

Safely Navigating the Industry Recovery



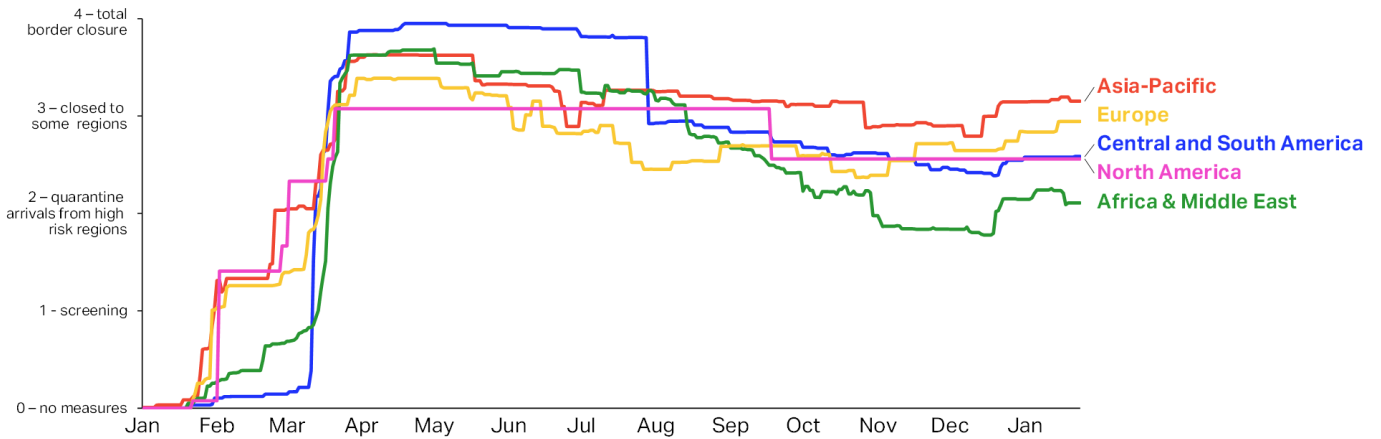
Bulletin 5

Occupational Health and Safety in the Context of COVID

1. Background

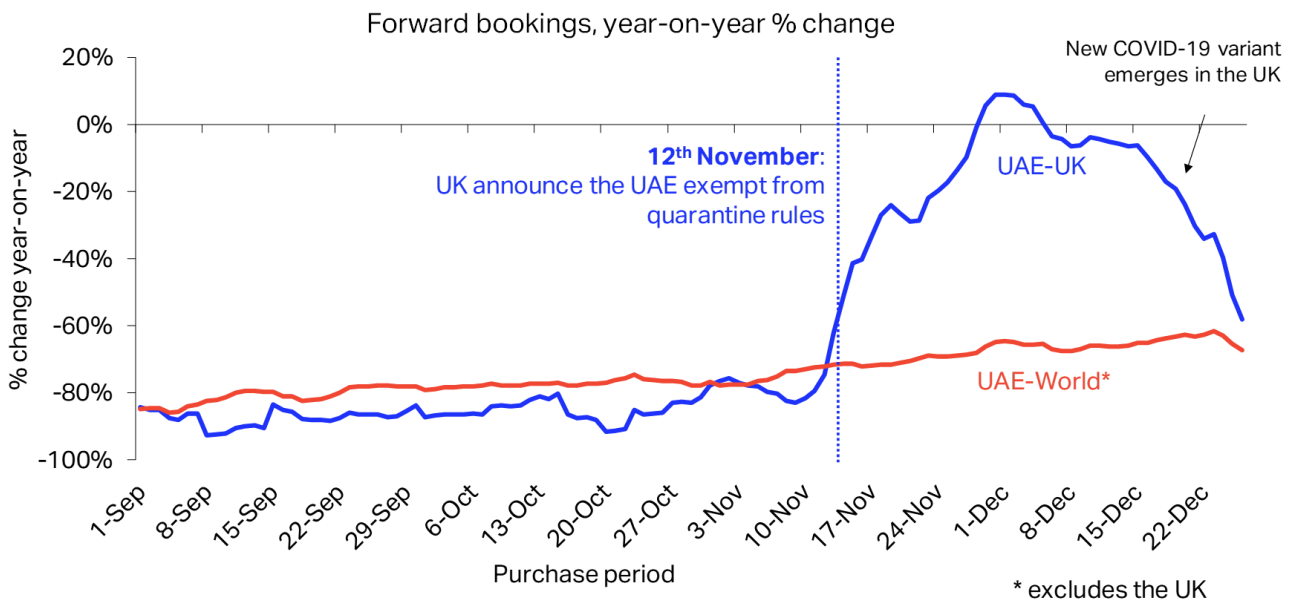
One year after the outbreak of the COVID-19 pandemic, global daily flights remain at around 40% of 2019 figures. With the spread of new variants of COVID-19, tighter travel restrictions in most regions are being imposed in 2021, as reflected in the following figure.

