

• • • • PANAMA DISEASE TROPICAL RACE 4

Decontamination guide

VERSION 2, AUGUST 2016





Panama disease tropical race 4

Decontamination guide

Biosecurity Queensland has confirmed that Panama disease tropical race 4 is present in north Queensland.

It is possible that the disease has been in north Queensland for a number of years and there is likely to be infected properties that have not yet been identified.

Given this risk, visitors and workers moving on or off your property are encouraged to come clean, leave clean.

Equipment and items that have come into contact with plant or soil material such as vehicles, machinery, tools, clothing and boots, have the potential to spread the disease.

To help protect your property, it is recommended that you manage the movement of these items as well as the movement of people and animals and implement wash-down and decontamination procedures on your property, as outlined in this guide.

These procedures can be time consuming, however, they are integral to protecting your property. It is important that you allow adequate time as part of your daily operations to complete this process properly.

Biosecurity is everyone's responsibility.



People

Movement

Visitors and workers can spread the disease by carrying contaminated soil on footwear or fungal spores on clothes.

There are a number of precautions you can put in place to minimise this risk, as follows:

- Ensure visitors and workers are aware of your on-farm biosecurity practices and the importance of ensuring that footwear, clothing, equipment and vehicles are clean and free from pests and plant material before they enter your property.
- Any visitor or worker who refuses to clean vehicles, equipment and footwear, or cannot demonstrate that their clothing is clean should be refused entry.
- Limit visitor contact with crops or plant material as much as possible.
- If you run a business that has a tourism component, clearly indicate any entry requirements and be especially vigilant in checking for new pests and diseases.

Signage

Well designed signage informs visitors and workers that biosecurity is a high priority on your property. Signs also remind people of the potential impacts of their visit.

Signage which clearly outlines your on-farm biosecurity practices should be placed at each entry point. It is recommended that you include a contact telephone number and direct visitors to call prior to entering your property.

Additionally, signage can be used to direct visitors to parking areas and to help prevent unnecessary movement into restricted areas such as production zones.



PLEASE RESPECT FARM BIOSECURITY

Visitors cannot enter this property without phoning now and gaining approval.

PLEASE CALL:

IF ALLOWED ENTRY, KEEP TO ROADWAYS AND LANEWAYS.






Designated parking areas

A parking area situated away from your production areas can help contain biosecurity risks. Using signage, it should be made clear that vehicles are not allowed beyond the car park unless absolutely necessary.

If vehicles are required beyond this point, wash-down and decontamination procedures must be completed. Visitors must also undergo personal decontamination.

Visitor register

It is important to ensure all visitors and workers, including those who may also visit other banana farms such as contractors, report their arrival to the property owner or manager immediately.



It is recommended you require all visitors and workers to sign in and enter their contact details in a visitor register on arrival at your property.

This information can assist with tracing investigations to determine the extent of outbreaks and help prevent the disease from spreading. **See the Visitor register within the On-farm Biosecurity section of the Panama disease tropical race 4 Grower Kit.**

Overseas travellers

Overseas travellers pose a high risk, especially if they have visited a farm or market where plant material was sold. Check that family members, workers and visitors who may have recently travelled from overseas did not return with any plant material. Also ensure they have washed clothing and thoroughly cleaned footwear before allowing them to enter the farm.



Decontamination

Requirements

- A clean water supply must be used. Clean water is defined as water that has not come into contact with banana plants, soil or other growing mediums in which a banana plant has been grown; or that has been treated to remove contaminating organisms (e.g. bore water, rain water that is collected directly into a tank and town water).
- Plastic footbath and bucket for disinfecting boots and equipment.
- Hand sanitiser and/or soap with a sufficient volume of clean water.

