







OPEN FARMS AND PET FARMS IN IRELAND: A PRACTICAL GUIDE TO PREVENTING AND CONTROLLING INFECTION

Environmental Health Association of Ireland

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The Environmental Health Association of Ireland (formerly the Environmental Health Officers' Association), which was founded in 1949, is a non government Association with Registered Charity status and professional body that represents those engaged in the environment and health protection fields. Our primary aim is to promote Environmental Health and to educate, advise and heighten the awareness of Environmental Health issues among the public and the profession.

2. GLOSSARY OF TERMS

Asymptomatic: This refers to a person (or animal) who is infected with a pathogen but is not displaying symptoms of the disease.

Communicable disease: A communicable disease is generally considered to be an infectious disease capable of being passed from one person to another, either directly from one person to another or through contaminated objects

Contamination: The presence of disease-causing microorganisms or their by-products (e.g. toxins), chemicals and/or foreign bodies, at a level sufficient to cause a potential health hazard

Contagious: (synonymous with 'communicable') Any infectious disease capable of being passed directly from one person to another.

Diarrhoea: Is defined as the passage of watery or "loose" stools with an increase in stool frequency - at least three times in a 24-hour period.

Exclusion: The isolation from work/school/childcare or other occupational settings of a person suffering, or suspected to be suffering from a contagious infectious disease.

Gastroenteritis: (synonymous with 'infectious intestinal disease' or IID) Any infection of the gastrointestinal tract, regardless of the source. Gastroenteritis may be bacterial, viral or parasitic in nature.

Incubation Period: The period between exposure to an infectious agent and the development of symptoms or signs of illness.

Infectious Disease: An illness due to a specific pathogen or its toxic products that arises through transmission of that agent or its products from an infected person, animal or reservoir to a susceptible host, either directly or indirectly through an intermediate plant or animal host, vector or inanimate object.

Immunocompromised: A person who has impaired immunity due to disease (e.g. cancer) or medical treatment (e.g. corticosteroid drugs or radiotherapy).

Microorganism: Any organism that is too small to be visible to the naked eye (e.g. bacteria, fungi, viruses and protozoa)

Parasite: An organism that lives in or on another living organism.

Pathogen: A pathogen is any microorganism (bacteria, viruses or parasites) that can cause disease

Vulnerable Groups: These are groups in which, following exposure to a pathogen, there is an increased likelihood of severe disease. This would include children under 5 years, frail and weakened patients, the elderly, the immunocompromised and pregnant women.

Zoonoses: Zoonotic diseases (zoonoses) are those that can be transmitted from animals to humans.

3. FOREWORD

Open farms offer visitors the opportunity of seeing and coming into contact with animals – a valuable activity that brings many benefits and pleasure to children and adults alike. Visiting these venues presents a generally low, but possible, risk of visitors acquiring infection from the animals. However, where practices are poor on individual farms, risks may be higher.

Open farms have been associated in the past with a number of outbreaks of infectious disease most notably, in 2009, a large outbreak of E.coli O157 in the UK was linked to an open farm in Surrey. In 2013 the EHAI (Environmental Health Association of Ireland) carried out a national study of open farms in Ireland. The main aim of this survey was to assess standards of open farms with a particular emphasis on what infection control and prevention measures were in place on the farms visited. While some good practices were identified it was clear that more could be done to prevent against the risk of infection, particular in relation to control of animal contact, provision and location of adequate hand washing facilities and signage and visitor information.

This guidance document has been produced by a multi-disciplinary group set up by the EHAI. In addition to a cross-sector range of health and veterinary professionals, there was also industry representation on the group. The document is primarily aimed at open farms which allow contact with animals as well as mobile operators who take animals to other venues. It is also directed at visitors to open farms and in particular community and school groups who are preparing to visit an open farm.

As the title suggests, the guidance focuses on preventing and controlling infection on the open farm. The document contains an animal/species matrix which identifies what harmful pathogens are associated with each animal species. It also goes into detail about the main pathogens which may be present on farms i.e. VTEC (e.g. Ecoli O157), Cryptosporidium, Salmonella, Campylobacter and Ringworm. The "Risk Pathway for Microorganism" diagram in the document is important as it identifies where possible transmission of harmful microorganisms from animal to humans can be interrupted by measures such as prevention of contact with animal faeces in the first instance and effective hand washing.

This document outlines how a risk assessment should be completed and an open farm self assessment tool is provided to assist in this regard. The guidelines for the preventing or controlling infection outlined in Section 8 form the main body of this guidance document. It outlines many of the measures which the open farm operator, staff and visitor can do to prevent and control infection. There is an important focus on the provision of adequate and appropriately positioned hand washing facilities and how signage should direct visitors to hand washing facilities. The section on animal contact areas identifies many of the steps that can be taken to control and prevent against the transmission of infection while the document also contains information on eating and play areas, training and supervision and animal health and livestock management.

A number of appendices are contained in the document including an information sheet for temporary or mobile farm operators and an information sheet for the public, education and childcare services and community organisations.

The application of all of the measures and guidance documented in these pages will go a long way towards preventing and controlling infection on open farms.

PETER GAFFEY, Chairman EHAI

4. INTRODUCTION

There have been various terms used to describe open farms in Ireland such as 'pet farms', 'petting farms', 'activity farms' and 'visitor farms'. Some open farms are operated as a business attached to a traditional working farm, some are attached to a tourist attraction while others may be located beside a campsite or operate as a stand-alone, independent attraction. There are also mobile businesses that take the animals to the people rather than have the public visit the animals at a fixed premises. If you operate such a mobile business, please also read Appendix 1, which has been drawn up specifically for you.

Whatever the term you use to describe your open farm, the definition for the purposes of this guide is a premises that maintains farm animals, actively attracts visitors for leisure purposes and has visitor facilities. This may also include animal contact. It need not be open on a daily basis nor solely operate as commercial leisure activities.

Open farms are associated with fun, education and enjoyment for all ages. They are becoming an increasingly important element of the agritourism industry. While the risk of infection is generally low, there is, however, a well catalogued history of outbreaks of serious illness associated world wide with visits to such farms. In Canada, in 2009, for example, an outbreak of E coli 0157:H7 associated with a petting farm at a special event in British Columbia affected at least fifteen children and two adults. The majority of those who had become ill had direct contact with the animals and / or faecally contaminated bedding material. Most notably, in 2009, the largest outbreak in the UK of E coli O157 was linked to an open farm in Surrey. Ninety three people were infected, of whom seventy six (82%) were under ten years of age. Investigations pointed to the main animal petting barn as the source of the outbreak and there was also evidence of environmental contamination at the farm suggesting that even without direct animal contact, there was a risk of infection from contact with railings or soiled footwear. In 1995, at least thirteen children became ill with Cryptosporidiosis after a visit to an open farm in Dublin. In a cohort study, researchers compared the activities of the thirteen ill children to the activities of fifty two out of fifty five people who had visited the farm. The study revealed that illness was significantly associated with playing in the sand at the edge of a stream beside a picnic area to which animals had access.

There are guidelines in various countries around the world aimed at helping open farm operators to provide and maintain high standards in protecting the health of those that visit their centres. There are several such guidelines available in Australia, Canada and America. In June 2012, a UK document, produced by the Access to Farms partnership which includes representatives from various interested parties, including open farm operators was published. These guidelines you are now reading have been developed taking note of the standards available elsewhere but particularly the UK document, which was used as a benchmark during a survey of open farms in Ireland in the summer of 2013.

This survey was carried out because very little cohesive information was available on open farms around Ireland, including their types and sizes, volume of customers going to them, washing facilities provided, range of animals kept etc. The survey was conducted in twenty seven such farms by the Environmental Health Association of Ireland (EHAI).

The survey findings indicated that there were farms operating to a high standard in protecting the health of those who visited them. It was found, for example:

- Routes throughout most open farms were clearly defined for the public – this is good because the public are not then directed into areas of the farm where they should not be.
- In most farms visited, gates and / or doors were used so that an 'animal contact area' was not accessible to unaccompanied children – again, this is good for child safety.
- In just over four out of five open farms surveyed, visitors were not allowed to enter pens where animals were housed. This is good news because preventing visitor access to pens where animals are kept is one of the main ways of preventing visitors from getting contaminated by animal dung and so reducing the risk of getting sick from this contact.

However, it was also found that there was much that could be done to improve these standards throughout the country e.g.

- Approximately one fifth of the farms allowed visitors to enter pens.
- Hand washing is a very important way to reduce this risk of contracting illness on an open farm but in a quarter of the open farms surveyed, hand washing facilities were not provided at or near animal contact areas (petting barns etc).
- It was also found that in over a fifth of the farms, pen fronts did not prevent contamination of visitor walkways, therefore increasing the risk of contamination for visitors.

Appendix 2 gives further detail on the survey results.

Consequently, a need to develop national guidelines for the operation of open farms was identified by the EHAI and a working group was set up. The results of the survey have been used to inform the content of this guideline document.

For maximum benefit, these guidelines should be followed and implemented in their entirety rather than in part only.

5. AIM

This document aims to provide advice and guidelines to facilitate the protection of public health and to assist open farm operators and visitors in having a safe experience by minimising the risk of infection.

KEY MESSAGES

6. INFECTION CONTROL

Seeing and coming into contact with a variety of animal species is a valuable recreational and educational activity that benefits children and adults alike. However visiting these venues presents a low but possible risk of visitors acquiring infection and becoming ill. Healthy animals (wild, domesticated and companion) can carry a range of infectious diseases that can produce illness in humans. Diseases passed from animals to man are known as "zoonoses". Most commonly these diseases are enteric (they cause gastroenteritis), but they can pass on other, non-enteric infections (such as brucellosis or anthrax).

The majority of contacts between animals and humans do not result in any illness. Potentially, however, zoonoses can be spread by direct contact with animals, such as bites and scratches, or through indirect contact with animal faeces, bodily fluids, aerosols, birth products, or facilities / equipment/ pens / gates etc. contaminated with these materials.

New-born hoofed animals (e.g. calves, lambs, piglets and foals), newly hatched poultry, some reptiles and animals that are stressed or unwell present a higher risk of zoonoses because of increased shedding of harmful micro-organisms through their faeces, urine etc). Many of the pathogens (germs) described here are hardy and can survive in the environment (bedding, yard, grass, feed troughs etc) and on farm surfaces (fencing, gates, machinery / equipment, pen surfaces) for long periods of time (in some cases, up to year). As a result, contact with the petting farm environment can lead to infection, even if there is no direct contact with animals.

6.1 WHAT IS AN INFECTION?

An infection occurs when a germ (or pathogen) enters the body and begins to multiply (reproduce). The germs may multiply to such an extent that they can cause illness. Occasionally, infection can be apparent (i.e. the person will have an immunological, or defensive, reaction to the germ and/or will develop signs and symptoms of disease) or it may be unapparent (mild or with no symptoms of disease, but often with immunological evidence of infection i.e. the person will develop antibodies to the infection). When someone carries a germ but it is not causing a true infection, the person is said to be "colonised".

6.2 HOW DO INFECTIONS SPREAD FROM ANIMALS?

There are several ways that zoonotic diseases can be spread:

Faecal-oral route:
Animal faeces may pass directly from soiled hands to mouth or indirectly by way of objects, surfaces, water or food contaminated with faeces. This spread may occur after petting animals or touching enclosure surfaces and neglecting to properly wash hands with soap and running warm water. Vero-cytotoxin producing E. coli, Salmonella and Campylobacter are examples of diseases readily spread this way.

Inhalation:
Humans may breathe in aerosols (droplets containing harmful organisms) originating from an infected animal or bird. Dust particles may contain harmful micro-organisms, become airborne and be inhaled. Ornithosis (Chlamydia psittaci) can be transmitted this way from infected pet birds, domestic poultry or wildfowl. Toxoplasmosis and Chlamydia abortus (the agent of enzoonotic ovine abortion) are also spread this way.

Ingestion:
Consuming contaminated food or water may cause illness e.g. consumption of unpasteurised milk from an infected animal or eating animal feed. Listeria, Campylobacter and Salmonella are examples of diseases spread this way.

Skin or mucous membrane contact:
Animal bites and scratches readily cause skin infections. Infection can spread indirectly when broken skin or mucous membranes come in contact with contaminated animals or surfaces.

6.3 WHO IS AT RISK OF INFECTION IN AN OPEN FARM SETTING?

Everyone (staff and visitors) are at risk of acquiring an infection in a pet farm setting. Any person who can come in contact with infectious material from infected animals (primarily animal faeces but also amniotic or birth fluid and the products of conception), can then potentially become infected with the pathogen carried by the animal. Many pathogens carried by animals do not result in the animal having symptoms, so the fact that the animal is carrying a disease-producing pathogen may not be apparent. Individuals who are more likely to have contact with

animal waste ("risky" individuals) are therefore at higher risk of BECOMING infected; this especially includes small children who will be too small to appreciate the dangers of touching animal faeces. It will also include staff at the farm, which is why repeated scrupulous handwashing with soap and warm water is so important in stopping the spread of infection.

For other groups of individuals, the danger is that if they become infected, they are at risk of developing a more severe form of the disease (vulnerable individuals). Such vulnerable groups include: young children, elderly persons, immunocompromised individuals (those with a medical condition that weakens their immune/defence system, such as patients living with, or being treated for cancer or other chronic diseases) and pregnant women. The immune system of pregnant women is depressed as part of their natural immunological response to carrying a baby, and this can make them more susceptible to certain infectious diseases (and in some cases may suffer a more severe form of the disease).

