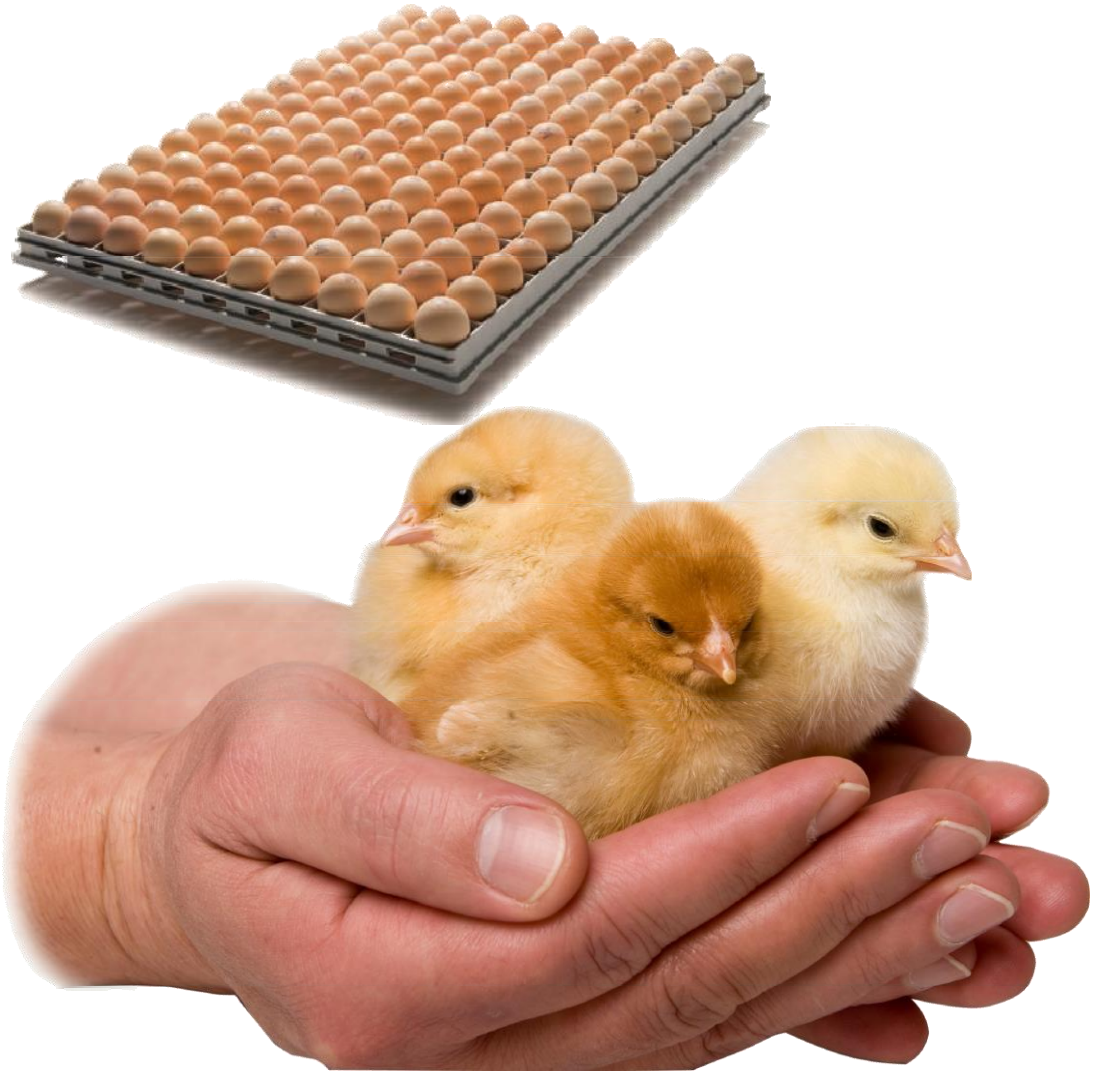


Global Guide to Best Practices in Air Transport of Hatching Eggs, Day-Old Chicks, Poults and Ducklings

Colophon:
This guide has been produced by the USPOULTRY Air Cargo Committee, the Association of European Poultry Breeders (EPB) and the European Live Poultry and Hatching Egg Association (ELPHA) in close collaboration with the major airlines transporting hatching eggs (HEG) and day-old-chicks (DOC) and the Animal Transportation Association (ATA). It is an addition to the existing guidelines of the International Air Transport Association (IATA).

The objective of this guide is to ensure the quality of air transport of breeding stock in the form of hatching eggs (HEG)[1] and/or day-old-chicks (DOC)[2] by:

- Eliminating stress to reduce the mortality of **DOC**
- Safeguarding the **HEG** during their transport

The guide covers what the USPOULTRY Air Cargo Committee, EPB and ELPHA consider the ideal parameters to transport HEG or DOC to guarantee the highest quality upon arrival. However, these organizations realize that, due to practical constraints, these conditions cannot always be achieved.

