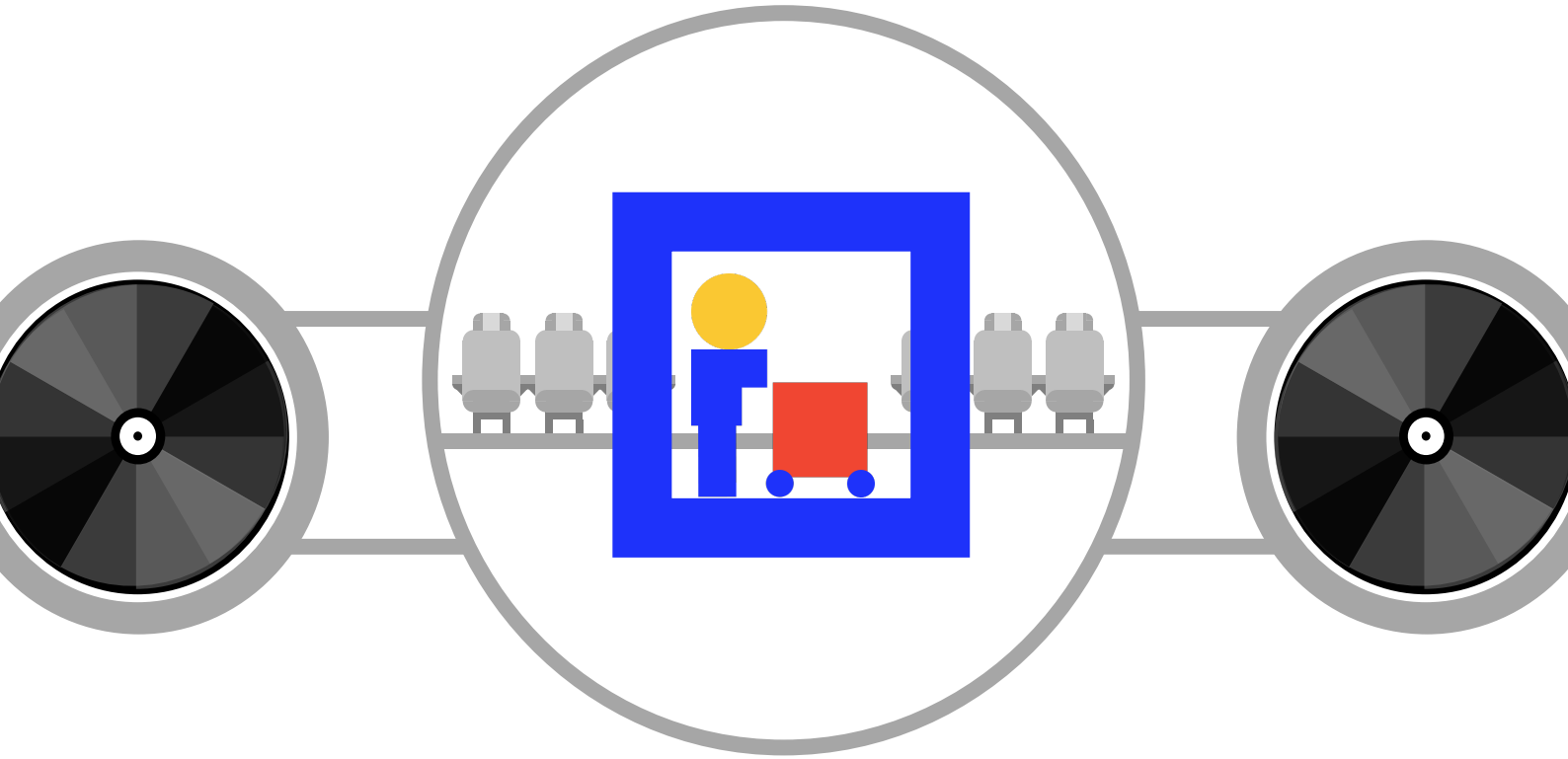
Guidance for Cabin Operations During and Post Pandemic

Edition 3 – 05 Jun 2020



Disclaimer

All IATA Covid19 related guidance materials can be found at
https://www.iata.org/en/programs/covid-19-resources-guidelines/

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Contents

Revision record

Symbol	Meaning
□	Insertion
△	Amendment
⊗	Deletion

Revised text is shown in red.

Revision table

Revision	Date	Section	Significant changes
Edition 1	22 April 2020	N/A	New issue
Edition 2	07 May 2020	2.1.2	Layers of protection from infection **added,** to highlight that protection is a multi-layered approach, incorporating distancing and PPE as and where appropriate.
		2.5	Crew positioning and flight duty limitations **updated** to include that exemptions may occasionally be granted by regulators subject to risk assessment and identification of mitigations.
		2.7.1	Crew Precautions during layover **added.**
		3.1.1	Masks section **updated** to include face coverings as an alternative. IATA recommends the use of face coverings by passengers and appropriate PPE for airport and airline staff.
		4.3	Using own cleaning materials **updated** to include that airlines may consider providing additional wipes for passengers and/or crew.
		5.2	Physical distancing **updated** - requirements may impact safety regulations e.g. seating of children next to guardians. These risks should be considered in the Airline safety risk assessment and mitigated appropriately.
		5.5	Passenger announcements **updated** to include safe and hygienic disposal of masks and tissues.
		5.7	Crew physical distancing **updated** to include double crew seats in risk assessment.
		5.10	Unruly passengers **added** to highlight potential new causes of unruly behavior.
		5.11	Carry-on baggage **added** – airport operators and/or security agencies may restrict the amount of carry-on baggage allowed through security searches and airlines should consider this within their risk assessment processes.
		5.12	Provision of First Aid onboard **added** to highlight the recommendation for Universal Precautions Kits to provide protection for cabin crew while administering first aid.
		5.13	Human factors/CRM issues **added** to highlight some issues which might require attention in risk assessment processes.

Edition 3	06 Jun 2020	1	Introduction amended to reference ICAO Council Aviation Task Force – Take-off guidance
		2.1.1	Example operational safety risk assessment inserted.
		2.1.2	Risk assessment of routes **amended** with websites indicating local infection rates and international scoring example from CAAC
		2.1.3	Phases of restart **added**.
		2.6	Crew Quarantine requirements – IATA website URL **amended** for interactive functionality.
		2.7	Crew health precautions removed and referenced to IATA Guidance for crew health precautions during and post pandemic.
		3.1	Disposed PPE (e.g. masks) is not required to be disposed of as biohazard waste.
		3.1.1, 3.1.2 and 3.1.3	Purpose and risks **added** to each category of PPE.
		4.1	Cabin cleaning section updated to **add** bassinets, lavatories and onboard wheelchairs. Renumbering of section.
		5.2	Physical distancing **amended** to 1 meter as per World Health Organization
		5.2.1	Boarding and disembarkation **amended** to include possibility of using additional screens during boarding/disembarkation as per CART guidance.
		5.5	Passenger announcements **amended** to list recommended contents.
		5.8.1	Provision of inflight service **amended t**o reflect some potential difficulties in supply chain and staffing of flight kitchens.
		5.8.2	Inflight sales **added** to indicate that on higher risk routes these may need to be limited.
		5.9	Waste management section renumbered and **amended** to include all details available

1 Introduction

Δ This guidance material is created with the input, collaboration and suggestions from the IATA Cabin Operations Safety Task Force, comprising of cabin safety specialists from member airlines with experience in auditing, regulations, training and cabin crew operations.

The International Civil Aviation Organization (ICAO) has published the Council Aviation Recovery Task Force (CART) "Take off" guidance. This is an authoritative and comprehensive framework of risk-based temporary measures for air transport operations during the Covid19 crisis. IATA fully supports this initiative and recommendations are incorporated within this document.

The situation changes frequently, and regulations vary according to the routes being operated and the prevalence of the outbreak in each country.