SPECIAL PRECAUTIONS FOR PREGNANT WOMEN VISITING A FARM

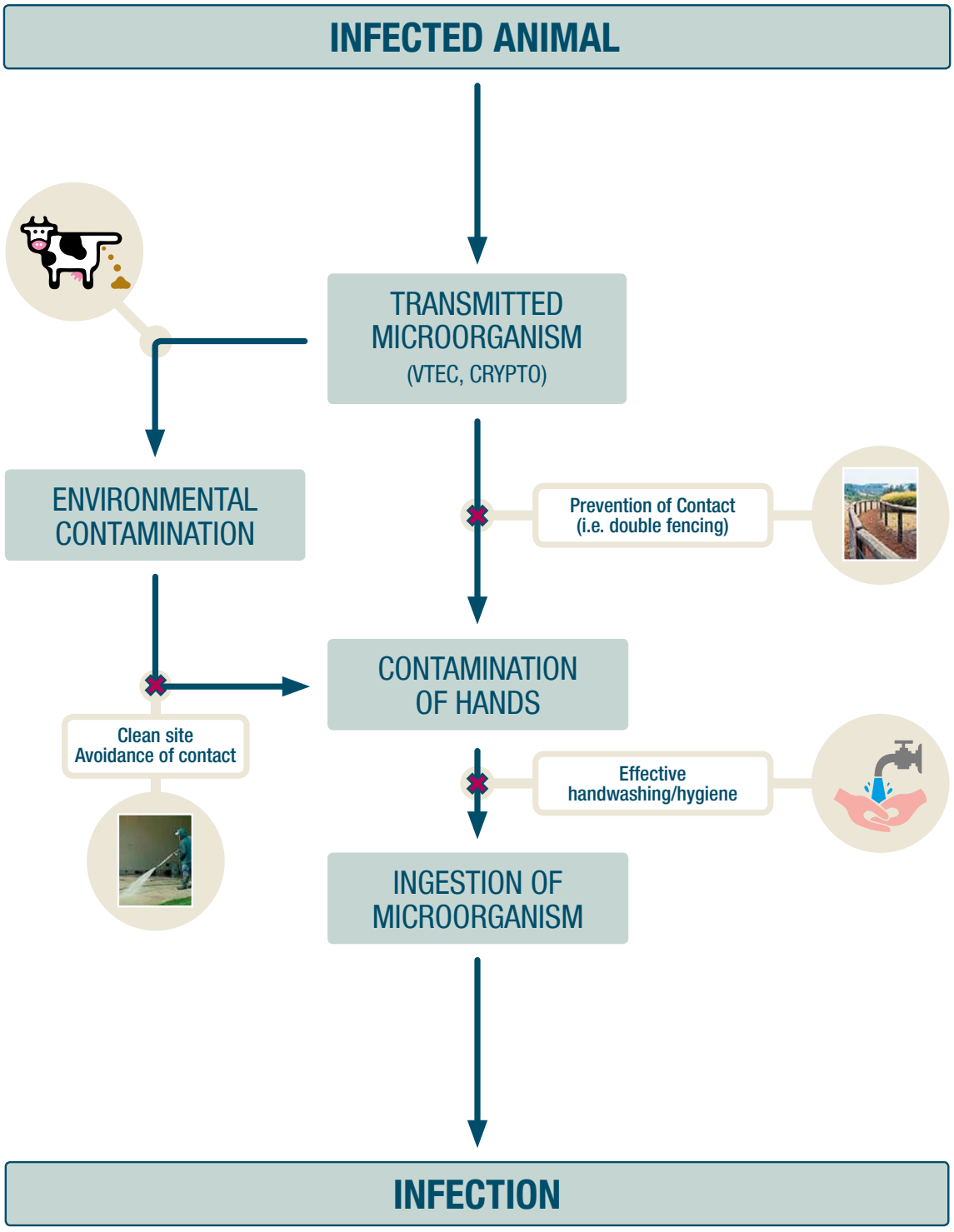
Pregnant women are more at risk of acquiring certain infectious diseases than others are. In addition, if they are infected, there can be a risk of adverse effects on them and on the foetus. These infections can be passed from pregnant, birthing or young livestock, including sheep and goats, to pregnant women. Therefore, women who are pregnant should take extra care when visiting an open farm.

Pregnant women should be made aware of the following when visiting an open farm:

- Avoid contact with all animals, particularly ewes about to lamb;
- Keep away from aborted or new born lambs, or with the afterbirth, birthing fluids or any bedding materials contaminated by such birth products;
- Avoid contact with clothing, footwear or other materials that may have come into contact with ewes that have recently given birth, their lambs or afterbirths;
- Pregnant women should ensure that their children and partners who have had contact with lambing ewes take appropriate health and hygiene precautions, including wearing appropriate clothing and thorough hand washing;
- Pregnant women who visit open farms should thoroughly wash their hands after any contact with animals, before eating, leaving the farm and at other appropriate times (see Section 8.8 of this document on washing facilities);
- Pregnant women should seek immediate medical advice if they experience fever or influenza-like symptoms, or if they are concerned that they could have acquired infection from a farm environment, within the two weeks following a farm visit.
- Pregnant women should not drink unpasteurised (raw) milk or eat dairy products made from unpasteurised milk.

Note: These risks are not only associated with sheep, nor confined only to the spring lambing season. Cattle and goats that have recently given birth can also carry similar infections.

RISK PATHWAY FOR MICROORGANISMS



✖ The red crosses denote points where infection can be interrupted
Adapted from UK Industry Code of Practice

7. INFECTIOUS DISEASE RISK ASSESSMENT

The term 'risk assessment' in this document refers to the assessment of the risk of the spread of zoonotic infections within the open farm. Risk assessment is also an excellent tool for the identification of general farm hazards. The Health and Safety Authority are the responsible authority and they give practical guidance on the carrying out of farm risk assessments.

When applying risk assessment to infectious diseases, the key factors that need to be considered are; the type of infection, the transmission pathways of the infectious disease, bearing in mind vulnerable groups.

The risk assessment process can be summarised as follows
1. Identify the hazards (infectious diseases)
2. Who can be harmed and how?
3. Evaluate the risks, existing control measures and additional measures which may be necessary
4. Implement the necessary control measures
5. Record your findings
6. Review and update as necessary

Once the risk assessment process has been completed you must evaluate the risks, what controls are already in place and what additional controls are necessary. Your findings should then be recorded in the *Risk Assessment* document

7.1 STEP 1 – IDENTIFY THE HAZARDS

A good way of identifying hazards or assessing where visitors may come in contact with infectious diseases is to walk around your open farm and look at all areas, draw a map of your farm identifying the different sections and potential hazardous areas that could reasonably be expected to be a risk. All sections of the farm should be included in the risk assessment. Examples of potential hazards are outlined in the sample risk assessment matrix on page [Page 14].

Pathogens most likely to be encountered on an open farm

All domestic farm animals carry, to varying degrees a range of dangerous pathogens, including VTEC, cryptosporidium and Salmonella. As a result, all animals should be assumed to be infected with these organisms, even though they show no signs of being so.

VTEC (e.g. E. coli 0157)

VTEC refers to a range of bowel bacteria (Escherichia coli are also referred to as E.coli) that are found in the bowels of warm blooded animals. VTEC produces a range of symptoms, from asymptomatic (having no symptoms) through moderate to severe gastroenteritis, occasionally with serious complications. VTEC is found widely in farming environments. VTEC can cause serious illness, especially in young children and the elderly including bloody diarrhoea and kidney failure, and even death. It can survive for up to a year in soil and manure.

The main pathogens responsible for VTEC infection are E. coli O157 and O26.

Annual numbers: Around 600 cases per year. Ireland has the highest VTEC notification levels in the EU.

Seasonal Distribution: There a sustained peak in VTEC incidence from August until October.

Incubation period: Typically 3 days with a range of 1 to 8 days. Duration of illness is generally 7 to 10 days.

Clinical Features: Abdominal pain which may often be severe (>90%), diarrhoea (severe in >60%) and bloody diarrhoea in >25%. Renal failure as a result of VTEC infection (haemolytic uraemic syndrome or HUS) develops in about 10% of cases, particularly in children and the elderly. Cattle, sheep and goats are the main recognised carriers of VTEC. VTEC may also be found in rabbits, dogs, horses, ponies, donkeys, pigs, chickens, deer, llamas and alpacas. Farm dogs, cats and wild rabbits can pick up the infection from an infected environment. Infection can also occur in wild birds. The dung of animals is the main source for this infection. It can also be spread through animals' saliva.

For more information see the HPSC factsheet on VTEC at: *http://www.hpsc.ie/A-Z/Gastroenteric/VTEC/Factsheet/*

CRYPTOSPORIDIUM

Cryptosporidium is a parasite commonly carried by calves, lambs, deer and goats which can lead to gastroenteritis and ultimately severe diarrhoea in young children, the elderly and those who are immunocompromised. It is capable of surviving for a long time in the environment - for up to a month in seawater and six months in manure.

Cryptosporidium is a protozoal parasite that generally produces an unpleasant but (in healthy individuals) self limiting intestinal infection. It can cause more severe disease in immunocompromised individuals and pregnant women.

Causative Agent: Cryptosporidium hominis (formerly known as C. parvum genotype 1) and C. parvum (formerly C. parvum genotype 2).

Annual Numbers: Between 400 and 600 cases per year. Ireland has the highest cryptosporidiosis notification rate in the EU.

Seasonal Distribution: There is a seasonal peak in spring time corresponding with the lambing /calving season.

Incubation period: Typically 7-10 days but a range of 1-28 days is possible.

Reservoir: The gastrointestinal tract of humans (C. hominis) and animals (C. parvum) including cattle,sheep, pigs, cats, dogs, poultry and fish. Asymptomatic carriage ranges from less than 1% to more than 3%.

Transmission is through ingestion of water or food contaminated with the faeces of an infected human or animal.

Cryptosporidium produces watery or mucoid diarrhoea that lasts between two days and four weeks.

SALMONELLA

Salmonella bacteria are very common and live naturally in the intestinal tracts of humans and other animals, especially birds and reptiles. Salmonella are usually passed to humans by eating foods contaminated by the bacteria. We may however also be infected by contact with animals and their dung or droppings. The bacteria are passed out in the animal dung or droppings and the bacteria may then contaminate bedding material, enclosures, fences, footpaths etc.

Salmonellosis produces a classical gastroenteritis with pronounced, occasionally bloody, diarrhoea. Ninety five percent of cases are foodborne.

Annual Numbers: Between 350 and 450 cases per year.

Seasonal Distribution: There is a seasonal peak during the summer months.

Causative Agent: Salmonella enterica, of which there are approximately 2,500 serotypes. S. Typhimurium and S. Enteritidis are the most frequent causes of salmonellosis in Ireland.

Reservoir: Gastrointestinal tract of many wild and domestic animals, birds (especially poultry), reptiles and amphibians.

Incubation Period: From 6-72 hours (generally 12-36 hours).

Clinical Features: Headache (75%), abdominal pain (90%), diarrhoea, nausea, fever (almost 90% of cases) and occasionally vomiting. Diarrhoea may be bloody (>20% of cases). The median duration of symptoms is 6-7 days but 25% of cases will have diarrhoea at 14 days.

CAMPYLOBACTER

Campylobacter species are prevalent in most warm blooded animals such as poultry, cattle, pigs, sheep, ostriches, shellfish and pets such as cats and dogs. The bacteria are well adapted to birds which can carry it without becoming ill. The main route of transmission is generally food borne via undercooked meat, unpasteurised milk or contaminated water. People may also become infected by contact with animals and their dung or droppings.

Campylobacter produces a diarrhoeal and systemic illness. Its public health importance lies in the fact that it is the commonest bacterial cause of gastroenteritis in Ireland.

Annual Numbers: There are between 1600 and 1900 cases reported in Ireland each year.

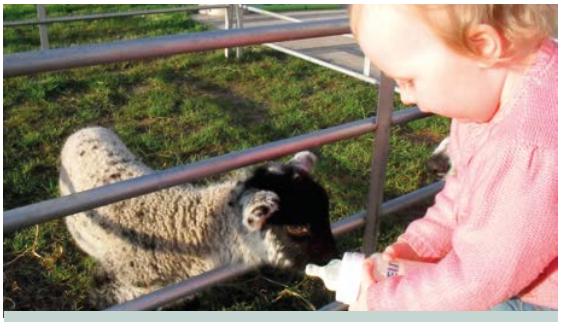
Seasonal Distribution: There is a seasonal peak in May June each year.

Campylobacteriosis is a zoonotic infection associated most commonly with poultry but also cattle and domestic pets. It is sometimes found in pigs and cattle.

Incubation Period: Typically 3 days (range 2-5 days). Range may vary from 1-10 days depending on the numbers of pathogens ingested and the physical condition of person affected. Symptoms last about one week.

RINGWORM (TINEA)

Ringworm is a contagious skin disease. Despite the name, it is not caused by a worm but through various type of fungi known as dermatophytes. The disease manifests itself as a flat spreading ring-shaped lesion. It is the most common infection spread from animal to human. It is thought to be fairly common in farm animal species and also may occur in dogs, cats, guinea-pigs. It can also be spread through contact with soil or indirect contact with items contaminated by the fungus e.g. gates, cattle pens, housing and persons clothing. The fungal spores may survive in the environment for long periods.



Other important zoonoses that may be present at visitor attractions include;

- Orf
- Q fever
- Leptospirosis
- Toxoplasmosis

7.2 STEP 2 – CONSIDER WHO MIGHT BE HARMED AND HOW

A visit to an open farm increases a person's exposure to the possible sources of infection by contact with animals or animal waste, animal feed or by the farm environment in general. Anyone can be infected, but children and the elderly are the most vulnerable. Children are particularly at risk because they are most likely to put contaminated fingers or items in their mouths (including thumb sucking and dummies/toys). Women who are pregnant and people with weakened immune systems, are also at risk.

Microorganisms are tiny (thousands can fit on the dot on the letter "i" on a page of newsprint) and it requires only small numbers of the pathogen to cause illness. As a result, just because something (an animal or an object such as a gate or fence) is not visibly contaminated with faeces, this does not necessarily mean it is free from risk.

