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COVID-19 Aviation Health Safety Protocol

Operational Guidelines for the management of air passengers and aviation personnel in relation to the COVID-19 pandemic













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1 Background

On 15 April 2020, the European Commission, in cooperation with the President of the European Council, put forward a Joint European Roadmap setting out recommendations on lifting COVID-19 containment measures¹. As called for in the Roadmap, on 13 May 2020, the European Commission put forward further guidelines on how to progressively restore transport services, connectivity, and free movement as soon as the health situation allows it, whilst protecting the health of transport workers and passengers². The European Commission's Communication mandated the European Union Aviation Safety Agency (EASA) and the European Centre for Disease Prevention and Control (ECDC) to jointly issue more detailed technical *operational guidelines* for the aviation sector.

In line with this, EASA and ECDC have developed the following operational guidelines. Their purpose is to serve as an Aviation Health Safety Protocol and to provide a source of best practice on how airport operators, aeroplane operators conducting commercial and non-commercial passenger transport operations (hereon referred to as 'aircraft operators'), and national competent authorities (NCAs) can ensure the health and safety of passengers, as well as of the aviation personnel who serve them, by **maintaining safe and secure operations, while minimising the risk of SARS-CoV-2 transmission.** This should complement the advice of public health authorities and help employers in their duties under the relevant legislation on the protection of workers' health and safety³.

It reflects a multi-layered approach consistent with the 'Plan-Do-Check-Act' (PDCA) principles of aviation safety management systems (SMSs), occupational health and safety, and public safety, to protect passengers and aviation personnel, restore confidence in air travel, and ensure a harmonised return to passenger transport operations both within and outside Europe.

From the beginning, it is important to stress that these *operational guidelines* reflect the current status of knowledge of the **COVID-19** pandemic and of effective preventive measures being implemented. **These** recommended measures will be regularly evaluated and updated in line with the improvements in knowledge of the risk of transmission as well as with the development of other diagnostic or preventive (including technological) measures and according to the evolution of the pandemic⁴.

The preventive measures recommended in these operational guidelines are expected to be gradually reduced over time in line with a reduction of the risk level. Furthermore, as additional and reliable mitigating measures become available, these should be considered as alternatives aiming to alleviate the burden on



¹ <u>https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/european-roadmap-lifting-coronavirus-containment-measures_en</u>

² <u>https://ec.europa.eu/info/files/covid-19-guidelines-progressive-restoration-transport-services-and-connectivity_en</u>

³ <u>https://oshwiki.eu/wiki/COVID-19: Back to the workplace - Adapting workplaces and protecting workers</u>

⁴ While decreasing trends in disease incidence are being observed in Europe overall (week 25/2020 - <u>https://www.ecdc.europa.eu/en/covid-19/surveillance/weekly-surveillance-report</u>), there is still community transmission reported in most EU/EEA countries and the UK and EU candidate and potential candidate countries, while some are experiencing resurgence of cases or large localised outbreaks. All countries are in the process of adjusting their containment measures and travel restrictions, which is expected to contribute to new cases, depending on continued com pliance with physical distancing, respiratory and hand hygiene as well as the intensity of testing and contact tracing.





passengers and aviation personnel, whilst maintaining the appropriate level of health safety and considering the level of risk.

Preventive measures should be implemented in such a way as to consider both the actual risk factors and the practical need for risk-mitigating measures in different circumstances, such as, for example, for family members and individuals travelling together as part of the same household and not requiring physical distancing among themselves.

2 General considerations

The purpose of this COVID-19 Aviation Health Safety Protocol is to provide guidance to airport operators, aircraft operators, and NCAs, as well as other relevant authorities and stakeholders on how to facilitate the safe and gradual restoration of passenger air transport. This restoration is subject to the deployment of proportionate and effective measures that reduce the risk of SARS-CoV-2 transmission at the airport and on board aircraft, as much as practicably possible, to protect the health of passengers and aviation personnel.

The general situation regarding the COVID-19 pandemic, including the implemented containment measures, the potential risk of being exposed to one or more infected individuals, and the need to deal with unfamiliar situations in the workplace, is likely to have a negative impact on the mental health and well-being of passengers and aviation personnel. In this context, airport operators, aircraft operators and, where applicable, other service providers/suppliers should promote aviation personnel's access to counselling and/or support programmes (where available), and make use of the **World Health Organization**⁵, **EU-OSHA**⁶ and any other relevant guidance⁷.

In addition to these *operational guidelines*, both airport operators and aircraft operators should consider the operational recommendations included in the latest revision of EASA Safety Information Bulletin (SIB) <u>EASA</u> <u>SIB 2020-02</u>. Aircraft operators involved in commercial, charter, and corporate aviation should implement these as far as practicable.

In the context of these *operational guidelines*, NCAs, airport operators, aircraft operators and other aviation stakeholders should coordinate their actions with their local public health authorities and national facilitation committees, where available, to ensure effective risk mitigation and compliance with the national public health requirements. Furthermore, they should coordinate with national public health authorities⁸ to help procure appropriate quantities of personal protective equipment (PPE) and disinfectant substances.

NCAs should monitor the implementation of the recommended measures and provide assistance and advice where needed, especially in coordinating and harmonising implementation with other national entities.

EASA and ECDC are ready to assist NCAs to the extent feasible.



⁵ WHO guidance on coping with stress in the context of COVID-19 is available at <u>https://www.who.int/docs/default-source/coronaviruse/coping-with-stress.pdf?sfvrsn=9845bc3a_2</u>.

⁶ <u>https://osha.europa.eu/en/themes/covid-19-resources-workplace#pk_campaign=ban_homecw</u>

⁷ <u>https://flightsafety.org/wp-content/uploads/2020/04/Guide-to-Wellbeing.pdf</u>

⁸ Formal communication with the Member States' public health authorities to ensure priority is given to acquiring personal protective equipment (PPE) for aviation.





In the context of these measures, an increase in cases of unruly or disruptive passengers should be expected, either prior to departure or during the flight. This may be due to passengers not wishing to sit next to each other or accusing each other of not following the rules. This strong potential for conflict should be managed in such a way as to avoid any negative impact on flight safety. In the worst case, panic could become quite a serious threat to flight safety — for example, if there are a significant number of displacements in the cabin. To address this potential situation, operators should consider and include the increased likelihood of these factors in their procedures and training.

Principles based on the best available evidence on COVID-19

- According to their airport emergency plan, airport operators should appoint a coordinator to ensure the uniform application of preventive measures mitigating the public health risk during this particular crisis by all stakeholders providing services at the airport. The coordinator should be in direct contact with the airport public health authorities and the local (and/or national) public health authorities.
- Access to airport terminals should be limited to passengers, crew members and staff (airport and aircraft operators as well as other service providers/suppliers that are required to enter the terminal to perform their tasks) to the extent possible. Accompanying persons should access airport terminals only in special circumstances (e.g. when accompanying or picking up a passenger that requires assistance, such as persons with reduced mobility (PRM), unaccompanied minors, etc.).
- As a strategy, airport operators should place emphasis on the following:
 - Discouraging symptomatic (in accordance with the symptoms listed in Annex 2) passengers, crew members and staff from presenting themselves at the airport. This can be achieved through the risk communication and health safety promotion activities as described below.
 - Implementing physical distancing (1.5 metres between individuals) and enhanced hygiene measures for passengers, crew members and staff, as well as enhanced facility cleaning. Similar measures should be implemented in General Aviation (GA) terminals.
 - Airport operators, in cooperation with aircraft operators and other aviation stakeholders, where applicable, are encouraged to take appropriate measures to prevent queues in high passenger concentration areas as much as practicable, in order to reduce the risk of infection posed by unnecessary human interaction. For queuing, floor markings at least 1.5 metres apart can assist passengers in maintaining physical distancing.
 - Where possible, contact with and touching of surfaces should be minimised by encouraging/requesting the use of alternative electronic processes or means (e.g. mobile check-in, non-contact boarding).
 - The reopening of non-essential airport services such as food and beverage services and areas should respect local provisions on similar services outside the airport and the physical-distancing measures implemented in other areas of the airport. Where such services are not open, drinking water should be made available (e.g. through water







fountains and/or vending machines) giving proper consideration to the enhanced cleaning and disinfection needed.

Health safety promotion material should be widely available at airport premises (entrances, information screens, gates, lounges, etc.) (see Annex 3 'Health Safety Promotion' for communication guidance). Particular attention should be given to the areas expected to have a high concentration of passengers. Attention should be paid to the format of the health safety promotion material: *pictograms* are strongly recommended. This material should be available in the national language(s), in English and, where necessary, in other languages based on the most common language profiles of the passengers using the airport. Health safety promotion material⁹ should also be made available in the aircraft cabin according to the aircraft operators' policy, preferably through audio-visual material, or, only when non-physical means are not available, as leaflets in the seat pockets.

3. Management of passengers

For reasons of clarity, this guidance on the management of passengers is presented in the following sequence:

- at all times,
- before arriving at the departure airport,
- at the airport,
- on-board the aircraft, and
- at the arrival airport.

