UNHCR PUBLIC HEALTH SECTION

SURVEILLANCE FOR COVID - 19

Effective response to an outbreak of COVID- 19 requires detection in the very earliest stages of the outbreak when the number of cases is small, and the geographical extent of spread is limited. In order to achieve this, a sensitive surveillance system capable of detecting small scale, unusual events is necessary.

Objective

Early identification of index case or possible human-to-human transmission of COVID- 19.

Approaches

1. Event-based surveillance systems - include a broad range of activities such as rumour surveillance, monitoring of media sources, informal community-based reporting networks, the immediate reporting of signal/trigger events by community or facility health care workers. This approach uses the community case definition (see below).
2. Indicator-based reporting – using case definitions in outpatient and inpatient departments at health facilities.

UNHCR Health Information System

- UNHCR case definitions include upper respiratory tract infections (URTIs), and lower respiratory tract infections (LRTIs). See Annex 1.
- Severe Acute Respiratory Illnesses include either URTI or LRTIs, which are hospitalized. This category is not included in the case definitions. See Annex 1.
- The Alert Thresholds for URTI and LRTI occurs when reported cases are 1.5 times the average for the previous 3 weeks. These trends should be monitored on a weekly basis to determine if the incidence rate is beyond the alert threshold. However, in the context of a COVID-19 outbreak, use the information from the line list to monitor daily trends of cases and death over time (Epi-curve).
- Suspected COVID-19 case definitions (See Annex 1) should be used for event-based surveillance at both health facility and community level. **This is a NOTIFIABLE DISEASE** and must be reported immediately to UNHCR/Partner Health Coordinator and Local Ministry of Health (MOH) Focal Points.

Triggers for Investigation/Reporting to UNHCR/MOH

- ✓ Clusters* of cases of **unexplained acute lower respiratory illness**;
- ✓ **Severe, unexplained lower respiratory illness** occurring in a health care worker who provides care for patients with respiratory disease;
- ✓ Changes in the epidemiology or mortality associated with the occurrence of **influenza like illness/URTI** or **LRTI** in a camp for example, a change in the age distribution of severe respiratory illness, an increase in deaths observed from respiratory illness or an increase in the occurrence of severe respiratory illness in previously healthy adults or adolescents;

- ✓ Cases beyond the alert threshold and beyond seasonality of the disease;
- ✓ Persistent changes noted in treatment response or outcome of severe lower respiratory illness;
- ✓ Suspected COVID-19 Case

**A cluster is defined as two or more persons presenting with manifestations of unexplained acute lower respiratory illness with fever (>38°C) (or who died of an unexplained respiratory illness) are detected with onset of illness in a two-week period and in the same geographical area and/or are epidemiologically linked.*

Community-based surveillance

Community-based Surveillance (CBS) involves the active community participation in detecting, reporting, responding to and monitoring COVID-19 events in the community. Community health workers and members are advised to report to the nearest health facility any cases exhibiting the following:

1. Fever + dry cough + difficulty in breathing OR
2. Unusual cluster of illnesses or deaths in a community

Note: any people exhibiting the above-mentioned symptoms, should be advised to stay home while the community health worker/ community member alerts the nearest health facility.

Locally developed case definitions and reporting mechanism can be applied.

Recommendations for specimen collection

Specimens should be collected in accordance with the national protocols and ensuring that appropriate personal protective equipment is available and worn by the health care worker and infection prevention protocols are followed. If not possible then referral should be made for specimen collection.

Recommendations for follow-up of contacts

<u>Definition of contact</u>

A contact is a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a suspected or probable or confirmed case:

- providing direct care for patients with COVID-19 disease without using proper personal protective equipment;
- staying in the same close environment as a COVID-19 patient (including sharing a workplace, classroom or household or being at the same gathering);
- travelling in close proximity with (that is, having less than 1 m separation from) a COVID-19 patient in any kind of conveyance.

