

## Early recognition, reporting and infection control management of acute respiratory diseases of potential international concern

### Background

Some acute respiratory diseases (ARDs) can cause outbreaks with high morbidity and mortality, which may constitute public health emergencies of potential international concern. Examples include severe acute respiratory syndrome (SARS), human cases of avian influenza, and novel ARDs about which little is known. Patients with severe ARDs typically seek care at health-care facilities and health-care workers therefore play an important role in recognizing newly-emerging ARDs.

Early recognition, based on familiarity with the clinical and epidemiological factors associated with ARDs of potential concern, isolation and treatment of patients, and reporting of such cases to public health authorities are key measures.

Prompt reporting to local public health authorities for further verification and control measures at the public health level is crucial to prevent and control the spread of ARDs of potential concern locally, nationally, and internationally. Public health authorities should also alert health-care facilities about unusual outbreaks of ARDs in the community or other hospitals.

In health-care settings, appropriate and timely management of patients, health-care workers and visitors who may be infected with an ARD of potential concern is a key administrative control measure which can successfully help to control the spread of such ARDs.

### Important advice

#### Look for clinical clues:

- Does the patient have an unexplained severe acute febrile respiratory illness (e.g. fever > 38 °C, cough, shortness of breath), or other unexplained severe illness (e.g. encephalopathy or diarrhoea) with an epidemiological clue?

#### Look for epidemiological clues:

- Does the patient have a history of travel within the known or suspected incubation period to countries where patients are known to be suffering from an ARD of potential concern?
- Could the patient have had an occupational exposure to the agents suspected of causing an ARD of potential concern within the known or suspected incubation period?
- Has the patient had unprotected contact with people or animals with an ARD of potential concern within the known or suspected incubation period?
- Is the patient part of a rapidly spreading cluster of patients with an ARD of unknown cause?

### ✓ Checklist

Without further delay, health-care facilities should:

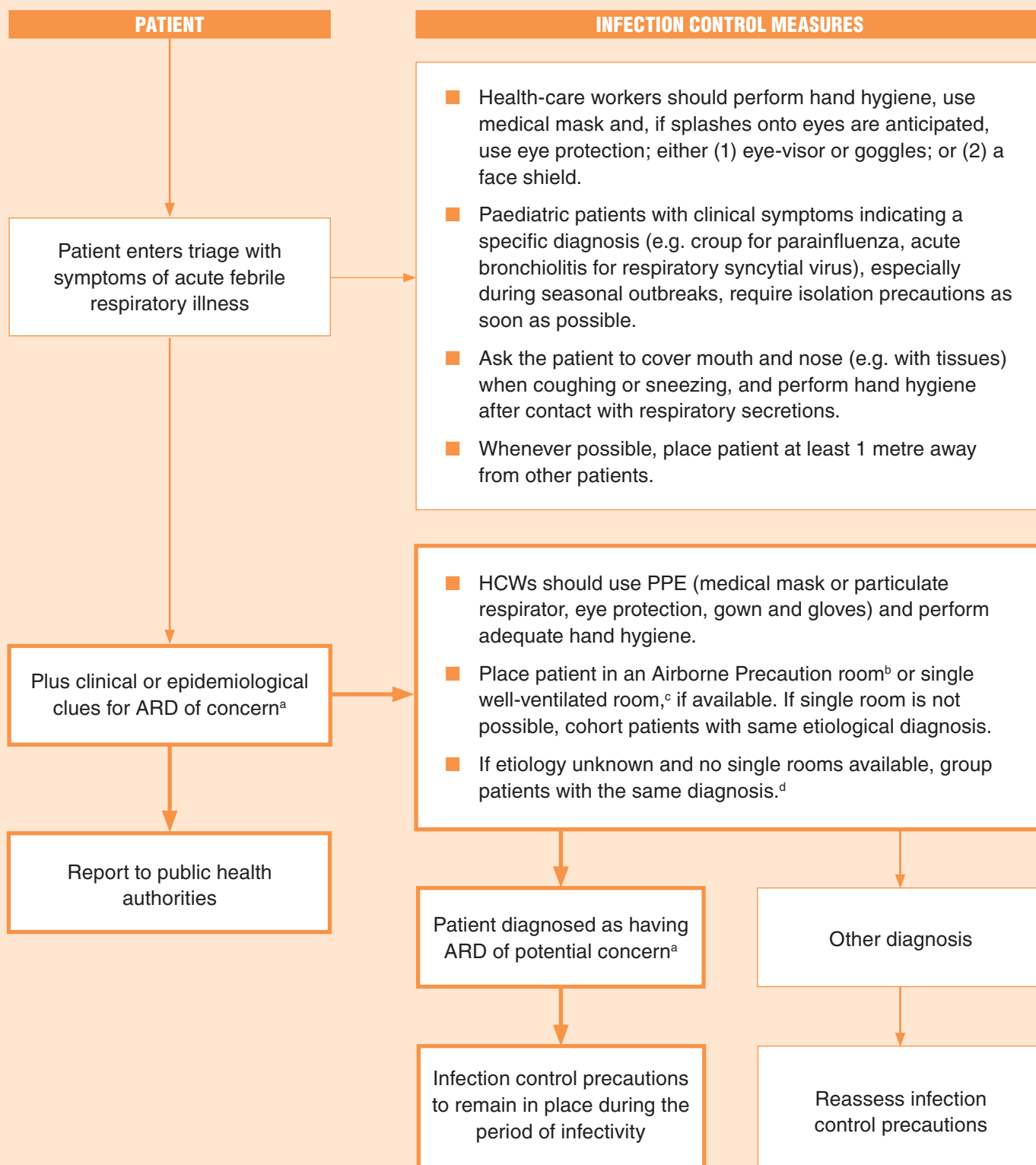
- Establish methods to ensure early recognition and investigation of persons who may be infected with an ARD of potential concern.
- Reinforce the prompt implementation of appropriate infection control precautions and use of personal protective equipment (PPE) by staff working with patients who may be infected with an ARD of potential concern.
- Train staff to place all patients suspected or confirmed to have an ARD of potential concern in a room or area separate from other patients and to evaluate them as soon as possible.
- Establish a link between health-care facility-based surveillance systems and public health surveillance systems and immediately report all available information about possible ARDs of potential concern to public health authorities.

For more details, see **Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care** available at [http://www.who.int/csr/resources/publications/WHO\\_CD\\_EPR\\_2007\\_6/en/index.html](http://www.who.int/csr/resources/publications/WHO_CD_EPR_2007_6/en/index.html).



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# Decision tree for infection control measures for patients known or suspected to have an ARD



<sup>a</sup> For the purpose of this document, ARDs of potential concern include: SARS, new influenza virus causing human infection (e.g. human cases of avian influenza), and novel organisms causing outbreaks of ARDs with high morbidity and mortality. Clinical and epidemiological clues – see previous page and Section IV.1 of “Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care – WHO Interim Guidelines”.

<sup>b</sup> Airborne Precaution rooms include both mechanically – and naturally-ventilated rooms providing at least 12 air changes per hour and controlled direction of airflow.

<sup>c</sup> Single well-ventilated room – room designated for the placement of patient providing at least 12 air changes per hour.

<sup>d</sup> Group patients with the same diagnosis – patients with epidemiological and clinical information suggestive of a similar diagnosis may share a room, but with a spatial separation of  $\geq 1$  metre between patients.