GUIDANCE FOR INFECTION PREVENTION OF COVID-19 FOR WUSM CLINICAL AREAS

NOTE: This policy is intended for use by Washington University School of Medicine (WUSM) clinical facilities. Washington University staff and clinicians working in non-WUSM facilities (e.g., BJC hospitals) should refer to hospital and system-specific policies.

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Clinical Presentation and Risk Factors

Symptoms of COVID-19 include fever, cough, and shortness of breath. Other symptoms reported include sore throat, new or worsening myalgias, loss of taste and smell, headache, chills, repeated shaking with chills, and occasionally diarrhea.

The virus is spread from person-to-person mainly through respiratory droplets produced by coughs and sneezes and between people who are in close contact with one another.

Patients with mild illness may not require hospitalization. Supportive home care is preferred in patients who are clinically stable, have appropriate caregivers available (or able to care for self), and can self-isolate at home.

Possible risk factors for progressing to severe illness include but are not limited to: over 65 years of age, immunosuppression, cardiovascular disease, diabetes mellitus, chronic respiratory disease, hypertension, and/or cancer. Protective factors against severe illness include vaccination.

The decision to manage a patient in an outpatient or inpatient setting should be made based on the clinical condition of the patient.

Clinical management includes prompt implementation of recommended infection prevention and control measures and supportive medical care. Recommended medications are detailed in the COVID-19 Treatment Guidance Document.

Masking

During surges of respiratory viruses (not exclusive to influenza) that yield changes to masking requirements, it will be implemented and communicated from the WUSM Faculty Practice Plan (FFP) for Washington University School of Medicine clinical facilities, in collaboration with BJC.

To guide these decisions, infection prevention, occupational health, and infectious disease specialist will continue to track rates in the community and among staff, along with hospitalization rates to evaluate whether and when masking requirements will change.

UNIVERSAL:

- During times when Universal Masking is implemented, all persons entering the healthcare facility will wear a face mask to provide source control and to protect others from transmission of respiratory viruses.
  - Employees must wear a medical grade isolation mask when interacting with patients and/or when visiting public places.
  - All patients and visitors will be offered a medical grade isolation mask upon arrival to a facility who have respiratory signs or symptoms.
SITUATIONAL:

- During times when Situational Masking is implemented, masking will be strongly encouraged for patients and visitors/families who show signs or symptoms of respiratory illness or those with a known exposure to someone with a respiratory illness.
  - Employees will continue to wear medical grade isolation masks as a safety precaution in specific situations, per standard hospital operations.
  - Health care personnel will be required to wear medical grade isolation masks when permitted to work with signs or symptoms of respiratory illness and when directed by Occupational Health.
  - Masking is optional for all patients and visitors/families.

Employee Management

- Self-Assessments should be completed daily by all employees.
  - Employees should self-assess for signs or symptoms of illness before reporting to work.
  - Washington University employees should call WUSM Occupational Health (314-362-3528) for evaluation of respiratory illness before coming to work.
  - Employees with vaccine exemptions will need to confirm self-assessment using an online screening tool before coming to work each day or wear a mask throughout their workday.
- Masking for employees is situational in clinical and public areas and at in-person events.
- Employees should wear a medical grade isolation mask if they show signs or symptoms of respiratory illness when they have been cleared to work.
- Employees with a recent known exposure to someone with a respiratory illness should wear a medical grade isolation mask.
- Masking will still be required due to:
  - Transmission-based precautions per policy (i.e., isolation signs, isolation policy)
  - Occupational Health (OH) requirements (e.g., cleared to work but still symptomatic, on return to work after COVID infection)
  - Per patient’s request of clinician/employee providing care.
- WUSM Occupational Health determines return to work criteria for employees with COVID-19.

Patient and Symptom Screening

- Masking at BJC and Washington University facilities is optional for patients unless required for patient isolation precautions.
• Patients may request an employee to mask when providing care.

• Patients are expected to be screened for symptoms, recent exposures, or recent positive COVID test results at the time of their health care encounter.

• Conduct symptom screening of patients before their scheduled visits via phone, if feasible.
  o Clinically stable ill or recently COVID-exposed patients coming in for non-urgent/routine appointments or procedures should be rescheduled, if feasible.
  o Ensure patient has supportive care available at home, and advise patient to seek medical care if symptoms worsen.

• Instruct all patients with respiratory symptoms to wear a medical grade isolation mask within the facility.
  o Provide a medical grade isolation mask to patients with respiratory symptoms who arrive at the facility without wearing a face mask or who are wearing a cloth face covering.
  o Patients who enter the facility wearing their own medical grade isolation mask can continue to wear it unless it has an exhalation valve.
    ▪ Patients wearing a mask with an exhalation valve will be provided an isolation mask.
  o An isolation mask should not be placed on young children under age 2, anyone who has trouble breathing, or anyone who is unconscious, incapacitated, or otherwise unable to remove the mask without assistance.

• A medical grade isolation mask should be worn anytime a symptomatic patient is required to come into a WUSM clinical facility if able to tolerate.

• Place symptomatic patients and/or patients who screen positive for possible exposure in a private room with the door closed until they can be assessed for possible COVID. If private room is not readily available, ensure patient is not allowed to wait among other patients seeking care.

• Patients requiring an in-person visit within 10 days of a COVID-19 diagnosis, who cannot be managed with a tele-visit or phone assessment, should be escorted directly to a private room in the care area with the door closed where staff can assess the patient in appropriate PPE.
  o When clinically necessary for patient requiring an in-person visit, patient should wear a medical grade isolation mask.