Airlines should consider the following when preparing for cabin operations during and post pandemic, in order to determine effective risk mitigations, which support their workforce and passenger confidence:

1) The route/s to be operated, local infection rates and whether they are considered high, medium or low risk;
2) Any Health Authority restrictions at point of departure and destination;
3) Cabin crew health/quarantine restrictions at point of arrival, including any restrictions imposed on those who have recovered from infection;
4) Hotel availability, meals and crew transport arrangements;
5) Inflight Services products which can be delivered safely, appropriate to the level of risk;
6) Health Authority requirements for Personal Protective Equipment for cabin crew, its availability and the associated procedures for its use and disposal.

As time progresses, Health Authorities and regulators will determine which measures can be alleviated. Airlines should be prepared to review their cabin operations regularly to ensure compliance with regulations and facilitate a gradual return to more normal operations.

As regulations and recommendations change frequently, please go to https://www.iata.org/contentassets/df216feeb8bb4d52a3e16befe9671033/iata-guidance-cabin-operations-during-post-pandemic.pdf for the most up to date version of this document.

2 Prior to operations

2.1 Procedural review and safety risk assessment

Prior to resuming services, airlines should review their standard operating procedures to identify whether any changes are required for both short term and long term. Where any change is related to safety regulation, these should be submitted to the regulator for acceptance and/or approval. Some regulators have issued generalized short-term exemptions to regulations, subject to airlines completing and submitting a risk assessment and/or exemption request.

All changes to procedures should be included in cabin crew training program which is required to be delivered before the crew member operates.

2.1.1 Example operational safety risk assessment

☐ The following is an example of an operational safety risk assessment including many of the aspects included in this guidance material.

Each airline is responsible for their own risk assessment based upon their individual circumstances and using their own scoring criteria for probability, severity and rating for ach risk. Please note that within the following example:

- It does not address ALL risks relating to operational safety during pandemic;
- The scores for severity and likelihood have been omitted;
- The ratings provided are a guide for demonstration purposes only.

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
1	Temporary extension of validity of recurrent training	High number of simultaneous expiries, backlog of recurrent training requirements and insufficient cabin crew to operate flights	Minimum crew complement, Systemic shortage of qualified cabin crew.	N/A			Tolerable with mitigation	Propose alternative training methods including online training, briefings, pre-flight Q&A, webinars including recent changes etc					Tolerable
2	Temporary extension of cabin crew medical license	Backlog of renewals. Increased risk of unchecked medical issues	Increased sickness, reduced crew complement	N/A			Tolerable with mitigation	As per regulatory requirements					Tolerable with mitigation

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
3	Cabin crew furloughed	Lack of recent operational experience. Lapse of knowledge,	Unintentional non compliance.	Recency and retraining requirements. These however have been removed during Covid19.			Tolerable with mitigation	Provide briefings, training/updates regardless of whether recurrent training is required. Crew scheduling/rostering to ensure a mix of crew experience.					Tolerable
4	Health requirements within training facilities - physical distancing, disinfection etc	Reduced throughout of delegates, cross infection between training equipment used.	Increased sickness, reduced operational crew complement	N/A			Tolerable with mitigation	Increased cleaning cycles and frequency. Reduced class delegate size. Sanitization of portable equipment items between each use.					Tolerable
5	High rate of infection at home base	Crew members required to isolate upon return to base	Reduced operational crew complement. Impaired mental health due to frequent or prolonged isolation				Tolerable with mitigation	Multiple trip pairings with isolation in hotel at base between flights					Tolerable

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
6	High rate of infection at destination base	Crew members required to isolate during layover. Insufficient hotel accommodation due to local restrictions	Crew members not rested.	N/A			Tolerable with mitigation	Temporary FTL extensions to permit immediate deadhead to/from base. Augmented crew complement.					Tolerable
7	Constant change in procedural, health and operational procedures that may be country or airport specific.	High stress levels due to non-standard operations. Loss of effective CRM due to misalignment in procedural changes	Erosion of SMS Delays, damage to equipment, misinformation of crews and application of wrong procedures				Tolerable with mitigation	Wellbeing Programs and support Increased oversight Provide all personnel with related brief. Empathetic approach to performance/service level penalties Consider training in Human Factors Safety Aspects of Continued Operations during COVID-19 Airline internal SRA can be expanded to include COVID restrictions. Additional Human Factors concerns to be included.					Tolerable

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
8	Frequent status changes of health restrictions and regulations	Incorrect information provided to planners and/or crew	Unexpected quarantine of arriving crew. Cancellation of flight	N/A			Tolerable with mitigation	Refer to IATA travel information website. Check for updates daily.					Tolerable
9	Crew member reports for duty with symptoms of Covid19	Infection spread and subsequent mandatory isolation of contacts	Reduced operational crew complement.	N/A			Tolerable with mitigation	Crew members to monitor continuously for symptoms. Crew members to be advised not to report for any duty (flying/training/office) while symptoms present. Identify method for crew to validate status upon reporting for duty.					Tolerable
10	Use of Masks by crew	Adverse impact on administration of oxygen during depressurization or while wearing Smoke hood/PBE	Unconsciousness/Fatality	N/A			Intolerable	Crew to remind passengers to remove masks during depressurization event. Crew procedures to be amended to include removing face mask during depressurization and fire fighting event.					Tolerable with mitigation

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
11	Use of Hazmat suit/apron	Flammable items worn during fire fighting activities	Uncontained cabin fire. Multiple fatalities	N/A			Intolerable	Test/validate flammability standards. Require removal of PPE before commencing fire fighting.					Tolerable with mitigation
12	Use of gloves	Increased potential for cross contamination due to false sense of protection.	Increased sickness, reduced operational crew complement				Tolerable with mitigation	Ensure wearers understand the need for continued hand hygiene and correct removal of gloves.					Tolerable
13	Use of goggles	Impaired visibility due to fogging	Impaired or delayed reaction to abnormal/emergency situation	N/A			Tolerable with mitigation	Apply soap based detergent on inside of goggles to prevent misting. Advise crew to remove goggles during emergency situations.					Tolerable
14	Transfer from seat to Wheelchair/s	Non sanitized onboard wheelchair. No physical distancing between staff and passenger.	Potential Infection spread to high risk/vulnerable passenger	N/A			Tolerable with mitigation	Provide sanitizing wipes for onboard wheelchairs. Provide instruction for crew to clean wheelchair prior to use. Provide appropriate PPE for assistance staff and crew assigned to assist.					Tolerable

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
15	Crew members/ assistance staff wearing masks	Hearing impaired passengers unable to receive information	Potential claims for Discrimination	N/A			Tolerable	Provide alternative individual briefing methods to hearing impaired passengers. Consider transparent mouth coverings where available.					Tolerable
16	Passenger with medical condition which prevents use of face covering	Complaint from other passengers	Increased potential for dispute between passengers or between passengers and crew members enforcing compliance	N/A			Tolerable with mitigation	Advise passengers in vicinity of reason for the passenger's individual noncompliance (without giving personal information). Introduce check of passenger's ability to comply within pre-clearance processes. Identify individual corcumstances where passenger non compliance may be approved in advance.					Tolerable
17	Flight crew monitoring and service **on high risk routes**	Multiple visits to cockpit crew from crew members exposed to passengers	Increased sickness, reduced operational crew complement				Tolerable with mitigation	Reduce frequency of visits from crew members exposed to passengers. Regular remote interphone checks on pilot welfare.					Tolerable

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
18	Infected passenger using lavatories **on high risk routes.**	Contaminated lavatory surfaces	Crew member/s become infected.	Periodic checks of lavatories during flight.			Tolerable with mitigation	Increased frequency of lavatory checks and cleaning during flight. Reserve one lavatory for crew use only. Provide additional santization materials for lavatory cleaning.					Tolerable
19	Passenger use of lavatories	Congregation of passengers waiting to use lavatories	Increased passenger/crew sickness, reduced operational crew complement	Congregation of passengers in lavatory areas not desirable for security reasons			Tolerable with mitigation	Passengers to be encouraged not to queue for lavatories. Passengers to wear face coverings/masks.					Tolerable
20	Cabin crew rest facilties in passenger cabin	Insufficient separation between crew and passengers during rest periods	Increased sickness, reduced operational crew complement				Tolerable with mitigation	Screen and protect seats allocated for cabin crew rest from passenger access.					Tolerable
21	Movement and interaction between cabin crew and passengers **on high risk routes**	Physical distancing not maintained.	Increased sickness, reduced operational crew complement	N/A			Tolerable with mitigation	Provide reduced onboard service. Amend services to galley service on request only. Prepackaging of food and beverage items.					Tolerable

No	Event	Hazard	Consequence *(worst case scenario)*	Existing Controls	Risk			Mitigation Action	Ownership	New Controls	Risk		
					Probability	Severity	Rating				Probability	Severity	Rating
22	Removing masks/face coverings while eating and drinking **on high risk routes**	Exposure to potential infection	Increased sickness, reduced operational crew complement	Removal of masks for short periods is not a significant concern.			Tolerable with mitigation	Advise passengers that the removal of masks for short periods to eat and drink is permitted. On high risk routes, cabin crew to eat and drink separately in private spaces and clean environment where possible.					Tolerable

2.1.2 Risk assessment of routes

Operators should consider classifying each route for the level of risk of exposure to Covid-19 in order to determine whether additional mitigations are required in relation to services, policies or procedures.