As indicated, the proposed measures will be regularly evaluated and updated in line with new evidence of the risk of transmission, as well as with the development of other diagnostic or preventive measures.

EASA and ECDC have created sample health safety promotional material available to assist airport operators and aircraft operators in creating their own material
 https://www.easa.europa.eu/document-library/general-publications/easaecdc-process-passengers
 https://www.easa.europa.eu/en/covid-19/facts/infographics,
 https://www.ecdc.europa.eu/en/covid-19/facts/videos







3.1 At all times

OBJECTIVE

To ensure that passengers arriving at the airport and boarding flights are aware of, and adhere to, the preventive measures put in place in order to ensure a safe and healthy environment for air travellers and aviation personnel at all times.

Passengers should be reminded that the 1.5-metre physical distance between individuals should be maintained as much as possible at the airport. For the supporting evidence regarding physical distancing, please see Annex 1.

The use of medical face masks¹⁰ (hereon referred to as 'face masks') should be recommended for all passengers and persons at the airport and in the aircraft, from the moment they enter the terminal building at the departure airport until they exit the terminal building at the destination airport. An exemption to wearing a face mask can be made for instances where it is otherwise specified, such as during security checks or identification control. Children under 6 years of age and people that cannot wear a face mask due to medical reasons can also be exempted.

Passengers should be reminded that, typically, face masks should be replaced after being worn for 4 hours, if not advised otherwise by the face mask manufacturer, or when they become wet or soiled, and that they should ensure a sufficient supply of face masks for the entire duration of their journey.

Airport operators and aircraft operators should include information regarding the proper use and removal of face masks and the appropriate way to dispose of them in their health safety promotion material. Additionally, airport operators should also consider the option to make face masks available at airports (e.g. through vending machines).

Passengers should be also instructed on the procedures for the safe and hygienic disposal of used face masks: no-touch bins should be available at the airport, and waste bags should be available on board and during disembarkation.

Waste materials that were in direct contact with passengers, airport staff or aircrew members, including partially consumed meals, beverages and disposable items such as used paper towels, tissues and PPE produced while treating or supporting passengers or aircrew members, should be treated in accordance with the applicable international guidance¹¹ or, where available, national guidance, giving proper consideration to



¹⁰ A medical face mask (also known as a surgical or procedure mask) is a medical device covering the mouth, nose and chin ensuring a barrier that limits the transition of an infective agent between the hospital staff and the patient. They are used to prevent large respiratory droplets and splashes from reaching the mouth and the nose of the wearer and help reduce and/or control at the source the spread of large respiratory droplets from the person wearing the face mask. Medical masks comply with the requirements defined in European Standard EN 14683:2019+AC:2019. Non-medical face masks (or 'community' masks) include various forms of self-made or commercially available masks or face covers made of cloth, other textiles or other materials such as paper. They are not standardised and are not intended for use in healthcare settings or by healthcare professionals. Non-medical face masks are in use and recommended in some EU/EEA countries and the UK. However, evidence is lacking on their efficacy in preventing transmission of COVID-19.

^{11 &}lt;u>https://apps.who.int/iris/bitstream/handle/10665/331488/WHO-2019-nCoV-Aviation-2020.1-eng.pdf</u> <u>https://www.who.int/publications/i/item/water-sanitation-hygiene-and-waste-ma nagement-for-the-covid-19-virus-interim-guidance</u> <u>https://www.iata.org/contentassets/df216feeb8bb4d52a3e16befe9671033/iata-guidance-cabin-operations-during-post-pandemic.pdf</u>





the cases where a symptomatic passenger, airport staff or aircrew member is present at the airport or on board the aircraft.

The use of face masks should be considered only as a complementary measure to physical distancing and, in addition, passengers should be required to observe the following measures at all times unless otherwise advised by airport staff or aircrew members:

- Hand hygiene by meticulously washing their hands with soap and water or, where this is not available, using alcohol-based hand-sanitising solution.
- Respiratory etiquette by covering the mouth and nose with a paper towel cover or a flexed elbow when sneezing or coughing, even when wearing a face mask.
- Limiting direct contact (touch) of any surfaces at the airport and in the aircraft to only when absolutely necessary.

ECDC's position regarding the use of face masks is available in its Technical Report 'Using face masks in the community — Reducing COVID-19 transmission from potentially asymptomatic or pre-symptomatic people through the use of face masks'¹² and is summarised in Annex 1, together with further considerations on their use.

Airport operators, aircraft operators and service providers/suppliers should provide the necessary PPE to their staff members and ensure that they are trained in its appropriate use:

- Staff members who interact with passengers directly (e.g. security check agents, assistants for passengers with reduced mobility, cleaning staff, etc.) should wear a face mask, disposable gloves and their uniforms; uniforms should be changed daily, and where uniforms cannot be changed daily, a protection suit should be used as an alternative. Security check agents performing body checks should change their gloves after each passenger and wear face shields or suitable alternatives in addition to their face masks to further mitigate the risk of mucosae contamination from droplets caused by their very close contact with passengers during body checks.
- Staff members who are behind a protection screen and interact with passengers do not have to wear PPE at all times. In addition, if the protection screens need to have openings for handling documents, passengers should stand away from the counter unless handing in documents and luggage. This may be facilitated with specific floor marking(s), which should extend along the queue area in order to maintain physical distancing.
- Aircraft operators should have on board one or more Universal Precaution Kits (UPKs). Such kits should be used by crew members who are assisting possible COVID-19 case¹³ and in cleaning up and correctly discarding any potentially infectious contents.

Regardless of the use of PPE, hand hygiene should be reinforced at all times. When gloves are used, they should be regularly changed. Not all types of gloves can be disinfected with alcohol-based solutions. Some can deteriorate significantly, thus contributing to contamination. The disinfection of gloves is, therefore, not

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European Centre for Disease Prevention and Control (ECDC) Gustav III:s boulevard 40, 169 73 Solna, Sweden Phone +46 (0)8 58 60 10 00 www.ecdc.europa.eu

¹² <u>https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission</u>

¹³ https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition





recommended. When gloves are worn by staff members, operators should remind them that wearing gloves does not protect against the spread of the virus and alert them to the possible false sense of security they may create if parallel measures are not scrupulously followed.

Maintenance and repair work in public areas should be prioritised and their schedule adjusted or possibly postponed if it is non-essential.

Passengers should be regularly instructed via audio-visual messages, as well as other appropriate means, to adhere to the preventive measures in place at various areas in the airport and in the aircraft, and give proper consideration to the full suite of preventive measures. They should also be advised of the consequences of not adhering to such measures.

Passengers who refuse to adhere to the preventive measures in place should be refused access to the airport's terminal building, to the aircraft cabin, or disembarked, if the event takes place before the aircraft doors are shut, and removed from the airport premises by the competent authorities according to national/local legislation. Furthermore, subject to national requirements, they may be subject to additional actions as determined by the local authorities at the departure airport.

If the event takes place in flight, the procedures relating to handling cases of unruly or disruptive passengers should be followed. If endangering the flight safety and the health of the other passengers and aircrew members, further action may be taken by the local authorities at the destination airport in line with national requirements.

3.2. Before arriving at the airport

OBJECTIVE

To reduce the chance that any passenger with COVID-19-compatible symptoms <u>ARRIVES</u> at the airport.

To ensure that passengers arriving at the airport are aware of, and adhere to, the preventive measures put in place.

Aircraft operators, in coordination with airport operators, should inform future passengers via health safety promotion activities of the travel restrictions for any passenger who may have COVID-19-compatible symptoms before arriving at the departure airport. This should include information on the symptoms to be considered. Promotion material should encourage symptomatic passengers not to go to the airport.

If exit thermal screening is performed at the airport according to national regulations, aircraft operators should inform their passengers that symptomatic passengers identified at the airport by the national public health authorities may be refused permission to continue their journey. Aircraft operators are strongly advised to encourage symptomatic passengers not to fly (e.g. by offering incentives such as cost-free rebooking or refund of the flight, if informed before departure of the suspicion of COVID-19 and on the basis of a doctor's certificate).







In coordination with airport operators, aircraft operators should inform their passengers that the use of a face mask is recommended at the airport and on board, except where otherwise specified, such as for security checks or identification control. Furthermore, they should inform their passengers about the expected duration of the preventive measures in place in order to plan for early arrival at the airport. Whilst passengers should be informed of the time needed to complete the formalities, care should be taken to keep the time they spend at the airport to a minimum.

In order to reduce the number of people in the terminals, and consequently facilitate physical distancing, airport operators, in coordination with aircraft operators, should inform passengers prior to their arrival at the airport that access to terminals is restricted to passengers only, with the exceptions of those presented in Section 2 'General considerations'. Furthermore, airport operators should clearly signal the points beyond which any accompanying persons are not allowed to go.

In order to reduce contact with the airport staff and infrastructure, aircraft operators in coordination with airport operators should encourage passengers as much as possible to complete the check-in process before arriving at the airport using the online check-in, mobile or printed boarding pass and where possible off airport baggage tagging.

