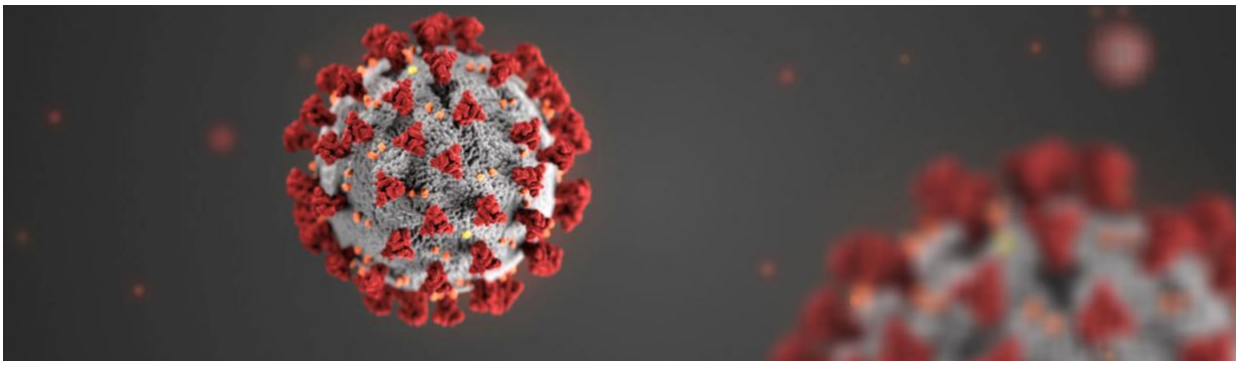
University Hospitals



COVID-19 Incident/Emergency Management Pre-Plan

(Long-Term Care / Post-Acute Care Facilities)

- Team Building
- Transmission Reduction
- Triage Preparedness
- Targeted Conversations
- Telehealth Capabilities
- Test & Treat in Place
- Transitions of Care

Seven (7) Pillars of COVID-19 Incident/Emergency Management Pre-Planning
Document Hyperlinked Sections Index:

COVID-19 Incident/Emergency Management Pre-Plan

Long-Term Care / Post-Acute Care Facilities

CDC Guidance to LTC Facilties

I. Pillar 1: Team Building

a. Form an interdisciplinary coalition of local/regional healthcare stakeholders including:

   i. Nursing Facility Leadership
      1. Administrator
      2. Director or Nursing
      3. Medical Director
      4. Consultant Pharmacist
      5. Consider Others: Attending Physicians, Advanced Practice Providers (APPs), Social Services, Admissions Director, Therapy Department Leadership, etc.

   ii. Hospital Leadership
      1. HICS (Hospital Incident Command Structure) Post-Acute Care Liaison
      2. Chief Medical and/or Nursing Officer
      3. Hospitalist Physician

   iii. Other Local/Regional Healthcare Entities:
      1. Local/County Health Department
      2. EMS/Transportation Providers
      3. Hospice & Home Health Care Providers

b. Identify & designate a hospital based HICS representative who can serve as a centralized point of contact for team communication, coordination of resources, and daily reporting

c. Develop communication strategies and tools to facilitate daily reporting, team/coalition communication, and management and transfer of residents:

   i. Health Department:
      1. Ensure you have an established contact with your local health department; when to call; how to report COVID-19 Person Under Investigation (PUI) or COVID-19 positive residents; and what support they might be able to provide in terms of staff education, facility-preparedness, PPE resources, COVID-19 testing, and interfacility surge guidance.

      2. ODH Local Health Department resource guide: https://odh.ohio.gov/wps/portal/gov/odh/find-local-health-districts

ii. Local Health System(s) or Hospital(s)

1. Establish a point of contact with your local hospital, preferably one who is connected to the HICS and can serve as a centralized point of contact and communication for the team

2. Develop and utilize a daily situational reporting (SIT-REP) to communicate daily with the coalition's central point of contact and communication within the HICS (COVID-19 Daily Facility Situation Report). This tool is used to assess facility status and need, and to help local hospitals to prepare for surge within the community. The SIT-REP should include the following for your facility:
    a. Contact information
    b. Current census & bed availability
    c. COVID-19 resident population status report
        i. Total number of COVID-19 positive residents
        ii. Total number of COVID-19 PUI residents
        iii. Total number of COVID-19 tests pending
        iv. Number of active COVID-19 positive residents currently in the facility (removing those who are deceased or released from isolation)
    d. Code status reports
    e. Clinical decline/concern & hospitalization risk
    f. PPE supplies
    g. Staffing vacancies
        i. Total number of COVID-19 positive staff
        ii. Total number of COVID-19 PUI staff who are being self-quarantined and not working
        iii. Total number of COVID-19 tests pending

3. Supply with contact information for SNF Medical Director

4. Utilize COVID-19 Patient Transfer Tool to ensure all pertinent information is relayed effectively to any healthcare facility or agency that may be receiving patients, regardless of their COVID-19 status.

5. Follow any established protocols for facility/facility or provider/provider communication during patient transfers.
    a. For direct admission of COVID-19 positive or PUI to the hospital floor (bypassing Emergency Department) Physician-to-Physician coordination and handoff is required.
    b. For COVID-19 positive or PUI residents being sent to the Emergency Department (ED), at minimum a Nurse-to-Nurse coordination and handoff is required prior to moving the patient.

iii. When a resident or staff member tests positive for COVID-19 or is designated as a COVID-19 PUI notify the following to begin contact tracing and appropriate isolation precautions:
    1. Local/county health department
    2. HICS-designated centralized team contact
    3. Facility Medical Director & resident's attending physician
    4. Resident (or their responsible party) if the resident is being designated as COVID-19 Positive or COVID-19 PUI
    5. All residents and/or their responsible parties when a COVID-19 index case is present within the facility
    6. Any sending or receiving facility/agency where the resident was residing or receiving care in the fourteen (14) days prior to their onset of symptoms (or positive test)

II. Pillar 2: Transmission Reduction

a. Establish a COVID-19 facility population screening and monitoring protocol for residents, staff, vendors, and visitors:

   i. Establish persons with suspected illness as a COVID-19 PUI (Person Under Investigation) if falling into one (1) or more of these three (3) categories:

      1. Clinical Features of COVID-19
         a. **Fever** (≥ 100.4ₒF/38ₒC or ≥2ₒF above established baseline), or
         b. **Cough**, or
         c. **Dyspnea** (shortness of breath), or
         d. Other viral-like symptoms: Chills, body aches, flu-like symptoms, weakness or lethargy, rhinorrhea (runny nose), nasal congestion, diarrhea, etc.
      2. Close contact with a known COVID-19+ person

   ii. Screening/monitoring should be performed daily at a minimum, however it may be clinically appropriate to screen/monitor residents more frequently (this determination should be made on a case-by-case basis in conjunction with the facility medical director.

   iii. Restrict access to all symptomatically ill and/or non-essential persons

   iv. Staff with clinical features of COVID-19 should:

      1. Not be returned to work until cleared by either a negative COVID-19 test (having never tested positive) OR by meeting the CDC guidelines with a test-based or non-test-based strategy for removal of isolation/transmission-based precautions.

b. Other practical ways to reduce COVID-19 transmission risk include:

   i. Reduce close contact exposure (minimum 6 feet of social and professional distancing when possible)

   ii. Consolidate resident care activities such as nursing care, personal care, and medication administration.

