OUTPATIENT COVID-19 REFERENCE GUIDE

April 2020

Oregon Health & Science University
Office of Primary Care & Population Health

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Background

Brief history of COVID-19

The disease

COVID-19 is the illness caused by a newly identified coronavirus. COVID stands for coronavirus disease, and 19 refers to the year it started.

The coronavirus

The virus itself is called SARS-CoV-2, short for severe acute respiratory syndrome coronavirus 2.

Background

Coronaviruses are part of a large group of viruses that cause illness. Some coronaviruses cause mild illness, such as the common cold. Others can cause serious illness, such as COVID-19.

Purpose of document

The intent of this document is to provide clinicians and medical treatment facilities with best practices based on latest evidence to optimize response to the current COVID-19 pandemic.

Information was compiled and adapted from sources including:

- The Centers for Disease Control and Prevention
- The World Health Organization
- The Oregon Health Authority
- The Oregon Health & Science University
- The OHSU Wellness Task Force
- The OHSU School of Medicine COVID Inquiry Group

Epidemiology

Incubation

According to the CDC, symptoms may appear 2-14 days after exposure. The CDC bases this on what's been seen with the Middle East Respiratory Syndrome coronavirus, or MERS-CoV. This virus was first reported in humans in 2012.

According to the World Health Organization, people are showing symptoms of the coronavirus 1-14 days after exposure, with five days being the most common. The WHO notes that estimates will be updated as more data becomes available.

Transmission

According to the CDC, the coronavirus appears to be highly contagious and to spread mostly person to person:

- Between two people who are within about 6 feet of each other.
- Through the droplets sprayed into the air when an infected person coughs or sneezes. These droplets can enter the mouth or nose of another person, or possibly be inhaled into the lungs.

In addition:
Some studies suggest that it can spread from infected people who aren't showing symptoms.
It may be possible for people to get COVID-19 by touching an object or surface that has the virus on it, and then touching the mouth, nose or possibly eyes.

Clinical Features

Symptoms

According to the CDC, symptoms are:

- Fever
- Cough
- Shortness of breath

If you experience concerning symptoms (below), call 911 or call your local emergency department so they can prepare for your arrival. These symptoms include:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to awaken
- Bluish lips or face
- Other severe symptoms

Precise information on duration of symptoms is not available. But according to a World Health Organization report, based on preliminary data from 55,924 confirmed cases in China:

- Mild cases lasted about two weeks.
- Severe cases lasted three to six weeks.
- Patients who died had symptoms for two to eight weeks beforehand.

Screening, Triage and Testing Criteria

Guidance for Testing in the Emergency and Ambulatory Settings

The decision to test for COVID-19 depends on several variables, including:

1. Availability of test kits and reagents
2. Implications for patient management
3. Implications for infection control/public health

Symptomatic clinical criteria

Clinical signs/symptoms of upper or lower respiratory tract illness (+/- fever).

Asymptomatic clinical criteria

No signs/symptoms of respiratory tract illness BUT undergoing any of the following in the next several days:

1. Surgery or aerosol-generating procedure
2. Cesarean section or induction of labor
3. Stem cell transplant or CAR-T therapy
4. Solid organ transplantation

Outpatient Setting: In-Person Evaluation of the Patient with Symptomatic COVID-19 or Patient Under Investigation (PUI)

General principles

- Be aware of anchoring bias. COVID is important but not yet highly prevalent; make sure to consider other conditions with respiratory symptoms or GI symptoms.
- Manage and optimize pre-existing chronic conditions.
- Consider x-ray to rule out lung infiltrate especially among pts with comorbidities.
- Provide focused physical exam to reduce direct contact with patients, and avoid removing patient mask if at all possible. Critically consider your use of a stethoscope.

Disposition Guide

1. Normal vital signs and physical exam, no risk factors*, appropriate social situation:
    - **Discharge home**
    - Consider COVID testing
    - Return precautions
2. Normal vital signs and physical exam, but significant risk factors: **exertion test** (see Figure 1. The Borg Scale)**, obtain one-view chest x-ray and COVID test.**
    - If x-ray normal and O2 sat ≥ 90% with exertion: **Discharge home**
        - Arrange follow-up in-person visit in 24–36 hours or virtual visit in 24-36 hours with home pulse oximetry twice daily, with instructions to call or return to the hospital if <93%
    - If x-ray suggestive of COVID 19 and/or O2 sat <90% with exertion: **Consider ER referral or direct admission for observation.**
    - If x-ray abnormal and suggestive of other conditions: **appropriate care/follow-up for the condition**
3. Mild hypoxia, no additional oxygen administration required (O2 sat 93-95% on room air), otherwise normal vital signs or mild abnormality, **no risk factors*** and O2 sat ≥ 90% with exertion:
    - **Discharge home**
    - COVID testing
    - Follow up**:**

- In-person visit in 24–36 hours or virtual visit in 24-36 hours with home pulse oximetry twice daily, with instructions to call or return to the hospital if <93%
- Modified Borg Scale (1-10; see below) with instructions to monitor level of exertional dyspnea with activities of daily living (ADL) or counting aloud to 20; advise patient to go to ED or call COVID Hotline if score increasing or > 3.

4. Mild hypoxia, no additional oxygen administration required (O2 sat 93-95% on room air), otherwise normal vital signs or mild abnormality, **with risk factors*** and O2 sat ≥ 90% with exertion
    - If x-ray normal and O2 sat ≥ 93% with exertion: Discharge home
    - Arrange follow-up in-person visit in 24–36 hours or virtual visit in 24-36 hours with home pulse oximetry twice daily, with instructions to call or return to the hospital if <93%
    - Modified Borg Scale (1-10l see below) with instructions to monitor level of exertional dyspnea with activities of daily living (ADL) or counting aloud to 20; advise patient to go to ED if score increasing or > 3.
    - If x-ray suggestive of COVID 19 and/or O2 sat <93% with exertion: ER referral or direct admission for observation
5. Patients requiring oxygen administration, any evidence of end organ dysfunction/shock, or otherwise unable to go home:
    - Transfer to ER

**Risk Factors*

- Age >60
- Vital sign abnormalities (e.g., RR 20; systolic BP 200 pulse 110), considering patient's baseline parameters and using physician discretion
- Evidence of, or impending, organ failure: encephalopathy (confusion / change in mental status), respiratory failure, renal failure, heart failure, liver failure
- Lymphopenia and neutropenia
- mSOFA score (<8 high priority for critical care)
- Health conditions (as defined by the CDC): heart disease (e.g., CHF, CAD, Hypertension); chronic lung disease (e.g., COPD, asthma); endocrine disorders (e.g., diabetes); immunosuppression (including autoimmune disease, malignancy or HIV/AIDS); BMI>30; blood disorders (e.g., sickle cell, on blood thinners); chronic kidney disease; chronic liver disease; neurological / neurodevelopment conditions; current or recent (within 2 weeks) pregnancy.

Figure 1. The Borg Scale

0	Nothing at all
0.5	Very, very slight (just noticeable)
1	Very slight
2	Slight (light)
3	Moderate
4	Somewhat severe
5	Severe (heavy)
6	
7	Very severe
8	
9	
10	Very, very severe (maximal)

Patients are asked to rate their difficulty breathing. Anything 3 or higher should prompt a return to health care provider.

Emergency Department Admission: Symptomatic COVID-19 or Patient Under Investigation (PUI)

ED Admission for COVID-19 or PUI is for supportive care as well as concern for complications, including need for supplemental oxygen or advanced support for respiratory failure, septic shock, and multi-organ failure, or for patients whose clinical trajectory raises concern that such support will be needed quickly.

Ultimately, disposition decisions must occur on an individual basis, and this medical decision will depend not only on the clinical presentation, but also on the patient's ability to engage in self-monitoring and self-care, the feasibility of safe isolation at home, and the risk of transmission in the patient's home environment.

Please use the following six examples as general guidelines, not to usurp your bedside judgement.

1. Normal vital signs and physical exam, no risk factors for severe illness, appropriate social situation: COVID testing + discharge
2. Mild hypoxia, no additional oxygen administration required (O2 sat 93-95% on room air), otherwise normal vital signs or mild abnormality, no risk factors:
    - **Discharge home**
    - Home pulse oximetry twice daily, with instructions to call or return to the hospital if <93%
    - Check in after 24–36 hours with telehealth or in-person visit
    - Modified Borg Scale (1-10) with instructions for monitoring level of exertional dyspnea with activities of daily living (ADL) or counting aloud to 20
3. Normal vital signs and physical exam, but significant risk factors: obtain imaging. Significant risk factors + disease severity indicators (abnormal imaging): admit to **observation** or dedicated COVID-19 unit.
4. Patients requiring oxygen administration (maintaining O2 sat >95% on ≤6 L/min nasal cannula) or otherwise unable to go home, but without severity criteria:
    - Observation admission, if possible to COVID-19 ward with continuous vital sign monitoring
5. Patients who require oxygen therapy (nasal cannula or face mask) and/or continuous monitoring of vital parameters but do not seem to be progressing to high flow oxygen needs:
    - Inpatient admission on continuous telemetry to COVID-19 ward.
    - Initiation of treatment: prone positioning, pharmacologic treatment
6. Patients with increasing respiratory and other organ dysfunction: Short of intubation, indications for ICU may include rapid progression of respiratory symptoms; escalating oxygen requirement on supplemental O2, requiring/anticipated to require HFNC (needing to increase FiO2 to maintain SpO2>90%); evidence of end organ damage or tissue hypoxia or increased risk of developing this quickly.
    - Consult ICU for admission
    - Initiation of treatment: prone positioning, pharmacologic treatment

**Risk Factors*

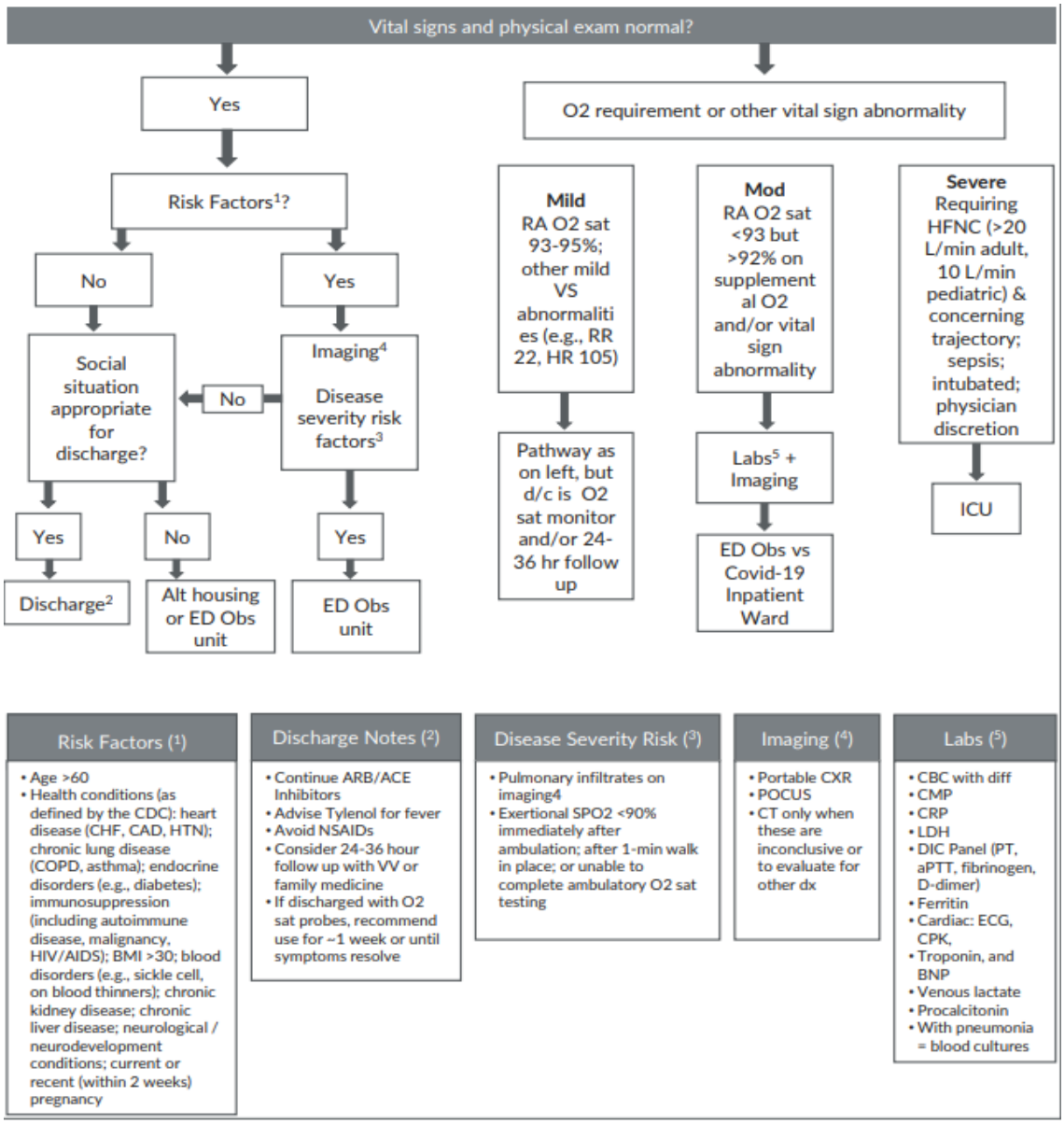
- Age >60
- Vital sign abnormalities (e.g., RR 20; systolic BP 200 pulse 110), considering patient's baseline parameters and using physician discretion
- Evidence of, or impending, organ failure: encephalopathy (confusion / change in mental status), respiratory failure, renal failure, heart failure, liver failure
- Lymphopenia and neutropenia
- mSOFA score (<8 high priority for critical care)
- Health conditions (as defined by the CDC): heart disease (e.g., CHF, CAD, Hypertension); chronic lung disease (e.g., COPD, asthma); endocrine disorders (e.g., diabetes); immunosuppression (including autoimmune disease, malignancy or HIV/AIDS); BMI>30; blood disorders (e.g., sickle cell, on blood thinners); chronic kidney disease; chronic liver disease; neurological / neurodevelopment conditions; current or recent (within 2 weeks) pregnancy.

Considerations for moderate or surge conditions:

Based on capacity in ED, internal and family medicine wards, and ICU, and in coordination with the on-call administrator, certain conditions that may reasonably be managed outside of the unit should be prioritized for floor admission. These include, for example:

1. Uncomplicated alcohol withdrawal. Receiving repeated IV benzodiazepines without escalating doses or mental status/hemodynamic decline;
2. Moderate DKA (bicarb 12-15, pH >7.0) without hypokalemia;
3. Atrial fibrillation with HR < 150 managed by intermittent boluses or a fixed infusion, but with stable blood pressure and no evidence of ischemia;
4. Hyperkalemia and volume overload in renal patients with appropriate access and no arrhythmia; pursue initial treatment in ED followed by telemetry admission to wards for expedited dialysis as long as repeat bloodwork does not show increasing potassium after initial ED treatment.

Symptomatic COVID-19 or PUI Patients: Emergency Department Disposition Decision



Outpatient Testing Guidance/Workflow

COVID-19 Medical Assistant (MA) Testing Workflow

1. Clinic provider determines patient is appropriate for COVID testing. Enters order for COVID testing.
2. Clinic pages COVID Medical Assistant (MA) with location of patient to be tested.
3. COVID MA will go to clinic and check in with staff. If COVID MA is getting multiple pages will call clinic and provide estimated time of arrival.
4. COVID MA will log in and release the order from the clinic's order pool.
5. COVID MA will don appropriate PPE (mask, eye protection, gown and gloves) provided by the clinic.
6. COVID MA will enter the patient room, ask two patient identifiers, explain the process and perform the testing. Testing process includes:
    a) Two media and two swabs needed per collection. Each swab should be placed in its own media.
    b) Prepare specimen for pick up and leave in the clinic specimen pick up area.
7. Clinic MA will do any needed follow up or education with patient, including bringing visit to a close and providing AVS. MAs can only educate based on what is on an education sheet. If the education sheet does not answer the patient's question, the question needs to be escalated to a Registered Nurse (RN) or Licensed Independent Practitioner (LIP) to answer.
8. COVID MA will give clinic MA the room cleaning job breakdown sheet for appropriate room cleaning.

