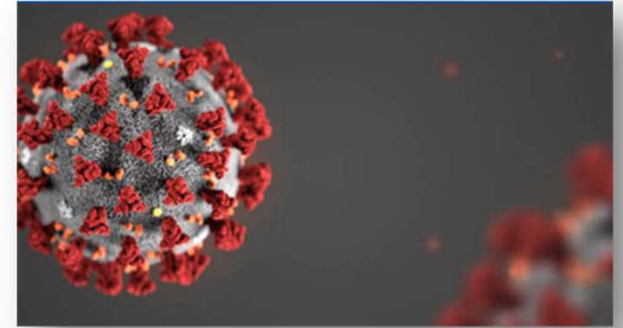


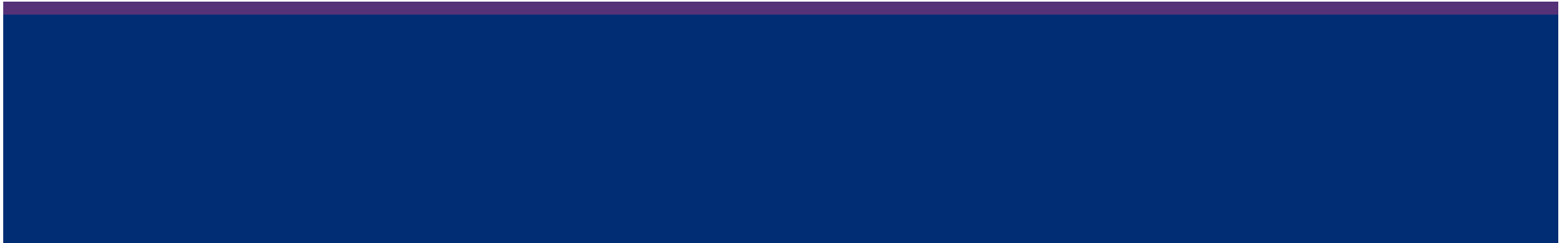


**Department
of Health**



Training for Sample Collection Procedure for SARS-CoV-2 Testing

Approved: March 11, 2020



Objectives

- Overview of COVID-19
- Personal Protective Equipment
- Sample Collection Process
- Occupational Health Considerations
- Additional Resources

