



Avoiding ill health at open farms - Advice to farmers (with teachers' supplement)

Introduction

This information sheet provides advice for farmers and others responsible for open farms, or farms which run open days, on practical steps to reduce the risk of ill health to visitors.

Ill health following visits to open farms is unusual. Such visits play a valuable part in the education and development of children, and are an enjoyable experience for many people.

Teachers and others who organise visits to farms should also read the separate supplementary sheet which forms part of this advice, to help them make sure that children do not become ill as a result of visits.

Background

All animals naturally carry a range of micro-organisms, some of which can be transmitted to humans, where they may cause ill health. Some organisms which may be contracted on farms, such as the verocytotoxin-producing bacterium *Escherichia coli* O157 (*E coli* O157), present a serious hazard and potentially cause severe disease. ***E coli* O157 in particular can cause severe illness in young children.** Good general cleanliness around the farm, separating eating and contact areas, adequate hand-washing facilities, information for staff and visitors, and proper supervision of animal contact and hand washing are all essential.

At least 45% of all cattle herds may carry the bacterium, and there have been cases of human ill health following contact with animals carrying it. Very low numbers of *E coli* O157 can cause infection and so it is important that farmers control the risks to visitors. Controlling the risks from *E coli* O157 will control the risks from most other organisms carried by animals which are transmissible to humans by hand to mouth.

The law

If you open your farm to the public, including for charity events, you have duties under health and safety law. The Control of Substances Hazardous to Health (COSHH) Regulations 1999 require an employer or self-employed person to:

- assess the risks to employees, self-employed people and the public from exposure to hazardous substances, including micro-organisms; and
- take appropriate action to prevent or adequately control that exposure.

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The remainder of this sheet gives advice on complying with these Regulations.

Assessing the risk

Your COSHH assessment is the essential first step in deciding what controls you need. Remember that:

- current veterinary and medical opinion is that farmers should assume that all ruminants (cattle, sheep, goats and deer) carry *E coli* O157;
- *E coli* O157 is found in a range of other animals including geese and seagulls;
- there are no tests in the live animal to prove that it is free of *E coli* O157 infection. A negative test does not mean the animal is free of infection. Animals which have previously tested negative may therefore begin to excrete the organism at a later date;
- *E coli* O157 may be introduced to your farm at any time by new stock, wild birds and animals, or by visitors such as delivery drivers who have visited other farms;
- young stock, or stock under stress because of pregnancy, unfamiliarity with people etc are more likely to excrete *E coli* O157;
- *E coli* O157 can persist for long periods outside the animal - up to 150 days in soil and 90 days in cattle faeces. Other animals on the farm, including pets, can therefore easily acquire the bacterium;
- visitors are most likely to be infected with *E coli* O157 from contact with animals or their faeces.

Controlling the risk

Given the advice above, assume that your animals carry *E coli* O157, and put controls in place to minimise the risk of visitors being contaminated by it, eg when:

- contacting animals in petting areas or during bottle feeding;
- touching gates or animal pen divisions contaminated with faeces;
- walking through areas contaminated with faeces and later removing footwear.

Contact with infected animals or their faeces in any of these ways can result in visitors accidentally ingesting the bacterium and suffering ill health if, without thoroughly washing their hands, they:

- put contaminated fingers in their mouths (including thumb sucking and nail biting). **Remember that children are very likely to do this;**
- smoke;
- touch their food.

Your controls should therefore concentrate on the following:

- farm layout and routes, including areas to which visitors should not have access;
- animal contact;
- siting of eating areas;
- washing facilities;
- information and signs;
- training and supervision;
- livestock management procedures;
- manure and compost heaps.