Ambulatory & Mobile COVID-19 Testing Delegation Protocol

A Delegation Protocol was created to provide direction for patients and community members that desire to be screened for COVID-19 based on specific criteria outlined below. This protocol is intended to provide direct and timely access to screening and specimen collection for patients with COVID-19 exposure or suspected respiratory illness based on best available evidence. The protocol affects an unknown quantity of patients, but thought to be in the thousands, given the current pandemic.

Staff authorized to initiate the delegation protocol and demonstrated competencies:

Authorized staff includes licensed Registered Nurses (RN) and Medical Assistants (MA) who are trained in the performance of Nasopharyngeal (NP) collection for screening.

Inclusion criteria

1. 2 months and older
2. Patient or parent consent for testing – COVID-19
3. Completion of RN triage screening supporting criteria for testing

Exclusion Criteria

1. Asymptomatic
2. Work-related infectious disease exposure (influenza, COVID-19, etc.)

Protocol

Patient will be provided with services based on their evaluated epidemiologic and clinical risks. These services will be provided in accordance with best practices indicated by OHA and the CDC.

Test Collection Site

1. Ensure patient is given a regular mask upon arrival. If caregiver and/or accompanying people have respiratory symptoms, encourage mask use for those people as well.
2. Check-in/Registration per standard process.
3. Provide patient information handout explaining the testing that will be done as well as the billing/financial cost information.

4. RN to screen patient for COVID-19 testing
    a) Patient does not meet criteria for testing indicated:
        i. Patient does not meet criteria: proceed to provide "Home Care" handout
        ii. Patient requires higher level of care indicated after RN assessment: proceed to provide info on where to seek care.
    b) Testing is indicated after RN screen
        i. RN will enter order for the following testing using "Delegation Protocol" order mode, then sign: COVID-19 (Outpatient) [LAB103362].
        ii. RN will provide patient with pre-printed instructions:
            1. Post-testing information.
            2. Work/school release with self-quarantine information.
5. Medical Assistant to print 1 order label (for COVID-19 test), don appropriate PPE, and then collect sample.
    a) Sample may be nasopharyngeal (NP) swab OR oropharyngeal (OP) swab.
    b) Appropriately label swab and store sample per standard.
    c) Samples sent to lab.
6. MA to close encounter.
7. Have authorizing provider sign off.

Method of documenting that the delegation protocol was used to initiate care

The Registered Nurse (RN) will enter orders using "Delegation Protocol" order mode using an orderset and sign the order.

Literature demonstrating that the delegation protocol is evidence-based

1. Oregon Health Authority
2. Centers for Disease Control
3. WHO
4. OHSU

Specimen collection resources and guidelines

Nasal wash specimen collection without suction

Check for nasal obstruction. Patients with a nasal obstruction should be swabbed using standard technique.
Wear protective gear based on the patient's isolation and/or clinical status. The following is a list of required Personal Protective Equipment (PPE) to be worn at all times when collecting a respiratory specimen:

- Gloves
- Face shield
- Procedure mask
- Isolation gown

Collecting Specimen

1. Squeeze 1 saline bullet (5 ml) into a sterile specimen container.
2. Instill sterile saline into a clean bulb suction.
3. Insert bulb into one nostril until nostril is occluded.
4. Instill saline into nostril with one squeeze of the bulb and immediately release bulb to collect recoverable nasal specimen.
5. Empty bulb into suitable dry, sterile specimen container.
6. Send specimen to the lab.

Nasal wash specimen collection with wall suction

Check for nasal obstruction. Patients with a nasal obstruction should be swabbed using standard technique.
Wear protective gear based on the patient's isolation and/or clinical status. The following is a list of required Personal Protective Equipment (PPE) to be worn at all times when collecting a respiratory specimen:

- Gloves
- Face shield
- Procedure mask
- Isolation gown

Collecting specimen

1. Connect wall suction tubing to the conical shaped adapter on the DeLee ™ canister.
2. Connect suction tubing to the tubing on the DeLee ™ catheter.
3. Set the wall suction to appropriate suction setting.
4. Check suction and measure distance from tip of nose to external opening of ear. Mark length with thumb and forefinger.
5. Gently insert tube into nostril and posterior pharynx until the thumb and forefinger touch the patient's nose. Do not use lubricants other than saline to aid tube insertion.
6. Apply suction while withdrawing and rotating tube. Catheter should remain in nasopharynx no longer than 10 seconds.
7. Hold trap upright to prevent loss of secretions from trap.
8. Repeat procedure for second nostril.
9. Disconnect suction. Remove cap with tubing and place in biohazard waste.
10. Remove cap from packaging and place on top of DeLee™ trap.
11. Send specimen to the lab

Nasal swab specimen collection

Wear protective gear based on the patient's isolation and/or clinical status. The following is a list of required Personal Protective Equipment (PPE) to be worn at all times when collecting a respiratory specimen:

- Gloves
- Face shield
- Procedure mask
- Isolation gown

Collecting specimen

1. Gently insert swab into a nostril straight back (not upwards), along the floor of the nasal passage until reaching the posterior wall of the nasopharynx. The distance from the nose to the ear gives an estimate of the distance the swab should be inserted. Note: Do not force swab – if an obstruction is encountered, try the other nostril.
2. Rotate swab gently for 10 seconds.
3. Remove swab slowly.
4. Bend handle of swab 1.5 to 2 inches straight down towards swab tip. Immediately place swab into the transport media. Leave swab in transport media. Swab should be entirely enclosed in tube, no wire should extend past lip of tube. Replace lid to transport media. Tighten to prevent leakage during transport.
5. Follow the standard operating procedures of transport and testing for your location. If off campus, then place specimen on ice.

Oropharyngeal Swab Specimen Collection

Wear protective gear based on the patient's isolation and/or clinical status. The following is a list of required Personal Protective Equipment (PPE) to be worn at all times when collecting a respiratory specimen:

- Gloves
- Face shield
- Procedure mask
- Isolation gown

Collecting specimen

1. Instruct patient to tilt head back, open mouth, and say "ah".
2. Use tongue depressor to push down the front third of the tongue. Do not gag the patient.
3. Insert the swab without touching the lips, teeth, tongue, cheeks, or uvula.
4. Gently and quickly swab the tonsils from side to side.
5. Carefully withdraw the swab without touching the oral structures.
6. Bend handle of swab 1.5 to 2 inches straight down towards swab tip. Immediately place swab into the transport media. Leave swab in transport media. Swab should be entirely enclosed in tube, no wire should extend past lip of tube. Replace lid to transport media. Tighten to prevent leakage during transport.
7. Follow the standard operating procedures of transport and testing for your location. If off campus, then place specimen on ice.

Guidance for Rapid Test

There has been tremendous demand for this very limited testing resource and a clear ask for better guidance on how to decide when to use the test. In order to conserve this precious resource, we are restricting use to situations where the result is critical to clinical decision-making.

The test can be used in the following situations:

- Pre-transplant patients upon admission for solid organ transplantation in <12 hrs
- Patients undergoing Pacific Northwest Transplant Bank donor work-up with donation planned in <12 hrs
- High-risk hematology/oncology patients who need urgent interventions in<12 hours that would be contraindicated in a COVID-19 positive patient
- Obstetric patients expected to deliver in <12 hours where the result would affect clinical care of the mother/infant dyad

Requires approval by the COVID-19 inpatient physician: Isolated emergent situations not included above where clinical decision-making would change depending on the result of the test.

Please continue to use the existing lab test (COVID-19 by PCR) for most COVID testing. The turnaround time for the existing test is about 12 to 36 hours, and is often less than 24 hours.

Retesting of Asymptomatic Patients for COVID-19

The below guidance applies to an asymptomatic patient who was tested and had a not detected COVID test. It does not apply to symptomatic patients, or to patients who have had a test that detected COVID-19.

When should I retest a previously tested, asymptomatic patient?

The hospitalized patients who have previously had a test that did not detect COVID-19 and remain asymptomatic should only be retested in the following circumstances:

1. More than 3 days have passed since initial negative test **AND**
2. Need for surgery or aerosol-generating procedure within the next 3 days

When can I stop serial testing of an asymptomatic patient who is hospitalized?

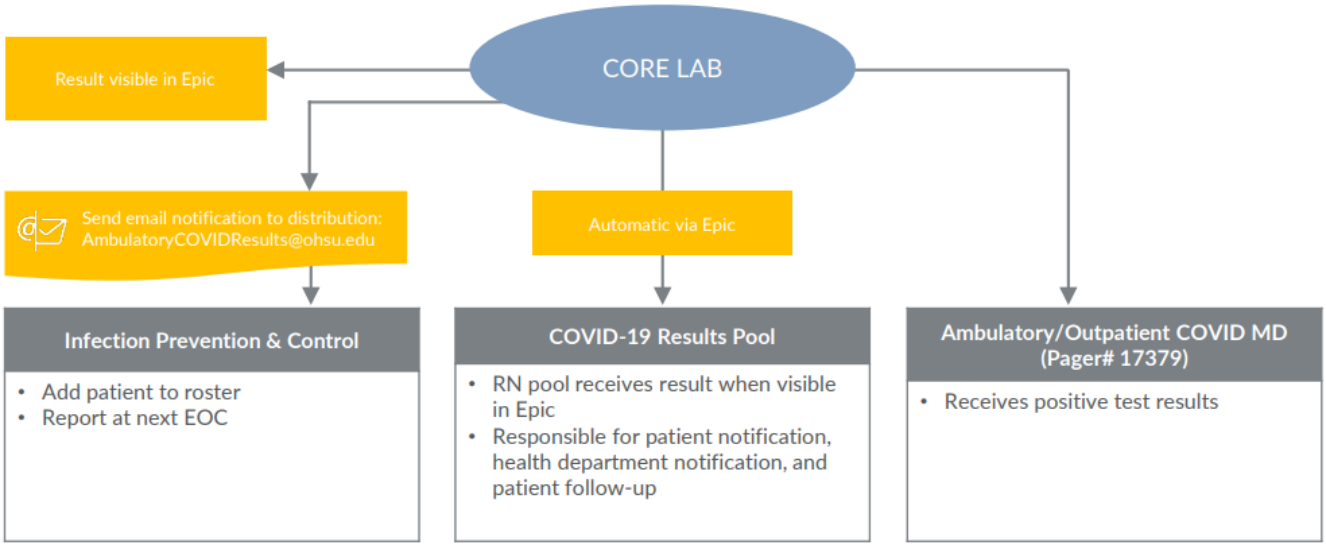
You can stop serial testing of an asymptomatic hospitalized patient when either:

1. 2 tests have returned not detected and the patient remains asymptomatic without known or suspected COVID-19 exposures **OR**
2. The patient's initial COVID test was not detected, the patient has been hospitalized for 14 days and the patient remains asymptomatic without known or suspected COVID-19 exposures

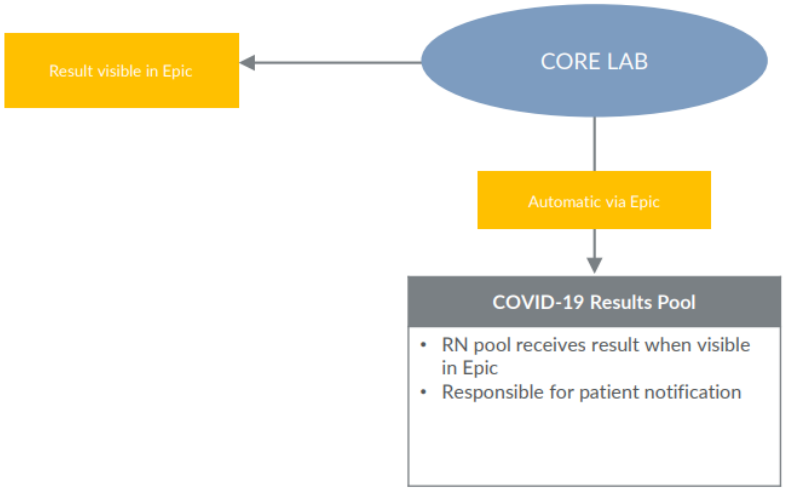
Please note that these testing criteria are subject to change as we learn more about COVID-19, including the incidence of healthcare-associated COVID-19.

