

Make your farm your **FORTRESS**



Biosecurity.
Have you considered the risks?
Management booklet for cattle



Biosecurity. Have you considered the risks?

Below are just some of the diseases that cattle could be carrying.

BVD

IBR

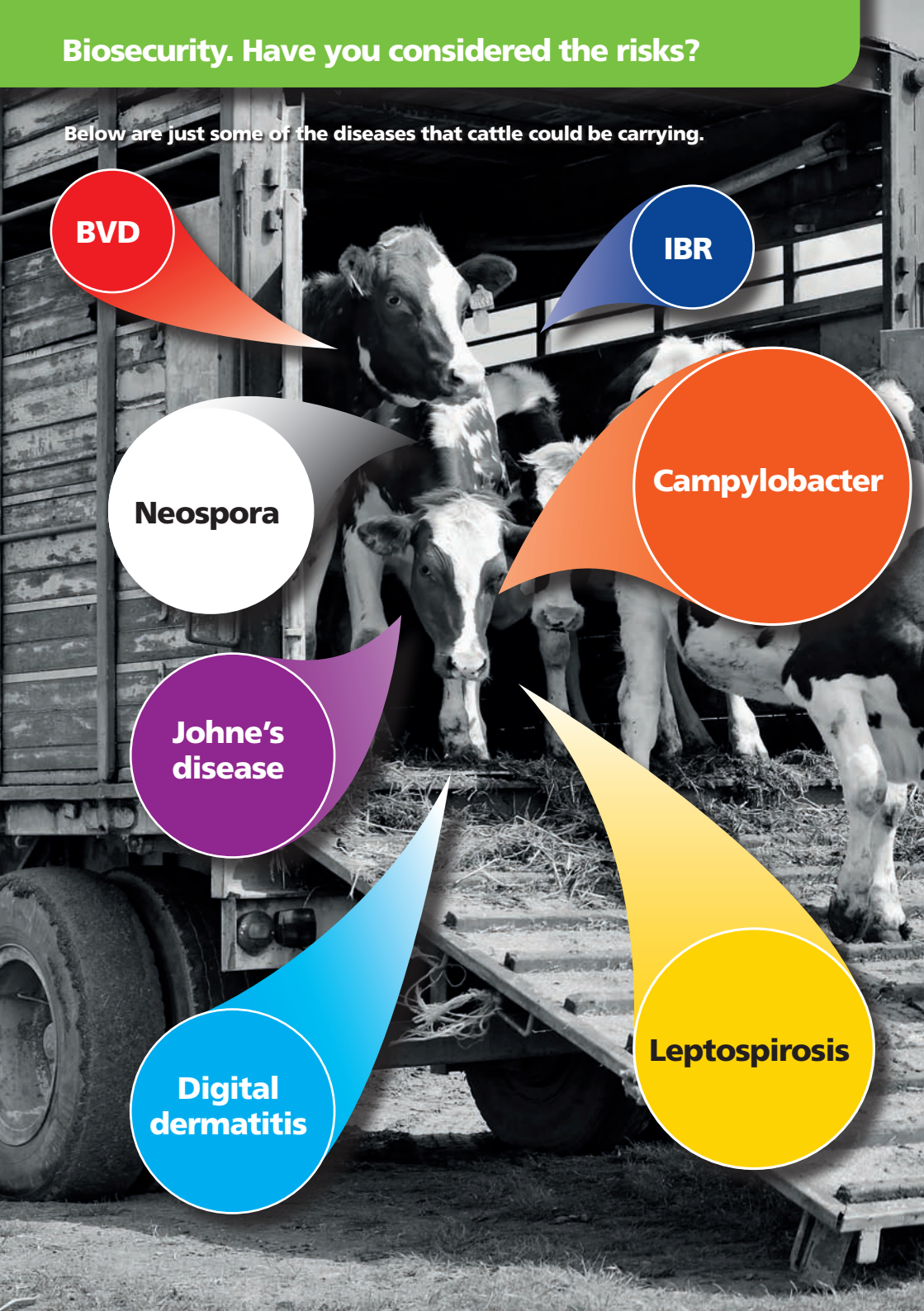
Neospora

Campylobacter

**Johne's
disease**

**Digital
dermatitis**

Leptospirosis





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What is biosecurity?