Passengers should receive information about COVID-19 symptoms and the risk of possible contact with COVID-19 cases and be requested to acknowledge reading this information and sign or electronically authenticate an acknowledgement (see Annex 2 for sample text). This should be done in advance of the flight, preferably prior to the arrival at the airport during the online check-in process or via a text message (SMS) link or other means acceptable to the national authorities.

Aircraft operators should make a similar declaration form available to their aircrews in their health monitoring programme. Aircrew member(s) should be immediately released by the aircraft operator from their flying duties in case of any doubt on whether they may have symptoms or any health-related issues without undue pressure or fear of sanctions/disciplinary measures. The management and processing of such declarations should comply with the applicable data protection rules, including the General Data Protection Regulation(GDPR)¹⁴.



¹⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1) (<u>https://eur-lex.europa.eu/legal-content/EN/TXT/?aid=1591910535903&uri=CELEX:32016R0679</u>).





3.3 Considerations for the management of passengers at the departure airport

OBJECTIVE

To reduce the residual risk of virus transmission from potential asymptomatic contagious passengers. To reduce the residual risk of any infected passenger boarding an aircraft.

Cleaning and disinfection

Airport operators and, where applicable, service providers/suppliers, should enhance the cleaning of public areas in terms of depth and frequency, subject to flight schedules. Airport operators should put a procedure in place to ensure that cleaning and disinfection is performed in a consistent manner and following the principles and the ECDC guidance¹⁵ below:

- Regular cleaning and disinfection of surfaces should be performed using standard detergents with particular care paid to frequently touched surfaces (e.g. door handles, banister rails, buttons, wash rooms, buses etc.).
- Studies have shown that plastic security-screening trays are frequently contaminated with respiratory viruses¹⁶; therefore, their cleaning should be intensified and hand-disinfectant placed at the entry and exit of the security locations to encourage hand hygiene. Alternatively, single-use tray coverings may be used.
- Cleaning and disinfection activities should be performed in such a way as not to aerosolise the particles that have already set on the various surfaces (e.g. avoiding air-blowing procedures, use of vacuum cleaners, etc.).
- Proper air ventilation should be ensured, minimising the percentage of air recirculation and favouring the use of fresh air when possible in accordance with the international guidance for ventilation of indoor public spaces^{17, 18}.
- Enhanced cleaning and maintenance should also include toilets, all frequently touched surfaces (e.g. self-service tools) and the air-conditioning system, including the employment of air filters and increasing the frequency of the filter replacement.
- Cleaning and disinfection of passenger interview booths (see 'Thermal screening' below) should be performed after each use of the booth.



¹⁵ ECDC, Disinfection of environments in healthcare and non-healthcare settings potentially contaminated with SARS-CoV-2 <u>https://www.ecdc.europa.eu/en/publications-data/disinfection-environments-covid-19</u>

¹⁶ Ikonen, N., et al., Deposition of respiratory virus pathogens on frequently touched surfaces at airports. BMC Infect Dis 18, 437 (2018). <u>https://doi.org/10.1186/s12879-018-3150-5</u>

¹⁷ ECDC, Heating, ventilation and air-conditioning systems in the context of COVID-19 <u>https://www.ecdc.europa.eu/en/publications-data/heating-</u> ventilation-air-conditioning-systems-covid-19

¹⁸ REHVA Federation of European Heating, Ventilation and Air Conditioning Associations (<u>https://www.rehva.eu/activities/covid-19-guidance</u>).





The procedure should be updated in terms of process, schedule and products, when new information becomes available. Cleaning staff should be made aware of the updates to ensure the updated procedure is adhered to.

Furthermore, heating, ventilation and air conditioning (HVAC) systems should be optimised in order to ensure a high rate of air change. In older facilities, subject to airport/terminal construction and meteorological conditions, windows can be kept open for additional supply of fresh air, subject to the absence of horizontal airflows.

Aircraft operators should clean and disinfect their aircraft in accordance with the EASA Safety Directives 2020-03¹⁹ and 2020-04²⁰, as applicable, and with the EASA Guidance on Aircraft Cleaning and Disinfection in relation to the SARS-CoV-2 pandemic²¹.

Protective screens

Where airport/aircraft operator staff interact with passengers from a fixed location, such as check-in counters, ticketing, passport control, and information desks, protective screens should be installed in such a way as to allow the handover of the documents required but protect staff from the respiratory droplets of passengers and vice versa.

Acknowledgment of COVID-19 policy

In line with the applicable data protection requirements, passengers should read and understand the aircraft operator's COVID-19 policy preferably before arrival at the airport, during the online check-in process, or via a text message (SMS) link or other means acceptable to the national authorities. An example of such statement can be found in Annex 2 'Acknowledgment of COVID-19 policy'.

Aircraft operators should make passengers aware of the consequences of making a false statement and the possibility that symptomatic passengers detected at the airport may not be allowed to continue their journey.

Thermal screening at the departure airport

If thermal screening (skin temperature check) is recommended due to national response regulations or decisions, or by agreement with the destination State, the following points should be considered:

- National public health authorities, in coordination with the airport operators, should develop a protocol for thermal screening and identify the required staff and resources to perform it. Staff performing manual checks, for example, as part of a verification procedure, should wear the appropriate PPE.
- Departing passengers entering the terminal should be subjected to thermal screening as soon as they
 enter the airport, in order to ensure the amount of interaction and time spent by potential suspected
 cases inside the terminal is reduced to a minimum.



¹⁹ https://ad.easa.europa.eu/ad/SD-2020-03

https://ad.easa.europa.eu/ad/SD-2020-04

²¹ https://www.easa.europa.eu/newsroom-and-events/news/easa-interim-guidance-aircraft-cleaning-and-disinfection-relation-sars-cov





- Airport operators should identify the best location for the thermal screening, ideally before check-in and baggage drop-off.
- Thermal screening should be performed by a validated non-invasive method. The process should aim to identify passengers with skin temperature of 38 °C or higher unless otherwise specified by the national public health authorities. For passengers with elevated skin temperature (38 °C or higher), the thermal screening should be repeated at least once for confirmation purposes. Passengers with elevated skin temperature (38 °C or higher) should be referred to secondary assessment by a health professional or follow the agreed screening protocol.²²
- Due to intensive use, equipment (e.g. ear or other type of thermometers or thermal scanners) should be regularly recalibrated in accordance with the manufacturer's instructions or at even shorter intervals.
- Airport operators should ensure the installation of separate interview booths for the secondary health assessment. These interview booths should ensure privacy and prevent viral transmission to individuals in the neighbouring interview booths. The booths should be disinfected after each use to prevent viral transmission to other interviewees.

It should be recognised that thermal screening has many limitations and there is little evidence for its effectiveness in detecting COVID-19 cases:

- A large percentage of the COVID-19 transmission occurs through asymptomatic or pre-symptomatic cases. Additionally, many symptomatic persons do not develop fever;
- Fever can easily be reduced with medication; and
- Thermal screening may give a false sense of safety with a negative effect on compliance with other preventive measures.

Furthermore, its implementation requires public health resources that could be invested in other measures. Further considerations regarding the scientific evidence for thermal screening may be found in Annex 1 'Scientific evidence and additional considerations'.

Check-in and boarding

Passengers should be advised/reminded by airport operators, in coordination with the aircraft operators, to adhere to the applicable preventive measures described in Section 3.1.

Passengers should be advised by airport operators to make use of their facilities and services in line with the national provisions for similar services provided outside the airport. Services for which the preventive measures mentioned in these guidelines cannot be implemented should not be made available to passengers (e.g. smoking areas, playgrounds).



²² ECDC, Considerations relating to passenger locator data, entry and exit screening and health declarations in the context of COVID-19 in the EU/EEA and the UK <u>https://www.ecdc.europa.eu/en/publications-data/passenger-locator-data-entry-exit-screening-health-declaration</u>





Whenever possible inside the terminal, priority should be given to self-services (e.g. boarding pass, baggage tag kiosks, baggage drop, automatic boarding pass scanners, passport control). Aircraft operators, in coordination with airport operators, should put measures in place to assist passengers in using self-check-in procedures and to minimise the amount of hand luggage taken into the cabin, in order to expedite the boarding and disembarking process and to reduce movements and the risk of contamination in the cabin. Operators should promote the carriage of hand luggage in the cargo compartment by implementing incentive policies. In doing so, operators should remind passengers not to carry lithium batteries (in equipment or stand-alone) in their checked luggage²³.

Aircraft operators and airport operators should cooperate to ensure that physical distancing is observed, wherever feasible, especially during check-in, security checks, pre-boarding and boarding. When the recommended physical distance is not possible (at least 1.5-metre), due to infrastructure or operational constraints, the aircraft operators and airport operators should implement and encourage adherence to additional risk-mitigating measures such as hand hygiene, respiratory etiquette, use of face masks, enhanced boarding procedures, additional buses for boarding, etc. Airport operators, as far as practicable, should also put in place separate opposite flows. This could be achieved through floor markings, stanchions or direction signs. As regards access to the airport toilets, the principles of physical distancing should be considered and respected.