Test Results workflow

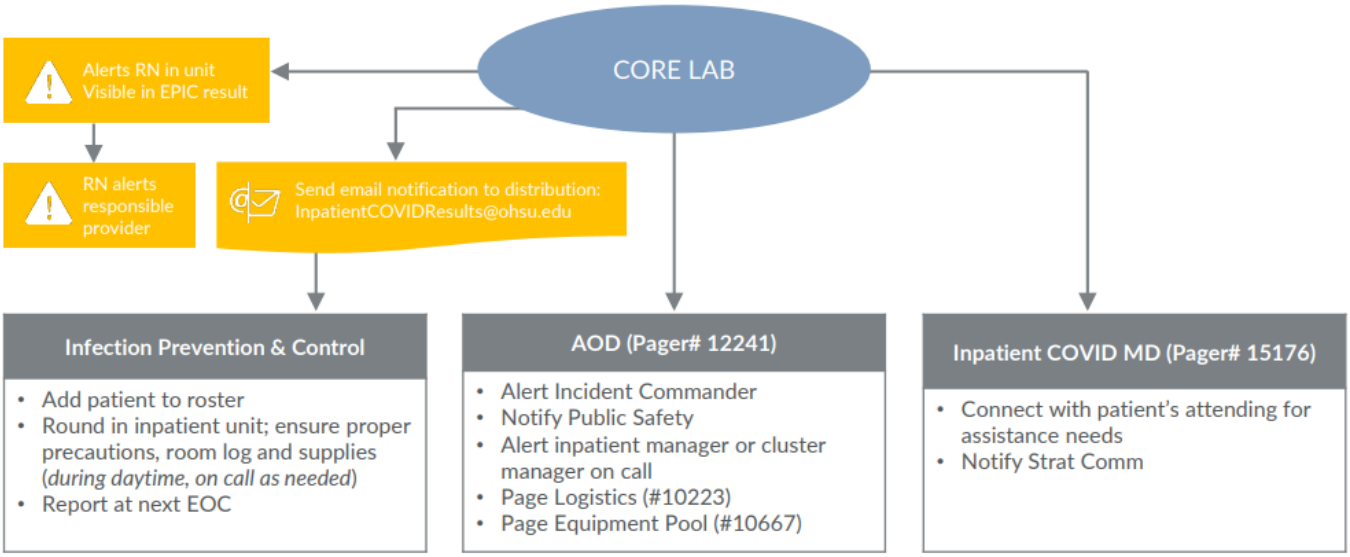
Positive result, Ambulatory & ED



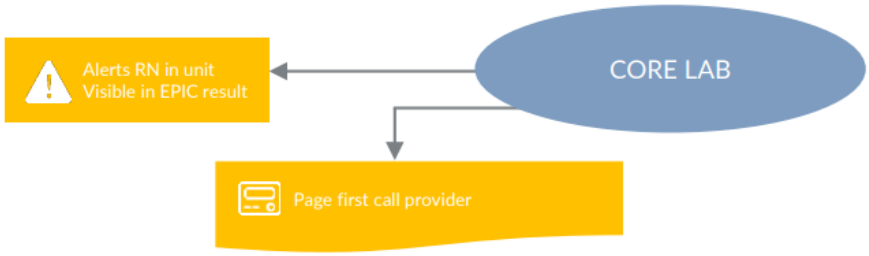
Negative result, Ambulatory & ED



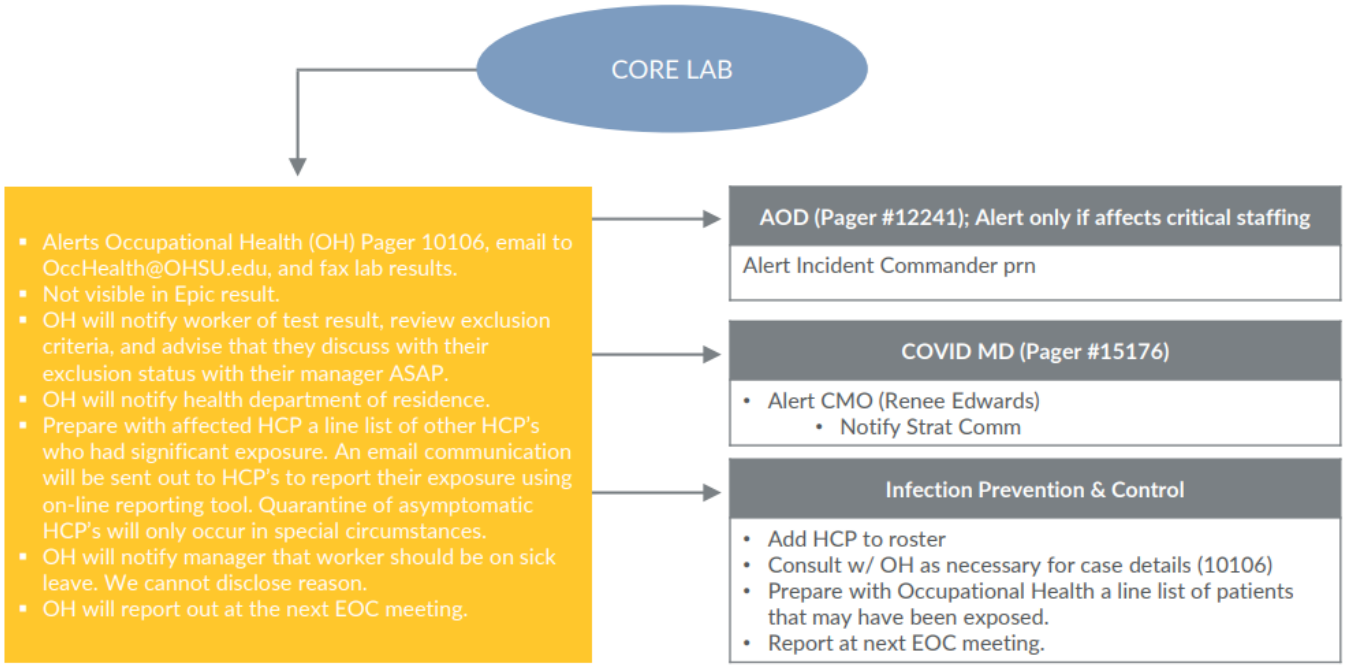
Positive result, Inpatient



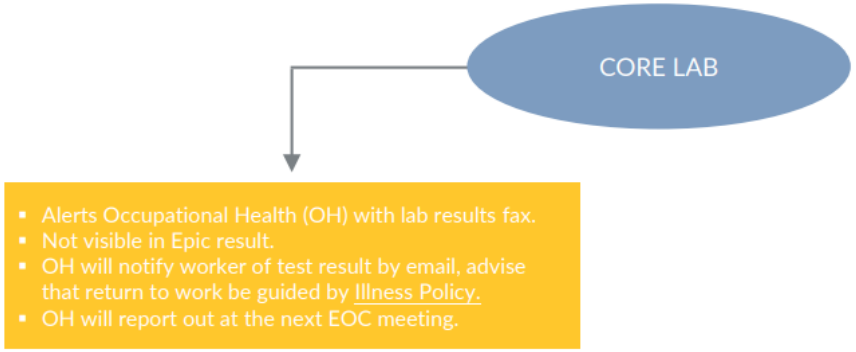
Negative result, Inpatient



Positive result, Healthcare Personnel



Negative result, Healthcare Personnel



Infection Prevention & Control (including PPE and isolation)

Standard Precautions

Standard Precautions are a set of practices that apply at all times regardless of the patient's suspected or confirmed infection status. Standard Precautions are based on the principle that all blood, body fluids, secretions, excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard Precautions protect healthcare workers from recognized and unrecognized sources of infection. Additional infection control precautions, such as Contact, Contact Plus, Droplet, or Airborne may be added based on laboratory findings or patient symptoms.

Definitions:

1. Food- raw, cooked, or processed edible substance, ice, beverages, chewing gum or ingredient used or intended for use or sale in whole or in part for consumption.
2. IFU – Instructions for Use (provided by the manufacturer of equipment/devices)
3. Mask – Refers to either a surgical mask or a procedure mask and includes those that tie behind the head and those that have ear loops
4. OPIM – Other potentially infectious material (for example, body fluids, secretions, and wound drainage)
5. PAPR – Powered Air Purifying Respirator
6. PPE – Personal protective equipment (for example, gloves, gown, mask, goggles, face shield)

Responsibilities:

Healthcare workforce members are to follow Standard Precautions at all times when working with patients, equipment or environment that might be contaminated with patient blood, body fluid, or OPIM.

Standard Precautions require that the healthcare worker be mindful during their clinical practice and assess for risks of transmission, and to be prepared by gathering necessary protective equipment prior to providing patient care.

Procedures:

1. Hand hygiene
    a. Perform hand hygiene
2. Respiratory hygiene/cough etiquette
    a. Perform Respiratory hygiene/cough etiquette
3. Appropriate use of PPE
    a. Glove use
        i. Wear clean, non-sterile gloves for contact with blood, body fluids, secretions, mucous membranes, and contaminated surfaces and equipment.
        ii. Change gloves between tasks and procedures on the same patient, after contact with material that may contain a high concentration of microorganisms, when holes or tears are noted, or when the glove's ability to function as a barrier is compromised.
        iii. Remove gloves and perform hand hygiene promptly after use, before touching non-contaminated items and environmental surfaces and before going to another patient.
        iv. For most patient care activities performed outside of restricted areas, non-sterile gloves are appropriate. Sterile gloves should be worn when performing invasive procedures or when working in a sterile field.
    b. Masks and goggles
        i. Wear mask and goggles or face shield to protect mucous membranes of the eyes, nose, and mouth during patient care activities that are likely to generate a patient cough, splashes or sprays of blood or other body fluids. Examples include endotracheal intubation and collection of a nasopharyngeal swab. A surgical mask should also be worn when eye protection is necessary.

ii. Wear surgical mask when placing a catheter or injecting material into the spinal canal or subdural space such as during myelograms, intrathecal injection of chemotherapy and spinal or epidural anesthesia.

c. Gowns
   i. Wear a fluid-resistant gown to protect skin and to prevent soiling of clothing during patient care activities that are likely to result in contact with blood, drainage, and OPIM.
   ii. Wear a fluid-resistant gown, sterile gloves, mask and eye protection when deep tissues/organ spaces are entered or manipulated with an introducer, wire, trocar or similar instrument.

d. PPE for Patient resuscitation
   i. During patient resuscitation, use a mouthpiece, resuscitation bag, or other ventilation devices to prevent contact with mouth and oral secretions

e. Procedure-specific PPE must be worn when indicated. For example, maximal barrier precautions including cap, mask, sterile gown, and sterile gloves must be worn for central line insertion (refer to policy "Invasive Intravascular Catheters Placed in OR – Placement and Follow-up" for more information).

f. Remove all PPE immediately after use and discard in regular trash. If PPE is dripping with blood or OPIM, discard in biohazard trash. Do not wear the same PPE to care for another patient or outside of the patient/exam/procedure room. PPE worn in any patient care activity or procedure area is to be considered contaminated. To prevent cross-contamination, PPE should be removed in the following sequence to first remove the most contaminated then least contaminated items: gloves, goggles or face shield, gown, mask. Perform hand hygiene after PPE removal.

g. When transporting a patient, wear appropriate PPE if patient contact is necessary (such as having contact with oral secretions). To prevent environmental contamination, do not touch surfaces such as hand rails and elevator buttons while wearing PPE.

h. When working in restricted and semi-restricted areas, refer to the Surgical Scrub Attire Policy.

4. <u>Safe work practices</u>
   a. If uniform or clothing becomes soiled with blood or body fluids:
      i. Don gloves and remove clothing immediately; handle clothing as little as possible
      ii. Do not rinse clothing
      iii. Wash contaminated skin with soap and water prior to changing into hospital scrubs
      iv. Paper scrubs are available from Logistics (ext. 4-5666)
      v. Cloth hospital scrubs can be obtained by using the following process:
         1. Employee contacts the Logistics Warehouse at extension 4-5666 to request a temporary surgical scrub station personal identification number (PIN)
         2. Employee uses the temporary PIN to access and return one set of hospital-owned surgical scrubs within 48 hours or the start of their next scheduled shift
         3. Employees in cloth hospital scrubs must adhere to the Surgical Scrub Attire policy with regard to warm-up jackets and cover jackets
      vi. Put soiled personal clothing in a plastic bag, seal immediately and label for transport home. Once home, place hospital-furnished clothing in plastic linen bag, to be returned to the hospital for laundering
      vii. At home to protect from cross-contamination, wash soiled personal clothing separately from other laundry using: 160°F (71°C) water and detergent. For water less than 160°F (71°C) use detergent and a bleach-containing product. Mechanical drying of the clothing is recommended.
   b. Appropriate handling of laundry
      i. Prevent soiled linen from touching Healthcare workforce member's skin or mucous membranes
      ii. Do not pre-rinse soiled linens in patient care areas
   c. Food and drink

i. In patient care areas, managers and other area leaders can designate specific locations where drinks with lids are allowed (for example, the main nursing station lower level counter). These locations must be separate from areas where lab specimens or contaminated equipment are handled or stored, even temporarily.
ii. Eating, drinking from open containers or coffee cups, and utensils are prohibited at laboratory workstations or in patient care areas including the charting area outside patient/exam rooms, or in any area visible by patients.
iii. Food and drink are not allowed in restricted and semi-restricted areas. Refer to the Surgical Scrub Attire Policy for a list of these areas.

5. Clean and safe reusable equipment
    a. Clean, disinfect and/or sterilize reusable patient care equipment between each patient according to the IFU.
    b. Single-use items are not used on more than one patient, and they are properly discarded after use.
    c. Prevent soiled equipment from contacting Healthcare workforce members' skin, mucous membranes or clothing.
    d. Disinfect environmental surfaces that had contact with contaminated equipment.
6. Safe handling of needles and other sharps
    a. If present, engage safety device immediately after use.
    b. Do not reuse, recap, bend, break, or hand-manipulate used needles.
    c. If recapping is required, use a one-handed scoop technique only.
    d. Place used sharps in designated puncture-resistant containers.
7. Patient placement
    a. Follow room requirements as specified in the Transmission-Based Isolation Precautions Policy for placement of patients requiring isolation precautions.
    b. Prioritize for single-patient room if patient is at increased risk of transmitting infectious agent(s), is likely to grossly contaminate the environment, does not maintain appropriate hygiene, or is at increased risk of acquiring infection or developing adverse outcome following infection.

Guidelines on isolation

Ambulatory Care: Airborne, contact and droplet precautions

For outpatients seen in an ambulatory clinic, follow Standard Precautions section in addition to the requirements listed below:

Outpatient Requirements: Airborne Precautions

1. Room
    a. Take the patient immediately into the examination/procedure room with door closed.
    b. The doors of the room must remain closed for at least 1 hour after patient discharge.
2. PPE
    a. Follow the Respiratory Hygiene-Cough Etiquette policy immediately upon patient arrival to outpatient area (e.g., waiting area, lobby).
    b. Mask the patient immediately (a procedure mask is adequate). The patient must remain masked during the entire visit.
    c. If a patient must be unmasked or cannot be masked, providers must use N-95 respirators or PAPRs in addition to Standard precautions (which includes protective eyewear as appropriate).
3. Visitors
    a. Visitors must follow Standard precautions and additionally:
        i. Screen all visitors for signs or symptoms consistent with the patient's illness.

ii. If the visitor has symptoms consistent with the patient's illness, they should wear a procedure mask.
iii. If the visitor is asymptomatic and will accompany the patient to the exam room or procedure room, they should wear an N-95 mask.

b. Ensure that visitors perform a fit check when N-95 mask is worn.

4. Cleaning
    a. Cleaning and disinfection of multi-patient use equipment and all high touch surfaces in the room in between every patient should be completed with the hospital-approved disinfectant product (i.e. Sani wipes).
    b. If the patient was masked for their entire visit, there is no delay with clinic room turnover. If the patient removed their mask in the exam room, the room must remain vacant with the door closed for 1 hour to ensure adequate air exchange. Staff may clean the room during this time with appropriate respiratory protection (N-95 or PAPR).

Outpatient Requirements: Contact precautions

1. Room
    a. Prioritize the placement of these patients into the examination/procedure room so as to minimize the risk of transmission in shared areas.
2. PPE
    a. Provide covering or dressing for the patient in order to cover and contain draining lesions (e.g. wound or incision).
    b. Staff should wear gowns and gloves in accordance with Standard precautions (i.e. when coming into contact with body fluids or non-intact skin, or when clothing may become contaminated).
3. Visitors
    a. Visitors must follow Standard precautions.
4. Cleaning
    a. Cleaning and disinfection of multi-patient use equipment and all high touch surfaces in the room in between every patient should be completed with the hospital-approved disinfectant product (i.e. Sani wipes).
5. Outpatient Requirements: Contact Plus precautions
    a. Room
        i. Prioritize the placement of these patients into the examination/procedure room so as to minimize the risk of transmission in shared areas.
    b. PPE
        i. Provide covering or dressing for the patient in order to cover and contain draining lesions (e.g. wound or incision).
        ii. Staff should wear gowns and gloves in accordance with Standard precautions (i.e. when coming into contact with body fluids or non-intact skin, or when clothing may become contaminated).
    c. Visitors
        i. Visitors must follow Standard precautions with hand hygiene performed with soap and water rather than alcohol-based hand sanitizer.
    d. Cleaning
        i. Cleaning and disinfection of multi-patient use equipment and all high touch surfaces in the room in between every patient should be completed with the hospital-approved sporicidal agent (i.e. bleach wipes).

Outpatient Requirements: Droplet precautions

1. Room
    a. Take the patient immediately into the examination/procedure room.
2. PPE
    a. Mask the patient (a procedure mask is adequate). The patient must remain masked during the entire visit.
    b. If the patient must be unmasked or cannot be masked, providers must wear procedure masks in addition to Standard precautions (which includes protective eyewear as appropriate).
    c. Follow respiratory etiquette: instruct patients to cover their coughs with a tissue, dispose of tissue properly in a waste receptacle, and perform hand hygiene after disposing of tissues.
    d. In outpatient clinics and the Emergency Department, patients may be requested to wear a procedure mask during increased community prevalence of communicable respiratory diseases.
3. Visitors
    a. Visitors must follow Standard precautions and additionally:
        i. Screen all visitors for signs or symptoms consistent with the patient's illness.
        ii. If the visitor has symptoms consistent with the patient's illness, they should wear a procedure mask.
        iii. If the visitor is asymptomatic and will accompany the patient to the exam room or procedure room, they should wear a procedure mask.
4. Cleaning
    a. Cleaning and disinfection of multi-patient use equipment and all high touch surfaces in the room in between every patient should be completed with the hospital-approved disinfectant product (i.e. Sani wipes).