Biosecurity is a simple management plan to reduce the risk of disease entering your farm and to reduce the risk of it spreading once on your farm.

Protecting profits

Take the time to consider your biosecurity management plan with the help of your vet and avoid the risks of introducing diseases which could have serious and long-term financial effects on your farms profitability.

Protecting health

When diseases can be passed from animals to humans, biosecurity planning will protect not only the health of your stock, but also the health of your family and farm workers.

How to use this booklet

The disease status and management is different on every farm. This booklet will help you to review the biosecurity risks to your farm.

Each section will allow you to quickly gather information about your farm and help you to assess the level of risk associated with particular management practices. This booklet can be used as a tool to help you and your vet to prioritise and plan your biosecurity strategy. Working through this booklet with the help of your own vet will allow you to develop a comprehensive biosecurity policy that is practical to implement.

When you have developed your biosecurity policy, don't forget to review and update it at least once a year.

Biosecurity measures differ for different diseases and the disease control measures described in this booklet represent general biosecurity advice. Further information and advice about specific disease control measures should always be discussed with your vet.



Establishing your farm's health status

Go through the list of diseases presented below and tick the relevant boxes.

List of key cattle diseases	Disease already on farm	Free from disease?	Disease to keep out	Disease to control/eradicate	Disease vet views as risk
Bovine Viral Diarrhoea (BVD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infectious Bovine Rhinotracheitis (IBR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leptospirosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Johne's disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neospora	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bovine Tuberculosis (bTB)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brucellosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bluetongue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Campylobacter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salmonella	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worms and lungworms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liver fluke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lice and mange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coccidiosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cryptosporidiosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ringworm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital dermatitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pseudocowpox and Ulcerative mammillitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Establishing your farm's health status

Finally ask your vet to go through the list and highlight, and discuss any further diseases which might pose a risk to your farm.

Those are just some of the infectious diseases that can be introduced into your herd. If there are other diseases which you are concerned about please write them here:

List of key cattle diseases	Disease already on farm	Free from disease?	Disease to keep out	Disease to control/eradicate	Disease vet views as risk
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

With this information and the advice of your vet, can you identify your disease risk priorities? Which diseases could you target for control or eradication? If you would like to know more information about the diseases listed here, speak to your vet or visit the XLVets website www.xlvets.co.uk

Notes

Purchasing stock

Please tick ☐ boxes relevant to your current farm practice.

Please tick ☐ boxes if there are any lower risk practices you could adopt.

LOWER RISK

- ☐ ☐ **Closed herd**
- ☐ ☐ **Use home bred replacements**
- ☐ ☐ **Use AI or ET to introduce new genetics**
- ☐ ☐ **Purchase from accredited sources**

MEDIUM RISK

- ☐ ☐ **Buy in occasionally**
- ☐ ☐ **Purchases limited to bulls**
- ☐ ☐ **Purchases limited to virgin animals**
- ☐ ☐ **Know the health status of source farms**

HIGHER RISK

- ☐ ☐ **Frequently buy in cattle**
- ☐ ☐ **Purchase from market**
- ☐ ☐ **Purchase from unaccredited sources**
- ☐ ☐ **Do not know the health status of source farms**



Do you know what diseases you could be buying in?

Buying from accredited herds

An accredited free farm is one which has joined a monitoring scheme for a particular disease or diseases. Farms undergo repeated and regular testing in order to achieve and maintain their disease free status. Details for some of the schemes are listed below:



Cattle Health Certification Standards (CHecs) is the regulatory body for Cattle Health Schemes in the UK and Ireland. It is a non-trading organisation established by the British cattle industry for the control and eradication of non-statutory diseases by a set of standards to which all licensed Cattle Health Schemes must adhere. Cattle herds can be accredited free from BVD, IBR, Leptospirosis, Johnes and Neospora. To find out more visit www.checs.co.uk



Scottish BVD Eradication Policy requires all breeding herds to undertake mandatory annual screening for BVD. The results of this are available to the public and will indicate whether a herd is part of an accredited scheme or not. To find out the BVD risk category of a Scottish herd or the test results of screened animals go to www.scoteid.com