Before boarding, passengers should be reminded to ensure a sufficient supply of face masks for the entire duration of their journey. Nevertheless, aircraft operators and airport operators should also consider making face masks available (e.g. vending machines).

Aircraft operators, in coordination with the airport operators and the relevant service providers/suppliers, should ensure efficient boarding processes, limiting boarding time and facilitating physical distancing resulting in a lower risk of close contact. When buses are used for the boarding process, an increased number of buses should be considered in order to accommodate passenger physical distancing inside them. When boarding the aircraft through an air bridge or by walking to parked aircraft on the apron, enhanced boarding procedures should be considered such as boarding by rows starting with the furthest row from the aircraft doors used in the embarkation process or, alternatively, all window seats, then middle seats, followed by aisle seats. If the embarkation and disembarkation procedures are adapted, the aircraft operator should give proper consideration to the possible adverse effect on the aircraft balance in order to avoid an increase of aircraft tail tipping risk.

All facilities, and particularly the frequently touched surfaces like handrails, used in the boarding process should be frequently cleaned and disinfected as described in the section above on *Cleaning and disinfection*.



²³ More information about the carriage of lithium batteries is available on the EASA website: <u>https://www.easa.europa.eu/easa-and-vou/passengers/dangerous-goods#lithium-batteries</u>.





3.4 Management of passengers onboard the aircraft

OBJECTIVE

To reduce the residual risk of virus transmission in an aircraft, in the event an asymptomatic passenger is onboard the aircraft.

ECDC has published a series of Risk Assessment Guidance for Infectious Diseases transmitted on Aircraft (RAGIDA) to help national public health authorities and others in making decisions on the most appropriate and operationally feasible public health measures for containment, such as whether to contact-trace passengers and aircrew in case of exposure²⁴. The RAGIDA guidance for the Middle East Respiratory Syndrome Coronavirus (MERS) could be used as a starting point, since scientific evidence on SARS-CoV-2 inflight transmission is still lacking.

Aircraft operators should provide guidance material to their passengers regarding the application of the preventive measures on board, including:

- hand hygiene, particularly before eating or drinking and after using the lavatory;
- appropriate use of face masks;
- respiratory etiquette;
- limiting contact with cabin surfaces;
- reduced in-flight service;
- reducing the use of the individual air-supply nozzles to the maximum extent possible, unless otherwise recommended by the aircraft manufacturer.

In their cabin safety demonstration, aircraft operators should include that, in case of emergency, passengers should remove their face masks before using the cabin oxygen masks. Furthermore, aircraft operators should instruct their aircrew to remove their protective face masks in case of emergency, in order to facilitate the communication of instructions to passengers.

Aircraft operators should regularly inform their passengers that they should wear face masks during the entire flight and until they exit the destination airport, and that they should not remove their face masks if unnecessary. The face mask should be close to the face, covering the nose and mouth completely. When the face mask is on or being removed, the outer layer of the face mask must not be touched to avoid hand contamination. Furthermore, aircraft operators should inform passengers that face masks should be properly disposed of and not be thrown on the cabin floor or placed in the seat covers.

Should oxygen-dispensing equipment (i.e. therapeutic oxygen, drop-down oxygen masks and quick donning masks) be used during the flight, this should be thoroughly disinfected afterwards.



²⁴ European Centre for Disease Prevention and Control. Risk assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA). ECDC: Stockholm; 2020 (<u>https://www.ecdc.europa.eu/sites/default/files/documents/infectious-diseases-transmitted-on-aircrafts-ragida-risk-assessment-guidelines.pdf</u>).





Aircraft operators should put measures in place to prevent passengers from queuing in the aisle or the galleys for use of the lavatories. Furthermore, provided there is a sufficient number of lavatories in the cabin, the aircraft operators should reserve a lavatory, preferably the closest one to the flight crew compartment, for aircrew use only.

High-efficiency particulate air (HEPA) filters securely retain SARS-CoV-2 containing droplets and aerosol with SARS-CoV-2 containing particles and nuclei that are much smaller in seize than SARS-CoV-2 containing droplets. Aircraft operators that use cabin air recirculation in their aircraft are recommended to either install, use and maintain HEPA filters, according to the aircraft manufacturer's specifications, or to avoid the use of cabin air recirculation entirely, provided it is confirmed that this will not compromise any safety-critical functions (e.g. avionics cooling, cabin pressurisation, etc.).

If the aircraft has an option for high flow operation, the original equipment manufacturer (OEM) should be contacted for setting recommendations. If the aircraft in-flight operating procedure calls for packs to be off for take-off, the packs should be switched back on as soon as thrust performance allows²⁵.

Aircraft operators should consider reviewing their procedures for the use of recirculation fans in airconditioning systems based on the information provided by the aircraft manufacturer or, if not available, by seeking advice from the manufacturer in order to achieve the objectives stated above. Given the importance of minimising virus transmission in order for air travel to remain a safe and reliable means of transport, operators are recommended to dispatch aircraft from their main bases only when all packs are serviceable and with air recirculation fans serviceable. Procedures should be in place for a best-case configuration in the event of unserviceability after dispatch.

Aircraft operators and airport operators should collaborate to ensure that passengers are not kept on board an aircraft without proper ventilation for longer than 30 minutes. In order to enhance the cabin air quality, it is recommended to use all packs and the Auxiliary Power Unit (APU) Bleed or Ground Air Conditioning Unit, depending on aircraft configuration and only in accordance with applicable procedures such as APU restrictions. Proper consideration should be given to the fact that external Pre-Conditioned Air (PCA) is treated the same way in the aircraft as aircraft APU air. External air sources are identically processed through a HEPA filter if the aircraft is equipped with such a system.

In addition to the other health and hygiene measures that must be observed at all times, when allowed by passenger load, cabin configuration, and aircraft mass and balance requirements, aircraft operators should ensure, to the extent possible, physical distancing among passengers. Family members and individuals travelling together as part of the same household can be seated next to each other. The seat allocation process should be modified accordingly.

If physical distancing cannot be guaranteed due to passenger load, cabin configuration or other operational constraints, passengers and aircrew members on board an aircraft should observe the other preventive measures at all times, including strict hand hygiene and respiratory etiquette, and should wear a face mask.



²⁵ <u>https://www.icao.int/covid/cart/Pages/Aircraft-Module---Air-System-Operations.aspx</u>





Aircraft operators should reduce in-flight services to the minimum necessary to ensure passenger comfort and well-being and limit contact between cabin crew members and passengers, giving proper consideration to the duration of the flight. Among these measures, the following should be considered:

- No duty free or other non-essential product sales on board.
- Reduced food and beverage service. Alcoholic drinks should be avoided.
- Preference for pre-packed and sealed food and drink products, such as canned drinks.
- Wherever possible, payment involving touch or contact, such as cash payments, should be avoided to
 mitigate the potential transmission risk between cabin crew members and passengers.

Passengers should be reminded to remain seated with their seat belt fastened as long as possible.

Although passengers should have already been reminded to have a sufficient supply of face masks for the entire duration of their journey, aircraft operators should have a sufficient number of face masks on board to provide to passengers, especially for long-haul flights where the need to replace them may be advised by national public health authorities. A safe face mask disposal process should be put in place in accordance with the principle mentioned in Section 3.1.

Aircraft operators, either individually or via their representation bodies, should provide health safety promotion material in advance as well as on board, explaining all the risk-mitigating measures put in place, such as the use of face masks, hygiene measures, reduced in-flight services, air filtration, ventilation and exchange, to reassure passengers and increase their adherence to the implemented measures. In this context, aircraft operators should consider the operational recommendations and guidance detailed in the latest revision of EASA SIB 2020-02²⁶, the EASA Guidance on Management of Crew Members in relation to the SARS-CoV-2 pandemic²⁷, and the EASA Guidance on Aircraft Cleaning and Disinfection in relation to the SARS-CoV-2 pandemics²⁸.

Special attention needs to be given to the management of unruly or disruptive passengers in the context of the psychological pressure caused by the pandemic. Multi-layered actions should be considered, starting with passenger information and preparation about the measures in place, and giving attention to the procedures and aircrew actions that are necessary to mitigate such risk.



²⁶ <u>https://ad.easa.europa.eu/ad/2020-02R5</u> <u>https://ad.easa.europa.eu/sib-docs/page-1</u>

²⁷ https://www.easa.europa.eu/document-library/general-publications/guidance-management-crew-members

²⁸ https://www.easa.europa.eu/document-library/general-publications/guidance-aircraft-cleaning-and-disinfection





3.5 Management of passengers onboard the aircraft with COVID-19-compatible symptoms

OBJECTIVE

To reduce the risk of virus transmission from a symptomatic passenger during the flight.

