Guidance for Clinicians

2019 Novel Coronavirus (2019-nCoV) Physician Check List: Managing patients who may have (2019-nCoV) infection

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 the San Bernardino County Department of Public Health (SBCDPH) and testing through the Public Health Laboratory (PHL).

Medical providers, for assistance with diagnosis and infection control, please call:
SBCDPH Communicable Disease Section (CDS)
(800) 722-4794 (8:00am – 5:00pm Monday to Friday)
(909) 356-3805 (After Hours 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 a healthcare staff.
(2019 nCoV travel alert poster: English / Chinese-Simplified / Chinese-Traditional)

☐ Step 2. Does the patient have: 1
   1. Fever (T >100.4°F or >38°C) 2
   2. Respiratory symptoms (e.g., cough, shortness of breath), AND
   3. Travel to Wuhan City, China <14 days prior to illness?

IF NO and patient does not meet all three (3) criteria then STOP 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
☐ 3d. Airborne precautions (e.g., N95 mask or PAPR)

☐ Step 4. Immediately contact and report patient to the SBC DPH CDS:
(800)722-4794 from 8:00am- 5:00pm Monday to Friday and (909)356-3805 (After Hours Duty Officer)
☐ SBCDPH will advise on the next steps.
☐ DO NOT send specimen to PHL until case is discussed with and testing is approved by SBCDPH.

☐ 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 Although CDC criteria for testing also include contact with a known or suspected case of novel coronavirus infection, this is unlikely since there are no cases in San Bernardino and contacts to cases outside of SB are being followed by CDC.
2 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.
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.

**TRANSPORT INFORMATION**
- Refrigerate specimens at 2-8°C and transport on cold pack.
- Contact SBCDPH for assistance in completing a Test Requisition form for *each specimen* prior to transportation of specimen to the PHL.
- **Notify Public Health of specimen collection prior to transport.** Specimens that arrive at PHL without prior SBCDPH notification 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).

**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.** PHL can assist with rapid molecular respiratory pathogen testing if needed.

**Step 7. Do not discharge patient without prior approval from SBCDPH.**
Continue patient isolation and infection control procedures as above.