The risk levels will change frequently according to the rate of local transmission, booked passenger load, the length of the flight/s operated and other factors.

Some health agencies publish dashboard information relating to infection rates, which assist in assessing risk:

Organization	Dashboard URL
World Health Organization	https://covid19.who.int/
European Center for Disease Prevention and Control	https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases
EASA	https://www.easa.europa.eu/SD-2020-01/Airports
US Center for Disease control	https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

The following table represents the basic criteria adopted by the Civil Aviation Administration of China to determine the risk levels associated with each flight and is shown for demonstration purposes.

Airlines should consider their own risk assessment processes and criteria in conjunction with any local regulatory recommendations or requirements.

△ Example risk scoring criteria for International flights.

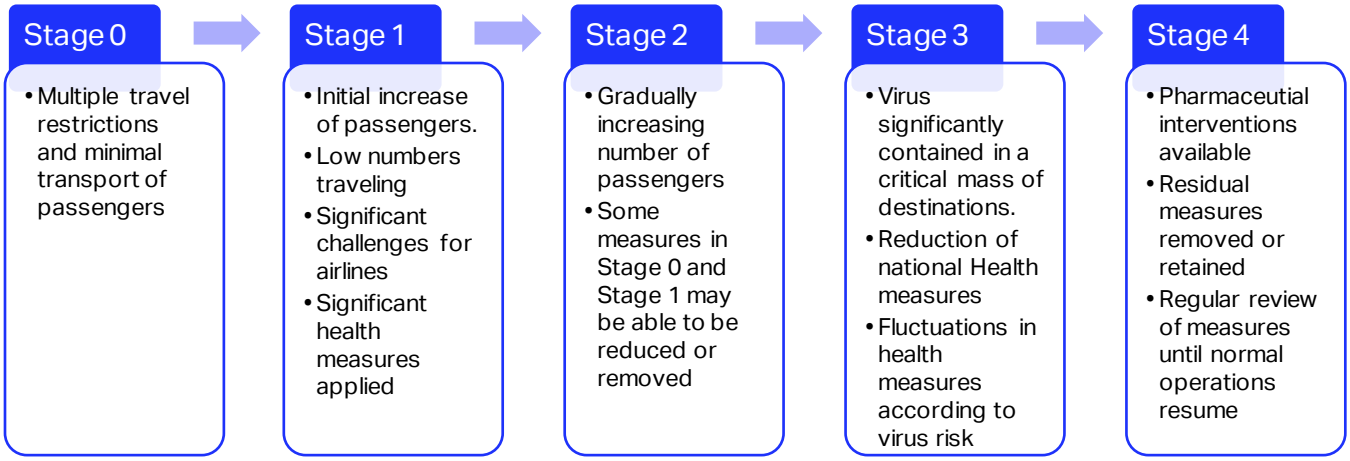
Score:	1	2	3	4	5	6
a) Prevalence rate in the place of origin (/million)*	0-10	11-25	26-50	51-100	101-150	> 150
b) Passenger load (%)	0-60%	61-80%	> 80%	-	-	-
c) Duration of flight (hours)	< 4	4 - 8	> 8	-	-	-
Risk level associated with flight	Score determined (a) + (b) + (c)					
Low risk	3 - 6					
Medium risk	7 - 9					
High risk	10 - 12					

* Number of confirmed cases / population in million

2.1.3 Phases of restarting operations

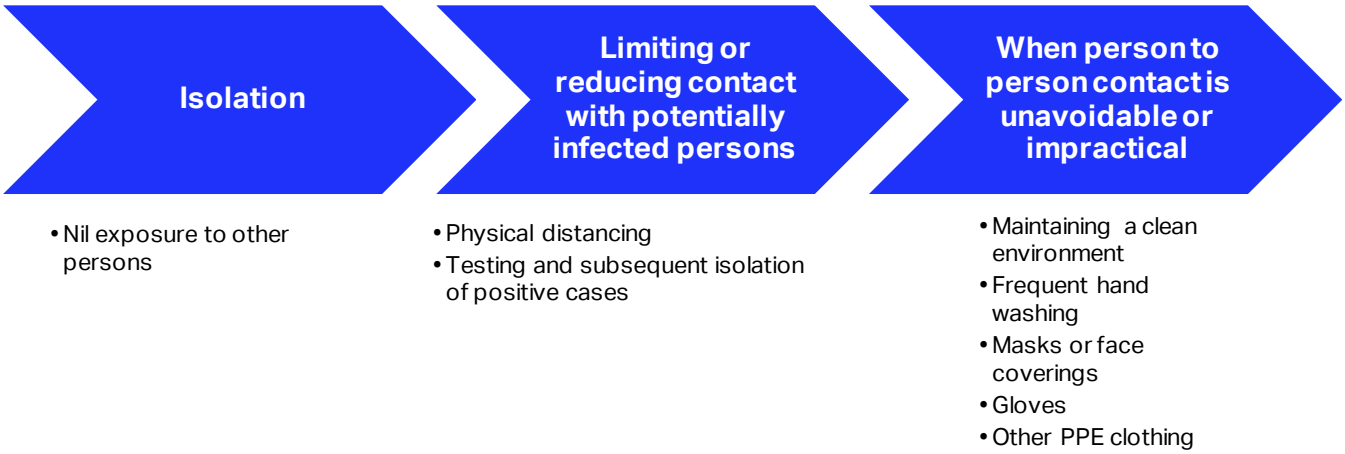
- It is important to note that there are several different phases to resuming full operations. (Ref https://www.icao.int/covid/cart/Pages/CART-Take-off.aspx)

Airlines will need to regularly review their procedures, risk assessments and mitigations in order to ensure that these remain appropriate to the current situation.



2.1.4 Layers of protection from infection

While transmission of a virus is ongoing, there are several layers of protection from infection according to what is possible to be achieved within the environment and appropriate to the circumstances.



Each of these measures might introduce some additional safety risks for airlines which should be identified and addressed within their risk assessment processes to identify the level of protection required in different situations and environments.

Airlines may be required by Health Authorities to adopt some of these layers of protection in various degrees and these requirements will likely vary frequently according to local transmission rates. Airlines should therefore plan their operating processes and procedures in such a manner as to be able to increase or decrease measures rapidly according to latest information available, which may vary by route, airport or country of operation.

2.2 Cabin crew qualification

Many states have published exemptions for cabin crew training during the initial stages of the Covid-19 Pandemic. Typically, such exemptions allow for the extension of cabin crew recurrent expiries for a predetermined period, subject to ongoing review.

The following might be considered as potential mitigations for extended cabin crew qualification if accepted by the regulator:

- Additional distance learning/e-learning for cabin crew refresher training;
- Interactive webinars or safety training sessions from Safety Training teams;
- Webinars on changes to existing services or onboard requirements;
- Enhanced cabin crew Safety Q&A at pre-flight briefings.

