

Biosecurity Guidance

1 Introduction

The purpose of this guidance is to recommend measures that will help protect the health of our trees and woodlands. The generic biosecurity procedures within this guidance must be followed whenever an official regulatory/advisory visit is made to any land or premises on behalf of the Forestry Commission. Contractors who carry out official visits for the Forestry Commission are required to follow the same biosecurity procedures as employees and this guidance therefore needs to be specified in relevant contracts.

The biosecurity procedures in this guidance have been endorsed by the Forestry Commission's Biosecurity Programme Board¹. The guidance is primarily aimed at regulatory/advisory staff but is also recommended as best practice for use by all those engaged in the forestry and arboricultural sectors.

The guidance given is generic and should be used in conjunction with specific recommendations that will need to be tailored to different circumstances. The procedures follow a structured approach similar to the way we determine other control measures by assessing the level of risk involved. The forestry and arboricultural sectors have successfully adopted the principles of risk assessment to the management of health and safety and to the protection of the environment. It is to be anticipated that, given time, protection of tree health will also become embedded in risk assessment procedures.

There are already examples of biosecurity measures that have been adopted at an operational level. This guidance will refer to these and to the circumstances to which they apply. In Scotland, the Scottish Environment and Rural Services (SEARS) partnership has already implemented a biosecurity protocol, the [SEARS Protocol](#). This forestry guide is intended to complement the SEARS protocol. In cases of doubt, the SEARS protocol will take precedence over this guidance in Scotland.

It is not possible to predict with certainty all of the circumstances, including practical constraints, that staff might come across while on official duty for the Forestry Commission. In many situations it will be necessary to undertake a risk-based approach in order to determine the appropriate measures to suit local conditions. If in doubt, seek advice from your manager.

¹ The FC [Biosecurity Programme Board](#) includes representatives from the devolved plant health administrations and stakeholders representing the forestry, wood processing and arboricultural sectors.

1.1 What are biosecurity measures?

Biosecurity measures are a series of precautionary steps designed to reduce the risk of transmission of harmful organisms and must address 'movement pathways' for such organisms. In the context of this guidance, good biosecurity practice refers to ways of working that minimise the risk of contamination and the spread of pests and invasive plants. Unless stated otherwise, the term "pest" should be taken to include all invertebrate, bacterial or fungal organisms that are harmful to trees. The term does not refer to other threats to trees such as deer or grey squirrels.

1.2 Who needs to follow this guidance?

This guidance is for anybody who carries out official duties on behalf of the Forestry Commission. It is also recommended as best practice for use by all those engaged in forestry and arboricultural sectors. The guidance applies equally to employees or contractors who are required to enter land on business, regardless of the land ownership or land tenure. It is intended primarily for rural land holdings but will also apply to parks and gardens in an urban environment.

1.3 Why is biosecurity important?

The threat to our forest and woodland health from pests has never been greater. Trees and plants can be susceptible to a range of pests and only a small proportion of these are controlled under plant health legislation.

Pest outbreaks can have serious implications for sustainable forest management and the provision of ecosystem services. They can have a severe financial impact on forestry and related industries and can cause economic loss and disruption to other sectors such as wood processing and tourism. The spread of endemic or naturalised pests may be less newsworthy but these can have an equally detrimental impact. Some examples of specific pests relating to trees can be found on the [Commission's web pages](#)².

The horticulture and forestry sectors welcome good hygiene and biosecurity practice so our officials and inspectors, in particular, should aim to lead by example when visiting different sites.

² www.forestry.gov.uk/forestry/infd-6abl5v

It is not always possible to see pests and they can be transmitted accidentally by individuals moving between different locations. The transmission of pests can simply be via our clothing and footwear or, more likely, on vehicles/machines (particularly on wheels) and equipment that we use to do our jobs. Pests are commonly transported in material like soil or plant material. Some microscopic organisms are dispersed in water so the risk that these may be transmitted increases when conditions are wet.