Background

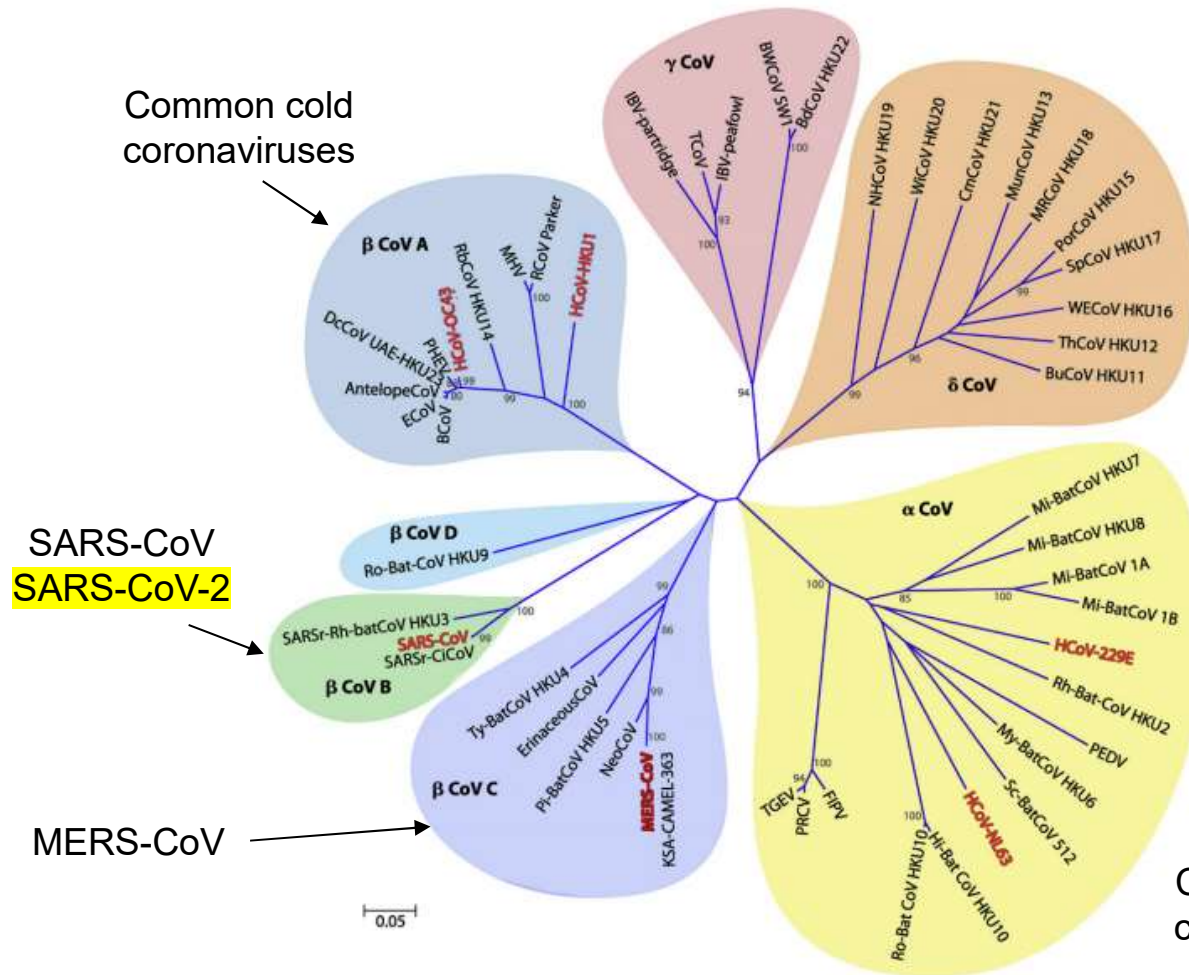
- On March 7, 2020, Governor Andrew M. Cuomo issued Executive Order No. 202, which modified sections 6521 and 6902 of the Education Law, to the extent necessary to permit unlicensed individuals, upon completion of training deemed adequate by the Commissioner of Health, to collect throat or nasopharyngeal swab specimens from individuals known to have been exposed to, with symptoms suggestive of, or known to have COVID-19, for purposes of testing
- This training is intended to train licensed and unlicensed individuals in New York State in the collection of specimens for SARS-CoV-2 testing in order to facilitate the public health response to the COVID-19 outbreak

<https://www.governor.ny.gov/news/no-202-declaring-disaster-emergency-state-new-york>

