Interim surveillance recommendations for human infection with novel coronavirus

3 December 2012

Update

Based on additional information received since the original surveillance recommendations were published, WHO is updating its guidance for surveillance. WHO will continue to update these recommendations as more information becomes available.

This document has been revised to emphasize the recommendations, rather than to summarize current case reports. Current numbers and descriptions of reported cases are found at http://www.who.int/csr/disease/coronavirus_infections/update_20121130/en/index.html.

The substance of the recommendations has not changed. Some wording has been changed for the sake of clarity.

Background

The novel coronavirus has now been confirmed in three countries since April of 2012. The infections in all three countries appear to have been locally acquired. Patients have generally presented with pneumonia, though a significant proportion have also had renal failure. In two instances, infections have occurred in a cluster, one in a family in Riyadh, Saudi Arabia, and one among health care workers in a hospital near Amman, Jordan. Although the clusters raise concerns about the possibility of human-to-human transmission, there is currently no definitive evidence that this has happened. The source of the virus, its total geographic extent, the spectrum of illness, and the mode of transmission are currently unknown. The revised surveillance recommendations, along with a number of directed investigations being carried out in the affected countries, have been developed to address these key issues.

The following should be carefully investigated and tested for novel coronavirus:

1. Patients under investigation

   A person with an acute respiratory infection, which may include history of fever or measured fever (≥38°C, 100.4°F) and cough

   AND

   Suspicion of pulmonary parenchymal disease (e.g. pneumonia or Acute Respiratory Distress Syndrome (ARDS)), based on clinical or radiological evidence of consolidation.

   AND

   Residence in or history of travel to the Arabian Peninsula or neighboring countries within 10 days before onset of illness.

   AND
Not already explained by any other infection or aetiology\(^1\), including all clinically indicated tests for community-acquired pneumonia according to local management guidelines. It is not necessary to wait for all test results for other pathogens before testing for novel coronavirus.

2. Ill contacts

Individuals with acute respiratory illness of any degree of severity who, within 10 days before onset of illness, were in close physical contact\(^2\) with a confirmed or probable case of novel coronavirus infection, while the case was ill.

Any person who has had close contact with a probable or confirmed case while the probable or confirmed case was ill should be carefully monitored for the appearance of respiratory symptoms. If symptoms develop within the first 10 days after contact, the individual should be considered a “patient under investigation”, regardless of the severity of illness, and investigated accordingly.

3. Clusters

Any cluster\(^3\) of severe acute respiratory infection (SARI)\(^4\), particularly clusters of patients requiring intensive care, without regard to place of residence or a history of travel

AND

Not already explained by any other infection or aetiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines.

4. Health care workers

Health care workers with pneumonia, who have been caring for patients with severe acute respiratory infections, particularly patients requiring intensive care, without regard to place of residence or history of travel.

AND

Not already explained by any other infection or aetiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines.

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\(^1\) Examples of other aetiologies include *Streptococcus pneumoniae*, *Haemophilus influenzae* type B, *Legionella pneumophila*, other recognized primary bacterial pneumonias, influenza, and respiratory syncytial virus.

\(^2\) Close contact is defined as:
- Anyone who provided care for the patient, including a health care worker or family member, or who had other similarly close physical contact;
- Anyone who stayed at the same place (e.g. lived with, visited) as a probable or confirmed case while the case was ill.

\(^3\) A “cluster” is defined as two or more persons with SARI, with onset of symptoms within the same two-week period and who are associated with a specific setting, such as a classroom, workplace, household, extended family, hospital, other residential institution, military barracks or recreational camp.

\(^4\) Severe Acute Respiratory Infection (SARI) is defined as:
An acute respiratory infection with:
- history of fever or measured fever of \(\geq 38\) C\(^o\) (100.4\(^o\)F) and cough;
- onset within the last seven days; and
- requiring hospitalization.
Recommendations for enhanced surveillance:

- Health care providers should report immediately, to national authorities, through established reporting channels, all individuals recommended for investigation as above.
- Follow existing protocols for respiratory disease surveillance, which includes the investigation of clusters and other unusual respiratory events.
- Based on current information on confirmed cases, WHO does not advise special screening at points of entry with regard to this event nor does it recommend that any travel or trade restrictions be applied.
- Member States that have the capacity may wish to also consider testing:
  - Patients with pneumonia who have unusual or unusually severe clinical course with no other known aetiology, without regard to place of residence or a history of travel.
  - Retrospective testing of stored respiratory specimens from patients with pneumonia of unexplained aetiology.

Reporting:

WHO requests that probable and confirmed cases be reported within 24 hours of classification as such, through the Regional Contact Point for International Health Regulations at the appropriate WHO Regional Office.

For questions about this document:

Email outbreak@who.int. Please put “NCV epi surv recs” in the subject line.