



## PHE Outbreak of acute respiratory syndrome associated with a novel coronavirus, Wuhan, China

06 February 2020

### ECDC answers to the European Commission questions 05/02/2020 on the Point of Entry measures

A coordinated EU-wide approach for screening and follow up of passengers at point of entry into the EU, especially from areas with ongoing community transmission of 2019-nCoV, may help to identify imported cases and limit the secondary transmission of the virus. It is possible that there will soon be cases from elsewhere in the world, so this document aims to provide an overview of possible measures to be considered. Although there are uncertainties related to the 2019-nCoV environmental survival, its transmission modes and transmissibility via asymptomatic or pre-symptomatic infections, applying a combination of measures may increase effectiveness in identifying suspected cases and their contacts, while minimising transmission at points of entry. Recommended best practice is a package including all these measures.

### Existing guidance on PoE measures

A comprehensive single resource was produced on 3 February 2020 by EU Healthy Gateways: *'Interim advice for preparedness and response to cases of 2019-nCoV acute respiratory disease at points of entry in the European Union (EU)/EEA Member States (MS) - Public health measures at points of entry'* and covers this issue based on ECDC and WHO guidance. Areas covered by this document are the following:

- Strengthening measures for detection of ARI due to 2019-nCoV on board aircrafts arriving from affected areas
- Strengthening measures for detection of ARI due to 2019-nCoV on board ships arriving from affected areas
- Strengthening measures for detection of ARI due to 2019-nCoV at medical facilities at the point of entry (port and air ports)
- Port and air port strategies for prevention of respiratory infections at points of entry

In addition, EU Healthy Gateways Joint Action has published more information related to the management of cases on ships and aircrafts:

- *'Interim advice for preparedness and response to cases of 2019-nCoV acute respiratory disease at points of entry in the European Union (EU)/EEA Member States (MS) - Advice for aircraft operators for preparedness and response to the outbreak of 2019-nCoV acute respiratory disease'*
- *'Interim advice for preparedness and response to cases of 2019-nCoV acute respiratory disease at points of entry in the European Union (EU)/EEA Member States (MS) - Advice for ship operators for preparedness and response to the outbreak of 2019-nCoV acute respiratory disease'*.

### Additional relevant guidance on case and contact management

Documents related to the management of contacts of probable and confirmed cases can be found in the ECDC document: *'Public health management of persons having had contact with novel coronavirus cases in the European Union.'* The case definition and classification of cases can be found in the ECDC document: *'Case definition and European surveillance for human infection with novel coronavirus (2019-nCoV).'*

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WHO has also produced guidance on management of suspected cases at home and in hospital settings <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/patient-management>.

## Overview of appropriate measures at PoE<sup>1</sup>

### Passenger locator forms

Port of entry authorities should use all available measures to identify those people who have been in an at risk area (as defined by ECDC or WHO) in the last 14 days. The EU Healthy Gateways interim advice highlights the importance of obtaining information from passengers to facilitate contact tracing in the event that a suspected case is identified during transit to the EU. This could be particularly relevant for flights coming from affected areas. A Public Health Passenger Locator Form (PLF) to rapidly collect passenger contact information for case investigation and contact tracing (handled according to the legal framework for protection of personal data) can be completed by the persons on board arriving from affected areas who have developed symptoms of ARI (fever or feeling feverish and sudden onset of respiratory infection with one or more of the following symptoms: shortness of breath/breathing difficulties, cough or sore throat) and their contacts on board (any person sitting within two seats in any direction of the suspect 2019-nCoV case or all persons on board). Completed PLFs should be handed to competent staff upon arrival at the PoE.

### Provision of information to passengers upon arrival

Travel advice (or travel recommendations) can refer to official government advice, which has legal and economic implications, or measures that travellers should consider to minimise risk of infection. Advice should provide information about the 2019-nCoV infection and the health care system in the country of arrival, in case travellers develop symptoms during their stay. ECDC has published a [template leaflet](#) for travel advice relating to 2019-nCoV.

- *Pre-travel advice* - preventative measures during travel (e.g. environmental and personal protective measures) or upon arrival to the destination to minimise the risk of infection and transmission. Advising against travel to areas where community transmission is sustained will help reduce the number of people who are infected, reduce the risk of importation and limit transmission among travellers (in airports queues, on planes, etc.)
- *General travel advice* - all passengers should be provided with information regarding personal protective equipment, environmental measures and seeking health care at the country of arrival.
- *More specific advice to travellers from affected areas* - should cover updates of the situation concerning 2019-nCoV and tailored advice on personal protective measures. Advice should also cover what to do in the event of developing symptoms compatible with 2019-nCoV infection after their return, in accordance with national procedures (e.g. refer to a particular call centre or healthcare facility).

