

Challenges in Transportation of Organs for Transplant

Overview

Rapid advances in organ preservation technologies means that organs can travel further to reach the sickest patients in need of a transplant. Our nation's donation and transplant system, however, is **increasingly reliant on commercial airline cargo processes** that were not designed to handle this lifesaving gift.

Though year-over-year records in organ transplants demonstrate that the vast majority of cases arrive safely at the transplant center, still some experience cargo handling-related issues. Even in a perfect world, delays due to weather are uncontrollable, but delays due to cargo processes, failures to load on initial or connecting flights, and misdirected shipments are potentially avoidable.

UNOS has sought Congressional support in developing security protocols to enable couriers and OPOs to deliver donor organs directly to an aircraft, returning to in cabin transport. **As a result of UNOS led advocacy and with the support of the organ donation and transplant community, Congress has required the U.S. Department of Transportation (DOT) and Federal Aviation Administration (FAA) to convene a working group to identify best practices and hindrances for the transportation of donated organs in the passenger cabin.**

What are the key problems?

Following the attacks on the U.S. on September 11, 2001, deceased donor organs that previously traveled commercial airlines unaccompanied – a majority of which are kidneys – were re-designated as cargo and thus no longer permitted to travel near the cockpit. This ended expedited on- and off-boarding at the gate and subjected organs, as well as related blood and tissue, to below-wing handling. This designation introduced these lifesaving gifts to similar mishandling, delays, and damage as baggage, and resulted in additional challenges navigating cargo hours and cargo lock-out times. Issues facing organs moving via commercial air include:

- The impact of below-wing cargo processes:
 - **Cargo lock-out times** for airlines range from 60 to 120 minutes prior to departure. Should an organ be accepted for a patient in need and the necessary flight is available within the next two hours, that flight may not be usable because the organ must be registered as cargo and checked in at the airport prior to the lock-out time.
 - **Cargo hours**, meaning the hours in which the cargo office is open, are highly varied between airlines and individual airports and are further limited by staffing shortages.
 - When coordinating transportation, the lack of open cargo offices prohibits organs from moving on all possible commercial flights.

- If an organ happens to arrive at a closed cargo office, the courier at the destination cannot recover it. This can lead to organs sitting on ice for prolonged periods, waiting for the next flight within cargo hours or for the office to open so that the organ can be recovered by the courier, and increases the potential for organ non-use.
- Airlines intend to promote transparency, care, and communication for the organ along the journey by applying **protective cargo statuses** to the package. However, these statuses often impose artificial limits on which airports the organ can be flown out of or into, further diminishing flight options for these lifesaving gifts.
- Several common airlines (e.g. JetBlue, Spirit, Allegiant) **do not accept cargo**, further reducing flight availability and limiting the ability of organs to move to patients in need. When airlines close cargo processes, such as with the recent Southwest shutdown, the options for organ transportation can be limited to an untenable degree.
- **Significant flight delays, airline staffing shortages and the increased rate of cancellations post-COVID** result in the gift of life relying on an unreliable network of commercial transportation options and can lead to non-utilization due to the organ being unable to reach the patient in time.
- **Only couriers with “Known Shipper” status can transport cargo on passenger flights.** Even couriers with the appropriate status are sometimes blocked without certain documentation present, such as Indirect Air Carrier (IAC) forms, despite proof of ID. OPO staff do not have this ability.
- There are **no incentives or accountability for commercial airlines** to improve processes around organ transportation.

A path forward

- As a result of UNOS led advocacy and with the support of the organ donation and transplant community, **Congress included a provision to the Securing Growth and Robust Leadership in American Aviation Act (HR. 3935) that requires the DOT and FAA to convene a working group to identify best practices and hindrances for the transportation of donated organs, primarily kidneys and livers, in the passenger cabin** instead of in the cargo hold of an airplane.
- **The FAA held the first working group meeting in August 2024.** Their work is expected to inform policy improvements that would not require going through the federal rulemaking process.
- Any new policies that enable couriers and OPOs to deliver donor organs directly to an aircraft, **returning to in cabin transport**, should include:
 - A definition of covered materials that includes human organs and containers associated with the transfer;
 - Consideration of protocols for air control outages that impact timeliness of flights transporting organs for transplant;

- A requirement that airlines have a protocol for human person accompaniment of organs to and from the aircraft and between connecting flights;
- A more standardized process for commercial airline acceptance, handling and management of human organs in transit; and
- Consistent use of flight notes to indicate organs on board, so that air traffic control can ensure priority takeoff and landing of aircraft.