

## University of Iowa Internal Medicine - COVID19 Guidelines 4.12.20

- 1) **Background** (based on CDC Interim Clinical Guidance for Management of COVID19)
  - a. Clinical Presentation
    - i. Incubation period: estimated at 4 days (may range from 2-14 days)
    - ii. Signs / symptoms: fever (77-98%), cough (46-82%), myalgia / fatigue (11-52%), shortness of breath (3-31%)
  - b. Clinical Course
    - i. Clinical deterioration reported in 2<sup>nd</sup> week of illness with development of dyspnea (mean time from illness onset to admission is 8-9 days)
    - ii. 20-30% of admitted patients with COVID-19 require ICU for respiratory support
    - iii. Case-fatality proportions are suspected as following; 60-69 years: 3.6%; 70-79 years: 8%; ≥80 years: 14.8%; No underlying medical conditions: 0.9%
  - c. Lab / Radiographic Findings
    - i. Lymphocytopenia (83%), Thrombocytopenia (36%), Leukopenia (34%), transaminitis, elevated D-dimer, CRP, LDH, and ferritin
    - ii. Chest CT findings of bilateral patchy shadowing (52%) and ground glass opacities (56%), however over half presenting within 2 days may have a normal CT
  - d. Testing
    - i. Testing for COVID19 (SARS-CoV-2) in Iowa is being performed in-house and at the State Hygienic Laboratory with a turnaround time of around 24 hours
  - e. Transmission Precautions / Isolation
    - i. Spread is mainly thought to occur person-to-person via respiratory droplets among close contacts; being within 6 feet for a prolonged time, having direct contact with infectious secretions (sputum, serum, blood, respiratory droplets)
    - ii. CDC criteria to release patients from isolation include; being free from fever without medications, no longer showing symptoms including cough, negative testing on at least 2 consecutive respiratory specimens collected 24 hours apart

## 2) **Testing criteria**

### UIHC:

Limited to at least one of the following criteria;

- a. Travel within 14 days to China, Italy, Iran, Japan, South Korea, or Hong Kong OR international cruise with fever and respiratory symptoms without alternate diagnosis
- b. Contact with individual(s) with lab-confirmed COVID19 in the 14 days prior to becoming ill with fever and respiratory symptoms
- c. Hospitalized patients >60 years of age with fever and respiratory symptoms AND chronic medical conditions (ie. Diabetes, heart disease, immunosuppressed, chronic lung or kidney disease)
- d. Hospitalized patients with fever and respiratory failure without alternative diagnosis (ex. Negative respiratory viral panel)

**Note:** In addition to the above, use clinical judgement for testing; suspicious travel to other 'hotspots' ie. Washington, or suspicious history ie. Multiple other patients with similar symptoms in nursing home etc. If suspicion is high, do not wait to notify Epidemiology to initiate testing procedure as above.

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### VA (testing run at UIHC):

Limited to at least one of the following criteria;

- a. Hospitalized patient with fever, pneumonia, or ARDS with no alternate diagnosis
- b. >60 years of age with fever (subjective or measured), new respiratory symptoms (cough, difficulty breathing) and a chronic medical condition (e.g., diabetes, heart disease, immunosuppressive medications, chronic lung disease, or chronic kidney disease)
- c. Healthcare worker with patient contact who has fever and new respiratory symptoms (e.g. cough, difficulty breathing)
- d. Persons with a household contact with a laboratory-confirmed case of COVID-19 in the 14-days prior to becoming ill with fever and respiratory symptoms (e.g. cough, difficulty breathing)
- e. Clinical suspicion of COVID-19 but does not meet criteria A-D (e.g. fever and cough/difficult breathing, regardless of age comorbidity)

**Note:** Rapid testing (Cepheid rapid SARS-CoV-2 – turn-around 1 hour) available in limited quantity at the VA, currently available for the ED, or an inpatient with ID approval, to be used **ONLY** when a rapid result will make a significant difference in care or Personal Protective Equipment (PPE) use