### Protection of employees at PoE

#### Use of personal protective equipment

Personal protective equipment (PPE; for respiratory protection: FFP1-3 respirator or facemask, for eye protection: goggles, face shield or procedural masks, for body protection: long-sleeved water-resistant gown; and for hand protection: gloves) should be used by PoE staff and medical personnel that are in contact with suspected 2019-nCoV cases. Disposable PPE need to be disinfected and disposed of immediately after use according to routine safety procedures and used in combination with proper hand hygiene measures.

Facemasks should be provided at PoEs to people with respiratory symptoms and suspected 2019-nCoV cases as a precautionary measure. Employees screening passengers or handling suspected cases may be offered respirators along with other PPE (see below) that will also protect from aerosol mediated transmission, although it is not known whether 2019-nCoV transmits via this mode. There is no evidence about the benefit of facemask use by non-ill persons as a community mitigation measure. If masks are used, best practices for donning, doffing, and disposing should be followed. Hand hygiene action after removal should always be followed.

<sup>1</sup> In order of priority



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### Training

Staff at PoE who have contact with the public, especially those screening the incoming passengers, should be trained in the use of personal protective measures, environmental measures and identification of suspected cases.

### Enhanced personal protective measures for general public and PoE staff

Personal protective measures (PPMs) refer are measures commonly recommended and undertaken during respiratory virus epidemics aiming to reduce transmission of acute respiratory infections, including infections from 2019-nCoV. They are generally inexpensive and easy to implement at the points of entry.

- Avoiding close contact with people suffering from ARI
- Avoiding public places, coughing and sneezing
- Hand washing (soap and water), rubbing hands for at least 20 seconds

Effectiveness of hand hygiene will depend on ensuring adequate and regular supply, providing appropriate training and achieving high community compliance. There is lack of evidence on effectiveness or respiratory etiquette on reducing transmission, but it is recommended due to mechanistic plausibility to reduce person-to-person transmission. Social distancing measures (keeping a distance of at least one meter away from people with acute respiratory infection) may reduce the risk of person-to-person transmission.

### Environmental measures at the PoE

Measures include routine cleaning of frequently used surfaces and objects (e.g. doorknobs, toilets) with water and detergent (e.g. bleach solution) and minimal sharing of objects. Disposal of hazardous waste should take place according to the procedures of the PoE. Air ventilation is especially important in contained settings where people gather regularly for long periods, like airports. Resources such as soap and water, alcohol scrub stations, tissues, disposal bins should be available.

The time of environmental survival of 2019-nCoV is currently unknown. Based on the knowledge of other coronaviruses, survival of SARS-CoV is estimated to be several days and MERS-CoV >48 hours at an average room temperature (20°C) on different surfaces. Although available evidence of effectiveness of environmental measures to mitigate the impact of respiratory virus epidemics is limited, there is mechanistic plausibility that these measures may reduce viral transmission and as such they are recommended at all times and all settings during containment and mitigation phases of the epidemic.

### Temperature and active screening at PoE

#### Screening to identify symptomatic cases

Measures such as active screening, non-contact infrared thermometers (NCITs) or encouraging reporting of symptoms aim to reduce the number of infectious people entering a country, focusing on those coming from countries that are first experiencing the epidemic.

Although some imported 2019-nCoV cases in Asian countries have been detected through entry screening procedures at destination airports, there is lack of sensitivity of current systems especially to detect pre-symptomatic and asymptomatic infections.

#### Screening through passenger questionnaires

Information may be obtained by the passengers returning from areas with ongoing 2019-nCoV transmission via a questionnaire/interview and using the Public Health Passenger Locator Form in case further actions are needed. It should be noted that there is no evidence of the effectiveness of this and the resources required may be substantial.

## Management of a symptomatic suspect case at the point of entry

This is well described in the the EU Healthy Gateways interim advice. Symptomatic travellers should disembark the aircraft according to instructions from the competent authority in order to minimise the risk for spreading the disease. Symptomatic travellers should be assessed for their condition and exposure at the designated facility of the PoE and if they fulfil the definition of a suspect case they should be transferred to a health care facility. Suspected cases should be provided with a face mask or respirator to minimise the risk of onward transmission. Management of contacts will take place in accordance with instructions from the public health authority. The competent authority at the PoE should update the airline/ship on the outcome of examinations and if further actions should be taken. It is advised that contact tracing activities begin immediately after a suspect case is identified, in order to find the close contacts and allow all other travellers to continue their activities without restrictions. The close contacts can be requested to remain on board until the laboratory results of the suspect case become available.

## Quarantine of contacts

Please refer to EU Healthy Gateways interim advice for management of contacts of cases identified on planes or ships. General advice on management of persons having had contact with 2019-nCoV is described in detail at a separate ECDC ['Public health management of persons having had contact with novel coronavirus cases in the European Union'](#) document that classifies contacts as 'close' or 'casual'. Self-isolation of 'close contacts' is advised in the guidance.