• Testing criteria may change. Current CDC COVID-19 person under investigation (PUI) criteria are detailed on the CDC website, but subject to change: https://www.cdc.gov/coronavirus/2019-ncov/testing/diagnostic-testing.html.

• See Guidance: COVID Testing Pre-Procedure & Procedural PPE document for details on current pre-procedural testing recommendations
Visitor Management

- Masking at BJC and Washington University clinical facilities is optional for visitors and families, during times with Situational Masking, but may change during times of increased respiratory virus activity (see MASKING section above).
- Visitors should be strongly encouraged and recommended to wear a medical grade isolation mask if they are showing signs or symptoms of respiratory illness or have a recent known exposure to someone with a respiratory infection.
- If they are visiting a patient on isolation precautions, they should be offered medical grade PPE as directed by the care team when entering the room with patient.
- Visitors should doff PPE and must perform hand hygiene when leaving the room.

Social Distancing

- Social distancing is a key principle of infection prevention and is recommended when feasible, restrictions on limiting seating in cafeterias, waiting rooms, break rooms, etc. is not necessary and is at the discretion of the facility.
- During surges of respiratory viruses, it may be necessary to maintain social distancing for the safety of employees, patients, and visitors/families.
- When Social Distancing is necessary:
  - Maintain a distance of 6 feet from those around you.
  - Keep your distance in work rooms, pantries, or other common areas.
  - Arrange break room tables and chairs to keep seating 6 feet apart.
  - Stagger employee break and mealtimes.

Personal Protective Equipment (PPE)

- Healthcare personnel (HCP) are to practice hand hygiene and standard precautions with all patient encounters.
- **For COVID-19 suspected/confirmed patients:**
  - HCP to follow *airborne precautions plus contact precautions with eye protection.*
  - Required PPE:
    - N95 respirator/Powered Air-Purifying Respirator (PAPR)/Controlled Air-Purifying Respirator (CAPR)
    - Eye protection (eyeglasses alone are not protective)
    - Gloves
    - Gowns
o In clinic/outpatient settings, patient to be managed in private room with door closed and interactions limited.

o Any symptomatic patient being tested for COVID, either via dedicated COVID test or respiratory panel, should be placed on these transmission-based precautions until any/all tests that include COVID have resulted.

- See Appendix D– COVID-19 PPE by Respiratory Protection Type

COVID-19 Patient Placement

See Appendix I: Patient Placement Guidance and Patient COVID Flags in EPIC for additional details on EPIC flags and patient placement.

Confirmed or Suspected to have COVID-19

- On arrival to a WUSM clinical facility, place symptomatic patients or patients who have had a positive COVID test within the last 10 days in a private room with the door closed.

- Patients considered at elevated risk for COVID-19 infection due to symptoms should be flagged as ‘COVID Suspected’ and placed in a private room until their status can be determined.

- COVID-19 exposed patients should be flagged as ‘Exposure, COVID-19’ and placed in a private room.

- Negative pressure ventilation (NPV) rooms, if available, should be considered for COVID-19 patients needing or anticipated to need aerosol-generating respiratory procedures.

- Limit patient movement outside of the room; patients must wear a medical grade isolation mask when out of the room.

- Minimize number of employees who enter the room.

- Minimize room transfers of patients with suspected or confirmed COVID-19, if feasible.

Influenza-like Illness

- Any patient with symptoms of influenza-like illness should be placed in a private room with the door closed.

Semi-Private Rooms and Cohorting

- See BJC System-specific policy for inpatient areas

Surge Planning

- See BJC System-specific policy for inpatient areas. Refer to Appendix 7 (Infectious Patient Surge Planning) of the of the Emerging Infectious Diseases Policy when a HSO is experiencing a surge of COVID-19 patients.
COVID-19 Patient Transport

- Limit patient movement outside of the room; testing and diagnostic procedures shall be performed in the patient room unless impossible and the procedure is medically necessary. Patients shall be the last case of the day when feasible.

- When feasible, HCP responsible for caring for a patient suspected or confirmed to be infected with COVID-19 will transport the patient.

- HCP should wear a N95 respirator and eye protection/PAPR/CAPR when transporting the patient. If there is an anticipated need to provide medical assistance during transport, additional PPE may be worn.

- If transport is necessary, patient must wear a medical grade isolation mask when out of the room, if tolerated. For patients requiring a mask or other device with exhalation holes, place a loose-fitting isolation mask over the holes during transport, if tolerated.

- When moving a patient to another department within the facility, the patient’s clinical staff shall notify the receiving areas of the patient’s status as someone suspected or confirmed to be infected with COVID-19.

- Stretcher or wheelchair rails shall be wiped with disinfectant wipe before and after transporting the patient.

- Patient shall perform hand hygiene prior to leaving the room.

- Elevators used to transport the patient shall be dedicated for the transport team during active transport (i.e., other employees or patients and visitors asked to step out). The patient shall not be held in any waiting areas.

Patient Ambulation

- See BJC System-specific policy for inpatient areas

Respiratory Specimen Collection

- For symptomatic suspect patients, collect nasopharyngeal (NP) or oropharyngeal (OP) swabs using airborne precautions with eye protection and contact precautions. Required PPE:
  - N95 Respiratory/PAPR/CAPR
  - Eye protection
  - Gloves
  - Gown

- For asymptomatic patients, required PPE:
  - Surgical/isolation mask
  - Gloves
• Do not collect NP and OP swabs in clinic/outpatient settings in a critically ill patient who will be transferred to a higher level of care.
• Minimize number of employees who enter the room during specimen collection.
• Visitors shall not be permitted to be in the room during specimen collection.