Farm layout and routes

- Decide which areas you want visitors to access.
- Make sure that routes around the farm divert visitors from non-access areas, eg parts of the farm where work is going on.
- Consider how you will prevent entry to non-access areas. Fencing is one solution.
- Route visitors to washing facilities as they leave any animal contact area, just before they access eating areas and before leaving the farm.
- Consider whether you can avoid routing visitors across farm tracks used regularly by stock. If this is not possible then make sure that visitors do not have to tread through any build-up of faeces. For example, scrape and wash down tracks after each milking, or provide duckboards or similar so that visitors avoid contaminating their footwear.
- Keep the farm as clean as practicable and ensure areas to which visitors have access are free from any build-up of faeces.

Animal contact

- Decide where visitors should be able to pet and feed animals, and which animals will be involved.
- Exclude visitors from non-contact areas, or install double fencing to prevent contact. Adequate fencing might include your existing fencing, plus hurdles or sheep or pig netting (to a height of around 1 m, properly erected and maintained).
- Make sure that contact areas are free from any build-up of faeces.
- Clean and disinfect pen divisions and gates in animal contact areas whenever animals are moved in or out of them.

Eating areas

- Discourage visitors from eating (including sweets) or drinking in animal contact areas.
- Make sure that visitors have to pass through or by washing facilities before going to eating areas.
- Site eating or picnic facilities away from areas where animals are likely to be contacted, and preferably at the end of the farm trail, or outside the main areas of the open farm.
- Exclude domesticated fowl, farm dogs etc from eating areas. They are likely to be contaminated with faeces and may contaminate eating areas. Consider wing clipping, double gates into eating areas and adequate fencing.
- Clear discarded food from eating areas to discourage wild birds from feeding and contaminating the area.
- Position ice-cream, sweet kiosks etc in the 'clean' areas of the farm, such as the eating areas or at the exit where visitors have passed washing facilities, and remind visitors using the kiosks, by notices or verbally, to wash before touching or eating purchased food or sweets.

Washing facilities

All open farms, but especially those where visitors are encouraged to contact animals, will need washing facilities. The numbers of facilities and their location is crucial to preventing ill health. Facilities can be individual basins, or troughs or pipes with a number of running water outlets. They need to be provided and easily accessible at:

- areas for intentional contact (petting barns etc). If there is a one-way system for visitors through the

contact area they should be provided immediately adjacent to the exit; if there is a two-way flow of visitors they should be provided immediately adjacent to entrances and exits. A one-way system may help to ensure that washing facilities are properly used;

- eating areas;
- the exit to the premises, where visitors may contaminate their hands removing footwear. If this is not possible (eg at sites with multiple exits) then provide signs advising visitors to wash their hands before they leave the premises;
- other areas where you expect contact to take place, eg those where young stock are housed. If you double-fence animals kept outside the contact area, so that contact is not likely, you may not need to provide washing facilities in those areas.

An acceptable way of estimating the capacity of the washing facilities is to:

- estimate the maximum number of visitors expected or permitted at one time;
- consider how many visitors will be in animal contact areas at any time - you may already limit numbers of visitors in these areas to allow them time to enjoy the experience with the animals;
- assess the rate at which visitors will leave contact areas, eg in large groups such as school parties or a few at a time;
- estimate the time taken to wash hands effectively, remembering that a thorough hand wash may take up to two minutes.

If you estimate that, for instance, 30 people will leave a contact area every 15 minutes, and each person will take two minutes to wash their hands, you should provide enough washing facilities for four people to use at one time (30×2 divided by $15 = 4$). Make similar calculations for other locations around the farm, eg at main exits or entrances to eating areas.

You can supplement permanent facilities with temporary ones at busy times, eg just before the summer holidays, but facilities should:

- be accessible by all visitors, ie at the right heights for both children and adults or with raised standing areas provided for children. Check these do not present tripping or falling hazards;
- have running water, preferably warm. It is easier to create soap lather with warm water, and it may encourage visitors, especially children, to wash

more thoroughly. Warm water supplies should be fitted with a means of restricting the temperature to around 43°C to avoid scalding;

- have liquid soap. Bactericidal soaps are not necessary;
- have paper or roller towels. Hot-air hand-dryers are suitable but may lead to queues which discourage visitors from washing their hands. Reusable hand towels are not suitable;
- be properly maintained and cleaned at least daily - contact with contaminated hand-operated taps can transfer bacteria from tap to person. Replenish paper towels as necessary.