      1. Work with the consultant pharmacist and medical director to discontinue any non-essential or unnecessary medications

      2. Work with the consultant pharmacist to reduce the number times that medication administration is taking place on patients with known or suspected COVID-19

iii. Dedicated staffing on individual floors or units within the facility

iv. Utilization of virtual care platforms (telehealth) for facility staff, ancillary staff, visitors, and providers when possible to reduce close contact exposure and in some cases to preserve PPE

v. Ongoing training and monitoring of transmission-based precautions including: Isolation techniques; droplet and contact precautions; handwashing and coughing technique; social and professional distancing, and donning/doffing of PPE

vi. Environmental strategies such as enhanced ventilation systems; sterilization/sanitization of PPE, surfaces/floors, personal devices; equipment; dedicated staff entrance with area to store personal items

vii. Masking of all staff, especially when providing close contact resident care or in situations where social/professional distancing are difficult

viii. Appropriate and timely cohorting of residents

III. Pillar 3: Triage Preparedness

a. Creating capacity for COVID-19 positive and COVID-19 PUI in the facility:

i. Intra/Inter-Facility: Proactive cohorting and/or geo-location of non-COVID-19 PUI residents to other areas of the facility/campus or to other facilities with bed availability in your geography

ii. Home/Community (Long-Stay Residents): Transition residents to home or community, with/without Home Health Care services, when safe and where suitable caregiver support is available:

1. Attempt to proactively decant 5% of your current resident population to free bed capacity utilizing an interdisciplinary triage process to identify:
    a. Residents who are most clinically and cognitively stable, requiring minimal-moderate assistance for most activities of daily living, and having adequate caregiver support options in a home/community setting;
    b. Residents who are on hospice and able to be safely transitioned to a home/community setting with adequate caregiver and hospice support;

2. Caregiver Support in a Time of Need:
    a. There may be more home caregivers available during pandemic crisis due to state-issued stay-at-home orders);
    b. Home Health Care services may be more readily accessible and attainable during times of pandemic crisis;
    c. Transitions may be temporary in nature to remove residents who are at high-risk for contracting or transmitting COVID-19 in a high-risk LTC/SNF environment;
    d. Use of virtual care platforms can serve to extend nursing support/monitoring and provider (Physician & APP) services into the home/community settings

iii. Home/Community (Short-Stay Residents): Transition clinically stable short-stay (skilled) residents to their home or community with Home Health Care services when safe and where suitable caregiver support is available:

1. Establish a plan of care upon admission to reduce targeted length of stay (LOS) in the SNF and to accelerate discharge to home/community in conjunction with Home Health Care services

2. Involve patient/responsible party with a Home Health Care representative in early care planning discussions (within 48-72 hours of SNF admission) to set a target date for accelerated discharge and to facilitate the timely completion of all necessary home and clinical needs assessments;

3. Use of virtual care platforms can serve to extend nursing support/monitoring and provider (Physician & APP) services into the home/community settings

iv. Hospital and Alternate SNF Placement
   1. The LTC/PAC facility must make every effort to accept the readmission of COVID-19 positive patients back to their facility from the hospital when they have been deemed clinically stable, unless the facility is unable to safely manage them and/or where there is:
      a. Insufficient staffing
      b. Insufficient personal protective equipment (PPE)
      c. Inability to appropriately cohort or isolate
      d. Halting of admissions/readmissions by a governing healthcare authority

   2. Restrict movement of COVID-19 positive or COVID-PUI residents to an alternate SNF location to reduce transmission risk in additional healthcare settings (unless that secondary site of care has been identified as having a dedicated COVID Isolation/Cohort Unit):
      a. No direct resident transfers from one SNF(a) to SNF(b) until the resident has been cleared of transmission-based precautions through a CDC-approved, testing or non-testing (time-based) method
      b. No transfer from SNF(a) to Hospital to SNF(b) until the resident has been cleared of transmission-based precautions through a CDC-approved testing or non-testing (time-based) method

v. COVID Isolation Centers
   1. Hospitals should preferentially utilize dedicated/designated COVID Isolation Centers for discharge of COVID-19 positive patients who do not originate from the LTC/PAC setting;

   2. COVID Isolation Centers may encompass a spectrum of options ranging from a facility with a dedicated COVID unit/wing to an entire facility with formal COVID designation.

b. Develop a COVID-19 Isolation/Cohort Unit or NEST™ (New Emergent Special Treatment) Unit* [NEST™ (New Emergent Specialty Treatment) Unit – 2020 Consortium Concepts, LLC – all rights reserved (Used by permission)]

i. Establish a dedicated space within your facility in preparation for any residents who are determined to be COVID-19 PUI or COVID-19 Positive; ideally two (2) separate units if possible.

ii. Identify an area of congregated rooms or an entire wing/hall/unit with following recommendations including:

1. Minimum of 6-beds each

2. Private rooms (preferable)

3. Adequate and readily accessible (on the unit) supply of personal protective equipment (PPE), including:
    a. Gowns
    b. Gloves
    c. Clinical Masks & N95 Masks
    d. Eye Protection
    e. Hats
    f. Booties

4. Dedicated COVID-19 staffing and equipment to reduce likelihood of transmission to the non-COVID-19 population (consider utilizing COVID+ staff who are now able to return to work per CDC guidelines)

5. Consider a system for remote patient vital sign monitoring (including Pulse Oximetry) to monitor residents for decompensation in real time and to limit close contact exposure and PPE utilization for staff

6. Proximity to a separate facility entrance

7. Dedicated areas for staff PPE donning/doffing

c. COVID-19 Risk Assessment, Triage & Testing and Return to Work for Healthcare workers

i. Not a COVID-19 PUI
    1. **Low Risk** for COVID-19 transmission:
    2. COVID-19 testing is not recommended
    3. Continue daily facility screening/monitoring for the development of clinical features of COVID-19 infection
    4. Continue appropriate handwashing/sanitizing technique and applicable transmission-based precautions
    5. Worker to self-monitor and self-report (prior to resident care) any development of COVID-19 clinical features, close contact/exposure with a known COVID-19 positive person, and/or travel risk for COVID-19

ii. COVID-PUI (Person Under Investigation)