Guidelines on PPE

Recommended personal protective equipment (PPE) to use while caring for a person under investigation (PUI) OR confirmed COVID-19 patient

Personal Type/Visitor	Activity	Type of PPE
Any staff member providing direct care to a Person Under Investigation (PUI) or confirmed COVID-19 patient (Including Provider, Registered Nurse, Certified Nursing Assistant, Medical Assistant, Radiology, Respiratory Therapy, Phlebotomy, Lab Techs, Rehab, Transportation etc.)	Entering room	• Procedure mask • Eye protection (goggles, safety glasses with side protection, or face shield. A rubber seal is not required) • Isolation gown • Gloves
	Performing aerosol-generating procedures (AGPs). The respirator is required only during AGP.	• Respirator (N95 or PAPR) • Eye protection (goggles, safety glasses with side protection, or face shield. A rubber seal is not required) • Isolation gown • Gloves
Environmental Services, Facilities, Food Services	Entering Room	• Procedure mask • Isolation gown • Gloves

Visitor	Entering patient's room	• Procedure mask • Isolation gown • Gloves
	Leaving patient's room	• Procedure mask
Triage/Front Desk	PAS specialist/Health Unit Coordinator	• Maintain a distance of at least 6 feet • Give a procedure mask to the patient with respiratory symptoms • No PPE recommended
Transportation (in transit)	Transfer of patients between units	• No PPE recommended for staff • Patient should be wearing a procedure mask and have a clean blanket placed over their body
Lab technician	Manipulation of respiratory samples (if sample is manipulated outside of a BLS2 hood)	• Procedure mask • Isolation gown • Gloves • Eye protection (if risk of splash)
Other staff	Do not provide care or have direct contact with PUI or confirmed COVID-19 patient	• No PPE recommended
Post mortem care per protocol	In addition: wipe down outer body bag with disinfectant wipes (EPA registered) before leaving location of death If performing aerosol-generating procedure (AGP), the following PPE is required: N95, gown, gloves and eye protection. If not performing an AGP, a procedure mask, gown, gloves and eye protection are needed	AGP : • Respirator (N95 or PAPR) • Eye protection (goggles, safety glasses with side protection, or face shield. A rubber seal is not required) • Isolation gown • Gloves Non-AGP: • Procedure mask • Gown • Gloves • Eye protection
Transportation (in transit with morgue cart)	Place patient in morgue Disinfect morgue cart, morgue key and door handles between uses	• Gloves

Guidance for Aerosol-Generating Procedures

Our efforts have focused on a well-informed yet rational approach to minimizing to the best extent possible the risk of nosocomial transmission of COVID-19, balanced with particular attention to conservation of vital personal protective equipment (PPE) resources. This is intended not as an exhaustive list, but rather as a practical list. Furthermore, our hope is to establish a set of "living guidelines," which can be used in response to improved understanding of this disease and changes in medical supplies. Therefore, these guidelines are subject to revision; please check them regularly for the most up-to-date information.

Aerosol generating procedures may include (but are not necessarily limited to):

- Intubation, extubation, and related procedures such as manual ventilation and open suctioning
- Cardiopulmonary resuscitation

- Tracheotomy/tracheostomy procedures (insertion/open suctioning/removal)
- Bronchoscopy
- Some surgeries and post-mortem procedures, most notably procedures involving the airway, oral/maxillofacial region, or GI tract
- Non-invasive ventilation (NIV) such as bi-level positive airway pressure (BiPAP) and continuous positive airway pressure (CPAP) ventilation
- High-frequency oscillating ventilation (HFOV)
- Induction of sputum
- Medication administration via continuous nebulizer
- Delivery of high-flow nasal oxygen (HFNO), also called high-flow nasal cannula (HFNC), may also generate aerosol but is markedly variable

Below is a stratified priority list for the use of N95 respirators or PAPRs (in addition to eye protection, gown, and gloves) by healthcare staff participating in these procedures. This list attempts to establish different tiers of risk, and thus graduated priorities, as well as the impact of distance between patient and healthcare worker. As the pandemic evolves and supplies change, this tiered system can inform changing guidelines

Definition of terms:

- Risk tier 1: Highest risk of aerosol exposure, recommended PPE should be prioritized.
- Risk tier 2: Medium risk of aerosol exposure, recommended PPE should be used when supplies are available.
- Risk tier 3: Lower risk of aerosol exposure, recommended PPE should be used when supplies are available.

Table: Recommended PPE (in addition to gown, gloves and eye protection) for aerosol generating procedures based on level of risk and proximity to patient during the procedure in patients with suspected or confirmed COVID-19.

	Risk tier	**Within 3 feet of patient**	**Within the immediate patient care area (approx.. 6 feet of patient)**
Sputum induction	1	N95/PAPR	N95/PAPR
Anticipated breaks in the circuit during mechanical ventilation	1	N95/PAPR	N95/PAPR
Home CPAP	2	N95/PAPR	Procedure mask
>20L NFNO/NFNC (adults)	2	N95/PAPR	Procedure mask
>10L HFNO/HFNC (pediatrics)	2	N95/PAPR	Procedure mask
>10L HFNO/HFNC (NICU)	2	N95/PAPR	Procedure mask
Medication administration via continuous nebulizer	2	N95/PAPR	Procedure mask
Transesophageal echocardiogram (TEE)	3	N95/PAPR	Procedure mask
Upper GI scope	3	N95/PAPR	Procedure mask
Labor and delivery	3	N95/PAPR	Procedure mask

Other considerations:

It is vitally important to appreciate that airborne transmission of infectious diseases is an exceedingly complex topic, dependent on myriad factors from the unique characteristics of the disease, to the air flow of the physical space surrounding an infected individual, to the distance between healthcare worker and patient. As such, it would be impossible to create with absolute certainty or reliability a list of procedures that generate aerosols of dangerous infectious transmission capacity.

At this time, healthcare staff participating in patient care NOT including any of these procedures are advised to abstain from using N95s/PAPRs and should instead wear procedural masks, in addition to the aforementioned droplet precautions (eye protection, gown, gloves).

In general, for surgeries not described above, N95/PAPR should be worn by the intubating provider and any healthcare staff within 6 feet of the intubation who cannot otherwise safely achieve this minimum distance, including during emergent intra-operative intubations. All healthcare staff who are able to maintain 6 feet distance from the intubation should do so and should abstain from using N95s/PAPRs.

At this time, patient contact limited to collection of a nasopharyngeal swab for COVID-19 testing does not require an N95/PAPR.

During transport of a patient where source control (e.g., masking the patient, closed-circuit mechanical ventilation) cannot be maintained, the person managing the airway during transport should wear the PPE indicated in the table above for the procedure in progress.

PPE Logistics

Reminders:

- When wearing PPE, keep hands away from face.
- Limit surfaces touched.
- Discard PPE in a waste container after each use, unless the PPE is for extended use. *Example: face shields, glasses, goggles, PAPR.*
- Change gloves when torn, heavily contaminated, and when cleaning hands in compliance with the WHO 5 moments for hand hygiene.
- If your PPE is compromised during use or removal, your clothes and skin are likely contaminated; please put on a bunny suit or change clothing and clean exposed skin to reduce the risk of transmission to other patients and staff.

<table>
<tr><th colspan="2">Gown and Gloves</th></tr>
<tr><td colspan="2">Wear a gown and gloves when:
- There is risk of clothing becoming soiled with stool, blood or other body fluids
- Indicated by contact, contact plus or contact and droplet precautions</td></tr>
<tr><td>Donning: Putting On
1. Perform hand hygiene
2. Put gown overhead. Do not tear open perforation on back.
3. Slide arms into sleeves and put thumbs through loops
4. Wrap ties around waist and tie in front.
5. Put on gloves over thumb loops so that wrists and hands are fully covered.
To perform hand hygiene during patient care, remove gloves, unhook thumb loops, rub hands with hand sanitizer or wash with soap and water, re-loop thumb loops, and don new gloves.</td><td>  </td></tr>
<tr><td>Doffing: Taking off
1. Untie or break waist tie by hooking thumbs under the tie and pushing down and away from your body.
2. Grab front of gown near the thighs. Slowly pull forward, up and away from your body to tear back of gown.
3. Carefully roll outside of gown inward and remove gloves with gown.
4. Perform hand hygiene.</td><td>  </td></tr>
</table>

<table>
<tr><th colspan="2">Gloves (without a gown)</th></tr>
<tr><td colspan="2">Wear gloves (without a gown) when:
There is a risk of your hands coming in contact with any type of body fluid.</td></tr>
<tr><td colspan="2">Putting on gloves:
Perform hand hygiene.
Select glove size that fits hands and put on.</td></tr>
<tr><td>Taking off gloves:
Pinch outside of glove, near the wrist, with the opposite gloved hand and peel off.
Hold removed glove in gloved hand.
Carefully slide finger of ungloved hand under wrist of remaining glove and slowly peel off second glove turning it inside out.
Perform hand hygiene.</td><td> 
</td></tr>
</table>

Procedure Mask

Wear a procedure mask when:

- There is a splash risk to your face
- Patient is coughing or sneezing
- Indicated by droplet precautions or contact and droplet precautions
- Performing spinal injection procedures
- Unvaccinated against influenza during flu season

Note:

If the patient is in airborne precautions, wear N95 respirator or PAPR.

Putting on a procedure mask:

1. Unless you have just put on a clean gown and gloves, perform hand hygiene.
2. Loop procedure mask elastics behind the ears.
3. Fit flexible band to nose bridge, ensure nose is covered.
4. Fit snug to face and below chin.

Taking off a procedure mask:

1. Remove all other PPE prior to taking off mask.
2. Do not touch the front of the mask, as it may be contaminated.
3. With clean hands, unhook elastics from behind ears.
4. Perform hand hygiene.
5. Place Procedure mask in clean, initialed paper bag for possible extended-use.

Extended-use guidelines for procedure mask and surgical masks apply to the all inpatient units, procedure areas, and pre/post-surgical areas only. Surgical masks worn in surgical units (restricted areas) should be disposed of and replaced between patients.

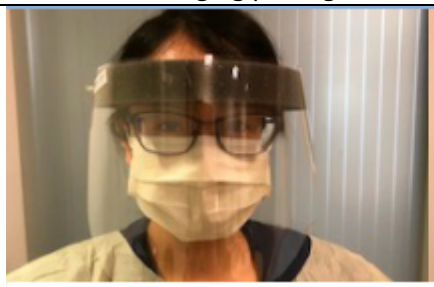
Eye Protection

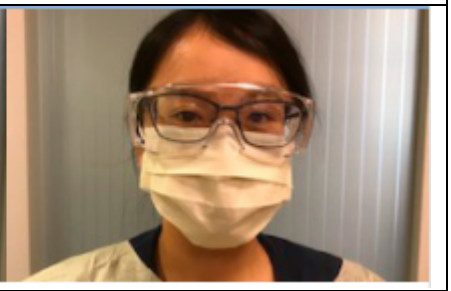
Wear eye protection when:

- There is a splash risk to your face
- Treating a patient with possible or confirmed emerging pathogen

Putting on eye protection:

1. Place over eyes/face and adjust to fit.
2. Wear with a procedure mask.





Taking off eye protection:

1. Do not touch the front of the eye protection, as it may be contaminated.
2. With clean hands, remove by ear pieces or head bad.
3. Clean with disinfectant wipes (or bleach wipes for contact plus precautions) for 3 minutes or discard only if compromised.
4. Perform hand hygiene.

Cleaning and extended-use of eye protection:

- Goggles and safety glasses can be disinfected with disinfectant wipes and can be reused between staff members.
- Be sure to follow the contact time for the wipe used.
- Goggles or safety glasses should be discarded if they are visibly contaminated (e.g., splashed with body fluids) or if they become cracked or damaged.
- The plastic shield of the face shield can also be disinfected between uses; however the foam comfort strip cannot be adequately cleaned.
- For this reason, the face shield can be reused by the same health care worker during one shift.
- Face shields should also be discarded if they are visibly contaminated (e.g., splashed with body fluids) or if they become cracked or damaged.

Eye protection notes:

- Eye protection should fully cover front and side of eyes
- Eye protection includes goggles, safety glasses or face shield; a tight rubber seal is not required
- Clean reusable eye protection with current disinfectant wipes

Imaging and Labs

Chest Imaging Recommendations

For potential COVID-19 cases and patients under investigation (PUI) it is recommended to perform the following:

Initial imaging: If clinically indicated, should be a PORTABLE ONE VIEW CHEST radiograph to help minimize exposure of other vulnerable patients while providing appropriate initial imaging evaluation.

- Chest CT is not recommended as the initial screening tool for potential COVID-19 cases.
- A CT may be helpful in the inpatient setting to assess for complications and if it would change therapeutic management.
- All CT chest orders should be discussed with one of the cardiothoracic radiology attendings prior to order placement.
- Suspicion for COVID-19 must be indicated on the order to allow for adequate protection of the radiology staff and technologists.

Radiology Ordering Criteria

Radiology approach considering five groups of patients:

1. Asymptomatic, not COVID-19 lab tested
2. Asymptomatic, test in anticipation of surgical aerosol generating procedure with anesthesia
3. Symptomatic, test in progress = PUI
4. Symptomatic, test positive = COVID-19
5. Symptomatic, test negative or undetermined
    - Radiology is committed to providing necessary diagnostic imaging to all patients.
    - For group 1 and 2 patients, radiology should be imaging as per any other patient.
    - For groups 3-5, Radiology requests that orders for imaging be elevated to a provider-to-provider conversation, to ensure staff safety, see item 2 below.
    1. Initial chest imaging, if clinically indicated, should be a portable one-view chest radiograph to help minimize exposure of other vulnerable patients while providing appropriate initial imaging evaluation.
        a) Provider to enter order for X-RAY PORTABLE CHEST 1 VIEW [RAD103253] for patients being worked up for COVID-19
        b) Click the appropriate COVID-19 specific indication (PUI or confirmed), now available on the chest x-ray orders, to allow for adequate protection of the technologists and triage to portable technique.
        c) Emergency Department, Trauma, Day Stay, PACU, and Inpatient Portables to take place in patient's exam room
        d) Chest CT is not recommended as the initial screening tool for potential COVID-19 cases. A CT may be helpful in the inpatient setting to assess for complications and if it would change therapeutic management.
    2. Any cross sectional (CT/MR/US/NM/PET) exams, in-department x-ray, or procedure requests for PUI and COVID-19 positive patients:
        a) Radiology provider to referring provider communication required to discuss urgency for exam or procedure and awareness for appropriate PPE.
            i. Radiology providers will reach out to referring clinician after order is placed. Should this occur before order placement, clinician may document discussion on order.
            ii. Radiologist may document in protocol or by direct communication to technologist.
        b) If exam is NOT URGENT – Ordering provider to indicate on order that the exam may be deferred until negative test result available (for PUI) or after patient recovers from COVID-19.

c) Imaging technologist to confer with referring clinician and/or radiologist if a) or b) are not documented to determine urgency.

Note that orders on asymptomatic patients including those with pre-op COVID-19 lab testing, should proceed as usual.

3. Nuclear Medicine V/Q scans
    a) Due to the increased risk of airborne transmission of COVID-19 during the ventilation portion of the V/Q scan, we are following national guidelines and performing only perfusion, not ventilation studies at this time.
    b) If a chest x-ray is also available, we can use the PISAPED instead of the PIOPED criteria for diagnosis of pulmonary embolus.

Treatment of COVID19

Triage for home versus hospital-based care

Patient Education: At-home Care for People with COVID-19

Follow these guidelines to keep the virus from spreading to others.

If you are sick with COVID-19:

- **Stay in a well-ventilated (aired out) room**. Keep doors and windows open if the weather allows for it.
- Stay in this room as much as possible. **Avoid shared spaces.**
- **Open windows** to keep fresh air circulating at all times in any shared spaces you use.
- **Wear a medical mask** to keep the virus from spreading through the air.
- **Cover your mouth or nose with a tissue** when you cough or sneeze. Throw the tissue away right away. If you do not have a tissue, cough or sneeze into the bend of your elbow, not into your hands.
- **Stay away from other household members, including pets. Do NOT** have contact with your pet, to keep them from spreading the virus to others.

If you do NOT feel sick but were exposed to the virus

- Stay home for 14 days from the day you were exposed, except for if you need medical care.
- If you have been around other people since you were exposed, they do NOT need to be watched or tested, as long as you do not get symptoms of COVID-19.
- Call your primary care provider if you get any of these symptoms within 14 days:
    - Cough
    - Sore throat
    - Headache
    - Body aches
    - Fever
    - Shortness of breath

For the caregiver:

- Try to have as **few caregivers** as possible for the sick person.
- **Wash your hands** with soap for 20 seconds (or use hand sanitizer with at least 60% alcohol) before you care for the sick person and after you touch them or anything around them. **DO NOT** touch your face with unwashed hands.
- **Wear a medical mask** when you are caring for the person. If you do not have one, use a bandana or fabric facemask. Use a fresh mask each day or sooner if it becomes wet or dirty. Wash fabric masks between uses.
- Treat any used gloves (if you choose to use them) or paper masks as **infectious waste**: Put them in a garbage bag and tightly close the bag with a knot.
- **DO NOT** touch any bodily fluids (saliva, blood, urine, etc.) if possible
- **DO NOT** let the sick person use the same towels, bedding or eating utensils as the rest of the household. Wash the towels and bedding with regular laundry detergent. Clean dishes and eating utensils with soap and water after each use.
- **Clean all surfaces in the sick person's room** with regular household cleaning products. Then go over them with a household disinfectant (diluted bleach, Lysol or Clorox wipes, etc.).
- **Clean the person's bathroom** and toilet at least once a day.