### **3) Testing procedure**

- a. **UIHC** → See Triage rules below. When ordering testing, the order need to be placed under ‘Procedures’;
  - i. Novel Coronavirus (COVID-19)
- b. IF POSITIVE, Epidemiology and Bio-Emergency Response Team (BERT) will facilitate transfer of the patient into airborne isolation room with isolation precautions (airborne + contact + face protection)
- c. **IRL** → “Influenza-like Illness (ILI)” Screening Clinic is being initiated at UIHC with Family Medicine in PFP Mon-Fri 7am-7pm and Sat-Sun 7am-5pm, along with video visit services, defer patients concerned about symptoms to the clinic and hotlines below
  - i. Video Visit Screening Service (Mon-Fri 7am-7pm and Sat-Sun 7am-5pm)  
Scheduled through MyChart account or by calling 319-384-9010
  - ii. University of Iowa Hospitals and Clinics Integrated Call Center  
Phone: 319-384-8442 OR toll free 800-777-8442
  - iii. If a patient makes it through the triage system and you are concerned for COVID19, page “IRL Swat Team” Michelle Turner (1714) or Kylee Bradley (4970). However in this scenario, unless the patient needs to be admitted, swab for influenza and send the patient home with instructions to call the above hotlines
- d. **Employees should contact the Employee Health Clinic for testing at 319-356-3630**
- e. If you tested positive for COVID-19:
  - i. Please notify the chief on call
  - ii. Call the University Employee Health Clinic (UEHC) at 319-356-3631. Stay home and isolate from others in your household, until:

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- iii. At least seven days have passed since your symptoms first appeared AND you have been fever-free for 72 hours without the use of fever-reducing medicine AND other symptoms (cough and shortness of breath), if any, have improved.
- iv. Please contact UEHC (319-356-3631) before returning to work, so that they can review your symptoms and determine that it is safe to do so.
- f. If you tested negative for COVID-19:
  - i. Please notify the chief on call
  - ii. You may return to work once you have been fever-free for 24 hours without the use of fever-reducing medicine AND have no other new respiratory symptoms (cough and shortness of breath).
- g. **VA Inpatient** → See Triaging rules below. Call Infection control @63-6224 or Pager 0556 during daytime hours. If evening / weekend contact UIHC ID Pager 8245
- h. **VA Outpatient** → All patients and visitors entering the VA are subject to screening by trained volunteers and positive screens will be referred to an assessment clinic staffed by ED physicians. If a patient makes it through this screening, the MAs will conduct secondary screening during check-in and positive screens will be transferred to the assessment clinic.

**Note:** In all situations, please exercise caution; utilize and conserve PPE as outlined below and limit exposure to minimal staff ONLY (ie. No medical students, non-primary interns).

### 4) Inpatient Triaging rules

#### UIHC:

- a. Applies to known **general medicine** COVID19 patients coming out of ICU AND non-critical admissions with either confirmed or **high risk** rule-out COVID19 (travel, immunosuppressed, confirmed contact, classic lab and/or imaging findings). The above patients will be admitted to the MAPPS team at UIHC
- b. **Low risk** rule-outs at the University may still be admitted to teaching services and should be discussed with the team attending in order to accept and reduce exposure
- c. IF a **general medicine patient** on the wards is confirmed as having COVID19 later during the hospital course, they will be transferred to the MAPPS team by the triaging hospitalist or the GOLD team (please inform ASAP)
- d. Subspecialty teams are **NOT** allowed to transfer PUI COVID patients to medicine just because they are being ruled out, this MUST be relayed by the SCM staff
- e. Rule-outs that are not in the ICU will be geographically located in **5-South** and **4-South**
- f. Subspecialty teaching services (Heme-onc, Cardiology) may still accept rule-outs and COVID19 positive patients, however interaction with these patients should preferably be limited to **STAFF ONLY**

#### VA:

- a. **All rule-outs** at the VA for the time being will be admitted to GOLD
- b. IF a patient is confirmed as having or is highly suspicious for COVID19 in the VA ICU, the primary will be the Pulmonary Critical Care attending with GOLD team cross covering in the day and overnight

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- c. In order to decrease patient load on medicine services, palliative service will start admitting end-of-life patients to their own service on 4/6, cross-cover will be done by GOLD hospitalist at night

### 5) Outpatient Patient Triage

- a. VA COC:
  - i. Please review your clinic schedules and see if the patient “needs” to be seen or if the appointment can be delayed.
  - ii. You will receive an email from Iverson / Smock / Schwartz prior to your Y-week describing the telephone visit process
- b. IRL COC: All residents are expected to review the most current materials on telemedicine the weekend before they come to clinic on Monday, and be prepared to do or learn telemedicine by video or phone. At your first session of your Y-week your staff will make sure you understand and can do telemedicine visits. Understand the rules for staffing, for phone timing, for different documentation for telemedicine.
  - i. Residents are to bring their own personal protective face shields with them to clinic and should wear face shields when in the clinic area, and respect social distancing and personnel safety measures. Entry screening of employees at IRL is similar to main campus. Expect to be assigned a computer/telemedicine spot for your clinic time, to be cleaned before and after use.

**Note:** We are still trying to “see” as many patients as possible to provide continuing care while enforcing social distancing.