1. **Moderate Risk** for COVID-19 infection/transmission: with confirmed close contact with known COVID+ person but without clinical features of COVID-19
    a. COVID-19 testing not recommended
    b. Continue daily facility screening/monitoring
    c. Continue appropriate handwashing/sanitizing technique and transmission-based precautions
    d. Worker to monitor and report (prior to resident care) any development of COVID-19 clinical features, new close contact/exposure with a known COVID-19 positive person, and/or travel risk
    e. Wear mask for a minimum of fourteen (14) days from time of close contact with a COVID-19 positive person

2. **High Risk** for COVID-19 infection/transmission: COVID-19 PUI with clinical features of COVID-19 but without close contact/exposure with known COVID+ person:
    a. COVID-19 testing recommended
    b. DO NOT RETURN TO WORK
    c. Self-isolate and wear mask
    d. Escalate personal primary care as needed per physician or advanced practice provider (APP)
    e. Continue appropriate handwashing/sanitizing technique and applicable transmission-based precautions
    f. Return to work decision making should follow CDC guidance and utilize an approved test-based or non-test-based strategy (https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html)

3. **Severe Risk** for COVID-19 infection/transmission: COVID-19 PUI with clinical features of COVID-19 and positive close contact/exposure with a known COVID+ person:
    a. COVID-19 testing recommended
    b. DO NOT RETURN TO WORK
    c. Self-isolate and wear a mask
    d. Escalate personal primary care as needed per physician or advanced practice provider (APP)
    e. Continue appropriate handwashing/sanitizing technique and transmission-based precautions
    f. Return to work decision making should follow CDC guidance and utilize an approved test-based or non-test-based strategy (https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html)

iii. COVID-19 Positive: any health care worker testing positive for COVID-19 infection:
   1. Facility to report positive test result to:
      a. The local health department
      b. The facility Medical Director
   2. Do not return to work
   3. Self-isolate and wear mask
   4. Continue appropriate handwashing/sanitizing technique and applicable transmission-based precautions
   5. Escalate personal primary care as needed per physician or advanced practice provider (APP)
   6. Return to work decision making should follow CDC guidance and utilize an approved test-based or non-test-based strategy (https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html)

d. Return to Work for Healthcare Workers

   i. Return to work decision making should follow CDC guidance and utilize an approved test-based or non-test-based strategy (https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html)

      1. **Test-Based Strategy** (exclude from work until):
         a. Resolution of fever without the use of fever-reducing medications, AND
         b. Improvement in respiratory symptoms (e.g. cough, shortness of breath), AND
         c. At least two (2) consecutive negative COVID-19 tests collected ≥ 24 hours apart

      2. **Non-Test-Based Strategy** (exclude from work until):

         a. At least three (3) days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications, AND improvement in respiratory symptoms (e.g. cough, shortness of breath), AND
         b. At least seven (7) days have passed since symptoms first appeared.

   ii. Return to work practices and restrictions:
      1. Wear a mask at all times while in healthcare facility until all symptoms are completely resolved or until fourteen (14) days after illness onset, whichever is longer
      2. Restrict contact with severely immunocompromised patients (e.g. transplant, hematology-oncology) until fourteen (14) days after illness onset

3. Continue appropriate handwashing/sanitizing technique and applicable transmission-based precautions
4. Continue daily facility screening/monitoring for symptom recurrence or worsening.

e. COVID-19 Risk Assessment, Triage & Testing for Residents

i. Not a COVID-19 PUI (Person Under Investigation)

1. **Low Risk** for COVID-19 transmission
2. COVID-19 testing not recommended
3. Continue daily facility screening/monitoring for the development of clinical features of COVID-19 infection
4. Continue appropriate handwashing/sanitizing technique and applicable transmission-based precautions

ii. COVID-PUI

1. **Moderate Risk** for COVID-19 infection/transmission: PUI with confirmed close contact with known COVID-19 person but without clinical features of COVID-19:
    a. COVID-19 testing not recommended
    b. Continue daily facility screening/monitoring
    c. Continue appropriate handwashing/sanitizing technique and applicable transmission-based precautions
    d. Wear mask for a minimum of fourteen (14) days from time of close contact with known COVID+ person
    e. Transition patient to dedicated COVID-19 PUI bed/unit if possible
    f. Isolate and institute transmission-based precautions

2. **High Risk** for COVID-19 infection/transmission: COVID-19 PUI with clinical features of COVID-19 but without close contact/exposure with known COVID+ person:
    a. COVID-19 testing recommended
    b. Wear mask until all symptoms are completely resolved or a minimum of fourteen (14) days from illness onset, whichever is longer.
    c. Transition patient to dedicated COVID-19 PUI bed/unit if possible
    d. Isolate and institute transmission-based precautions per CDC guidance (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html)
    e. Institute remote vital sign monitoring if possible

f. Escalate care as needed per physician or advanced practice provider (APP)

3. **Severe Risk** for COVID-19 infection/transmission: COVID-19 PUI with clinical features of COVID-19 and having close contact/exposure with a known COVID-19 positive person
    a. COVID-19 testing recommended
    b. Wear mask until all symptoms are completely resolved or a minimum of fourteen (14) days from illness onset, whichever is longer.
    c. Transition patient to dedicated COVID-19 PUI bed/unit if possible
    d. Isolate and institute transmission-based precautions per CDC guidance (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html)
    e. Institute remote vital sign monitoring if possible
    f. Escalate care as needed per physician or advanced practice provider (APP)

iii. COVID-19 Positive: Any resident/patient testing positive

1. Facility to report positive test to:
    a. The local health department
    b. The facility Medical Director
    c. Any sending facility, agency or healthcare provider caring for the resident in the past fourteen (14) days.

2. Wear mask until all symptoms are completely resolved or a minimum of fourteen (14) days from illness onset, whichever is longer;

3. Transition patient to dedicated COVID-19 PUI bed/unit if possible;

4. Isolate and institute transmission-based precautions per CDC guidance (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html);

5. Institute remote vital sign monitoring if possible;

6. Escalate care as needed per physician or advanced practice provider (APP);

7. Removal of isolation and transmission-based precautions and/or movement of a COVID-19 positive resident out of a dedicated COVID-19 unit to another location should be done in coordination and under the guidance of the local health department.