International travel stringency index weighted by population (Jan 2020-Jan 2021)



Source: IATA Economics using data from Oxford University

Full recovery of air travel will still take time. However, based on trend information, there are instances of traffic spikes after prolonged periods of low traffic, motivated by a substantial surge in demand when travel restrictions are eased. An example is shown in the following figure.



Source: IATA Economics using data from DDS

At the same time, varying health measures and testing requirements continue to impact the flying public and operational staff, specifically crew. Additionally, changing conditions on the ground, and different demands and interactions across the aviation supply chain, are impacting operations. In order to address new operational challenges and safety hazards, the Civil Air Navigation Services Organization (CANSO), the International Federation of Air Traffic Controllers' Associations (IFATCA), the International Federation of Air Line Pilots' Associations (IFALPA) and the International Air Transport Association (IATA) continue their collaboration to assist

the industry with the restart and recovery effort, specifically on a safety risk assessment (SRA) which helped shape a webinar organized on 18 March 2021. This joint bulletin is a result of the SRA and the webinar and highlights key considerations to be taken into account with regards to the impacts of health measures on operational staff, the possible long-term impacts of COVID infections, and best practices for health measures.

2. Operational Health and Safety in the Context of COVID-19

Impact of varying government requirements for testing and other health measures

Given the high complexity of the current public health crisis, States are applying different mitigation measures to manage public health risks. The varying measures affect the system in different ways. Non-standard testing may affect how operational staff are assessed as infectious or not. In addition, because of the varying requirements, crew are sometimes subject to testing pre-departure, post arrival at the destination, and upon return to home base. A crew member may be subject to COVID testing 6-10 times/month.

The differentiation of crew from the flying public when imposing measures before or after a duty will facilitate the continued operation of aircraft. ICAO's Manual (Doc 10152) recommends States to recognize crew members as essential personnel. ICAO has also established a minimum dataset for testing certificates to facilitate States' recognition and harmonization of their use for air travel. Mutual recognition of tests can minimize the operational and psychological burden and time spent on complying with the different requirements for crew.

From a human factors' perspective, false positive testing can have negative impacts on operational staff, especially crew operating international flights. Growing stigma and fear associated with positive tests may negatively affect operational staff. Furthermore, PCR tests can remain positive for weeks to months post infection in some patients. Some authorities do not recommend additional PCR tests within a 90-day period of confirmation of diagnosis. Antigen tests may be considered to differentiate current infection from past/recovered infections.

Vaccination can reduce the number and severity of SARS-CoV-2 positive cases and serve as a protective measure for individuals. Additionally, vaccinations will play an important role in aviation recovery as the vaccinated proportion of the global population increases over time. While it should remain voluntary, priority for vaccination should be granted to aviation workers, once health care workers and vulnerable groups have been inoculated. Organizations should develop return to work policies post COVID infection and/or following vaccinations.

Recommended Mitigations
Encourage mutual acceptance of tests and other health measures as they are rolled out. This could be achieved through the implementation of Public Health Corridors (PHCs) for mutual recognition of public health mitigation measures management of cross border health risks
Apply ICAO recommendations for testing and vaccinations, reflected in ICAO Doc 10152, (link) .
Conduct local risk assessments taking into account global best practices.
Ensure that ICAO's CART guidance and ICAO's Doc 10152 are taken into consideration when developing national recovery plans.
Continually review corporate guidelines and return to work policies.

Challenges Associated with Managing Mixed Workforce

It is expected that a multi-layered risk assessment approach will continue to be used for the flying public as well as for operational staff. Vaccination needs to remain voluntary, however it is highly recommended. Therefore, the workforce in any given organizations may include a mix of vaccinated and non-vaccinated staff. This means that requirement for wearing masks, contact tracing, testing, and physical distancing, will sustain even after the roll-out of vaccines. This may also have an impact on staff rostering and corporate policies for health measures, applied even to vaccinated staff. At the same time there may be misconceptions about the efficacy of immunity

once a person is vaccinated. Therefore, organizations need to ensure that there is proper communication and training to ensure a good understanding among operational staff about residual risks post vaccination. Additionally, regular risk assessment will be needed to evaluate the effectiveness of the multi-layered defense against infection outbreaks, to avoid operational interruptions caused by outbreaks among staff.

Recommended Mitigations
Decisions related to relaxation of health measures should be based on data and recommendations by public health authorities.
Regular local risk assessments will be needed to identify additional mitigation measures that may be required.
ICAO's CART guidance should be taken into consideration when developing national recovery plans.

Long-term health Impacts of COVID-19 Infection

The extent of COVID effects on cognitive abilities remains undetermined. However, preliminary indicators for a percentage of people who have been infected include a loss of taste and smell, loss of concentration and fatigue. There may also be possible risks around reduced lung function post COVID infection. This will require stakeholders across the aviation system to constantly review guidance for their operational staff and return to work policies post infection, as new scientific evidence becomes available and is updated.