Additionally, you may wish to implement decontamination checkpoints on your farm for workers to wash-down and decontaminate before moving from one block to another. This will help prevent the disease from spreading further if your property becomes infected. **You may also wish to provide dedicated footwear at this point.**

PEOPLE

Wash-down process

Step 1 - Cleaning

- Remove all visible soil, plant material and debris from boots, hats, clothing and any other items by scrubbing with water and detergent and then rinse. A screwdriver or brush may be required to completely remove mud from within the tread of the soles of boots. Your agricultural chemical retailer can provide advice on which detergent-based cleansers are appropriate to use.

Step 2 - Rinsing

- Following the cleansing process, rinse all relevant surfaces with clean water.

Step 3 - Disinfecting

- Disinfect by dipping and soaking boots or equipment in a suitable broad spectrum disinfectant. You must use each product in accordance with its label or Australian Pesticides and Veterinary Medicines Authority (APVMA) Permit instructions. Your agricultural chemical retailer can provide advice on which broad spectrum disinfectants are appropriate to use.



Before starting work

Ensure workers:

- are aware they are required to arrive clean with freshly laundered clothing and hats.
- use tools and equipment provided on-farm rather than bringing equipment.
- clean and disinfect boots and other items such as bags and knives, using the three step process above.



While at work

Ensure workers:

- disinfect hands before and after coming into contact with plant material or soil using an antibacterial hand gel.
- dispose of used treatment solutions according to label instructions, away from roads, drains, pathways, riparian zones and waterways, before leaving the property.



Before leaving work

Ensure workers:

- change or wash clothes and any additional items (i.e. gaiters) and clean and disinfect boots and equipment using the three step process above, before leaving the property.



Vehicles and machinery

Movement

Equipment including vehicles and machinery, and items that have come into contact with soil, plant material or other biosecurity matter, have the potential to spread the disease onto other areas on your farm or other properties, particularly in wet conditions.



Measures to consider:

- Use signage and fences to manage the movement of vehicles and machinery.
- Where possible, use your own vehicle to transport visitors around your property.
- In farm production areas, keep vehicle movement to a minimum, particularly on wet soil.
- Stick to regular pathways through each block.
- Always ensure borrowed or second-hand equipment and machinery is cleaned of all soil, plant material and other biosecurity matter before moving them onto your property.
- Deny dirty vehicles and machinery access beyond the car park unless wash-down and decontamination is completed.

Requirements

- A clean water supply must be used. Clean water is defined as water that has not come into contact with banana plants, soil or other growing mediums in which a banana plant has been grown; or that has been treated to remove contaminating organisms (e.g. bore water, rain water that is collected directly into a tank, town water).
- Water pressure cleaner, preferably a mobile water tanker or spray unit. A garden hose may be

adequate for small wash-downs.

- Brooms, brushes, scrapers and dust pans for cleaning vehicle cabins, including the interior and dislodging dried on mud.
- A large tarpaulin to prevent re-contamination while cleaning smaller implements.
- Strong plastic bags for collecting and sealing items for disposal.
- Cleaning and decontamination solutions as advised by your agricultural chemical retailer.

Wash-down facilities

- A dedicated wash-down facility allows farm workers to clean vehicles and equipment and contain potential contaminants in one easily managed area.
- Where available, use a designated facility. If no wash-down facility exists, one should be established as close as possible to the entry and exit points of the property (i.e. next to the designated parking area), away from crop areas.



- Select a level site of suitable size and shape to contain any vehicle. The site should be away from waterways, gutters, culverts or areas that could drain into waterways or coastal waters.
- Access to a power source for the high pressure air and water cleaner is desirable.
- Ideally, the wash-down site should have a solid and impervious base (e.g. concrete) with bunds to retain all residual wash water, i.e. a Controlled Drainage Area (CDA). Refer to *Product usage guidance and considerations* on page 11 of this document for residue disposal options.

- Ensure the area is free of obstructions or objects that may cause injury. If bunds or sumps are present be aware of where they are and take care when moving equipment over them.
- Regularly check areas around the wash-down facility for new pests, diseases or weeds.