If, after take-off, a passenger shows symptoms that are compatible with COVID-19, such as fever, persistent cough, difficulty breathing or other flu-like symptoms, the following measures should be considered:

- The cabin crew should make sure that the passenger is wearing their face mask properly and has additional face masks available to replace the one they are using in case it becomes wet after coughing or sneezing. If a face mask cannot be tolerated, the symptomatic passengers should cover their mouth and nose with tissues when coughing or sneezing. If the passenger is having difficulty in breathing, medical assistance should be sought and oxygen supply offered.
- The passenger should be isolated on-board. Depending on the cabin configuration of the aircraft, the actual occupancy and distribution of passengers, the position of the symptomatic passenger, and to the extent that is practicable:
 - an isolation area should be defined, leaving, if possible, two (2) rows of seats unoccupied in each direction around the symptomatic passenger;
 - taking into consideration all the factors, where possible, the symptomatic passenger should be seated in the last row window seat, preferably on the side of the aircraft where the Outflow Valve is;
 - where possible, the lavatory closest to the symptomatic passenger should be specifically designated for them and should not be used by the rest of the passengers or the cabin crew from that moment on;
 - depending on the composition of the cabin crew, the Senior Cabin Crew member should designate certain cabin crew member(s) to provide the necessary in-flight service to the isolation area(s). This (these) cabin crew member(s) should be the one(s) that had previously been in close contact with the symptomatic passenger. The designated cabin crew member(s) should use the PPE that is available in the aircraft's universal precaution kit (UPK). The designated cabin crew member(s) should minimise any non-essential close contact with the other cabin crew members and avoid unnecessary contact with the passengers.
- Where possible, the individual air-supply nozzle for the symptomatic passenger should be turned off in order to limit the potential spread of respiratory droplets.
- If the symptomatic passenger is accompanied, their companion(s) should be also confined in the isolation area, even if they do not exhibit any symptoms.
- The flight crew should inform the destination airport via the air traffic control system and follow their instructions, and complete the health part of the aircraft general declaration to register the







information regarding the health related situation on board and submit it to the point-of-entry (PoE) health authorities when required by a State's representative.

- After the aircraft has landed and all the other passengers have disembarked, the isolated symptomatic passenger and, where applicable and their companion(s) should be disembarked and managed in accordance with the instructions provided by the local public health authorities.
- Passengers who were seated two (2) seats in every direction from the suspected case are considered close contacts and will need to be interviewed by the entry country public health authorities, if the suspected case is confirmed. If contact tracing discovers more case(s) around the index case, then contact tracing of all the aircraft's passengers should be considered.
- The cabin crew member who was assigned to provide in-flight services to the symptomatic passenger, and other cabin crew members who may have been in direct or close contact with the symptomatic passenger, should be disembarked and managed in accordance with the instructions provided by the local public health authorities. This may include being transferred to facilities where they can clean and disinfect themselves before having physical contact with other people. Alternatively, as a last resort and subject to the public health authorities' decision, after carefully disposing of the used PPE and washing and disinfecting their hands, the affected cabin crew members could be isolated on board, in a quarantine area, before returning to their base or to a layover destination.
- In coordination with the relevant national public health authorities, the aircraft operators should endeavour to receive information about the test result of the suspected case as soon as possible. The crew member(s) who provided in-flight services to the passenger with COVID-19-compatible symptoms should be considered a close contact and asked to self-isolate after returning to their home base. In coordination with the public health authorities, the respective crew members may be considered safe for the remainder of their duty period but no longer than 48 hours after the first contact with the symptomatic passenger and after thorough personal hygiene and a change of uniform or the single use protective suit, if such a suit was used. If the suspected case is confirmed positive, the affected crew member(s) should be quarantined for 14 days from the last contact with the confirmed positive passenger, unless otherwise specified by the local public health authorities. If the passenger's test is negative, they may resume flying duties.
- After the removal of the COVID-19 suspected case from the aircraft, the cleaning and disinfection of the aircraft should be performed in accordance with the EASA Guidance on Aircraft Cleaning and Disinfection in relation to the SARS-CoV-2 pandemics²⁹.
- If a passenger or cabin crew member exhibit COVID-19-compatible symptoms, all waste materials including partially consumed meals, beverages and disposable items such as used paper towels, tissues and PPE produced while treating or supporting the symptomatic passenger or the cabin crew member(s) that has (have) been in close contact with them should be treated in accordance with the applicable international guidance or, where available, national guidance, as specified in Section 3.1.



²⁹ <u>https://www.easa.europa.eu/document-library/general-publications/guidance-aircraft-cleaning-and-disinfection</u>





Note: The incubation period of the SARS-CoV-2 virus has been found to be between 1 and 14 days, with a median incubation period of 5.1 days. 75 % of the cases have an incubation period longer than 4 days and only 2.5 % of the cases have an incubation period of less than 2 days³⁰. In this context, it is considered that, even if already in the incubation period, a person is most likely not contagious in the first 2 days after exposure.

If a suspected passenger is identified on board before take-off, the airport and the local health authorities should be informed and their instructions followed. At this point, if there has been no direct contact between the symptomatic passenger and crew members, no additional measures need be taken with regard to the management of the crew members, unless otherwise advised by the local public health authorities.



³⁰ <u>https://annals.org/aim/fullarticle/2762808/incubation-period-coronavirus-disease-2019-covid-19-from-publicly-reported</u>





3.6 Management of arriving and transit passengers

OBJECTIVE

To reduce the residual risk of infection for passengers at the arrival airport and/or in the destination region, should an infected person have been on a flight or at the airport.

Disembarkation

Passengers should be reminded by the airport operators, in coordination with the aircraft operators, to adhere to the applicable preventive measures described in Section 3.1 and to the relevant principles described in the check-in and boarding section (Section 3.3).

Aircraft operators and airport operators should cooperate and coordinate to ensure that physical distancing is observed as much as possible during disembarkation. When buses are used for the disembarkation process, an increased number of buses should be considered in order to accommodate passenger physical distancing inside them. Disembarkation should be performed by rows starting with the rows closest to the exits in use, in the aisle–middle–window seat order, or an alternative procedure that would ensure physical distancing to the maximum extent possible and prevent queuing.

All facilities used in the disembarkation process should be cleaned and disinfected as described in Section 3.3.

Transfer passengers

Where transfer security screening is required, it should follow appropriate sanitary requirements as described for the departure process.

"One-stop" health screening arrangements should be developed using existing one-stop security arrangements as a model. In this model, passengers and property are not rescreened at transfer locations based on the mutual recognition of security measures between the States in the travel itinerary. A similar arrangement for health screening procedures may prevent unnecessary queuing points at passenger transfer locations.

Passenger locator card (PLC)

Where electronic systems are available and accepted by the national public health authorities, aircraft operators should ensure that passengers are required to fill in their data for contact-tracing purposes before their boarding passes are issued.³¹ Furthermore, national public health authorities and aircraft operators should ensure that passengers are not allowed to travel if the required data is not registered in the respective electronic system.

Where such systems for the collection of contact-tracing data are not available or temporarily fail, aircraft operators should provide, without undue delay and without prejudice to the applicable data protection



³¹ ECDC, Mobile applications in support of contact tracing for COVID-19 - A guidance for EU EEA Member States, <u>https://www.ecdc.europa.eu/en/publications-data/covid-19-mobile-applications-support-contact-tracing</u>





requirements, the following data to the relevant national public health authorities upon request for contacttracing purposes:

- full name,
- date of birth,
- allocated seat number,
- functional phone number and email address.

This data set represents a minimum recommended extract from the currently available WHO, IATA, and ICAO passenger locator card (PLC)³². Refer to Annex 1 and the ECDC document on Considerations relating to passenger locator data³³ for the use of the PLC data by the national public health authorities for contact-tracing purposes.

Thermal screening (skin temperature check) at the arrival airport

If entry thermal screening is required, e.g. due to national response plan decisions/regulations, the points presented in Section 3.3 and in Annex 1 should be considered.

In order to avoid a duplication of procedures, passengers that arrive from EU/EEA flights and that have been subject to thermal screening at the departure airport should be exempted from entry thermal screening at the arrival airport. "One-stop" health screening arrangements should be considered as mentioned in the 'Transfer passengers' section above.

Passengers that have fever and, following their assessment, are considered suspected COVID-19 cases, should be managed in accordance with the instructions of the local public health authorities in terms of confirmation testing, transport and quarantine. Without prejudice to the above, symptomatic passengers should under no circumstances be repatriated on a commercial flight.

Further considerations regarding thermal screening (skin temperature check) may be found in Annex 1 'Scientific evidence and additional considerations'.

Baggage claim and exiting the arrival airport

Passengers should be advised by the airport operators to give proper consideration to the preventive measures described in Section 3.1 'At all times', and to the relevant principles described in the check-in and boarding part of Section 3.3, including the use of the airport facilities.

To limit gathering of passengers, airport operators and/or any stakeholder involved in the delivery of baggage handling service such as ground handling service providers, airlines or relevant service providers should maximise use of the available arrival baggage carousels and, where possible, use dedicated baggage carousels for flights from high-risk areas (as assessed by the local public health authorities at the arrival airport). The use of baggage delivery services, where the passenger's baggage can be delivered directly to their hotel or



³²<u>https://www.icao.int/safety/aviation-medicine/guidelines/AvInfluenza_guidelines_app.pdf</u>

https://www.iata.org/contentassets/07a397c1164d45e794c22949c75a95ac/public-health-passenger-locator-form.pdf ³³ https://www.ecdc.europa.eu/en/publications-data/passenger-locator-data-entry-exit-screening-health-declaration





home, should be encouraged. Baggage tracking information should be shared with passengers so that they are able to make a baggage claim, in the event of baggage mishandling, without waiting in the reclaim area.