Background on the USPOULTRY Air Cargo Committee

The USPOULTRY Air Cargo Committee is one of the world's largest and most active poultry organizations. It represents the entire U.S. industry as an All Feather Association, progressively serving through research, education, communication and technical assistance. Formed in 1947, the association has affiliations in 27 states and member companies worldwide. The ACC's objective is to encourage safe handling and proper techniques for shipping breeder DOC and HEG to other nations and to recommend actions to its Board of Directors.

Background on the EPB and ELPHA

The EPB is a non-profit organization and part of the ELPHA. The mission of ELPHA is to defend the interests of primary poultry breeders in the European Union (EU) as well as their rights and functions to address common issues in the European and international markets and to have an official representation of organizations, particularly in the EU.

The Association endeavours to achieve this mission by:

- Defining and implementing principles related to poultry breeding on the basis of the EU Treaty
- Reinforcing the contacts between the affiliated organizations on one hand and the institutions of the EU and all other authorities and bodies on the other
- Representing the common interests of the members with the EU institutions and possibly also with official national governments
- Defending the common interests of its members by any useful procedure

These guidelines have been prepared by all members of USPOULTRY Air Cargo Committee, EPB, ELPHA, the airlines and ATA.

[1] **Hatching eggs to produce day-old-chicks, day-old turkey poults, ducklings** will be referred to as "**HEG."**

[2] **Day-old chicks, day-old turkey poults, ducklings** will be referred to as "**DOC.**"

Why HEG and DOC Need to Travel by Air

Poultry is in high demand worldwide, as it provides healthy and affordable meat, produced thanks to the continuous improvement of poultry breeding stock. For this reason, companies that produce top-quality breeding stock must ship their products in the form of DOC, day-old turkey poults, ducklings and HEG worldwide by air cargo.

HEG and DOC are the result of many years of genetic research and improvement. They are vital to breeding companies and to future generations of poultry for the production of meat and eggs.

During transport HEG and DOC must be handled with the utmost care from the moment of collection to the moment they arrive at the final destination. For this reason, it is important to provide everyone involved in the logistics process with essential information on handling them during transport to and from the airport, during storage and on the plane. The lives of the next generation of poultry rely on the ability of the staff involved in the different stages of the distribution process to deliver HEG and DOC in as good a shape as when they were first received for shipment.

Basic measures during transport, storage and flight must be carefully followed to ensure that the HEG and DOC arrive in the best condition at their final destination.

I. PREPARATION AND TRANSPORT OF HEG

HEG contain embryos that are living animals. They are very sensitive to rough handling and temperature extremes and fluctuations. Improper handling can cause an embryo to die within the shell. The result is a loss in hatchability of the eggs.

A cracked or broken egg is useless for hatching purposes. HEG are live cargo that is perishable and valuable. **HEG should be shipped without delay** as any delay reduces the hatchability and quality of the end product.

At the breeder farm

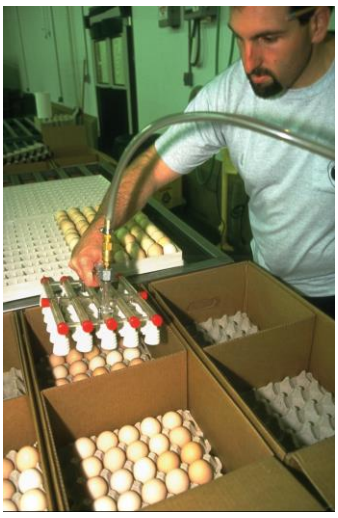
At the source breeder farm, the manager and staff take special care to adhere to all **biosecurity measures** to avoid disease and contamination of the HEG before they are hatched. Biosecurity measures are set up to implement hygiene standards at all levels of production in order to prevent the entry of undesirable organisms, including farm pests and micro-organisms, and to manage the animal health, including the microbiological condition of the flocks of origin and the eggs produced. Regular inspections take place at the farm level to ensure health certificate requirements are met.

Temperature and humidity are carefully controlled at the farm before the eggs are picked up to avoid unnecessary stress to the embryo before hatching.

Packing of the HEG

HEG are collected from the poultry house and placed on specific plastic or paper egg trays which are then packed in specially designed, clean and strengthened shipping cases or pallets. To maintain quality the HEG are packed small end down, so it is essential that egg cases are transported the correct way up. All egg cases are stacked in an alternating pattern on pallets to keep the HEG from being jarred or from shifting during transportation.