Infection can occur on open farms:

- When touching or petting animals
- When bottle feeding or hand feeding
- Eating and drinking without washing hands first
- Touching gates, or animal pen divisions, or other structures contaminated with faeces
- Picking up/touching animal feeds or other items
- Removing footwear or clothing which has been soiled by animal faeces
- Using play equipment which has been contaminated
- Touching personal items taken on to the premises that have become contaminated e.g. dropped toys or baby soothers and pushchair wheels
- Being scratched or bitten
- Inhalation of airborne contamination
- From standing water pools

7.3 STEP 3 – EVALUATE THE RISKS, EXISTING CONTROL MEASURES AND ADDITIONAL MEASURES WHICH MAY BE NECESSARY

The overall risk is determined by a number of factors

- The likelihood of harm arising
- The severity of the harm
- The number of people who are potentially exposed to the risk.

When undertaking a risk assessment one should be aware that all animals can carry harmful micro-organisms. Ruminants (e.g. cattle, sheep and goats) carry VTEC but harmful bacteria including VTEC can also be found in a range of other animals and birds, including farm dogs and cats.

7.4 STEP 4 - PUTTING THE NECESSARY CONTROL MEASURES IN PLACE

Once hazards have been identified, the open farm operator needs to determine what control measures can be put in place. Control measurews are actions that need to be taken to prevent or reduce exposure to a substance hazardous to health, in this case, micro-organisms. The open farm operator needs to consider whether or not the hazard can be eliminated or avoided or if it is only possible to minimise the hazard. The best option is to try and eliminate the hazard but if this is not possible, the open farm operator must try and minimise the hazard. Control measures to prevent transmission of infection are outlined in Section 8 of this document. Worked examples of infectious disease hazards are outlined in the sample risk assessment matrix on Page 14. A combination of control measures will be necessary to protect the health of visitors. To be effective, these measures should be practical, workable and sustainable.

OPEN FARM NAME **HAPPY COW PET FARM**	OPEN FARM OPERATOR **JOE BLOGGS**		
SIGNED **JOE BLOGGS, OPEN FARM OPERATOR**	DATE **1ST JANUARY 2015**	RISK ASSESSMENT REVIEW DATE **1ST JANUARY 2016**	
List hazards and risks here:	**List groups of people who are especially at risk from the significant hazards**	**List required controls to be put in place here:**	Responsible Person
Hazard; Contamination of hands with harmful micro-organisms during animal contact **Risk;** Transmission of infection during animal contact	Open Farms visitors particularly young children and pregnant women Other vulnerable groups & elderly Open farm staff	• The animal contact area is to be suitably constructed and maintained in a suitable and clean condition. • All animal contact is supervised by suitably trained staff. • Ensure that visitors are advised to wash hands after touching or feeding animals • Adequate hand washing facilities provided at or near the animal contact/ petting area(s) and signage clearly posted • Surfaces such as fences and pen fronts are kept free from contamination	Open Farm Operator
Hazard; Human contact with animals known/ suspected to be carrying infectious disease **Risk;** Visitor contracting infectious disease	Open Farms visitors particularly young children and pregnant women Other vulnerable groups & elderly	• Segregate sick animals, prevent access to humans • Restrict access of visitors to new animals • Ensure good hand washing practices among staff	Open Farm Operator
Hazard; Visitors do not wash hands after exiting animal contact area and before eating/drinking **Risks;** Visitors will ingest harmful micro-organisms and will contract an infectious disease	Open Farms visitors particularly young children and pregnant women Open farm staff	• Hand washing facilities provided at or near the animal contact / petting area(s) and at or near the entrances to eating areas, with signage clearly posted. • Visitors instructed to wash hands • Signage directs visitors to hand washing facilities	Open Farm Operator
Hazards; Open farm routes not clearly defined and posted, visitors access unsafe & unclean areas **Risks;** Health and safety risks, Contamination of footwear/clothing	Open Farms visitors	• Routes and pathways are clearly defined and signposted • Non access areas fenced off and clearly marked • Measures must be in place to prevent contamination of walkways with liquid/waste run off from other areas.	Open Farm Operator
Hazards; Contamination of walkways and paths with liquid waste/run off, animal faeces, soiled bedding **Risk;** Transfer of harmful micro-organisms via soiled footwear buggies etc	Open Farm visitors	• Regularly clean walkways and paths • Elevate areas where natural flooding may occur • Provide duckboards on pen fronts to prevent seepage or runoff of faeces or effluent onto visitor routes	Open Farm Operator
Hazards; Contamination of hands in eating areas from contact with animals **Risk;** Transfer of harmful bacteria onto hands at time of eating	Open Farms visitors particularly young children and pregnant women Other vulnerable groups & elderly	• Ensure visitors cannot pet or touch animals when in the eating area e.g. by providing double fencing • Ensure animals are excluded from the eating area, including domestic animals and poultry etc.	Open Farm Operator Open Farm staff
Hazards; Contamination of the environment e.g. school, creche etc into which animals of a mobile farm are brought **Risk;** The environment into which the animals are brought may become contaminated by animal faeces, fur etc.	Occupants of the premises or visitors to the mobile farm, particularly young children and the elderly.	• Provide an animal health plan for the animals concerned • Ensure that the mobile unit is clean and that contaminated surfaces are regularly disinfected • Provide suitable means of waste disposal • Discuss arrangements with the owner / manager of the premises in advance of the visit	Open Farm operator

7.5 STEP 5 - RECORDING OF FINDINGS

The risk assessment should be documented. A risk assessment template is provided in Appendix 3 of this document. The completion of a risk assessment is the starting point for monitoring risks at the premises. It is good practice to share findings with staff. The public should be informed as to what safeguards are in place to protect their health and what they need to do to protect themselves.

7.6 STEP 6 - REVIEW AND UPDATE AS NECESSARY

Risks to human health have to be constantly monitored. A review should be carried out if there has been an incident, or if changes have been introduced e.g. new animals, change to layouts etc. Changes can lead to new hazards. As staff members are valuable sources of information and may detect new hazards, staff should be included in the review process. In reviewing hazards, areas that appear to present a risk can be addressed (e.g. though better hand-washing facilities or greater use of signs). It makes sense therefore to review your risk assessment on an annual basis and or when changes are introduced.

An Open farm self-assessment tool is available in Appendix 4.

OPEN FARM ANIMAL SPECIES AND PATHOGEN MATRIX

For those zoonoses of greatest concern on open farms, this matrix links the likely animal species that a particular infection will be contracted from. It doesn't indicate the probability of contracting an infection or the incidence rate of a particular pathogen.

	E.coli O157	Salmonella	Cryptosporidium	Campylobacter	Ringworm
Mode of Infection:	Oral	Oral	Oral	Oral	Cutaneous
Cattle	++	++	+	+	++
Sheep	++	++	+	+	++
Goats	++	++	+	+	++
Pigs	+	++	+	+	++
Equines	+	+	+		++
Deer		+	+		
Llamas		+	+		
Alpacas		+	+		
Dogs	+	+	+		++
Cats		+	+		++
Rabbits		+	+		
Guinea Pigs		+	+		
Mustelids (e.g. otters, badgers, ferrets)		+	+		
Rodents		+	+		
Domestic Poultry		++	+	++	
Psittacine Birds (e.g. parrots)		++	+	++	
Wild birds		++	+	++	
Exotic birds		++	+	++	
Wild animals		+			
Exotic animals		+	+		
Zoo species		+	+		
Fish			+		
Marine Animals			+		

++ Animal species most commonly associated with human infection
+ Animal species less commonly associated with human infection

LIST OF OTHER LESS COMMON PATHOGENS AND THE SPECIES THEY ARE ASSOCIATED WITH:

Disease	Pathogen	Associated Species
Tetanus	*Clostridium tetanii*	Cattle, sheep, goats, horses, dogs, cats, guinea pigs and rodents
Brucellosis	*Brucella abortus*	Cattle, sheep, goats, pigs, domestic poultry, and less likely dogs
Chlamydiosis	*Chlamydia abortus; Chlamydia psittaci*	Sheep, domestic poultry, all poultry and birds, and less likely cattle, goats
Q-fever	*Coxiella burnetii,*	Sheep, cattle, goats
Leptospirosis	*Leptospira*	Cattle, rodents and wild animals
Orf	*Orf virus*	Sheep, goats, and less likely deer
Streptococcal disease	*Streptococcus suis*	Pigs
Toxocariasis	*Toxocara*	Dogs and cats
Toxoplasmosis	*Toxoplasma*	Sheep and cats
Tuberculosis	*Mycobacterium bovis*	Cattle and badgers
Listeriosis	*Listeria monocytogenes*	Cattle, sheep and goats

For a comprehensive list of Zoonoses, please see Appendix 5 Table of Zoonotic Diseases and Organisms

8. GUIDELINES FOR PREVENTING AND CONTROLLING INFECTION

8.1 KEY ELEMENTS OF OPERATING AN OPEN FARM

Key Elements of Operating an Open Farm

- FARM ROUTE AND LAYOUT
- CLEANING
- ANIMAL CONTACT AREA
- EATING & PLAY AREAS
- WASHING FACILITIES
- SIGNAGE & VISITOR INFORMATION
- TRAINING & SUPERVISION
- ANIMAL HEALTH AND LIVESTOCK MANAGEMENT
- WATER SUPPLY
- WASTE MANAGEMENT PLAN
- PEST CONTROL
- RISK ASSESSMENT
- INCIDENT REPORTING

The open farm self-assessment tool in Appendix 4 is designed to assist the open farm operator to address all of these elements in the design, maintenance and operation of his/her farm. However, the following sections provide the important technical information.

8.2 RESPONSIBILITIES

8.2.1. Open Farm Operator: Although eliminating all risk from animal contact is not possible, there is a responsibility on the open farm operator to reduce the potential for transmission of infectious diseases from animals to humans as far as is reasonably practicable. The different range of measures that the open farm operator must take to minimise risk on their farms are outlined in this guidance document. The open farm operator has a responsibility to ensure that staff are trained on infection risk and control measures and the importance of good hand hygiene.

The open farm operator has a responsibility to take appropriate actions if they have reason to believe that a visitor(s) has become ill following a visit to their farm. This includes notifying the relevant authorities and taking actions/implementing control measures advised by them.

8.2.2. Visitors: Visitors are expected to take a level of personal responsibility for their own safety and well being during their visit to the open farm. Visitors should follow the instructions of open farmers and their workers. They should also heed the direction given via signage, in particular concerning hand washing, route layout and animal contact.

8.2.3. Parents, Guardians and Teachers: Adults should supervise children within their care. In particular children should be supervised when washing hands and during and after animal contact. Parents and, in particular, teachers and community leaders should make contact with the open farm in advance to get general advice on staying healthy on the farm as well as general advice concerning clothing and foot wear. Teachers should also consult with the "Management of Infectious Disease in Schools" document available on the Health Protection Surveillance website at *www.hpsc.ie*. There is also a similar document, "Management of Infectious Diseases in Childcare Settings" available on the same website.

A fact sheet for the public, education and childcare services and community organisations is available in Appendix 6

8.2.4. Staff: Staff members should advise visitors of the risks of infection on the farm, supervise visits and intervene if visitors are found to engage in behaviour that is likely to result in exposure to sources of infectious disease.

8.3. FARM ROUTE AND LAYOUT

The farm route and layout should take into account the importance of public health protection for farm visitors – it is the primary means by which to prevent / minimise contact with animal faecal material.

In particular, the farm operator should consider natural geography of the area, existing farm tracks and routes and means of entry and exit from the

farm when planning the farm route and layout. The farm operator should also consider the location of eating areas, play areas animal contact areas/non-animal contact areas and hand washing areas.

The Open Farm operator should:

- Decide which areas of the farm are for visitor access. There should be a clear differentiation between open areas and non-access areas. Routes around the farm should prevent visitors from entering non-access areas and the natural flow of the routes should lead visitors to open farm access areas only. Non-access areas should be fenced off and clearly marked. Access to areas of the working farm, manure pit/slurry tank, silage storage, veterinary products and working machinery / tools and areas prone to pooling water or other potential hazards should be prevented. Clear signage should be used directing visitors along open farm routes and away from non-access areas.

Categories of Public Areas:

1. Look and See Areas e.g. areas behind glass or railings
2. Animal Contact Areas
3. Non-Animal Areas e.g. eating areas, play areas, toilets

- Ensure that the open farm route should not direct visitors along or across tracks or routes on the farm regularly used by stock and farm vehicles. These areas may be prone to build up of animal faeces, pooled dirty water and/or liquid effluent, mud or soiled bedding. If the route passes through areas of the working farm or along working farm routes, measures should be taken to reduce the risk of contamination of visitor footwear, buggies, wheel chairs etc. These measures would include regular cleaning of the routes and elevating areas where natural pooling of effluent may occur.

- Provide duckboards in pens which front onto routes and visitor walkways. Duckboards should be erected in such as manner so as to prevent seepage or run off of faeces or effluent onto visitor routes. Note that duckboards are a preventative measure but build ups should not be allowed to occur in pens and frequent pen cleaning is necessary.

Note: For newly constructed open farms, consideration at the layout and design stage as to where best to locate hand washing facilities and animal contact areas and eating and play areas is essential.

8.4 CLEANING

It is important to keep the open farm as clean as is practically possible. Ensure all areas to which visitors have access are free from the build-up of faeces. Keep animals and their pens clean. Ensure all pen divisions, viewing points, gates and other areas, in which visitors have direct contact, are cleaned and disinfected regularly and whenever animals are moved in or out of the area. Parts of the farm only seasonally open to the public should be thoroughly cleaned, and surfaces which visitors are likely to touch should be disinfected, before opening up the farm to the public.