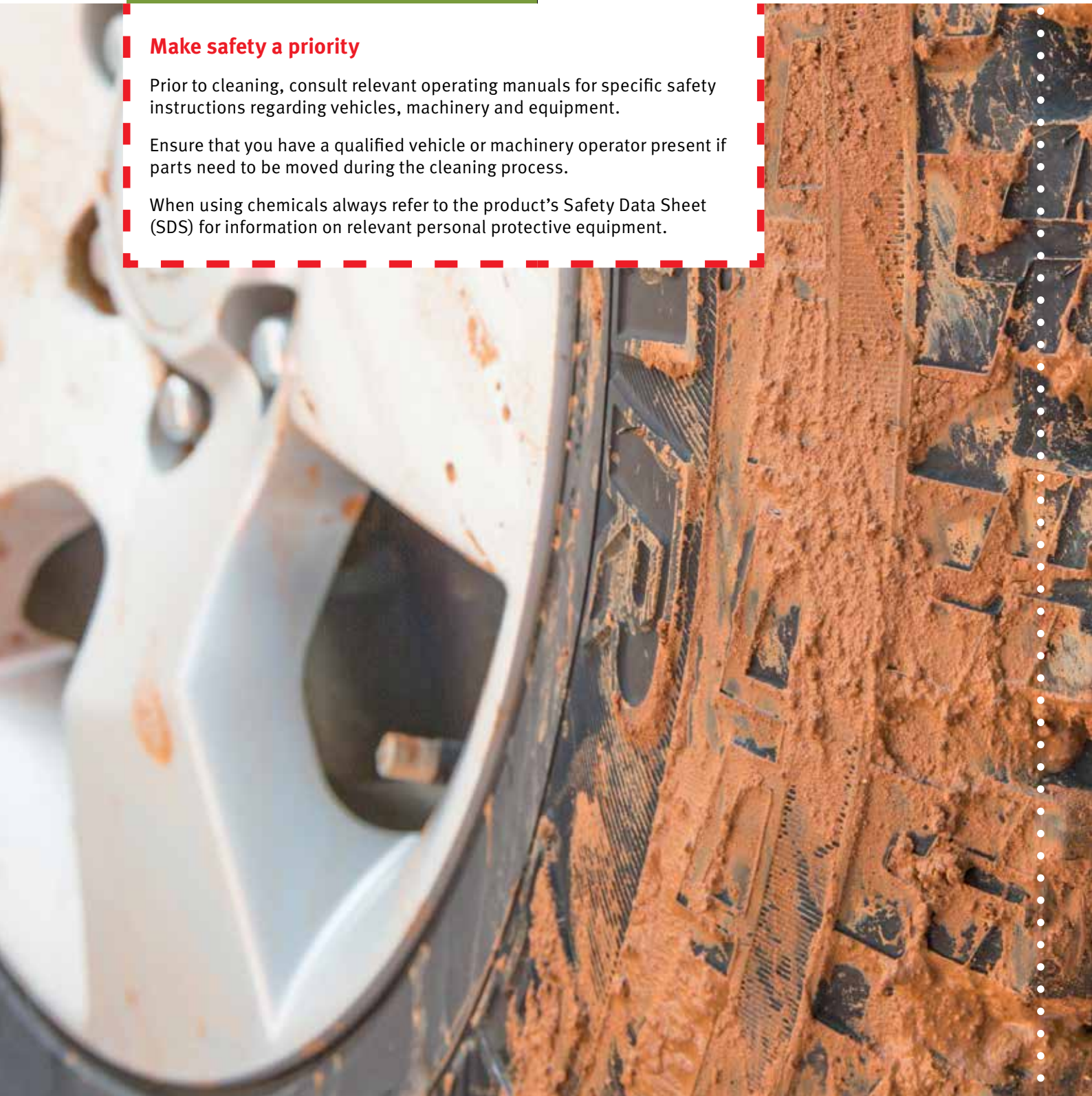
Decontamination

Make safety a priority

Prior to cleaning, consult relevant operating manuals for specific safety instructions regarding vehicles, machinery and equipment.