HEG MUST ALWAYS BE LOADED IN A LEVEL POSITION AND STACKED IN A LEVEL MANNER



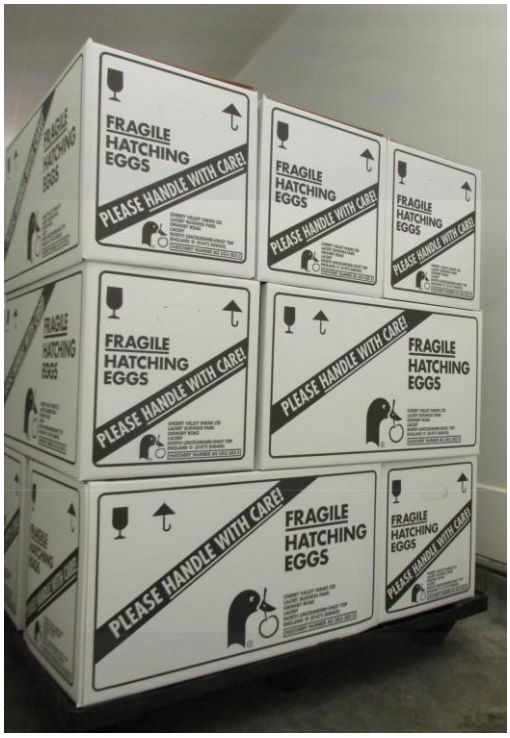
Required Storage Temperature Range for HEG consignments: 15 to 18 °C (59 to 64 °F). Extreme or vastly fluctuating environmental temperatures during air transportation can negatively impact HEG and DOC quality and welfare. Low temperatures can be detrimental to the health and development of embryos. High temperatures may also cause the embryo development process to start prematurely, thereby reducing the embryonic viability. Therefore, specific attention to the proper temperature range during transport must be given to ensure the health, welfare and viability of the embryo.

Storage at the airport before loading

Once the HEG arrive at the airport or to the carrier/handling agent, the HEG need to be held at appropriate temperatures. Some airports have specialized animal lounges with temperature control. For HEG, the correct temperature is 15 to 18 °C (59 to 64 °F).

All packaging material must be new, clean and dry and must be kept indoors and separated from wild birds, other avian species and pests (e.g. rodents). All packaging must meet the requirements of the importing country. HEG must be placed on a pallet before they can be stored. On the pallets, egg cases should be stacked in an alternating pattern for maximum stability. Once the egg cases are positioned on the pallet, the pallet should be shrink-wrapped to create one unit and therefore protect against movement and damage. During the whole process, the egg cases and pallets must be protected against rain.

Note: Do not stack egg cases more than five layers high. Please store with caution.



Accepting HEG Shipments

Before the air carrier accepts the HEG**,** the shipper, agent, and carrier must make sure all relevant information is available. This information helps to ensure a speedy customs clearance, delay-free schedule and safe arrival at the final destination.

Make sure all cases are clearly marked with the name, address and country of the consignee, along with the Air Waybill number (see page 24 for the minimum requirements).

Proper Methods of Handling, Loading and Off-loading

The method chosen for handling and loading depends on the type of aircraft and whether the flight is passenger or cargo. The basic procedures involve palletizing and conveyor belt handling. All methods require loading the egg cases in a level manner. Tilting and jostling HEG will decrease hatchability. Loading and off-loading must take place as quickly as possible to minimize exposure to climatic fluctuations, and HEG should be stored properly in due time.

Make sure the pallets fit to the size of the egg cases with no overhanging cases. Do not stack egg cases more than 5 layers high.

Palletizing Method too

Cargo or combi-planes	The palletizing method works best. HEG cases are removed from the cooler or truck and loaded by forklift onto the pallet. Always use an alternating pattern for stacking, which lessens the strain on the bottom boxes.
Loading by forklift	When using this method, make sure that all pallets are large enough. Otherwise some cases may fall off or be crushed and damage the HEG. Never stack cases more than 5 cases high. Once the HEG cases are positioned on the pallet, they may be wrapped to create one unit and further protect against movement/damage.
Weather conditions	Depending on climate conditions such as rain, shippers will require you to cover the cases with a large plastic sheet. Once the HEG are loaded onto the pallet, cargo netting should always be used for additional stability. It is not necessary to remove the plastic sheet during transport.

Conveyor Belt Method

Conveyor Belt Method	This method should be used on small aircraft or in the bulk compartment. Each egg case should be placed in the center of the belt. Assign trained personnel on both ends of the belt so the egg cases are less likely to fall. Inside the aircraft, secure the cases by using the straps on the side of the cargo hold to prevent shifting and ensure a smoother flight.

Do's and Don'ts for Shipping HEG

DO's

• Handle HEG with extreme care; they are very fragile. Dropping, jarring or throwing can damage the eggs.
• Stack HEG on pallets no more than 5 cases high.
• Keep cases level while loading, noting directions on the boxes. Place HEG in a dry, clean and protected area and away from extreme heat or cold.
• Maintain contact with the freight forwarder or shipper in case of any delay or cancellation.
• Make sure all documentation attached to the Air Waybill is transferred with the HEG.

DON'Ts

• Don't stack cases upside down or on their sides.
• Don't allow HEG cases to sit on the truck too long. Keep waiting time at a minimum when no dollies or temperature controlled vehicles are available.
• Don't let HEG sit in the rain or sunshine; even small amounts of shade are better than none.
• Don't mishandle HEG cases.
• Don't place HEG cases directly on the floor of the holding rooms and the aircraft.

If the plane makes transit stops before reaching the final destination, remind the crew of the live freight and ensure staff check on the temperatures.

