



EU HEALTHY GATEWAYS JOINT ACTION
GRANT AGREEMENT NUMBER: 801493
PREPAREDNESS AND ACTION AT POINTS OF ENTRY
(PORTS, AIRPORTS, GROUND CROSSINGS)



Co-funded by
the Health Programme
of the European Union

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

Version 2

3 February 2020

The EU HEALTHY GATEWAYS Joint Action has received funding from the European Union, in the framework of the Third Health Programme (2014-2020). The content of this document represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA) or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

Introduction

This interim advice was prepared after a request from the European Commission's Directorate-General for Health and Food Safety (DG SANTE). An ad-hoc working group was established with members from the EU HEALTHY GATEWAYS joint action consortium. Names and affiliations of the working group members who prepared this document are listed at the end of the document.

The working group produced the following advice, considering current evidence and travel advice from the World Health Organization (WHO) about the 2019-nCoV acute respiratory disease outbreak (as of 3 February 2020).

1. Education and raising crew awareness

1.1. Raising crew awareness for detection of cases on board

Airlines should provide guidance to their crews for recognition of the signs and symptoms of ARI: fever and sudden onset of respiratory infection with one or more of the following symptoms: shortness of breath, cough or sore throat.

Crews should be reminded of the procedures to be followed when a traveller on board an aircraft display signs and symptoms indicative of ARI (as described in paragraph 1.2) and the proper use of Personal Protective Equipment (PPE)^{1,2}.

1.2. Personal hygiene measures

Airlines should provide guidance to their crews, related to reducing the general risk of ARI¹:

- Hand washing technique (use of soap and water, rubbing hands for at least 20 seconds etc.)
- When hand washing is essential (e.g. after assisting an ill traveller or after contact with their environment)
- When hand rubbing can be applied instead of hand washing and how this can be done
- Respiratory etiquette during coughing and sneezing with disposable tissues or clothing
- Appropriate waste disposal
- Use of respiratory masks
- Avoidance of close contact with people suffering from ARI

1.3. Advice for crew working/staying in affected areas²

Crew members staying in affected areas or working on flights to or from affected areas should be reminded to: a) frequently clean hands by using an alcohol-based hand rub or soap and water; b) when coughing and sneezing cover mouth and nose with flexed elbow or tissue – throw tissue away immediately and wash hands; c) avoid close contact with anyone who has fever and cough; d) if experiencing fever, cough and difficulty breathing seek medical care early and share previous travel history with the health care provider; e) when visiting live markets in areas currently experiencing cases of 2019-nCoV acute respiratory

² Affected areas are those defined by WHO as affected or as areas with on-going transmission.

disease, avoid direct unprotected contact with live animals and surfaces in contact with animals; f) the consumption of raw or undercooked animal products should be avoided. Raw meat, milk or animal organs should be handled with care, to avoid cross-contamination with uncooked foods, as per good food safety practices².

Crew members presenting symptoms of ARI should not work on flights and should inform their doctor and airline about exposure in affected areas.

2. Risk of transmission on aircrafts according to ECDC

According to the Rapid Risk Assessment by the European Centre for Disease Prevention and Control (ECDC): *“No cases of 2019-nCoV have been reported to have been infected on-board an aircraft. The assessment of possible transmission of 2019-nCoV on an aircraft needs to be undertaken on a case-by-case basis. This individual risk assessment should take into account the index case classification, the symptoms and disease severity during the flight, and the timing of possible contact tracing in relation to the flight”*³.

3. Management of a suspect case on board

An algorithm that can be used by the public health authorities for decision making in response to an event of a suspect case of 2019-nCoV acute respiratory disease on board an aircraft can be downloaded from:

https://www.healthygateways.eu/Portals/0/plcdocs/Flow_chart_Aircrafts_4_2_2020.pdf

3.1. Separation

The standard procedures of the company should be followed for travellers presenting respiratory symptoms.

According to the WHO Handbook for Management of Public Health Events in Air Transport, if a traveller develops symptoms of ARI, efforts should be made to minimize contact between passengers and cabin crew with the ill person⁴. If possible, the ill person should be separated from others (2 meters or 6 feet is ideal), and one crew member should be designated to serve the ill person. Use of a facemask is recommended, if available and can be tolerated by the ill person. If a face mask is not available or cannot be tolerated, the ill person should be asked to cover their mouth and nose with tissues when coughing or sneezing. A designated toilet should be provided for the use of the ill person only⁵.

3.2. Supplies and use of PPE

Aircrafts should carry universal precaution kits, including as per the International Civil Aviation Organization (ICAO): dry powder that can convert small liquid spill into a sterile

granulated gel, germicidal disinfectant for surface cleaning, skin wipes, face/eye mask (separate or combined), gloves (disposable) and a protective apron³.