Particular attention should be given to cleaning in eating areas and also in play areas, where equipment such as climbing frames etc. can become contaminated by footwear. The washing and sanitary facilities must be kept clean at all times as hand-washing is so important for the prevention of infection. Remove any faeces on walkways or other areas used by visitors without delay to reduce the risk of transfer of faecal matter to non-animal areas.

A written cleaning programme is recommended for the open farm as it focuses attention on the areas that need to be cleaned and checked.

For an effective cleaning programme:

- List all areas and items that need to be cleaned in the cleaning programme and detail:
  - How often each area needs cleaning
  - Cleaning method for each area/item
  - Equipment to be used for cleaning
  - What chemicals are needed
  - The person responsible for cleaning
  - Any personal protective equipment that should be worn and
  - How often the areas are to be checked.

Always seek Veterinary advice in relation to cleaning chemicals used on the open farm.

8.5 ANIMAL CONTACT AREAS

An animal contact area is an area where visitors are permitted to pet or feed animals.

It is important that:

- The animal contact area is suitable for the purpose for which it is intended. Fencing, barriers and other structures within the animal contact area must be maintained in a suitable condition and inspected regularly. Regular cleaning is needed. Disinfection

of pen divisions and gates in these areas where visitors are able to touch them is also required. The open farm operator decides which animals are suitable for contact areas. Animals which are not suitable for petting/ feeding should generally be housed in a different area from the animal contact area.

- Where animal feed is provided for visitors to feed the animals, great care is taken by adults to ensure that young children do not eat the food or put it in their mouths.
- Sick animals, especially those with diarrhoea, are isolated and kept away from visitors or other animals.
- Signage is provided to inform visitors when they are entering and leaving the animal contact areas.
- Visitors are not allowed to enter the pens where animals are housed. There is a strong likelihood that faeces may be underfoot within pens which could lead to contamination of footwear and/or hands. In addition, visitors may introduce contamination to pens where animals are housed putting animals at risk.
- Pregnant women avoid handling lambing sheep and kidding goats and pre-weaned animals.
- The open farm operator ensures that the public has no contact with newly born animals or birthing by-products such as placenta. Animals giving birth should be kept away from visitors and other animals and access restricted for 2-3 weeks afterwards. If visitors are allowed to watch live-birthing, the environment should be thoroughly cleaned after each birth and all the waste products should be properly discarded. It is preferable to hold such events in well ventilated areas or outdoors.
- Children under five years of age are not permitted contact with reptiles.
- Animal contact areas are kept free from build up of faeces, contaminated bedding etc. Faeces must be cleaned up without delay. Specific tools for waste removal such as shovels and pitch forks must be stored in designated areas away from public access.

- Deep bedding is avoided.
- Animal contact areas are not contaminated by run off from other areas of the open/working farms.
- Animal contact areas are always supervised by an adequate number of suitably trained staff during visiting times.
- Adequate and suitable hand washing facilities are available and are used by visitors when leaving the animal contact areas. A one way flow of visitors is the preferred arrangement for the movement of visitors though an animal contact area i.e. with separate entry and exit points. Signage should be provided, directing visitors to hand-washing facilities.
- Staff remind visitors to wash their hands immediately after leaving the animal contact area and after contact with animals and pen fencing in particular.
- Eating and drinking in the animal contact area is strictly prohibited. Staff are to advise visitors of this when entering the animal contact area.
- Children are supervised to ensure that contaminated items such as dummies, toys, pens and pencils should not be put into mouths and that nail biting and thumb sucking is prevented.
- Staff advise visitors that smoking is strictly prohibited in the animal contact areas. Signage should be displayed instructing visitors of this requirement.
- Open farm operators schedule specific feeding times for animals. This will provide a far greater level of control and supervision for the open farm operator than allowing free feeding of animals by the public.
- Children are not allowed to sit or play in the animal contact area.
- Visitor traffic to the animal contact area is controlled to prevent overcrowding.
- The use of animal contact areas for public activities (e.g. social functions) is avoided as pathogens can remain in the environment for a period of time. Otherwise the area should be thoroughly cleaned and surfaces which visitors are likely to touch should be disinfected beforehand.
- When parts of the farm are only open to the public during certain times of the year, such as the spring and summer, but are in general farm use during other seasons of the year, these parts of the farm are also thoroughly cleaned and surfaces which visitors are likely to touch are disinfected before opening up the farm to the public.
- The animal contact area is well ventilated.

8.6 EATING AREAS

This relates to all eating areas, indoor and outdoor, picnic and dining areas provided on your open farm.

It is important to:

- Ensure that visitors pass through or by hand washing facilities after leaving the animal and farm areas and before entering eating areas.
- Ensure visitors only eat in the designated eating areas.
- Post clear signs to advise visitors to wash their hands and the hands of those in their care before eating.
- Keep animals, including birds and domestic animals such as dogs and cats, out of eating areas.
- Locate eating areas away from animals. However, in an existing farm, if an eating area is side-by-side with an animal contact area, it's important to prevent animal contact e.g. by double fencing provided at a sufficient distance. Locate eating areas preferably at the end of any farm trail, walk or tour, or outside the main areas of the premises.
- Provide adequate, lidded waste bins and clear discarded food away to discourage any free roaming animal from entering the eating area.
- Locate any shop, kiosk, vending machine etc., where food or drinks are sold or served, in the non-animal contact areas of the farm e.g. in the eating areas or at the exit where visitors have passed washing facilities.
- Train staff working at any shop, kiosk etc. to remind visitors to wash hands before touching or eating any sweets, ice cream, foods etc. and put up signs to this effect also.
- Keep tables, seats etc. in the eating areas clean.
- Ensure that milk, juices and other drinks for consumption are pasteurised.
- Designated drinking water points should be provided with potable water and should be clearly sign posted. The taps should be protected from contamination.

8.7 PLAY AREAS

This relates to all play areas provided on your open farm.

It is important to:

- Post clear and conspicuous signs to advise visitors to wash their hands and the hands of those in their care before and after using play areas.
- Keep animals out of play areas.
- Ensure that animals cannot be reached or touched when visitors are in a play area. If a play area is side-by-side with an animal contact area, prevent animal contact e.g. by double fencing, provided at a sufficient distance. Preferably, locate play areas at the end of any farm trail, walk or tour, or outside the main areas of the premises.
- Provide play areas and equipment that can be cleaned on a regular basis and keep these areas and the equipment clean.
- Clean and disinfect toys such as model tractors, sand diggers etc. regularly and store them appropriately so as to prevent contamination by vermin and pests.

- Ensure straw play areas are pest-proof and that the straw area is kept clean and pest free. Straw should be replaced on a frequent basis.

- Where practical, ensure removal of footwear in indoor play areas to reduce the risk of contamination.
- Check the play area regularly for hazards, broken equipment, animal waste etc.
- Regularly wash and change the sand used in sandpits. Sandpits should be adequately covered when not in use. Animals, particularly cats, should not have contact with sandpits.

8.8 WASHING FACILITIES

Hand washing is the single most important protection against the spread of disease and so hand-washing facilities must be available and adequate (see below).

Signage should advise visitors to wash their hands

- After animal contact, including feeding animals.
- After contact with animal feed or bedding.
- After using the toilet.
- Before eating and drinking.
- After cleaning footwear.
- On leaving the farm, even if they did not directly contact any animal.
- After changing clothes or footwear worn on the farm visit.

Signage outlining proper hand washing techniques should be placed at all hand washing stations. Hands should be washed well with running hot and cold or warm water and liquid soap, so as to build up a good lather, and then dried thoroughly.

Hand washing must be actively encouraged and monitored by staff. Children under five years should always be supervised when washing hands.

Cleansing wipes or sanitizing gel are not acceptable substitutes for proper hand washing on a farm.

Signage or other means of communicating this to visitors should state this.

The provision of adequate numbers of washing facilities and their location is crucial to preventing spread of infection on a visit to an open farm. One-way systems may encourage visitors to wash hands at the recommended times.

Washing facilities need to be provided at or near the following areas:

- Areas where visitor contact with animals is allowed, immediately adjacent to the exits and/or entrances (depending on whether a one-way system is in operation or not).
- Entrances to eating areas.
- At toilet facilities.
- Exits from the premises.

An estimate should be made of how many wash hand basins will be required in each area, depending on usual visitor numbers. It may be necessary to supplement permanent facilities with temporary ones at busy times.

Do not use communal basins, buckets etc. in which the water is used by more than one person as these will spread infection.

All washing facilities should:

- Be accessible by all visitors i.e. at the right heights for children and adults or with raised standing areas provided for children. Wheelchair accessible facilities should be provided.
- Have running hot and cold, or warm water (e.g. mixer taps). Ensure hot water cannot cause scalding accidents.

- Have liquid soap.
- Have adequate drying facilities e.g. disposable paper towels. Reusable towels are not appropriate.
- Be properly maintained, monitored and cleaned regularly.
- Be replenished with paper towels and soap, as necessary.
- Have open or pedal operated waste bins that are emptied as necessary.
- Be arranged so that visitor throughput, queues or delays does not put visitors off using the facilities.

The location of hand washing stations on the open farm must be clearly and conspicuously indicated for visitors.

Visitors should be encouraged to clean or change footwear on leaving the farm and to clean the wheels of buggies, wheelchairs etc. Separate washing facilities should be provided for cleaning footwear and wheels and located so that visitors can conveniently wash their hands after footwear, wheels of pushchairs, wheelchairs etc. have been cleaned. It is recommended that visitors to the open farm wear wellington boots which should be washed and disinfected when leaving the farm.

8.9 SIGNAGE AND VISITOR INFORMATION

8.9.1. Visitor Information

The open farm operator should be conscious that many visitors to the open farm will not have an awareness of the risks which may be present during the visit and with animal contact in particular. "Awareness of zoonotic disease risk is protective against illness and outbreaks. Therefore education of visitors about the risk for transmission of disease from animals to humans is a critical prevention measure" (JAVMA, 2013).

Visitor information should be simple and easy to understand.

Information for visitors to the farm should cover the following:

- Potential risk to health associated with the farm visit.
- Precautions to be taken to minimise risk.
- Information on farm route and layout.
- Guidance on supervision of children for families and groups.
- General guidance on footwear and appropriate clothing etc.
- Special precautions for pregnant women.

For large groups, visitor information should be made available prior to their visit to the farm in order for them to properly prepare. Leaflets and information should also be made available at a conspicuous location on the farm. Visitor information for a safe visit to the open farm should also be made available through the Open Farms website or other means of electronic communication such as Facebook, email etc.

A fact sheet for the public, education and childcare services and community organisations is available in Appendix 6 of this document

The National Zoonoses Committee have an open farm visitor leaflet for free download at *http://www.zoonoses.ie/public/publications/Pet Farm Leaflet.pdf.*

The Food Safety Authority of Ireland's leaflet "E.coli - how to reduce the risk from your farm" is available at *http://www.fsai.ie/resources_publications.html.*

8.9.2 Signage

General Guidance for Effective use of Signage.

It is important that:

- Signage is positioned at appropriate and most suitable locations on the open farm.
- Signs give a clear, concise and effective message.
- Signage is of suitable size, colour and font size.
- Images as well as text can help to create good signage.
- On some open farms, it may be necessary to consider displaying signage in other languages as well as English.

Signage should be provided on the open farms to:

- Advise visitors of the importance of hand washing and to remind visitors when to wash their hands (see text box below on hand washing signage).
- To direct visitors to hand washing facilities.
- To remind visitors that they are entering a farm environment and to take precautions against risks.
- To remind adults to supervise children in their care.
- To direct visitor along the farm route and on a one way system through the animal contact area, if applicable.
- To advise visitors when they are entering the animal contract area.
- To advise visitors they are in an non-animal contact area.

- To advise visitors to approach and touch animals in a gentle and caring manner and to advise of any biting hazard which may exist.

The above is not an exhaustive list of information which should be provided by signage on the open farm.

Hand washing signage should:
- Demonstrate the effective method of hand washing (using warm water and liquid soap) rubbing hands together to create a lather, scrubbing well including the backs of the hands, fingers and finger nails, rinsing and effective drying with paper towels).
- Be positioned after the animal contact area in clearly visible locations and also before entering the eating and play area and before leaving the farm.
- Step-by-step hand washing is particularly effective for encouraging good hand washing practices.

Hand washing signage templates are available in Appendix 7 of this document and the EHAI have hand washing signage available for free download at *www.ehai.ie*.

Safefood have an effective hand washing poster available for download at *http://www.safefood.eu/Education/Pre-school/Pre-school-handwashing-poster.asp*.

Signage located at the entrance to animal contact areas should:
- Remind visitors to wash hands after leaving the animal contact area.
- Remind visitors that there is a risk of infectious disease from contact with animals and that precautions must be taken.
- Remind visitors to supervise children within their care and to ensure that they do not put hands, dummies or animal feeds into their mouths.
- To remind visitors that eating and drinking is prohibited.

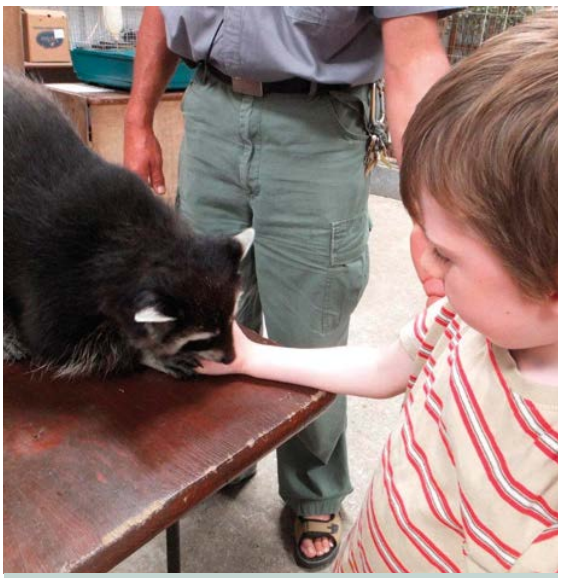
8.10 TRAINING AND SUPERVISION

8.10.1 Training:
To enable employees to work safely, confidently and competently, training is essential.

It is necessary to have staff trained about:
- The human health risks associated with animal contact and the control measures required to reduce the risks.
- The pathway of infection from animals to humans and the stages at which this can be disrupted.
- The most common/serious types of pathogens and the animals associated with them.
- The basic control measures for preventing and controlling infection, including training in explaining specifically to visitors the importance of good hand washing for both adults and children.
- What visitors can do and should not do.
- The importance of supervision of visitors in contact areas for the protection of both visitors and animals.
- The importance of a high level of good personal hygiene required by staff themselves.
- Cleaning and disinfection procedures.
- The use of personal protective equipment.
- How to be firm, diplomatic and confident in dealing with visitors and children.
- Suitable types of animals for contact/petting/feeding and the control process.
- Setting a good example by following the relevant guidelines in this document.
- Record keeping.
- Procedures for mishaps / accidents / unexpected events (see also Appendix 8 on Incident Reporting and Investigation).