Overview of COVID-19

Definitions

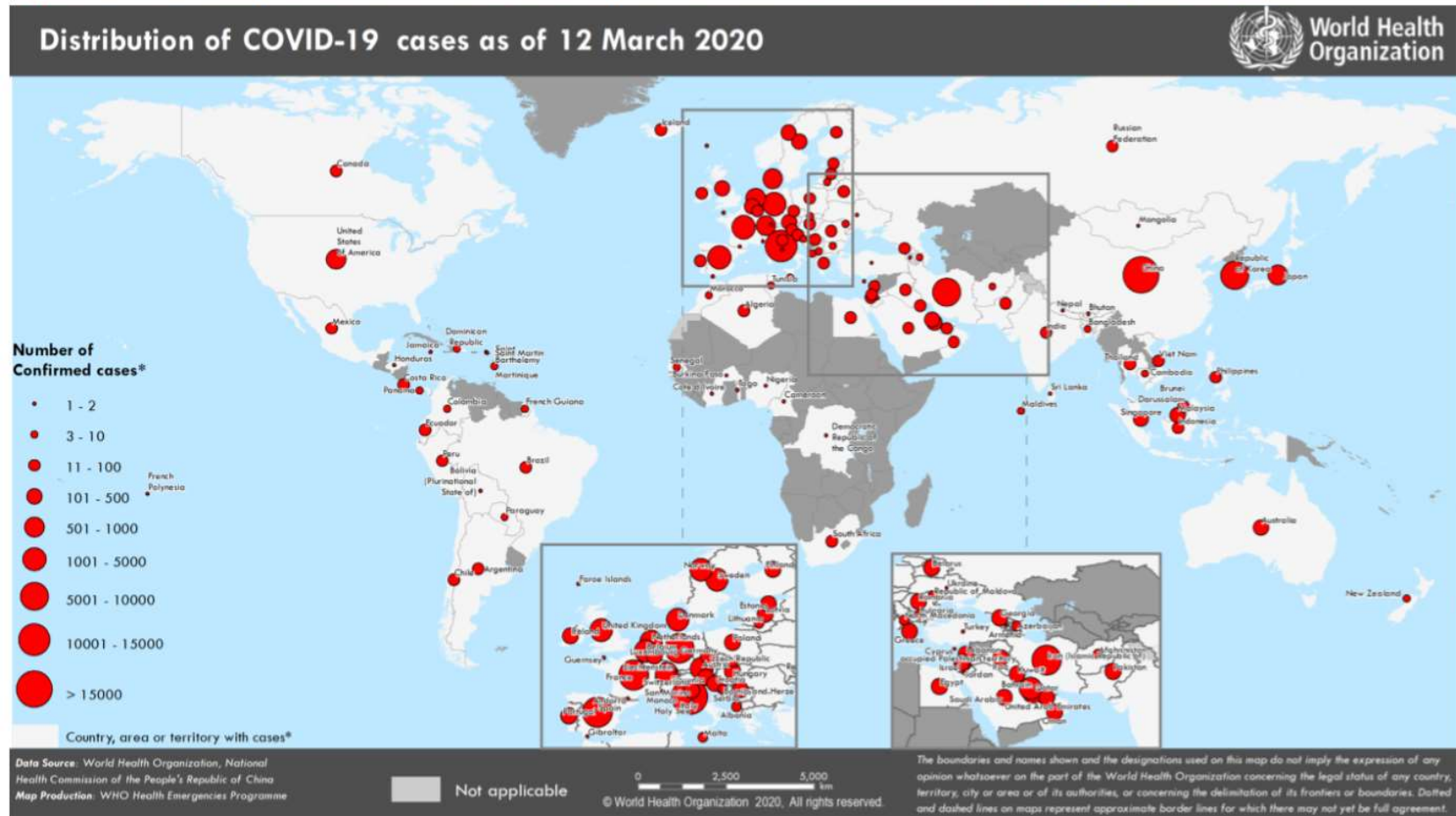
- **Coronavirus:** A group of related viruses that typically cause respiratory disease in humans
- **SARS-CoV-2:** Official name for the particular strain of coronavirus causing the 2019 novel coronavirus outbreak
- **COVID-19:** Official name for the disease occurring in the 2019 novel coronavirus outbreak



- (SARS-CoV-2) is part of a large family of viruses called coronaviruses.
- This diagram shows the family map of Coronaviruses including SARS-CoV-2 and other significant pathogens causing outbreaks

Common cold coronaviruses

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 12 March 2020

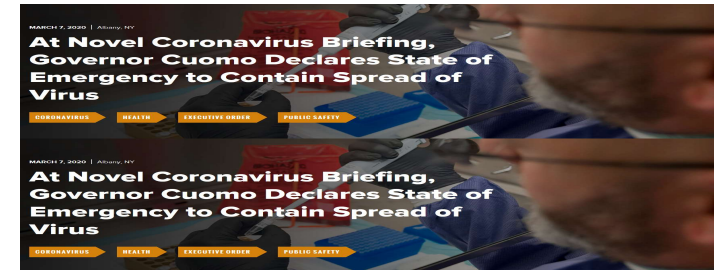


Situation Summary: COVID-19

New York State

Data last updated 4:00pm March 12, 2020

	Positive Cases
Westchester County	148
Nassau County	41
Suffolk County	20
Rockland County	7
Saratoga County	3
Ulster County	4
Orange County	1
Albany County	1
Monroe County	1
Dutchess County	1
Delaware County	1
Herkimer County	1
Broome County	1
New York State (Outside of NYC)	230
New York City	95
Total Positive Cases (Statewide)	325



No. 202

EXECUTIVE ORDER

Declaring a Disaster Emergency in the State of New York

WHEREAS, on January 30, 2020, the World Health Organization designated the novel coronavirus, COVID-19, outbreak as a Public Health Emergency of International Concern;



Epidemiological Update

- Evidence of community transmission in parts of the U.S.
- 37 U.S. deaths from COVID-19
 - Washington, Florida, California
- Based on early data from China, approximately 80% of cases have mild symptoms, and 15-20% severe
- Case death rate thus far is between 1-2%

Disease Spread and Symptoms

- Disease Spread:
 - Primarily person-to-person spread
 - Close contact (within about 6 feet)
 - Through respiratory droplets produced when an infected person coughs or sneezes
 - Spread from contact with infected surfaces or objects
 - May be possible but not thought to be main way the virus spread
 - Some studies of other human coronaviruses suggest virus may remain on surfaces for 2 hours to 9 days → more study is needed
 - On average, each infected person spreads the infection to an additional two persons
 - Indicates more infectious than most influenza strains