8. Guidelines on Discontinuation of Transmission-Based Precautions:

    a. Consider CDC test-based strategy for removal of isolation and transmission-based precautions or subsequent placement back into the general facility population:
        i. Resolution of fever without the use of fever-reducing medications, AND
        ii. Improvement in respiratory symptoms (e.g. cough, shortness of breath), AND
        iii. At least two (2) consecutive negative COVID-19 tests collected ≥ 24 hours apart

    b. Alternative: CDC Non-test-based strategy for removal of isolation and transmission-based precautions or subsequent placement back into the general facility population:
        i. 14 days since the onset of symptoms, AND
        ii. 3 days with no fever without fever-reducing medications, AND
        iii. 3 days of stable and improved respiratory status

IV. Pillar 4: Targeted Conversations

a. Advance Care Planning (ACP) & End-of-Life Conversations

i. Work with facility clinical leadership and health care providers to proactively engage in advance care planning conversations with all residents (and/or their responsible parties) to address:

1. Clinical conditions, prognosis, & goals of care

2. Advance directives (i.e. Living Will and/or Durable Power of Attorney for Health Care)
    a. Ensure access to all Advance Directives and make them available to any receiving healthcare facility, agency or provider for all care transfers;

3. Code Status (i.e. Full Code, DNR-Comfort Care Arrest, DNR-Comfort Care)
    a. Utilize the approved/recognized Ohio DNR Comfort Care Order Form and include with all care transfers
    b. Re-educate staff and providers on DNR interpretation and messaging during pandemic crisis to simplify understanding and encourage use of DNR-CCA:

        i. Full Code = Full Medical Care prior to arrest and at the time of arrest

        ii. DNR-CCA = Full Medical Care prior to arrest and comfort care at the time of arrest

        iii. DNR-CC = Comfort Care prior to arrest and at the time of arrest

ii. Prioritize advance care planning conversations for residents having an “Unknown” or “Full Code” status & re-message these residents or their responsible parties as to the importance of considering a transition from Full Code to DNR-CCA for COVID-19 positive residents during a time pandemic crisis:

1. To reduce unnecessary hospital transfers of patients who have arrested and/or may be deceased;

2. To reduce close contact of COVID-infected patients with healthcare workers whenever possible;

3. To reduce the unnecessary utilization of PPE resources

iii. Consider the utilization of ACP conversation resources such as:

1. The Conversation Project (COVID-19): © 2020 Institute for Healthcare Improvement & Ariadne Labs, or

2. The Serious Illness Conversation: © 2015 Ariadne Labs

iv. Engage local hospice providers to assess their ability to care for COVID-19 patients, and to develop processes to streamline communication and engagement with residents (or their family/responsible party) when appropriate

V. Pillar 5: Telehealth Capabilities

a. Virtual/Telehealth Strategy

i. As a facility team, select a virtual/telehealth platform which will be simplest to implement

ii. Options during the COVID-19 pandemic crisis include common technologies that are not generally acceptable in healthcare settings such as: Zoom®, Skype®, FaceTime®, etc.

1. Test your system in advance and develop protocols for use that will help to coordinate staff and providers (especially when the provider's access to patients is limited by COVID-19 restrictions or infection)

2. Practical application of virtual technology:
    a. Provider (Physician/APP) visits (for both offsite and onsite encounters) to reduce close clinical contact and preserve PPE supplies;
    b. Nursing and Interdisciplinary Team rounding
        i. Maximize planned (and unplanned) resident care to accomplish interdisciplinary assessment and provider engagement
        ii. Coincide daily provider COVID rounds with routine resident care delivered by nursing staff, nursing aides or other facility staff who is needing to provide direct resident care.
    c. Family, friends, and/or responsible party
    d. Outside healthcare specialists/providers
    e. Clergy

iii. Consider implementing a remote vital sign monitoring platform (i.e. - Masimo SafetyNet™)

VI. Pillar 6: Test & Treat in Place

a. Strive to manage clinically stable COVID-19 residents in the facility

b. **Testing**: Practical aspects to COVID-19 testing in LTC/PAC facilities

i. Testing should be done in accordance with the local/county health department;

ii. Clinically stable residents should not be transferred to a local hospital for testing unless deemed necessary by the team/coalition;

iii. Testing strategies:

1. **Conventional**: reserved for symptomatic residents and/or healthcare workers;

2. **Non-Conventional (Crisis)**: Testing of entire units or facility populations, including direct-care staff, may be warranted in certain situations as some people will actively shed virus in an asymptomatic or pre-symptomatic state

iv. Utilization of a hospital “hotline” and “testing team” model to improve coordination/allocation of resources and to circumvent the need to utilize external laboratories with protracted result turnaround times;

v. Test ordering, collection, and results should be tracked closely and reported through a centralized point of contact within the HICS team to ensure timely communication, intervention, coordination of resources, and hospital surge planning.

vi. If there are limited testing capabilities, prioritize testing for residents/staff by risk status (Severe Risk then High Risk);

vii. There are typically three (3) potential sources for testing in the SNF and the Medical Director should explore which is best suited to the facility population and situation, taking into account availability and turnaround time:
1. Local Health Department (in conjunction with ODH)
2. SNF in-house laboratory services
3. Local hospital or medical center

c. **Treatment**: Practical aspects to COVID-19 treatment

i. There are no FDA approved or CDC supported pharmacological treatment regimens for COVID-19 infection;

ii. In some situations, the combined use of hydroxychloroquine and azithromycin have proven beneficial and may be appropriately applied in patient care on a case-by-case basis;

iii. Before treatment the provider (Physician/APP) should only consider use of the hydroxychloroquine/azithromycin regimen when:

1. The patient has been confirmed COVID-19 positive;

2. The patient is declining clinically despite other treatment or management strategies;

3. The potential benefits outweigh the potential risks of treatment;

4. The patient/responsible party has been made aware of and accepted the potential risk of treatment

v. Pharmacological Treatment Regimens:

1. Remdesivir (Trial Drug)

2. Hydroxychloroquine with Azithromycin (Trial Drug Regimen) – Use with caution as this regimen may cause QT prolongation and be associated with increased risk of cardiac death
   a. FDA guidance from 4/3/20
   b. CDC guidance – original guidance shown below was removed from the CDC website on 4/8/20

      i. Azithromycin Dosing: 500mg day 1; then 250mg on days 2-5 (Z-pak dosing regimen)

      ii. Hydroxychloroquine Dosing (options – not currently supported by controlled clinical trials, FDA approval or CDC guidance):