- ii. Monday’s patients will be reviewed by staff/or residents the previous week for telemedicine or in-person visit appropriateness. If staff reviews a resident’s patients for Monday, they will send the resident and MA/RN an email with recommendations about whether the patient should be seen or switched to telemedicine.

**Note:** If the resident has time to review their clinic patient schedule they can, but this is NOT REQUIRED on Friday or the weekend before clinic. (We want to do our best to avoid overburdening residents outside of clinic right now.)

- iii. Residents who are on Y-week will review their own schedules for the upcoming day or two starting with Tuesday schedule, check with staff, and hand their lists to the resident clinic MA’s.
- iv. When reviewing patients, providers need to decide if
  - i. Patient needs to be seen – keep clinic appointment
  - ii. Patient can be seen by telemedicine. Most visits should be telemedicine, to help patients maintain isolation at home for their own safety and the safety of IRL
- v. When all patients have been reviewed, give your notes to Evan, Marilyn, Carol, or other MAs/RNs assigned to help with resident clinic that day.

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- i. The MA/RN will start contacting patients with your recommendations using scripting we have provided and document their conversation in Epic. MA's will help patients to get on MyChart and to establish video "vidyo" capabilities by MyChart.
- ii. For a telemedicine visit, the MA will confirm date/time/phone number to reach patient and the appointment will be converted to a telemedicine visit by video (preferred) or by telephone. Only MA's can change a visit to a billable telemedicine encounter. Unless it is a friendly phone call or lab follow up, all phone calls/video connections on which care is provided **must be prescheduled** by an MA.
- iii. The MA's will try do much of their usual protocol of prepping the visit with chief complaint, allergies, meds, refills, etc, - work closely with your MA for this.
- iv. When the MA/RN is finished contacting patients from your schedule, resident is responsible for timely completion of visit with patient with the presence and availability of staff confirmed. Skype for Business or clinic phones are recommended for telephone contacts. Approved video platforms are to be used for video visits– discuss with your staff.
- v. Telemedicine visits are to be done in clinic unless your staff has specifically given you permission for a given session to work from elsewhere at a telemedicine capable site. Each staff may vary on this – resident must clarify with staff prior to each session if you and staff feel comfortable "seeing" your patients from another location. If you are off site, you must verify BEFORE initiating a telemedicine encounter that staff is immediately available to you by phone or other electronic communication

### 6) Code Blue Procedure

#### a. General:

- i. Please review 'Personal Protective Equipment' below
- ii. Please verify prior to entering the code room whether the patient is on contact / isolation precautions, **take all necessary precautions to ensure your safety**
- iii. Please minimize resident / staff entry into the room for safety and to reduce PPE wastage
- iv. Make sure to remove all PPEs when exiting the patient room, if escorting the patient to the ICU, you must have NEW PPE ex. contact gown, once the patient is intubated a surgical mask is okay

#### b. UIHC:

- i. The resident carrying a code pager should carry an N95 mask of their size in a sealed bag to be utilized if and when needed (this is to ensure resident safety and to minimize PPE waste) until other protocol is finalized
- ii. Call stores @61784 the day prior to receiving the code pager and ask them to tube the appropriate size to you, you must keep it unused in a bag then return it to stores at the end of your rotation
- iii. MET / RRTs are currently not considered aerosol generating events, HOWEVER use your judgement\* for example if the patient is on high flow oxygen, nebulizer, or being bag-masked or needing intubation

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- iv. All airway / respiratory rapid responses should be paged to 'Adult Covid Airway' team @6145. Medicine teams will NOT be expected to go to these.
- v. The ICU charge nurses will be notified of the above procedures and should be organizing the patient transport process

c. **VA:**

- i. ICU and ED personnel will bring a jump bag with masks to every code
- ii. PPE required for the code itself will be available outside of 7W entrance

### 7) Personal Protective Equipment

- a. All residents and staff should review donning and doffing procedures, including undergoing respirator fit testing at the Employee Health Clinic (1097-1 Boyd Tower) call ahead to schedule at 319-356-3631
- b. **Gowns should no longer be worn by faculty or staff treating patients in contact precautions for conditions other than confirmed or suspected COVID-19**
- c. PPE should be re-used per new hospital policy below  
<https://apps.its.uiowa.edu/dispatch/archive/3-18-2020-patient-care-staff--new-guidelines-for-ppe-reuse-2xpqjYM>