Recommendations for reporting surveillance data to WHO

<u>Case-based reporting</u>

- Any suspected, probable and confirmed cases of novel coronavirus infection (COVID-19 disease) must be reported immediately to UNHCR and the Local Ministry of Health Focal Point for further investigation.

- A template for the revised line listing in Excel format and the data dictionary can be downloaded from the links.
- Case-based data reporting is recommended until it is not feasible due to high number of cases when you should switch to daily aggregated data.

Daily aggregated data

It should include the following information;

- number of new confirmed cases, that is, patients who tested positive for infection with the COVID-19 virus;
- number of new probable cases, that is, patients with an inconclusive laboratory test result;
- number of new deaths due to COVID-19 disease;
- number of new COVID-19 cases that were hospitalized;
- number of new COVID-19 cases referred for mechanical ventilation or extracorporeal membrane oxygenation or admitted to an intensive care unit;
- number of new cases and new deaths by age group in years using the groups 0 to <2, 2 to <5, 5 to <15, 15 to <50, 50 to <65 and ≥65 years, or similar;
- cumulative sex ratios of confirmed cases and deaths;
- total number of laboratory tests conducted;
- total number of tests that were positive for the virus that causes COVID-19; and
- the number of contacts being followed up and the number of newly identified contacts.
- Address in the Site/Settlement and the Site Name.

This should be reported daily to the Local Ministry of Health and UNHCR field office.

A decision to move from daily to weekly reporting should be made in the local coordination meetings based on the evidence on the ground.

ANNEX 1: Case Definitions

1. Upper Respiratory Tract Infection (URTI)

Cough/Cold (non-pneumonia)

- ✓ Running nose, cough and low-grade fever.

ILI case definition

An acute respiratory infection with:

- ✓ measured fever of ≥ 38 C°
- ✓ and cough;
- ✓ with onset within the last 10 days

2. Lower Respiratory Tract Infection (LRTI)

Adults (5 years or older):

- ✓ temperature ≥ 38°C **or** subjective fever; **and**
- ✓ cough **or** sore throat; **and**
- ✓ breathing rate > 20 breaths / minute

Child (2 months to < 5 years of age):

- ✓ cough **or** difficulty breathing; **and**

- ✓ any <u>one</u> of the following general danger signs:
  - breathing rate > 50 breaths / minute (infant 2 – 12 months)
  - breathing rate > 40 breaths / minute (child 1 – 5 years)
  - chest in drawing
  - stridor in a calm child
  - unable to drink or breastfeed
  - vomits everything
  - convulsions
  - lethargic or unconscious

Infant (1 week to < 2 months of age):

- ✓ breathing > 60 breaths / minute
- ✓ severe chest in drawing
- ✓ nasal flaring (when an infant breathes in)
- ✓ grunting (when an infant breathes out)

3. <u>Severe Acute Respiratory Illness</u>

An acute respiratory infection with:

- ✓ history of fever or measured fever of ≥ 38 C°;
- ✓ and cough;
- ✓ with onset within the last 10 days;
- ✓ and requires hospitalization.

4. <u>COVID - 19</u>

Suspect case

A. A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset. OR
B. A patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset; OR
C. A patient with severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

Probable case

A. A suspect case for whom testing for the COVID-19 virus is inconclusive. a. Inconclusive being the result of the test reported by the laboratory. OR
B. A suspect case for whom testing could not be performed for any reason.

Confirmed case

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

Community case definition

A. Fever + dry cough + difficulty in breathing OR
B. Unusual cluster of illnesses or deaths in a community

References

1. UNHCR Health Information Systems Case Definitions, 2019
2. https://www.who.int/csr/disease/swineflu/global_pandemic_influenza_surveilance_apr09.pdf?ua=1
3. https://www.who.int/bulletin/volumes/96/2/17-194514/en/
4. https://www.who.int/influenza/resources/documents/WHO_Epidemiological_Influenza_Surveillance_Standards_2014.pdf?ua=1
5. https://www.who.int/emergencies/diseases/novelcoronavirus-2019/technical-guidance/laboratory-guidance.
6. https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)