         1. 400mg by mouth, BID x1 day; then 400mg by mouth, daily x 5 days, or

         2. 400mg by mouth, BID x1 day; then 200mg by mouth, BID x 4 days, or

         3. 600mg by mouth, BID x 1 day; then 400mg by mouth, daily x 2-5 days

d. **Management**: Practical aspects to COVID-19 management

i. Management of COVID-19 is supportive in nature (i.e. fluids, oxygen supplementation, fever-reducing medications, symptom relief, etc.)

ii. Caution should be taken with the use of certain medications including:
    1. Nebulized drugs (change to metered dose inhalers – MDI with a spacer if possible)
    2. Angiotensin-converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) – Risk unknown
    3. Corticosteroids – Not generally recommended in the treatment of COVID-19 or other viral pneumonia; risk and benefit are not well-established
    4. Non-steroidal anti-inflammatory drugs (NSAIDs) – Preferential use of acetaminophen for analgesia and antipyretic (fever-reducing) purposes

iii. Hydration: Consider hypodermoclysis over intravenous (IV) route of administration of fluids

iv. Supplemental oxygen:
    1. Low flow: nasal cannula (up to 6L/min)
    2. High flow: face mask, venturi mask, or non-rebreather mask (up to 10-20L/min)

v. Consider viral testing for influenza and/or RSV in symptomatic patients who have tested negative for COVID-19

vi. Common COVID-19 laboratory and imaging findings:
    1. CBC (lymphopenia, leukocytosis, leukopenia, neutrophilia)
    2. Lactase dehydrogenase and ferritin levels are commonly elevated
    3. D-dimer levels may be elevated in more severe cases
    3. Chest radiography may reveal consolidation, ground-glass opacities, or pulmonary infiltrates; findings are most commonly bilateral

VII. Pillar 7: Transitions of Care

a. Transfer to the hospital

i. Pre-transfer communication with receiving facility; call the transfer center to coordinate transfer communications;

1. Physician-to-Physician for direct hospital admission to regular nursing floor, step-down unit, or ICU (bypass ED)

2. Nurse-to-Nurse report must be given prior to patient's departure from the SNF to allow for proper preparedness

ii. Proper notification to transporting agency as to COVID-19 positive or PUI status and Code Status (including Ohio DNR Form if applicable)

iii. Diversion to ED or ICU (for floor/step-down destinations) on a planned direct hospital admission

1. Vital Sign Concerns:
    a. Heart Rate < 50 or > 120 beats per minute with symptomatic changes in condition
    b. Systolic Blood Pressure < 90 or > 200 with symptomatic changes in condition
    c. Pulse Oximetry SpO2 < 88% on supplemental O2 and in significant respiratory distress or change in mental status
    d. Respiratory Rate < 8 or > 24 breaths per minute and in significant respiratory distress
2. Severe chest pain
3. Obvious respiratory distress or imminent respiratory failure
4. Syncope, altered mental status, or shock
5. Other medical emergency requiring immediate intervention

iv. Call ED prior to arrival with patient report so that they can prepare for the COVID-19 positive or PUI patient

v. **NOTE**: Potential for limited transport during a public health disaster:

1. During a time of public health disaster, no resident of a long-term care or skilled nursing facility may be removed from the facility and transferred to a hospital unless a physician determines it is medically necessary.

2. If it is determined, subsequent to the resident being removed from the facility, that there is no medical necessity for the resident to be treated at, or admitted to, a hospital, or if there is no longer a medical necessity present, the resident shall be immediately returned to and placed back in the facility

vi. **Avoid**:

1. Sending clinically stable COVID-19 PUI residents to the hospital for COVID-19 testing; this testing can be completed in the LTC/SNF setting in conjunction with your local health department, facility laboratory services provider, and/or through agents of the local hospital.

2. Activating EMS via 911 for non-emergent facility transfers

vii. **Always**:

1. Coordinate transfers of patients to higher levels of care through the University Hospitals Transfer Referral Center (TRC)

2. Utilize the COVID-19 Patient Transfer Communication Tool when to ensure the receiving facility/agency receives all pertinent patient information during transfer (see attachment)

3. Send with the resident their Ohio DNR Form & advance directives (as applicable)

4. Send with the resident their medications, especially multi-dose inhalers (MDIs) and other respiratory medications

b. Return to SNF Practices for COVID+ Residents

i. Patients who resided in a skilled-long term care facility prior to transfer to the hospital that receive a COVID-19 positive test should be discharged back to the facility of residence once they are medically stable. Patients that tested positive for COVID-19 prior to admission should be transferred back to their facility of residence per CDC guidance as follows:

1. If Transmission-Based Precautions are still required upon discharge, the facility must adhere to infection prevention and control recommendations for the care of COVID- 19 patients. Preferably, the patient would be placed in a location designated to care for COVID-19, such as a unit or wing designated to house COVID-19 residents

2. If Transmission-Based Precautions are to be discontinued, but the patient has persistent symptoms from COVID-19 (e.g. persistent cough), resident should be placed in a single room, be restricted to their room, and wear a facemask during care activities until all symptoms are completely resolved or until 14 days after illness onset, whichever is longer;