The *XLVets BVD FREE* initiative has been developed to offer practical solutions for BVD control on farm. As part of this initiative the *BVD Check* database has been created www.bvdcheck.co.uk which allows veterinary practices to upload negative BVD test results for individual animals. Farmers can then search the *BVD Check* database by ear tag number to see if there is a corresponding test result for any animal. For more information visit www.bvdfree.co.uk



Buyer's checklist

Always take time to ask the vendor questions, regardless of whether you are purchasing directly from a farm or from a market. Minimum questions for vendors:

- Do they test or monitor for any disease?
- What does the farm routinely vaccinate for?
- Does the farm currently have any of the diseases you wish to avoid?
- In the past has the farm had any of the diseases you wish to avoid? How long ago?
- Have these animals been tested, treated or vaccinated for anything?
- When were they last treated? With which product and how many times?



Be cautious:

- You must judge the accuracy of the information you are given by the vendor and evaluate the disease risks that purchased animals from this source might pose to your farm.
- Judge the effectiveness of any vaccine or treatments given on the source farm. What are the risks if animals haven't been treated correctly?
- Ask the vendor if they can provide any supporting evidence or if you can contact their vet about the health status of the farm.
- Consider arranging for animals of unknown disease status to be tested pre-purchase.

When risks are identified there are usually actions that can be taken to respond to these risks. Work with your vet to develop a specific action plan for animals entering your farm.

Quarantine

The quarantine period provides a monitoring period during which animals that were incubating disease on the day of purchase are likely to show symptoms. Regardless of the source, all purchased animals should be placed in isolation for a minimum of three weeks. The isolation period may differ between diseases, specific disease advice should be discussed with your vet.



Disease testing

The quarantine period allows for animals of unknown disease status to be tested and for those test results to be returned. Discuss with your vet which tests should be conducted on quarantined stock. Whenever possible test stock before purchase rather than after.

Please tick ☐ boxes relevant to your current farm practice.

Please tick ☐ boxes if there are any lower risk practices you could adopt.

LOWER RISK

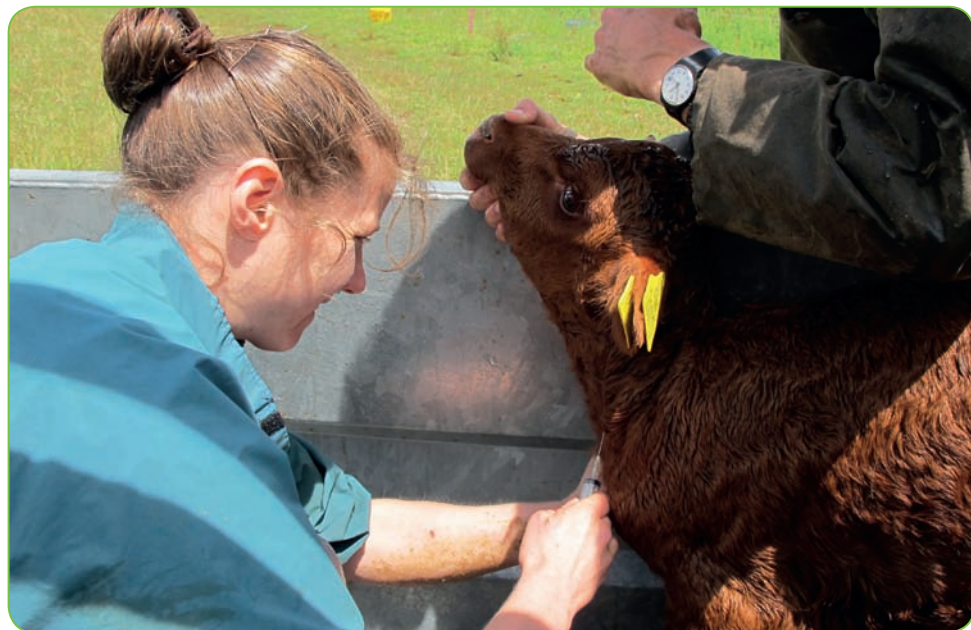
- ☐ ☐ **Animals quarantined after purchase**
- ☐ ☐ **Animals quarantined for three weeks or more**
- ☐ ☐ **Animals tested before purchase**

MEDIUM RISK

- ☐ ☐ **Animals quarantined for less than three weeks**
- ☐ ☐ **Animals tested after purchase**

HIGHER RISK

- ☐ ☐ **Animals not quarantined after purchase**
- ☐ ☐ **Animals not tested before or after purchase**



Quarantine facilities

Please tick ☐ boxes relevant to your current farm practice.

