

THE GOOD, THE BAD AND THE FUNGI

APPENDIX 11

SCOTTISH CENTRE FOR INFECTION AND ENVIRONMENTAL HEALTH

GUIDANCE NOTES SERIES

E. COLI 0157 AND OPEN FARMS

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BACKGROUND

Visits to farms are recognised as an enjoyable experience for all age groups. In particular, children benefit from the experience and should be encouraged to visit open farms to learn about rural life and experience contact with animals. This guidance provides advice on protective practices aimed at reducing the risk of ill health associated with open farms and compliments the general guidance contained in Guidance Note: *E. coli* O157:H7, GN 5 - 02/2000.

HEALTH RISKS

All animals naturally carry a range of micro-organisms, some of which can be transmitted to humans, where they may cause ill health. *Escherichia coli* O157 (*E. coli* O157) is an example of a micro-organism that may be contracted on farms. This organism has little or no effect on the health of animals and they show no signs of illness or distress.

E. coli O157 however, poses a serious hazard to humans with those particularly at risk being the very young, the very old and the immuno-suppressed. The infection is the major cause of renal failure in children in the UK.

The infective dose of *E. coli* O157 is considered to be very low and is transmitted to humans by the consumption of contaminated foods or water, person-to-person spread or contact with infected animals or their faeces.

Consequently current veterinary and medical opinion is that it is reasonable and advisable for farmers to assume that all ruminants (cattle, sheep, goats and deer) carry *E. coli* O157. The organism has been found in a range of other animals including geese and seagulls.

There are no tests in the live animal to conclusively prove that it is free of *E. coli* O157 infection, therefore it must be assumed that farm-associated animals are likely to be infected by this organism. On this basis, control measures introduced should be aimed at reducing the potential risk to those who choose to visit open farms.

LEGISLATIVE POSITION

- Employers have a responsibility under Sections 2 and 3 of the Health & Safety at Work etc Act 1974 and in particular, responsibility in relation to The Management of Health & Safety at Work Regulations 1992 (SI 1992 No 2051).
- In terms of The Control of Substances Hazardous to Health Regulations 1999 (SI 1999 No 437) there is a responsibility on the employer to carry out a risk assessment on the exposure to hazardous materials including micro-organisms.
- Section 2 of the Occupiers Liability (Scotland) Act 1960 places a duty on the occupier of land to take reasonable care for the safety of, 'a person entering thereon in respect of dangers which are due to the state of the premises or to anything done or omitted to be done on them'.
- As a form of food poisoning, cases of *E. coli* O157 are notifiable in terms of The Public Health (Notification of Infectious Diseases) (Scotland) Regulations 1988 and 1989 (SI 1988 No 1550) (SI 1989 No 2250).
- When food is produced and sold on the premises the occupier has a responsibility to comply with the Food Safety Act 1990 and the Food Safety (General Food Hygiene) Regulations 1995 (SI 1995 No 1763).
- The Food Safety (General Food Hygiene) Regulations 1995 (SI 1995 No 1763) implements the provisions of Council Directive 80/778/EEC relating to the quality of water intended for human consumption for food production purposes. Regulation 2 sets the quality standard for food used for food production purposes.
- Section 3 of The Private Water Supplies (Scotland) Regulations 1992 (SI 1992 No 575) (Amended SI 1998 No 1856) refers to the need to provide a wholesome water supply.
- In addition to the above requirements, local education authorities, private school governors etc will be under a common law duty to ensure that children in their care are reasonable safe whilst visiting any farm.

PRINCIPLES OF GOOD PRACTICE

Visitors to farms are most likely to become infected with *E coli* O157 from direct or indirect contact with animals or their faeces. Possible routes include:

- Contact with animals in petting areas or during bottle-feeding.
- Touching gates or animal pen divisions contaminated with faeces.
- Walking through areas grossly contaminated with faeces.
- Putting fingers or items into the mouth e.g. smoking, eating, dummies etc.

ADVICE FOR FARMERS

Farmers and others responsible for farms open to the public should be advised to introduce the following measures to reduce the potential for spread of infection.

- **Farm layout and visitor routes**

A visitor route requires to be organised around the farm that ensures visitors are diverted away from restricted areas e.g. parts of the farm where work is going on. There should be no access to restricted areas, preferably separated by an adequate barrier such as fencing.

- **Animal contact**

Animals, that farm visitors are able to pet, handle and feed, require to be specifically identified. Animal contact areas require be kept free from any build up of faeces. Contact areas within animal housing require to be kept clean, including pen divisions and gates etc. Contact areas should be cleaned whenever animals are moved in or out of them.

- **Refreshment areas**

Visitors should be prohibited from eating (including sweets), drinking or smoking within the animal contact areas and should only be allowed in a designated refreshment area.

Washing facilities require to be provided at the entrance to the designated refreshment areas and all visitors should be advised to wash their hands before the consumption of food or drink. Designated refreshment areas require to be sited away from animal contact areas.

All animals, including domesticated fowl, farm dogs etc, require to be excluded from the refreshment areas. Any discarded foodstuffs should be cleared from the refreshment areas to discourage wild birds from feeding and contaminating the area.

Kiosks for the selling of sweets, ice creams etc require to be sited in the 'clean' area of the farm, such as within the designated refreshment area. Visitors should be reminded, verbally and by notices, to wash their hands before touching or eating purchased food or sweets.

- **Washing facilities**

All open farms, especially those where visitors are encouraged to have contact with animals, require to provide adequate washing facilities. Permanent washing facilities may require to be supplemented with additional temporary facilities during busy times of the year. Washing facilities can, for example, be individual basins, or troughs with a number of running water outlets.