When a major pest outbreak occurs it is likely to impact on everyone involved. For example, movement around the countryside may be restricted, operations and inspections could be stopped or extra work required responding to the crisis.

It is everyone's responsibility to take proportionate measures to minimise the risk of transmitting pests onto or off any sites that they visit.

1.4 Where is biosecurity relevant?

Biosecurity is important when entering any land, or other premises where there is a risk of spreading pests. This includes all forestry and agricultural land (including grassland and arable/horticultural crops), nurseries, hill ground, moorland, farm steadings and other woodland. Our official duties can also extend to parks and gardens and premises for the processing and storage of timber.

For most low risk site visits, very little extra time is required over and above normal good practice. If we prevent unintentional movement of pests then this should pay dividends in the longer-term by reducing the impact and cost of pest management. This guidance has been developed to help you decide on the level of biosecurity measures to adopt in different circumstances.

The guidance cannot cover every eventuality and in some situations complying with specific requirements will be difficult in practice. In all cases, professional judgement will be required to understand the biosecurity risks and to take reasonable steps to address them.

If, during a site visit, the presence of a serious pest not previously known to be there is suspected, then your line manager must be informed at the earliest opportunity. Your manager will be responsible for ensuring that appropriate reporting and investigation are implemented without delay and they will also ensure that precautions are put in place until the outcome from the investigation is known. The risk assessment undertaken at the outset of the visit must be reviewed and the biosecurity measures amended accordingly. This applies regardless of ownership of the land concerned.

1.5 Health and safety considerations

Some biosecurity measures have health and safety implications, like the handling and use of disinfectants and the use and disposal of appropriate clothing or equipment. Take account of these in job risk assessments and undertake COSHH assessments for chemicals using information from the product label and/or the product safety data sheet.

1.6 Environmental considerations

For most visits, simple cleaning of footwear may be all that is required (see [section 2.1.1](#)). Where additional measures such as washing off mud or the use of disinfectants is required, avoid any potentially contaminated run off entering water courses or other drainage systems. This can be achieved by ensuring that cleaning is carried out at least 10 m away from watercourses.

Where a higher level of biosecurity is adopted for sites that are known to be infested by certain pests and pathogens, additional care is needed to ensure that water courses do not become contaminated (see [section 2.1.2](#)). Our main concern is to minimise the risk of transferring the pest itself. It is also important to minimise the risk of contaminating watercourses with disinfectant, or other agents harmful to the environment such as disposal of contaminated protective clothing or waste effluent arising from washing down vehicles. Special provisions may be required to comply with the Environmental Permitting (England and Wales) Regulations 2010 or the National Waste Management Plan for Scotland Regulations 2007. Advice is available from the Environment Agency (England and Wales) or SEPA (Scotland).

2 Risk of pest spread and level of biosecurity control

The risk of spreading pests between different locations is influenced by:

- the level of potential exposure to pests;
- the duration and the purpose of visits to different locations;
- the type of land or premises concerned; and sometimes
- the site conditions at the time of the visit.

This section categorises visits in terms of the risks they pose and describes the precautions that should be taken to minimise them.

2.1 Levels of biosecurity control

The biosecurity control measures required will vary according to the level of risk. You may need to observe more rigorous controls, for example, if site operators have more stringent biosecurity requirements. It is important to respect the safeguards they require.

- The levels of biosecurity control are described in the following sections and Figure 1 below provides a quick reference guide for applying them.

2.1.1 Low risk biosecurity control

This is the minimum level of biosecurity control encountered when entering any land or premises. This standard of control is normally sufficient when staff visit woodlands, gardens, nurseries, dockyards and sawmills etc., where there are no grounds to suspect that damaging tree pests are present (other than those that are endemic and for which there would be minimal risk arising from transmission to other sites). Carrying out visual plant pest surveys in woodlands or at other sites where there is no known direct contact with potentially infected plant or tree species come within this category.

