New strain of *Salmonella*

Information note for markets and hauliers

January 2019

**Background**

APHA has recently investigated incidents of a potential new strain of *Salmonella Typhimurium* in sheep. This strain of *Salmonella* is associated with an on-going human outbreak. In batches of affected ewes the animals were **dull** with **diarrhoea**, and affected flocks had **high mortality rates**. However, not all infected animals on the affected premises displayed clinical signs. Other species of animals have also tested positive for this strain of *Salmonella*. Animals (and flocks) without any clinical signs may still be carrying and shedding this *Salmonella*. *Salmonella* can also infect other livestock, such as pigs, poultry, horses, cattle, as well as farm dogs and wildlife. They may show no clinical signs at all, or may have diarrhoea.

Human illness in this outbreak has mostly been associated with the handling of and consumption of lamb and mutton. It is also possible that farm staff or family members may become infected through direct contact with infected animals, and an individual haulier has become ill via this route.

*Salmonella* can be introduced and spread by:

- Movement of animals, which may or may not be showing any clinical signs of infection
- Equipment and machinery e.g. handling/dosing equipment
- Vehicles – especially contaminated wheels and footwells
- Contaminated clothing and footwear
- Contaminated feed
- Wild birds and pests

Depending on the weather, *Salmonella* can potentially survive for months in the environment.
Biosecurity advice

Biosecurity is very important to help stop the spread of Salmonella.

Avoid selling, buying or transporting sick animals. Clinically affected animals will be shedding a lot more bacteria into the environment and so are more likely to spread the infection.

Avoid mixing different batches of animals as far as possible.

Moving pen to pen during selling will spread infection, so better to avoid this practice at markets.

Ensure a high standard of cleansing and then appropriate disinfection at the end of a market or for vehicles before the vehicle is re-loaded (with another load of animals or with equipment etc.)

Cleaning & Disinfection (C&D)

This is particularly important at markets and for hauliers to help stop the spread of Salmonella between different premises.

When completing C&D at markets and on livestock transport vehicles, Defra-approved disinfectants must be used at the dilution rate shown on the General Orders list. A list of Defra approved disinfectants can be found on the gov.uk website: http://disinfectants.defra.gov.uk/DisinfectantsExternal/Default.aspx?Module=ApprovalsList_SI

The following Chlorocresol-based disinfectants are effective against Salmonella, shown below with the appropriate dilution rate:

<table>
<thead>
<tr>
<th>Disinfectant</th>
<th>Dilution rate</th>
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<tbody>
<tr>
<td>Bi-OO-Cyst</td>
<td>1:50</td>
</tr>
<tr>
<td>Cyclex</td>
<td>1:24</td>
</tr>
<tr>
<td>Interkokask</td>
<td>1:50</td>
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<tr>
<td>KC5000</td>
<td>1:50</td>
</tr>
<tr>
<td>Kilcox</td>
<td>1:50</td>
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<tr>
<td>Virkon LSP</td>
<td>1:40</td>
</tr>
</tbody>
</table>
It is important that dirty equipment/vehicles are first cleaned to remove any visible contamination so that the disinfectant can work effectively.

The disinfectants need to then be applied to the cleaned surfaces at the correct concentration.

Livestock vehicles must be C&D as soon as practicable after use, and in any case within 24 hours or before the vehicle is next used for carrying livestock or poultry (The Transport of Animals (Cleansing and Disinfection) Order 2003).

Ideally wheels and wheel arches of vehicles and personnel’s footwear should be C&D between holdings or when moving between clean/dirty areas at a market.

Boot dips should be regularly cleaned and replenished with disinfectant at the correct concentration, visible and be frequently used.

Staff, people visiting markets and hauliers should be encouraged to wear appropriate personal protective equipment (PPE) such as a clean boiler suit and wellies.

Where available, hand washing facilities should be regularly used.