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:

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>AND</th>
<th>Epidemiologic Risk</th>
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<tbody>
<tr>
<td>Fever(^2) or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)</td>
<td></td>
<td>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</td>
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<tr>
<td>Fever(^2) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)</td>
<td></td>
<td>A history of travel from Hubei Province, China within 14 days of symptom onset</td>
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<tr>
<td>Fever(^2) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization(^4)</td>
<td></td>
<td>A history of travel from mainland China within 14 days of symptom onset</td>
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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.
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. Ser um
- 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. Ur ine
- 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.