Disease Spread and Symptoms

- Symptoms:
 - Mild to severe respiratory symptoms
 - Cough
 - Fever
 - Trouble Breathing
 - Pneumonia

Containment Strategies – to Date

- Travel restrictions
- Airport entry screening
 - Customs and Border Protection (CBP) and CDC screen passengers returning from China for symptoms, travel to Hubei province and close contacts
- Movement restrictions and monitoring of people at high and medium risk
- Lab testing of symptomatic individuals at increased risk
- The goal of containment strategies is to rapidly identify new cases and limit secondary transmission to persons who are under isolation so exposures are limited and transmission chains are suspended

NYSDOH Response Activities - Continued

- Working closely with CDC, NYCDOHMH, local health departments, and other NYS agencies
 - Airport Screening
 - Isolation & Quarantine operations
 - Monitoring of individuals
 - Laboratory testing
- Public education
 - [NYSDOH COVID-19 webpage](#)
 - [Public Service Announcements](#)
 - Hotline for information on COVID-19
 - 1-888-364-3065
- Healthcare provider and healthcare facility education
 - Advisories, webinars, resources

Protect yourself from COVID-19 and stop the spread of germs.

Simple steps help stop the spread of COVID-19 and other viruses:



Wash your hands often with soap and water for **at least 20 seconds**, especially before eating.



Avoid close contact with people who are sick.



Avoid touching your eyes, nose, and mouth.



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.

Stay up to date by visiting
www.ny.gov/coronavirus

Personal Protective Equipment (PPE) Required for Sample Collection for SARS-CoV-2 Testing

PPE Protocol


- BEFORE entering the home:
 - Perform hand hygiene
 - Put on gown, respiratory protection, eye protection and gloves
 - Knock or ring bell
- AFTER leaving the home:
 - Remove and properly dispose of gown and gloves, eye protection, and respiratory protection in a garbage bag
 - The homeowner can throw away the garbage bag with the regular household waste
 - Perform hand hygiene

Hand Hygiene

- Perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves
- Hand hygiene after removing PPE is particularly important to remove any virus that might have been transferred to bare hands during the removal process
- Perform hand hygiene by using alcohol-based hand rub (ABHR) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds
 - If hands are visibly soiled, use soap and water before returning to ABHR

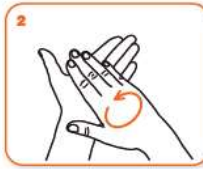
How to handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS ONLY WHEN VISIBLY SOILED!

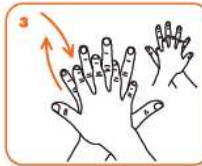
 Duration of the entire procedure: 20-30 sec.



1a Apply a palmful of the product in a cupped hand and cover all surfaces.



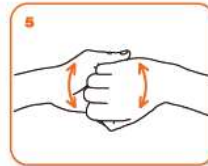
2 Rub hands palm to palm



3 right palm over left dorsum with interlaced fingers and vice versa



4 palm to palm with fingers interlaced



5 backs of fingers to opposing palms with fingers interlocked



6 rotational rubbing of left thumb clasped in right palm and vice versa



7 rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa




8 ...once dry, your hands are safe.

Hand Hygiene

How to handwash?

WASH HANDS ONLY WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB!

 Duration of the entire procedure: 40-60 sec.



Wet hands with water



apply enough soap to cover all hand surfaces.



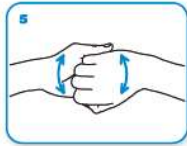
Rub hands palm to palm



right palm over left dorsum with interlaced fingers and vice versa



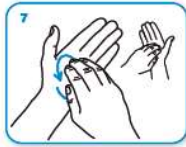
palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked



rotational rubbing of left thumb clasped in right palm and vice versa



rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.



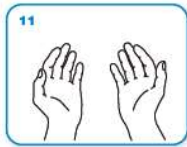
Rinse hands with water



dry thoroughly with a single use towel



use towel to turn off faucet



...and your hands are safe.

