COVID-19 Vaccine Transportation

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Supply chain

- Timely and reliable delivery of vaccines around the globe will be key to tackle the pandemic effectively.
- To achieve that, effective coordination and cooperation throughout the supply chain is critical to include all entities from vaccine production at various locations to the end user.

Vaccine Delivery Challenges

- Proper storage for vaccines to be transported quickly, safely and securely.
- Lessons learned from first wave will be key, for example:
 - Lockdowns limited production and shipping capacity;
 - Estimated arrival times were unreliable;
 - Customs clearance at destination was longer due to insufficient personnel and procedural issues.

Capacity and Connectivity

- Consider appropriate provisions in order to facilitate prompt issuance of flight permissions (overflight, entry) for flights carrying COVID Pharmaceutical and Life Science products;
- Air Navigation Service Providers (ANSPs) facilitate acceptance of flight plans of flights carrying COVID Pharmaceutical and Life Science products;
- For airlines, airport and handling companies considerations must be taken to ensure to prioritize the movement of essential shipments, including but not limited to vaccines. For example, there are serious concerns about potential impact on transport of radiopharmaceuticals.

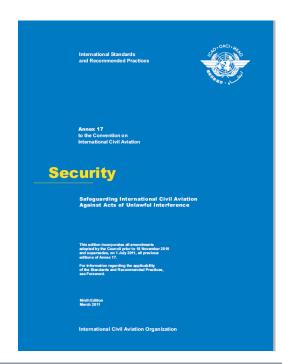
Facilitation

- Exempt flights carrying COVID Pharmaceutical and Life Science products from the COVID-19 restrictions that are imposed by States to arrival, departure and overflights
- Annex 9, standard 4.5
 - ... different public authorities, e.g. the customs, veterinary or sanitary controllers, ... delegate authority for release/ clearance to customs or one of the other agencies or,
 - where that is not feasible, ... ensure that release/clearance is coordinated and, if possible, carried out simultaneously and with a minimum of delay.

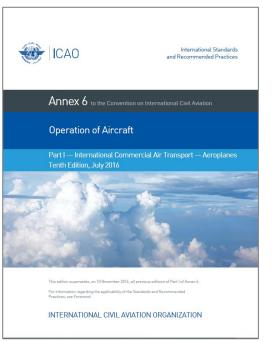


Security

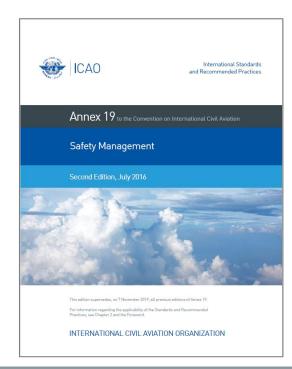
- Vaccines will be highly valuable commodities.
 - Arrangements must be in place to ensure that shipments remain secure from tampering and theft.
- Furthermore, guidance will need to be provided regarding the appropriate screening method for vaccines to ensure the integrity of shipments, taking into account the special difficulties dry ice might raise.



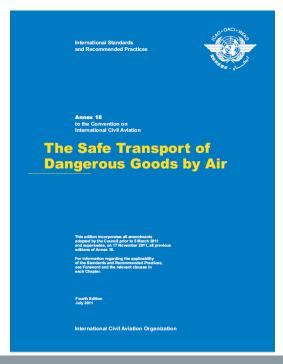
Safety

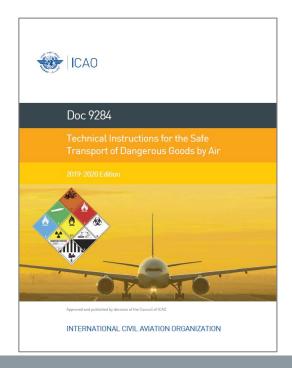


- Are there new operational safety risks?
- Are all carriers ready for vaccine transportations?
- Is the authority ready/capable to grant special authorizations, approvals and exemptions for carriage of dangerous goods?



Dangerous goods







Dangerous goods

- Cargo safety considerations
 - Classification of vaccines as dangerous goods
 - Exempted if classified as 'Biological products'
 - · Manufactured and packaged in accordance with requirements of appropriate national authorities
 - May have special licensing requirements
 - Packaging and temperature control
 - May require refrigerants (e.g. dry ice)
 - Data loggers (lithium batteries)
 - Operator permitted to carry dangerous goods





Dangerous goods

- Cargo safety considerations
 - Dry ice
 - Hazards
 - Cargo compartment and/or passenger cabin
 - Guidance from OEMs regarding quantities based on specific aircraft configurations and systems, as well as sublimation rate and/or capability to vent the CO₂
 - Multimodal transport
 - UN Recommendations on the Transport of Dangerous Goods

IATA Guidance for Vaccine and Pharmaceutical Logistics and Distribution

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Guidance for Vaccine and Pharmaceutical Logistics and Distribution

- The Constraints and Risks
 - Stakeholders need to pre-empt and overcome in order to deliver vaccines where they are needed with no wastage or loss.
- The Role of Authorities and NGO's in the vaccine distribution and procurement process
 - While authorities and NGO's share the common objective of ensuring that countries have safe, fast and equitable access to the vaccine when available, the role of each party varies.

Guidance for Vaccine and Pharmaceutical Logistics and Distribution

- Industry Preparedness for vaccine distribution which includes set of considerations and awareness that governments and stakeholders need to consider:
 - Capacity & Connectivity
 - Facilities & infrastructure
 - Border Management
 - Security & Safety

Guidance for Vaccine and Pharmaceutical Logistics and Distribution

https://www.iata.org/en/programs/cargo/

Guidance for Vaccine and Pharmaceutical Logistics and Distribution

Set of considerations and awareness on large scale handling, transport and distribution of vaccines, pharmaceutical, life science and medical products.

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