II. PREPARATION AND TRANSPORT OF DOC

At the breeder farm and hatchery

At the breeder farm and hatchery, the managers and staff take every possible care to respect all **biosecurity measures** to avoid disease and contamination of the HEG from production until hatch. Biosecurity measures are established to implement hygiene standards at all levels of production in order to prevent the entry of undesirable organisms, including farm pests and micro-organisms, and to manage the animal health, including the microbiological condition of the flocks of origin and the eggs produced. Regular inspections take place at the source farm level to make sure the health certificate requirements are met.

HEG are incubated for **21 days for chickens, 28 days for turkeys and ducks** in a temperature and humidity-controlled environment. The racks inside egg-setting machines are programmed to turn the HEG every hour to prevent the embryo from sticking to the egg shell.

Once the DOC hatch they are inspected and prepared for travel according to domestic and international regulations. The DOC are then carefully counted and packed in boxes suitable for transport. The number of DOC per box and type and size of box will depend on the climatic conditions on departure and arrival.

Packing and Shipping

Each shipper will have its own specific plastic or cardboard box, including the predetermined quantity of DOC per box. All comply with the country of origin and IATA regulations.

All boxes must be clearly marked with the name, address and country of the consignee and the Air Waybill number (see page 24 for the minimum requirements).

The chick boxes are loaded from the hatchery directly onto the vehicle. At times, depending on the supplier, trolleys may be used. All vehicles are environmentally controlled to protect the birds. Once DOC leave the hatcheries and are entrusted to the air carrier, their health and well-being are in the hands of the airline. Upon arrival at the airport, the boxes are delivered to the live animal station or a suitable holding area. The area should be well ventilated, sheltered from sun or wind and free from exhaust fumes and cold drafts. The boxes are then built on clean and dry pallets using Styrofoam strips so they are not directly placed on the pallet floor. A spacer system is used to maximize airflow and stability. All packaging material must be new, clean and dry and kept inside and away from wild birds or other avian species. All packaging must meet the requirements of the importing country.


General temperature requirements

As DOC produce heat, humidity and CO_2, adequate ventilation is vital.

- Required temperature in holding areas for DOC: 21 to 26 ^{o}C (70 to 79 ^{o}F)
- Required temperature in aircraft cargo compartments and holds: 18 to 24 ^{o}C (64 to 75 ^{o}F), which generally achieves the required temperature inside the chick boxes shown below

Most shippers will place their temperature standards on the Air Waybill.
Please follow their instructions.


Holding DOC before loading onto the aircraft. The DOC are scheduled to arrive at the designated holding area 3-5 hours before departure of the aircraft. The consignment will then be prepared for transport. The area where the DOC are palletized should maintain segregation of consignments. If other animals are present they must be kept separate from the DOC. During the palletization process and holding period before loading, all requirements for temperature and ventilation must be met.

DOC should not be stored with other avian species unless they adhere to the status demanded on the health certificate.

There are two ways to transport the DOC in an aircraft:

- Palletized
- Loose-loaded

During transportation every effort should be made to keep DOC at their ideal temperature and protect them from stress resulting from adverse weather conditions such as heat, cold, rain, sleet and snow. The DOC should only ever be exposed to these elements for the shortest possible time during loading and unloading from an aircraft.

Loading/unloading during adverse weather conditions. To further reduce exposure to extreme temperatures and conditions, DOC should always be last in and first out of an aircraft. In warm or hot weather, DOC should be loaded last and placed near a cargo door (attention to aircraft and aircraft type might create some variation) so they can be removed quickly and get access to fresh air as soon as the door is opened. This rule is especially critical if the plane has to make a stop before arriving at the final destination. If a stop cannot be avoided or there is a transit, DOC must have good ventilation while on the ground. The same holds true even in cold weather unless outside temperatures are extremely cold. In this case, they should be loaded and placed away from the door so their own heat can keep them warm during a stop.

DOC must never be allowed to sit exposed to the elements. During conditions such as rain, sleet and snow they must be protected with a cover such as a plastic sheet during loading and unloading and they should also be shaded from the sun as much as possible. The time that the protecting cover is over the consignment needs to be at minimum. It should be only the necessary time for the chicks to be moved from the warehouse to the plane when no dollies or temperature-controlled vehicles are available. The cover must be taken off before the DOC board the aircraft to ensure proper air flow.

Communication is critical to effective DOC protection during transport. Freight forwarders and airline staff should be in constant communication with the export team for specific recommendations regarding DOC health and comfort. Everyone involved with handling the birds should be aware of their temperature, ventilation and other environmental requirements. These requirements should be fulfilled during loading and unloading of the DOC including when they are being transported to and from the aircraft. DOC should be transported in environmentally controlled vehicles when available and be kept in temperature-controlled storage areas.

Palletized DOC

The air carrier or freight forwarder's personnel must palletize the DOC before loading them onto the aircraft. Boxes should be loaded onto pallets and secured with spacers between the stacks to stabilize them and to keep the boxes separated during transport thus allowing air movement in and around the boxes. For cardboard boxes, corner posts can be used to prevent the netting from damaging the boxes.