Please tick ☐ boxes if there are any lower risk practices you could adopt.

LOWER RISK

- ☐ ☐ Quarantined stock separated from other livestock by three metre gap
- ☐ ☐ Quarantined stock have a separate water supply
- ☐ ☐ Separate equipment used for quarantine stock
- ☐ ☐ Disinfection point outside isolation area
- ☐ ☐ Staff use separate protective clothing when in quarantine
- ☐ ☐ Staff work with quarantined stock last

HIGHER RISK

- ☐ ☐ Quarantined stock share air space with other livestock
- ☐ ☐ Direct nose to nose contact or contact with faeces and urine possible with other stock
- ☐ ☐ Quarantined stock share a water supply with other livestock
- ☐ ☐ Equipment moved between quarantined stock and the rest of farm without being disinfected
- ☐ ☐ Staff do not change protective clothing after working in quarantine

Fields and paddocks

Animals kept in quarantine should not be able to have direct contact with other stock. If stock must be grazed next to quarantine fields, boundaries should be double fenced leaving a three metre gap between isolated stock and other livestock. Leave at least a two month gap before allowing quarantine paddocks to be used again for general grazing. Some diseases will require a much longer waiting period and specific advice should be sought from your vet. Do not allow calves to graze fields previously used for quarantine.

Buildings and pens

Try to avoid shared airspace with other stock. If quarantined stock cannot be kept in a separate building, leave a three metre gap between isolated stock and other livestock. Ensure that water, feed, bedding, urine and faeces from quarantined animals does not come into contact with other livestock.



Quarantine treatments

Discuss with your vet which quarantine treatments and vaccination protocols are appropriate for your farm. Whenever possible vaccinate purchased stock on arrival before they mix with other stock. Please tick boxes relevant to your current quarantine practice.

Treatment	Products used
<input type="checkbox"/> Treatment for worms
<input type="checkbox"/> Treatment for fluke
<input type="checkbox"/> Treatment for external parasites
<input type="checkbox"/> Treatment for foot conditions
<input type="checkbox"/> Routine vaccinations
<input type="checkbox"/> Other treatments please specify

Effective vaccination

If your biosecurity policy and disease control relies on vaccination, take steps to ensure that this vaccination is effective. Please tick current farm practices. Are there any best practices you could adopt?

<input type="checkbox"/> Always check the product label for route, dose and timing.	<input type="checkbox"/> Seek vet timing advice for vaccination
<input type="checkbox"/> Keep product cool in transport	<input type="checkbox"/> Use a calendar to plan when vaccinations take place
<input type="checkbox"/> Always store vaccine in a working fridge	<input type="checkbox"/> Ensure the vaccination equipment is hygienic and calibrated
<input type="checkbox"/> Check the expiry dates	

Returning stock

Do you?

<input type="checkbox"/> Use shared or loaned bulls	<input type="checkbox"/> Show stock
<input type="checkbox"/> Keep stock on away grazing	<input type="checkbox"/> Have stock returning from sales

- All returning animals must also undergo quarantine procedures.
- Assess the disease risks of where the animals are going to.
- With your vet, develop a specific plan for animals which leave and return to your farm.
- Consider protecting these animals with vaccination.
- The practice of hiring or loaning bulls should be avoided. Specific treatment protocols regarding shared bulls should be discussed with your vet.

Farm boundaries

Please tick the types of land use which border or pass through your farm.

LOWER RISK
<input type="checkbox"/> Arable
<input type="checkbox"/> Forestry

MEDIUM RISK
<input type="checkbox"/> Main road
<input type="checkbox"/> Water course
<input type="checkbox"/> Public footpath
<input type="checkbox"/> Livestock other

HIGHER RISK
<input type="checkbox"/> Livestock sheep
<input type="checkbox"/> Livestock cattle
<input type="checkbox"/> Common grazing

Please tick boxes relevant to your current farm practice. Are there any lower risk practices you could adopt?