For customs formalities, and where possible, it is recommended to provide green and red lanes for selfdeclarations. Appropriate sanitary measures must be taken at secondary screening points to protect both passengers and airport staff. It is recommended that the national governments should also simplify border control formalities by enabling contactless processes (e.g. relating to the reading of passport chips, facial recognition, etc.) or passenger flow management with digital solutions, setting up special lanes where feasible, and training agents to detect and identify passengers exhibiting signs and symptoms relevant to COVID-19. The possible redesign of immigration halls needs to be coordinated between airport operators, aircraft operators and national governments.

Airport operators should also inform and advise arriving passengers to leave the arrivals terminal as soon as possible after they have collected their baggage and finalised all arrival formalities, in order to minimise the possibility of transmission.

Airport operators should inform meet-and-greet individuals that access to the terminal is limited to passengers, aircrew members and airport staff only. When meet-and-greet cannot be avoided (e.g. for persons requiring assistance), a meet-and-greet area should be set up away from the exits from the restricted area and away from the main passenger flow to reduce the risk of the arriving passengers crossing paths with other individuals.

4 Management of aviation personnel

OBJECTIVE

To reduce the residual risk of infection of aviation personnel from passengers or vice versa, and avoid duplication of procedures.

The health and safety of staff is paramount. Not only for their own protection but also to help prevent the spread of the virus and maintain safety. There is a comprehensive body of EU legislation to protect workers' health and safety at the workplace. Additional measures that need to be taken for COVID-19 may pose additional risks to staff in terms of higher physical and mental workload, longer working hours and increased administrative workloads. Workplace risk assessments in accordance with occupational safety and health legislation therefore need to be revised and occupational health and safety measures adapted in agreement with public health authorities and staff performing the tasks taking into account all types of risks (including the additional physical load when wearing personal protective equipment).

Non-binding guidelines developed at EU level aim to help employers and workers to stay safe and healthy in a working environment that has changed significantly because of the COVID-19 pandemic. They give advice on risk assessment and appropriate measures such as minimising exposure, resuming work, coping with absences and taking care of workers that have been ill. They also contain useful links to national guidance in specific sectors. More information on occupational safety and health is available here:







- Overview: https://osha.europa.eu/en/themes/covid-19-resources-workplace
- COVID-19: Guidance for the workplace: <u>https://oshwiki.eu/wiki/COVID-19: guidance for the workplace</u>
- COVID-19: Back to the workplace Adapting workplaces and protecting workers
 <u>https://osha.europa.eu/en/publications/covid-19-back-workplace-adapting-workplaces-and-protecting-workers/view</u>

Aircrew members, airport staff and service provider/supplier staff should be exempt from the airport's COVID-19 screening procedures, subject to the implementation of an equivalent procedure by the aircraft operators, the airport operators or the service provider, as applicable, to monitor the health status of their staff.

Furthermore, airport operators should set up separate flows for aircrews in order to ensure that physical distancing from the passengers is guaranteed at all times.

Equipment of common use used by aviation personnel such as computers, tablets, radio stations, headsets, etc. should be disinfected before being used by another staff member. For staff working shifts, handovers should be conducted in a contact-free manner, i.e. via telephone, videoconference, electronic logs, or as a minimum through physical distancing.

Staff training should maximise the use of online training and virtual classrooms.

Additional operational measures should be considered in accordance with the EASA Guidance on Management of Crew Members in relation to the SARS-CoV-2 pandemic³⁴.



³⁴ <u>https://www.easa.europa.eu/document-library/general-publications/guidance-management-crew-members</u>





5 Summary

Matrix of measures per aviation stakeholder

Type of measure	Airport operators	Aircraft operators	Airport staff	Service providers/ suppliers	Aircrew members	Passengers
Physical distancing	Wherever possible	Wherever possible	Wherever possible	Wherever possible	Wherever possible	Wherever possible
Hand hygiene, respiratory etiquette	Yes	Yes	Yes	Yes	Yes	Yes
Face masks	Yes	Yes	Yes	Yes	Yes ³⁵	Yes
Health safety promotion material	Yes, in coordination (see Annex 3)		Yes, should adhere to the recommendat ions and disseminate the material/ information where required under their tasks	Yes, should adhere to the recommendat ions and disseminate the material/ information where required under their tasks	Yes, should adhere to the recommendat ions and disseminate the material/ information where required under their tasks	Yes, should read and adhere to the recommendations
Cleaning and disinfection	Yes, see Section 3.3	Yes ³⁶	n/a	Yes	n/a	n/a
Acknowledge ment of COVID-19 policy	Yes, in electronic format Coordinate the format and assessment		n/a	n/a	n/a	Yes, should acknowledge reading and understanding before the flight
Thermal screening (skin temperature check)	Yes, where required by the national authorities	n/a	Possible, if the airport operator has not implemented a staff health monitoring programme	Possible, if the employer has not implemented a staff health monitoring programme	Possible, if the A/C operator has not implemented a crew health monitoring programme	Yes, may be thermal screened if required by the national authorities
Reduced aircrew–	n/a	Yes	n/a	n/a	Yes	Yes, should adhere to the recommendation of

³⁵ Face masks should not be worn by the flight crew in the flight crew compartment after boarding and while operating due to safety reasons.



³⁶ <u>https://www.easa.europa.eu/document-library/general-publications/interim-guidance-aircraft-cleaning-and-disinfection</u>





Type of measure	Airport operators	Aircraft operators	Airport staff	Service providers/ suppliers	Aircrew members	Passengers
passenger interaction		Essential in-flight services only; Avoid lavatory queuing; Designate lavatoryfor aircrew use only				limiting their requests to the cabin crew members to the essential.
Special disembarking procedure	Yes, in coordination with the local public health authorities		Yes, where applicable, enforce the national public health authority instructions/ measures	Yes, where applicable, enforce the national public health authority instructions/ measures	Yes, enforce the national public health authority instructions/ measures	Yes, follow the aircrew and ground staff instructions







Annex 1 — Scientific evidence and additional considerations

Exit and entry thermal screening³⁷

It is essential for the movement of people within or between countries that there are measures in place to minimise the risk of sustained community transmission resurging.

Exit or entry screening of passengers, particularly at international airports, is frequently considered as the go-to measure to implement for health safety in order to safeguard countries from the introduction of a communicable disease. These procedures usually include some type of thermal screening (contactless thermometers, thermal scanners/cameras and others) to detect exiting or entry passengers with fever (i.e. body temperature >38°C). Additional (secondary) screening is frequently added to this procedure using a health declaration form or a health questionnaire, potentially administered and assessed by a health professional to determine the need to test for the particular pathogen.

Historically, reports reviewing entry screening from several countries at the time of the SARS outbreak (2003), the A(H1N1)pdm09 influenza pandemic (2009) and the Ebola virus disease (EVD) in West Africa (2014-2016) consistently show that entry screening using temperature control is a high-cost, low-efficiency measure.

As regards COVID-19, based on what we know so far, several of its characteristics make it unlikely that exit or entry screening will detect a sufficient number of cases to make screening procedures effective and/or efficient in preventing introduction and onward transmission of the disease. These include the following:

- A relatively large number of COVID-19 cases will potentially be in the incubation phase when travelling; SARS-CoV-2 has an incubation period of 2-14 days, with 75% of cases developing symptoms after 4-7 days. These passengers will not be detected by exit or entry screening, even in a scenario assuming high sensitivity equipment. When this scenario was modelled at the beginning of the outbreak in January 2020, it showed that an estimated 75% of infected passengers would exit or enter the country without being detected.
- Evidence has accumulated which indicates that asymptomatic (or pre-symptomatic and mild) cases play a significant role in the transmission of COVID-19 (maybe up to 40%) and it is currently established that transmission starts before the onset of symptoms (peaking 0.7 days before).
- In the case of COVID-19 fever is frequently, but not consistently, reported in symptomatic cases. According to ECDC's weekly epidemiological report for week 23/2020, fever was reported for 53% of over 150 000 laboratory-confirmed COVID-19 cases entered in The European Surveillance System (TESSy).³⁸ In addition, fever is a symptom that can be temporarily concealed by using antipyretic drugs.