Aerosol-Generating Procedures on COVID Patients

• Avoid aerosol-generating procedures in clinic/outpatient settings unless necessary for patient care. See Appendix E – Non-Exhaustive List of Aerosol-Generating Procedures

• HCP are to follow airborne precautions with eye protection and contact precautions. Required PPE:
  o N95 respirator/PAPR/CAPR
  o Eye protection
  o Gloves
  o Gown

• Conduct aerosol-generating procedures in NPV room if feasible. If not feasible or available, then conduct in a private room with the door closed.

• Bundle procedures if feasible.

• Minimize number of employees who enter the room during the procedure.

• Visitors shall not be permitted to be in a patient room during the procedure.

Periprocedure Guidance for Patients Suspected or Positive for COVID-19

• Delay non-emergent procedures until the patient is no longer infectious, if possible.

• If the procedure cannot be delayed, the case must be coordinated with Infection Prevention.

• Schedule the procedure for end of day, if possible.

• Respiratory aerosol-generating procedures should be performed in a NPV room
  o If unable to use NPV room, damp towels should be placed at procedure room door to minimize airflow out of the room; consider use of HEPA-filter. All personnel entering the room must wear a N95 respirator for one hour after patient leaves the room.

Testing and Diagnosis


- Diagnostic testing may include the following:
  - Chest radiograph
  - Pulse oximetry (or arterial blood gas, if indicated)
  - Complete blood count with differential
  - Complete metabolic panel (CMP)
  - Lactate dehydrogenase (LDH) level
  - Creatine phosphokinase (CPK) level
  - Blood cultures (at least two sets, collected before antibiotics are given, if possible)
  - Sputum Gram stain and culture (before antibiotics are given, if possible), if patient with productive spontaneous cough (induced sputum not recommended)
  - Legionella urinary antigen
  - Respiratory PCR
    - Multiple (NP swab and/or BAL/bronchial wash) OR
    - Influenza A/B + RSV PCR (NP swab)

- Patients at WUSM clinical facilities with evidence of moderate to severe respiratory compromise (e.g., respiratory rate ≥30, oxygen saturation <92% room air, altered mental status, tachycardia, etc.) should be referred to an emergency department via ambulance for further care.
  - WUSM clinical facilities may utilize the BJH Doctor’s Access Line: 800-252-3627 to contact a WU Infectious Diseases physician for specific COVID-19 related questions on stable patients.

Current CDC guidelines for collecting, handling, and testing clinical specimens from PUI for COVID-19 are detailed on the CDC website, but subject to change: https://www.cdc.gov/coronavirus/2019-ncov/lab/guidelines-clinical-specimens.html

- COVID-19 results and other COVID-19 data including deaths and Healthcare Associated COVID-19 are reportable to public health using centralized reporting protocols.

- Serologic assays are available to determine past infection with the SARS-COV-2 virus. There are currently no serologic assays that can reliably diagnose COVID-19 or predict immunity. Serologic testing SHOULD NOT be used to rule in or rule out COVID-19 infection, nor to assess immunity after infection or vaccination.

- In general, at home rapid antigen test results should not be used for decisions about patient placement and isolation*. At home rapid antigen test results may vary due to type of test and testing technique, though they can be helpful for the general public in making quarantine and isolation decisions outside the healthcare setting.
  - Patients being admitted to the hospital reporting a positive home-based rapid antigen test should be isolated and re-tested with a PCR test.
Any healthcare or nursing home administered COVID antigen test may be accepted as proof of a positive result if scanned into the medical record or documented in the medical record.

At home COVID antigen tests cannot be accepted as proof of a negative result. Confirmatory PCR is needed if there is clinical suspicion of COVID.

For the purposes of scheduling an outpatient visit, a positive at home COVID antigen test can be interpreted as a positive test — the COVID-19 isolation flag should be placed in the patient chart and the appointment should be delayed if possible (see Outpatient Appointment Plan for Patients with Confirmed COVID-19).

*Exception: if a positive at home test result within the last 10 days is confirmed with a lab-based test, then the date of the positive at home test, or start date of associated illness symptoms, may be used to help determine the duration of isolation.

- Symptomatic patients who test negative with a lab based or home rapid antigen test should have PCR testing ordered and be treated as “COVID: Suspected” while waiting for PCR results. The accuracy of a lab-based antigen test is less than that of PCR, which is considered the gold standard for diagnosing COVID-19 infection. Lab-based antigen testing is used in some outpatient locations. See table below for result interpretations.

- See Pre-Procedural Testing and Procedural PPE document for guidance for procedural testing

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Home or Lab-Based Rapid Antigen Test Result</th>
<th>Confirmatory PCR Result</th>
<th>Outcome/Isolation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptomatic</td>
<td>Positive</td>
<td>Positive</td>
<td>Confirmed COVID-19; Day 0 = date of symptoms or date of positive test (can use date of home test if within past 10 days of PCR)</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>Positive</td>
<td>Negative</td>
<td>Repeat PCR within 24-48 hours; if repeat negative, no isolation*</td>
</tr>
<tr>
<td>Asymptomatic</td>
<td>Positive</td>
<td>Negative</td>
<td>Repeat PCR within 24-48 hours; if repeat negative, no isolation*</td>
</tr>
<tr>
<td>Symptomatic or Asymptomatic</td>
<td>Negative</td>
<td>Positive</td>
<td>Confirmed COVID-19; Day 0 = date of symptoms or date of positive test</td>
</tr>
</tbody>
</table>

*If repeat PCR result is discrepant with previous PCR, repeat with 3rd PCR to confirm. If confirmed COVID-19 positive, isolation time period (Day 0) should be calculated with first date of symptom onset or date of first positive test, whichever came first.