Boxes with corner posts

Built in chimneys

The spacers guarantee more stability of the pallet during take-off, in-flight turbulence and landings. It also ensures that all boxes have at least one side open to a larger air space to increase airflow to the DOC. All pallet configurations are carefully designed to permit maximum airflow for the DOC during their journey. Some of the spacers can be removed if chimneys are inserted into the pallet configuration.

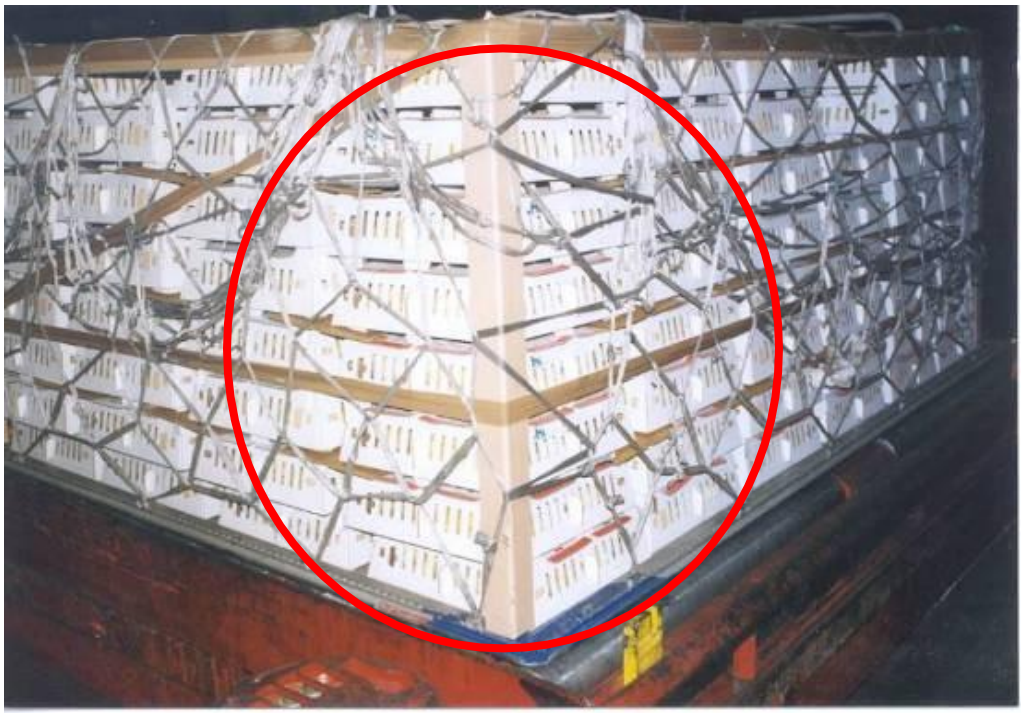
After palletization is complete a cargo net must be placed on every pallet to ensure that chick boxes do not move during shipment. The cargo net should fit snugly over the pallet but not so tightly that boxes begin to bow under the pressure. Please ensure that all obstructions attached to the netting are removed or restricted to safeguard the airflow.

Loose-loaded DOC

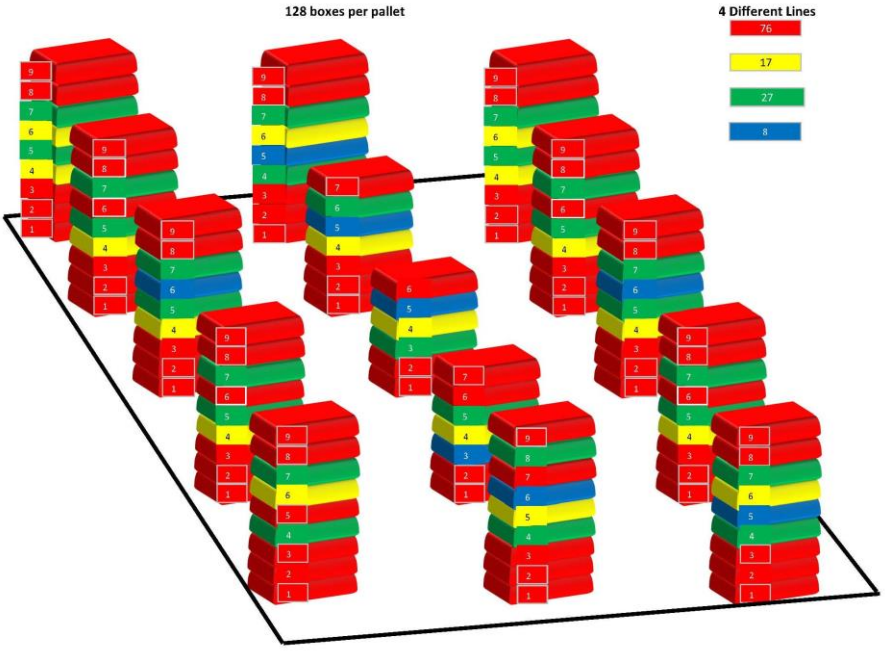
Consignments of loose-loaded DOC must never be loaded directly on the floor of the holding area. The loose-loaded DOC can be loaded onto clean and dry pallets using Styrofoam strips or pallets. On the plane, loose-loaded chick boxes must always have ventilation underneath the lowest chick boxes and along the sidewalls of the aircraft (especially charter flights). Boxes must be stacked according to the booking agreement. Similar to palletized DOC, spacers ensure the boxes are stabilized and kept separate, allowing air movement in and around the boxes. Spacers must remain in place during DOC holding and transport.