Do not provide buckets or troughs of water which are reused by several people - they do not allow effective hand washing, and reusing water can spread bacteria among those using it. Adding a disinfectant to the water does not make the practice acceptable. Using cleansing wipes is not a substitute for proper hand washing and will not be effective if hands are heavily soiled.

Consider how you can encourage your staff and parents, teachers etc to make sure that children and other visitors wash their hands properly.

Information and signs

- Information should include at least notices at all entrances to the premises to remind visitors of the need for good hygiene, and request that they only eat or drink in the designated areas.
- Signs should be erected in appropriate places reminding visitors to wash their hands when leaving animal contact areas, before eating, and when leaving the farm.
- Washing facilities should have signs giving full instructions on proper hand washing.
- Consider whether leaflets, or pre-visit packs for schools, may be useful to advise visitors of good hygiene precautions (and other site rules).
- Remember that young children may have dummies or toys that they put in their mouths, and consider whether you need to remind accompanying adults not to put dummies that have fallen to the ground back into their children's mouths.

Training and supervision

- Staff should be trained and instructed on what visitors should or should not do.
- Provide guidance to staff on how to explain the hygiene message to visitors.

- Make sure staff know what to do if visitors won't co-operate, and how to handle aggressive visitors.
- Provide supervision in contact areas. The number of supervisors will depend on the size of the contact area and the number of visitors permitted or expected in that area at one time.
- Make sure that children are supervised while they wash their hands. Although this is the responsibility of parents or teachers, in some cases farm staff may need to help in supervising.
- Remind supervisors in animal contact areas (who may also be there to protect the animals) to ensure that visitors do not eat in those areas.
- Supervisors should discourage visitors (especially children) from putting their fingers in their mouths, or kissing the animals.

Livestock management procedures

- Arrange regular visits from a vet to check on the health of stock, especially for zoonoses such as salmonellosis, cryptosporidiosis, orf or ringworm.
- Assess whether animals are healthy before moving them to contact areas, but remember that animals carrying *E coli* O157 do not suffer ill-health effects.
- Do not put animals that have just given birth, or been born, in contact areas.
- Remove animals showing signs of ill health, such as diarrhoea, or stress from contact areas.
- Keep animals clean, and in clean conditions.
- Consider whether replacement stock should come from within the farm rather than being bought in. If stock are purchased, isolate them from other animals on the farm for one month.

Manure and compost heaps

- Position manure or compost heaps away from areas that visitors access, or fence them off.
- Make sure visitors do not climb on the manure or compost, or walk through the liquid run-off.
- Do not allow visitors to bag their own compost - bag it up ready for them.
- Clean tools regularly.

'No contact' farms

If visitors to your farm are not expected or invited to have contact with any of the animals (eg many farms

which open for single days, perhaps at lambing) consider whether you need to:

- arrange the 'open' part of the farm so that visitors cannot pass through or close to any areas in which animals are kept; or
- arrange routes through areas where animals are kept so that contact with them is not possible, eg by putting fencing between the normal barriers around the animal pens, barns etc and the visitor access route; and
- double-fence areas to which the public have access for picnics etc, so that animals in adjacent fields or pens cannot be touched from those areas.

Remember that children will want to contact the animals and so fencing should be of a standard they will find difficult to overcome (see 'Animal contact').

Sources of advice for farmers

The National Association of Farms for Schools (Tel: 01422 882708), the Federation of City Farms and Community Gardens (Tel: 0117 923 1800) and the National Farm Attractions Network (Tel: 01536 513397) all provide advice and other services to open farms. Consider using the assurance or inspection schemes run by some of these organisations.