For the rest of the household:

- **DO NOT** stay in the same room as the sick person.
- **Keep at least 6 feet away** from the person.
- **NO VISITORS**: Do not visit the sick person until their fever has been gone for 3 days AND it has been 7 days since they first felt sick.
- **DO NOT** touch anything used by the person (toothbrush, towels, sheets, clothes, dishes, eating utensils, etc.).

- **Stay connected**. Friends and family are important for healing. Please stay in touch with the sick person often by phone, video chat or other electronic communication.

Treatment Guidelines for Adult Patients

Guidelines for Management of COVID-19 in Hospitalized Adult Patients

Currently, there are no treatments for COVID-19 that are supported by evidence from clinical trials. The efficacy of the treatments included in these guidelines is unknown and the decision to use these therapies in patient care should be made on a patient-by-patient basis. The agents recommended for COVID-19 are based on limited preclinical and clinical evidence of safety and efficacy. Please also see treatments that are NOT recommended due to lack of efficacy and risk of adverse events.

1. Criteria for treatment*
    A. Documented positive (or presumptive, if state lab) test result for COVID-19 **AND**
    B. Patient specific criteria:
        i. Any hospitalized patient with severe lower respiratory tract disease or acute respiratory distress syndrome (ARDS)) and compatible with COVID-19 infection. **OR**
        ii. Hospitalized patients with signs and symptoms compatible with COVID-19 infection, ***with or without*** documented lower respiratory tract disease, who are at high risk for poor outcome, as defined by any one of the following:
            a. Age ≥ 60 years old
            b. Underlying medical comorbidities (cardiac or pulmonary disease, dialysis, diabetes)
            c. Solid organ or stem cell transplant recipient
            d. Diagnosis of hematologic malignancy being treated with systemic chemotherapy
            e. Receipt of biologic agent or prednisone > 0.5 mg/kg/day (or equivalent)

** Meeting criteria for treatment requires A AND B-i or B-ii*

Medications (i.e. information on commonly used and experimental treatments)

1. Treatment regimens and principles
    A. **Remdesivir:** If remdesivir is available, it should be used as first-line treatment. Gilead has developed an expanded access protocol for remdesivir; however, access has remained limited.
    B. **Hydroxychloroquine:** Patients receiving hydroxychloroquine must undergo cardiac monitoring. Clinical studies of hydroxychloroquine are inconclusive due to design limitations and lack of peer review. English language studies are listed in the references. The optimal dosing regimen and duration for hydroxychloroquine for this indication are unknown but a reasonable regimen may be:
        i. Dosage: hydroxychloroquine 400 mg bid x 1 day followed by 200 mg bid x 4 days
        ii. Hydroxychloroquine will require ID attending approval, with further approval for release from ID Pharmacy.
    C. Important hydroxychloroquine/chloroquine drug information:
        i. Cardiac monitoring required
        ii. Hydroxychloroquine is a substrate of cytochrome P450 2C8, 3A4, and a moderate inhibitor of CYP450 2D6. An updated list of drug-drug interactions for COVID-19 therapeutics is maintained by the University of Liverpool. The very long half-life of hydroxychloroquine, ~40 days, should be considered after the treatment course is completed.

iii. Hydroxychloroquine carries a risk of neurotoxicity. Special caution is required in patients with Myasthenia Gravis.
iv. Acute toxicity from hydroxychloroquine is rare; however, complications include QRS widening and dysrhythmia, CNS depression, hypotension and hypokalemia.

D. **Post exposure prophylaxis:** There are no trials for post exposure prophylaxis or treatment for healthcare workers. However, people who are interested may self-enroll in a randomized placebo-controlled study to receive hydroxychloroquine or placebo through the following link. https://covidpep.umn.edu

E. **Not recommended:** At the current time, based on lack of clinical data showing benefit and in some cases potential for harm, we do NOT recommend ANY of the following:
   i. **Lopinavir/ritonavir** or other HIV protease inhibitors are under investigation; however, an open label placebo controlled randomized trial of lopinavir/ritonavir did not show any benefit in patients with SaO2 ≤ 94%.
   ii. **Azithromycin** was combined with hydroxychloroquine in several patients in a small non-randomized clinical study that evaluated detection of SARSCoV-2.3 While the results of this study are encouraging, they are inconclusive and do not support the routine use of azithromycin in combination with hydroxychloroquine.
   iii. Discontinuing or changing ACE inhibitor /ARB: Currently, the major relevant professional societies do not recommend altering therapy due to COVID-19.
   iv. Ribavirin
   v. Interferon
   vi. **steroids** (unless strongly indicated for another reason) WHO guidelines steroids and COVID-19
   vii. **tocilizumab:** There is very little supporting evidence at this time and this drug is restricted in hospital due to its need for patients with proven indications.
   viii. **ivermectin:** in vitro data indicate that therapeutic concentrations would be toxic.

3. Investigational agents: Several investigational agents are being tested for treatment of COVID-19. Patients with severe illness may be considered for treatment with an investigational agent either in the context of a study or through compassionate use by emergency investigational drug application with the FDA. More information regarding use of investigational agents will be included here as it becomes available.

Medication Frequently Asked Questions (FAQ)

Information can change based on new evidence. For any FAQ, please refer to OHSU FAQ website for up-to-date information.

Should people who have/may have COVID-19 avoid ibuprofen?

Anecdotal evidence from France suggests NSAIDs (nonsteroidal anti-inflammatory drugs, such as ibuprofen) may be linked to more severe COVID-19 symptoms. But no scientific studies support these findings. The World Health Organization recommends using acetaminophen or ibuprofen for symptom relief.

Because some doctors remain concerned about NSAIDs, it seems prudent to choose acetaminophen first to manage symptoms. But over-the-counter ibuprofen does not need to be specifically avoided.

Learn more:

- FDA advisory
- Harvard Health Publishing on COVID-19 treatments

What about IV vitamin C or herbal medicine for COVID-19?

IV Vitamin C is not recommended. No research supports its use in patients with COVID-19. Nor is there scientific evidence that any alternative remedies can prevent or cure COVID-19.

A healthy and robust immune system plays an important role in the treatment and possibly prevention of COVID-19. We recommend a healthy, balanced diet; moderate exercise; getting enough sleep; and stopping smoking.

Oral vitamin C, vitamin D and zinc in moderation are known to boost immunity, though these supplements have not been studied in relation to COVID-19. The following may be dangerous and should be avoided: ingesting bleach or hydrogen peroxide; or taking supplements in excess, including colloidal silver or vitamin D.

Learn more:

- Oregon Poison Center at OHSU warns against dangerous COVID-19 remedies circulating on social media

Special Populations

Pregnant patients

Information can chance based on new evidence. Refer to OHSU FAQ website for up-to-date information.

What is known about COVID-19 in pregnancy?

Currently available data on COVID-19 does not indicate that pregnant women are at increased risk.
The World Health Organization (WHO) reports that, as opposed to influenza, pregnant women do not appear to be at higher risk of severe disease. In an investigation of 147 pregnant women (64 confirmed, 82 suspected and 1 asymptomatic), 8% had severe disease and 1% were critical. Refer to the WHO report for details.

Should pregnant health care workers take any special precautions with respect to COVID-19?

It has been recommended that pregnant health care workers follow standard precautions and adhere to recommended PPE while caring for patients with suspected or confirmed COVID-19.

Can I transmit COVID-19 to my unborn baby?

We still don't know if a pregnant woman with COVID-19 can pass the virus to her child during pregnancy or delivery. No infants born to mothers with COVID-19 have tested positive. In addition, in these few cases, the virus was not found in samples of amniotic fluid or breast milk.
Learn more:

- CDC on pregnancy and breastfeeding

Can I breastfeed if I have COVID-19?

So far, the COVID-19 virus has not been found in breast milk. However, there is not yet enough information on whether women with COVID-19 can pass the virus through breast milk.
If you have or may have COVID-19, talk with your doctor and make a joint decision on breastfeeding. Breast milk is the best source of nutrition for most babies, and it gives babies protection against many illnesses.
Either way, take all other precautions to avoid spreading the virus to your infant. These include washing your hands and wearing a mask during contact with your baby.
Learn more:

- CDC on pregnancy and breastfeeding
- A Message for Patients, American College of Obstetricians and Gynecologists

Perinatal care (mothers, infants and breastfeeding)

Management of Mother with Newborn Suspected or Confirmed

Stage of delivery	Medical care team (Mother+)	Medical care team (Baby)
OB clinic	Contact Droplet Eye protection	N/A
L&D	Contact Droplet Eye Protection Restricted visitation**	N/A
Delivery room or operating room	Contact Eye protection If mother is intubated: airborne If mother is NOT intubated: droplet	Contact Droplet Eye protection If procedure in close proximity to respiratory secretions - airborne

<table>
<tr><td>Resuscitation suite</td><td>N/A</td><td colspan="2">Contact
Droplet
Eye protection

If procedure in close proximity to respiratory secretions - airborne</td></tr>
<tr><td rowspan="2">Post-delivery</td><td rowspan="2">Contact
Eye Protection

If mother is intubated: airborne
If mother is NOT intubated: droplet

Restricted visitation**</td><td colspan="2">Rooming-in: same as mom***</td></tr>
<tr><td>Contact
Droplet
Eye protection

If procedure in close proximity to respiratory secretions - airborne</td><td>Mom restricted from visiting NICU</td></tr>
<tr><td>Breastmilk</td><td>If rooming-in: Mom should practice hand hygiene and wear facemask when breastfeeding.

No skin to skin contact allowed with mother or visitors.

Expression:
Dedicated breast pump if possible.
Mom should practice hand hygiene.
Usual cleaning of breast pump and apparatus.
Bottle to be wiped down with alcohol wipes prior to storage.</td><td>EBM may be used.</td><td>Breastmilk</td></tr>
</table>

*Suspected: mother is person under investigation (PUI) under public health supervision
+ Within healthcare facility, mother to wear procedure mask UNLESS in a room.
**CDC recommendation is that visitors wear same PPE as healthcare workers.
***CDC recommendation is to have risk/benefit discussion and separation can be considered
If mom decides on separation – options include:
Separate rooms for mother and baby (baby's room would be under standard precautions)
Same room – 6 feet apart with physical barrier (curtain/screen).
++If baby becomes ill, please consult pediatric infectious disease on whether COVID-19 investigation and isolation is needed.

Pediatrics

Are COVID-19 symptoms different in children than in adults?

Children and adults infected with COVID-19 have similar symptoms, though symptoms tend to be milder in children. Children also appear to have gastrointestinal symptoms more often.

What is the risk of my child becoming sick with COVID-19?

Based on available evidence, children do not appear to be at higher risk for COVID-19 than adults. While some children and infants have been sick with COVID-19, adults make up most of the known cases to date.

Learn more:

- Visit OHSU FAQ website for more frequently asked questions.
- Visit the CDC's Frequently Asked Questions page, and scroll down to "COVID-19 and Children" to find links on:
    - Risk to children
    - Protecting children from infection
    - Whether symptoms are different in children
    - Whether children should wear masks
- The CDC also has tips on keeping children healthy while school is out

Elderly patients

According to the CDC, older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness.

COVID19 Care Planning

Attribution: Suvi Neukam, DO, COVID19 Care Planning One Pager, April 2020
Please notify me at neukam@ohsu.edu if you utilize this document or if you would like related curriculum resources

Reality of COVID for Older Adults → **Patient's Health Care Goals** → **Appropriate Goals of Care Documentation**

Understanding the Reality of COVID for Older Adults

Level of Care	Progression of Illness	Mortality
Hospitalization: - 65-84 yo 31-59% - >85 yo 31-70% **Admission to ICU:** - 65-84 yo 11-31% - >85 yo 10-27% **Admission = Isolation**	**Rapid:** hours to days **Chaotic**: AMS, high use of sedating meds **Confusing:** separated from family and friends	80% of deaths >65 yo **Mortality Rate**: - 64-85 yo 4-11% - >85 yo 10-27%

CDC COVID-19 Older Adults April 7, 2020

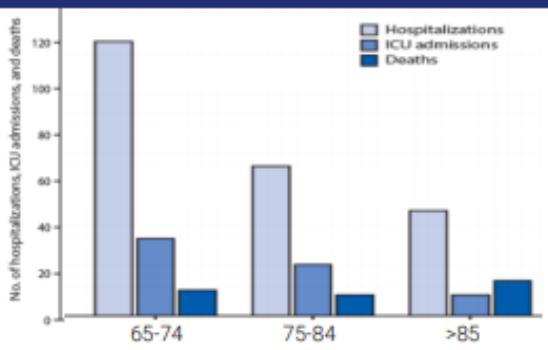
Older Oregonians via OHA

Age	Cases	Ever Hospitalized	Deaths
>80	139	68	39

Translation: **48% risk of hospitalization**
28% mortality

Oregon Health Authority, "COVID-19 Demographics, Hospital Capacity and Testing", April 23, 2020

Older Americans via CDC



CDC Severe Outcomes Among US Patients with COVID19 Feb 2-Mar 16, 2020

TAKE HOME POINT

Not all elders who acquire COVID19 will experience a severe infection.

But, if an older adult is sick enough to consider advanced levels of care, we should be worried about their outcomes, including survival

Identifying Patient's Health Care Goals

1. Introduce Conversation & Assess Understanding
2. Identify Goals and Worries (aka Health Priorities)
3. Apply Health Priorities to Treatment Path
4. Clarify Preferred Level of Intervention
5. Clarify Code Status
6. Summarize and Thank

Health Priority	Potential Cause for Loss of Priority
Independence	Need to go to SNF, inability to live alone, need for caregivers, inability to **be** caregiver for loved one...
Communication	Intubation, sedation, complications of stroke or intubation, progressed cognitive impairment...
Cognitive Awareness	Post-hospitalization delirium, new cognitive impairment, requirement for new centrally acting medications
Time with Loved Ones	Quarantine, isolation while in hospital or SNF, decreased interactions due to intubation/sedation...
Physical Function	Deconditioning (baseline never regained), complications of stroke or anoxia...
Avoidance of Pain	Intubation/ventilation, procedures, hospital stay, severe symptoms

Treatment Path		
Longevity Focus	Maintain Health/Function	Comfort Oriented
Level of Intervention		
Full	Limited	Comfort
May Include: ICU, ventilation, long term tube feedings, IV medications, IVF...	**May Include:** hospital (non-ICU), NIPPV, IVF, IV Abx... **Does NOT include:** CPR, intubation, ventilation	**May Include:** hospital for symptom control, oxygen, sunction, PO meds, fluids & nutrition... **Does NOT include:** CPR, intubation, ventilation
Code Status		
Full	DNR	DNR

Options for Documenting Conversation

1) POLST
***Can be rescinded/updated at any time**
****Note: there is NO requirement to have a POLST**

2) Add "Goals of Care" to **Problem List**

3) Involve **family/SDM**

References:

https://www.talkdyingtome.com/new-blog-1/2020/3/19/goals-of-care-discussions-in-the-age-of-covid-19
https://www.ariadnelabs.org/wp-content/uploads/sites/2/2017/05/SI-CG-2017-04-21_FINAL.pdf
https://medicine.utah.edu/internalmedicine/geriatrics/education/fellowship_reference_materials_2015/2015-08-28_presentation_5_code_status.pdf
https://www.healthaffairs.org/do/10.1377/hblog20200330.141866/full/
https://www.acc.org/latest-in-cardiology/articles/2020/04/09/12/42/palliative-care-considerations-for-patients-with-cardiovascular-disease-under-coronavirus-disease-2019-covid-19
https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e3.htm#F1_down
https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html
https://govstatus.egov.com/OR-OHA-COVID-19

Patients living in facilities (i.e. skilled nursing and long-term care)

Should elderly people be taken out of long-term care facilities?

There is currently no recommendation to remove elderly people from long-term care facilities. Families and caregivers need to think carefully about removing an older patient, especially those with underlying chronic conditions.