FOR PALLETIZED AND LOOSE-LOADED DOC SHIPMENTS, FEMALE AND MALE BOXES SHOULD BE SPREAD THROUGHOUT THE CONSIGNMENT. DO NOT PLACE ALL MALES IN ONE AREA OR AT ONE HEIGHT.

Make sure female and male boxes are evenly spread and NOT like here, where all male boxes with red lids are stored in the same corner.



Example of a palletization plan for 4 different types of chicks



Loading onto the Aircraft

The time between leaving the holding area and loading the aircraft should be as short as possible. Make sure the DOC are not exposed to adverse weather conditions. An environmentally controlled vehicle is the preferred method of transportation.

DOC should be the last cargo delivered to the aircraft and the first to be off-loaded from the plane during hot weather. During cold weather, pallets should not be loaded directly at the aircraft door. Ensure that everyone is aware that perishable live cargo is on board and that specific temperatures are required during the journey.

Examples of vehicles used for transportation between the holding area and the aircraft

HEG and DOC must not be shipped with other avian species unless they adhere to the same biosecurity and health status as required on the health certificate. The carrier must inform the shipper or agent at the time of booking if other avian species are on the same flight.

Loading DOC with animals other than avian species is possible, but other live animals should not be placed adjacent to the birds, nor should other animal shipments be stored in the warehouse directly adjacent to DOC shipments.

Placement on the Aircraft

As well as plane design and air supply, weight and balance play an important part in where DOC should be loaded onto the aircraft. In warm or hot weather DOC should be loaded last and placed near a cargo door so they can be removed first and will get fresh air as soon as the door is opened. This rule is especially critical if the plane has to make a stop before arriving at the final destination. If a stop cannot be avoided, the DOC need to have good ventilation while on the ground. The same holds true in cold weather unless a stop is made in a cold location (below 18 ^{o}C / 64 ^{o}F). In this case DOC should be loaded a pallet or two's distance away from the door so their own heat can keep them warm during the stop.

During Flight and Flight Delays

When unforeseen flight delays happen, tips for maintaining DOC quality are:

• Notify the forwarding agent or shipper of the delay.
• Delay: If DOC have already been loaded, the GPU or APU must be used to ensure that suitable ventilation and temperature requirements are met. • If this is not possible, then the DOC must be brought back to the holding area.
• Long Delay: For managing extended delays, seek shipper advice.
• Stopovers**:** Make sure the NOTOC information on the compartments of the cargo carrying the DOC is available and that the temperature/ventilation conditions are satisfactory.

Pilot and Flight Crew Must be Notified of DOC on Board!

It is imperative that the pilot and flight crew are made aware that DOC are on board the aircraft. Proper notification ensures that the air supply to the cargo compartment isn't accidentally shut off during the flight, at an intermediate stop or at the destination (before DOC can be unloaded from the aircraft). The same notification should be forwarded by fax or email to intermediate stops and to the final destination. The flight number, Air Waybill number and pallet position need to be included so that DOC can be quickly offloaded upon arrival.

Documents containing specific instructions regarding the care and requirements of live bird shipments must remain with the birds. When these crucial documents are separated from the bird shipment, the health and welfare of DOC may be compromised.

If DOC are transferred to another aircraft at any point during the logistics process, it is crucial that all documents (especially health certificate and invoice) attached to the Air Waybill are transferred along with the DOC. Some shippers include documents in a special plastic pouch directly attached to the live animal shipments. However, not all importing countries accept this method. Consult with the freight forwarder or shipper when in doubt.

Aircraft Unloading and DOC Holding

The DOC must be transported to the warehouse immediately after they are unloaded from the aircraft to minimize exposure to weather conditions. An environmentally controlled truck is preferred for the transport. It is very important that the DOC are kept under conditions that include ventilation, especially if temperatures are hot. During landing, taxiing, loading and unloading, the air supply must never be shut off.

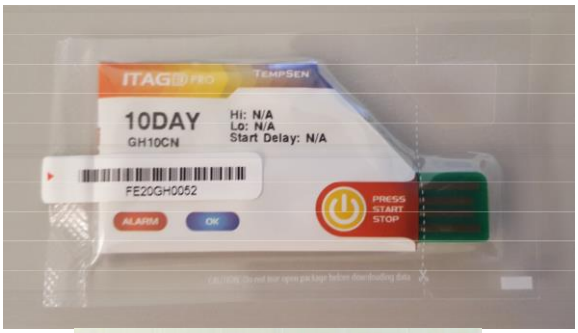
DOC must not be stored with other avian species unless they adhere to the status demanded on the health certificate.

General temperature requirements DOC
As DOC produce heat, humidity and carbon dioxide, adequate ventilation at chick level is vital.