- Any symptomatic patients and/or patients with known high-risk exposure within the last 10 days should be isolated as “COVID: Suspected” while awaiting confirmatory PCR testing. Exposed patients who test negative should remain isolated for 10 days after exposure.
Environmental Cleaning and Disinfection

- **Environmental Services (EVS):** See BJC System-specific policy for inpatient areas
- Required PPE should be determined by the isolation precautions in place for the patient.
- For patients who are on airborne precautions plus contact precautions, due to known or suspected COVID-19 infection, after the patient leaves the exam room, the room should be cleaned by personnel using WUSM FPP approved products. If a respiratory aerosol generating procedure was performed in the room (including both non-NPV and NPV) OR if the patient was not wearing a medical grade isolation mask in the room, the room should be blocked for one hour after patient leaves the room to allow for clearing of potentially infectious airborne particles. Infection Prevention may be consulted to evaluate releasing the room prior to one hour.
- In outpatient and clinic settings, after the patient departs the room, perform the standard terminal/end of day cleaning protocol. No special PPE is needed to clean the room.
- Waiting areas and common spaces should be cleaned more frequently during COVID-19 surges. Frequency should be determined based on the space. Chairs, armrests, tables, and counters should be disinfected with a hospital-approved disinfectant at least once in the middle of the day and again at the end of the day. If waiting room is 24/7, space should be disinfected at least once overnight and/or first thing in the morning.
  - More frequent disinfecting might be needed when the space is occupied by young children and others who may not wash hands or cover coughs or sneezes and if gross soiling occurs.
  - Disinfect other high touch points at least once per day and if gross soiling occurs. Examples of high touch points: credit card machines, tablets, keypads, and touch screens.
  - Wipes should be available in break rooms and staff lunch rooms for users to disinfect the table after each use.
  - Approved disinfection wipes (e.g., PDI Super Sani-Cloth ‘purple-top’ wipes should be made available. The wipes container should be closed after each use.

Exposure Management

- See **COVID-19 Patient Exposure Management Plan**

Clinical Management and Treatment

- See **COVID-19 Treatment Guidance**

Duration of Isolation Precautions

The decision to discontinue transmission-based precautions should usually be made using a symptom-based strategy. A test-based or time-based strategy may sometimes be indicated, per below criteria. Meeting criteria for discontinuation of transmission-based precautions is not a prerequisite for

CDC Decision Memo regarding Discontinuation of Transmission-Based Precautions can be reviewed here: https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html. See EPIC Isolation Algorithm.

Isolation Discontinuation Criteria for Hospitalized Patients with COVID-19***

1. Inpatient Symptom-Based Discontinuation Strategy – For inpatients, follow CDC recommendations for isolation duration for patients based on immune status and severity of illness
   a) Immunocompetent inpatients with severe to critical illness*
      i. At least 24 hours have passed since resolution of fever without the use of fever-reducing medications AND
      ii. Improvement in symptoms (e.g., cough, shortness of breath) AND
      iii. At least 15 days have passed since symptoms first appeared

   b) Immunocompetent inpatients with mild to moderate illness – precautions can be removed when:
      i. At least 24 hours have passed since resolution of fever without the use of fever-reducing medications AND
      ii. Improvement in symptoms (e.g., cough, shortness of breath) AND
      iii. At least 10 days have passed since symptoms first appeared

   Mild – moderate illness is defined as individuals who have any of the various signs and symptoms of COVID-19 (fever, cough, sore throat, malaise, headache and/or muscle pain, shortness of breath, dyspnea, or abnormal chest imaging) who have not had four room air O2 saturation readings below 94% in a 24-hour period AND have not required ≥24 hours of supplemental O2

   c) Moderately to severely immunocompromised ** inpatients
      i. At least 24 hours have passed since resolution of fever without the use of fever-reducing medications AND
      ii. Improvement in symptoms (e.g., cough, shortness of breath) AND
      iii. At least 20 days have passed since symptoms first appeared OR
      iv. 2x negative SARS-CoV-2 assay collected >24 hours apart
         1. If positive upon re-test, wait at least 7 days before re-testing

   d) Inpatients hospitalized for non-COVID reasons, without COVID-19 symptoms, found to be positive on preprocedural or replacement testing – see time-based strategy below:
      i. At least 10 days have passed since date of first positive COVID-19 test, assuming no symptoms subsequently developed.

