



Mortality Report 90

Sheep exported by air to Indonesia in August 2024

1 Summary

On 17 August 2024, a consignment of 95 breeder sheep was exported by air from Sydney to Jakarta, Indonesia.

A mortality rate of 84.2% (80 head), was reported for this consignment. This exceeds the notifiable mortality level of 1% for sheep as prescribed by the Australian Standards for the Export of Livestock (ASEL).

All 80 mortalities were reported by the exporter to be the result of technical malfunction of the cooling/ventilation system on the flight that triggered critical environmental conditions in the cargo compartment.

2 Background

The department has no previous notifiable mortality incidents recorded for sheep exported to Indonesia since the introduction of ASEL in 2005. Prior to this journey, 19 consignments of breeder sheep have been exported to Indonesia since 2005, with a total of 1651 sheep. This is the first notifiable mortality incident for sheep exported by air for the exporter involved.

3 Exporter's findings

The exporter prepared a report, which covers the details of preparation of livestock, the journey, and a potential cause for the mortalities.

3.1 The livestock

The consignment consisted of 95 breeder sheep.

3.2 Preparation in the approved premises

One approved premises was used for the preparation of sheep in this consignment. It is located in New South Wales, and it is routinely used to prepare livestock including sheep for export by air.

The required time for sheep to be held in pre-export quarantine for this market is 14 clear days. The sheep in the consignment met the importing country requirements of minimum length of time that livestock must remain isolated in an approved premises.

3.3 Health inspections

The sheep were examined by an Australian Government Accredited Veterinarian on 15 August 2024. Four animals were rejected with one due to a laceration, one due to keratoconjunctivitis, one due to scabby mouth, and one due to lameness. Otherwise, the sheep were deemed to be in good health.

The sheep were inspected on 17 August 2024 by the department's regional veterinary officer who deemed all presented sheep as fit for travel, and approved transport of the consignment to the airport for export.

3.4 Loading onto the aircraft

Once the sheep were loaded into the crates, they were kept undercover, and the temperature remained below 22 degrees Celsius. Loading onto the aircraft commenced at approximately 7am and concluded at 8am on 17 August 2024. During loading, the sheep were reported to be bright, alert and moving around in the crates, with stocking densities in accordance with ASEL. The sheep were loaded in the forward cargo compartment of the aircraft.

There was a delay in departure when the aircraft had to return to the gate due to a technical issue. The issue was resolved in just over an hour. During this time, the cargo doors were opened to assist airflow to the sheep.

3.5 Conditions during the flight

During the flight, a malfunction of the cooling/ventilation system in the cargo compartment containing the sheep was detected. The crew attempted to manage the cargo conditions for the remainder of the journey.

The flight itself was uneventful, with no severe turbulence or weather noted.

3.6 Mortalities

During unloading, 80 of the 95 sheep were found deceased. An additional 5 sheep died after unloading: 2 died at the airport and the other 3 at the post-export quarantine facility in Indonesia.

Postmortems were performed on 2 sheep that had died after unloading. One was performed shortly after unloading, and the other later, at the quarantine facility. Findings reported from both postmortems suggested that the likely cause of death was asphyxiation and/or ammonia intoxication.

4 Exporter's actions

The exporter was in frequent communication with the airline to clarify the technical fault that had occurred during the flight and received confirmation that a cooling/ventilation system fault occurred during the flight. It was reported that it was likely that this fault had contributed to environmental conditions in the cargo hold that led to the deaths of the 80 sheep.

The exporter had measures in place prior to the flight to avoid this type of situation, such as instructions to the captain if temperatures exceed a certain point in the cargo compartment.

5 Department's actions

The department requested additional information from the exporter throughout the investigation and has found that there is no evidence to suggest that any breaches of ASEL may have led or contributed to the mortalities.

No regulatory action has been taken.

6 Conclusions

After review of the reports provided by the exporter and airline, the department determined that the technical fault identified during the flight, and the resulting environmental conditions that were likely to have been experienced in the cargo hold, provide a plausible multifactorial cause of the sheep mortalities.

The department has found that the exporter was not at fault in this incident and is satisfied that the steps taken before the flight were appropriate. The exporter has continued to work with the airline to get assurances that updated procedures will prevent a similar event from occurring in the future. The exporter has undertaken to review its standard instructions to the captain for air consignments once the airline's procedures are finalised.