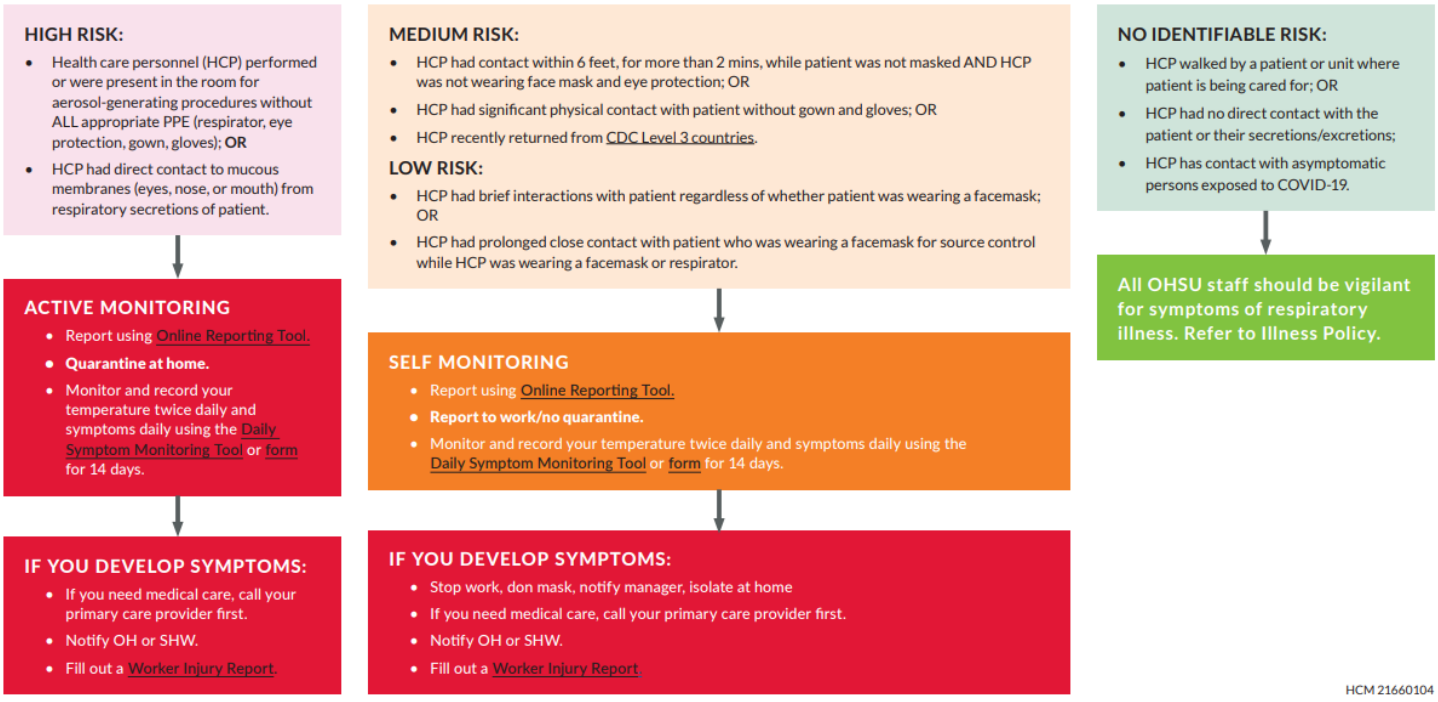
Introducing the person to a new environment could lead to exposure. It's important to limit contact and to follow the facility's directions.

Learn more:

- OHSU FAQ website
- CDC on long-term care facilities and nursing homes

Healthcare workers

Criteria for Staff Exposures to Confirmed COVID-19



Resources for Patients with Cancer

Cancer patients represent a more vulnerable population, and it is important that we take every measure possible to protect them and to protect ourselves as we take care of them. If you have an appointment that is elective in timing (as determined by the cancer care team and agreed by the patient) it may be rescheduled to a future date, or it may be done as a virtual visit or by telephone.

Are there special precautions that people with cancer should take?

While available data is limited, the experience reported from China suggests that people with cancer may have a higher risk of severe complications compared to those without a history of cancer. This makes it increasingly important for patients with cancer to take actions to reduce the risk of getting sick with the disease.

Patients with blood cancers, or those who have undergone or are undergoing bone marrow transplants (BMT's) are among the patients considered to be of particularly high risk. As part of routine care, these patients are given special infection prevention instructions, and those remain appropriate for preventing COVID-19.

Actions to reduce risk include:

- Clean your hands often. Wash for at least 20 seconds with soap and water.
- Avoid touching your mouth, nose and eyes with unwashed hands.
- Stay home as much as possible to further reduce your risk of being exposed.
- When you must go out in public, keep away from others who are sick, limit close contact and wash your hands often.
- Avoid all non-essential travel including plane trips, and especially avoid embarking on cruise ships.
- Keep enough essentials (medications, groceries, household supplies) on-hand so that you will be prepared to stay at home for a period of time.

According to the CDC, people who have **emergency warning signs** for COVID-19 should call 911 right away. Emergency warning signs at home include*:

- Difficulty breathing or shortness of breath
- Persistent pain or pressure in the chest
- New confusion or inability to wake up
- Bluish lips or face

*This is not every emergency symptom or sign.

What to do if you have COVID-19 symptoms?

- Stay home and call your primary care provider.
- If needed, contact your county health department.
- **Do not** go to any health care facility **unless instructed**, so you don't spread the virus

Additional Resources:

- Read more from the National Cancer Institute: Coronavirus: What People with Cancer Should Know.
- Read more from the CDC about actions to reduce risk: Groups at Higher Risk.

Primary Care Guidelines in the Setting of COVID Pandemic

Outpatient clinic operations frequently asked questions

Information can changed based on new evidence. Refer to OHSU FAQ website for up-to-date information.

What outpatient procedures/visits are considered essential?

The Oregon Health Authority and Oregon Gov. Kate Brown recently updated guidance. A procedure is subject to cancellation if it is elective or non-urgent and if it requires PPE (face masks, N95 respirators, gowns and eye protection; and in the case of shortages, exam or surgical gloves).

A procedure is exempt from cancellation if a delay would put the patient at risk of irreversible harm, including:

- Threat to the patient's life
- Threat of irreversible harm to the patient's physical or mental health
- Threat of permanent dysfunction of an extremity or organ
- Risk of cancer metastasis or progression of staging
- Risk of rapidly worsening condition

As a health care provider, if you believe that a patient will suffer irreversible harm if a recommended procedure is delayed or foregone, then you should provide that care using as little PPE as is safe and consistent with guidelines and laws.

Per the April 7 OHA Webinar for Oregon health care professionals, the OHA is leaving it up to each clinician's judgment whether a service is essential if it cannot be easily defined.

In addition:

- **Reproductive health:** Services (including access to long-acting reversible contraceptives and abortion care) are considered essential.
- **Care for children:** The American Academy of Pediatrics recommends conducting well-child visits for newborns, and for infants and younger children who need immunizations. It recommends rescheduling well visits for those in middle childhood and adolescence. Pediatricians may choose to limit well visits to early morning while reserving the rest of the day for sick visits. Pediatricians are encouraged to dedicate specific rooms for sick visits and well visits, and if they have multiple practice sites, to consider one office for all well visits, staffed by those in higher risk categories. Pediatricians may choose to increase their capacity to deliver telehealth. If available, health care providers are encouraged to use "drive through" COVID-19 testing sites.

My clinic plans on telehealth for 3 months. Is there an estimate for how long stay-home and physical distancing should continue?

We aren't certain yet. A lot depends on what we learn about the virus in the coming months, and how well the community is able to practice physical distancing.

Right now, stay-at-home and physical distancing orders range from the end of April through mid-June.

Guidance from the Oregon Health Authority includes a mandate from Gov. Kate Brown that all non-urgent and elective health services be rescheduled no earlier than June 15, 2020. Physical distancing in public will most likely need to continue for an undefined time period even when we are no longer staying at home.

Is there guidance for outpatient settings on changing hours, workflows and spaces to separate sick from well patients?

CDC recommendations for clinic workflows during COVID-19 list primary goals as:

- Providing the appropriate level of necessary medical care.
- Protecting health care personnel and non-COVID-19 patients from infection.
- Preparing for a potential surge in patients with respiratory infection.
- Preparing for shortages in PPE and staffing.

Specific CDC recommendations include:

- Postponing preventive visits that can't be done virtually unless the risks of postponing are deemed to outweigh the benefits.
- Consider contacting patients who may be a higher risk of COVID-19 complications to make sure they are following medication and therapeutic regimens; to confirm they have enough refills; and to ask them to call their provider if they become ill.
- Eliminate patient penalties for missing or canceling an appointment related to respiratory illness.
- Explore alternatives to face-to-face triage and visits for the acutely ill:
    - Ask patients to use phone advice lines, patient portals and online self-assessment tools.
    - Develop protocols that enable providers to triage and assess patients before or they enter the facility or immediately upon entry.
    - Implement algorithms to identify which patients with respiratory symptoms need to be advised to seek 9-1-1 transport, go to an emergency department, or come to your facility.
    - Implement algorithms to identify which patients with respiratory symptoms possibly from COVID-19 can be managed by phone and advised to stay home, and provide clear instructions to caregivers and sick people regarding home care.
    - If possible, identify health care personnel who can monitor these patients at home with daily check-ins by phone, text, patient portals or other means.

I've heard nurse practitioners and physician assistants can order home care. Is there guidance?

According to a Centers for Medicare & Medicaid Services waiver issued March 30, 2020, nurse practitioners, clinical nurse specialists and physician assistants are allowed to:

- Order home health services
- Establish and periodically review a plan of care for home health services
- Certify and recertify that the patient is eligible for Medicare home health services

Preventive measures

Best Practices to Limit Exposure Risk in the Ambulatory Setting

Background:
We understand that COVID-19 is spread through droplets, contact and fomites. This means that the individuals who are sick should wear a mask to prevent spreading infectious droplets. Short interactions with patients, even those with symptoms, are very unlikely to cause the other person to be infected.

Considerations:
The safety of our employees, including psychological safety, is our highest priority. Every day our employees demonstrate their commitment to our patients, and to one another, by coming into clinic and going above and beyond to provide the best care.

We understand that employees on the frontlines are deeply concerned about the risk of exposure, even if transmission is very unlikely. It is our duty to do everything we can to ensure our teams feel safe. We must also be mindful of the current evidence and the pressing need to conserve critical resources. To that end, we have assembled best practices and steps that all clinics can take to reduce the risk of exposure and increase the sense of safety our employees feel.

Best Practices Physical Space

- Rearrange waiting room furniture to provide adequate distance between waiting room seats.
- Post signs for patients to stand 6 feet back from front desk. Consider use of a stanchion or other physical barrier to ensure distance is maintained.
- Place tape on floor at 6 feet intervals to ensure adequate spacing for patients waiting to check in.
- Check-in Process: Encourage the use of the any online patient portal check-in process (This process saves time and also limits exposure with patients).
- Identify patients requiring contact precautions in advance and perform check-in functions in the exam room while the patient is masked.
- Engage team to assess physical space and explore new ways to coordinate check-in process.
- Consider alternative options including: conducting check-in in a vehicle or with a phone call Patient Communication.
- Schedule virtual visits rather than face-to-face whenever possible.
- Triage all patients with symptoms to determine if in-person visit is appropriate or necessary.
- Contact patients the day before their scheduled appointment to determine if patient has developed symptoms and explain the visitor policy.
- Use scheduling and rescheduling guidance to inform decision-making.
- Clinic & Care Teams: Use cohort strategies to limit exposure.
    - Create care team cohorts and develop schedule and/or rotation for cohorts.
    - Create patient cohorts (well patients and sick patients). Clearly delineate when and where well patients will be seen, and when and where sick patients will be seen.
- Work collectively to explore options for treating patients outside of the normal clinic setting (i.e. surge clinic for potential COVID patients within an existing setting currently not in use).
- Consider what core functions can be maintained in a virtual space and enable as many employees to work from home as possible while maintaining core functions

De-isolation criteria for outpatients

<table>
<tr><th colspan="4">COVID-19 De-isolation Criteria – for ambulatory</th></tr>
<tr><td rowspan="2">Severely immunocompromised patients[1]</td><td>Symptomatic</td><td>With COVID-19 positive results

OR

With presumed or suspected COVID-19 (e.g., compatible clinical syndrome & close contact of a documented case)

OR

Who tested negative but has high clinical suspicion</td><td>Remain on isolation precautions for a minimum of 14 days from illness onset

To inform de-escalation of isolation precautions, testing* can be performed when:
- At least 14 days have passed since symptoms first appeared AND
- The patient has been symptom-free for ≥ 72 hours.</td></tr>
<tr><td>Asymptomatic</td><td>COVID-19 positive result</td><td>Remain on isolation precautions for a minimum of 14 days from illness onset

To inform de-escalation of isolation precautions, testing* can be performed when:
- At least 14 days have passed from last positive test AND
- The patient has remained asymptomatic for the entire 14-day period.</td></tr>
<tr><td>All other patients (those who are not severely immunocompromised)</td><td>Symptomatic</td><td>With COVID-19 positive results

OR

With presumed or suspected COVID-19 (e.g., compatible clinical syndrome & close contact of a documented case)

OR

Who tested negative but has high clinical suspicion</td><td>There is no testing requirement for testing to inform de-escalation of isolation precautions for this population (non-test based strategy).

Isolation precautions can be discontinued if:
- At least 3 days (72 hours) have passes 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</td></tr>
</table>

[1] Transplant, hematologic malignancy, bone marrow or solid organ transplant recipients, inherited immunodeficiency, poorly controlled HIV/AIDS, etc.

			CDC guidelines for discontinuation of transmission based precautions in the healthcare setting.
	Asymptomatic	COVID-19 positive result	Isolation precautions can be discontinued when: - At least 7 days have passed since the last positive COVID-19 test **AND** - The individual has remained asymptomatic for the entirety of the 7-day period

*Testing consists of TWO COVID-19 tests (preferably NP swab for COVID-19) separated by > 24 hours.

- If both test results are negative, isolation precautions can be discontinued.
- If one or both of the test results is positive, the patient should remain on isolation precautions and retested in ≥ 1 week to determine next steps.

Telehealth visits & FAQ

Information can changed based on new evidence. Refer to OHSU FAQ website for up-to-date information.

Can we waive Medicare face-to-face encounters for home health services?

Yes, when there's an emergency, the Centers for Medicare & Medicaid Services give health care providers flexibility to make sure Americans have access to the health care they need.

In such circumstances, the secretary of the Department of Health and Human Services, using Section 1135 of the Social Security Act can temporarily modify or waive certain Medicare, Medicaid, CHIP or HIPAA requirements.

How do I do a new-patient appointment if I need to do a physical exam for billing?

The Centers for Medicare & Medicaid Services has allowed flexibility in using telemedicine for new patient services during the COVID-19 pandemic.

During the COVID-19 pandemic, the need for an in-person evaluation for new patients will be guided by history and clinical judgment.

CMS has not provided specific guidance on the requirement for physical examination. Many health systems have created ways to document physical examination (for example, affect, speech tone, content and fluency; audible and or visual ease of breathing; home blood pressure measurement; photo of a rash, etc.)

According to the Department of Consumer and Business Services and the Oregon Health Authority, the state expects health plans of all types to provide increased access to telehealth options during the pandemic to encourage patients to use telehealth and to discourage in-person services.

Are people who live out of state eligible to receive telehealth from Oregon providers?

Oregon providers are able to provide telehealth care to those living in neighboring states, though each state has its own rules. To bill for telehealth, the patient must be in Oregon.

- **In California**, Oregon providers must be sponsored by a California-based telehealth agency to get approval to provide care.
- **In Idaho**, Oregon physicians and physician assistants in good standing may provide telehealth care to Idaho residents without an Idaho license, but they should notify the Idaho Board of Medicine (info@bom.idaho.gov) of their intent.

- **In Washington**, Oregon practitioners must register (https://www.waserv.org/) as Emergency Volunteer Health Practitioners in Washington to provide telehealth services.

My first payment for video visit was about 30% less than normal reimbursement. How is the state ensuring proper reimbursement?

The Department of Consumer and Business Services and the Oregon Health Authority issued telehealth guidance.

Providers should contact health insurance companies for policies on coverage of audio, electronic and video telehealth services. If there are unresolved concerns, DCBS regulates commercial health plans, and OHA regulates Medicaid health plans.

