Algorithm for Contact Tracing for Suspected coronavirus disease (COVID-19) cases on conveyances to CARPHA Member States

1. **Exposed Traveller**
   - (History of travel to location with active outbreak or exposed to COVID-19 case)

2. **Self-Monitor**
   - 14 Days
   - No Symptoms Develop
     - Symptoms Develop
     - Suspected Case
       - (Travel history and Symptoms)

3. **Suspected Case**
   - Follow-up until 14 days after the flight
   - Impact of contact tracing in relation to the flight
   - Isolate person and use PPE

4. **Contact Tracing**
   - Begin Contact Tracing
     - AND
     - Laboratory Testing

5. **Laboratory Testing**
   - Assess Laboratory Results
   - Positive for COVID-19
     - Maintain isolation until recovered (Retest on Day 14-21)
     - No follow up required
   - Negative for COVID-19
     - Stop Contact Tracing

### Criteria to be considered in Contact Tracing

- **Case classification:**
  - Contact tracing should be initiated upon confirmation of a COVID-19 case, according to the WHO case definition: WHO’s definition of patients with SARI: suspected of COVID-19: SARI: An ARI with history of fever or measured temperature ≥ 38°C and cough; onset within the last ~10 days; requiring hospitalization. However, the absence of fever does not exclude viral infection.
  - **Suspected case:** A person who meets the clinical AND epidemiological criteria: Clinical criteria: 1. Acute onset of fever and cough; OR 2. Acute onset of ANY THREE OR MORE of the following signs or symptoms: fever, cough, general weakness/fatigue, headache, myalgia, sore throat, dyspnoea, anosmia/nausea/vomiting, diarrhoea, altered mental status. AND Epidemiological criteria: 1. Residing or working in an area with high risk of transmission of the virus; for example, closed residential settings and humanitarian settings, such as camp and camp-like settings for displaced persons, anytime within the 14 days prior to symptom onset; OR 2. Residing in or travel to an area with community transmission anytime within the 14 days prior to symptom onset; OR 3. Working in health setting, including within health facilities and within households, anytime within the 14 days prior to symptom onset. **A patient with severe acute respiratory illness (SARI): acute respiratory infection with history of fever or measured fever of ≥ 38°C and cough; with onset within the last 10 days; and who requires hospitalization**.
  - **Probable case:** A patient who meets the clinical criteria above AND is a contact of a probable or confirmed case, or epidemiologically linked to a cluster of cases which has had at least one confirmed case identified within that cluster.
  - **Confirmed case:** A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms. *See: https://www.who.int/health-topics/coronavirus* for latest case definitions. Testing should be according to local guidelines for management of community.

- **Symptoms, severity and infectiousness during flight/ cruise**

### Laboratory Protocols

- **Initial laboratory testing:**
  - Chest radiograph (CXR): abnormal CXR findings suggestive of COVID-19 disease. Typical chest imaging findings suggestive of COVID-19 include the following (Manna 2020): chest radiography: hazy opacities, often rounded in morphology, with peripheral and lower lung distribution ∙ chest CT: multiple bilateral ground glass opacities, often rounded in morphology, with peripheral and lower lung distribution - lung ultrasound: thickened pleural lines, B lines (multifocal, discrete, or confluent), consolidative patterns with or without air bronchograms. A person with recent onset of anosmia (loss of smell) or ageusia (loss of taste) in the absence of any other identified cause. D. Death, not otherwise explained, in an adult with respiratory distress preceding death AND who was a contact of a probable or confirmed case or epidemiologically linked to a cluster which has had at least one confirmed case identified within that cluster.

### Extent of contact tracing for aircrafts

- **Contact tracing efforts should focus on:**
  - passengers seated two seats in all directions around the index case AND
  - crew members serving the section of the aircraft where the index case was seated AND
  - persons who had close contact with the index case e.g. travel companions or persons providing care.

- **If severity of symptoms, sputum, diarrhea, other symptoms, or movement of the case warrant more extensive contact tracing, larger portions of the aircraft or the entire section of the aircraft can be subject to contact tracing.** This also applies if, during contact tracing, a secondary case is identified. If a crew member is the index case, all passengers seated in the area served by the crew member during the flight should be regarded as contacts, as should the other members of the crew.