*Briefly;*

- i. All face shields and CAPR lens cuffs can be reused after cleaning
- ii. N95 masks should be labeled with a black permanent marker (on the outside bottom edge) with your first initial, last name, unit, and date of first use. When doffing after use, handle the mask with proper doffing procedure (straps only) and place / seal inside a brown paper bag. Label the bag with your name and unit and drop it off at the designated location "dirty biohazard bin" on each unit. This should then be available for you to pick up in your next shift. Each mask will only undergo 5 cleanings (kept track of by colored marks). Check for mask integrity before your next use.
- iii. Keep your surgical mask on for the day if seeing other patient(s) on droplet isolation (ex. Wear a mask for influenza patient, and keep it on for the rest of rounds / however long it's needed whether the patient is on droplet iso or not) and only dispose once you need to take it off
- d. **UIHC PPE** for patients with Suspected or Confirmed COVID-19 is as below
  - i. **Clinic, ED, Acute care** → Droplet + Contact + Eye Protection
  - ii. **Critically Ill OR Requiring aerosol generating procedures\*** → AIIR (negative pressure room if available) AND Airborne (N95 / CAPR) + Contact + Eye protection
- e. **VA PPE** for patients with Suspected or Confirmed COVID-19 is as below
  - i. LOCAL ICVA Isolation Recommendations w Fever/ Dyspnea suspected COVID patients
    - i. **LOW suspicion** for COVID without aerosol generating\* procedures → droplet / contact isolation
    - ii. **LOW suspicion** for COVID requiring aerosol generating\* procedures → airborne / contact isolation
      - a. **High suspicion for COVID** → airborne / contact isolation
    - iii. **PPE for non-COVID patients**

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- a. MRSA colonization patients will NOT require PPEs. We will STILL use PPEs for other conditions, C diff, VREs
- b. **Face shields should be used for all patients**
- iv. **The VA as of 4/10 has a universal mask policy, these will be provided to each team at the beginning of the day**
- v. Scrubs are available in the 7W day room. Please change there when seeing COVID patients.
- vi. ICVA will use PAPR (can be wiped and reused) as PPE for airborne isolation. PAPR and other PPE are located in storage room on 7W
- f. **\*Aerosol generating procedures:** Nebulizer treatments, manual ventilation, intubation / extubation, BIPAP/CPAP, high-frequency oscillating ventilation, suctioning, sputum induction, bronchoscopy, CPR, autopsy
- g. Procedure mask + Face shield: <https://youtu.be/17pVileUA4U>
- h. N95: <https://youtu.be/9chxhfXWLws>
- i. CAPR: <https://youtu.be/SCaZm1Lzvrl>

### 8) Other / Resources

- a. Travel
  - i. Effective 3.5.20 the Board of Regents has instituted a ban on university-sponsored international travel for 30 days (this may be extended)
  - ii. All UIHC work-related domestic and international travel is suspended until further notice
  - iii. If you are returning from the above-mentioned countries on or after Feb. 2, call EHC above or page Epidemiology at 3158 after business hours and on weekends
  - iv. UIHC: Currently no policies exist restricting employee personal travel, HOWEVER deferring non-essential international travel is strongly encouraged

**Note:** Unexpected policy changes may occur at any time. Ex. Additional countries may be added to the CDC's travel health notice, potential restriction of travel back to the United States and/or mandatory quarantine may be imposed.

- b. UIHC Visitor Restrictions and Entry / Exit Procedures
  - i. **Please keep your UIHC badge on you when entering, if you do not have your ID security may need to see other photo ID for employee verification**
  - ii. 1 visitor per day for all adult patients
  - iii. 2 visitors per day for pediatric patients (must be a parent or legal guardian)

**Note:** Visitors must be age 18 or older and healthy. Visitors will be screened when they arrive and asked which patient they are visiting. Some patient care areas may impose additional restrictions. **Please use your own judgment for visitor access to critical care patient situations and/or severely ill patients**

  - iv. GME Parking passes (65-M, 75-M) are now only allowed to park in Parking Ramp #4 (the one beside JPJ Family Pavilion) in the day
  - v. Overnight parking accesses are unchanged
  - vi. Access from the Resident Lounge to the hospital: from the first floor between 0600-0900, 1430-1900

