What is Biosecurity?

Biosecurity is a set of precautions that aim to prevent the introduction and spread of harmful organisms. These may be pests, pathogens or invasive species. In this guidance, 'pests and diseases' refers to invertebrate pests (e.g. insects) that are harmful to trees, and to diseases of trees caused by pathogens such as certain bacteria and fungi. Biosecurity measures are the practical steps designed to minimise the risk of introducing or spreading pests and diseases. This leaflet sets out good practice for all those working in forestry.

Why is biosecurity important now?

The threat to our forests and woodlands has never been greater. Increased global trade and the movement of goods between countries means an increased risk of spreading pests and diseases, which may travel hidden in plant products, packaging and shipping crates. Trees and plants in Britain are now vulnerable to a range of new pests and diseases, and outbreaks can seriously threaten sustainable forest management. In addition to economic losses for forestry and related industries, outbreaks can disrupt other sectors such as tourism.

It is not always possible to see pests and diseases and they can be transmitted accidentally by people moving between different forests and woodlands. Pests are most often transported in soil or organic material, such as plant debris, that can be carried on footwear or by the wheels of vehicles and forest machinery. Diseases may also be spread via the equipment used for tree work. Some pathogens are dispersed in water and so the risk of these being spread increases when conditions are wet.

Exotic tree pests such as the Asian longhorn beetle are a threat to our forests and woodlands

Who is the guidance for?

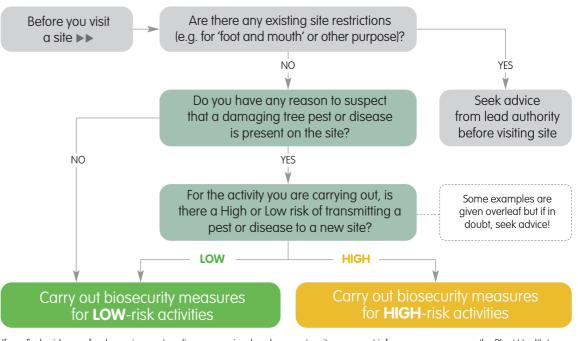
This guidance is for anybody who works for, or carries out official duties on behalf of, the Forestry Commission. It applies equally to employees or contractors who are required to enter land on business – regardless of the land ownership or tenure. More than that, it is recommended as good working practice for use by all those involved in forestry.

Where does the guidance apply?

Biosecurity is important when working in any forest or woodland, or when entering any land or premises where there is a risk of spreading tree pests and diseases (for example, where timber is stored or processed). This guidance is intended primarily for rural situations but it is also relevant to urban parks and gardens.

What do I need to do?

Use the decision tree opposite, prior to your visit, to help you plan the level of biosecurity needed. If in any doubt, seek advice. Use the appropriate biosecurity measures in the table overleaf during your visit. Be prepared to use higher-risk measures if the need arises.



If you find evidence of a damaging pest or disease, previously unknown at a site, you must inform your manager or the Plant Health team

Find out more ...

More information and advice on biosecurity and plant health can be found at:

Forestry Commission (Plant Health): www.forestry.gov.uk/biosecurity
Food and Environment Research Agency: www.fera.defra.gov.uk
Department for Environment Food and Rural Affairs (Defra): www.defra.gov.uk
Scotland's Environmental and Rural Services: www.sears.scotland.gov.uk
Environment Agency (England and Wales): www.environment-agency.gov.uk
Scotlish Environment Protection Agency (Scotland): www.sepa.org.uk

Lead by example!

- Take pride in your appearance at work
- Keep your footwear clean
- Clean vehicles regularly
- Don't let mud accumulate on wheels or tyres
- Keep tools and equipment clean
- Use disinfectant if you have visited a high-risk site

www.forestry.gov.uk/biosecurity

Biosecurity measures

Use the decision tree overleaf, prior to your visit, to help you plan the level of biosecurity needed. If in any doubt, seek advice. Use the appropriate biosecurity measures in this table during your visit. Be prepared to use higher-risk measures if the need arises.

Low-risk activities

Low-risk activities include routine operations that are unlikely to involve contact with high-risk pests and diseases. For example, day-to-day forest and woodland management, monitoring, routine visits to sites or premises (including tree nurseries, sawmills and timber processors), and routine inspections of ports and dockyards to check compliance with Plant Health Notices.

High-risk activities

High-risk activities include specialist or targeted operations that may involve contact with infected or infested material. For example, a visit to site or premises as part of a pest surveillance programme or to collect pest and disease samples, inspections of a sawmill processing infected material, or to a port or dockyard importing potentially infected material.



Wear footwear and outerwear that can easily be kept clean.

Clean footwear and outerwear regularly; ensure they are visually free from soil and organic debris.

- Plan to visit highest-risk sites last.
- Clean footwear and outerwear between site visits by removing leaves, soil and other organic material.
- Spray cleaned footwear and outerwear with disinfectant until it runs off (boots can be dipped in disinfectant).



Clean vehicles regularly; do not let mud and organic debris accumulate on tyres, wheels or under wheel arches.

Biosecurity measures

Avoid vehicular access to high-risk sites – park off-site if possible.

Keep to established hard tracks.

- Remove mud and organic debris from tyres, wheels and wheel arches.
- Clean and disinfect tyres and wheels.



Restrict the equipment taken onto a site – Biosecurity measures take only what you need for the task.

Ensure all tools and equipment are clean, serviceable and free from organic debris.

- When taking samples, clean and disinfect cutting tools after each sample.
- Clean and disinfect other tools and equipment before leaving the site.
- Keep any samples in sealed containers.

Personal biosecurity kit

You should carry the following items if cleaning and disinfection are required:

- Plastic storage box
- Supply of clean water (~5 litres)
- Boot tray or bucket
- Hard brush and boot-tread scraper
- Disinfectant (see opposite)
- Vapour-proof container for disinfectant
- Protective gloves
- Eye protection
- Brush, sponge or portable sprayer
- Paper towels/wipes
- Re-sealable bags (for samples)
- Plastic bags and ties (for clothing/PPE)

Using disinfectants

Alcohol-based disinfectant (such as industrial methylated spirit or isopropyl) at 70% concentration is recommended as it is effective against Phytophthora and other pathogens. You must be aware of the relevant health and safety guidance and follow the COSHH risk assessment for the product you use. In addition to this you should always:

- Follow the instructions on the product label.
- Wear protective gloves and eye protection.
- Mix and use disinfectant in a well-ventilated place.
- Carry out the disinfection process on a flat area well away from any watercourses.
- Apply disinfectants to clean surfaces remove mud, soil, leaves and other organic debris by first washing with water (or hosing down if necessary and where permitted).
- Observe any specific contact times and, if necessary, rinse off the disinfectant afterwards with clean water.
- Minimise pollution risk from run-off. Do not allow disinfectants or washings to enter watercourses, surface-water drains, or springs and wells.