

# Recommendations for the cleaning of transport trucks after transporting BVD virus carrying livestock (Persistently Infected or PI animals)

## **Background**

BVD is largely a disease of cattle. Some cattle are born persistently infected (PI animals) with BVD which means that they are infected for their entire lives and excrete huge amounts of the virus via all body fluids (including faeces, urine, saliva, nasal secretions and milk).

Cattle persistently infected with BVD occur throughout New Zealand but in relatively low numbers (<0.1% in adults but closer to 0.5% in young calves). Even at these low numbers, one persistently infected animal can be expected to be transported every tenth full unit load of adults or every second to third full unit load of weaners. Farmers and therefore transport operators are generally unaware of these PI animals. This is one of many good reasons to regularly clean stock trucks.

In addition to this 'normal' level of PI animals, there are situations on individual farms where there may be large numbers of PI animals at any one time – over 50% of a particular age group may be affected in outbreak situations, especially in stock that is less than 24 months of age. Generally farmers are aware of this situation as they have had problems rearing these animals and usually have sought veterinary advice. The usual outcome is that, once identified, this group of PI animals is culled, which means they are sent to slaughter at a meat works if of suitable size.

A PI animal that is transported has a good chance of infecting other cattle being transported at the same time – directly from secretions, rubbing together from hair/skin or indirectly from air transmission. This only becomes a problem if the in-contact animals have not been exposed to the virus before or are not currently protected by BVD vaccination.

## **Survival of BVD virus**

The BVD virus is quite fragile and only remains viable for a few hours if directly exposed to sunlight or disinfectants or heat. However, studies have shown that the virus can remain viable for days or weeks when present in globs of mucus (snot) or faeces at low ambient temperatures (5°C). This means that at cooler times of the year and where mucus, hair/skin, faeces remain in a truck from a PI animal, many other animals may become infected over days after the original contamination.

## **Recommendations to minimise the possibility of PI animals infecting other cattle**

When asked to transport known PI cattle:

1. Only carry the PI cattle on the trip unless all the remaining stock being transported are going directly to a slaughter plant.
2. The key thing is to high pressure hose out the entire unit as soon as practical after transporting the PI animals, and definitely prior to transporting any other stock. Start hosing at the top and work down to the floor. Pay special attention to the walls as this is where a lot of virus will be present. This needs to be thorough so that no mucus (snot), hair/skin, faeces or urine remains. This job may be easier if the unit is clean before the stock is transported.
3. Follow this up by spraying the unit with disinfectant from top to bottom, especially at cooler times of the year. Any commercial grade disinfectant is likely to be effective, provided the unit has been first thoroughly cleaned of faeces, mucus, skin debris etc.
4. Thoroughly clean and disinfect footwear used and replace contaminated overalls/clothing with clean gear.

## Notes

The aim of these procedures is to reduce the risk. Elimination of the risk cannot be guaranteed.

Farmers are generally aware of the risk of BVD entering their farm from incoming stock. Those that have a BVD control programme in place will have considered ways to mitigate the risk of incoming stock being exposed to BVD virus on the truck by making sure all incoming stock are vaccinated, or isolated from other stock on farm for a few days after arrival.

If stock truck operators use simple cleaning and disinfecting procedures and farmers put in place a programme to control the disease, then both parties ultimately will benefit – truck drivers by having fewer PI animals to cart and farmers reducing the risk of infection entering the farm from stock trucks.

BVD Steering Committee  
September 2015