Refresher courses should be undertaken annually.

8.10.2 Supervision:
It is the responsibility of the open farm operator to supervise and direct their staff in the performance of their duties in the interests of their animals and the visitors (especially children) who come to see those animals. Adequate and suitable levels of supervision by staff of visitors in animal contact areas should be arranged.



8.11 ANIMAL HEALTH/LIVESTOCK MANAGEMENT

Good animal health and livestock management is essential to reduce the risk of people getting sick from contact with animals or their environment. Healthy happy animals, just like humans, shed fewer germs than those that are ill or stressed. However it is important to note people can also get sick from contact with healthy animals and their environment.

Open farms can have an array of animal species which have different animal husbandry, feeding and veterinary requirements. In order to maintain animal health on farm it is essential the operator is fully aware of the essential requirements of each animal under their care.

It is important that open farm operators seek professional veterinary advice with regard to an ANIMAL HEALTH PLAN for their farm. Depending on the animal species involved, the farm operator may need to seek out appropriate advice from a number of sources. An animal health plan could include items such as:

- Animal husbandry requirements such as space required, appropriate bedding, water and feed, group sizes, ventilation, temperature requirements etc.
- Disease control measures such as routine worming, vaccination, screening tests.
- Animals which are suitable for human contact and the parameters around that contact e.g. time of day, length of contact etc.
- Isolation pens for sick, new or any animals in a stressed state e.g. birthing, weaning etc.
- Avoidance of excessive movements and mixing of animals from different groups.
- Awareness of any behaviour issues or times when animals might be protective/ aggressive.
- Careful selection of new animals from reputable sources.
- Cleaning and disinfection programme.
- Quarantine procedures e.g. staff hygiene, isolation, time periods.
- Daily routines for checking on any signs of animal illness.

The advice here is not exhaustive and is only intended to alert open farm operators to various elements involved. Professional advice should be sought on all aspects of animal health, welfare and management.

8.12 WATER SUPPLY

The provision of water fit for human consumption is a legal requirement. The open farm operator may connect to a public water supply or a group water supply or provide his/her own private supply. Water supply for drinking by visitors and animals should be provided directly through a rising main. For open farms using water from a private well, it is the responsibility of the open farm operator to ensure that the source of the well is protected and that the water is potable (safe to drink) and will supply enough water for the needs of the farm, animals, visitors, catering and reservoir needs for fire safety etc. The provision of a treatment system for a private water supply is strongly recommended so as treat the water for the presence of undesirable chemicals (e.g. excessive nitrate, iron etc) and microbes (e.g. E coli 0157). Open farm operators using a private well should also have the water supply tested at least annually to ensure compliance with the quality requirements of legislation.

The **European Union (Drinking Water) Regulations 2014** lay down the requirements for safe drinking water intended for human consumption. The Environmental Health Service of the Health Service Executive may monitor private water used in food businesses for compliance with food safety legislation.

Water supply points in areas accessible to the public should be labelled to indicate whether or not it is suitable for human consumption.

Allowance must be made to provide cut off stopcocks at all water usage points to allow for repairs/maintenance. This is to avoid major interruptions to the overall working of the farm by water leaks or defects to drinking points or hand washing areas and or toilets. Backflow prevention devices should be installed between outlets in livestock areas and water lines supplying other areas on the farm and premises.

The entire water supply system should be:
- Mapped and
- Clearly marked on site at all points for efficient maintenance.

Further information is available in the following leaflet, "Risk of Illness from Well Water" (June 2013) which is available for download at the following link: *http://www.lenus.ie/hse/Leaflet_Precautions and advice for reducing risk of illness from well water.pdf.*

Additionally, information is available from the Environmental Protection Agency's (EPA) website at the following link: *http://www.epa.ie/pubs/advice/drinkingwater/.*

8.13 WASTE MANAGEMENT

Manure and compost heaps and their liquid run-off should be managed and segregated to prevent the spread of faecal matter in the open farm environment.

- Position manure and compost heaps well away from the public. Fence off where necessary.
- Prevent or contain all liquid run-off.
- Prevent build-up of faecal matter in pens.
- Prevent dried contaminated bedding being blown onto clean visitor areas or routes.
- Do not allow visitors to collect and bag their own compost or manure.

Not all farm wastes are agricultural wastes. Examples include plastic silage covers, bale wrap, fertilizer bags, glass, metal, wood, paper, cardboard and media. Keep waste packaging clean and store for disposal or recycling at a central location on the farm in a manner that reduces the visual impact of these materials on the landscape.

8.14 PEST CONTROL

8.14.1 Rodents

Rodents can spread disease to humans, livestock and pets through urine, faeces and bites. Indirect transmission may be through contaminated mud, dust, standing water pools and parasites carried on feet or fur. Studies indicate that rat populations on most farms carry a wide range of pests and diseases including:

- *Bacterial diseases* such as leptospirosois, listeriosis, pasteurelosis and melioidosis. Leptospirosis icterohaemorrhagiae causes life threatening Weils disease in humans.
- *Fleas, lice and tapeworms* can transfer to man or animals. Tapeworms may cause capillariasis and toxocariosis.
- *Protozoa* causing cryptosporidiosis and toxoplasmosis.
- *Rickettsia* which causes Q fever.

Rats may also spread foot and mouth disease.

Vermin Control Procedures

Survey Vermin Activity e.g.

- Watch for signs of rodent activity and droppings.
- Identify runs, burrows, holes.

Identify Vermin Feed Sources and Harbourages e.g.

- Easy vermin access to leftover food, domestic refuse.
- Easy access to animal feed/grain stores/root crops.
- Presence of “tasty feeds” like maize silage.
- Clutter (older equipment, rubbish piles etc), rubble and cover around the yard.
- Open drains, lack of gulley/drain covers.

Vermin Control Options

Rodenticides, traps and ultrasound repellents are very useful but are not the total solution. Combine control options with effective hygiene management and proofing. Make the environment inhospitable to rodents e.g.

- Remove clutter (old equipment, rubbish heaps etc).

These are harbourages for vermin.

- Repair buildings and drains.
- Minimize access to feed stores.
- Store domestic refuse in suitable containers.

8.14.2 Pets

Cats and certain breeds of dogs can be useful vermin hunters. Remember that both cats and dogs can also potentially transmit disease if they soil animal feed.

8.14.3 Pest Birds

Pest birds play a role in disease transmission.

In terms of disease and damage, rats and pest birds are quite similar. Birds can carry a range of viral, bacterial, fungal, protozoal and rickettsial infections. Birds are attracted by and contaminate feed (e.g. grain, silage, maize). This causes several problems, apart from being unsightly and messy, bird guano can present a serious human and animal-health hazard. Allowing birds access to feed should be denied where at all possible and exposed areas where feed is kept loose should be kept to a minimum.

When evaluating the potential health risk of a bird infestation, look for the following: droppings or nesting materials inside air vents, birds around the picnic/amenity areas or large amounts of droppings in enclosed areas.

Other preventative measures:

- Eliminate or reduce as much as possible, standing water and areas in which pest birds can feed.
- Keep rubbish bins covered and areas clean.
- Never feed pest birds.
- Trim trees away from structures and prune those seen to attract pest bird roosting.
- Clean gutters to prevent standing water.
- Seal openings through which small pest birds can enter.
- Sparrows can enter through gaps as small as ¼ inch / 6 mm.
- Block vents, eaves and loft openings with ¼ inch / 6 mm wire mesh or netting.
- Take proper precautions when tackling bird control problem. Wear respirators, goggles and protective clothing when cleaning up bird sites. It’s important to exterminate ecto-parasites and thoroughly disinfect the site.

It is advisable to develop and implement a pest control plan tailored for your farm. **For this, it is recommended to seek the advice of a professional pest control service provider.**

9. KEY LEGAL REQUIREMENTS

9.1 HEALTH AND SAFETY

The Safety, Health and Welfare at Work Act 2005 Act
The Safety, Health and Welfare at Work Act 2005 Act requires employers to provide a safe place of work, safe working practices/procedures, safe equipment and machinery. A place of work includes the farmyard and farm buildings. Information and training on safety matters and the provision of personal protective equipment must be given to workers where necessary. A safe system for the storage, handling and use of articles and substances is required as well as adequate first aid, toilet and washing facilities and a smoke-free policy.

Employers must provide a safety statement and risk assessment which examines all possible hazards and assesses the risks involved to ensure safety through the implementation of control measures. In relation to farms the act allows for farmers with three or fewer employees to follow a code of practice in replace of developing their own safety statement. The "**Code of practice for preventing injury and occupational ill health in agriculture**" requires farmers to complete a standard risk assessment for their farm.

The Act also outlines the general duties of employers to persons other than their employees i.e. visitors. It states 'every employer shall manage and conduct his or her undertaking in such a way as to ensure, so far as is reasonably practicable, that in the course of the work being carried on, individuals at the place of work (not being his or her employees) are not exposed to risks to their safety, health or welfare'.

Information on occupational safety and health in the farm setting is available on the Health and Safety Authority website at; *www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/*. The Health and Safety Authority are the competent authority for the enforcement of legislation and provision of guidance and advice in relation to health, safety and welfare matters in Ireland.

First Aid - Under Chapter 2 Part 7 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 employers must provide and maintain suitably marked and easily accessible first aid equipment. The employer must also designate the appropriate number of suitably trained first aiders at the place of work. The name and address and telephone number of local emergency services should be displayed. The HSA have prepared comprehensive Guidelines on first Aid at places of Work detailing the relevant standards and training provider requirements including the provision and use of Automated External Defibrillators (AED's). More information is available on the Health and Safety Authority website at: *http://www.hsa.ie/eng/Topics/First_Aid/*.

Their "**Code of Practice on Preventing Accidents to Children and Young Persons in Agriculture applies to on-farm work activities and the potential impact on children and young persons**". This Code gives practical guidance on the provisions of the 2005 Act and the **Safety, Health and Welfare at Work (General Application) Regulations 2007 and amendments**. These Regulations control some biological agents have the potential to affect certain sensitive risk groups. Employers must assess the exposure of children and young persons and pregnant, post natal and breast feeding employees to biological agents.

Safety, Health and Welfare at Work (Biological Agents) Regulations 2013

This act requires an employer to assess the risk to employees of exposure to hazardous substances, including micro-organisms (bacteria, viruses etc.), take appropriate action to prevent or control that exposure and assess risks to health and safety of anyone that may be affected by their work activities. The Health and Safety Authority's Guidelines to Biological Agents 2014 can also be referred to in this regard.

9.2 INFECTIOUS DISEASE

Infectious Disease Regulations 1981 (SI No. 390 of 1981) and amendments provide for the diagnosis and treatment of infectious diseases, the prevention of infectious diseases and the prevention of the spread of infectious diseases and for removing conditions which favour the spread of infection. A list of notifiable diseases is contained in the Regulations *http://www.hpsc.ie/NotifiableDiseases/ListofNotifiableDiseases/File,13288,en.pdf*. Examples of notifiable diseases include Verotoxigenic Escherichia coli infection, salmonellosis, campylobacterosis and cryptosporidosis.

The investigation and control of a zoonotic disease is multidisciplinary, requiring skills in the area of public

health, environmental health, clinical microbiology, food and veterinary microbiology, food safety, food control, risk assessment and management.

Directive 2003/99/EC on the monitoring of zoonoses and zoonotic agents sets out the general rules on the monitoring of zoonoses, zoonotic agents and related antimicrobial resistance in EC Member States. It also provides for epidemiological investigations of food-borne outbreaks of disease.

S.I. No. 154 of 2004 European Communities (Monitoring of Zoonoses) Regulations 2004 is national legislation which supports surveillance of zoonoses and zoonotic agents in all animals. The aim of the regulations is to provide Government with the tools to investigate and monitor sources of known zoonotic diseases and detect as early as possible significant new and emerging issues so that appropriate action can be taken to protect public health and support healthy animal populations. It provides authorised officers with powers of entry to monitor for zoonoses and antimicrobial resistance to zoonotic agents and other agents that pose a threat to public health.

9.3 FOOD SAFETY

If you have a food business as part of your open farm it must be registered with the official agency appropriate to your business.

The purpose of registering your food business is to let the official agency know that you are operating a food business, where it is located and what activities you are carrying out. Restaurants and cafes are supervised by Environmental Health Officers working on behalf of the HSE.

When you start a food business you are regarded as a 'food business operator'. It is your legal responsibility to make sure that your new business complies with food law and produces safe food. The "Guide to Food Law for Artisan/Small Food Producers Starting a New Business" published by the FSAI outlines how to apply for registration for your new food business and provides information on food safety management systems, traceability and training. The guide gives a summary of the main pieces of food legislation that may apply to your food business. So, in the early stages of planning your food business, you should discuss with your enforcement officer how the legislation applies to you.