Where an exemption has been agreed, the number of cabin crew who are exempted for the period of the crisis will require recurrent training around the same time in the future and on a yearly basis. Operators should therefore consider this and identify a plan with their regulator in order to reduce the peak of training in the future and maintain the required number of trained and qualified crew in operation during peak travel times.

2.3 Cabin crew training

The airline's ability to provide training for cabin crew will be impacted by Government Health Authorities restrictions on movement, physical distancing and public health requirements. Alternative training methods such as webinars, distance learning and e-learning may need to be discussed and accepted by regulators.

2.3.1 Classroom training

If physical distancing techniques are required to be implemented within training facilities, classrooms should be arranged to maintain the required distance between delegates. The number of delegates per class may need to be reduced to ensure this is possible.

2.3.2 Use of practical training equipment and mock-ups

Any cabin crew training equipment used in practical demonstrations of procedures should be effectively sanitized between each use. This includes portable breathing equipment, oxygen masks, life vest mouthpieces and any other item which is used near the face of the delegate.

If physical distancing techniques are required to be implemented in training facilities, demonstration of evacuation procedures in cabin mock-ups may need to be restricted or limited.

A suitable cleaning and sanitization program for cabin crew training equipment and facilities should be implemented.

In some cases, temporary exemptions and alleviations to practical training elements have been granted by regulators, however these do not apply to initial training. Therefore newly recruited cabin crew are still required to undertake the practical training sessions and use the appropriate equipment.

2.4 Cabin crew scheduling

If a significant number of cabin crew have been exempted from recurrent training for any period of time, the operator may be required to consider risk mitigations when scheduling crew members, to ensure a mix of experience and validities among the cabin crew on any given flight.

While transmission of a virus is ongoing in the region of operation, the availability of cabin crew exposed to the virus may impact the number of cabin crew who are operationally fit for service. Airlines should consider this in their scheduling programs and may need to temporarily increase the number of standby cabin crew.

2.5 Crew positioning and flight duty time limitations

Cabin crew may need to position/deadhead before operating services and the availability of commercial flights is likely to be limited. Additionally, quarantine requirements may prevent crew from being able to leave the aircraft upon arrival and they may be required to return to base immediately.

Flight duty time limitations need to be considered carefully to ensure that cabin crew are suitably rested before operating the commercial flight with passengers. The following should be considered in the planning process:

- Where cabin crew are required to remain on board the aircraft during extended turnarounds, power, lighting and heating/cooling should remain available at all times.
- Seating allocation on commercial flights should enable cabin crew to rest as appropriate;
- When identified as positioning outside of the maximum permitted Flight Time Limitations, cabin crew should not be assigned any safety related duties onboard.
- Exemptions may be granted by regulators and these are normally dependent on risk assessment and identification of potential mitigations aimed at preventing the onset of fatigue.

2.6 Quarantine requirements for crew

IATA maintains the Timatic system to collate and maintain up to date health and visa requirements globally. This interactive map helps to identify quarantine requirements per country.

https://www.iatatravelcentre.com/international-travel-document-news/1580226297.htm

Where a country requires that incoming cabin crew are required to quarantine upon arrival, airlines may need to consider alternative operational methods in order to position outbound cabin crew back to home base immediately, subject to flying duty time limitations.

2.7 Cabin crew health precautions

Airlines should provide guidance and instructions to cabin crew aimed at preventing them from contracting Covid-19 while on duty and down route in areas where local transmission is evident.

Δ More detailed guidance covering all aspects of cabin and flight crew health precautions during pandemic is provided in the IATA Guidance for crew health precautions during and post pandemic. This document includes precautions to be taken at home base, on duty and during layover.

Cabin crew who have recovered from infection may experience a loss of smell and/or taste (anosmia). Airlines should consider the impact of anosmia on the cabin crews' ability to identify unusual smells within the cabin such as leakage of dangerous goods/chemicals and overheating/burning, especially where the number of cabin crew with anosmia on any given flight is significant.

3 Equipment

3.1 Personal Protective Equipment (PPE)

The provision and use of Personal Protective Equipment may be required by Health Authorities according to the perceived risk of infection in some areas of operation.

A safety risk assessment should be undertaken to determine the impact of PPE on cabin crew safety duties and any additional mitigations which might be necessary. Suggested risks include but are not limited to:

- Use of oxygen masks;
- Use of fire extinguishers and PBE;
- Additional flammability risks;
- Use of communication systems and procedures;
- Evacuation procedures and the need for cabin crew to be easily recognizable by passengers.

Where PPE is provided, cabin crew should be provided with appropriate guidance in the correct use of personal protective equipment issued to them, including when and how to wear, remove and replace them correctly and ⊗ safely. Worn items should be safely disposed of.

3.1.1 Face coverings and/or masks

△

Purpose	• To prevent a potentially infected person (the wearer) from exhaling droplets into the surrounding area. • **Protects others** from inhaling potentially infected respiratory droplets
Risks	• May negatively impact the use of oxygen masks by passengers and crew. • May impact the use of smoke hoods/PBE by crew. • May impact communication during normal and emergency situations. • Some passengers may not be able to tolerate their use for medical reasons. • Noncompliance with a requirement to wear them may increase passenger disputes. • Face coverings/masks need to be removed to eat and drink. • Masks worn by crew need to be disposed of, replaced and replenished periodically.

IATA recommends the use of suitable cloth face coverings by passengers and appropriate PPE (e.g. masks) for airline and airport staff while infection transmission is ongoing.

The cloth face coverings recommended are **not** surgical masks or N-95 respirators. Those are critical supplies that must continue to be reserved for healthcare workers and other medical first responders.

Airlines should review and publicize their policy on the use of masks and face coverings. This policy should be clearly communicated so that passengers are able to acquire the appropriate item in time for their flight. Passengers should be encouraged to provide their own suitable face covering to be shown to check in staff.

The publicized airline policy should include:

- What type of face covering is acceptable;
- When the face covering is required to be worn;
- What will happen to passengers who do not present themselves at the airport with the required face covering;

Masks or face coverings need to be removed for eating and drinking and airlines should reassure passengers that this is permitted, necessary and safe. Limiting the duration the covering is removed will help to minimize any potential risk of exposure.

Passengers using disposable masks or cloth face coverings should be reminded to dispose of them safely and
△ hygienically. Waste bins in lavatories can be used for this purpose inflight, unless health authorities or the airline risk assessment determines that they are required to be treated as biohazardous waste.

Some passengers, such as those with breathing difficulties, dementia or autism may not be able to tolerate the use of face coverings or masks for a lengthy period, if at all. Airlines should consider this within their risk assessment process and identify whether additional questions are necessary at pre-screening stage, and whether any exceptions can be made within their policy. Where exceptions are made, other passengers may need to be advised of the reasons and additional steps to mitigate the risks in order to reassure them and prevent disputes between passengers.

If providing masks to cabin crew or permitting their generalized use, the operator should ensure that cabin crew are made aware of additional risks posed by frequent touching of the face to reposition masks, and that regular thorough handwashing is still required. Masks should be safely removed and replaced at regular intervals in accordance with health recommendations.

The use of masks by cabin crew onboard may introduce communication difficulties which might require management, for example passengers who read lips will not be able to do so, while crew and passengers may have difficulty in understanding what is being asked of them if they cannot see the full facial expression or movement of the mouth.

All masks and face coverings should be removed during an emergency situation which requires the use of oxygen or protective breathing equipment for firefighting. Pre-flight passenger safety briefings to passengers may need to include a reminder for passengers to remove face coverings in a depressurization incident.

Where masks are used on passengers showing signs of Covid-19 or experiencing breathing difficulties, their use might increase the patient's anxiety and may not be easily tolerated. Where this is the case, masks should always be worn by the crew member/s caring for the patient and by those in close proximity to them. Further guidance on dealing with passengers displaying symptoms of any communicable disease can be found in IATA's Suspected Communicable Diseases Guidelines for cabin crew.

3.1.2 Gloves

△

Purpose	• **Protects the wearer**'s skin from contact with contaminated surfaces.
Risks	• Contaminants are spread in the same manner as when not wearing gloves. • If the wearer touches their face, the same risk of contamination is present. • Does not negate the need for hand washing and sanitization.