2. Outpatient Symptom-Based Discontinuation Strategy (per CDC recommendations for isolation duration for immunocompetent patients with mild to moderate illness)
   a) At least 24 hours have passed since resolution of fever without the use of fever-reducing medications AND
b) Improvement in symptoms (e.g., cough, shortness of breath) **AND**
c) At least 10 days have passed since symptoms first appeared or if asymptomatic, since initial positive SARS-CoV-2 assay
   i. Extend duration to 15 days if outpatient requires supplemental oxygen*
   ii. Extend duration to 20 days if outpatient is moderately/severely immunocompromised**
*Defined as having four room air O2 saturation readings below 94% in a 24-hour period OR requiring supplemental O2 for 24 hours or more
**Immunocompromised as per Isolation Policy: Care of the Immunocompromised Patient

3. **Test-Based Discontinuation Strategy** – to be used:
   a) On a case-by-case basis in consultation with local infectious disease experts.
   b) For moderate to severely immunocompromised patients in coordination with Infectious Disease consultants.
   c) May be needed for patients being discharged to a long-term care facility or skilled nursing facility which requires testing.
   d) May also be use in other situations where the symptom or time-based isolation period needs to be reduced, in consultation with local infectious disease experts:
      i. At least 24 hours have passed since resolution of fever without antipyretics **AND**
      ii. Improvement in applicable symptoms **AND**
      iii. 2x negative SARS-CoV-2 assay collected >24 hours apart
         1. If positive upon re-test, wait at least 7 days before re-testing

4. **Time-Based Discontinuation Criteria** - for asymptomatic, positive COVID-19 patients (e.g., presurgical or patients hospitalized for other reasons found to be positive on required discharge testing)
   a) At least 10 days have passed since date of first positive COVID-19 test, assuming no symptoms subsequently developed

***Calculation of isolation period: date of symptom onset/date of positive COVID test = Day 0

**Isolation Discontinuation Strategies for Hospitalized Patients with a Negative COVID-19 Test:**

1. **Patients who test negative for COVID-19 despite high clinical suspicion for infection**
   a. False negative test results could be due to timing of specimen collection in relationship to the disease or related to poor specimen collection technique. Before discontinuing transmission-based precautions on a patient with high clinical suspicion for COVID-19, the patient should be evaluated clinically to determine if a repeat COVID-19 test should be conducted.

   • In EPIC, the ‘COVID-19 Suspected’ reason for isolation flag that is auto-generated when a COVID-19 test is ordered on a symptomatic patient and will fall off immediately after a negative result. If determination is made that patient should be retested for COVID-19, the ‘COVID-19 Suspected’ flag will again be auto-generated with a new test order.

   • General considerations include the following, including the use of a flowchart (See Appendix F – Isolation Discontinuation / Suspect False Negative Decision Algorithm):
A. If yes Is there an alternative diagnosis that explains the patient’s clinical syndrome?
B. Was the patient tested not due to clinical suspicion but due to preoperative or pretreatment screening?
   ▪ If yes to A or B, retesting not indicated and precautions can be removed.
C. Is clinical presentation compatible with COVID-19? (See Appendix F – Isolation Discontinuation / Suspect False Negative Decision Algorithm)
   ▪ Please review clinical history (including exposure history), data, and course of illness
   ▪ If yes, consider retesting before removing isolation precautions

Outpatient Appointment Plan for Patients with Confirmed COVID-19

- In-person clinic appointments during acute illness or within 10 days of a high-risk exposure (i.e., a household member or intimate partner) should be avoided if clinically appropriate. Use telehealth or phone appointments for primary care needs and follow-up while patients are symptomatic.
- If possible, appointments should not be scheduled sooner than 10 days after the date of positive COVID-19 testing if testing was performed in an outpatient setting. See For post-discharge/illness appointments below, if provider determines that a COVID-19 positive patient must be seen in a WUSM clinical facility prior to 10 days, due to an urgent medical condition that cannot wait.
- If a patient with confirmed COVID-19 infection reports worsening symptoms at home, telehealth should be used to evaluate and triage patient needs.
  - If there is need for an urgent in-person evaluation, the patient should be directed to the emergency department with prior notification of ED staff. Patients should be directed to wear masks when entering the emergency department and to immediately identify themselves to ED staff as having confirmed COVID-19 disease.
  - Patients who require admission for additional medical needs but are stable for direct admission should be directly admitted to the COVID-19 ward, where available. New complications can occur within 4 weeks of initial COVID onset. These admissions should be coordinated through patient placement and infection prevention.

For post-discharge/illness appointments

- Consider rescheduling in-person visits for patients who:
  - Have been exposed to a person with known or suspected COVID, within the past 10 days.
  - Have been tested for COVID and results are pending.
  - Have not yet met criteria for isolation discontinuation.
  - Have symptoms consistent with COVID and not yet tested.
- If patients must be evaluated in the situations noted above, minimize in-person visits as much as possible, unless clinically necessary. Utilize telehealth or phone assessments preferentially.
Patients who require an in-person visit should wear a medical grade isolation mask on arrival to the facility.

- If confirmed COVID-19 patients require an in-person visit while still on COVID precautions (usually for 10 days after a positive test), the following precautions should be taken:
  
  o Schedule patient as the last patient of the day if possible.
  o Patient should wear a face covering/mask to and from the facility and don a medical grade isolation mask on arrival to the facility.
  o Facilities should have a process to identify patients and/or notify areas of patient arrival (e.g., a clinic staff member in appropriate PPE can meet the patient at the entry point and escort the patient directly to the care area or a visual cue can be given to patients with a positive screen [yes to any screening questions] by the screener to alert the patient clinical area destination). Patient should not wait in waiting area but should be brought immediately back to a private room, with the door closed.
  o Staff should wear PPE per criteria outlined above in the PPE section.
  o Wipe down non disposable equipment (such as BP cuff) used on the patient with routine cleaning products.
  o Room cleaning after the patient departs per usual terminal/end of day cleaning protocol. No special PPE needed to clean the room.