The psychological impacts of COVID-19 infections remain critical. As the aviation industry navigates the different complexities and risks of recovering operations, mental wellbeing should be at the core of all strategies. Continued support will be needed for aviation staff across the system and at various levels. One recurring issue for air crews is having to quarantine away from home. Fatigue associated with COVID, feeling of isolation, as well as quarantine conditions in some States negatively impact crew's mental health.

Recommended Mitigations
Monitor new scientific evidence as it becomes available with regards to long term effects of COVID infections and update corporate policies, specifically return to work policies post infection.
Establish minimum conditions for quarantine away from home to ensure physical and mental wellbeing of crews. Reference : ICAO EB 20/36 , Section 10.
Conduct local risk assessments taking into account global best practices.
Reinforce "Fit to work" self-assessment.

3. Recommendations

In order to utilize the best practices in this bulletin, it is recommended to use the identified hazards and the example safety risk assessment in **Attachment – A** to conduct an internal safety risk assessment by individual organizations or companies.

4. Additional Resources

Additional resources and information can be found through the following links:

- [iata.org/en/programs/covid-19-resources-guidelines/](https://www.iata.org/en/programs/covid-19-resources-guidelines/)
- [ifatca.org/covid-19/](https://www.ifatca.org/covid-19/)
- [canso.org/navigating-covid-19](https://www.canso.org/navigating-covid-19)
- [ifalpa.org/publications/covid-19-resources/](https://www.ifalpa.org/publications/covid-19-resources/)
- [icao.int/covid/Pages/](https://www.icao.int/covid/Pages/)

If you have any question or would like more information, please contact infrastructure@iata.org.

SRA Example

Occupational Health and Safety in the Context of COVID

Event	Hazard	Consequence	Mitigation Actions (COVID-19 Actions)	Rating with Existing & COVID Measures
		<i>(worst case scenario)</i>		
Post COVID effect on health for operational staff	<ul style="list-style-type: none"> • The extent of COVID's effect on cognitive abilities remains undetermined. However, preliminary indicators could include a loss of taste/smell, loss of concentration and fatigue for a percentage that been infected. • Risk of post-infection psychological stress. • Risk of re-infection, other potential sickness linked to return to work policies. • Risk of unacceptable quarantine conditions away from home if they self-identify as ill. • Need for additional research around hypoxia and reduced lung function post COVID infection 	<ul style="list-style-type: none"> • Possible decreased cognitive abilities leading to accident or injury. • Distraction leading to accident or injury. 	<ul style="list-style-type: none"> • Continue dialog with medical professionals. • Reinforce "Fit to work" self-check. • Existing sick leave policies. • Existing & up-dated return to work policies. • Additional training and awareness. • CART guidance for quarantine away from home. 	Since Additional Research is needed, this event is not rated at this stage.
Impact of varying government requirements for vaccinations for operational staff	<ul style="list-style-type: none"> • Risk of lack of mutual acceptance of different States or regions for vaccine types which can impact operational staff, primarily air crew. • Varying requirements for return to work post vaccination <ul style="list-style-type: none"> ○ Scheduling/rostering for operational staff with varying times for return to work ○ Challenges with staff rostering of a mixed workforce population and possible impacts on workload • Potential misconception about efficacy of immunity once vaccinated. • Risks of spikes in traffic while still requiring social distancing and rotations of sub-teams. • Varying prioritization of when someone is vaccinated. 	<ul style="list-style-type: none"> • Crew unable to enter a specific state. • Potential diversion of flight. • Impact on crew rostering and schedules based on time and type of vaccination. • Reintegrating people prematurely into the workplace with delays in testing results. 	<ul style="list-style-type: none"> • Continue to require social distancing and mask requirements. • Reinforce existing controls and maintain for the foreseeable future. • Encourage mutual acceptance of vaccines and schedules. • Transparent communication and clear expectations. 	Tolerable (with the controls)
Varying COVID testing requirements and negative impact on operational staff	<ul style="list-style-type: none"> • Risk of alienation and distancing from those previously presumed or tested positive. • Non-standard testing that may affect how operational staff may be perceived as infectious or not. • False positive of COVID post infection 	<ul style="list-style-type: none"> • Resources rostering challenges • Pacing increased workload on remaining staff 	<ul style="list-style-type: none"> • Existing & up-dated return to work policies. • Existing OHS policies from States. • COVID specific policies that have been implemented for sanitation and hygiene. • Risk assessments to identify where additional mitigations may be appropriate, i.e. best practices from ANSP's and Airlines. 	Tolerable (with the controls)
Mix of vaccinated and non-vaccinated staff	<ul style="list-style-type: none"> • Overconfidence regarding vaccination. • Lack of information that would permit relaxing protection protocols for social distancing and PPE. 	<ul style="list-style-type: none"> • Infection outbreak resulting in operational disruption 	<ul style="list-style-type: none"> • Existing OHS policies from States. • COVID specific policies that have been implemented for sanitation and hygiene. • Business continuity contingency plans. • Exercise caution and rely on verified data with the relaxing of hygiene measures and all COVID mitigation practices. 	Tolerable (with the controls)