Hand Hygiene

Diagnostic respiratory specimen collection for COVID-19 for all individuals

- This process is for all COVID-19 testing, including for:
 - Confirmed cases (retesting confirmed cases, when needed)
 - Symptomatic suspected cases
 - Asymptomatic contacts of known cases
- Testing for the virus that causes COVID-19 should be conducted outdoors if climate allows
- If conducted in the home, specimen collection should be performed in the area of the house where the individual being tested self-isolates
 - Only the public health personnel and individual being tested should be in the room when testing is performed
 - Collecting diagnostic respiratory specimens (e.g., nasopharyngeal swab) is likely to induce cough or sneezing

Diagnostic respiratory specimen collection for COVID-19 for all individuals

- Public health personnel collecting specimens should wear recommended PPE, including a gown, gloves, eye protection, and respiratory protection that is at least as protective as a NIOSH-approved N95 filtering facepiece respirator, as recommended in the [*Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 \(COVID-19\) or Persons Under Investigation for COVID-19 in Healthcare Settings*](#)
 - PPE should be put on before being exposed to potential suspect cases
 - Hand hygiene should be performed before putting on and after removing PPE using alcohol-based hand sanitizer that contains 60 to 95% alcohol

PPE Available for Field Visits

Your PPE will include the following:

- Gown
- Gloves
- Respiratory protection
- Face shield or goggles

Recommended Clothing

- Comfortable shoes
- Wear professional, comfortable, cotton based clothing
- Please keep hair neatly up and out of the face. This will prevent face touching

Gown

- Wear a gown to protect skin and clothing during activities where contact with blood or body fluids is anticipated
- Do not wear the same gown for the care of more than one person being swabbed
- Remove gown and perform hand hygiene after leaving the person's environment
- Limitations of PPE-none for this purpose. Does not cover feet or shins. Impervious to fluids
- Proper care, maintenance, useful life and disposal of PPE-Do not reuse. Change or discard if gown has tears, sweat saturation, or had deteriorated due to age or time in use. If remains intact, use for no more than 8 hour shift. Follow doffing procedure for removal and disposal in designated area.

Nitrile Gloves

- Wear gloves that fit appropriately (select gloves according to hand size)
- Do not wear the same pair of gloves for the care of more than one person being swabbed
- Do not wash gloves for the purpose of reuse
- Perform hand hygiene before and immediately after removing gloves
- Limitations of PPE-None for this purpose. Impervious to fluids.
- Proper care, maintenance, useful life and disposal of PPE-Do not reuse. Change or discard if gloves have tears, sweat saturation, or had deteriorated due to age or time in use. If remains intact, use for no more than 4 hours. Follow doffing procedure for removal and disposal in designated area.

Respirator

- There are several classifications or designations for filtering respirators
- The available levels of filter efficiency are 95%, 99%, and 99.97%
- Categories of filter are:
 - **N**: Filters particles. N filters are not resistant to oil;
 - **R**: Filters particles. R filters are somewhat resistant to oil;
 - **P**: Filters particles. P filters are strongly resistant to oil.

Minimum Efficiency*	Filter Classification		
95%	N95	R95	P95
99%	N99	R99	P99
99.97%	N100	R100	P100

Eye Protection

- Wear eye protection for potential splash or spray of respiratory secretions, blood, or other body fluids.
- Personal eyeglasses and contact lenses are not considered adequate eye protection
- May use goggles with facemasks, or face shield alone, to protect the mouth, nose and eyes
- Limitations of PPE-Covers half of face. Impervious to fluids.
- Proper care, maintenance, useful life and disposal of PPE-Do not reuse. Change or discard face shield if it tears, breaks, sweat saturation, or had deteriorated due to age or time in use. If remains intact, use for no more than 8 hours. Follow doffing procedure for removal and disposal in designated area.

Prohibited Duties

- Try to maintain a comfortable distance (more than 6 feet) from the person and avoid direct physical contact for interactions that do not involve direct specimen collection.
- Always have a good breakfast/lunch before shifts to resist the temptation of eating or drinking while on duty
- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html>

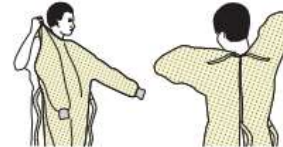
Donning

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene



Doffing

- Take off (doff) PPE in the order shown in the figure

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

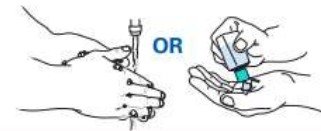


3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — **DO NOT TOUCH!**
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