Other advice is available from DEFRA/SERAD (see telephone books for contacts), veterinary surgeons, or the enforcing authority for health and safety legislation for your premises. Where the open farm is part of a commercial farm this will normally be HSE; in other cases it will be the local authority for your area.

Further information

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995 Website: www.hsebooks.co.uk (HSE priced publications are also available from bookshops.)

For information about health and safety ring HSE's InfoLine Tel: 08701 545500 Fax: 02920 859260 e-mail: hseinformationservices@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG. You can also visit HSE's website: www.hse.gov.uk

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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Avoiding ill health at open farms - Advice to teachers

AIS23 Supplement (revised)

This supplement to AIS23 *Avoiding ill health at open farms - Advice to farmers* advises teachers and others who organise visits for children to farms on controlling the risk of infections from the animals the children may contact during their visit.

All animals naturally carry a range of micro-organisms, some of which can be transmitted to humans, where they may cause ill health. Some infections which may be contracted on farms, such as the bacterium *Escherichia coli O157 (E coli O157)*, present a serious hazard and potentially cause severe disease which may be particularly acute in young children.

While the hazard from infection resulting from a farm visit is real, the risks are readily controlled by everyday measures. The following sensible steps will help make your visit even more safe, healthy and enjoyable.

Before your visit:

- read and understand the advice in the main AIS23 information sheet, and discuss visit arrangements with the farm management. Assure yourself that the facilities provided match the recommendations in AIS23;
- decide what the ratio of pupils to teachers/assistants/parents should be, using advice from the Registration and Inspection Unit of your local authority social services department. As a general rule, the ratio of supervisors to children should be 1:1 for children under 1 year old, 1:2 for children between 1 and 2 years old, 1:3 for children between 2 and 3 years old, 1:4 for children between 3 and 5 years old, and 1:8 for those between 5 and 8 years old. If supervision levels are less than this, you should not allow direct contact with the animals for children under eight;
- discuss with the supervisors, who may be parents or staff of the school, creche etc, their role during the visit. They must understand the need to make sure that the children wash, or are helped to wash, their hands thoroughly after contacting animals, and follow the other rules suggested below;
- discuss with pupils the rules for the visit, stressing that they must not eat or chew outside the areas in which you permit them to do so;
- make sure that pupils wear appropriate clothing, including sturdy outdoor shoes (not sandals) or wellington boots if possible;
- check that cuts, grazes etc on children's hands are covered with a waterproof dressing.

During and after the visit, make sure that the children:

- do not kiss animals;
- always wash their hands thoroughly before and after eating, after any contact with animals and again before leaving the farm;
- eat only food that they have brought with them, or food for human consumption they have bought on the farm, in designated areas, and never eat food which has fallen to the ground, or taste animal foods;
- do not suck fingers or put hands, pens, pencils or crayons etc in mouths;
- clean or change their footwear before leaving, remembering to wash their hands after any contact with animal faeces on their footwear.

Check that the children stay in their allocated groups during the visit, and that they:

- do not use or pick up tools (eg spades and forks) unless permitted to do so by farm staff;
- do not climb on to walls or animal pens etc;
- listen carefully and follow the instructions and information given by the farm staff;
- approach and handle animals quietly and gently;
- do not chase, frighten or torment the animals.

Remember:

- the children are your responsibility during the visit;
- you should supervise them during the visit, especially during hand washing to make sure that each child washes thoroughly. Farm staff may be able to help with this supervision;
- allow plenty of time before eating or leaving so that the children do not have to rush.

If a member of your group shows signs of illness (eg sickness or diarrhoea) after a visit, advise them or their parent/guardian to visit the doctor and explain that they have had recent contact with animals.

Further information

Extra copies of this information sheet and supplement are available free from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA. Tel: 01787 881165 Fax: 01787 313995. Website: www.hsebooks.co.uk