- Patients should be called by front office staff the day prior to the appointment to confirm that they have been fever free for 24 hours, with improvement in other symptoms, prior to appearing in clinic.
  
  o If patient has met criteria for discontinuation of isolation precautions (see above), patient may be seen in clinic/outpatient settings using standard precautions.
  o If a patient has not met criteria for discontinuation of isolation precautions (see above), the provider with whom the patient is scheduled should be notified and the clinic visit rescheduled if possible.
    • If urgent and unable to reschedule for later date, or in-person clinical assessment is indicated, treat as confirmed case with caregivers wearing PPE per criteria outlined above in the PPE section during visit.

**Calculation of isolation/quarantine:** Date of symptom onset/Date of positive COVID test/Date of Exposure = Day 0, whichever came first.
Appendix A: Operational Guidance for In-Person Patient Screening of COVID-19

1. Respiratory hygiene stations will remain at entry points of all facilities, and masks readily available for those who choose to mask.

2. At time/location of healthcare encounter: screen patients for positive COVID-19 test, recent exposure, or COVID-19 symptoms within the last 10 days.

3. COVID-19 symptoms include:
   a. Fever
   b. Cough
   c. Shortness of breath/trouble breathing
   d. Sudden loss of taste and/or smell
   e. Sore throat
   f. Body aches
   g. Diarrhea or vomiting

4. For patients with recent positive test, symptoms, and/or recent exposure
   a. If patient is wearing a cloth mask, instruct patient to don a medical grade isolation mask
   b. At destination, place in a private with the door closed, ensure providers are aware of screening results
      i. If private room is not readily available, ensure patient is not allowed to wait among other patients seeking care
Appendix B: Guidance for Front Line Staff on COVID-19 Screening

Passive symptom screening is being conducted at every hospital to screen visitors and patients for Respiratory illness. We are asking about fever, respiratory symptoms, sudden loss of taste and/or smell, sore throat, body aches, diarrhea or vomiting, recent exposure to a person with COVID-19 in the past 10 days, or a recent diagnosis of COVID-19.

Respiratory hygiene stations are placed at entry areas of all facilities, and masks available for all patients and visitors who choose to mask.

Patients with respiratory symptoms, recent exposure, or who have tested positive for COVID-19 within the past 10 days should be provided with, and instructed to wear, an isolation mask.

- If you identify a patient who screens positive, please follow these steps:
  - If at destination, take them to a private room or ask them to wait in an area away from other people.
  - If they are here for an appointment, notify the provider.
  - If at entry point, instruct patient to proceed directly to destination and to alert front desk staff of symptoms on arrival. Consider using a visual cue such as a colored card.

  Date of symptom onset/Date of positive COVID test/Date of exposure = Day 0 (whichever came first)

If you identify a visitor who screens positive for symptoms, known exposure to a person with COVID-19 within the past 10 days or a positive COVID-19 test within the past 10 days, ask them not to visit right now.

Below are suggested talking points to support you in these conversations:

- Thank you so much for reporting your symptoms to us
- We want to take important precautions for the health and safety of our patients
- We’re giving you this mask to wear while you’re here, to prevent the risk of spreading any germs to others
- We appreciate your help during this busy time
- I’m going to show you to a room, and we’ll have a doctor follow up with you shortly
- This is part of our standard process for anybody experiencing respiratory illness who also has a risk of exposure to COVID-19
- The doctor will come talk with you about how to rule out COVID-19
Appendix C: Patient Access Screening Guidance

Questions to ask patients calling into patient access call centers or arriving at a hospital

1. Have you tested positive for COVID-19 within the last 10 days?

2. Do you have any of the following symptoms? New or worsening...
   - Fever
   - Cough
   - Shortness of breath/trouble breathing
   - Sudden loss of taste and/or smell
   - Sore throat
   - Body aches
   - Diarrhea or vomiting

3. Have you had contact with anyone who would put you at risk for contracting COVID-19 in the past 10 days?

Patient Calling:

- If the patient answers yes to 1, 2, or 3 above and is not emergently ill, please obtain the patient information and notify health care provider for further instructions.
- Direct all patients with respiratory symptoms to wear a medical grade isolation mask upon arrival, if tolerable by the patient

Patient arriving at an HSO, including Emergency Department:

- If the patient answers yes to 1, 2, or 3 above and is not emergently ill, please obtain the patient information and notify health care provider for further instructions.
- Ask all patients with respiratory symptoms to wear a medical grade isolation mask and proceed with proper intake protocols

Date of symptom onset/Date of positive COVID test/Date of exposure = Day 0 (whichever came first)

Below are some suggested talking points to support you in these conversations:

- Thank you so much for reporting your symptoms to us
- We want to take important precautions for the health and safety of our patients and our co-workers
- You will be given a mask to wear while you’re at the facility to prevent the risk of spreading any germs to others
- We appreciate your help during this busy time
- This is part of our standard process to help prevent the spread of COVID-19 and other respiratory viruses
Appendix D: COVID-19 PPE by Respiratory Protection Type

COVID-19 Personal Protective Equipment by Respiratory Protection Type

Masking will become situational for employees and optional for patients and visitors/families in healthcare settings effective March 22, 2023. Reference below graphic for when and what PPE may still be required.