The use of gloves by cabin crew during services is already commonplace but is not a substitute for regular and thorough handwashing, as contaminants on gloves can also be spread in the same manner as on bare hands.

Gloves should not be worn for long periods and should be disposed of carefully and correctly to avoid cross contamination, followed by thorough hand washing.

3.1.3 Over sleeves, aprons, gowns, goggles, visors and other PPE

△

Purpose	• **Protects the wearer** from contamination with potentially infectious respiratory droplets, through contact with skin and mucous membranes of the nose and/or eyes
Risks	• Only protects the wearer; • May impact cabin crew visibility if goggles/visors susceptible to fogging; • May be flammable; • Will impact communication during normal and abnormal situations; • Will impact the use of Oxygen masks, Smoke hoods/PBEs, megaphones, fire extinguishers etc; • Differentiation of cabin crew (uniformity) is required to be maintained so that they are recognizable as crew members; • Thermal discomfort to the wearer.

Where airlines operate higher risk flights and are required, or choose to, provide full protective clothing and/or goggles or visors to cabin crew, the safety risk assessment should determine any impact such clothing may have on the cabin crews' ability to carry out both normal and emergency procedures.

3.1.4 Hand sanitizing products

Alcohol based hand sanitizing products can be used in addition to (but not in place of) regular and thorough hand washing.

Airlines that wish to add alcohol-based hand sanitizer to the items carried in galleys or installed in lavatories will need to request authorization from their civil aviation authority (State of the Operator) in accordance with the provision that is set out in Part 1; 2.2.1 a) of the ICAO Technical Instructions, which reads as follows:

> 2.2 EXCEPTIONS FOR DANGEROUS GOODS OF THE OPERATOR
>
> 2.2.1 The provisions of these Instructions do not apply to the following:
>
> a) articles and substances which would otherwise be classified as dangerous goods but which are required to be aboard the aircraft in accordance with the pertinent airworthiness requirements and operating regulations or that are authorized by the State of the Operator to meet special requirements;

It is recommended that the request for authorization address the following:

- the classification and UN number of the hand sanitizer. For example, UN 1987, Alcohols, n.o.s. (ethyl alcohol mixture), UN 1170, Ethanol solution. However, the safety data sheet from the manufacturer of the hand sanitizer should be checked for the classification;
- the quantity of hand sanitizer in each container and the number of containers to be carried on the aircraft;
- what steps will be taken to ensure that the hand sanitizer is kept away from sources of heat or ignition;
- provision of information to crew members on the carriage of the hand sanitizer. For example, that crew members will be advised on the procedures through a bulletin or other appropriate method. Hand sanitizers containing alcohol must not be installed or carried adjacent to any source of heat, such as ovens, water heaters, Inflight Entertainment systems etc.

Passengers and crew may wish to carry their own hand sanitizing gels. Paragraph 2.3.5.1 of the IATA Dangerous Goods Regulations sets out the allowances for passengers and crew to have in their checked or carry-on baggage medicinal or toiletry articles, which may include articles containing alcohol as follows:

2.3.5.1 Medicinal or Toiletry Articles and Aerosols in Division 2.2

Non-radioactive medicinal or toiletry articles (including aerosols). The term "medicinal or toiletry articles" is intended to include such items as hair sprays, perfumes, colognes and medicines containing alcohols. Aerosols in Division 2.2, with no subsidiary hazard, for sporting or home use.

Note: The total net quantity of all such articles carried by each passenger or crew member under the provisions of 2.3.5.1 must not exceed 2 kg or 2 L and the net quantity of each single article must not exceed 0.5 kg or 0.5 L. Release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents.

Alcohol-based hand sanitizer is acceptable under the provisions of 2.3.5.1, however, it should be noted that where passengers or crew wish to have the hand sanitizer in their carry-on baggage that the limit of 100 ml or equivalent per item for liquids and gels in accordance with the aviation security provisions applies.

3.2 Universal Precautions Kits (UPK)

IOSA CAB 4.2.3

The Operator SHOULD ensure all passenger aircraft in its fleet are equipped with one or more universal precaution kits for use by cabin crew members in managing:

i. Episodes of ill health associated **with a case of suspected communicable disease**;
ii. Cases of illness involving contact with body fluids.

One or two universal precaution kits per aircraft would typically be adequate for normal operations; **additional kits would be carried at times of increased public health risk (e.g. an outbreak of a serious communicable disease with pandemic potential)**. The contents of an aircraft universal precaution kit would typically include:

- Dry powder that can convert small liquid spill into a granulated gel;
- Germicidal disinfectant for surface cleaning;
- Skin wipes;
- Face/eye mask (separate or combined);
- Gloves (disposable);
- Impermeable full-length long-sleeved gown that fastens at the back;
- Large absorbent towel;
- Pick-up scoop with scraper;
- Bio-hazard disposal waste bag;
- Instructions.

4 Cleaning and sanitization

4.1 Cabin cleaning

All cabin sanitization products used must be compatible with aircraft components. Aircraft manufacturers provide operators with guidance on approved sanitization processes and cleaning fluids.

Airlines may need to consider additional cleaning and sanitization schedules in accordance with Health Authority requirements.

Note: IATA uses the term sanitization so as to differentiate more clearly between disinfection from infectious virus and bacteria and disinsection to kill or control insects which spread disease.

△

More detailed guidance covering all aspects of aircraft cleaning on the ground can be found on IATA's Ground Operations website.

EASA Interim guidance on Cabin disinfection

4.1.1 Lavatories

Cabin crew activities during flight include regular checks of the lavatories, typically every 20 – 30 minutes, to check for signs of smoke/fire and to ensure that they are clean and tidy. During times of pandemic or public health emergency on high risk routes:

- The frequency of checks may need to be enhanced or increased according to risk, either on a per use basis (e.g. after every ten passengers) or time interval.
- It is recommended that cabin crew undertake cleaning of passenger touch surfaces using appropriate disinfectant cleaning wipes. The use of alcohol based sprays should be avoided inflight as these could introduce potentially flammable vapours and/or activate lavatory smoke detectors.

4.1.2 Crew rest compartments and bedding

Where crew rest compartments are installed, some airlines provide bedding items for cabin crew use. To minimize any possibility of cross infection, where pillows, cushions, sheets, blankets or duvets are provided, these should not be used by multiple persons unless coverings are laundered or changed.

Some airlines issue each crew member with their own provisions and the cabin crew members are responsible for ensuring that they are removed and bagged after use.

Other airlines provide bulk loading for crew rest area bedding items. Where this is the case, each cabin crew member should install their own bedding items before their rest period and remove them hygienically afterwards.

4.1.3 Bassinets

Cabin crew should offer sanitization wipes where carried for the guardian to sanitize the bassinet to their satisfaction prior to use.

Where bassinets are permanently installed on the aircraft as part of equipment, they should also be sanitized after each use.

Where bassinets are part of the inflight product and are removed from the aircraft during turnaround, they should be clearly identified as used, and sanitized by the provider before replacement.

4.1.4 Onboard wheelchairs

Where onboard wheelchairs are provided to facilitate transfer of passengers with disabilities between their seat and lavatory facilities, these should be cleaned between each use.

4.1.5 Passengers and/or crew using their own cleaning products onboard

The use of additional cleaning chemicals and products in the cabin by passengers and crew should be discouraged as they may interact with chemicals already used and may cause damage to fabrics, plastics and finishes.

The use of commercially available non-bleaching antibacterial wipes may be acceptable and airlines might consider providing additional wipes for passengers and/or crew, to mitigate the potential for damage caused by non-approved cleaning materials and provide an element of consumer reassurance.

5 Cabin operations

5.1 Pre-flight checks

It is possible that the aircraft may have been in extended storage prior to cabin crew operating the flight. Cabin crew should conduct thorough pre-flight cabin checks and report any defects through the operator's usual reporting processes for rectification. Where necessary, the Minimum Equipment List should be checked to identify whether defective or missing item results in operational limitations.