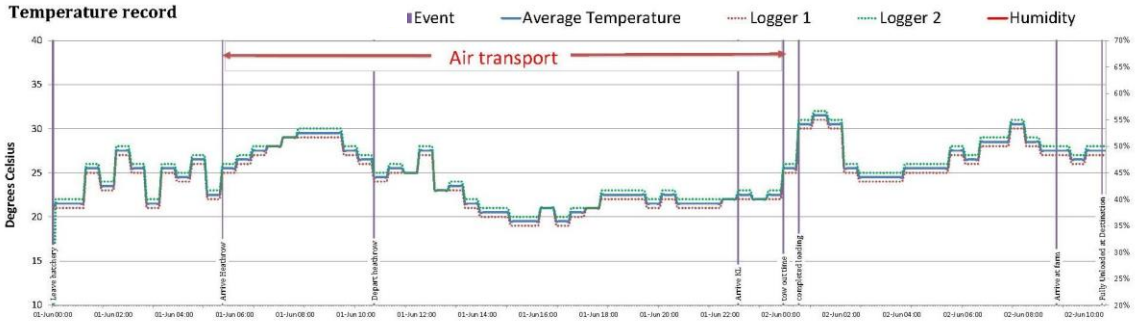
The temperature required in DOC holding areas is 21 to 26 °C (70 to 79 °F).
The required temperature in aircraft cargo compartments is 18 to 24 °C (64 to 75 °F), which generally achieves the required temperature inside the chick boxes as shown in the table below.

Most shippers will place their temperature standards on the Air Waybill.
Please follow their instructions.

Examples of Temperature loggers used by different shippers



Example of Temperatures during transport and 1st days in the chicken house



Do's and Don'ts for Air Carriers

DO's

• Handle DOC with extreme care, they are live animals and fragile.
• Stack DOC boxes to the booking agreement's height.
• Keep boxes level while loading (note directions on the boxes). Place DOC in a dry, clean, ventilated and protected area and away from extreme heat or cold. **Required temperatures in holding areas: 21 to 26 °C (70 to 79 °F).** • **Required temperature in aircraft cargo compartments/holds: 18 to 24 °C (64 to 75 °F) which generally achieves the required temperature inside the chick boxes indicated below (pictures to be added)**
• Maintain contact with the freight forwarder, shipper, and final destination in case of any delay or cancellation. A downgraded plane may not be suitable for DOC.
• Ensure all documentation attached to the Air Waybill is transferred with the DOC. This is especially critical in case of transfer to another aircraft.
• Make sure that all boxes are clearly marked with the name, address and country of the consignee together with the Air Waybill number.
• During flight, take-off and landing or stopovers, remember to have appropriate air flow/humidity in the cargo compartment – make sure APU or GPU is switched on.
• DOC must be removed from the aircraft and taken to appropriate animal holding areas as soon as possible after landing.

DON'Ts

• Don't stack boxes upside down or on their sides.
• Don't let the DOC sit in the rain or sunshine; even small amounts of shade are better than none.
• DOC boxes or cases must not be mishandled.
• DOC boxes should not be placed directly on the floor of the holding rooms and aircraft.
• Don't turn off the airflow during the flight.
• Don't forget to communicate any delay or change in aircraft to an agent at the destination. A downgraded plane will not be suitable for the DOC.

APPENDICES

CHECKLIST SHIPPER/AGENT/CARRIER HANDLING HEG OR DOC

1	Inspect cases/boxes for obvious signs of dirt and damage (crushed, torn, wet or soiled).
2	Verify the number of cases/boxes.
3	Name of Consignee. Make sure that contact details, including phone numbers and country of destination, are clearly indicated (see page 24 for example).
4	Flight number and Air Waybill.
5	Make sure ALL cases/boxes have labels identifying the consignee and if possible the Air Waybill number.
6	Verify that shipping documents are in order.
7	Notify personnel at the destination airport and any transfer points along the way to expect an arrival of HEG or DOC.

CHECKLIST CARGO COMPANIES HANDLING HEG

Packing HEG	Are the egg cases packed the correct side up?
	Are cases stacked maximum of 5 cases high?
	Are the egg cases stacked in alternating patterns to avoid shifting?
	Are the storage temperatures correct (15-18° C (59-64 °F))?
Shipping HEG	Are any egg cases damaged?
	Is all information available and cases labelled?
	Are shipping documents in order?
	Have the airport and transfer points been notified of the arrival of the HEG?
Handling, Palletizing and Loading HEG on the aircraft	Are pallets large enough to prevent cases from falling off?
	Are the cases covered with plastic in case of rain?
	Are cases load-maxed 4 layers high?
	Are egg cases placed in the center of the conveyor belt if used?
	Is the pallet shrink-wrapped?
	Have personnel both at aircraft and at destination been notified that HEG are on board?
	Are egg cases securely strapped on the aircraft?
	Are HEG stored in a protected area away from extreme temperatures?
	Are HEG being handled carefully? They are fragile.
	Ensure no other cases are stored on top of the egg pallets.
Off-loading HEG	Are loading and off-loading taking place as quickly as possible to minimize exposure to climatic fluctuations?
	Are HEG stored properly in due time and under correct temperatures (15-18° C (59-64 °F))?