- Ensure footwear is clean prior to the visit (visually free from loose soil and plant debris). If necessary brush or wash in soapy water before the visit. Make use of any facilities provided at the premises to clean footwear if required by the site manager;
- Ensure that vehicles are cleaned regularly to remove any accumulated mud, especially from wheels and wheel arches;
- Keep vehicular access to a minimum: do not enter areas unnecessarily and, where practicable, keep to established hard tracks;

- Respect any notices or instructions.

2.1.2 High risk biosecurity control

This should be applied before entering a woodland or a nursery or other premises where

- a damaging tree pest is known or suspected to be present; and
- there is a risk of spreading the pest further.

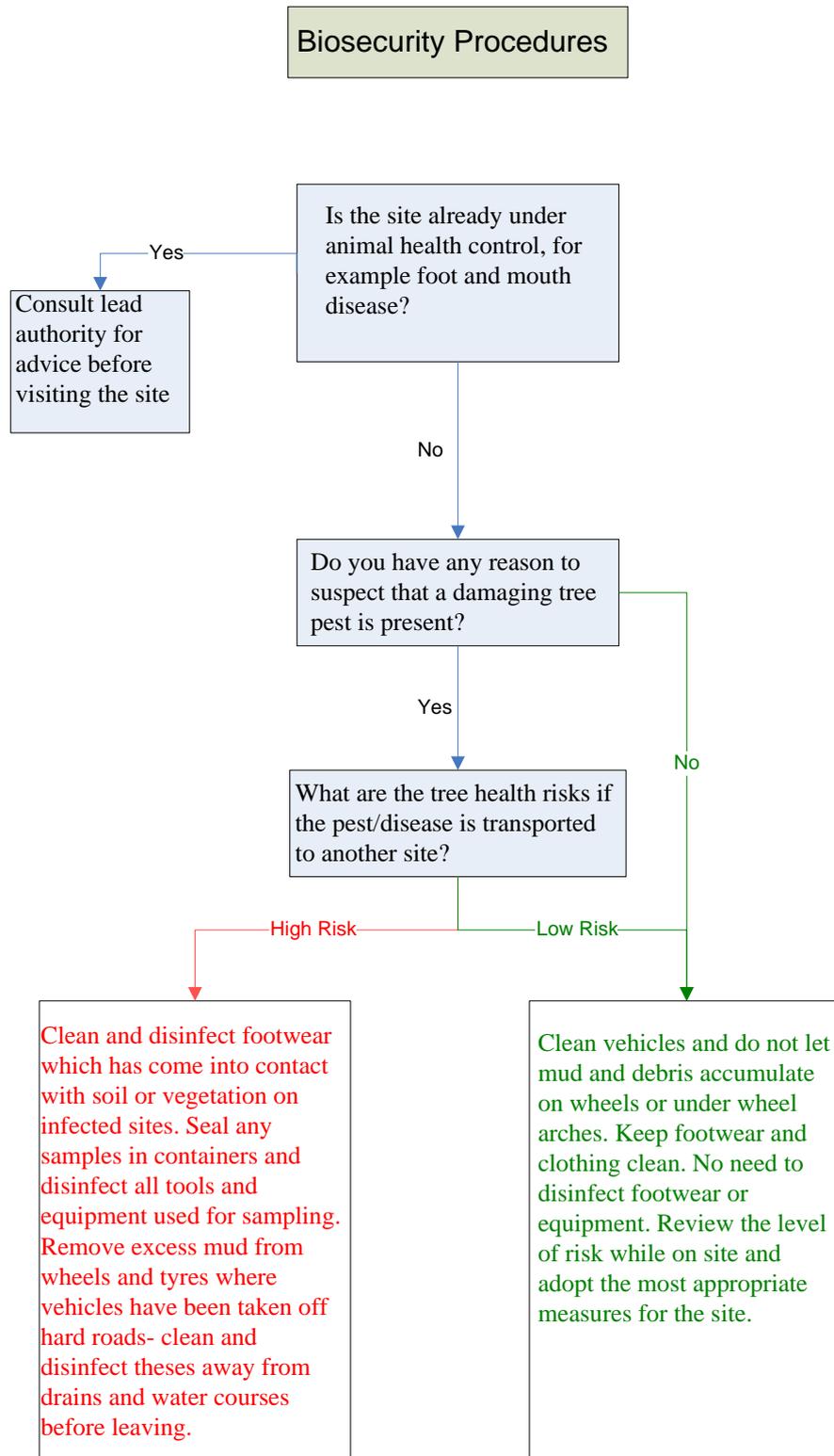
This level will apply to any sites where forestry statutory control measures are in place. Adopt this level if you are visiting any site where the owner or site manager requests that you take precautionary biosecurity measures.