5.1.1 Safety and emergency equipment

While maintenance checks before return to service may include a full maintenance survey of all safety and emergency equipment, there is an increased possibility of cabin crew identifying unserviceable, damaged or missing equipment during pre-flight checks. The operator should consider creating awareness to cabin crew to outline the added risks of defective equipment when an aircraft returns to passenger mode after being used for cargo purposes.

5.1.2 Cabin damage

If the aircraft has been used for the transportation of cargo and/or mail in the passenger cabin, some damage may have occurred in passenger seating areas. Cabin crew should be vigilant and check for damage which may affect safety such as life vests, seatbelts, tray tables, Inflight Entertainment system components, seat arm rests, seat cushions etc.

5.1.3 Galleys and lavatories

In galley areas, air may have accumulated in galley and lavatory water systems while the aircraft was stored, therefore a thorough purging of water systems is recommended until water flows freely, in order to avoid burns/scalds while in use.

5.2 Physical distancing

The concept of physical distancing is that every person is considered to be infected and every person
△ maintains a distance of at least 1 meter (Ref World Health Organization) from others. This concept is familiar among the population as it is one of the measures imposed by governments in efforts to contain and slow the infection rate. It is however, just one of the measures enforced to the population of countries where infection is ongoing.

Travelers may expect the same physical distancing to be enforced on aircraft, however this concept does not reflect the additional screening (e.g. temperature check) of passengers before boarding, so that not all passengers are considered to be infected, nor does it consider the protections offered by the cabin environment.

On board aircraft, it is difficult to achieve physical distancing, unless the aircraft loadings are so light as to be uneconomical and would require nil movement of persons within the aircraft cabin.

The cabin itself provides the following protections within the layout and systems:

- The physical barrier of seat backs;
- In most cases the seating arrangement does not provide face to face seating positions;
- The direction of airflow from ceiling to floor reduces forward and aft movement of air;
- The installation of HEPA filters on newer aircraft types to help clean recirculated air.

Other measures to limit possibility of infection can be adopted by airlines including for example:

- Increased cleaning programs for all passenger touch points in the cabin;
- Use of Sanitization materials effective against Covd-19;
- Managing passenger boarding and disembarkation carefully to reduce person to person contact and avoid passengers from obstructing others getting to seats;
- Limiting passenger movement during flight, including the use of lavatories;
- Alteration of inflight services to reduce movement in the cabin;
- There is information available to suggest that such use of face coverings is effective at reducing droplet spread, and this is of potential benefit where physical distancing cannot be achieved.

Where physical distancing is required, at least one lavatory should be blocked and dedicated for crew use in order to ensure it remains available for handwashing, as well as limiting the possibility of contamination from infected persons. Physical distancing techniques may also need to be applied to passengers waiting to use lavatories.

Mandating that airlines use empty seats to increase physical distance between passengers is not an effective health precaution on board aircraft for the following reasons:

△
- It does not afford a distance of 1 meter around each passenger;
- There is little medical evidence of passenger to passenger spread on board aircraft;
- To comply with safety regulations, children are required to be seated adjacent to their guardians who are responsible for them during a depressurization, so that they can fit their oxygen masks for them while remaining seated with their seatbelt fastened, this is not possible if empty seats are mandated;
- Passengers who have a fear of flying, or young children often require the reassurance of a fellow traveler alongside them during take-off, landing and turbulence;
- Passengers traveling together within the same family group living at the same residence do not have to maintain a physical distance from each other elsewhere, therefore might not be willing to be separated while on board aircraft.
- Advance seat assignment and seat preferences/requests from travelers may not be able to be granted, resulting in increased possibility of disgruntled and/or unruly passengers.

Nevertheless, an Authority may require such measures and airlines may choose to leave empty seats between passengers. Where this is the case airlines should provide cabin crew with guidance on how to manage some of the risks posed by this requirement.

5.2.1 Boarding and disembarkation

Where physical distancing is required, cabin crew positions during boarding may need to be altered, for example in areas such as over wing exits where it is not possible to maintain a suitable distance from
△ passengers during boarding. Additional protection on higher risk routes, such as temporary transparent screens or curtains to segregate passengers and crew may be considered.

It may be necessary to board smaller groups of passengers in order to increase space between them while they store carry-on baggage and take their seats.

Depending on passenger booking figures, airlines with pre-assigned seating procedures may wish to consider physical distancing requirements within seating assignment systems. Airlines who do not have pre-assigned seating should ensure cabin crew monitor passengers' seat choices during boarding, so that passengers are spread throughout the cabin as necessary.

Where passenger load and any weight/balance limitations allow, passengers may be encouraged to move to empty seats to increase physical distance between them.

During disembarkation, cabin crew may be required to limit the number of passengers standing to retrieve personal belongings and to manage the number of passengers disembarking simultaneously, in order to ensure physical distancing is possible while on steps/airbridges.

5.2.2 Cabin crew

Where physical distancing measures are required on high risk flights, cabin crew should be reminded to consider the following:

- Wherever possible, remain within their assigned area of responsibility;
- While eating or drinking, do not share meals, utensils or drinking containers;
- Reduce non-essential contact with passengers and/or their belongings;
- Reduce physical contact between each other and with other staff or members of public.

5.3 Passengers with disabilities

Some passengers with disabilities may be more vulnerable to infection and will likely seek additional reassurance that measures are in place to prevent transmission of infection from those who are assisting them, before they are able to travel.

Airlines should be mindful of this and may need to consider additional measures within their acceptance procedures for such passengers, so that precautions can be taken to protect them.

Where physical distancing techniques are required by Health Authorities, these may not be possible when passengers with disabilities require additional assistance such as seat transfers, use of wheelchairs or help with carry-on baggage.

Where onboard wheelchairs are provided, airlines should consider additional cleaning procedures to ensure they remain clean between each use.

5.4 Safety demonstration

Manual safety demonstration equipment should be sanitized before each use.

It is recommended that procedures be reviewed to ensure that cabin crew are not required to place demonstration equipment such as oxygen masks and life vest mouthpieces to their mouth and nose.

When demonstrating the use of oxygen masks, passengers should be reminded that protective facial masks if worn, should be removed.

5.5 Passenger announcements

△ It is recommended that airlines review their existing cabin announcements and ensure the following are included as appropriate:

Category	Additional content of announcements suggested
Boarding	Stowage of personal belongings; Avoid touching other passengers' belongings; Occupying only assigned seats
Health precautions	Face coverings/masks; • When to wear them; • When they can be removed (e.g. eating/drinking only); • How to dispose of them correctly in accordance with airline requirements (e.g. lavatory waste bin or other method); Minimizing movement within the cabin; Cough/sneeze/respiratory etiquette; Advising cabin crew if symptoms of Covid19 present at any time;
Safety demonstration	Requirement to remove masks/face coverings if oxygen masks appear during depressurization.
Reassurance	To emphasize airline's commitment to passenger bio safety: • Enhanced cabin cleaning procedures; • Wearing of masks/face coverings; • Provision of additional disinfection wipes; • Air circulation and clean air processes; • Limited movement and interaction between passengers.
Meal service	Highlight any changes to expected meal/beverage services Acceptance of payment (credit/debit card only if applicable)
Health Authorities requirements	Completion of passenger locator forms if required. Completion of passenger health declarations if required.
Use of lavatories	Which lavatories may be used by passengers in which cabin; Where to wait if lavatory is occupied; Maintaining physical distance where possible; Reminder for good hand hygiene to prevent spread of infection.
Disembarkation	How this will be managed if different to normal expectations.

5.6 Passenger health declaration

Some countries' immigration and health authorities require passengers to leave a health and travel history record. In those cases, IATA suggests the use of a card based on the Passenger Locator form and providing an additional section, the Health Declaration Card.

Passenger locator form

5.7 Cabin crew seating positions

Physical distancing is just one layer of preventing spread of infection (see 2.1.4 & 5.2). Where cabin crew occupy double crew seats, airlines should consider within their risk assessment processes whether the other layers of protection such as screening, self-declaration, regular crew monitoring/testing, use of face coverings/masks etc, and the limited time on the crew seat are sufficient to mitigate any risk of infection.