N95 Respirator Required with Eye Protection, Gown, Gloves

Any team member participating in the care of patients who are positive for COVID-19 or patients under investigation (PUI) for COVID-19 must wear an N95 respirator/PAPR/CAPR, eye protection, gown and gloves.

Examples: Staff at any healthcare location who provide care to suspected or confirmed COVID-19 patients.

N95 respirators may also be used at the point of patient’s first contact with the health system when judged appropriate by care providers, including initial evaluation of patients in the ED, Clinics, Women’s Access Center and Urgent Care.

Isolation Mask Required
Masking will still be required due to:
- Transmission-based precautions per policy (i.e., isolation signs, isolation policy)
- When Occupational Health (OH) requirements are met (e.g., cleared to work but still symptomatic, or return to work after COVID infection)
- Specific stated request by the patient of clinician/employee providing care

To reduce workplace transmission, masking will be required for employees and recommended for patients and visitors:
- Showing signs or symptoms of respiratory illness
- With a recent known exposure to someone with a respiratory infection
- Employees are still expected to self-assess for signs or symptoms of illness before reporting to work and to contact OH for evaluation of respiratory illness before coming to work
- For vaccine-exempt employees screening should be conducted via the OH app prior to every shift or continue to mask.

How to Wear a Mask

1. Wash your hands with soap and water or clean with hand sanitizer.
2. Pick up the mask by holding the ear loops or ties.
3. Place the mask over your nose and mouth and secure the loops over your ears or tie the ties behind your head.
4. Mold or pinch the mask over your nose. The mask should be comfortable and allow you to breathe.
5. Wash or clean your hands again and avoid touching the outside of the mask with your hands.

BJC HealthCare Washington University School of Medicine in St. Louis
Appendix E: Non-Exhaustive List of Aerosol-Generating Procedures (AGP)

Note: this list is not exhaustive. Please discuss activities not described with Infection Prevention and/or Infectious Diseases.

- Tracheal intubation procedure, extubation and related procedures such as manual bag mask ventilation and open suctioning
- Invasive tracheostomy/tracheostomy procedures (insertion/removal)
- Open suction catheter use via tracheostomy, endotracheal tube, nasotracheal intubation (does not include normal oral or nasal suctioning)
- Bronchoscopy
- Non-invasive mechanical ventilation such as bi-level positive airway pressure (BiPaP) and continuous positive airway pressure ventilation (CPAP)
- High-frequency oscillating ventilation (HFOV)
- Heated high-flow nasal oxygen (HHFNO), also called high-flow nasal cannula
  - HHFNO defined as > 15L/minute
- Induction of sputum
- Naso-endoscopic procedure
- Medication administration via continuous nebulizer* (MDIs should be used unless clinically contraindicated)

*Nebulizers

The BJC Pharmacy, in partnership with respiratory therapy and emergency medicine has issued guidance on nebulized medications. Meter Dose Inhalers are preferred over nebulized therapy for non-intubated patients. Intubated patients may receive nebulized therapy through a closed system such as Aerogen. Treatment with a continuous nebulizer may temporarily aerosolize viral particles, although it is unclear how far these might travel or how long these may remain suspended. Follow risk-based guidance detailed below:

- Inpatients:
  - Meter dose inhalers are the preferred treatment when feasible.
- Outpatients: Nebulized therapy should be avoided when feasible. Screen patients before arrival and delay visit if possible. If not possible:
  - Schedule patient for last visit of day where feasible
  - Staff to wear PPE per PPE guidance section outlined earlier in document
  - Block room for 30 minutes following treatment
  - Wipe high-touch surfaces in room with approved disinfectant
    - Staff to wear gown and gloves to clean room
APPENDIX F: ISOLATION DISCONTINUATION / SUSPECT FALSE NEGATIVE DECISION ALGORITHM

*Inpatient Symptom-Based Strategy: 24 hours afebrile without antipyretics AND improvement in symptoms AND >10 days have passed since symptom onset for immunocompetent patients with mild/moderate illness. Severe/critical illness 24 hours afebrile without antipyretics AND improvement in symptoms AND >10 days have passed since symptom onset for immunocompetent patients (if admitted for non-COVID reason/asymptomatic for COVID, use time-based strategy below). Mild/moderate illness defined as having any of the various signs and symptoms of COVID-19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain, shortness of breath, dyspnea, or abnormal chest imaging), with a PaO2 saturation <94% no more than 4 times in 24 hrs and did not require supplemental oxygen > 0 or ≤ 24 hrs.

**Outpatient Symptom-Based Strategy: 24 hours afebrile without antipyretics AND improvement in symptoms AND >10 days have passed since symptom onset; extend to 15 days if required home supplemental oxygen.

***Time-Based Strategy: At least 10 days have passed since first positive COVID-19 test and no symptoms. Extend to 15 days if severe/critical illness, or outpatient requiring supplemental O2. Extend to 20 days if moderate/severely immunocompromised or use test-based strategy consulting with local ID experts.

****Test-Based Strategy: Resolution of fever without antipyretics AND improvement in respiratory symptoms AND negative SARS-CoV-2 assay from 2 NP swabs collected > 24 hours apart. If positive upon retest, wait at least 7 days before re-testing. For modestly/severely immunocompromised: 20 days have passed since symptom onset before testing. Consult with local ID experts.