Here is a summary of the guidance:

Commercial insurance: Health plans (including commercial health plans) shall cover telehealth services delivered by in-network providers to replace in-person visits whenever possible and medically or clinically appropriate. Health plans shall also examine reimbursement rates for telehealth services to ensure they are adequate for providers to increase capacity to serve patients through telehealth delivery methods. Rules for telehealth coverage may vary among commercial insurers.

Medicare: The Centers for Medicare & Medicaid Services has broadened access to Medicare telehealth services so that beneficiaries can receive a wider range of services without having to travel to a health care facility. During the COVID-19 Public Health Emergency, Medicare will make payment for Medicare telehealth services for patients in broader circumstances. These visits are considered the same as in-person visits and are paid at the same rate as regular in-person visits.

Oregon Health Plan: The OHA encourages delivering medically necessary and appropriate health services through live audio and video interaction whenever possible. Audio-only phone or a patient portal may be used to remove barriers to patients who don't have a computer, internet access or video capability. Providers may be reimbursed at the in-person rate for phone visits when such barriers exist. In some cases, specific modifiers or place-of-service codes are needed to specify that the service was delivered by telehealth. Direct questions to OHA Provider Services at:

- 800-336-6016
- dmap.providerservices@dhsoha.state.or.us

Are phone visits reimbursed at the same rate as video visits?

Coverage of telehealth visits varies by insurance provider. Clinicians should contact health insurance companies for policies on coverage of audio, electronic and video telehealth services.

The following summarizes the guidance:

Medicare: The Centers for Medicare & Medicaid Services issued a waiver that expands the Medicare Telehealth Services benefit. Video visits are considered the same as in-person visits and are paid at the same rate as regular in-person visits. These are available for new and established patients. Medicare has approved audio-only phone visits only for 5-10 minute "virtual check-ins" with established patients; these are reimbursed at a lower rate than video visits.

Oregon Health Plan: Oregon Medicaid will reimburse video visits at the same rate as in-person services. Providers may be reimbursed at the in-person rate for using telephone-only communications when barriers to equipment and access exist. Direct questions about to OHA Provider Services at:

- 800-336-6016
- dmap.providerservices@dhsoha.state.or.us

Commercial insurance: Health plans (including commercial health plans regulated by the Department of Consumer and Business Services) shall cover telehealth services delivered by in-network providers to replace in-person visits whenever possible and medically or clinically appropriate. Rules for telehealth coverage may vary between commercial insurers.

Outpatient E&Ms via Telehealth

Telehealth is two-way audio and visual communication such as using a laptop, tablet, or video chat using a smartphone.


It is NOT audio only.


NEW

STARTING DOS 3/1/20, SELECT YOUR E&M LEVEL OF SERVICE BASED ON MDM OR TIME! HISTORY AND EXAM ARE NOT REQUIRED DOCUMENTATION ELEMENTS.

New Outpatient Telehealth E&M			Established Outpatient Telehealth E&M		
CPT	**MDM**	**Time**	**CPT**	**MDM**	**Time**
99201	n/a	<15min	**99211**	n/a	<10min
99202	Straightforward MDM	15+ min*	**99212**	Straightforward MDM	10+ min
99203	Low MDM	30 min	**99213**	Low MDM	20 min*
99204	Moderate MDM	45 min	**99214**	Moderate MDM	30 min*
99205	High MDM	60 min	**99215**	High MDM	40 min

*The time thresholds have changed and differ from what is in the CPT book and Epic.

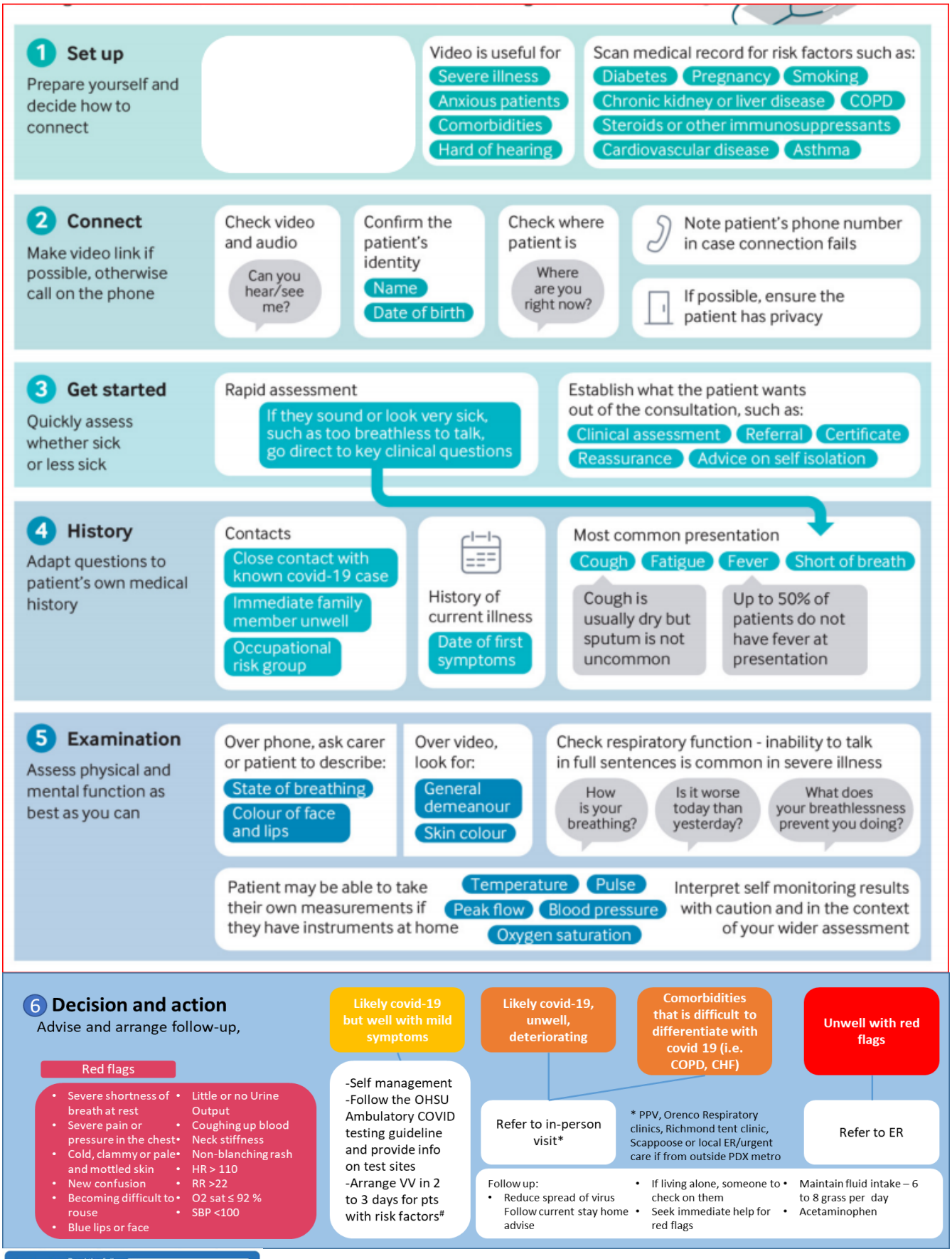
FOR TIME, NEW RULES:

- ✓ Face-to-face time with the patient via telehealth video
- ✓ Does NOT need to have >50% in counseling or coordination of care - NEW!
- ✓ Includes non-face-to-face time spent on the patient's case – NEW!
  - Record review
  - Charting
  - Putting in orders
  - Talking with team/other providers

!! **You must document a summary of how the time was spent** !!

Example: I spent a total of 36 minutes on the patient's care today. This time was spent face-to-face with the patient; reviewing the patient's recent chart notes, labs, and images; coordinating their care with the team.

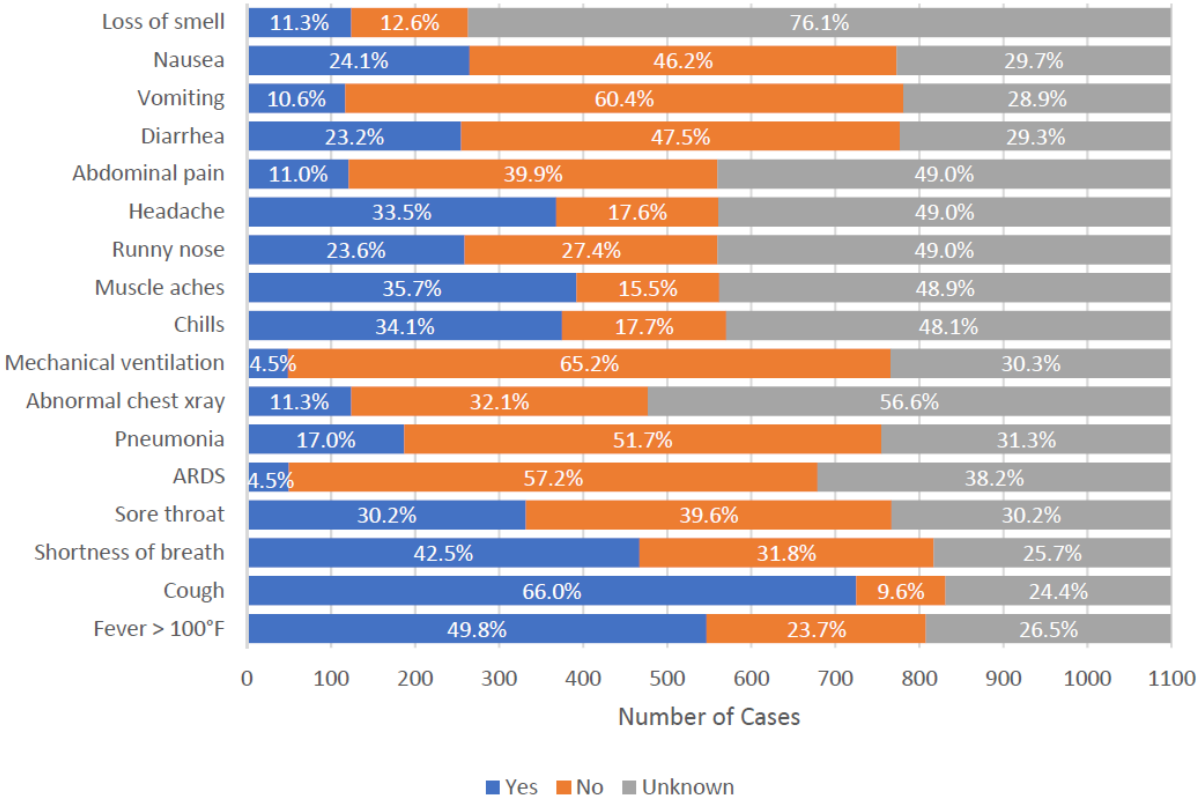
Not for In-Person Face-to-Face Outpatient E&Ms


1 Set up
Prepare yourself and decide how to connect
Video is useful for
Severe illness
Anxious patients
Comorbidities
Hard of hearing
Scan medical record for risk factors such as:
Diabetes
Pregnancy
Smoking
Chronic kidney or liver disease
COPD
Steroids or other immunosuppressants
Cardiovascular disease
Asthma
2 Connect
Make video link if possible, otherwise call on the phone
Check video and audio
Can you hear/see me?
Confirm the patient's identity
Name
Date of birth
Check where patient is
Where are you right now?
Note patient's phone number in case connection fails
If possible, ensure the patient has privacy
3 Get started
Quickly assess whether sick or less sick
Rapid assessment
If they sound or look very sick, such as too breathless to talk, go direct to key clinical questions
Establish what the patient wants out of the consultation, such as:
Clinical assessment
Referral
Certificate
Reassurance
Advice on self isolation
4 History
Adapt questions to patient's own medical history
Contacts
Close contact with known covid-19 case
Immediate family member unwell
Occupational risk group
History of current illness
Date of first symptoms
Most common presentation
Cough
Fatigue
Fever
Short of breath
Cough is usually dry but sputum is not uncommon
Up to 50% of patients do not have fever at presentation
5 Examination
Assess physical and mental function as best as you can
Over phone, ask carer or patient to describe:
State of breathing
Colour of face and lips
Over video, look for:
General demeanour
Skin colour
Check respiratory function - inability to talk in full sentences is common in severe illness
How is your breathing?
Is it worse today than yesterday?
What does your breathlessness prevent you doing?
Patient may be able to take their own measurements if they have instruments at home
Temperature
Pulse
Peak flow
Blood pressure
Oxygen saturation
Interpret self monitoring results with caution and in the context of your wider assessment
6 Decision and action
Advise and arrange follow-up,
Red flags
Severe shortness of breath at rest
Severe pain or pressure in the chest
Cold, clammy or pale and mottled skin
New confusion
Becoming difficult to rouse
Blue lips or face
Little or no Urine Output
Coughing up blood
Neck stiffness
Non-blanching rash
HR > 110
RR >22
O2 sat ≤ 92 %
SBP <100
Likely covid-19 but well with mild symptoms
-Self management
-Follow the OHSU Ambulatory COVID testing guideline and provide info on test sites
-Arrange VV in 2 to 3 days for pts with risk factors#
Likely covid-19, unwell, deteriorating
Refer to in-person visit*
Comorbidities that is difficult to differentiate with covid 19 (i.e. COPD, CHF)
* PPV, Orenco Respiratory clinics, Richmond tent clinic, Scappoose or local ER/urgent care if from outside PDX metro
Unwell with red flags
Refer to ER
Follow up:
Reduce spread of virus
Follow current stay home advise
If living alone, someone to check on them
Seek immediate help for red flags
Maintain fluid intake – 6 to 8 grass per day
Acetaminophen
thebmj
Read the full article online
https://bit.ly/BMJremcon

Risk factors for COVID-19 complication

- Age >60
- Health conditions (as defined by the CDC): heart disease (CHF, CAD, HTN); chronic lung disease (COPD, asthma); endocrine disorders (e.g., diabetes); immunosuppression (including autoimmune disease, malignancy, HIV/AIDS); BMI >30; blood disorders (e.g., sickle cell, on blood thinners); chronic kidney disease; chronic liver disease; neurological / neurodevelopment conditions; current or recent (within 2 weeks) pregnancy

Figure 1. Reported signs and symptoms for all confirmed COVID-19 cases (n=1099)



Guidelines for Obtaining Written Consent from COVID-19 PUI or Confirmed Positive Patient

Instructions for person obtaining consent:

1. Separate all pages of consent form
2. Perform hand hygiene and don appropriate PPE based on posted isolation precautions.
3. Bring into the room a pen that will stay in the room, the consent form, a sheet protector for each page of consent form, and oxivir wipes
4. Clean a surface away from patient with oxivir wipes for 1 minute contact time.
5. Place sheet protector(s) on the clean surface
6. Have the patient (or consenting individual, such as a parent) cleanse their hands (ideally using soap and water, with hand sanitizer as a backup if no sink available).
7. Wipe down the surface used for signing (such as a bedside table) with Oxivir wipe for 1 minute contact time
8. Have patient or consenter sign consent form
9. Place consent form into sheet protector(s) (do not use a biohazard bag)
10. Wipe the outside of the sheet protector(s) containing consent with Oxivir wipe for 1 minute contact time and place on clean surface

11. Remove PPE appropriately, sanitize hands
12. Take sheet protector(s) containing the consent form with you as you exit the room, then wash or sanitize hands.
13. Give consents in sheet protectors to HUC or PAS

Instructions for person processing consent form (PAS or HUC):

1. Leaving consents in sheet protectors photocopy both sides by placing directly on copy machine glass
2. Dispose of consents and sheet protectors in biohazardous trash (red trash)
3. Scan consent copies into HER

Information Sources & Patient Messaging

Communication skills for difficult conversations

Vital Talk has developed a communication playbook with a super-concentrated blast of tips focused on COVID-19 for healthcare professional's everywhere. Follow Vital Talk's COVID Ready Communication Playbook to learn more.

Suggested Language for COVID American College of Physicians (ACP) Conversations

Adapted from the COVID-19 Care Planning One Pager, April 2020 by Suvi, Neukam, DO.