Department
of Health

Sample Collection Process

Consent

- Obtain oral consent for oropharyngeal and nasopharyngeal specimen collection
- Do not collect specimens unless the patient is adequately informed and consents to specimen collection
- For minor persons and patients incapable of consenting to specimen collection, before a specimen may be collected, either a person legally responsible for the patient must give prior written consent to the specimen being collected or a person legally responsible for the patient must be present during the specimen collection and consent to the specimen collection

Viral Swab



- Use only synthetic fiber swabs with plastic shafts
- Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing

Upper respiratory tract - Oropharyngeal swab (OP) AND Nasopharyngeal swab (NP)

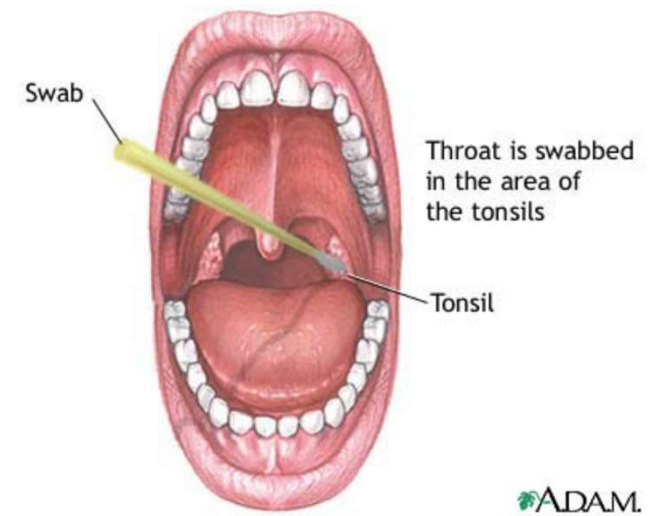
- Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media (VTM). NP and OP specimens should be combined into one single VTM vial.
- Nasopharyngeal (NP) Swab -
<https://www.youtube.com/watch?v=hXohAo1d6tk>
<https://www.youtube.com/watch?v=DVJNWefmHjE>
- Oropharyngeal (OP) Swab -
<https://www.youtube.com/watch?v=mfZYAMDpGNk>

The Joint Commission and the Centers for Disease Control and Prevention would like to thank Copan Diagnostics for their contribution in producing these instructional videos.

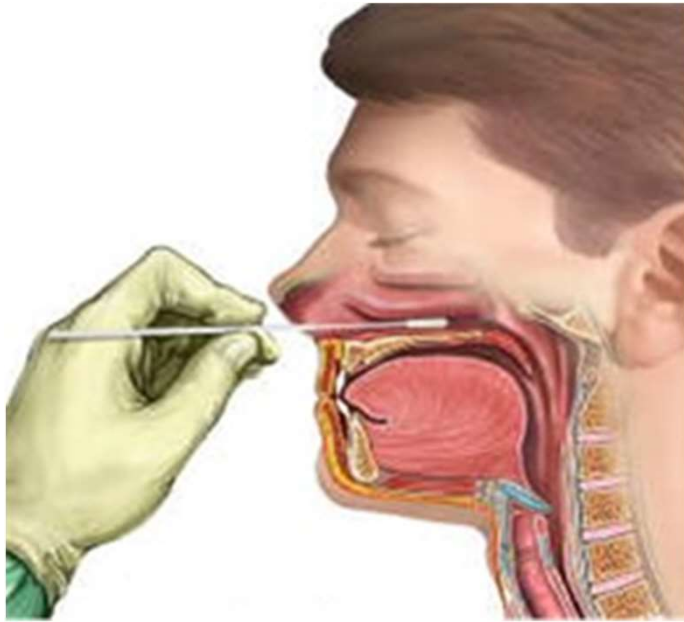


Oropharyngeal swab (OP) -

1. Swab the posterior pharynx, avoiding the tongue.
2. Using plastic handled swab, vigorously swab both the tonsils and the posterior pharynx.
3. Place swab into the viral transport media vial
4. Make sure liquid medium covers the swab tip.
5. Break or cut the end of the swab
6. Screw the vial lid on tightly.



