



Don't give
pests and
diseases
an easy ride

Many of our
trees are under
threat from the
spread of pests
and diseases.

Human activity
is a key factor
in the spread
of tree pests
and diseases.

By undertaking basic
biosecurity day to day,
and minimising the
amount of soil, water
and plant material we
carry between sites, we
can reduce the spread
of pests and diseases
and give control
measures more of a
chance to succeed.

People working in
arboriculture are a high
risk group for the spread
of pests and diseases.
However, they can also
spot outbreaks early.

Taking action at the
right time can be
critical to managing
an outbreak.



Think kit

Remove soil and debris from
boots, clothing, ropes, saws
and other equipment before
leaving any site. Regularly
wash and dry ropes.

Clean and disinfect chainsaws
and other cutting tools as
part of routine maintenance.

Ensure machinery is
cleaned regularly and
positioned so as not
to spread material
around the site.



Think trees

Develop relationships
with nurseries you can
trust to help you source
plants responsibly.

Keep records of purchases
and suppliers, and monitor
plants for signs of ill health.

Report suspect plants to
the Forestry Commission
via Tree Alert.



Think transport

Remove any build-up of
soil and debris on vehicles,
including cabs and footwells,
before leaving any site.

Use proper off-site wash-
down and disinfection
facilities regularly. Make
a clean start each day.



Biosecurity in Arboriculture

For higher risk situations...

Good biosecurity is always
important, but there are cases
where you might need to be
more rigorous, such as when:

- there's a disease or
pest present; or
- there's a Statutory Plant
Health Notice in place.

In these cases, follow the
specialist guidance, or visit
forestry.gov.uk/biosecurity

If you must work with infected
material for safety reasons:

- keep it separate from
other arisings; and
- do not use it for
mulch or firewood.

Dispose of infected material
by deep burial or incineration,
either on site or at a licensed
handling facility.

Key contacts and resources

Stay up to date:
forestry.gov.uk/pestsanddiseases
and follow @treepestnews on Twitter

Tell us if you spot any ill health in trees:
forestry.gov.uk/treelert

Learn more from our e-learning package:
forestry.gov.uk/biosecurity

Forestry Commission
0300 067 4321
tree_health@forestry.gsi.gov.uk

Arboricultural Association
trees.org.uk

London Tree Officers Association
ltoa.org.uk

Phytophthora infestations in European nurseries

A sample of 732 nurseries in 18 European countries showed that nearly all — 91.5% — had at least one species of *Phytophthora*. Appropriate planning and careful sourcing can minimise the amount of infected stock and ensure that only healthy trees are planted.

(Jung et al., 2015)

The impact of dirty tools

Disease can be spread on our tools. In a Brazilian study, plots of unharvested eucalyptus had only a 2.7% occurrence of *Ceratocystis* wilt, but harvested plots had 39.7%. This suggests the disease had been spread on infected harvesting tools. In a USA study, *Ceratocystis platani* infected 40% of wounds made by saws previously used on diseased trees. Rates increased to 50% for climbing ropes.

(Ferreira et al., 2012) (Walters, 1946)

Clean start, every day

In a study of seven sites, the rate of tree infection by *Phytophthora lateralis* reduced over 12 years from 29% to 0% where vehicles and boots were washed. Sites where no washing was done saw only limited reductions.

(Goheen et al 2012)

The Pest and Disease Cycle