9.4 OCCUPIERS LIABILITY

Occupiers Liability Act 1995 outlines the duty of care of an occupier to visitor. On the farm the owner should know the dangers and risks through identification in the safety statement/risk assessment and then put reasonable steps in place to protect the visitor.

9.5 TOBACCO CONTROL

Public Health (Tobacco) Act 2002 as amended prohibits the smoking of tobacco products in specified places, including a place of work. A tobacco-free policy for the open farm environment in its entirety is strongly recommended by this group to ensure compliance with the law, to reduce risks of fire, litter and to animal health etc. as well as the promotion of smoke free environment for all visitors especially children. This will be an extremely positive step for the health of all and the family-friendly culture of open farms. A smoke free policy would be the responsibility of the owner/manager/person in charge of the open farm. The Tobacco Regulations are enforced by Environmental Health Officers of the HSE and Officers of the HSA.

10. SUMMARY OF KEY POINTS

- There is a risk of infection associated with contact between animals and people. While the risk of infection is generally low, outbreaks of disease can and do occur.
- The risk can be minimised by implementing sound and common sense precautions, particularly in relation to hand washing.
- A risk assessment should be carried out in relation to infection control.
- The responsibilities of all concerned should be clear.
- A good layout of the open farm is fundamental to preventing / minimising infection risk and should take into account the best routes for visitors to take, the best locations for animal contact, non-animal contact, eating and playing areas.
- A cleaning plan should be drawn up and put into effect.
- Animal contact areas should be clearly designated, supervised and kept clean. Visitors must not be allowed to enter pens where animals are housed.
- Hand washing facilities need to be provided at or near the following areas:
  - Areas where visitor contact with animals is allowed, immediately adjacent to the exits and/or entrances depending on whether a one-way system is in operation or not).
  - Entrances to eating areas.
  - Exits from the premises.

  and at:
  - toilet facilities.
- Hot and cold or warm running water, liquid soap and disposable towels should be provided at all wash hand facilities.
- Cleansing wipes or sanitising gels are not an acceptable substitute for proper hand washing on a farm.
- Animal contact must not happen in eating or play areas.
- Visitors should eat only in designated eating areas.
- Provide information to visitors in a simple and easy to understand format that is age and language appropriate. Signage is essential.
- Inform visitors of the risks associated with animal contact and the methods by which they can protect themselves and those in their care to reduce that risk. The need for visitors to take personal responsibility for their own safety should be conveyed. Particular emphasis should be placed on the need for hand washing. Specific information must be provided to pregnant women.
- Provide information to the public on the risks and controls in advance of a visit by way of your website, information packs or leaflets, when confirming bookings by post, email etc.
- Staff of the open farm should be trained in matters relating to human health risks associated with animal contact and in preventative measures.
- Staff must be supervised to ensure that they are implementing the controls measures needed.
- Maintain good animal health and welfare. Good livestock and farm management should be maintained. Have an animal health plan in place for your open farm.
- Provide drinking water that is safe to drink. Water from a private water supply should be treated and tested regularly to ensure that the treatment system is effective.
- Ensure all waste is contained and disposed of in a sanitary manner.
- Implement a pest control programme for the open farm.
- Know your key legal obligations.
- Enforce a tobacco-free policy for whole of the open farm.
- If you provide a mobile open farm service, cleanliness, a suitable means of hand washing and drying, supervision, signage and waste disposal are essential. An animal health plan for animals suitable for temporary exhibits is a must.

- Users and operators of mobile farms should discuss arrangements for animal contact and hand washing in advance. Owners of premises subject to regulatory inspection e.g. crèches, nursing homes etc. should check in advance with the regulatory authority that such a visit is acceptable practice and that suitable infection control measures are in place.

- Investigate and record incidents on the farm e.g. record any reported illness, incidents or complaints and notify the relevant authority where necessary. In relation to any reported infection, the Public Health Department of the HSE must be contacted as a matter of urgency. Advise individuals who report illness to contact their GP for advice.

- Carry out regular audits / checks using the open farm self assessment tool in Appendix 4.

- Keep the open farm in a clean condition and in good repair.

- Ensure that children are supervised.

11. APPENDICES

Appendix 1 Information Sheet for Temporary or Mobile Operators

In addition to inviting visitors to an open farm, a small number of businesses take animals to venues outside the farm e.g. to private houses, family fun days, festivals, child care facilities etc. Operators of temporary or mobile premises are faced with additional challenges in maintaining adequate infection control among visitors.

The following represent some of the issues and methods of dealing with them:

1. Hand washing
2. Locations
3. Signage
4. Waste disposal
5. Cleaning
6. General issues

Hand hygiene options (in decreasing order of preference)

The most effective method of removing dirt and contamination from hands is by running hot and cold or warm water, using liquid soap, followed by hand drying.

Therefore, you should:

- Provide hand washing facilities that conform to the recommended requirements for hand-washing (see Section 8 'Guidelines for Preventing and Controlling Infection').

- Hire portable hand washing facilities that conform to the recommended requirements for hand-washing (see Section 8, as above). If a portable basin is not feasible, water containers with taps (such as those used for drinking water) can be mounted above basins. However, water used for washing hands must be running from the tap (using water in a basin is not acceptable) and liquid soap should be used. Provide single use paper towels to dry hands.

- Use existing permanent hand washing facilities and locate animal activities as close as practicable to these.

Locations

- When arranging to hold an exhibition in a shared use environment (e.g. shopping centre), discuss placement issues with the management of the centre when the event booking is made.

- The exhibition should be well separated from food service operators.

- The exhibition should be located as close as practicable to hand-washing facilities (as per above).

- Suitable and adequate cleaning facilities must be available so as to ensure that cleaning and disinfection can be carried out, as described below.

- When farm animals are taken to premises occupied by vulnerable groups such young children in a crèche or older people in a health care setting such as a nursing home, there is a higher risk of complications should infection occur.

- A comprehensive animal health plan, developed in conjunction with your Vet, is a must from a public health and from an animal health and welfare perspective.

Signage

In addition to any advice you or your staff give customers verbally, signs regarding risk and prevention measures, such as the following, should be posted:

- Forbidding eating in the animal contact areas

- Advising of the importance of hand washing

- Advising when to wash hands (e.g. following any contact with animals, their food, bedding, litter or holding areas; before eating etc.) and

- Advising where to wash their hands.

Waste disposal

- An appropriate means of waste disposal must be provided for both solid (e.g. animal dung, straw bedding, paper towels for hand drying) and liquid waste (e.g. waste water from hand washing).
- Droppings must be removed as soon as possible.
- Liquid waste temporarily stored in a suitable holding tank of sufficient capacity must be emptied as often as necessary to prevent overflow, nuisance or an insanitary condition.
- Bins must be provided for disposal of paper towels and other solid wastes.

Disinfection of surfaces

- Surfaces should be easily cleanable.
- There is a need for a high level of cleanliness when operating a temporary or mobile farm animal unit. Good hygiene practices are essential, particularly when dealing with premises occupied by individuals in vulnerable health.
- Contaminated surfaces (such as benches, cages, pens) in high-use areas which the public have direct contact with at temporary premises or visiting animal displays should be regularly disinfected.
- Soiled surfaces should be cleaned first with detergent and hot water and then disinfected. Choice of disinfectant depends on the application – individual products should be checked to ensure they are appropriate for each operation. Steam cleaning may also be suitable.
- In certain circumstances, it may be useful to provide a tarpaulin under animals to catch faeces.

General Issues

- Entry into animal pens must not be allowed except those pens or enclosures specifically designed for the handling of animals
- Iguanas, snakes, turtles and other reptiles are not appropriate animals for childcare settings as they can carry pathogens such as salmonella and clostridia.
- The public, particularly children, should be supervised when handling animals.
- It is advisable to provide advance information to customers on precautions to take when in contact with animals either on your website and / or by electronic communication e.g. if confirming bookings by email and / or by hard copy leaflets / information sheets.
- Mobile operators should make a record after each visit, detailing which animals were brought and their demeanour, any issues raised, staff attending, hand washing procedures observed etc.

This Appendix is available to download free at *www.ehai.ie*.

APPENDIX 2 : EHAI SURVEY RESULTS

In the preparation for the survey, it was estimated that there were approximately eighty open farm operators in the Republic of Ireland. The criteria for determining whether or not a facility was an open farm was 'one which invited members of the public to visit and which facilitated direct contact with animals'.

The survey was conducted during the summer of 2013 by means of a comprehensive questionnaire, the main sections of which are outlined in the table below. Results of questionnaires from twenty seven (N= 27) open farms located in all four provinces of Ireland were analysed, many of which are also presented below.

No.	QUESTION	Response
	General:	
1	Months of the year the business operates	All year 44% (N = 12)
2	Most commonly found type of animals on the farm:	
	- donkeys	93% (N = 25)
	- goats & sheep	89% (N= 24)
	- pigs & rabbits	85% (N = 23)

No.	Farm Route and Layout	Yes	No	N/A
1	Are routes clearly defined?	96% (N = 25)	4% (N =1)	-
2	Where an animal contact area has been provided, is it defined, segregated and clearly identified?	75% (N = 18)	25% (= 6)	-
3	Where a non-animal contact area has been provided, is it defined, segregated and clearly identified?	81% (N = 22)	19% (N = 5)	-
4	Where eating and play areas have been provided, are they defined, segregated and clearly identified?	85% (N = 23)	5% (N = 4)	-
5	Are visitors directed to hand washing facilities:			-
	- As they leave animal contact areas?	72% (N = 18)	28% (N = 7)	-
	- As they access eating areas?	55% (N = 15)	45% (N = 12)	
	- Before leaving the farm?	54% (N = 14)	45% (N =12)	-
6	Do pen fronts prevent contamination of visitor walkways?	77% (N = 20)	23% (N = 6)	
7	Does seepage / run-off contaminate visitor walkways?	19% (N = 5)	81% (N = 22)	-
8	Are gates and / or doors used so that 'animal contact areas' are not accessible to unaccompanied children?	88% (N = 22)	12% (N = 3)	
9	Are areas to which visitors have access free from any build up of faeces?	93% (N = 25)	7% (N = 2)	
10	In 'non-animal contact areas', is the fencing provided adequate to control contact with animals?	70% (N = 19)	30% (N = 8)	

No.	Animal Contact			
1	Animals which are most commonly allowed to be petted and / or hand fed or touched:			
	- rabbits		78% (N = 18)	
	- donkeys		61% (N = 14)	
	- goats		52% (N = 13)	
	- sheep, pigs and guinea pigs		48% (N = 11)	
		Yes	**No**	**N/I**
2	Do staff supervise the petting and / or feeding of animals?	78% (N = 21)	18% (N = 5)	-
3	Are visitors allowed to enter pens where animals are housed?	15% (N= 4)	82% (N = 22)	-
4	Are eating and play areas segregated from areas containing animals or is double fencing provided?	93% (N= 25)	7% (N = 2)	-
5	Are 'animal contact areas' free from build-up of faeces?	89% (N = 24)	11% (N = 3)	-
6	Are signs provided indicating that eating, drinking and smoking is forbidden in 'animal contact areas'?	33% (N = 9)	66% (N =18)	-

No.	Eating Areas	Yes	No	N/I
1	Are eating or picnic areas away from areas where animals are likely to be contacted or at the end of the farm trail or outside the main areas of the open farm?	89% (N = 24)	11% (N = 3)	-
2	If eating or picnic areas are adjacent to animals contact areas, is animal contact prevented e.g. by double fencing?	67% (N = 16)	33% (N = 8)	-
3	Do visitors pass through or by hand wash facilities before going to eating areas?	74% (N = 20)	26% (N = 7)	-
4	Are animals incl. domesticated fowl, farm dogs etc. excluded from eating areas?	81% (N = 22)	19% (N = 5)	-
5	Are visitors advised e.g. by adequate signage, to wash hands before eating foods?	67% (N = 18)	33% (N =9)	-

No.	Play Areas	Yes	No	N/I
1	Are play areas located away from areas where animals can be contacted or at the end of the farm trail or outside the main areas of the open farm?	81% (N = 22)	19% (N = 5)	-
2	If play areas are adjacent to animals contact areas, is animal contact prevented e.g. by double fencing?	64% (N = 16)	36% (N = 9)	-
3	Are visitors advised e.g. by adequate signage, to wash their hands before and after using the play areas?	44% (N = 12)	56% (N = 15)	
4	Are animals excluded from play areas?	81% (N = 22)	19% (N = 5)	-
5	Are play areas observed as being clean?	93% (N = 25)	7% (N = 2)	-
6	Are play areas checked regularly for hazards, broken equipment, and animal waste?	92% (N = 24)	7% (N = 2)	N = 1

No.	Washing Facilities	Yes	No	N/I
1	Are washing facilities provided at or near:			
	- Animal contact areas (petting barns etc) at entrance and exit (if 2-way) or at exit (if 1-way)?	74% (N = 20)	26% (N=7)	-
	- Exits from the premises?	68% (N = 17)	32% (N=8)	-
	- Other areas where contact could take place e.g. where young stock is housed?	64% (N = 16)	36% (N=9)	-
2	Are the wash hand facilities at the right height for all users (safe raised standing areas for children / wheelchair accessible)?	85% (N = 22)	15% (N=4)	-
3	Do wash hand facilities have:			
	- running hot and cold or warm water?	78% (N = 21)	22% (N=6)	-
	- Liquid soap?	93% (N = 25)	7% (N=2)	-
	- Paper or roller towels or hot air driers?	81% (N = 22)	19% (N=5)	-
4	Is children's hand washing supervised by adults?	59% (N = 16)	15%(N=4)	26% (N=7)
5	Are signs for hand-washing posted?	67% (N = 18)	33% (N=9)	-
6	If signs for hand washing are posted, do they show how to wash hands properly?	18% (N = 5)	41% (N=11)	41% (N=11)
7	Is there a likelihood of contamination of footwear, pushchairs, wheelchairs etc?	41% (N =11)	59% (N=16)	-
8	If yes, are there facilities for visitors to clean contaminated footwear / wheels of buggies or wheelchairs before leaving the farm?	23% (N = 6)	38.5% (N=10)	38.5% (N=10)