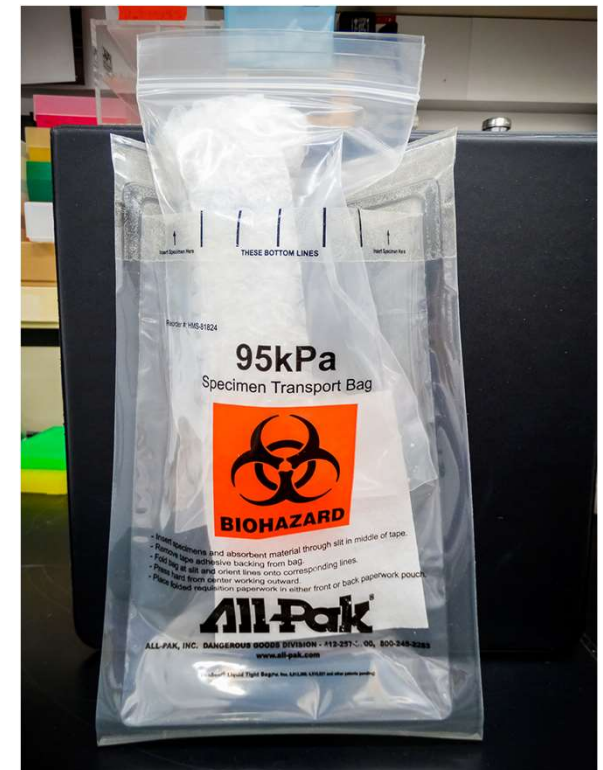
Pass the NP swab through the nares:



1. Resistance will be met, and this will confirm contact with the nasopharynx.
2. Rub the swab tip several times across the mucosal surface. This will loosen and collect cellular material.
3. Allow a time of contact of up to 30 seconds.
4. Withdraw the swab and place into the same viral transport media (VTM or UTM) vial. Make sure liquid medium covers the swab tip.
5. Break or cut the end of the swab and screw the vial lid on tightly.

Specimen Packaging-

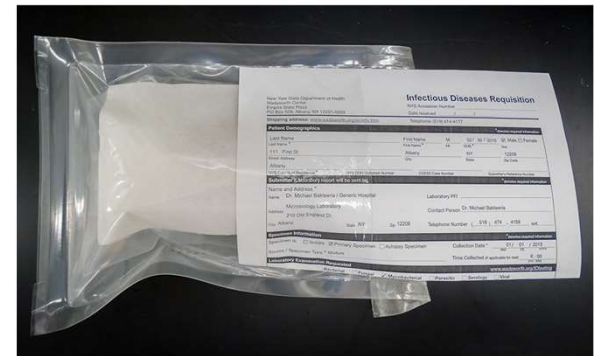
1. Complete the New York State Department of Health forms required for specimen submission.
2. Insert the zip-locked plastic bag containing the primary receptacle(s) into the secondary Specimen Transport Bag containing the absorbent material.
3. Remove the tape adhesive backing from the bag opening then fold bag at the slit and orient lines onto corresponding lines.



<https://www.wadsworth.org/programs/id/mycobact/specimen-shipping>

Specimen Packaging-

1. Press hard from center working outward to seal and close.
2. **DO NOT** place any form(s) inside the plastic bag with primary receptacles.
3. Fold and place any completed form, in accordance with the New York State Department of Health process, in the paperwork pouch on the outside of the Specimen Transport Bag.



<https://www.wadsworth.org/programs/id/mycobact/specimen-shipping>

Specimen storage and transport-

1. If critical specimen transport is needed, notify the New York State Department of Health Critical Specimen Transport.
2. While in the field, place in a hard container or shipper with freezer packs.
3. Store specimens at 2-8°C for up to 72 hours after collection.

<https://www.wadsworth.org/programs/id/mycobact/specimen-shipping>

Process Summary

- Verbal consent
- Specimen collection: Collect one (1) oropharyngeal (OP; throat) swab and one (1) nasopharyngeal (NP) swab per patient. Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they contain substances that inactivate some viruses and inhibit PCR testing. Place swabs immediately into sterile tubes containing 2-3 mL of viral transport media. NP and OP swabs being sent to the Wadsworth Center should be combined at collection into a single vial.
- Specimen packaging, transport and storage

Exposure Reporting

Exposure Reporting

- If a breach in PPE occurs, IMMEDIATELY notify the on-shift supervisor, duty station supervisor, and the local health department and complete an Accident Report form.
- If a NYSDOH employee is exposed due to a PPE breach to a person being swabbed that is later found to be infected with COVID-19, the local health department will identify and confirm the dates and times the person being swabbed was infectious.
- In the rare instance where the person being swabbed was infectious while in the presence of the employee, the local health department will contact the employee to initiate a monitoring plan.

