COVID-19: BREAKING THE CHAIN OF TRANSMISSION THROUGH CASE IDENTIFICATION, TESTING, ISOLATION, QUARANTINE

Information for All UN Personnel
Updated May 2021

Dr. Esther Tan, MD, MPH
Senior Medical Officer
Public Health Section
UN Division of Healthcare Management & Occupational Safety and Health (DHMOSH)
NOTE: Does Being Vaccinated Make Any Difference?

• Currently, **no specific change in policy** for any individuals who are fully vaccinated against COVID-19

• Because according to WHO:
  — Positive evidence that the vaccine prevents severe disease/death,
  — But NO EVIDENCE YET it stops transmission of the virus

**Therefore, WHO recommends that for vaccinated persons all precautions (e.g. masking, hygiene, quarantine) continue.**
Break the Chain of Transmission through Early Detection
Symptoms To Monitor Daily Amongst UN Personnel

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- General weakness/fatigue
- Muscle or body aches

- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea
- Altered mental status
Who To Test?

• Testing is only one part of response plan

• Testing by itself will not reduce transmission/morbidity & mortality

• Need to Test all who are SYMPTOMATIC:
  – Mask & Isolate ASAP
  – Quarantine all close contacts
  – Test for COVID-19 via PCR
Contact Tracing

1. Identify source of infection (known contact, mass gatherings, etc.)
2. Case identified
3. Identify contacts
4. Isolate and manage as COVID-19 case
5. Quarantine contacts in a designated facility or at home (14 days recommended)
   a. No symptoms develop during quarantine
   b. Symptoms develop during quarantine
      i. Test for COVID-19
         - Mild symptoms: isolation at home
         - Severe symptoms: immediate medical care
      ii. Result:
         a. Negative: Continue with infection prevention and control measures
         b. Positive: Isolation for at least 10 days from symptom onset +3 additional days without symptoms

Continue with infection prevention and control measures:
- Physical distancing, mask use, adequate ventilation, hand hygiene, and respiratory etiquette.
Definition of a Contact

A contact is a person who has had any one of the following exposures to a probable or confirmed case:

1. face-to-face contact with a probable or confirmed case within 1 meter and for at least 15 minutes;
2. direct physical contact with a probable or confirmed case;
3. direct care for a patient with probable or confirmed COVID-19 disease without the use of recommended PPE; or
4. other situations as indicated by local risk assessments.

Exposure must have occurred during the infectious period of the case, and defined as follows:

Exposure to a symptomatic case: 2 days before and 10 days after symptom onset of the case, plus at least 3 additional days without symptoms (including without fever and without respiratory symptoms), for a minimum of 13 days total after symptom onset.

Exposure to an asymptomatic case: 2 days before and 10 days after the date on which the sample that led to confirmation was taken. Contacts should be managed in the same way as for a symptomatic case.
Who Must Be Quarantined for 14 days?

1. All contacts of lab-confirmed or suspected cases

2. Mandatory 14-day routine quarantine for incoming rotations of formed troops into field missions

—Monitor them for fever and symptoms twice daily.


NOTE: Local health authorities may recommend testing of asymptomatic contacts

—If symptoms develop/ PCR+, immediately mask & isolate
Quarantine vs Isolation – Word on Terminology

**Quarantine**
- healthy person
- exposed
- staying at home + away from others

**Versus**

**Isolation**
- known case
- sick (even mild symptoms)
- staying at home + away from others
PCR Testing Strategy?

• PCR Tests should be prioritized for
  - symptomatic persons
  - or units with PCR+ cases

• If planning to mass test with PCR tests, leadership must be prepared:
  — May find many asymptomatic persons who are PCR+
  — Must have isolation area for large number of cases
  — Must have quarantine area for large number of contacts
  — HCW must have sufficient PPE to care for PCR+ cases
Segregate the Different Groups

1. ISOLATION: **Confirmed PCR+** cases (can be symptomatic or asymptomatic)
2. ISOLATION: **Suspect** (i.e. symptomatic) cases
3. QUARANTINE: **Contacts**

- **Isolation area:**
  - Have dedicated bathrooms and no mixing of isolated persons with others
  - Need to be thoroughly cleaned and disinfected before use by other groups.
  - Have separate dining area/food supply
When to Release from Isolation?

• **COVID-19 who is symptomatic:**
  — At least 10 days have passed since symptoms first appeared AND
  — At least 3 days without fever and respiratory symptoms

• **PCR+ COVID-19 case who is asymptomatic:**
  — At least 10 days from specimen collection date

• NOTE that PCR testing at the end of isolation is not required however countries can chose to do this.
Please urgently notify up the chain:

- Anyone with fever and/or respiratory symptoms
- Clusters of >2 persons with fever and/or respiratory symptoms
- Anyone with suspect/confirmed COVID-19
- Anyone with severe shortness of breath without an identified cause
- Sudden death
Strict Segregation of Different Groups

• DO NOT mix the following 3 groups.