The US Centers for Disease Control and Prevention (US CDC) advises the following precautions be applied on board aircrafts by cabin crew⁴:

- Treat all body fluids (such as respiratory secretions) as if they are infectious.
- Wear disposable gloves when tending to an ill traveller or touching body fluids or potentially contaminated surfaces.
- Remove gloves carefully to avoid contaminating yourself then wash hands.
- When tending to an ill traveller from affected area who has fever, persistent cough, or difficulty breathing, consider using additional protective equipment in the Universal Precaution Kit: face mask, eye protection, and a gown to cover clothing.
- Properly dispose of gloves and other disposable items that came in contact with the ill person or body fluids in biohazard bag or a secured plastic bag labelled as “biohazard”.

3.3. Public Health Passenger Locator Form (PLF)

The PLF has been developed by a working group established by WHO to facilitate rapid collection of passenger contact information, which can be used for case investigation and contact tracing⁶. Information collected should be handled according to the legal framework for protection of personal data.

Airlines should cooperate with EU MS to ensure that there is an adequate number of the PLF available on board.

The airline may be requested to arrange completion of the PLF by the persons on board the aircraft 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)⁷ and their contacts on board (any person sitting within two seats (in any direction) of the suspect 2019-nCoV case, travel companions or persons providing care, and crew members serving in the section of the aircraft where the index case was seated, if severity of symptoms or movement of the case indicate more extensive exposure, passengers seated in the entire section or all passengers on the aircraft may be considered close contacts)⁸. EU MS may decide to ask for completion of the PLF not only from symptomatic travellers and contacts, but from all persons on board the aircraft. The completed PLFs can be collected and delivered to the competent staff upon arrival at the airport.

3.4. Disembarkation

Symptomatic travellers should disembark the aircraft according to instructions from the competent authority in order to minimise the risk for spreading the disease.

³ <https://www.icao.int/MID/Documents/2013/capsca-mid3/ICAOHealthRelatedSARPsandguidelines.pdf>

Symptomatic travellers will be assessed for their condition and exposure at the designated facility of the airport and if they fulfil the definition of a suspect case they will be transferred to a health care facility.

Management of contacts will take place in accordance with instructions from the public health authority.

The competent authority at the airport should update the airline on the outcome of examinations and if further actions should be taken.

4. Waste management

WHO advises that staff responsible for removing waste should be provided with information about the public health event⁹. Disposal of hazardous waste will take place according to the procedures of the airport.

5. Cleaning and disinfection

The time of environmental survival of 2019-nCoV is currently unknown. SARS-CoV may survive in the environment for several days. MERS-CoV may survive >48hours at 20°C, 40% relative humidity comparable to an indoor environment, on plastic and metal surfaces¹⁰.

Following an event of an ARI case on board, the airline should ensure that cleaning and disinfection procedures are followed consistently and correctly using the licenced products suitable for the aircraft at the highest acceptable concentrations¹¹. Special attention should be given to the zone of risk in the cabin area (e.g. seats, headrests, table-tops, handsets, and other materials coming in contact with the suspected case) where the case was seated, as well as all shared facilities and high-touched surfaces^{12,13}. The service staff who will clean and disinfect the aircraft should be specially trained and apply the standard procedures for cleaning and disinfecting contaminated surfaces with infectious agents using the appropriate PPE.

WHO advises the following procedures for cleaning and disinfection in case a public health event has occurred on board⁹:

- Ensure any disinfection is conducted using products licensed for use in the country occupied. The disinfectants must be tested by a certified laboratory according to the specifications of the aircraft manufacturers for material compatibility tests.
- Any contaminated items must be handled appropriately to mitigate the risk of transmission:
 - o Disposable items (hand towels, gloves, tissues) should be double bagged and sent to incineration or similar final disposal, according to the States Parties guidelines for infectious waste management.
 - o Reusable items that can be washed and treated/disinfected (gowns or linens) must be tagged and sent to a facility for washing and treatment, as recommended according to infection control procedures, depending on the type of contamination/infectious agent, if known.

6. Reporting the suspect case or cases of infectious disease

An EU MS can request the submission of the Health Part of the Aircraft General Declaration by aircrafts arriving from affected areas directly or the connected flights from affected areas, when there is a suspected case of infectious disease on board the aircraft (IHR 2005, Article 38)¹⁴. The Health Part of the Aircraft General Declaration can be downloaded at the following link: https://www.who.int/csr/ihr/Annex9_en.pdf

7. Aircraft ventilation

To avoid airborne transmission of diseases, WHO recommends that passengers should not be left on board longer than 30 minutes in an aircraft without proper ventilation¹⁵.

8. Handling luggage

There was no evidence to suggest that a person could be infected from handling baggage or goods.