Accident Reporting

NEW YORK STATE DEPARTMENT OF HEALTH OCCUPATIONAL HEALTH AND SAFETY PROGRAM ACCIDENT REPORT		
Instructions		
This form is to be used to report any work-related injury, illness, or incident that occurs during the course of employment.		
In addition filling out this form, State Department of Health employees are required to call the Accident Reporting System(ARS) at 1-888-800-0029 to report a work -related injury or illness.		
Note: If this illness or injury resulted in an employee fatality, inpatient hospitalization, loss of an eye, or an amputation Occupational Health and Safety must also be notified immediately at 518-474-8130.		
Fields marked with an asterisk (*) and highlighted in yellow are required.		
EMPLOYEE INFORMATION		
<input type="checkbox"/> DOH Employee	<input type="checkbox"/> Volunteer	<input type="checkbox"/> Student
<input type="checkbox"/> Consultant	<input type="checkbox"/> Contractor	<input type="checkbox"/> Other
Name(Last, First, MI)	Date of Birth	
Home Address:		
Home Telephone	Last 4 SSN	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female
Job Title :		
Bargaining Unit <input type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> 06 <input type="checkbox"/> 07	Date Started DOH Service	
Shift Hours: From	<input type="radio"/> AM <input type="radio"/> PM	To <input type="radio"/> AM <input type="radio"/> PM
Division:		
Bureau:		

- For any injuries or illnesses sustained or contracted in the field, staff should first call the ARS at 888-800-0029 to report and file an [accident report](#) after the situation has stabilized.

COVID-19 Resources

NYSDOH COVID-19 Webpage

www.health.ny.gov/diseases/communicable/coronavirus/

Novel Coronavirus (COVID-19)

Novel Coronavirus Hotline

Call 1-888-364-3065 for Information about Coronavirus

Recently, a new coronavirus - 2019 Novel (New) Coronavirus – that was first detected in China is now spreading worldwide. This virus causes a disease called COVID-19 and can lead to fever, cough and shortness of breath. There are thousands of confirmed cases in a growing number of countries internationally and the virus is now spreading in the United States. There are ongoing investigations to learn more about this virus.

Individuals who are experiencing symptoms and may have traveled to [areas of concern](#), or have been in contact with somebody who has traveled to these areas, should call ahead to their health care provider before seeking treatment in person.

This is a rapidly changing situation. Please regularly check this site and the [CDC's Novel Coronavirus webpage](#) for updates.

Data last updated March 2, 2020

Test Results	New York State (Outside of NYC)	New York City (NYC)	Total Persons Under Investigation (PUI)
Positive Cases	0	1	32
Negative Results	22	8	
Pending Test Results	0	1	

Health Care Providers: [Click for more Information](#)

Health Novel Coronavirus - A message from Ne... Watch later Share

• Also available in: [Chinese](#), [Simplified Chinese](#), [Korean](#)

New York State is ready.

CDC Coronavirus Webpage

www.cdc.gov/coronavirus/2019-ncov/index.html

Coronavirus Disease 2019 (COVID-19)

CDC > Coronavirus Disease 2019 (COVID-19)



Coronavirus Disease 2019 (COVID-19)

COVID-19 Situation Summary +

What You Should Know +

Travel Information +

Preventing COVID-19 Spread in Communities -

At Home

At School

At Work

First Responders

Public Health Communicators

Community Events

Universities and Colleges

Preventing COVID-19 Spread in Communities

Protect yourself and your community from getting and spreading respiratory illnesses like coronavirus disease 2019.

Americans should be prepared for the possibility of a COVID-19 outbreak in their community. The community can take measures to reduce the spread of COVID-19. Everyone has a role to play in getting ready and staying healthy.

Currently a vaccine is not available for COVID-19. Community-based interventions such as school dismissals, event cancellations, social distancing, and creating employee plans to work remotely can help slow the spread of COVID-19. Individuals can practice everyday prevention measures like frequent hand washing, staying home when sick, and covering coughs and sneezes. Click below to learn about steps to take before, during, and after any community spread of COVID-19.

How to prepare and take action for COVID-19:

At Home



Get my household ready

At Childcare and K-12 Schools



At Colleges or Universities



IF QUESTIONS:

OHS@health.ny.gov

Congratulations on completing your training!

**You will be issued a training
certificate upon completion**