Extra precautions to those listed in section 2.1.1. will be necessary if you handle plants or trees, soil or other material that is known or suspected to be infected. Where samples of plant material or invertebrates are collected you should try to plan visits to inspect areas where the risk of presence of a damaging pest is thought to be lowest before visiting those with the highest risk. This approach will help to reduce the risk of transmitting damaging plant pests, especially diseases which may be spread in soil or plant debris adhering to footwear.

- Clean and, where relevant, disinfect footwear (See section 3 for guidance on disinfection);
- Clean and, where relevant, disinfect tools, particularly cutting equipment such as secateurs or knives after each time they are used and before moving on to the next plant or tree;
- If vehicles have entered an area where a damaging tree pest is known or suspected to be present, and have been taken off hard roads, ensure that the tyres and wheel arches are adequately cleaned and disinfected well away from drains and water courses and before leaving the site.

Biosecurity control – quick reference guide

Figure 1.



3 Fundamentals of good biosecurity practice

As outlined in Section 2, the level of biosecurity control will vary from visit to visit. The kit that you need to carry will also vary according to circumstances but some basic biosecurity principles apply in all situations.

3.1 Planning the visit

It is good practice to discuss the visit with the occupier or manager beforehand. Find out whether there are any constraints on access to be aware of like machine operations or site hazards. However, sometimes that is not possible, for example, if you are carrying out an unannounced compliance inspection or investigating other suspected illegal situations.

When planning the visit:

- Try to clarify the following points with the owner/ manager before you visit unless it is unannounced:
 - Will water be available? If required, ask to have some water provided or carry a small supply.
 - What parking facilities exist?
 - If premises have high hygiene standards, do they apply their own additional controls?
 - Are the premises under any restrictions?
 - Ensure all your equipment is clean and serviceable.
 - Restrict the equipment taken onto the premises; take only what you need.
 - Do not take vehicles further into the site than necessary: try to leave them at designated car parking areas.

3.2 Personal biosecurity

At low risk visits (Low risk - green) you are likely to need only minimal biosecurity kit. This may be just suitable footwear and outdoor clothing which you can clean easily.

In situations involving high risk visits (High risk – red) biosecurity precautions may involve adequate cleansing and disinfecting of footwear and other Personal Protective Equipment. It may also be necessary to clean and disinfect vehicle wheels and tyres and other tools and equipment used to collect samples.

Details of appropriate contents of a biosecurity kit for cleansing and disinfection are given in [Annex A](#).

3.3 Cleansing and disinfection

All staff visiting woodland, or premises where there is a possibility of contamination should carry a basic disinfection kit. A list of approved disinfectants for use in England Scotland and Wales can be found on the Defra website: [approved disinfectants](#)³

3.4 Vehicle biosecurity

Your vehicle should be clean prior to each visit. This does not mean it needs to be completely washed or 'show room clean', just that significant contamination from plant debris such as needles, foliage and accumulated mud, has been removed. Particular attention needs to be paid to tyres and wheel arches. Remember that the use of hose pipes and pressure washers are only permitted at specially designated sites or where an exemption has been obtained from either the Environment Agency (in England and Wales) or SEPA (in Scotland).

Consider where you park the vehicle and ideally park off-site if you can. Where you cannot park off site, try to park on a hard standing to avoid exposure to soil or plant material.

If using an off-road vehicle, avoid driving it through land that has or has recently had livestock on it or where manure or slurry has been recently spread.