LOWER RISK
<input type="checkbox"/> No adjoining grazing with neighbours livestock
<input type="checkbox"/> Boundary fences are secure
<input type="checkbox"/> Double fencing between adjoining grazing
<input type="checkbox"/> Double fencing with a gap of three metres between stock
<input type="checkbox"/> Stock prevented from accessing shared water courses

HIGHER RISK
<input type="checkbox"/> Stock can have nose to nose contact with neighbours cattle
<input type="checkbox"/> Stock frequently break through boundary fences
<input type="checkbox"/> Stock can access shared water

Assess with your vet the risk any neighbouring livestock enterprise or land uses may pose to your farm. What actions can you take to deal with these risks?

Double fencing

A distance of three metres is preferable when double fencing. When a permanent double fence is not feasible, use an electric fence to temporarily create a boundary that can be taken down when the stock are removed from the field.

Cooperation with neighbours

Find out what your neighbours health status is. You could arrange to use grazing at boundary fields at different times, or work together on a local disease control strategy, which may be easier than trying to double fence!

Water access

Avoid allowing stock access to surface water, streams and rivers. These are at risk of becoming contaminated by neighbouring stock and wildlife. Fence off streams and rivers, supply clean fresh drinking water in troughs instead.

Visitors

Please tick boxes relevant to your current farm practice. Are there any lower risk practices you could adopt?

LOWER RISK

- ☐ Visitor parking is away from livestock areas
- ☐ Visitor parking is on hard standing, visibly clear of faeces and mud
- ☐ Records kept of all visitors to the farm
- ☐ Restricted contact between visitors, livestock and feed
- ☐ Visitors asked to wear clean protective clothing and boots
- ☐ Clean protective clothing and boots provided
- ☐ Disinfection points provided

HIGHER RISK

- ☐ Visitor vehicles can pass through livestock areas
- ☐ Visitor vehicles pass through mud and faeces before parking
- ☐ Visitor access not recorded
- ☐ Visitor access not restricted
- ☐ Farm biosecurity policy not communicated
- ☐ No disinfection points provided



Effective footbaths

- Follow product mixing instructions
- Replenish footbaths at required rate
- Prevent dilution by rain
- Site near a hose and provide brushes
- Ensure boots are scrubbed clean before emersion



Clear signage and maintained disinfection points around the farm, clearly indicate the farms biosecurity policy.

High-risk visitors, staff and contractors

This group includes:

- Vets
- Livestock technicians
- Farm contractors
- Staff who move between farms
- Other farmers
- Livestock hauliers
- Deadstock collectors

- ☐ Clearly communicate the farm's biosecurity policy to all high-risk visitors, staff and contractors.
- ☐ Ensure that equipment brought into direct contact with livestock is cleaned and disinfected before and after use.
- ☐ Consider providing high-risk personnel with protective clothing and boots to use and leave on farm.
- ☐ Ask contractors to give written declarations specifying what cleansing and disinfection will take place before they enter your farm.

Are there any best practices you could adopt?

All contractor vehicles and trailers accessing livestock areas should be clean and free of visible manure on the outside of the vehicle, wheels, mudguards and wheel arches.

Ask all high-risk visitors to arrive wearing clean protective clothing and boots. And to ensure all equipment is disinfected.



Shared equipment and machinery

Please tick boxes relevant to your current farm practice. Are there any lower risk practices you could adopt?

LOWER RISK

- ☐ No equipment and machinery shared with other farms
- ☐ Wash station and disinfectant sprayers provided for incoming vehicles and equipment

MEDIUM RISK

- ☐ Any shared equipment is cleaned and disinfected between farms
- ☐ Contractors clean and disinfect their vehicles and equipment between farms
- ☐ Contractor machinery has no contact with stock

HIGHER RISK

- ☐ Equipment and machinery shared with other farms
- ☐ No requirement for contractors to clean and disinfect equipment

Deadstock collection

Please tick boxes relevant to your current farm practice. Are there any lower risk practices you could adopt?

