



Understanding and managing the risks from *E. coli* O157 in an open farm context

Following the outbreak of *E. coli* O157 infection associated with Godstone animal petting farm last summer, an independent investigation was established by the Health Protection Agency into the causes and implications. Although the investigation committee, led by Professor George Griffin, has not yet finalised its considerations and report, the agencies agree that it is timely to share important points emerging from its work, bearing in mind the upcoming Easter holidays and the start of the main visiting season.

'Open farms' (or 'petting farms') provide a valuable recreational and educational experience for many people. As with many activities in life, visits to open farms can never be considered free from all risk – such an environment is not attainable – and one of the risks which needs to be understood by farm operators and their staff, regulators and the visiting public alike is that of infection caused by the bacterium, *E. coli* O157.

The assumption must be that all ruminant animals carry *E. coli* O157 and excrete it in their faeces. *E. coli* O157 is a very infectious disease. Swallowing a small number of the bacteria can cause illness. While relatively rare in relation to the millions of visits paid to open farms each year, there must be no complacency as *E. coli* O157 can cause very severe complications in all age groups but especially in children under 5. This advice is intended to help with sensibly managing the risk to visitors, especially children, while retaining the enjoyment.

The standards which the operators of open farms, including 'petting farms' are expected to meet are set down in an information sheet published by HSE – this is <http://www.hse.gov.uk/pubns/ais23.pdf> 'Avoiding ill health at open farms – advice to farmers'. This guidance, which has a supplement aimed at teachers who may take groups of children on organised outings to such farms, is used by inspectors from the Local Authorities and HSE to judge compliance with the relevant health and safety legislation.

The guidance describes how to minimise the risk to visitors from being contaminated and accidentally ingesting the bacteria. It covers aspects such as livestock management, the importance of farm layout, the need for cleanliness of contact areas, keeping eating and picnic facilities away from animal contact areas, good visitor information and signage, the need for visitor supervision, especially in contact areas, by trained staff and the importance of washing facilities - their location, attractiveness, capacity, cleanliness, maintenance and use.

The need to strengthen the guidance in any areas will be reviewed in the light of Professor Griffin's report when it is published. Meanwhile, the emerging findings from the investigation committee reinforce the importance of these precautions, and highlight the importance of three areas of risk management. In particular in the light of the Godstone outbreak, they and we wish to emphasise:

1. People should not have contact with animal faeces – this is the committee's strongest recommendation. There is a need to keep all areas accessible by the public clean and free of faecal material, including preventing faecal seepage and runoff from pens. The public should not have access to non-visitor areas, such as manure heaps. Other parts of the farm such as play areas, sandpits and picnic areas should especially be kept clean and free from contamination.

2. Visitors may have little appreciation of the hazard posed by *E. coli* O157 or on how to avoid infection. It is therefore important that everyone on starting a visit to an open farm, particularly those with children, is made aware that:
 - *E. coli* O157 should be assumed to be present in the faeces of all ruminant animals and on the animals themselves and on many surfaces.
 - A very small dose can cause infection.
 - The serious nature of the illness *E. coli* can cause, especially in children under five.
 - Handwashing with soap and water is the most effective method of reducing risk of infection - gels and wipes should not be used as an alternative to hand washing.
 - Handwashing should take place after any contact with animals and when moving from any animal areas to other areas including non-animal play areas and places where food is consumed such as picnic areas, cafes and similar.
 - Any personal items of visitors which may have had contact with animals or have fallen on the floor and possibly contaminated should be cleaned thoroughly before being handled, particularly by children.

- 3 Supervision of children's handwashing is essential. Young children cannot be expected to understand and follow the guidance, so the responsibilities for adult supervision must be clear.

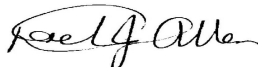
Working with the Department of Health we are also promoting some straightforward public health message about *E. coli* O157, and attach these here for your information.

Public Health Messages

- ◆ You should assume that all cattle, sheep and goats are infected with *E. coli* O157 bacteria, even if the animals look clean and healthy.
- ◆ You can therefore pick up *E. coli* O157 by touching animals, fences and other surfaces and accidentally transfer the bacteria to your mouth.
- ◆ Children, especially those under 5, are particularly vulnerable to *E. coli* O157 infection and are more likely to suffer very serious illness as a result.
- ◆ Washing your hands thoroughly with soap and water will reduce the chance of infection. Remember to wash your hands after touching an animal, before eating or drinking, and after removing clothing and shoes worn on the farm.
- ◆ Children should be closely supervised to ensure that they wash their hands properly after contact with animals.



Geoffrey Podger
HSE



Derek Allen
LACoRS



Justin McCracken
Health Protection Agency