Introducing Conversation and Assessing Understanding

- "We can't control the uncertainty about if you will get sick or how sick you may become, but we CAN control how well planned we are to make sure the care you receive is in line with your goals and preferences"
- "Spending time now exploring what you would and wouldn't want done if you contracted COVID, helps us make sure that myself, other doctors and your family and loved ones are all on the same page" "What do you understand about COVID 19?"
- "What do you understand about the complications of COVID19 and your personal risk given your age and other medical conditions"

Identifying Goals & Worries

- "What are your most important goals if you contracted COVID or your health situation worsens?"
- "What abilities are so critical to your life that you can't imagine living without them?"
- "If you become sicker, how much are you willing to go through for the possibility of gaining more time?"
- "How much does your family know about your priorities and wishes?"

Apply Health Preferences to Treatment Path

- "Thank you for sharing so openly with me. From what you have said, it sounds like focusing on (living longer, maintaining your current level of health and function, comfort) fits best with what is most important to you"

Clarify Preferred Level of Intervention

- "Acknowledging that you would like to focus on (X), I want to review the treatment plan that fits best with these goals if you did contract COVID19 and became seriously ill. Would that be okay?"
- "Based on what you have said we would prioritize treatments that accomplish (X). This would include (appropriate examples from treatment path), and we would avoid (appropriate examples from treatment path), because the risk of you losing your (patient-identified goal- independence, function, cognition…) is very high if we did that"

Clarify Code Status

- "Has anyone ever talked with you about CPR or have you seen it on TV?"
- "CPR is used only when someone's heart and breathing has stopped-- when they have died. It involves forcefully pushing on the chest, often breaking ribs, blowing air in the lungs and usually a breathing tube and shocks to the heart"
- "Unfortunately, CPR is not as successful as many think. Would you like to know the chances of surviving?" "Do you know about the problems that CPR can cause?"
- "Would you like me to make a recommendation about CPR based on the goals you shared with me and what I know about your health or would you prefer to let me know your thoughts first?"
- "Based on your goals (ex- live independently, be able to care for spouse…), and I what I know about your health, it seems that you would (want/not want) CPR, is that correct?"
- "Can you tell me more about your decision for CPR and what you are hoping for?" "Is there a situation you could imagine when you (would/would not) want CPR?"

Summarize and Thank

- "I always say let's hope for the best and plan for the worst. I never want you or your loved ones to be a position where you feel uncertain or rushed about your medical decisions. Thanks for taking the time now to discuss them with me so I can help make sure we are prepared"

- "Today we have reviewed what is most important to you in your general life and also health care. We have used those health priorities to choose a treatment path that fits with what you do and don't want medically."
- "Now, I would like to spend some time documenting this conversation in a form that other health care providers and emergency responders can see, it is called the POLST, in addition to finding ways we can involve your surrogate decision maker and family. My goal is to make sure everyone is on the same page about your wishes so that we are all in the best position to advocate for you if you couldn't speak for yourself.

Information sources (i.e. CDC, WHO, OHSU resources)

COVID-19 information

- Oregon Health Authority COVID-19 Updates, including Stay Home, Save Lives materials you can download and share
- Oregon Coronavirus Information and Resources, Oregon governor's office
- Coronavirus (COVID-19), Centers for Disease Control and Prevention (CDC)
- What to do if you are sick, CDC
- People who need to take extra precautions, CDC
- How to prevent getting sick, CDC
- COVID-19 travel advisories, CDC
- COVID-19 guidance for businesses, Multnomah County Health
- Mask information, CDC

Updates

- COVID-19 in Oregon, Oregon Health Authority
- National and global cases and updates, CDC
- COVIDView, weekly summary, CDC
- World Health Organization daily situation reports

Provider resources

- OHSU COVID-19 Resources for Oregon
- OHSU COVID-19 FAQ and Resources for Providers
- Oregon COVID-19 Response ECHO for Clinicians
- Psychiatry Grand Rounds: Mental Health During the COVID-19 Outbreak (video)
- Online CME courses, including: COVID-19 and SARS CoV-2: A Background
- CDC information on COVID-19 for health care professionals

Employee & Staff Wellness

This list is adapted from the "Wellness Resources" by the OHSU Wellness Task Force.

Stress relief and managing anxiety

- FACE COVID: How to Respond Effectively to the Corona Crisis. Developed by Dr. Russ Harris, this video, eBook and infographic.
- Get some Headspace. Any U.S.-based health care professional can get a free Headspace Plus subscription by enrolling with their National Provider Identifier (NPI). All subscribers will get free access to all 1200+ hours of meditation and mindfulness content through December 31, 2020.
  Don't remember your NPI? Look it up here.

Support for caregivers, families and children

COVID and kids

- *Talking to Youth about COVID-19*, by Dr. Linda Schmidt. Watch the recording of the March 26 Doernbecher Children's Hospital Pediatrics Grand Rounds presentation, or earn CME by completing the online module.
- Understanding COVID Workbook for Kids
- Talking to your child about COVID-19 — 20-minute video from the American Academy of Pediatrics (AAP) about talking about COVID-19 with your child
- Helping Children Cope with Changes Resulting from COVID-19
- Talking to Children about Tragedies and other News Events
- COVID-19: Supporting At-Home Children

Entertainment

- Virtual Field Trips
- Virtual National Park Tours via Google Earth
- Online museum tours
- GoNoodle exercise resource

Education

- Free Mystery Science lessons for kids K-5
- Free Scholastic multi-curricular lessons for kids K-6 with code **SCHOOL1446**
- Online school schedules by grade from Kahn Academy
- OPB has adjusted its TV schedule to support K-12 students with grade level and subject-based programs during the coronavirus outbreak. View the broadcast schedule

Older Adults

- CDC COVID-19: If You Are At Higher Risk
- Coronavirus: What Older Adults Need to Know
- How Coronavirus Affects Older Adults
- Why Coronaviruses Hit Older Adults Hardest
- Families Concerned About Loved Ones in Nursing Homes, Assisted Living

- Coronavirus (COVID-19) Resources and Articles for Family Caregivers

Physical wellness

Many fitness studios and gyms are now offering free, guided workouts online. Here are a few:

- Orange Theory
- BurnCycle
- CorePower Yoga — free live classes streaming at 8 a.m., 1 p.m. and 6 p.m. (videos also available).
- Barry's Bootcamp — live workouts streaming twice a day (8 a.m. and noon).
- Firelight Yoga — live classes streaming daily.
- BurnMVMT — a local business offering free workout videos and guided meditations.

Financial Assistance

AFSCME Employee Hardship Fund

If you are an AFSCME-represented employee who is dealing with housing, transportation or food insecurity, there are resources available. Please click here to learn more. Once a referral has been made, a coordinator should be in touch within 48 hours.

Oregon unemployment

Criteria for unemployment benefits have expanded during COVID-19. UI benefits may be available to those who are on a temporary layoff. These benefits occur for claimants whose employer stops operation for a short period of time, such as cleaning following a coronavirus exposure or by government requirement. Workers can get UI benefits, and do not need to seek work with other employers. You must be able to work, stay in contact with your employer and be available to work when called back. Apply here.

Utilities and ancillary services

NW Natural, Portland General, Pacific Power as well as others are suspending disconnects and late fees to support Oregonians during the COVID-19 outbreak. Check the Oregon Office of Emergency Management for details or contact your provider directly:

- Portland General Electric (PGE): Find payment extension information online.
- Pacific Power: Call customer service at 888-221-7070.
- Portland Water Bureau: Apply for financial assistance online.
- NW Natural: Contact the billing department at 800-226-4211.
- Comcast is offering free and expanded services over the next 60 days, including free Wi-Fi hotspots, unlimited data for customers, and a temporary pause on disconnects and late fees.

Eviction moratoriums

Governor Kate Brown and Governor Jay Inslee issued temporary moratoriums on all residential evictions for tenants on the basis of non-payment of rent, and the U.S. Department of Housing and Urban Developments is helping to prevent foreclosures and evictions for home owners. See also: Multnomah County/City of Portland COVID-19 Eviction Moratorium.

Psychological support

24/7 support

Crisis Text Line

Text HELLO to 741741

National Suicide Prevention Lifeline
1-800-273-8255

Caring for Clinicians

Caring for Clinicians: COVID-19 webinars every Saturday

Resilience-building strategies and resources

We would like to highlight these resilience-building strategies and resources, which can protect your well-being during this challenging time:

Self-awareness is the first step

- Reflect on where you feel your stress in your body and what "bad habit" you engage in more when stressed (e.g., eating unhealthy, staying up late, and drinking more).
- Pause daily to notice signs of stress, and check in with your emotions.
- If you notice your stress level is higher, take action to reduce your stress.

Calm body, calm mind

- Exercise daily — taking a quick walk, running the stairs or doing some core work can help reduce stress hormones and improve mood and focus.
- Practice relaxation skills — breathing, mindful meditation or progressive muscle relaxation (tightening and then relaxing different parts of the body). Here are a few apps for learning relaxation skills/mindfulness:
    - headspace.com
    - calm.com
    - UCLA Mindful (free)
    - Insight timer (free)
    - Portland Mindful Medicine (online meetings for health professionals)
- Take at least a 10-minute break and step out of your work context for a brief time.
- Develop a healthy ritual for when you return home to help you disconnect from work and be more present for your family, friends and for yourself:
    - "Park your phone," if possible
    - Change your clothes
    - Take a hot shower
    - Go for a walk or exercise after work
    - Listen to music
    - Check in with a loved one

Prioritize basic self-care

- Prioritize sleep (eight hours is recommended for most adults).
- Stay hydrated and eat healthy. Try not to skip meals, and bring food and water to work.
- Reduce any unhealthy use of substances or stress eating.
- Take time off — before you become depleted.
- When feeling ill, use your sick leave — protect others by not coming into work.

Maintain or increase social connection

- Check in regularly with family and close friends.
- Reach out via telehealth, phone or text to your colleagues, staff, learners and patients
- Confide in someone you trust. Reassurance is fine to seek— you're human, too.

Notice meaningful and positive experiences

- Pay attention to the daily moments of meaning and purpose in your professional work.
- Reflect on your values and how you might use these values to guide you.

- Identify your personal goals, try to move toward them and notice small progress. This helps facilitate a sense of control in the face of so many changes.
- Recognize what is going well in your life — gratitude journaling of "one good thing that happened today" can help improve your mood.

Act with kindness and appreciate others' efforts

- Recognize other people's efforts — sending them a note of appreciation can lift your mood, too.
- Ask others how you can help.
- Include appreciative inquiry in group discussions/meetings.
- Invite others to comment on something they appreciated about the team's efforts — perhaps they noticed a colleague who went the extra mile, or something that gives them joy or hope. This type of discussion can increase the positive mood of team members.
- Consider ways to post and share with your team some messages of hope, support and appreciation — virtually or in a visible work area (out of patient care areas).

Recognize growth

- Ask yourself how you might grow or learn from this experience.
- Recognize what strengths you are drawing upon to cope with this situation.
- Notice the ways that your colleagues are using their strengths and skills.

Suicide Prevention

Early data suggests increased rates of depression and suicidality since the start of the COVID-19 public health crisis. Whether you are the one experiencing suicidal thoughts or you are here to help another person, we thank you for being here. **You are not alone. Help is available.**

Connect with support

Crisis resources are still available during this pandemic.

- National Suicide Prevention Lifeline 24/7: 800-273-8255
- Alcohol and Drug Helpline 24/7: 800-923-4357 24/7
- Mobile County Crisis Teams
    - Multnomah County "Project Respond" 503-988-4888
    - Washington County Mobile Crisis Team 503-291-9111
- Mental Health Urgent Care
    - Multnomah County Cascadia Walk-In Clinic 503-963-2575 Daily 9 a.m.–9 p.m.
    - Washington County Hawthorn Walk-In Center 503-846-4555 Daily 9 a.m.–8:30 p.m.
- Call to Safety: Domestic and Sexual Violence 503-235-5333
- Suicide Bereavement Support: https://afsp.org/support_group/suicidebereavement-support-inc/
- Food, housing, health, and other resources: 2-1-1

Learn more

- The American Foundation for Suicide Prevention offers resources for those whose lives have been touched by suicide. Their website features COVID19-specific discussion of mental health as well as resources specific to health professionals.
- The National Suicide Prevention Lifeline offers a wealth of suicide prevention resources online. Check out the "Stories of Hope and Recovery" section to hear stories about healing.

Spiritual support

Grief

A Nation's Grief: Loss in the Time of COVID-19 (12:45) — Led by Susan Hedlund, LCSW, OSW-C, director of patient/family support services at the OHSU Knight Cancer Institute and senior scholar with the Center for Ethics. This

webinar, recorded from a presentation on April 6, 2020, is less about traditional grief as we know it and more a consideration of the collective grief we feel as a nation during this pandemic.

Online worship services

Online worship services and various resources are available for spiritual support by denomination/religion (this is not an exhaustive list):

- Catholic
- Episcopal
- Lutheran - Online services available in English and Spanish
- Methodist
- Presbyterian
- Southern Baptist
- American Baptist
- Reform Jewish
- Conservative Jewish
- Orthodox Jewish
- Islam
- Zen Buddhist
- Insight Meditation

Daily Prayer and Meditation

- Our Daily Bread
- Meditation apps
- Free online Buddhist meditation session with well-known teachers
- Pray as You Go

Interpersonal relationships

These stressful times can present unique challenges for relationships. If you are experiencing increased conflict, feelings of disconnect, or communication-related issues in your partnership, you are not alone. The following resources may be helpful as you navigate these stressful times.

- The New York Times: How to Help Your Relationship Survive a Lockdown
- Time magazine: Can Your Relationship Survive the Togetherness of a Pandemic? 11 Things Couples' Therapists Recommend
- CNN Health: Can your marriage survive the coronavirus?

References

- https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it
- https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fsymptoms.html
- https://www.who.int/news-room/q-a-detail/q-a-coronaviruses
- https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Ftransmission.html
- https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf
- https://covidpep.umn.edu/
- https://www.fda.gov/drugs/drug-safety-and-availability/fda-advises-patients-use-non-steroidal-anti-inflammatory-drugs-nsaids-covid-19
- https://www.health.harvard.edu/diseases-and-conditions/treatments-for-covid-19
- https://www.ifm.org/news-insights/boosting-immunity-functional-medicine-tips-prevention-immunity-boosting-covid-19-coronavirus-outbreak/
- https://news.ohsu.edu/2020/03/25/the-oregon-poison-center-at-ohsu-warns-against-dangerous-covid-19-remedies-circulating-on-social-media
- https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html
- https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html
- https://www.acog.org/patient-resources/faqs/pregnancy/coronavirus-pregnancy-and-breastfeeding#Can%20COVID19%20pass%20to%20a%20baby%20through%20breast%20milk
- https://www.cdc.gov/coronavirus/2019-ncov/faq.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fchildren-faq.html
- https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/children.html?deliveryName=USCDC_2067-DM23953
- https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fhigh-risk-complications.html
- https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhealthcare-facilities%2Fprevent-spread-in-long-term-care-facilities.html
- https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/care-for-someone.html
- https://www.cancer.gov/contact/emergency-preparedness/coronavirus
- https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fhigh-risk-complications.html
- https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/index.html
- https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html
- https://www.vitaltalk.org/guides/covid-19-communication-skills/

- Decision Support for COVID19 Testing ED a
- OHSU PC COVID In-person Visit Guide
- Disposition-Sympto matic-COVID-19-ED
- MA Testing Workflow
- Ambulatory-Mobile-COVID-Testing-Protoc
- Nasal Wash Poster
- Nasal Swab Poster
- Oropharyngeal Swab
- Guidance for Rapid Test
- Retesting of Asymptomatic Patient
- Isolation Instructions
- COVID Result Workflow Patient
- Standard Precautions
- Transmission-based-I solation-Precautions.p

- Recommended PPE
- Guidance for Aerosol Generating Procedure
- PPE Logisitics
- Chest Imaging Recommendations
- Radiology Ordering Criteria
- At-home care with COVID
- Treatment Guidelines for Adult Patients
- Management of Mother with Newborr
- HCM-21660104-OH SU-Criteria-for-Staff-I
- Checklist to Limit COVID 19 Exposure R
- De-isolation Criteria for Outpatients
- Outpatient Virtual Visit Billing Handout
- Primary Care COVID Virtual Visit Guide

- Guidelines for obtaining written cons
- COVID GOC Handout