Efforts to keep the vehicle clean and avoid areas where livestock has access will minimise the need to use disinfectants. If disinfectants are used, rinse or wash the disinfected areas with clean water once the recommended contact time (see product label) has passed. Ensure that any run-off does not enter any watercourses or surface water drains.

3.5 Equipment biosecurity

Equipment includes anything taken onto the site to allow you to carry out your task. Make sure all equipment is clean and fit for purpose and that any equipment likely to become contaminated is capable of being cleaned and disinfected after each use and at the end of the visit (unless disposable).

³http://disinfectants.defra.gov.uk/Default.aspx?Location=None&module=ApprovalsList_SI

3.6 Special circumstances

The procedures described in Section 3 should be sufficient to deal with the majority of routine visits to forests, nurseries, woodland etc, but certain sites will have specific requirements. Where a site is under Notice served by an organisation other than the Forestry Commission contact with the responsible official is essential before entering.

3.7 Public awareness

Take the opportunity to improve public awareness about the importance of biosecurity. Demonstrate the techniques that we adopt for the different level of risk and explain how these help to control unintentional movement of pest between sites. Under most circumstances the general the public will not be required to follow this guidance, unless this has been stipulated in a Statutory Plant Health Notice (SPHN). The owner or occupier of the land is responsible for compliance with the conditions of any SPHN and we may ask that they provide the necessary information and facilities to allow visitors to wash down footwear when leaving certain sites.

Plant Health Service
Forestry Commission
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Annex A – Personal biosecurity kit and disinfectants

Biosecurity kit for cleansing and disinfection

The actual clothing you use will depend on the tasks you need to carry out, the type of premises, the environment, the weather conditions etc. All protective clothing should be capable of being disinfected unless it is disposable. If cleansing and disinfection is likely, you should carry the necessary equipment; see the following suggestions:

- Plastic storage box
- Supply of clean water (approx 5L)
- Boot tray or bucket
- Hard brush
- Approved disinfectant
- Yachting flare container for Propellar (this is vapour proof and helps comply with the propellar data sheet/risk assessment for flammable products)
- Eye protection
- Protective gloves
- Means of applying disinfectant, for example brush or a portable sprayer
- Hand sanitiser / wipes and paper towels
- Selection of re-sealable bags (for samples)
- Plastic bags and ties (for clothing or other PPE to be taken offsite for cleaning or disposal)

Disinfectants

Propellar® is effective against *P. ramorum* and *P. kernoviae* as well as all other pathogens of concern in the forestry sector. It has the advantage of evaporating quickly and does not pose a high level of risk to water courses. It may therefore be used as a good general purpose disinfectant.

Preparation and use

Some disinfectants can be harmful particularly if inhaled or if they come into contact with skin and you should wear appropriate protective equipment such as gloves and eye protection when making up the disinfectant mixture.

Mix and prepare the disinfectant in the open air or in a well-ventilated area; you can do this on location or in advance. Make sure you adhere to the dilution rates stated by the manufacturer.

Many disinfectants are particularly toxic to aquatic ecosystems and, if not managed properly, risk polluting the water environment. To minimise any pollution risk from run-off or splashes of washings and disinfectant, you should carry out the disinfection process on a well vegetated flat area at least 10 metres away from any surface water drains, watercourses, springs or wells.

Most disinfectants are only effective at killing pathogens when applied to a clean surface and many are deactivated on contact with organic material such as soil or plant material. Make sure surfaces to be disinfected are clear of mud, soil, leaves, faeces etc by first washing in a water bath or hosing down if necessary and where permitted.

Once clean, spray the boot/sole or equipment with disinfectant solution until it runs off. Alternatively, dip boots in disinfectant. Follow the risk assessment instructions for the product you use.

Unless the product instructions state otherwise, you should then rinse off the disinfectant solution with clean water before drying. It is important to observe any specific contact times and make sure you do not allow disinfectants or washings to enter any clean surface water drain or watercourse.