No.	Toilet and Hand Washing Facilities	Yes	No	N/I
1	Do wash hand basins have:			
	- running hot and cold or warm water?	78% (N=21)	22% (N=6)	-
	- Liquid soap?	96% (N=26)	4% (N=1)	-
	- Paper or roller towels or hot air driers?	89% (N=24)	11% (N=3)	-
2	Are hand washing facilities in toilet areas accessible to adults and children?	100% (N=26)	0% (N=0)	N=1
3	Are signs for hand-washing posted?	67% (N=18)	33% (N=9)	-
4	If signs for hand washing are posted, do they show how to wash hands properly?	19% (N=5)	44% (N=12)	37% (N=10)

No.	Visitor Information and Signage	Yes	No	N/I
1	Are hand washing stations clearly signposted on the route around the premises?	54% (N = 14)	46% (N = 12)	-
2	Do signs inform visitors that hand washing is the most effective way of removing dirt or contamination?	38% (N = 10)	62% (N = 16)	-
3	Does signage indicate that sanitisers alone do not provide adequate protection?	19% (N = 5)	81% (N = 21)	-
4	Does signage use visual as well as written instruction?	32% (N = 8)	68% (N = 17)	-
5	Is specific signage posted regarding precautions for pregnant women?	19% (N = 5)	81% (N = 22)	-
6	Are leaflets or pre-visit packs provided for schools?	65% (N = 17)	35% (N = 9)	-

No.	Health and Safety Risk Assessment	Yes	No	N/I
1	Has a health and safety risk assessment for preventing zoonotic disease been carried out?	48% (N=13)	52% (N=14)	-

No.	Training and Supervision of Staff	Yes	No	N/I
1	Are staff trained and instructed about the human health risks associated with animals and the necessary control measures?	89% (N = 24)	11% (N = 3)	-
2	Is documentation available on staff training about:			
	- E. coli 0157?	23% (N = 6)	77% (N = 20)	N=1
	- Health and safety?	41% (N = 11)	59% (N = 16)	-

No.	Livestock Management Procedures	Yes	No	N/I
1	Are animals that have just given birth or have just been born put into contact areas?	4% (N = 1)	96% (N = 25)	N = 1
2	Are ill animals removed from contact areas?	100% (N = 27)	0% (N = 0)	-
3	Is new stock isolated from current stock?	76% (N = 19)	24% (N = 6)	N = 2

No.	Manure, Compost Heaps and Waste Disposal	Yes	No	N/I
1	Are manure or compost heaps located away from areas that visitor's access or are they fenced off?	74% (N = 20)	4% (N = 1)	22% (N = 6)
2	Is there any manure / liquid run-off on walking paths or visitor areas?	7% (N = 2)	93% (N = 25)	-
3	Are rubbish bins provided throughout the farm suitable and lidded?	89% (N = 24)	11% (N = 3)	-

No.	Water Supply and Drainage			
1	What is the source of drinking water for the open farm:			
	- Mains water?		N = 9	
	- Group scheme?		N = 3	
	- Private well?		N = 18	
		Yes	No	N/I
2	If not from the mains, has drinking water been tested for potability?	95% (N = 21)	5% (N = 1)	N = 5
3	Is surface and foul waste water draining satisfactory?	70% (N = 19)	4% (N = 1)	26% (N = 7)

No.	Food Business	Yes	No	N/I
1	If a food business is in operation, is there separate staff for catering and open farm duties?	63% (N=17)	15% (N=4)	22% (N=6)

No.	Miscellaneous	
1	Estimated number of visitors in 2012:	
	1 to 999	N = 3
	1,000 to 4,999	N = 5
	5,000 to 9,999	N = 2
	10,000 to 19,999	N = 3
	20,000 to 49,999	N = 3
	50,000 to 99,999	N = 2
	100000	N = 2
	Not known	N = 6
	N/I	N = 1

APPENDIX 3 : RISK ASSESSMENT TEMPLATE

OPEN FARM NAME

OPEN FARM OPERATOR

SIGNED

DATE

RISK ASSESSMENT REVIEW DATE

List hazards and risks here:	List groups of people who are especially at risk from the significant hazards:	List required controls to be put in place here:	Responsible persons:

APPENDIX 4 : OPEN FARM SELF-ASSESSMENT TOOL

ASSESSMENT CARRIED OUT BY (INSERT NAME OF PERSON)

.....

DATE OF ASSESSMENT

.....

DATE OF NEXT ASSESSMENT

.....

Best Practice	Yes/No	If No, the action required is:	Name of person(s) to be actioned by:
Farm Route and Layout (See Section 8.3)			
Is there a clear distinction between the areas of the open farm to which visitors can access (e.g. play areas) and cannot access (e.g. main working farm areas)? Visitors to the farm should not have access to main farm working areas such as slurry pits, manure heaps etc.			
Are visitors able to easily identify the open farm route?			
Does the open farm route direct visitors away from tracks regularly used by stock and farm vehicles?			
If it does not, are measures taken to reduce visitor contamination? Visitor walking routes throughout the farm should be free from build up of animal faeces.			
Cleaning (See Section 8.4)			
Are all parts of the open farm to which visitors have access kept clean and free from a build up of faeces?			
Is a written cleaning programme in place and being put into practice?			
For seasonal open farms, are all parts of the farm to which visitors have access cleaned and are surfaced which visitors are likely to touch disinfected before (re)opening to the public?			

Best Practice	Yes/No	If No, the action required is:	Name of person(s) to be actioned by:
Animal Contact Areas (See Section 8.5)			
Are visitors prohibited from entering pens where animals are housed?			
Is this area designed so that hand washing facilities are provided for visitors when leaving this area, at or near the exit?			
Is this area kept clean and free from build up of faeces, animal bedding etc? Animal pens should be cleaned regularly with no build-up of animal faeces. Visitors' footwear should not come into contact with liquid run off from animal pens.			
Is supervision by trained staff during visiting hours is implemented?			
Eating Areas (See Section 8.6)			
Are hand washing facilities provided and easily accessible at or near entrances to eating areas?			
Are eating areas located away from animals and is contact with animals prevented when visitors are in these areas? There should be a clear distinction between animal areas and non animal areas throughout the farm particularly eating areas.			
Do visitors eat only in designated eating areas?			
Are the eating areas kept clean?			
Play Areas (See Section 8.7)			
Are play areas located away from animals and is contact with animals prevented when visitors are in these areas?			
Are the play areas and equipment in them kept clean?			
Is straw, sand etc changed regularly?			
Washing Facilities (See Section 8.8)			
Are hand washing facilities provided and easily accessible: - at or near animal contact / petting areas? - at or near entrances to eating areas? - at or near exits from the premises? - at toilet facilities? Appropriate hand washing facilities should be available in key locations throughout the farm.			
Are enough hand washing facilities provided to cope with maximum numbers of visitors at any one time?			
Do hand washing facilities have: - running hot and cold or warm water? - liquid soap? - suitable means of hand drying?			
Are hand washing facilities accessible to all visitors incl. those in wheelchairs, children etc?			
Are separate footwear / wheel cleaning facilities provided for visitors as they leave the open farm?			

Best Practice	Yes/No	If No, the action required is:	Name of person(s) to be actioned by:
Signage and Visitor Information (See Section 8.9)			
Are signs posted advising visitors to wash their hands and the hands of those in their care: - after animal contact? - before eating? - after using the toilet? - before eating, drinking or smoking? - after cleaning footwear? - on leaving the farm? There should be signage throughout the farm reminding visitors of the importance of hand washing after visiting the animal areas and particularly before entering eating areas.			
Are signs posted to show good hand washing technique?			
Are signs posted advising visitors that sanitising gel or cleansing wipes are not an acceptable substitute for proper hand washing?			
Are signs posted to advise visitors when they are entering and leaving animal contact area(s)?			
Are signs posted to advise visitors of the risks associated with animal contact, particularly for vulnerable groups such as pregnant women, children etc? Information outlining the potential dangers of farms and farm animals as being a source of infectious diseases should be available to all farm visitors at key locations throughout the farm.			
Is information provided in advance to visitors, groups etc. about the risks and controls over infection e.g. by means of information sheets, website info etc?			
Staff Training and Supervision (See Section 8.10)			
Has all staff been trained in infection prevention and control, as outlined in Section 8.10?			
Is all staff supervised to ensure that they are carrying out the infection prevention and control measures outlined in their training?			
Animal Health and Livestock Management (See Section 8.11)			
Has an animal health plan been drawn up in consultation with professional veterinary advice?			
Are animals that are unsuitable for visitor contact, newly introduced animals, sick animals or those that have just given birth kept away from visitors?			

Best Practice	Yes/No	If No, the action required is:	Name of person(s) to be actioned by:
Water Supply (See Section 8.12)			
If the water supply is from a private source, is it treated and tested regularly to ensure that it is safe to drink?			
Waste Management (See Section 8.13)			
Is animal waste collected, stored and disposed of so as to prevent the spread of faecal matter and contamination?			
Pest Control (See Section 8.14)			
Are pest control measures for the open farm adequate?			
Tobacco Control (See Section 9.5)			
Has a tobacco-free policy been implemented for the whole of the open farm?			
Infectious Disease Risk Assessment (See Section 7 and Appendix 3)			
Has a risk assessment been carried out for the control and prevention of infection on the open farm?			
Incident Reporting and Investigation (See Appendix 8)			
Are all incidents recorded?			
Are incidents or accidents referred to the appropriate authority e.g. Health and Safety Authority, Health Service Executive?			
Are visitors reporting illness advised to contact their G.P?			
Mobile Farms (See Appendix 1)			
Are suitable hand washing facilities provided?			
Are signs posted advising visitors: - of the importance of hand washing - when to wash their hands and the hands of those in their care? - where to wash their hands?			
Is animal waste stored and disposed of in a suitable manner?			
Are the surfaces, pens, benches etc. regularly cleaned and disinfected?			
Is the public prevented from entering animal pens?			
Are only animals suitable for vulnerable groups such as children and the elderly taken in mobile units?			

APPENDIX 5 : TABLE OF ZOONOTIC DISEASES AND MICRO-ORGANISMS

Extracted from the Public Health England website; *https://www.gov.uk/government/publications/list-of-zoonotic-diseases*

Disease	Organism	Main reservoirs	Usual mode of transmission to humans
Anthrax	Bacillus anthracis	livestock, wild animals, environment	direct contact, ingestion
Animal influenza	influenza viruses	livestock, humans	may be reverse zoonosis
Avian influenza	Influenza virus, avian strains	poultry, ducks	direct contact
Bovine tuberculosis	Mycobacterium bovis	cattle	milk
Brucellosis	Brucella species	cattle, goats, sheep, pigs	dairy products, milk
Cat scratch fever	Bartonella henselae	cats	bite, scratch
Cysticercosis	Taenia species	cattle, pigs	meat
Cryptosporidiosis	Cryptosporidium species	cattle, sheep, pets	water, direct contact
Enzootic abortion	Chlamydophila abortus	farm animals, sheep	direct contact, aerosol
Erysipeloid	Erysipelothrix rhusiopathiae	pigs, fish, environment	direct contact
Fish tank granuloma	Mycobacterium marinum	fish	direct contact, water
Food poisoning	Campylobacter species	poultry, farm animals	raw meat, milk
	Salmonella species	poultry, cattle, sheep, pigs	foodborne
Giardiasis	Giardia lamblia	humans, wildlife	waterborne, person to person
Glanders	Burkholderia mallei	horse, donkey, mule	direct contact
Haemorrhagic colitis	Escherichia coli O157	ruminants	direct contact (and foodborne)
Hantavirus syndromes	Hantaviruses	rodents	aerosol
Hepatitis E	Hepatitis E virus	not yet known	not yet known
Hydatid disease	Echinococcus granulosus	dogs, sheep	ingestion of eggs excreted by dog
Leptospirosis	Leptospira species	rodents, ruminants	infected urine, water
Listeriosis	Listeria monocytogenes	cattle, sheep, soil	dairy produce, meat products
Louping ill	Louping ill virus	sheep, grouse	direct contact, tick bite
Lyme disease	Borrelia burgdorferi	ticks, rodents, sheep, deer, small mammals	tick bite
Lymphocytic choriomeningitis	Lymphocytic choriomeningitis virus	rodents	direct contact
Orf	Orf virus	sheep	direct contact
Pasteurellosis	Pasteurella multocida	dogs, cats, many mammals	bite/scratch, direct contact
Plague	Yersinia pestis	rats and their fleas	flea bite
Psittacosis	Chlamydophila psittaci	birds, poultry, ducks	aerosol, direct contact
Q fever	Coxiella burnetii	cattle, sheep, goats, cats	aerosol, direct contact, milk, fomites
Rabies	Rabies viruses	dogs, foxes, bats, cats	animal bite
Rat bite fever (Haverhill fever)	Streptobacillus moniliformis	rats	bite/scratch, milk, water
Rift Valley fever	Rift Valley fever virus	cattle, goats, sheep	direct contact, mosquito bite
Ringworm	Dermatophyte fungi	cats, dogs, cattle, many animal species	direct contact
Streptococcal sepsis	Streptococcus suis	pigs	direct contact, meat
Streptococcal sepsis	Streptococcus zooepidemicus	horses, cattle	direct contact, milk
Tickborne encephalitis	Tickborne encephalitis virus	rodents, small mammals, livestock	tickbite, unpasteurised milk products
Toxocariasis	Toxocara canis/cati	dogs, cats	direct contact
Toxoplasmosis	Toxoplasma gondii	cats, ruminants	ingestion of faecal oocysts, meat
Trichinellosis	Trichinella spiralis	pigs, wild boar	pork products
Tularemia	Francisella tularensis	rabbits, wild animals, environment, ticks	direct contact, aerosol, ticks, inoculation
Viral haemorrhagic fevers	Ebola, Crimean-Congo HF, Lassa and Marburg viruses	variously: rodents, ticks, livestock, primates, bats	direct contact, inoculation, ticks
West Nile fever	West nile virus	wild birds, mosquitoes	mosquito bite
Zoonotic diphtheria	Corynebacterium ulcerans	cattle, farm animals, dogs	direct contact, milk

APPENDIX 6 : INFORMATION SHEET FOR THE PUBLIC, EDUCATION AND CHILDCARE SERVICES AND COMMUNITY ORGANISATIONS

A visit to an open farm should be a very enjoyable and worth while experience for both children and adults alike. However, the open farm environment will be unfamiliar for some people and there are potential risks associated with the farm environment which visitors may not normally be exposed to. It is important that those organising visits to open farms, including schools and community groups, would consider these risks and take a few basic steps to ensure a safe visit to the open farm. Animals which you will encounter, and may have contact with on the open farms, naturally carry micro-organisms some of which can be transmitted to humans and can cause ill-health. It must be borne in mind that pathogens such as E.coli 0157 and Cryptosporidium parvum can cause serious illness, particularly in young children.