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- c. VA Entry / Exit Procedures
  - i. Starting 3/18, all employees are expected to enter from Building 2 between 6 am – 4 pm across from Newton Road as the primary entrance (Southeast corner of main VA hospital), for screening prior to entry
  - ii. Entry screening includes questions about symptoms only
  - iii. All other entrances / exits will be locked
  - iv. For evening / weekend entry, the FRONT entrance will be open ONLY
  - v. **Starting 4/2, all employees will not be allowed to enter the VA wearing UIHC scrubs, or face shields. Both will be provided internally, please contact Andrei**
- d. Jeopardy Contingency
  - i. Please refer to 'Jeopardy Contingency' plans document
  - ii. Plans to reduce resident in-house exposure and conserving providers by reducing non-essential service coverage are being explored, further updates will be forthcoming
- e. Education
  - i. Morning Reports are cancelled until further notice
  - ii. Noon Conferences are limited to <25 in-person attendees, click on the zoom link in the meeting invitations sent to join in remotely
  - iii. Wards 101 is cancelled until further notice
  - iv. Master Clinician Rounds are cancelled until further notice
  - v. Y-week QI Huddles are cancelled until further notice
  - vi. Y-week afternoon curriculums are being transitioned to zoom live-streaming vs online modules
  - vii. Y-week subspecialty clinics are cancelled for residents until further notice
- f. HIPAA
  - i. **Reminder:** Please DO NOT open patient charts for whom you are not directly providing care
  - ii. If you are approached by the media, refer them to the media relations team  
<https://uihc.org/media-phone-numbers>
- g. Food
  - i. UIHC: Food is provided in to-go containers for residents watching conferences live or in team rooms
  - ii. VA: Based on availability, food will be brought from UIHC to VA
- h. Learning Modules
  - i. ACP – Novel Coronavirus: A Physician's Guide:  
<https://www.acponline.org/cme-moc/online-learning-center/novel-coronavirus-a-physicians-guide>
  - ii. How to talk to your patients:  
<https://www.vitaltalk.org/guides/covid-19-communication-skills/>
- i. Mental Health and Wellbeing
  - i. UIHC IM CHIEF RESIDENTS! (Please call or stop by!)
  - ii. UI Employee Assistance Program (confidential counseling):  
Phone: 319-335-2058 or [eaphelp@uiowa.edu](mailto:eaphelp@uiowa.edu)
  - iii. Mental health hotline (UI Psych – free):



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Phone: 319-678-4148 (internally 8-4148)

- iv. Join the Humanities and Wellness team for a nightly virtual hangout session from 7:30 pm! Recurrent Zoom link: <https://uiowa.zoom.us/j/393891119>
- v. COPE team (multi-disciplinary emotional support)  
Email: [UIHC-COPE@healthcare.uiowa.edu](mailto:UIHC-COPE@healthcare.uiowa.edu) (Pager: 7080)
- vi. Headspace (mindfulness / wellness site) free to providers with NPI:  
<https://www.headspace.com/health-covid-19>

### j. Child Care Resources

- i. University Just-in-Time Child Care Resources:  
<https://hr.uiowa.edu/well-being/family-services/child-care/just-time-child-care-resources>
- ii. Internal Medicine Residency Excel Sheet:  
[https://iowa-my.sharepoint.com/:x:/g/personal/msansari\\_uiowa\\_edu/EahjNrvk8FFKuJ87Vh1qUn0BpRGLDAbIhThUTf2IyQhne-A?e=yct000](https://iowa-my.sharepoint.com/:x:/g/personal/msansari_uiowa_edu/EahjNrvk8FFKuJ87Vh1qUn0BpRGLDAbIhThUTf2IyQhne-A?e=yct000)
- iii. CCOM IM Interest Group – Medical Students matching service:  
<https://forms.gle/WDxvrbWSKHgDnojG7>

### k. Coronavirus Updates

- i. University of Iowa:  
<http://coronavirus.uiowa.edu>
- ii. UIHC:  
<https://medcom.uiowa.edu/theloop/>
- iii. COVID-19 “By the numbers”:  
<https://medcom.uiowa.edu/theloop/covid-19-by-the-numbers>
- iv. Iowa Department of Public Health:  
<https://idph.iowa.gov/Emerging-Health-Issues/Novel-Coronavirus>
- v. Centers for Disease Control and Prevention:  
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

### l. Coronavirus Questions

- i. Program of Hospital Epidemiology, Ph: 319-356-1606, pager 3158
- ii. Hospital epidemiologists;
  - i. Jorge Salinas ([Jorge-salinas@uiowa.edu](mailto:Jorge-salinas@uiowa.edu))
  - ii. Dan Diekema ([daniel-diekema@uiowa.edu](mailto:daniel-diekema@uiowa.edu))
  - iii. Melanie Wellington ([melanie-wellington@uiowa.edu](mailto:melanie-wellington@uiowa.edu))
- iii. Submit suggestions / potential solutions to “Blind Spots”:  
[https://service.healthcare.uiowa.edu/CherwellPortal/BlindSpots/?\\_af=5f0928a8#0](https://service.healthcare.uiowa.edu/CherwellPortal/BlindSpots/?_af=5f0928a8#0)
- iv. Direct PPE donation requests to the site below:  
<https://uihc.org/kind-donations>