

# **Mortality Investigation Report 60**

Cattle exported by sea to Vietnam in March 2016



## Summary

On 14 March 2016, Frontier International Northern Pty Ltd (FIN) exported a consignment of feeder and slaughter cattle by sea from Darwin to Vietnam. There were 13 mortalities in this consignment of 1,318 cattle, recording a mortality rate of 0.99 per cent. This exceeds the reportable mortality level of 0.5 per cent for cattle on voyages of less than ten days duration as prescribed by the *Australian Standards for the Export of Livestock* (ASEL).

Respiratory disease was the main factor contributing to the mortalities.

The department did not take any regulatory action against the exporter.

## Information reviewed

The department investigated the mortalities by reviewing the following information:

- · report from the exporter
- end of voyage report and daily voyage reports
- documents from the Australian Government Accredited Veterinarian (AAV) who prepared the consignment
- · report from the Master of the vessel
- · documents from the regional department veterinary officer (DVO)
- · records from the registered premises
- the department's records from previous and subsequent voyages.

## Background

FIN is experienced in preparing cattle for Vietnam. For the 12 months prior to this incident (1 March 2015 – 28 February 2016) FIN exported 16 consignments comprising 43, 451 cattle to Vietnam, with an overall mortality rate of 0.13 per cent (57 mortalities). This is the exporter's first reportable mortality incident.

Over the previous five years (to March 2016) the vessel has had one other reportable voyage which occurred in October 2014 and recorded a mortality percentage of 1.12 per cent (Report #55).

As at 30 April 2017, there have been six reportable mortality incidents (including this incident) recorded since exports to Vietnam commenced in December 2012. In the 12 months prior to this incident (1 March 2015 – 28 February 2016) there were 100 voyages comprising 105 consignments of 338 086 cattle exported to Vietnam. The overall mortality rate of these consignments is 0.13 per cent (454 mortalities).

## **Investigation findings**

#### Preparation in the registered premises

Cattle were sourced from five properties in the Northern Territory and assembled at two registered premises in Darwin between 4 March and 13 March 2016.

On arrival at the registered premises cattle were weighed and drafted. Long wave ear tags were also applied as part of the exporters ESCAS control and traceability system.

Weather conditions in the registered premises were hot during the preparation period, with maximum temperatures ranging from 33.8°C to 36.6°C (BOM - 2016).

An Australian Government Accredited Veterinarian (AAV) and a departmental veterinary officer inspected the cattle at the premises on the 13 and 14 March 2016. There were no mortalities and no treatments required at the premises. The AAV removed one lame steer from the consignment at the time of loading the trucks.

#### Loading onto the vessel

Cattle were loaded onto the vessel in accordance with ASEL standards. Heavy cattle (above 600kg) and horned cattle were loaded onto the vessel separately and given extra space and bedding. Cattle were loaded in accordance with the exporters' Heavy Cattle Management Plan with heavy cattle loaded into pens closest to the loading and discharge ramps and loaded onto the vessel last.

The vessel has five decks and the exporter's consignment of 1,318 cattle was the only consignment on the vessel and were loaded onto all five decks of the vessel. The vessel numbers its decks with deck five being the bottom deck.

#### **Mortalities and treatments**

On voyages such as this one, where there is no veterinarian on board, the Australian Livestock Export Corporation Limited (LiveCorp) accredited stock person works with the Master of the vessel and the crew to maintain the health and welfare of the livestock on board and is responsible for reporting to the department

A number of cattle required treatment for swollen legs and respiratory problems during the voyage. Daily voyage reports submitted by the accredited stockperson recorded treatments and mortalities. Cattle presenting with rapid respiration were treated with antibiotics and a number of cattle with swollen legs and feet were treated with anti-inflammatories and antibiotics. One animal was treated with antibiotics for an eye condition. The stockperson tracked the progress of treated cattle.

All 13 mortalities were cattle sourced from the same property of origin near Alice Springs. These cattle were Santa Gertrudis, Droughtmaster cross steers. Ten mortalities occurred on deck four (second lowest deck of the vessel) these cattle had an average weight of 560 kg. Three mortalities occurred on deck 5 (the lowest deck of the vessel) these cattle were over 650 kg.

Post mortems were completed by the accredited stockperson on three of the mortalities. The accredited stockperson suggested that the animals died from respiratory disease.

Voyage Days	Mortality #	Cumulative #	Deck/s	Cause of mortality	Wet bulb temp /humidity/seas
1	0	0			32°C /79%/Rough seas
2	5	5	4	Respiratory	32ºC/not recorded/Rough
3	1	6	5	Unknown	32ºC /79%/Moderate
4	0	6			33ºC /80%/Moderate -rough
5	2	8	4, 5	Respiratory	31ºC /79%/Slight-moderate
6	1	9	4	Unknown	32ºC /79%/Slight-moderate
7	2	11	4, 5	1 pneumonia, 1 unknown	32ºC /79%/Slight
8	1	12	4	Euthanised – respiratory	30ºC /78%/Moderate
9	1	13	5	Respiratory	In port

The following table provides information on mortalities during the voyage.

Table 1: Daily mortalities and weather conditions during the voyage.

#### Australian Maritime and Safety Authority Evaluation of the vessel

The AMSA investigation, including review of shipboard records during the voyage, did not disclose any anomalies in relation to livestock services, with the vessel compliant with the requirements of Marine Order 43 for this voyage.

## Conclusions

The department confirmed the cattle were prepared and loaded in accordance with ASEL requirements.

The department's review did not find any information to link the mortalities to the preparation of the cattle in the registered premises or the loading of the vessel. The mortalities were all in heavier cattle from the same property of origin. These cattle had all arrived at the registered premises on 10 March 2016 and had additional time above the ASEL requirements of 24 hours in the registered premises prior to departure. Based on information provided by the accredited stockperson on board and the exporter's review of the incident the likely cause of the mortalities was respiratory disease.

In the 12 months following this voyage (1 April 2016 – 31 March 2017), FIN completed ten voyages to Vietnam for cattle, with a total of 25 121 cattle exported and 39 mortalities, a mortality rate of 0.16 per cent.

Between the completion of this voyage and 31 March 2017, the vessel shipping this consignment has completed 13 voyages carrying a total of 19 522 cattle. There were 43 mortalities reported, a mortality rate of 0.22 per cent.

The department did not take any regulatory action against the exporter.