This factsheet outlines some simple practical guidelines for groups of visitors to open farms so that school and group visitors can have a safe and healthy visit to an open farm.

Preparing for your visit:

- Contact the open farm in advance of your visit to discuss the visit.
- As with all group outings, ensure that you have an adequate level of supervision within your group.
- Brief all supervisors before the visit.
- Ensure that all supervisory staff are aware of preventative measures against the transmission of infection to be observed by children during the visit, as listed below.

A briefing should also be held with children before the visit to the farm commences. The following points must be covered with children before they commence their visit to the farm:

- **As HAND WASHING is the single most important protection against the spread of disease, they must wash their hands after contact with animals and before eating/handling food and before leaving the farm.** The use of hand sanitizer / wipes alone is not an acceptable substitute for proper hand washing on a farm. (A useful resource can be found at *http://www.e-bug.eu/*. e-Bug is a free educational resource for classroom and home use for learning about micro-organisms, the spread, prevention and treatment of infection).

- Warm water and liquid soap is essential for adequate hand washing. A demonstration on effective hand washing should be carried out by a supervisor.

- Children should be told that they are only permitted to eat in the designated eating areas and after hand washing has taken place. Children must be told that eating is forbidden during parts of the visit to the farm which include feeding, contact and petting of animals.

- Children should be supervised to so as to ensure they do not put anything from the farm into or near their mouths and that they do not suck their fingers or put anything they find into or near their mouths.

- Children and parents should be instructed on the type of footwear and clothing necessary. The recommended footwear is wellington boots which should be washed and disinfected when leaving the farm.

During the visit, to prevent against the risk of infection ensure that all children within the group:

Always wash their hands thoroughly after contact with animals, before eating food or drinking and before leaving the farm.

Observe all safety signs and rules and follow the designated routes for the open farms.

Ensure that food is only eaten in the designated eating area.

Do not enter restricted animal housing areas or pens.

Do not touch manure slurry or other farm yard waste.

Only feed animals when it is allowed and they are invited to do so.

Do not kiss the animals or allow them to lick their face.

Where facilities are provided, footwear, buggies and wheel chairs should be cleaned before leaving the farm.

General Safety Guidance to be followed during the visit to the Open Farm:

Children are the responsibility of the adult(s) they accompany during their visit and they must be supervised at all times during the visit, obey the instructions of the open farm staff and never wander off unaccompanied. Children and other visitors must never enter areas that have restricted access i.e. animal housing sheds, hay-barns, slurry tanks, machinery storage, work areas and open fields.

Should working machinery be on the open farm route, keep a clear distance between you and the machine so that you are visible to the driver.

Ensure that children and/or adults in your group do not walk behind animals, startle or chase animals. Children should be instructed to approach animals in a quiet and gentle manner.

Children and other visitors must only drink from designated drinking water points.

Visitors should keep clear of electrical fences and not climb over gates and fences.

If illness is experienced after visit, contact your GP and say you were at an open farm and also contact the open farm
If you are requesting a visit by a mobile farm to your house, premises, event e.g. for a party or community event:

1. If your premises is subject to inspection by a regulatory authority e.g. a nursing home, crèche, school, ensure that a visit of a mobile farm to your premises is an acceptable practice to the regulatory body inspecting your premises and that suitable infection control measures are in place
2. Discuss arrangements for animal contact and hand washing with the operator beforehand.

This Appendix is available to download free at *www.ehai.ie*

APPENDIX 7:

STAYING HEALTHY DURING FARM VISITS

Getting to meet farm animals brings many benefits and pleasure to children and adults alike.

However, animals and the farm environment naturally carry germs, some of which may cause illness. Some of these illnesses can be severe with the potential to be life threatening.

To make your visit as safe and enjoyable as possible, here are some of the precautions that you must take:

- Follow instructions of staff at all times
- Hand washing is VERY important. Always wash and dry hands and the hands of those in your care thoroughly with running warm water and soap after contact with animals, before eating and before leaving the farm
- Cleansing wipes or sanitizing gel are not acceptable substitutes for proper hand washing on a farm
- Keep to the open farm pathways and routes
- Heed the signs that are posted throughout the farm
- Do not enter pens in which animals are housed. Children must not be lifted or allowed to climb in with the animals in their pens
- Be respectful and gentle with animals at all times
- Don't kiss the animals or let them lick your face and never touch any animal droppings
- Supervise children at all times
- Ensure that children do not put dummies, toys, etc into mouths if they have been contaminated
- Only eat in designated areas and, in particular, ensure that eating and drinking does not take place in animal areas
- Only drink water from taps that are clearly marked 'drinking water'
- Special precautions need to be taken by pregnant women, including avoiding contact with all animals, particularly birthing animals.
- Clean footwear before leaving




Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara

hpsc

Veterinary Liaison Technical Group
LAVS

HAND WASHING STEPS

1. Wet hands with warm water

2. Apply soap to hands

3. Rub hands together for 20 seconds

4. Rinse hands thoroughly with water

5. Dry hands

APPENDIX 8 : INCIDENT REPORTING AND INVESTIGATION

Reasons for Investigating Incidents: Incident reporting is necessary for monitoring visitor safety on open farms. Any near misses which occur during visits to open farms should be recorded. Incidences or near misses involving visitors and/or staff may help the open farm operator identify areas of their premises where hazards still exists. Note: Individuals who contact the open farm to report illness should be advised by the open farm operator to contact their GP.

When to record incidences on the farm: Reports from visitors of alleged illness or food poisoning or injury or near miss should be recorded. The form provided below should be used for recording and investigating incidences which occur on the open farm.

Any incident reported to the open farm operator should be managed in a comprehensive manner. An incident report investigation form similar to the one below facilitates the comprehensive recording of any incident reported. Comprehensive investigating and recording of incidents may help identify trends of incidents, accidents or near misses and thus result in further preventative measures being taken to alleviate the risk.

Note: The open farm operator should be aware that some visitors to the open farm may not report incidents or near misses which they have been exposed to on their visit to the farm.

If an accident has occurred on the farm this should be reported to the Health and Safety Authority.

Reporting of Incidents

Reporting of incidents such as suspected infectious disease allegedly contracted during a visit to the open farm may help to quickly identify potential outbreaks. If the open farm operator has reason to suspect or if it has been alleged by a visitor that infectious disease has been contracted on their open farm they should immediately make contact with the Department of Public Health of the Health Service Executive. The following is a link to the Department of Public Health Offices : *http://www.hse.ie/eng/services/list/5/Public_Health/publichealthdepts/phoffices.html*

It should be noted that such incidents should be reported as a matter of urgency as the expedience of notification can be of critical importance in outbreak situations.

The person(s) given the responsibility of investigating or reporting the incident should have suitable knowledge, training and experience.

OPEN FARM INCIDENT INVESTIGATION FORM			
Complainant Details			
Name of Complainant/Visitor:			
Address and Contact Details of Complainant/Visitor:			
	Contact No:	Email Address	
Injured/Ill persons name:			
Male/Female:			
Date of Birth:			
Details of alleged illness/injury/incident:			
Incident Details:			
Incident Date:	Incident Time:		
Detail of Illness/injury (include illness type, illness symptoms/injury sustained):			
Did the illness/injury require hospital/doctor?	Yes	Yes	
Was the illness confirmed by a stool sample?	No	No	
Investigation Details:			
Was the illness reported to a relevant authority? (HSE/HAS) If so give details:			
Corrective Action:			

APPENDIX 9 - USEFUL CONTACTS & INFORMATION RESOURCES

Dept of Agriculture, Food and the Marine
Head Office: Agriculture House,
Kildare Street, Dublin 2.
Tel. Lo call: 1890 200 510
Tel: 01 607 2000
Website: *www.agriculture.gov.ie*
Email: *info@agriculture.gov.ie*

EHAI - Environmental Health Association of Ireland
Heraghty House, 4 Carlton Terrace Novara Avenue,
Bray, Co. Wicklow
Tel: 01-2761211,
Website: *www.ehai.ie*
Email: *info@ehai.ie*

ENFO - The Environmental Information Service
Website : *www.enfo.ie*

EPA - Environmental Protection Agency
Johnstown Castle Estate, County Wexford
Tel: (053) 916 0600
Website: *www.epa.ie*
Email: *info@epa.ie*

HPSC - Health Protection Surveillance Centre
25-27 Middle Gardiner Street, Dublin 1
Tel: 01 8765300
Fax: 01 8561299
Website: *www.hpsc.ie*
Email: *hpsc@hse.ie*

HSA - Health & Safety Authority
Head Office: The Metropolitan Building,
James Joyce Street, Dublin 1
LoCall: 1890 289 389, 01-6147125,
Website: *www.hsa.ie*
Email: *wcu@hsa.ie*

HSE - National Environmental Health local Office details can be found at:
Website: *http://www.hse.ie/eng/services/list/1/environ/Contact.htm*

HSE - Department of Public Health Offices
Website: *http://www.hse.ie/eng/services/list/5/Public_Health/publichealthdepts/phoffices.html*

LAVO - The Local Authority Veterinary Officer for each county can be contacted through the respective County Council
National Zoonoses Committee of Ireland
Website: *www.zoonoses.ie*

Safefood
Dublin Office: Block B, Abbey Court,
Lower Abbey Street, Dublin 1
Tel: +353 14480600

Cork Office: 7 Eastgate Avenue, Eastgate,
Little Island, Co Cork
Tel: +353 212304100
Website: *www.safefood.eu*
Email: *info@safefood.eu*

12. REFERENCES

Access to Farms "Preventing or controlling ill health from animal contact at visitor attractions", UK Industry Code of Practice, Version 1, June 2012

British Columbia Centre for Disease Control "Communicable Disease Control Guidelines for prevention of zoonotic diseases from petting zoos and open farms", March 2011.

FSAI "Guide to Food Law for Artisan/Small Food Producers Starting a New Business", 2010

HSA "Spring lambing season -Farm safety advice for pregnant women" at http://www.hsa.ie/eng/Your Industry/Agriculture Forestry/Livestock/Spring lambing season -Farm safety advice for pregnant women

HSE and HPSC "Recommendations to prevent VTEC on Open/Pet Farms", 26th March, 2010 V 1.2

HSE Information Leaflet "Risk of illness from well water" June 2013 at http://www.hse.ie/eng/services/Campaigns/wellsepa.html

HSENI "Information Sheet No. 1/11 Preventing or controlling ill health from animal contact at visitor attractions", April 2011.

Manitoba Health Protection Unit, Guidelines for the operation of petting zoos & open farms, Guideline # 2013-01, January 2013

Murray, Cora and Gaffey, Peter, "A National Survey of Standards and Practices in Open Farms in Ireland", Yearbook for the Environmental Health Association of Ireland, 2014

Murray, Cora, "Open Farms – An Environmental Health Concern", Yearbook for the Environmental Health Officers Association, 2012

National Health Service (UK) "Why should pregnant women avoid sheep during the lambing season?" Page last reviewed 29/8/ 2013 http://www.nhs.uk/chq/Pages/934.aspx?CategoryID=54&SubCategoryID=131

Preventing or controlling ill health from animal contact at visitor attractions - Industry Code of Practise, June 2012

Preschool and Childcare Facility Subcommittee: Management of Infectious Disease in Childcare Facilities and Other Childcare Settings, Health Protection Surveillance Centre and HSE, May 2012

Queensland Government, Queensland Health, Infection Control Guidelines for Animal Contact, Petting Zoo, Animal Farm and Animal Show Operators, Wildlife Exhibitors, Education and Childcare Services, 2008

Review of the major outbreak of E coli o 157 in Surrey, 2009; An evaluation of the outbreak and its management, with a consideration of the regulatory framework and control of risks relating to open farms; report of the E coli O 157 Independent Investigation Committee 2010

Sayers et al (1996) "Cryptosporidiosis in children who had visited an open farm". Communicable Disease Report CDR Rev. 13 6 (10): R140-144

"Staying Healthy on your Farm- Advice Pack for the Farming Community ", Southeast Zoonoses Committee, 2010.

Veterinary Medicine Today, Public Veterinary Medicine, Public Health, Compendium of measures to prevent disease associated with animals in public settings, JAVMA, Vol. 243, No. 9, Nov 2. 2013

Wall, Tom, "Children hospitalised with E.coli after petting lambs". EH News, CIEH, 7/5/2014.

Websites Referenced:
Communicable Disease Centre: *http://www.cdc.gov*
Health Protection Surveillance Centre: *www.hpsc.ie*
Health and Safety Authority: *www.hsa.ie*
Public Health England: *http://www.e-bug.eu/*
World Health organisation: *www.who.com*


Environmental Health Association of Ireland