• Keep each group under strict isolation/quarantine and away from each other

• 1. **Suspect** COVID case

• 2. **Lab Confirmed** COVID cases

• 3. **Contacts** who are well (NOT infected) but were exposed (at risk of infection)
Please strictly segregate these FOUR Different Groups No Mixing Of These Groups with Each Other / Well Persons

**ISOLATION**

- Suspect COVID Case
  - (symptomatic but labs not done/pending)

**QUARANTINE**

- Well Contacts
  - (non-sick people but who were exposed to a COVID case)

**REGULAR INDIVIDUALS**

Lab Confirmed COVID Case
- (can be symptomatic or asymptomatic)
When to Release from Isolation or Quarantine?
(Please consult also your Local Health Authorities)

**ISOLATION**

- **Suspect COVID Case** (symptomatic but labs not done/pending)
- **Lab Confirmed COVID Case** (can be symptomatic or asymptomatic)

**QUARANTINE**

- **Well Contacts** (non-sick people but who were exposed to a COVID case)

**Symptomatic patients:** Release 10 days after symptom onset, plus at least 3 additional days without symptoms

**Asymptomatic cases:** Release 10 days after PCR positive test result

*Release only after 14 days from date of exposure to case*

*If become symptomatic, start isolation process ASAP*
You Can’t Say It Enough…..
Repeat Preventive Messages, Adapt in Local Language
Responding to COVID-19
Real-time training in national languages

Current courses

Virus respiratórios emergentes, incluindo COVID-19: métodos de...

COVID-19 dahil, ortaya gikan solunum yolü virüsüleri: tanı yöntemleri, önleyici...

Rizviye Hanım Descem Tozuhun, he Şamal

Novonastali respiratori virusi, ukljucujući COVID-19: metode za otkrivanje,...

Click here for the full course.

Click here for the full course.

Click here for the full course.

Click here for the full course.
Take the Threat Seriously – You Set the Tone as Leaders

• Develop a clear COVID-19 SOP for outbreak prevention and management

• Run a simulation drill for your office / duty station
Thank you

Any Questions for the Public Health Team: dos-dhmosh-public-health@un.org


WHO Guidance: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
Reference Slides: WHO Case Definitions for COVID-19
Suspected case of SARS-CoV-2 infection

A person who meets the clinical AND epidemiological criteria:

Clinical Criteria:

- Acute onset of fever AND cough; OR
- Acute onset of ANY THREE OR MORE of the following signs or symptoms: Fever, cough, general weakness/fatigue¹, headache, myalgia, sore throat, coryza, dyspnoea, anorexia-nausea/vomiting¹, diarrhoea, altered mental status.

AND

Epidemiological Criteria:

- Residing or working in an area with high risk of transmission of virus: closed residential settings, humanitarian settings such as camp and camp-like settings for displaced persons; anytime within the 14 days prior to symptom onset; or
- Residing or travel to an area with community transmission anytime within the 14 days prior to symptom onset; or
- Working in any health care setting, including within health facilities or within the community; any time within the 14 days prior of symptom onset.
Suspected case of SARS-CoV-2 infection

A patient with **severe acute respiratory illness:**
(SARI: acute respiratory infection with history of fever or measured fever of \( \geq 38 \) C\(^\circ\); and cough; with onset within the last 10 days; and requires hospitalization).

**C**
Asymptomatic person not meeting epidemiologic criteria with a **positive SARS-CoV-2 Antigen-RDT**\(^2\)

---

\(^1\) Signs separated with slash (/) are to be counted as one sign.

\(^2\) NAAT is required for confirmation, see Diagnostic testing for SARS-CoV-2

See Antigen detection in the diagnosis of SARS-CoV-2 infection using rapid immunoassays
**Probable case of SARS-CoV-2 infection**

A patient who meets **clinical criteria** above **AND** is a **contact of a probable or confirmed case**, or linked to a **COVID-19 cluster**

A **suspect case with chest imaging** showing findings suggestive of COVID-19 disease

A person with recent onset of **anosmia** (loss of smell) or **ageusia** (loss of taste) in the absence of any other identified cause.

**Death**, not otherwise explained, in an adult with **respiratory distress** preceding death **AND was a contact of a probable or confirmed case** or linked to a **COVID-19 cluster**

---

25
**Confirmed case of SARS-CoV-2 infection**

A **person with a positive** **Nucleic Acid Amplification Test (NAAT)**

B **A person with a positive** **SARS-CoV-2 Antigen-RDT AND** meeting either the **probable case definition** or suspect criteria **A OR B**

C **An asymptomatic person with a positive** **SARS-CoV-2 Antigen-RDT** who is a **contact of a probable or confirmed case**
A group of symptomatic individuals linked by time, geographic location and common exposures, containing at least one **NAAT**-confirmed case or at least **two** epidemiologically linked, symptomatic (meeting clinical criteria of Suspect case definition A or B) persons with **positive Ag-RDTs** (based on ≥97% specificity of test and desired >99.9% probability of at least one positive result being a true positive).

Typical chest imaging findings suggestive of COVID-19 include the following:

- **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.