Washing facilities require to be accessible to all visitors and may require to provide a raised standing area for children. All washing facilities must provide running water, liquid soap (bactericidal soap is not necessary) and a means of drying hands using hot-air hand dryers, or paper towels.

Visitors require to be directed to washing facilities after having intentional contact with animals i.e. petting barns, before accessing designated refreshment areas and before leaving the farm.

Young children must be supervised during hand washing to ensure it is carried out in a hygienic manner.

- **Water supply**

The water supply to the open farm may be from the mains water supply or a private water source such as a spring, well, borehole, loch or stream. The use of a private water supply is common in the remote parts of the country.

If private water supplies are not protected they can become polluted from a range of activities associated with the operation of farms. These include 'run-off' from manure or compost heaps, effluent discharges from slurry and septic tanks and contamination of the 'catchment area' from grazing livestock.

Particular care should be taken to ensure that grazing livestock are not in close proximity to the source and the distribution network of the supply.

Standards relating to water quality are the responsibility of the occupier and advice can be obtained from the local environmental health department.

- **Information and signs**

Notices require to be provided at all entrances to the premises advising visitors of the need for good hygiene and requesting they can eat and drink only in the designated areas. Additional information requires to be provided at appropriate places advising visitors to the need to wash their hands after contact with animals, along with providing instructions on how to wash hands properly. Parents of young children should be advised that dummies or toys that fall to the ground should not be used again until thoroughly cleaned. Additional guidance for visitors highlighting further precautionary measures would be beneficial.

- **Training and supervision**

Farm staff must be available to provide an adequate level of supervision, not least to protect the animals and ensure their welfare. Farm staff require to be trained and instructed on what visitors should or should not do during their visit.

All parties of nursery or school age children require to be accompanied by a minimum number of supervisory staff; the level of supervision is outlined below. While it is the responsibility of teachers and parents to make sure children wash their hands thoroughly, in some instances farm staff may need to assist in their supervision.

- **Farm management and husbandry**

The farm requires to be kept as clean as practicable, with areas that visitors have access being kept free from any build up of faeces.

Animals require to be kept as clean as possible and in clean conditions. Any animals showing signs of illness or stress should be removed from animal contact areas. Similarly, those animals that have just given birth or been born must not be put in to animal contact areas. If replacement stock requires to be bought in, these animals must be isolated from the other animals on the farm for a minimum of one month.

Manure, compost heaps and other waste deposits require to be sited away from visitor access areas or fenced off. If this is not possible, visitors should be prevented from coming into contact with the manure, compost or liquid run-off.

Visitors should not be allowed to bag compost. If however, farms wish to supply bagged compost for domestic use, visitors require to be made aware of the need to wash their hands after using the material at home.

Tools and implements used on the farm require to be regularly cleaned.

REFERENCES

Health and Safety Executive. Avoiding ill-health at open farms – advice to farmers (with teachers supplement). Agriculture Information sheet 23 (revised). HMSO, 2000.

Task Force on *E. coli* O157 Final Report, June 2001

GUIDANCE FOR TEACHERS

Teachers and others involved in organising visits to farms require to provide an adequate level of instruction and supervision for children in their care and should introduce the following measures to minimise the risk of spread of infection.

- **Arranging a visit to an open farm**

Facilities available at the open farm require to comply with the requirements outlined above. Arrangements for the visit must be discussed and agreed in advance of the visit with those in charge of the farm.

- **Parental consent**

Plans for a trip to a farm should be discussed in advance with parents and parental consent sought. Parents should be advised of the small but potential risk posed to their child from undertaking such a visit, in particular the potential of contracting *E. coli* O157 infection.

Age of children	Recommended minimum level of supervision (Supervisor: number of children)
<1 year	1:1
1 year to < 2 years	1:2
2 years to < 3 years	1:3
3 years to < 5 years	1:4
5 years to 8 years	1:8

- **Level of supervision**

As a general rule the following minimum level of supervision requires to be provided for visits to open farms:

If supervision levels are less than stated above, there should be no direct contact with animals for children under eight. A supervisor is considered as either a staff member of the school or crèche etc, or parent/guardian of a child.

Where direct contact with farm animals is possible, children under 5 years of age are at greater risk and may need to be carried or more closely supervised.

Supervisors require to be advised of their duties in advance of the proposed visit. Supervisors must ensure children wash their hands thoroughly and provide assistance when needed.

Children require to be encouraged to stay in their allocated group to assist in their supervision during the visit.

- **Instructions for parents and children**

Children must be advised of the rules for the visit. Children must not consume food or drink outside the designated refreshment areas. Children require to understand the need to wash hands thoroughly and when they are required to do so.

The parent or guardian of a child should be advised of the need to provide appropriate clothing, including sturdy outdoor shoes (not sandals) or wellington boots if possible for visiting an open farm. Also, any cuts, grazes etc on the child's hands require to be suitably covered with a waterproof dressing.

- **Personal hygiene**

Children require to be given proper instruction on when to wash their hands. When required, children must be given assistance in washing their hands thoroughly.

- **Contact with animals**

Children require to be discouraged from kissing animals. Children also require to be discouraged putting their fingers, pens, pencils or crayons etc in their mouths.

- **Contact with farm environment**

Children require to clean or change their footwear before leaving the farm environment, and must be instructed to wash their hands after any contact with animal faeces on their footwear.

- **Reported illness**

Any signs of illness (e.g. sickness or diarrhoea) occurring after a visit to an open farm requires to be reported to their GP. The GP should be advised of recent contact with farm-associated animals.