LOWER RISK

- ☐ Carcasses moved out of livestock areas by farm vehicles before collection
- ☐ Specific collection area – away from other livestock, feed and water
- ☐ Collection area can be cleansed and disinfected
- ☐ Collection area located at the perimeter of the farm
- ☐ Carcasses collected asap
- ☐ Small carcasses stored in lidded containers

HIGHER RISK

- ☐ Carcasses are collected directly from livestock pens
- ☐ No designated collection area
- ☐ Collection vehicle must pass through parts of the farm contaminated with manure or mud
- ☐ Collection vehicles pass near livestock, feed or water areas
- ☐ Vermin, wildlife and dogs can access carcasses

Market visits

At every market there is a risk of coming into contact with potentially infected livestock or equipment. Minimise these risks by:

- ☐ Wearing protective clothing and boots when entering the animal areas
- ☐ Not leaving the animal area without cleansing and disinfecting your boots
- ☐ Remove protective clothing for laundry after leaving the animal area
- ☐ Ensuring your vehicles and equipment arrive and leave the market clean and disinfected

Are there any best practices above you could adopt?

Manure and slurry

- Manure and slurry from quarantined animals and imported manures taken from other farms should be considered a high disease risk. Whenever possible try to ensure that high-risk manures are spread on arable land rather than pasture.
- Before spreading, ensure that high-risk manure or slurry has been stored for a suitable length of time.
- Before allowing stock to graze recently spread fields ensure a suitable length of time has passed.
- Suitable waiting times should be discussed with your vet, particularly if there is a worry about Johne's disease.
- Prevent calves from grazing pastures where manures have been spread for at least 12 months.

LOWER RISK

- ☐ No manure hauling equipment shared
- ☐ No imported manures taken from other farms
- ☐ Manure from quarantined animals is stored separately
- ☐ Muck heaps fenced off or stock unable to access muck heap
- ☐ Livestock kept away from freshly spread manures for an appropriate period of time

MEDIUM RISK

- ☐ Manure hauling equipment shared with another farm, but thoroughly cleaned and disinfected between farms
- ☐ Farms from which imported manure is taken have been assessed for potential risks

HIGHER RISK

- ☐ Manure hauling equipment shared with another farm
- ☐ Imported manure or slurry from other farms
- ☐ Imported manure or slurry spread on pastures
- ☐ Stock can access muck heaps
- ☐ No separate storage of quarantine manure
- ☐ Livestock not prevented from accessing recently spread fields

Sourcing feed

- Whenever possible buy from a known source.
- Assess the disease risk whenever buying from a new source.
- Avoid buying high risk feedstuffs which could be contaminated with faeces.

Wildlife and other animals

- Make efforts to make the farm unattractive to wildlife:
 - Minimise or prevent animal access to feed stores.
 - Ensure that feed containers are sealed.
 - Clear up spilled feed as soon as possible.
 - Employ vermin control.
 - Remove debris piles around the farm in which vermin can hide.
 - Inspect buildings and forage stores for nesting and denning areas.
 - Deter badgers from entering buildings with stock proofing.
- Prevent all animals accessing carcasses and cleansings.
- Prevent faecal contamination of feed or forage from dogs and cats.
- Consider the disease risks posed between cattle and sheep.
- Assess the disease risks of fields which are accessed by dogs from public footpaths.

Animal	Potential risk to cattle
Birds and vermin	Salmonella
Dogs	Neospora
Sheep	Fluke and Leptospirosis
Badgers	TB

Notes

Disinfectants

A link to the list of DEFRA approved disinfectants can be found here:

www.gov.uk/controlling-disease-in-farm-animals

Your choice of product should be determined by:

- The disease risks you are concerned about.
- What you are trying to disinfect – for example, boots, equipment or housing.
- How much organic matter is likely to be present.

There is no one product that will be suitable for all jobs in all circumstances.

To use any disinfectant effectively you must know:

- How sensitive the product is to deactivation by organic matter?
Generally surfaces must be thoroughly cleaned before disinfection begins.
- How long the product must be in contact with the surface to be effective?
- What concentration the product must be mixed at to kill all your target pathogens?
Some diseases will require a higher concentration than others.
- How often solutions will require replenishing?



**For further information or advice
please contact your veterinary surgeon.**