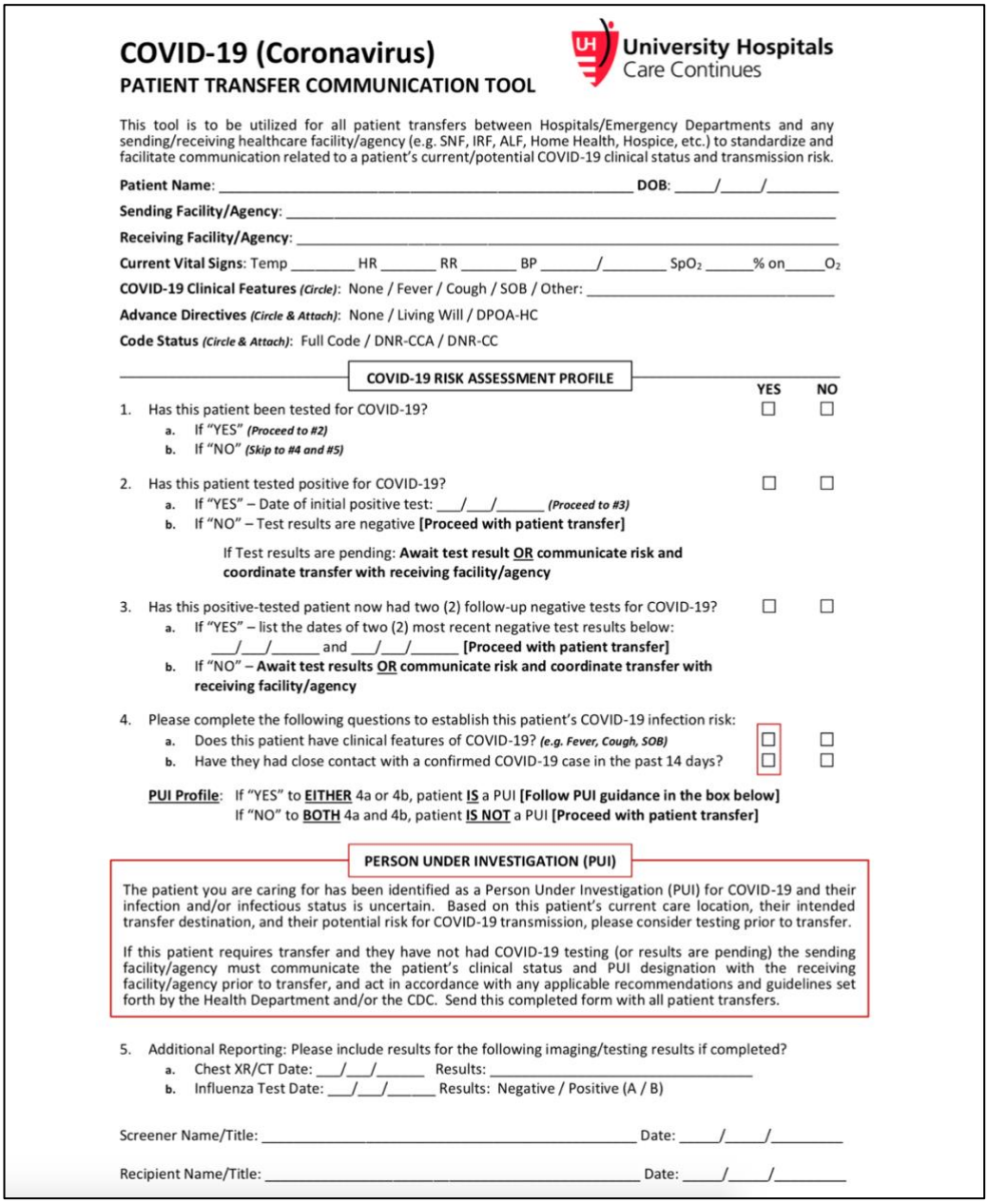
3. If Transmission-Based Precautions have been discontinued and the patient's symptoms have resolved**,** patient should be admitted without further restrictions.

ii. Patients not living in a skilled long-term care facility prior to hospitalization who receive a COVID-19 positive test and require discharge to a skilled long-term care facility should be admitted to a COVID-19 dedicated skilled long-term care facility. The facility should follow CDC guidelines based on whether Transmission-Based Precautions are still required. If a COVID-19 dedicated skilled long-term care facility is not available, then the patient should be admitted to a skilled long-term care facility with a COVID-19 dedicated wing or unit. If this is not available, then patient should be admitted to a skilled long-term care facility able to follow the CDC's guidance on Transmission-Based Precautions.

VIII. Resource Appendix

a. UH Seven (7) Pillars of COVID-19 Incident/Emergency Management Pre-Planning
(Zoom Cloud-Based Training / Handout)

b. UH COVID-19 Patient Transfer Communication Tool
(PDF Printable Version / PDF Fillable Electronic Version)
(Zoom® Cloud-Based Training / Handout)



COVID-19 (Coronavirus)
PATIENT TRANSFER COMMUNICATION TOOL

University Hospitals Care Continues

This tool is to be utilized for all patient transfers between Hospitals/Emergency Departments and any sending/receiving healthcare facility/agency (e.g. SNF, IRF, ALF, Home Health, Hospice, etc.) to standardize and facilitate communication related to a patient's current/potential COVID-19 clinical status and transmission risk.

Patient Name: _____ **DOB**: ____/____/_____
Sending Facility/Agency: _____
Receiving Facility/Agency: _____
Current Vital Signs: Temp _____ HR _____ RR _____ BP _____/_____ SpO_2 _____% on_____O_2
COVID-19 Clinical Features *(Circle)*: None / Fever / Cough / SOB / Other: _____
Advance Directives *(Circle & Attach)*: None / Living Will / DPOA-HC
Code Status *(Circle & Attach)*: Full Code / DNR-CCA / DNR-CC

COVID-19 RISK ASSESSMENT PROFILE

	YES	NO
1. Has this patient been tested for COVID-19?	☐	☐
a. If "YES" *(Proceed to #2)*		
b. If "NO" *(Skip to #4 and #5)*		
2. Has this patient tested positive for COVID-19?	☐	☐
a. If "YES" – Date of initial positive test: ___/___/_____ *(Proceed to #3)*		
b. If "NO" – Test results are negative **[Proceed with patient transfer]**		
If Test results are pending: **Await test result OR communicate risk and coordinate transfer with receiving facility/agency**		
3. Has this positive-tested patient now had two (2) follow-up negative tests for COVID-19?	☐	☐
a. If "YES" – list the dates of two (2) most recent negative test results below: ___/___/_____ and ___/___/_____ **[Proceed with patient transfer]**		
b. If "NO" – **Await test results OR communicate risk and coordinate transfer with receiving facility/agency**		
4. Please complete the following questions to establish this patient's COVID-19 infection risk:		
a. Does this patient have clinical features of COVID-19? *(e.g. Fever, Cough, SOB)*	☐	☐
b. Have they had close contact with a confirmed COVID-19 case in the past 14 days?	☐	☐

PUI Profile: If "YES" to **EITHER** 4a or 4b, patient **IS** a PUI **[Follow PUI guidance in the box below]**
If "NO" to **BOTH** 4a and 4b, patient **IS NOT** a PUI **[Proceed with patient transfer]**

PERSON UNDER INVESTIGATION (PUI)

The patient you are caring for has been identified as a Person Under Investigation (PUI) for COVID-19 and their infection and/or infectious status is uncertain. Based on this patient's current care location, their intended transfer destination, and their potential risk for COVID-19 transmission, please consider testing prior to transfer.

If this patient requires transfer and they have not had COVID-19 testing (or results are pending) the sending facility/agency must communicate the patient's clinical status and PUI designation with the receiving facility/agency prior to transfer, and act in accordance with any applicable recommendations and guidelines set forth by the Health Department and/or the CDC. Send this completed form with all patient transfers.

