Riverside University Health System (RUHS)
Public Health (PH)
2019-nCoV Evaluation Checklist

The purpose of this checklist is to provide you with step-by-step guidance when evaluating patients who may have 2019 Novel Coronavirus (2019-nCoV) infection, with the goal of preventing the spread infection and expediting investigation with RUHS-PH and testing through the Public Health Laboratory (PHL).
Medical providers, for assistance with diagnosis and infection control, please call:

RUHS-PH Disease Control
(951) 358-5107 (8:00am – 5:00pm Monday to Friday)
(951) 782-2974 (After Hours Public Health Duty Officer)

Step 1. Identify patients who may have respiratory illness caused by 2019-nCoV.
- Place visible signage requesting visitors with a fever and recent international travel to immediately notify designated licensed staff.

Step 2. Does the patient meet one of the criteria below:

Clinical Features	AND	Epidemiologic Risk
Fever[2] **or** signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)		Any person, including health care workers, who has had close contact[1] with a laboratory-confirmed[3] 2019-nCoV patient within 14 days of symptom onset
Fever[2] **and** signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)		A history of travel from **Hubei Province, China** within 14 days of symptom onset
Fever[2] **and** signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization[4]		A history of travel from mainland **China** within 14 days of symptom onset

IF NO and patient does not meet all three (3) criteria then **STOP** 🛑 here and continue evaluation for alternative diagnosis as clinically indicated.

IF YES and patient meets all three (3) criteria, then immediately isolate patient:
- 2a. Place surgical mask on patient
- 2b. Place patient in private room with door closed (ideally negative pressure airborne isolation room).

Step 3. Implement following infection control procedures for healthcare workers:
- 3a. Standard precautions
- 3b. Contact precautions (gloves, gown)
- 3c. Eye protection (goggles or face shield)
- 3d. Airborne precautions (e.g., N95 mask or PAPR)

Step 4. Immediately contact and report patient to Disease Control:
(951)358-5107 from 8:00am- 5:00pm Monday to Friday and (951)782-2974 (After Hours Public Health Duty Officer)
- RUHS-PH will advise on the next steps.
- **DO NOT send specimen to PHL until case is discussed with and testing is approved by Disease Control.**

Step 5. Collect specimens for laboratory diagnosis via the PHL.
Collect one specimen from each category (lower respiratory, upper respiratory and serum)
for a minimum of three (3) specimens as soon as possible regardless of symptom onset.

[1] Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever-lowering medications. Clinical judgment should be used to guide testing of patients in such situations.

[2] Impacted areas are located at https://www.cdc.gov/coronavirus/2019-ncov/locations-confirmed-cases.html

- *5a. Lower Respiratory*
  - **Bronchoalveolar lavage or tracheal aspirate:** 2-3 mL in 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.
- *5b. Upper Respiratory*
  - **Nasopharyngeal swab AND oropharyngeal swab (NP/OP swab)** Use a synthetic fiber swab with plastic shaft. Do not use calcium alginate swabs or swabs with wooden shafts. Place swab in a sterile tube with 2-3 ml of viral transport media Do NOT combine NP/OP swab specimens; keep swabs in separate viral transport media collection tubes.
  - **Nasopharyngeal wash/aspirate or nasal aspirate:** 2-3 mL in a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

> **NOTE:**
> - It is imperative that NP and OP swabs are placed in viral transport media, such as ones used to collect specimen NP swabs for influenza testing (see figure to the right).
> - Improper collection, such as placing swabs in bacterial culture media, will void the specimen and delay testing.

- 5c. *Serum*
  - Children and adults: Collect 1 tube (5-10 mL) of whole blood in a serum separator tube.
  - Infant: A minimum of 1 mL of whole blood is needed for testing pediatric patients. If possible, collect 1 mL in a serum separator tube.

If indicated Public Health may request the additional following specimens:
- 5d. *Stool*
  - Collect and place in a sterile, screw-cap, leak-proof container without preservative.
- 5e. *Urine*
  - Collect a minimum of 10mL in a sterile, screw-cap, leak proof container without preservative.

> **TRANSPORT INFORMATION**
> - Refrigerate specimens at 2-8°C and transport on cold pack.
> - Complete a PHL form for *each specimen*. The test request form is located at www.
> - Upon approval by Disease Control, the PHL will assist with courier pick up. Specimens that arrive at PHL without prior DPH approval may experience significant delays in testing. **If specimens cannot be collected at the clinic, do not refer the patient to another facility to obtain specimens** (i.e., commercial lab, other medical clinic). **Notify Public Health.**

Step 6. Continue medical evaluation and empiric treatment for other causes of respiratory infection or pneumonia as clinically indicated.

All patients with suspected nCoV-2019 infection may also be tested for common causes of respiratory infection and pneumonia as clinically indicated. **Testing for other respiratory pathogens should not delay specimen collection for nCoV-2019 testing.**

Step 7. Do not discharge patient without prior approval from Disease Control.

Continue patient isolation and infection control procedures as above.