Where physical distancing is determined to be necessary or is required by Health Authorities, the MEL published procedure for unserviceable crew seat may be able to be adapted.

Any change to crew seating positions during take-off and landing may need the approval of the regulator.

5.8 Inflight services

5.8.1 Provision of services

△ The availability of inflight meals and beverages may be limited by local health restrictions within the flight kitchens, as well as supply chain issues and workforce reductions which may be encountered by the providers.

Onboard services may need to be altered to comply with temporary health restrictions and physical distancing techniques and could vary according to the risk assessment of the route (Ref 2.1.2).

Examples of services include:

Low risk routes	• Normal services
Medium risk routes	• Pre-packaged food items • Some aisle services
High risk routes	• Pre-packaged food items supplied in disposable container which can also be used to store passenger waste afterwards • Bottled water provided pre departure • Minimal inflight aisle service – galley service on request

Where onboard food and beverage services are offered, cabin crew should be reminded of the need to maintain good food and respiratory hygiene practices at all times to protect the loaded items from potential contamination.

If airlines choose to offer services from galley areas to maintain physical distance between cabin crew, flight crew and passengers, they should ensure that these service procedures consider the following safety risk mitigations:

- Cabin crew require easy and immediate access to the cabin during an emergency;
- Further limitation of flight crew compartment access;
- Service equipment such as trolleys/carts set up at door areas need to be secured while in use and may need to be stowed rapidly during unexpected turbulence or any other emergency;
- Regular cabin safety monitoring activities should always be maintained;
- Passengers should not be permitted to congregate in or near the service areas. It may be advisable to call passengers by seat row/number for service;
- Passengers should remain seated with seatbelts fastened at all other times to reduce risk of injury during unforeseen turbulence.

5.8.2 Inflight sales

□ On higher risk routes, in order to limit movement and interaction between passengers and crew, inflight sales may need to be limited and restricted to card transactions only.

5.9 Waste management

△ The COVID-19 pandemic has significantly increased the volumes of healthcare wastes from hospitals and clinics requiring specialized handling and treatment. There is an obligation on the sector and its regulators to not only ensure the health of its passengers and staff but to also confirm that uncontaminated cabin wastes are not contributing to this growing disposal problem.

Initially, cabin waste volumes are expected to be lower than normal due to restricted inflight service offerings, but the following waste components may increase:

- Discarded personal protective equipment (PPE) from masks and gloves worn by crew and passengers;
- Empty plastic hand sanitizer bottles;
- Discarded sanitizer wipes and their packaging;
- Plastic packaging from sealed food and drink.

5.9.1 Cabin Waste Regulations

Cabin waste is already subject to legislation that ensures it is handled, stored and disposed appropriately to minimize pollution and disease risk. In fact, many countries including Australia, Brazil, Canada, Members States of the European Union, New Zealand and USA already require cabin waste from international flights to be subject to specialized handling, treatment and disposal.

According to the International Health Regulations (2005) States (competent authorities) must ensure, to the extent practicable, that passenger facilities at international airports and on aircraft are kept free of sources of infection and contamination.

Competent authorities may impose additional restrictions on cabin waste during the COVID-19 pandemic including the need to disinfect waste bags; bans on reuse/recycling; need for double bagging; sealing; labelling and specialist handling and treatment including steam sterilization, incineration and chemical treatment.

The waste restrictions imposed by national health authorities during the pandemic should be respected, at all times.

5.9.2 Cabin Waste Risk

The primary mechanism of the COVID-19 virus spread is respiratory droplets and, although there is the possibility of surface contamination on cabin interiors, inflight products and waste, this can be minimized by regular cabin interior cleaning and hand hygiene.

Research indicates that the virus is more stable on plastic and stainless-steel surfaces than copper and cardboard and that viable virus was detected up to 72 hours after application to these surfaces.
https://www.nejm.org/doi/full/10.1056/NEJMc2004973

The UK regulator highlights that this "research involved exposing the surfaces to high viral loadings in a laboratory environment and is, therefore, likely to represent a worst case" scenario.
https://www.letsrecycle.com/news/latest-news/uk-wish-coronavirus-covid19-waste/

5.9.3 Cabin Waste Classification

5.9.3.1 Normal

Cabin waste generated during flight operations where no passenger or crew member exhibits COVID-19 symptoms should be handled as normal waste, as recommended by WHO.
https://apps.who.int/iris/bitstream/handle/10665/331488/WHO-2019-nCoV-Aviation-2020.1-eng.pdf

5.9.3.2 Biohazardous

If a ***passenger or crew member exhibits COVID-19 symptoms*** all waste materials including part-consumed meals, beverages and disposable items including used paper towels, tissues and PPE generated whilst treating or supporting the passenger or crew member should be treated as potentially a ***biohazardous waste***.

This waste should be placed in the biohazard waste disposal bag held in the aircraft's Universal Precaution Kit or double bagged in standard plastic waste bag (if a biohazard bag is not available). The bags should be labelled and sealed for specialist handling, storage and treatment. The airport authority and aircraft service providers including cleaning and catering companies must be informed of the presence of potentially biohazardous waste.

5.9.4 Cabin Waste Treatment and Disposal

5.9.4.1 Normal

Cabin waste should be handled and stored using normal waste procedures and disposed using the municipal landfill or incinerator.

The reuse and recycling of waste from these flights should continue but recyclable items should be segregated on-board and should not contain any discarded PPE.

For those countries that classify cabin waste from international flights as biohazardous for agricultural health reasons (International Catering Waste – ICW), airports or local waste management contractor already subject the waste to special handling and thermal treatment (incineration or steam sterilization).

5.9.4.2 Biohazardous

There are 6 potential options for the treatment and disposal of potentially biohazardous cabin waste resulting from the pandemic. These include the following:

i. ***Airport Thermal Treatment*** at the airport or local waste management contractor's facility with no additional requirements deemed necessary for potentially biohazardous waste
ii. ***Secure Storage*** at the airport or local waste management contractor's facility until the test results indicate that the passenger or staff member did not have COVID-19. The waste can then be treated as "normal".

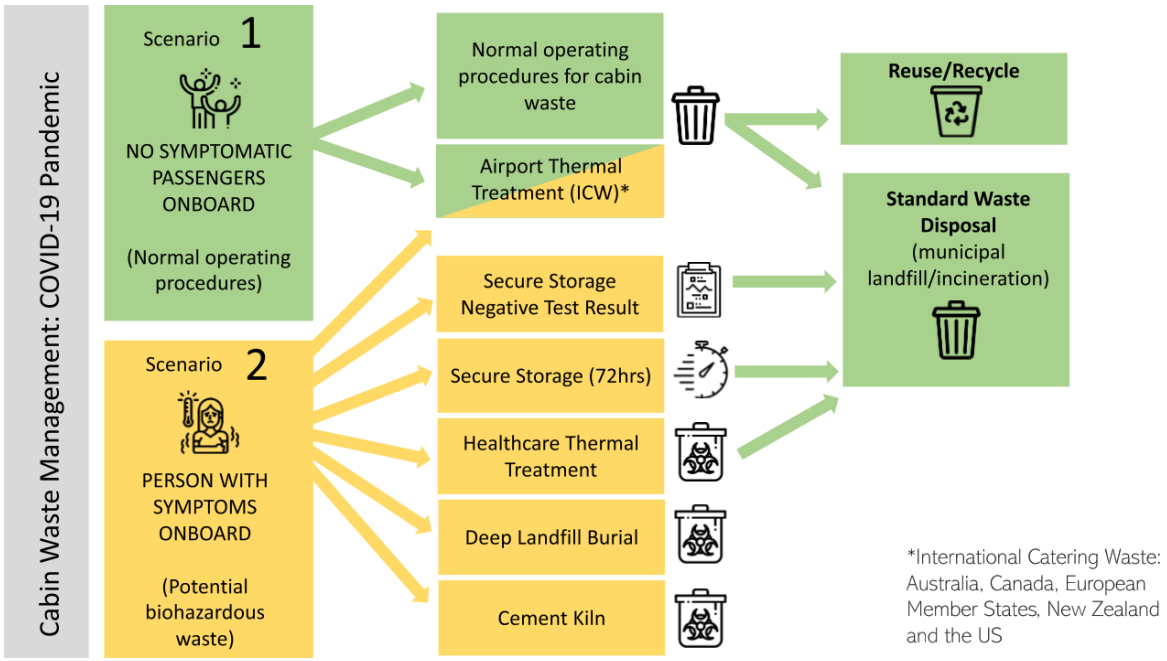
iii. ***Secure Storage for 72 hours*** at the airport or local waste management contractor's facility. The waste can then be treated as "normal".