5. Additional Reporting: Please include results for the following imaging/testing results if completed?
   a. Chest XR/CT Date: ___/___/_____ Results: _____
   b. Influenza Test Date: ___/___/_____ Results: Negative / Positive (A / B)

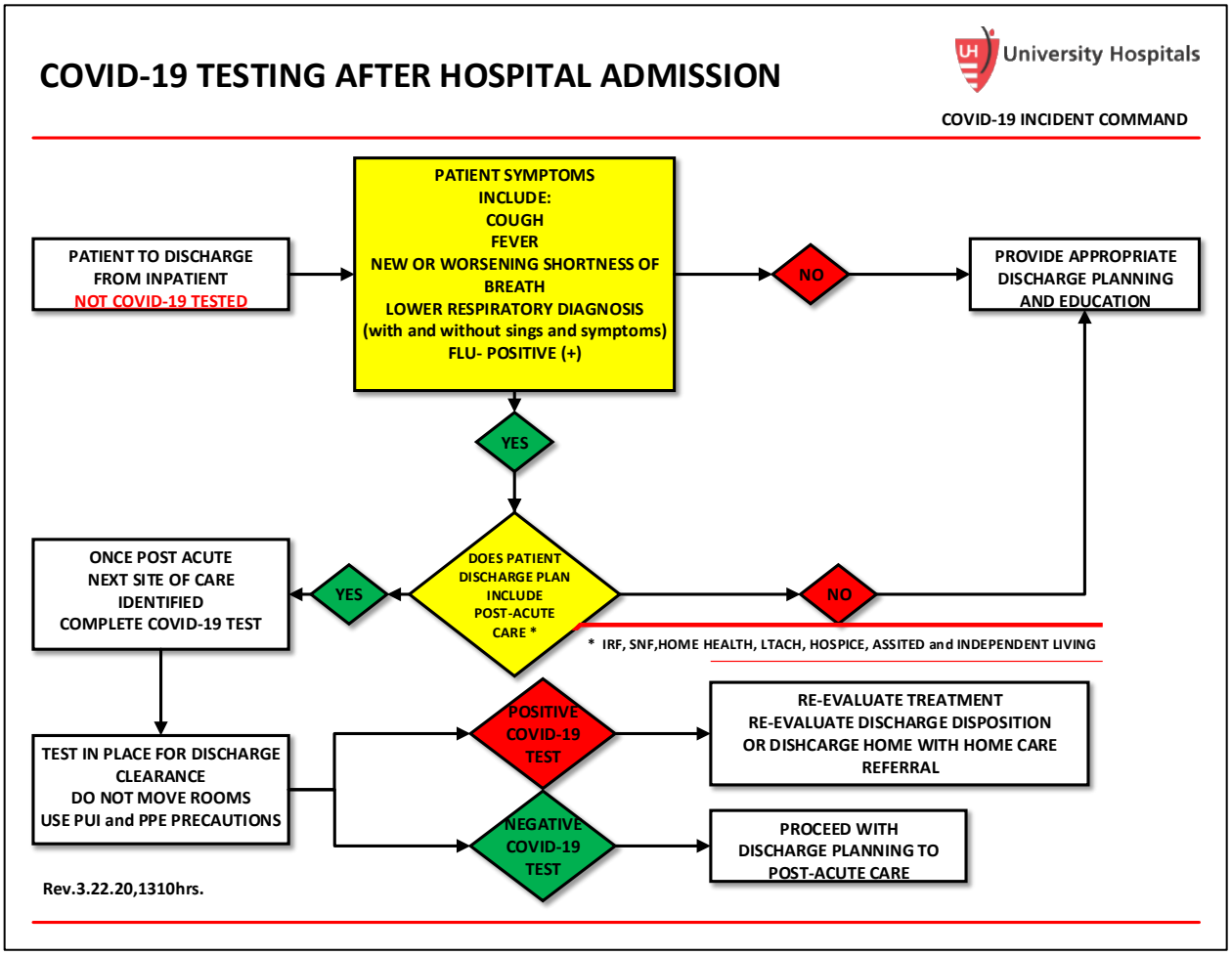
Screener Name/Title: _____ Date: ____/____/_____

Recipient Name/Title: _____ Date: ____/____/_____

a. UH COVID-19 Daily Facility Situation Report (Excel® Version)

COVID-19 Daily Facility Situation Report			
Today's Date (00/00/00)			
Facility Information			
Facility Name			
Street Address			
City			
Zip Code			
County			
Current Patient Census	SNF	LTC	AL/IL
Number of Patients In-House	0	0	0
Number of C-19 Positive	0	0	0
Number of C-19 Persons Under Investigation (PUI)	0	0	0
Number of C-19 Test Pending	0	0	0
Employee Status	RN/LPN	Nursing Assistant	Ancillary Services
Number of C-19 Positive	0	0	0
Number of C-19 PUI	0	0	0
Number of C-19 Test Pending	0	0	0
Code Status of Patients	Full Code	DNR CC Arrest	DNR CC
Number of Unstable or Declining Positive/PUI In-House	0	0	0
PPE Supplies	# of Days Left In Stock		
N95 Masks	0		
Face Shields	0		
Gloves	0		
Gowns	0		
Shoe/Boot Covers	0		
Staffing Vacancy	RN/LPN	Nursing Assistant	EVS/Nutrition
Based on Pre COVID-19 Staffing Levels	0%	0%	0%

b. UH COVID-19 Hospital Testing Algorithm



c. ODH COVID-19 Testing Algorithm

Ohio Department of Health

ODH Algorithm for Testing of Coronavirus Disease 2019 (COVID-19)

Guidance for specimens submitted to the ODH Public Health Laboratory (ODHL) for COVID-19 testing.

(Adapted from CDC Recommendations – Guidance Subject to Change)

Individual presents with:
- Fever **AND/OR**
- Symptoms of acute lower respiratory illness (e.g., cough, difficulty breathing)

Yes

Individual, including healthcare workers[1], has close contact[2] with a laboratory-confirmed[3] COVID-19 patient within 14-days of symptom onset.

Yes

1. Rule out other respiratory etiologies.
2. Collect specimens [NP, OP & Sputum (if available)].
3. Notify local health department (LHD).
4. LHD contact ODH BID to discuss testing.
5. Submit to ODHL for COVID-19 testing.

No

Individual has a travel history to an affected geographic area[4] within 14 days of symptom onset.

Yes

Individual is hospitalized.

Yes

1. Rule out other respiratory etiologies.
2. Collect specimens [NP, OP & Sputum (if available)].
3. Notify local health department (LHD).
4. LHD contact ODH BID to discuss testing.
5. Submit to ODHL for COVID-19 testing.

No

Does not meet criteria for COVID-19 testing at ODHL. Additional workup and follow-up as clinically indicated.

No

Individual has severe acute lower respiratory illness (e.g., pneumonia, ARDS, as evidenced by imaging) **AND** lack of alternative diagnosis (e.g., negative respiratory viral panel, negative rapid flu) **AND** is hospitalized.