The large variety of screening equipment (contactless thermometers, thermal scanners, etc.) commercially available requires that particular care is taken in calibration and the setting of thresholds for categorising

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³⁷ ECDC, Considerations relating to passenger locator data, entry and exit screening and health declarations in the context of COVID-19 in the EU/EEA and the UK <u>https://www.ecdc.europa.eu/en/publications-data/passenger-locator-data-entry-exit-screening-health-declaration</u> ³⁸ ECDC, COVID-19 Surveillance report <u>https://covid19-surveillance-report.ecdc.europa.eu/</u>





people as screen-positive. The performance of devices is difficult to compare because of different targets and modes of operation. In addition, the performance of devices is affected by the choice of the cut-off value set for screening. In general, performance is reported as follows:

- Sensitivity: 80–99%, meaning that between 1 and 20% of febrile passengers will not be detected (false negative).
- Specificity: 75–99%, meaning that between 1 and 25% of non-febrile passengers will be reported as febrile (false positive).

Some reports suggest that taking the average of several readings improves accuracy, however this increases the resources necessary to perform the task.

Some imported COVID-19 cases have been detected through entry screening at destination airports (e.g. in Taiwan, where there is a permanent airport screening system in place). In a recent US-CDC review of the public health response, data from incoming passengers at selected US airports show that as of 21 April 2020, screening of 268 000 returning travellers discovered 14 COVID-19 cases (approx. 5 cases per 100 000 passengers screened).

With regard to exit screening, past experience during the Ebola virus disease (EVD) outbreak in West Africa 2014-2016 has shown that it can be useful, but EVD is not transmitted before the onset of symptoms and is in general not asymptomatic.

Due to the ongoing community transmission levels in all EU/EEA countries, if exit and/or entry screening is planned, it should include all points of entry and all passengers, using a specific protocol for primary and secondary screening, testing and follow-up. This entails huge human, laboratory, logistical (PPE, sample transport, passenger transit and quarantine, etc.) and monetary resources, which will be reduce the amount available for preparedness planning for a potential second wave of the COVID-19 pandemic.

Nevertheless, exit and entry screening processes may help dissuade those who are sick from travelling by air and enhance the confidence of healthy travellers. In addition, they offer a further means for providing specific information to passengers on the disease, the current epidemiological situation and where to seek medical advice, if needed.

Use of face masks

A **medical face mask** (also known as surgical or procedure mask) is a medical device to cover the mouth, nose and chin ensuring a barrier that limits the transmission of an infective agent between hospital staff and patients. It is used to prevent large respiratory droplets and splashes from reaching the mouth and the nose of the wearer and help reduce and/or control at source the spread of large respiratory droplets from the person wearing the medical face mask. Medical face masks comply with the requirements defined in European Standard EN 14683:2019+AC:2019.

Non-medical face masks (or community masks) include various forms of self-made or commercially available masks or face covers made of cloth, other textiles or other materials (such as paper). They are not standardised and do not offer a consistent level of protection. For these reasons, non-medical face masks







are not recommended for use where a minimal physical distance of 1.5 metres between individuals is not guaranteed.

Face masks are recommended mainly as a means of source control for persons who are symptomatic in order to prevent the spread of the respiratory droplets produced by coughing or sneezing³⁹. There is increasing evidence that persons with mild or no symptoms at the pre-symptomatic and early stages of the infection can contribute to the spread of COVID-19. A face mask may help reduce the spread of the infection in the community by minimising the discharge of respiratory droplets from infected individuals who may not know they are infected and before they develop any symptoms⁴⁰.

ECDC advises that the use of face masks outside health or social care settings can be considered, especially when visiting busy, confined spaces, or when using public transport — conditions that apply in the context of airports and on board aircraft. The use of face masks should, therefore, be strongly recommended at airports for both staff and passengers, with particular emphasis on areas or settings where the ideal 1.5 to 2-metre physical distancing is not feasible.

The use of face masks at airports should be considered only as a complementary measure and not replace the preventive measures put in place, for example physical distancing, respiratory etiquette, meticulous hand hygiene, and avoiding touching the face, nose, eyes and mouth.

In general, face masks should be replaced when they become wet or soiled, or after being worn for 4 hours. Passengers should be reminded that they should ensure they have a sufficient supply of masks for the entire duration of their travel. Nevertheless, airport operators should also make medical face masks available at the airport terminals in case passengers have no access to such face masks before arriving at the airport.

There are three main caveats associated with the use of face masks: their correct use (how to wear and remove them, and how to manage the face mask while wearing it), the proper disposal of the used face mask, and the false sense of security that the use of a face mask can give:

- A face mask should completely cover the face from the bridge of the nose down to the chin. Before wearing and removing the face mask, hand hygiene with soap and water or alcohol-based hand sanitiser should be observed. When removing the face mask, it should be removed from behind, avoiding touching the front side.
- The false sense of safety that can be given by wearing a face mask should be considered: the face mask works mainly as a means of control for exhaled droplets, and not as a means of protection for the wearer. Passengers should be informed about this and about the importance of observing physical distance and frequent hand hygiene, together with the proper respiratory etiquette, to reduce the risk of infection.



³⁹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4734356/ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5058571/ https://iournals.plos.org/olosope/article/file2id=10_1371/iournal.pone_00026

https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0002618&type=printable

⁴⁰ Using face masks in the community — Reducing COVID-19 transmission from potentially asymptomatic or pre-symptomatic people through the use of face masks (<u>https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission</u>).





— A used face mask as well as other waste materials that were in direct contact with passengers, airport staff or aircrew members, including PPE, should be treated in accordance with the applicable international guidance or, where available, national guidance, giving proper consideration to the case where a symptomatic passenger, airport staff or aircrew member is present at the airport or onboard the aircraft.

Physical distancing

Current scientific studies and articles⁴¹ confirm that, in general, the distance that large respiratory droplets can travel in the air is 1.5 metres for normal speech and up to 2 metres when coughing. Further evidence⁴² indicates that the physical distancing should be of at least 1.5 metres and ideally 2 metres. For this reason, aircraft operators, airport operators and service providers/suppliers should ensure that 1.5-metre physical distancing is maintained wherever this is operationally feasible. If it cannot be guaranteed because of operational constraints, the airport operator should implement risk-mitigating measures.

In order to reduce the number of people at the airport terminals, and consequently facilitate physical distancing, airport operators, in coordination with the aircraft operators, should inform passengers prior to their arrival at the airport that access to the terminals is restricted to passengers only, with the exceptions presented in Section 2 'General considerations'. Furthermore, airport operators should clearly signal the points beyond which any accompanying persons are not allowed to go.

When allowed by passenger load, cabin configuration, and aircraft mass and balance requirements, aircraft operators should ensure, to the extent possible, physical distancing among the passengers. This may be achieved by leaving at least one seat unoccupied between the passengers, or increasing the distance between the seats, or leaving every other seat row unoccupied. Family members and individuals travelling together as part of the same household can be seated next to each other. The seat allocation process should be modified accordingly.

If physical distancing cannot be guaranteed because of passenger load, cabin configuration, aircraft mass and balance requirements or other operational constraints, passengers and aircrew members onboard the aircraft should adhere at all times to all the other preventive measures including strict hand hygiene and respiratory etiquette, and should wear a face mask.

Passenger locator card (PLC) data⁴³

The current standard for collecting passenger locator data is a form that was developed as a collaboration between WHO, the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) in 2012. Its aim is to assist public health authorities in conducting the contact tracing of

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⁴¹ <u>https://www.tandfonline.com/doi/full/10.1080/15459620590918466</u> <u>https://onlinelibrary.wiley.com/doi/full/10.1111/j.1600-0668.2007.00469.x</u> <u>https://asmedigitalcollection.asme.org/biomechanical/article-abstract/129/3/341/469879/Transport-Characteristics-of-Expiratory-Droplets?redirectedFrom=fulltext</u> <u>https://www.nejm.org/doi/full/10.1056/NEJMc2007800</u> <u>https://medium.com/@Cancerwarrior/covid-19-why-we-should-all-wear-masks-there-is-new-scientific-rationale-280e08ceee71</u>

⁴² <u>https://www.sciencedirect.com/science/article/pii/S0140673620311429?via%3Dihub</u>

⁴³ https://www.ecdc.europa.eu/en/publications-data/passenger-locator-data-entry-exit-screening-health-declaration





passengers potentially exposed to a communicable disease during a flight or while travelling, in the framework of the International Health Regulations (2005). Passenger locator forms can be used for any conveyance but are most relevant for air-travel. Depending on the public health regulations in the country of arrival, passengers are asked to fill out a hard copy in-flight and hand it in, either to the aircraft crew or at passport control.

The purpose of identifying and managing the contacts of probable or confirmed COVID-19 cases is to rapidly identify secondary cases and prevent further spread. Contact tracing is an essential measure to fight the ongoing epidemic of COVID-19, in conjunction with active case finding and testing and the application of other measures such as physical distancing. Each country needs to adapt their response to the local epidemiological situation and according to available resources. The rigorous application of contact tracing measures can reduce further transmission and have a major impact on the spread of the outbreak. Contact tracing is crucial during the current phase of the COVID-19 pandemic when countries are adjusting their control measures.

Passenger locator data should be made available to the public health authorities as soon as possible so that they can initiate contact with exposed passengers. The prompt availability of accurate passenger locator data is extremely important for the success and effectiveness of contact tracing operations. This enables public health authorities to identify and notify contacts of an infected case for active follow-up and the provision of relevant advice.