When there is overheating, a missed connection or a lengthy delay in forwarding a shipment of HEG, we request that you:

Notify the shipper and freight forwarder immediately. Refer to emergency contacts on the documents accompanying the HEG including the freight forwarder.

CHECKLIST CARGO COMPANIES HANDLING DOC

Temporary storage (animal hotel/lounge)	Make sure holding room temperatures are between 21-26 °C (70-79 °F) and the ventilation is good.
	Check regularly on the well-being of the DOC while they are waiting.
Holding Palletizing or loading of loose DOC	If boxes arrive loose, secure them onto pallets with spacers built between the boxes.
	Make sure that boxes with female and male DOC are evenly spread on the pallets.
	Make sure the loose-loaded DOC are loaded onto clean and dry pallets using Styrofoam strips or wooden pallets.
	Make sure boxes are stacked according to the booking agreement.
	Make sure at least one side of each box is open to larger air space for sufficient ventilation.
	Check that all papers are correct before the DOC are loaded.
	Make sure the boxes are fixed by a net to ensure they do not move.
Loading to the plane	Make sure the DOC are only exposed to outside weather conditions during loading for short periods.
	Make sure that no other avian (bird) species are loaded on the same plane. Inform the shippers if other DOC are loaded on the plane.
	Inform the pilot and crew about the DOC on board to make sure they do not switch off ventilation during waiting, take-off, landing and stopovers.
	Notify the next destination and shipper about the delays so that correct measures can be taken when the plane arrives.
During flight	Make sure the DOC are placed in the cargo room where temperatures (18 to 24 °C (64 to 75 °F)) and ventilation are maintained. (These are the best conditions for DOC during take-off and landing and during the entire transport.)
Flight delays	Keep flight delays to a minimum.
	If flight delays are longer than 2 hours, unload the DOC and bring the pallets back to the ventilated and temperature-controlled storage area 21 to 26 °C (70 to 79 °F).
	In case longer delays occur, follow the shipper's instructions or recommendations for hydration/feeding of the DOC.
Stopovers	Make sure the NOTOC information on the conditions of the cargo storage is available and the temperature and ventilation in the DOC storage are satisfactory.
Off-loading of plane	Make sure the DOC are among the first cargo to leave the plane.
	Immediately take the DOC to storage where the temperature is between 21 and 26 °C (70 to 79 °F) and the ventilation is good.
	Check that DOC are transported to the storage by a truck with controlled temperature and ventilation if available.
Documents	Unnecessary delays and complications occur in customs because crucial documents were separated from the shipment or Air Waybill. Make sure the **correct documents** accompany the DOC.

When there is overheating, mortality, a missed connection or a lengthy delay in forwarding a shipment of DOC, we request that you:

Notify the shipper and freight forwarder immediately. Refer to emergency contacts on the documents accompanying the DOC, including the freight forwarder.

Glossary of Terms

HEG: Hatching eggs are eggs that have a very small embryo inside that is dormant.

DOC: Day-old chicks are the newly hatched poultry. For the purpose of this manual, DOC include day-old turkey poults and ducklings.

Biosecurity is a set of procedures designed to protect DOC and HEG from disease and potentially harmful germs and is a key priority throughout the supply chain.

GPU: A ground power unit (GPU) is a vehicle capable of supplying power to aircraft parked on the ground.

APU: Auxiliary Power Unit.

NOTOC: Each airline is individually responsible for developing the procedures which must be followed to ensure that the Captain is fully informed. A typical process involves the use of the Notification to Captain "Document" which is otherwise known as a (NOTOC).

This guide is been supported by the following airlines and associations:

Minimum IATA requirements for a shipping label:

- Full name and address and contact number of the Shipper
- Consignee name and address and a 24 hour contact
- Air Waybill number
- Scientific name and common name of animal
- Number of birds / HE per container

References:

This guide has been prepared in consideration of existing codes and legislation including, but not limited to:

Council of Europe

www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/transport/Rec%20R%20(90)6%20transport%20Poultry.asp

www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/A_texts_documents.asp

www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/default.asp

Council Regulation (EC) 1/2005 on the welfare of animals during transport

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32005R0001

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32005R0001&from=EN

EFSA opinion of the scientific committee on the welfare of animals during transport January 2011

www.efsa.europa.eu/en/efsajournal/pub/1966

IATA - Live animal regulations

www.iata.org/whatwedo/cargo/live-animals/Pages/index.aspx
www.iata.org/publications/store/pages/live-animals-regulation.aspx
Corrigendum for 2017:
www.iata.org/whatwedo/cargo/live-animals/Documents/lar-43-edition-corrigendum.pdf

OIE code for terrestrial animals

www.oie.int/doc/ged/D10905.PDF

USAPEEC United States Poultry and Egg Export Council

www.usapeec.org

USDA United States Department of Agriculture

www.aphis.usda.gov/aphis/ourfocus/animalhealth/export

USPOULTRY Air Cargo Committee - Air Cargo Management Guide

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Rev. 1 January 2019