

---

# ACI ADVISORY BULLETIN

---

## Airport preparedness for Covid-19 vaccine distribution

**Montreal, 10 December 2020** – The rapid development of Covid-19 vaccines by the global pharmaceutical industry is a positive indicator for a return to a somewhat normal state of being in 2021.

The global distribution of these vaccines is likely to be one of the biggest logistical challenges ever faced by the transportation and logistics industry.

Along with a multitude of stakeholders involved in the global distribution chain, the aviation industry has a key role in facilitating the rapid and safe delivery of large volumes of doses of these vaccines including the syringes and other medical equipment needed for the vaccination campaigns.

In this regard, airports play a central role as gateways for the incoming and outgoing shipments of vaccines and equipment. Airport operators are primarily responsible for facilitating and coordinating the activities related to this logistical process taking place on their premises, and in some cases are directly involved in the operations.

Many airports are involved in the global effort and planning process underway and have developed, or are currently developing, local operating concepts to address any potential challenges. All stakeholders agree that being adequately prepared, anticipating the possible impacts of this distribution process and having a coordinated operations plan will ensure the overall success of the vaccination campaigns that will be launched by States in the coming weeks and months.

The purpose of this advisory bulletin is to support the planning processes already underway through the identification of some of the challenges that global vaccine distribution will pose for airports, as well as provide some guidance to airport operators on points to consider while finalizing their local plans.

It is therefore recommended that the considerations listed below, should be reviewed and analysed by airport operators as part of their planning processes.

This bulletin does not go into considerations related to the vaccine distribution process in local communities, priorities and phases that may be decided on a regional or State basis. It focuses on the practical aspects useful to airport operators.

### **Operational considerations**

- The vast majority of vaccines will be distributed by air cargo in and out of the regions that produce the products. This may generate sudden increases in aircraft traffic flows for airports close to production facilities or airports designated as main distribution hubs. Consideration should be given to the impacts of increases or significant variations in aircraft movements by airports close to production facilities or designated as hubs with the aim of minimizing potential delays of critical supplies.
- In cases where airports experience increases in aircraft movements due to proximity to production facilities or being designated as a distribution hub, airport operators should ensure coordination with the slot coordinator to facilitate the allocation of ad-hoc slots and may also want to consider any impacts on increases in night flights and potential impacts on local communities.
- Airport cargo facilities that are equipped to store and manage large volumes of pharmaceutical grade cold or ultra-cold materials will be needed as points of entry for vaccine distribution that could then be further distributed in a hub and spoke manner from these centers. Depending on the proximity to the final destination, the regional distribution method of vaccines may be done through additional air cargo flights or road freight. Consideration should therefore be given to increases in the volume of aircraft movements or road freight traffic in and out of these distribution hubs with a focus being put on minimizing delays to the movement of the product.
- Some airports at the receiving end of the flights out of the hubs, may not be fully equipped for maintaining the cold chain at all times. Consideration should be given to the operational and facility needs that this could generate for individual airports as well as any partnerships or collaborations that can be set up locally to cater to these needs.

### **Safety considerations**

- As some of the vaccines have to be stored at temperatures as low as -70°C (-94°F) at all times, it will be essential to maintain the ultra-cold chain throughout the transportation processes. The use of large volumes of dry ice is needed to sustain these low temperatures and may generate risks if not adequately handled in the cargo logistics process.
- Dry ice is considered to be a “dangerous good”, according to ICAO technical guidance (Doc 9284), and therefore its transportation in aircraft, in particular the volumes allowed, is regulated. However, given the ultra-cold requirements of

some of the vaccines linked with the volumes that will be necessary, discussions are underway in ICAO to increase the volume of dry ice that may be transported in a single aircraft, provided strict protocols are followed. In the case of an incident or accident, involving an aircraft carrying significant amounts of dry ice, the Airport Rescue and Fire Fighting (ARFF) response may need to be adapted. As a minimum ARFF should be informed of the increased volumes transported.

- The dispatching of large volumes of vaccines and equipment into airports at the receiving end of flights originating in the main hubs, could see flight operations conducted by larger aircraft than those normally operating at the airport. This can have safety implications and disrupt normal airport operations. Particular consideration should be given to the operational and safety aspects of accommodating larger aircraft than those normally operating on the airport.
- Airports affected by vaccine distribution operations that change to their standard operating procedures, should conduct a safety risk assessment of the overall changes and impacts so as to identify hazards and implement mitigation measures.

### **Security considerations**

- INTERPOL recently issued a global alert to law enforcement authorities warning them to prepare for organized crime networks targeting Covid-19 vaccines, both physically and online. Consideration should be given to liaising with local or national law enforcement agencies to ensure coordination on plans as they are established.
- The sensitive nature of the vaccines, the high level of demand for obtaining them and the initial short supply has the potential to generate some attention by persons or organised groups with malicious or disruptive intent. Consideration should be given to increased protection of these goods and/or the facilities that will house them. In many cases, this requires coordination with local security authorities.
- Airports affected by vaccine distribution operations should conduct a risk and threat assessment with the relevant entities and ensure that adequate mitigation measures are implemented.

### **Actions by airport operators**

ACI recommends that as part of their planning process airport operators:

- make themselves aware of and, depending on the plans being made and the local organisation, be directly involved in the development of the regional or national plans for vaccine distribution

- establish contacts with relevant government authorities (customs, health authorities, aviation, security, etc.) via the national or airport safety, security and facilitation committees or any ad hoc task force specifically created and involved in the vaccine distribution planning process to ensure that the role and responsibilities of the airport operator, as an infrastructure provider and airport operations facilitator, is clearly defined and understood. Attention should also be given to possible liability issues
- establish contacts with and initiate coordination on plans being made by the air cargo community operating on or providing service to their airports
- initiate contacts with national or local security agencies that may be involved in preparations for ensuring the security of these sensitive air cargo operations
- conduct an initial assessment of their level of preparedness for facilitating or managing the Covid-19 vaccine distribution at their specific location, and
- if air cargo operations are conducted into or out of the airport, establish a general operating framework, taking into consideration the points identified in this bulletin as well as any other relevant information available through the national or local coordination activities.

## Ends

1. Airports Council International (ACI), the trade association of the world's airports, was founded in 1991 with the objective of fostering cooperation among its member airports and other partners in world aviation, including the International Civil Aviation Organization, the International Air Transport Association and the Civil Air Navigation Services Organization. In representing the best interests of airports during key phases of policy development, ACI makes a significant contribution toward ensuring a global air transport system that is safe, secure, customer-centric and environmentally sustainable. As of January 2020, ACI serves 668 members, operating 1979 airports in 176 countries.