**If COVID-19 still thought likely despite 2 negative tests, change isolation flag to COVID.

Calculation of isolation/quarantine: Date of symptom onset/Date of positive COVID test/Date of Exposure - Day 0

NOTE: Patients do not need to remain hospitalized until precautions removed. Need for hospitalization should be determined based on clinical needs.
Appendix G: Infection Prevention Immunocompromised Definition

*Immunocompromised Patients include:

- Those with neutropenia (ANC or WBC < 500/mm3)
- Those with leukemia/lymphoma undergoing chemotherapy
- Patients with HIV with CD4 count <200
- Transplant patients who have undergone solid organ or allogeneic stem cell transplant on immunosuppressive therapy or who have GVHD
- Transplant patients who have undergone autologous transplant less than 6 months from transplant
- Those on high dose steroids (e.g. >40mg of prednisone or its equivalent (>160mg hydrocortisone, >32mg methylprednisolone, >6mg dexamethasone, >200mg cortisone daily for >2 weeks)

*Please note: patients with autoimmune diseases requiring treatment with immunosuppressive medications, such as TNF alpha inhibitors, should be reviewed with ID for further direction
**Appendix H: EPIC COVID-19 RFI and Isolation Flag Logic**

<table>
<thead>
<tr>
<th>Reason for Isolation/Infection (RFI)</th>
<th>How the RFI is applied</th>
<th>How the RFI is removed</th>
<th>Isolation Flags required to match the RFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID19</td>
<td>1. Positive test result in our system OR 2. Manually added by Infection Prevention</td>
<td>1. If patient is discharged before day 10, flag will fall off day 11. If patient is discharged day 10-15, flag will fall off day 16 OR Falls off day 21 if patient is on the transplant registry and is no longer inpatient 2. If patient is outpatient, flag will fall off day 11(day added=day1) or day 21 if pt on transplant registry OR 3. Infection Prevention manual removal *Flag will not fall off while pt is an inpatient admission.</td>
<td>Contact and Airborne</td>
</tr>
</tbody>
</table>
| COVID: Suspected                   | 1. COVID test ordered on:  
  a. symptomatic patient for any testing reason, who does not already have the **COVID19** RFI OR  
  b. asymptomatic patient for testing reason: resident of congregate living facility, e.g. prison, SNF, who does not already have the **COVID19** RFI* OR  
  c. unable to obtain symptoms on patient due to altered mental status for any testing reason, who does not already have the **COVID19** RFI  
  2. Manually added by Infection Prevention  
  3. Respiratory Panel ordered *Outpatient orders on asymptomatic patients (no reason for test indicated) will not produce a flag upon ordering test. | 1. When lab results:  
  - If positive: changes to **COVID19**  
  - If negative: **COVID: Suspected** flag falls off  
  2. If manually added by Infection Prevention or added with a duplicate test that does not result, falls off after 1 day.                                                                 | Contact and Airborne                      |
| Exposure, COVID-19                 | 1. Manually added by Infection Prevention OR  
  Automatically added when a test ordered for an asymptomatic patient for testing reason: post-exposure testing required by public health agency OR known exposure to suspected or confirmed COVID-19 case. | 1. Falls off day 11 from day it was added (day added=day1) OR  
  2. Infection Prevention manual removal | Contact and Airborne                      |
| COVID: Recovered                   | Automatically added (when chart is re-opened) when a **COVID19** flag falls off or is manually removed. *COVID: Recovered will not be added after a manually added COVID19 flag expires; only after expiration or removal of a COVID19 flag added by test result. | 1. Automatically falls off after 90 days from the day it was added  
  Can be removed manually by IP | No isolation flag: Standard precautions    |
EPIC Inpatient COVID-19 Testing & Isolation Flagging for COVID-only Testing

- **COVID-19 SYMPTOMS?**
  - Yes or unsure due to altered mental status
  - Any testing reason
    - Testing reason: Asymptomatic screening prior to BMT or immunosuppressive therapy
    - Testing reason: Resident of congregate living facility, e.g., prison, SNF
    - Post-exposure testing: Known exposure to confirmed suspected COVID-19 case
  - COVID-19 Suspected
  - No change in isolation
  - COVID-19 Suspected
  - Exposure, COVID-19

EPIC COVID-19 Testing and Isolation Flagging for Respiratory Pathogen Panel Testing

- **Reason for Testing**
  - Surveillance testing for transplant patient
  - Known exposure to confirmed or suspected COVID-19 case

  - Yes
    - No change in isolation
    - COVID-19 Suspected
    - COVID-19 Suspected
  - No
    - No change in isolation
    - COVID-19 Suspected
    - COVID-19 Suspected
  - Initial flag in EPIC
    - No change in isolation
    - COVID-19 Suspected
    - COVID-19 Suspected
  - COVID result
    - +
      - COVID-19
    - -
      - No change in isolation
    - +
      - COVID-19 Suspected
    - -
      - COVID-19 Suspected
    - +
      - COVID-19
    - -
      - No change in isolation

*If positive for other respiratory pathogens in the panel, the patient will be flagged for the infection appropriate for the positive result (e.g., RSV, pneumo) in addition to the COVID flagging above.*
EPIC Outpatient COVID-19 Testing and Isolation Flagging for COVID Only Testing

COVID-19 SYMPTOMS?

- Symptom evaluation
- Yes or Unsure due to altered mental state
- No

Initial flag in EPIC

COVID Suspected

- COVID result
  - -
  - +

Change in RFI flag after COVID result

- COVID: Suspected flag drops off with negative result
- COVID: Suspected changes to COVID-19
- No change
- COVID-19

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Version 9/28/2023