Current European legislation requires data provided by passengers during the process of booking and checking in for a flight to be communicated by the aircraft operators to law enforcement and immigration authorities. For passengers arriving from countries outside the Schengen area, and with the aim of combatting illegal immigration, the aircraft operators transfer the advance passenger information (API) data under EU Directive 2004/82. The Schengen Borders Code explicitly states that the data gathered under Directive 2004/82 may be used to determine that a person is not a threat to public health. For passengers within the Schengen area, with the overall aim of combatting terrorism, a similar set of data – a Passenger Notification Record (PNR) – is collected and shared with certain competent authorities in the Member States under EU Directive 2016/681. This is also shared with Australia, Canada and the USA under international agreements. To date, public health authorities have not been included in the list of designated competent authorities that can receive PNR data, either automatically or on request. When aircraft operators receive requests for passenger data for contact tracing purposes due to a communicable disease incident, they manually extract the relevant flight PNR and communicate it to the requesting authority.

However, obtaining API or manually extracted PNR data is a slow process fraught with challenges, such as double records, incorrect phone numbers, etc. A recent report by the California Department of Public Health (CDPH) in USA reviewed work on the identification and monitoring of incoming international travellers from January to 17 March 2020. During that period, the CDPH staff tried to locate and monitor international passengers using the API and PNR data provided by federal authorities, in an activity similar to contact tracing (although the latter works backwards from a known confirmed case). Only three passengers, out of 11 574 records (26/100 000 passengers) were eventually identified as confirmed COVID-19 cases in the state database, at a cost of 1 694 hours of personnel time, 34% of which was outside normal working hours.







Moreover, two of the three identified passengers were not reached until several days after their entry into the country. This report highlights the need for more efficient ways of communicating with the public health authorities, such as electronic provision of information by aircraft operators and flexible text-messaging tools to improve the contact tracing procedures.

Direct collaboration with aircraft operators is the easiest way to obtain the necessary passenger data in a timely manner for effective contract tracing. Member States will need to assess whether the transfer of passenger location data from aircraft operators to public health authorities complies with the requirements under the applicable data protection requirements, taking into account the legal requirements under their national law.

Given the above data sets collected for aircraft operator passengers, below are the recommended minimum data elements which aircraft operators could be asked to be provided to national authorities upon request when government electronic means does not exist or fail, in line with the section on 'Passenger locator card (PLC)' in chapter 3.6 above. This will allow the remaining personal information to be obtained during the contact-tracing interview. This data includes the following limited fields:

- Flight number and seat number: the flight number may already be known from the index case, but the seat numbers are extremely important for the assessment of each contact's risk;
- Full name;
- Date of birth (optional, but may be useful to differentiate between people with common names);
- Telephone number: a functional mobile;
- Email address: a functional email.

Electronic methods for transferring these data should be explored in collaboration with the public health authorities and the airport and aircraft operators.

Immunity certificate

There is currently limited evidence on immunity and protection against COVID-19 disease provided by antibodies detected in the sera of recovered patients. The quantity, quality and duration of the human immune response to SARS-CoV-2 is, as yet, unclear. In addition, we lack validated serology tests that can ascertain immunity to the virus.

This lack of correlation with disease immunity is not expected to be resolved in the coming months and it will take years to establish for long-term immunity. There is not enough scientific basis for using serology or other immune markers to take decisions on travel. Given the evidence currently available, any immunity certification for COVID-19 is not supported by ECDC.

Requirement for recent negative RT-PCR⁴⁴ test

Some countries have implemented, or are considering implementing requirements for a recent negative RT-PCR test, but the evidence base behind this is unclear. If a PCR test is negative (e.g. 72 hours prior to departure), it could indeed help reduce the risk of asymptomatic, pre- symptomatic or symptomatic COVID-

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⁴⁴ Reverse transcription polymerase chain reaction





19 cases being introduced. However, a negative test does not exclude the possibility that the person tested may become infectious in the days prior to departure or during travel (on board, or at the destination) since the virus incubation period is known to be 2-14 days.

In addition, it is critical to use well-validated, clinical, diagnostic, molecular detection assays. At the time of writing, no rapid antigen tests have been clinically evaluated and their performance validated in different settings and for different purposes. All testing should take into account the quality of the test and specimen as well as the epidemiological situation to exclude the possibility of a false result. Non-validated assays may have low sensitivity (thus giving false negative results) or low specificity (thus giving false positive results). In the event of a false negative test, a person could falsely believe that they are not infected and be less cautious in applying other preventive measures (self-isolation, physical distancing and hygiene measures), while transmitting the virus without knowing. The false negative test may also delay testing, diagnosis, isolation and contact tracing if the person develops symptoms shortly after obtaining the test result. A false positive result would not increase the risk of transmission during travel, as in this situation the case would be required to stay at home and self-isolate. However, a false positive test would also prevent any healthy accompanying persons from travelling and trigger unnecessary contact tracing.

If a country decides to include laboratory testing (e.g. a nucleic acid detection test before departure) as part of the exclusion policy for travellers, this should be communicated to incoming travellers well before their departure date, so that they have sufficient time to plan testing. When deciding whether to include testing as a condition for travel, EU Member States should take into consideration the limitations, including cost, testing policy and the availability of tests in the other EU/EEA countries. In many of the EU/EEA Member States, testing is not readily available or foreseen for asymptomatic persons or for those with mild respiratory symptoms. Finally, the 72-hour window may cause significant logistical issues, due to the laboratory processing time required between sample collection and results becoming available.

Testing at destination

In order to allow for early detection of cases and clusters, national/regional/local public health authorities need to ensure that all tourist destinations have easy access or clear operating procedures for the sample collection and testing of any person developing symptoms. Local testing capacity should be developed to ensure timely results. Alternatively, if there is limited or no testing capacity in the area, access to a testing facility and shipment of samples for testing should be planned proactively.







Annex 2 – Acknowledgment of COVID-19 policy

An example of an acknowledgment of COVID-19 policy prior to the arrival at the airport during the online check-in process or via a text message (SMS) link or other means acceptable to the national authorities, is presented below.

It should be made clear that this applies for each individual passenger in a booking for more than one person.

In particular, I understand that I shall not go to the airport, if any of the following applies:

- ✓ I have been diagnosed with COVID-19 at any time during the 14 days prior to my flight.
- ✓ I have had any of the COVID-19 relevant symptoms (fever; newly developed cough; loss of taste or smell; shortness of breath) at any time during the 8 days prior to my flight.
- ✓ I am aware of having been in close contact (e.g. less than 2 metres for more than 15 minutes) with a person who was diagnosed with COVID-19 in the 14 days prior to my flight.
- ✓ I am required by local or national regulations to be in quarantine for reasons related to COVID-19 for a period that includes the date of the fight.

In case any of the above situations applies, I shall contact [name of the Airline] at the latest [x] hours before the flight. I understand that if any of the above 4 situations is identified at the airport, I may be refused to proceed with my travel and lose my right to benefit from any COVID-19 commercial policy put in place by [name of the Airline].

In case you need medical information on COVID-19, please contact [Contact information of the local health authority].

□ I have read and understood the COVID-19 policy of [name of the Airline].







Annex 3 — Health safety promotion material

General instructions

- Wear a medical face mask, ensure it is used and disposed of correctly. Replace the mask every 4 hours (unless instructed otherwise)
- Observe 1.5-metre physical distancing
- Wash hands regularly for at least 20 seconds with soap and water or, where not available, use alcoholbased hand-sanitising solutions
- Cover the mouth and nose with a tissue or flexed elbow when sneezing or coughing (respiratory etiquette)
- Do not touch surfaces and limit direct contact with other people.
- Be kind to each other it is the only way we can get through this

Before leaving for the airport

- Do not travel to the airport if you have been in any of the situations specified in the Acknowledgment of COVID-19 policy
- Be aware that only passengers are allowed to enter the airport terminal at arrival and departure (The only other people who should enter the terminal are people accompanying or picking up a passenger that requires assistance, such as persons with reduced mobility (PRM), unaccompanied minors, etc.)
- Read your airline's health safety promotion material
- Make sure you have sufficient medical face masks and hand sanitiser for your entire journey
- Make sure you allow enough time for your journey to the airport, including security checks at the airport

At the departure airport

- Contact airport staff if you have any questions or if you feel uneasy (they are there to help you in this new situation)
- Be prepared for thermal screening (body temperature check)
- Observe physical barriers or signs indicating physical-distancing requirements
- Check-in your bag whenever possible rather than taking it through security
- Wear a medical face mask, and expect to be denied boarding if you do not have one

On the aircraft

- If you have any questions or feel uneasy, ask a cabin crew member (they are there to help you in this new situation) and be nice to them
- Watch the cabin safety demonstration so you know what is happening on your flight
- Reduce the use of the individual air-supply nozzles as much as possible







At the arrival airport

- Practice physical distancing, hand hygiene and cough etiquette and wear a medical face mask.
- Collect your bags and leave the terminal building as soon as possible.
- Reduce the risk of virus transmission by minimising interaction with people in the arrival terminal.





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