Working group members

Barbara Mouchtouri¹, Martin Dirksen-Fischer², Maria an der Heiden³, Mauro Dionisio⁴, Miguel Dávila-Cornejo⁵, Brigita Kairiene⁶, Janusz Janiec⁷, Sotirios Tsiodras⁸, David Schwarcz⁹, Peter Otorepec¹⁰, Boris Kopilovic¹⁰, Aura Timen¹¹, Corien Swaan¹¹, Anita Plenge-Bönig², Areti Lagiou¹², Jan Heidrich¹³, Agoritsa Baka¹⁴, Pasi Penttinen¹⁴, Paul Riley¹⁴, Matthias Boldt², and Christos Hadjichristodoulou¹

1. Laboratory of Hygiene and Epidemiology, Faculty of Medicine, University of Thessaly, Larissa, Greece
2. Institute for Hygiene and Environment of the Hamburg State Department for Health and Consumer Protection, Hamburg, Germany
3. Robert Koch Institute, Berlin, Germany
4. Italian Ministry of Health, Rome, Italy
5. Ministry of Health, Social Services and Equality, Madrid, Spain
6. National Public Health Centre, Klaipeda, Vilnius, Lithuania
7. National Institute of Public Health – National Institute of Hygiene, Warsaw, Poland
8. National and Kapodistrian University of Athens, Medical School, Athens, Greece
9. Public Health Agency of Sweden, Stockholm, Sweden
10. National Institute of Public Health, Ljubljana, Slovenia
11. National Institute for Public Health and the Environment, Bilthoven, the Netherlands
12. Laboratory of Hygiene and Epidemiology, University of West Attica, Athens, Greece
13. Institute for Occupational and Maritime Medicine, Hamburg, Germany
14. European Centre for Disease Prevention and Control, Stockholm, Sweden

For any questions or support related to the points of entry, please email info@healthygateways.eu

References

1. World Health Organization. WHO advice for international travel and trade in relation to the outbreak of pneumonia caused by a new coronavirus in China. 10 January 2020 2020. <https://www.who.int/ith/2020-0901-outbreak-of-Pneumonia-caused-by-a-new-coronavirus-in-C/en/> (accessed 20/1/2020).
2. World Health Organization. Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV. 27 January 2020. 2020. <https://www.who.int/ith/2020-27-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/> (accessed 27 January 2020).
3. European Centre for Disease Prevention and Control. RAPID RISK ASSESSMENT - Outbreak of acute respiratory syndrome associated with a novel coronavirus, China: first local transmission in the EU/EEA – third update. 31 January 2020, 2020.
4. Centers for Disease Control and Prevention. Interim Recommendations for Airline Crew: Novel Coronavirus in China. Updated Jan 28, 2020. 2020. <https://www.cdc.gov/quarantine/air/managing-sick-travelers/ncov-airlines.html> (accessed 2 February 2020 2020).
5. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Risk assessment guidelines for infectious diseases transmitted on aircraft, 2009.
6. World Health Organization. Strengthening health security by implementing the International Health Regulations (2005). Public health passenger locator card. 2020. https://www.who.int/ihr/ports_airports/locator_card/en/ (accessed 22 January 2020).
7. European Centre for Disease Prevention and Control. Laboratory testing of suspect cases of 2019 nCoV using RT-PCR 16 Jan 2020 2020. <https://www.ecdc.europa.eu/en/publications-data/laboratory-testing-suspect-cases-2019-ncov-using-rt-pcr> (accessed 20/01/2020).
8. European Centre for Disease Prevention and Control. Public health management of persons having had contact with cases of novel coronavirus in the European Union. Stockholm: ECDC, 2020.
9. World Health Organization. Handbook for the Management of Public Health Events in Air Transport. Updated with information on Ebola virus disease and Middle East respiratory syndrome coronavirus: World Health Organization; 2015.
10. van Doremalen N, Bushmaker T, Munster VJ. Stability of Middle East respiratory syndrome coronavirus (MERS-CoV) under different environmental conditions. *Euro Surveill* 2013; **18**(38).
11. Klaus J, Gnirs P, Holterhoff S, et al. Disinfection of aircraft : Appropriate disinfectants and standard operating procedures for highly infectious diseases. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 2016; **59**(12): 1544-8.
12. World Health Organization. Summary of SARS and air travel. 23 May 2003 2003. <https://www.who.int/csr/sars/travel/airtravel/en/> (accessed 21/1/2020).
13. World Health Organization. Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected. Interim guidance. 25 January 2020, 2020.
14. World Health Organization. International health regulations (2005). Third ed. Geneva; 2016.
15. Abubakar I, Fernandez de la Hoz K, Who. WHO publishes the third edition of guidelines for the prevention and control of air-travel-associated tuberculosis. *Euro Surveill* 2008; **13**(23).