No

Yes

1. Collect specimens [NP, OP & Sputum (if available)].
2. Notify local health department (LHD).
3. LHD contact ODH BID to discuss testing.
4. Submit to ODHL for COVID-19 testing.

No

Does not meet criteria for COVID-19 testing at ODHL. Additional workup and follow-up as clinically indicated.

Notes:

[1]For healthcare personnel, testing may be considered if there has been exposure to a person with suspected COVID-19 without laboratory confirmation.

[2]Close contact is defined as—

a) being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case

– or –

b) having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on).

If such contact occurs while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

Additional information is available in CDC's updated Interim Infection Prevention and Control Recommendations for Patients with Confirmed COVID-19 or Persons Under Investigation for COVID-19 in Healthcare Settings.

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to healthcare personnel exposed in healthcare settings as described in CDC's Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with COVID-19.

[3]Documentation of laboratory-confirmation of COVID-19 may not be possible for travelers or persons caring for COVID-19 patients in other countries.

[4]Affected areas are defined as geographic regions where sustained community transmission has been identified. Relevant affected areas will be defined as a country with at least a CDC Level 2 Travel Health Notice. See all COVID-19 Travel Health Notices.

03/07/2020

d. ODH Specimen Collection Protocol

Ohio Department of Health

Specimen Collection:

Nasopharyngeal swab AND oropharyngeal swab (NP/OP swab): Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing. Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media. NP and OP specimens should be kept in separate vials. Refrigerate specimen at 2-8°C and ship on ice pack.

- Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
- Refrigerate specimen at 2-8°C and ship on ice pack.

Sputum: Sputum can be collected on individuals with productive coughs. Induction of sputum is not recommended.

- Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
- Refrigerate specimen at 2-8°C and ship on ice pack.

Specimen Shipping:

- Once testing is approved by ODH, ship specimens Monday through Friday during normal business hours to:
  Ohio Department of Health Laboratory
  ATTN: Microbiology Labs
  8995 E. Main St.
  Building 22
  Reynoldsburg, OH 43068
- Special arrangements must be made in advance with ODH Epi and Lab for specimen delivery after hours and over the weekend.

Contact Information:

- ODH Bureau of Infectious Diseases
  - Phone: (614) 995-5599
- ODH Laboratory
  - Phone: (888) ODH-LABS

03/07/2020

e. UH COVID-19 Daily Facility Situation Report (Excel® Version)

COVID-19 Daily Facility Situation Report

Today's Date (00/00/00)			
Facility Information			
Facility Name			
Street Address			
City			
Zip Code			
County			
Current Patient Census	SNF	LTC	AL/IL
Number of Patients In-House	0	0	0
Number of C-19 Positive	0	0	0
Number of C-19 Persons Under Investigation (PUI)	0	0	0
Number of C-19 Test Pending	0	0	0
Employee Status	RN/LPN	Nursing Assistant	Ancillary Services
Number of C-19 Positive	0	0	0
Number of C-19 PUI	0	0	0
Number of C-19 Test Pending	0	0	0
Code Status of Patients	Full Code	DNR CC Arrest	DNR CC
Number of Unstable or Declining Positive/PUI In-House	0	0	0
PPE Supplies	# of Days Left In Stock		
N95 Masks	0		
Face Shields	0		
Gloves	0		
Gowns	0		
Shoe/Boot Covers	0		
Staffing Vacancy	RN/LPN	Nursing Assistant	EVS/Nutrition
Based on Pre COVID-19 Staffing Levels	0%	0%	0%

f. CDC Guidelines & Testing Procedure for COVID-19 PUI

(https://www.cdc.gov/coronavirus/2019-ncov/lab/guidelines-clinical-specimens.html)

Specimen Type and Priority

All testing for COVID-19 should be conducted in consultation with a healthcare provider. The guidance below addresses options for self-collection of specimens once a clinical determination has been made to pursue COVID-19 testing.

For initial diagnostic testing for COVID-19, CDC recommends collecting and testing an upper respiratory specimen. Nasopharyngeal specimen is the preferred choice for swab-based SARS-CoV-2 testing. When collection of a nasopharyngeal swab is not possible, the following are acceptable alternatives:

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

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

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

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

Specimens should be collected as soon as possible once a decision has been made to pursue COVID-19 testing, regardless of the time of symptom onset. Maintain proper infection control when collecting specimens. See Biosafety FAQs for handling and processing specimens from suspected case patients.

General Guidelines

Store specimens at 2-8°C and ship overnight to CDC on ice pack. Label each specimen container with the patient's ID number (e.g., medical record number), unique specimen ID (e.g., laboratory requisition number), specimen type (e.g., serum) and the date the sample was collected. Complete a CDC Form 50.34 for each specimen submitted. In the upper left box of the form, 1) for *test requested* select "Respiratory virus molecular detection (non-influenza) CDC-10401" and 2) for *At CDC, bring to the attention of* enter "Stephen Lindstrom: 2019-nCoV PUI".

- Please refer to our instruction guidance for submitting CDC Form 50.34 found here: Completing a CRF and Specimen Guidance pdf icon[2 pages]

I. Respiratory Specimens

A. Lower respiratory tract

Bronchoalveolar lavage, tracheal aspirate

Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

Sputum

Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

B. Upper respiratory tract

Nasopharyngeal swab (NP) /oropharyngeal swab (OP)

Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing. Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media. In general CDC is now recommending collecting only the NP swab. If both swabs are used, NP and OP specimens should be combined at collection into a single vial. OP swabs remain an acceptable specimen type.

Nasopharyngeal swab: Insert a swab into nostril parallel to the palate. Swab should reach depth equal to distance from nostrils to outer opening of the ear. Leave swab in place for several seconds to absorb secretions. Slowly remove swab while rotating it.
Oropharyngeal swab (e.g., throat swab): Swab the posterior pharynx, avoiding the tongue.

Nasopharyngeal wash/aspirate or nasal aspirate

Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

II. Storage

Store specimens at 2-8°C for up to 72 hours after collection. If a delay in testing or shipping is expected, store specimens at -70°C or below.

III. Shipping

Specimens PUI's must be packaged, shipped, and transported according to the current edition of the International Air Transport Association (IATA) Dangerous Goods Regulationsexternal iconexternal icon. Store specimens at 2-8°C and ship overnight to CDC on ice pack. If a

specimen is frozen at -70°C ship overnight to CDC on dry ice. Additional useful and detailed information on packing, shipping, and transporting specimens can be found at Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19).

For additional information, consultation, or the CDC shipping address, contact the CDC Emergency Operations Center (EOC) at 770-488-7100.