iv. ***Healthcare Waste Thermal Treatment*** – the wastes can be deemed biohazardous and sent directly for thermal treatment at a local healthcare waste facility.

v. ***Deep Landfill Burial:*** Many developing countries lack the infrastructure to treat healthcare waste and the International Solid Waste Association (ISWA) recommends, that in such circumstances, COVID contaminated wastes are either securely stored for over 72 hours and/or sent for disposal in a landfill under closely controlled conditions[1].

vi. ***Cement Kilns*** – In the absence of other alternatives, the high temperatures, long residence times and alkaline environment of cement kilns are considered suitable for treating biohazardous waste. This option has already been used in China[2] and Spain[3], in response to the COVID-19 pandemic

The following flowchart summaries the pandemic cabin waste treatment and disposal options.



5.9.5 Waste Minimization

IATA recommends that passengers wear reusable face coverings and crew wear surgical-type masks. Airlines may wish to procure surgical masks fitted with replaceable filters for crew.

If a passenger chooses to wear their own surgical-type mask they should be encouraged to only dispose of this mask after they have left the aircraft, in a closed waste bin.

For crew or passengers that wish to replace their surgical-type mask or gloves during the flight, the discarded items should be placed in the lavatory waste bins unless Health Authorities require such items to be handled as biohazardous waste.

[1] https://www.iswa.org/fileadmin/galleries/0001_COVID/ISWA_Waste_Management_During_COVID-19.pdf
[2] http://www.ecns.cn/news/2020-02-25/detail-ifztvsqr0580848.shtml
[3] https://www.efe.com/efe/english/destacada/covid-waste-burn-it-or-dump/50000261-4239489

5.9.6 Single Use Plastic (SUP) Ban Suspensions

There has been a surge in SUP bans with over 127 countries regulating the consumption of plastic bags, and 27 more extending these bans to other SUP products, including plates, cups, straws and materials such as polystyrene[4]. Airports and civil aviation authorities have added an extra layer of complexity by applying their own SUP restrictions.

Unfortunately, these SUP bans are not compatible with medical restrictions being imposed on flights during the pandemic. Airports and civil aviation authorities should allow the use of SUP for medical, hygiene and safety purposes during the pandemic including biohazardous waste bags; discarded PPE; empty sanitizer bottles, sanitizer wipes and their packaging and packaging from sealed food and drink.

5.9.7 Engagement Plan & Training

Airlines should prepare a written plan to share with stakeholders regarding their COVID-19 waste management procedures and to communicate the information accordingly.

5.10 Interfering with aircraft cabin

Passengers have been known to interfere with aircraft fixtures and fittings during time of pandemic, in attempts to reduce their personal risk of infection. Such behaviors have included the use of plastic sheeting over the seatbacks in order to create enclosed spaces, obstruction of air vents and the wearing of unusual clothing or head coverings.

Passengers should not be permitted to interfere with aircraft cabin fixtures in such a manner as to:

- obstruct access to emergency equipment:
- prevent cabin crew access to monitoring passengers and seating areas:
- prevent access to oxygen masks:
- impede evacuation routes for themselves or any other person.

5.11 Unruly passengers

There are no anticipated changes to the way cases of unruly passengers should be handled. However, cabin crew should be made aware of some new issues which may be encountered onboard including:

- Passengers may refuse to continue wearing a face covering inflight;
- There may be an increase of disputes between passengers according to their ethnicity or country of residence;
- Increased stresses imposed on passengers through airport processes and the overall travel experience may trigger more exceptional responses inflight to disputes or requests for compliance;
- The impact of distancing and health screening of passengers through airports may slow the passenger transit and increase the likelihood of missed connections;
- Fear of infection may cause more disputes between passengers due to noncompliance or poor hygiene etiquette, or the presence of symptoms similar to those associated with Covid-19.

[4] https://www.unenvironment.org/resources/report/legal-limits-single-use-plastics-and-microplastics

5.12 Carry-on baggage

During the initial phases of restarting operations, processing of passengers through airport central searches may be much slower than normal, as a lesser number of passengers can be processed at one time incorporating physical distancing techniques. As a result, airport operators and/or security agencies may impose restrictions on the amount of carry-on baggage which can be permitted through security checkpoints.

Note: The effects of this may not be evident in the early stages of restart due to the low number of travellers.

Airlines should consider the potential impact of such restrictions through their risk assessment processes, including point to point passengers and those who may be in transit from other airports with less restrictive policies.

Any change to policy should be communicated to passengers as soon as possible in order for them to be able to pack appropriately **before** arriving at the airport.

5.13 Provision of First Aid onboard

During a response to a medical incident or emergency onboard, the cabin crew member/s dealing with the passenger will not be able to maintain any physical distancing techniques where required.

The provision of Universal Precautions Kits is an IOSA Recommended Practice in order to provide protection for cabin crew members in dealing with any medical incident.

Cabin crew should be reminded of the availability of and correct use of personal protection equipment such as masks, gloves etc when dealing with a medical incident, in order to minimize any risk of infection from Covid-19.

5.14 Human Factors/Crew Resource Management issues

Throughout the Covid-19 crisis there will likely be many human factors issues which may need attention during cabin crew training and onboard operations. Some of these issues may adversely affect individual and group performance as well as introduce additional safety risks.

Example	Cause
Reduced knowledge and skills	Where cabin crew have been removed from the role for an extended period, they may become less familiar with tasks. Any extension of recurrent training validity may impact their current knowledge levels and multiple changes to procedures on a regular basis may cause confusion.
Increased risk taking	Where cabin crew are fearful of losing their job, they may take more risks in order to protect the operation.
Increased distraction from task	Bereavement or concerns relating to the health of an infected family member or close contact. Employment uncertainty.
Reduced reporting of non-compliance	Cabin crew may be less confident to report non-compliance with procedures in case of consequences including loss of employment for themselves and/or others.
Increased fatigue	• Returning to work following a long period of inactivity and/or isolation. • Increased alertness to ongoing fears and concerns around employment, infection, protection, finances and news/media. • Changes in diet, nutrition and exercise routines.

6 References

The following list is not exhaustive and is aimed at providing airlines with a selection of information to support their risk assessments, mitigations and amended procedures.

Topic	Description
IATA Guidance material	All IATA Covid Resources Carriage of cargo in cabin Travel restrictions Crew health precautions
Cabin sanitization and cleaning	IATA Ground handling resources including aircraft cleaning guidance IATA guidance for cleaning crew responding to an inflight event EASA Interim guidance on Cabin Sanitization World Health Organization operational considerations for managing Covid-19 cases or outbreak in aviation
Catering	Quality and Safety Alliance Inflight Services
Waste Management	World Health Organization operational considerations for managing Covid-19 cases or outbreak in aviation
Other	ICAO Council Aviation Recovery Task Force CART ICAO Security Covid website ICAO Safety Covid website World Health Organization operational considerations for managing Covid-19 cases or outbreak in aviation Collaborative Arrangement for Prevention and Management of Public Health Events in Civil Aviation (CAPSCA) US Center for Disease Control FAA SAFO 20009 : Covid-19: Updated Interim Occupational Health and Safety Guidance for Air Carriers and Crews. FAA – Flight Attendant Exemption (Safety Demo / Seating) EASA Covid Website EASA Guidance on management of crew members European Center for Disease Control CAAC preventing spread of coronavirus Transport Canada Covid Alleviations and Guidance Airline Pilots Association International Flight Crew resources