Ensure that you have a qualified vehicle or machinery operator present if parts need to be moved during the cleaning process.

When using chemicals always refer to the product's Safety Data Sheet (SDS) for information on relevant personal protective equipment.



VEHICLES AND MACHINERY

Wash-down process



- Refer to the following sections of this guide to assist you with this process:
- *Vehicle and machinery wash-down checklist* on page 11.
- *Product usage guidelines and considerations* on page 12.

Step 1 - Cleaning

- Ensure the vehicle or machinery is parked in a safe position. This may involve applying the parking brake, lowering ploughs, chocking wheels, etc.
- Identify areas that may require cleaning with compressed air rather than water and clean these first e.g. radiators.
- Use clean water with a detergent-based cleanser to clean all surfaces, so that they are visibly free from soil and plant material. Your agricultural chemical retailer can provide advice on which detergent-based cleansers are appropriate to use.
- Clean machinery from the top down and dismantle to gain access to internal spaces. Brooms, brushes, scrapers can be used to assist in the removal of mud and plant material.
- Determine the extent of mud, soil and plant material build up and identify areas that require particular attention e.g. behind guards and protective plates, radiators and spare tyres.
- Clean under the guards and underneath the machine or vehicle and the cabin, including the interior, upper body and implements as well as tool boxes and storage compartments.



Step 2 - Rinsing

- Following the cleansing process, rinse all relevant surfaces with clean water.

Step 3 - Disinfecting

- After rinsing, use a broad spectrum disinfectant on all relevant surfaces.
- You must use each product in accordance with its label or Australian Pesticides and Veterinary Medicines Authority (APVMA) Permit instructions. Your agricultural chemical retailer can provide advice on which broad spectrum disinfectants are appropriate to use.
- An additional rinse step may be considered following disinfection.



Step 4 - Checking and record keeping

- Carry out a final check to ensure all areas have been cleaned effectively.
- Replace any guards or belly plates that were removed for cleaning.
- Move the clean vehicle or machine, avoiding recontamination and if necessary wash, rinse and decontaminate all surfaces harbouring any remaining mud, soil or plant material.
- Record details of each wash-down and decontamination as appropriate, e.g. vehicle or machinery log books.

Vehicle and machinery wash-down checklist*

Vehicles and machinery have a number of places where soil and other organic material can lodge. This biosecurity matter may pose a biosecurity risk so it is important to check, clean and recheck the following areas:

Underside and other parts		Track area	
Guards and belly plates		Shoe	
Chassis rails and brackets		Links	
Recesses		Sprockets	
Around the fuel tank		Idler wheels	
Axel housing		Track adjuster guards	
Ledges gaps or crevices in the body including damaged areas where dirt may lodge		Lubrication points	
		Inside the track area	
Engine		Blades, buckets and attachments	
Chain cases		Front and back of the cutting edge	
Plates		Teeth	
Radiator fins and grille		Pivot points and trunnions	
In between the cooling cores		Turning circle	
Engine mounts		Hydraulic rods	
Recesses in the engine or manifold		Inside and back of the bucket	
Floor of the engine bay		Hydraulic hoses	
Air filter		Area where the cutting edge is fixed	
Battery box		Wear plates	
Wheels and steering		Pivot points	
Treads		Tynes and rippers	
Outside and inside rims		Support frame	
Wheel arches		Cherry picker bucket	
Mud flaps		Cabin	
Brackets and brakes		Carpets and mats	
Steering components		Foot wells	
Lights and accessories		Pedals and controls	
Lights		Seats	
Tool boxes		Air conditioner filter	
Tools and equipment		External surrounds	

* It is recommended that you keep a copy of this checklist near your wash-down area (in a waterproof sleeve or within an appropriately marked folder) for easy reference.

Product usage guidelines and considerations

Chemicals used for wash-down and decontamination, while effective in addressing decontamination, can have other unintended effects and when not used in accordance with label instructions can be extremely damaging to aquatic environments.

Protecting our waterways is everyone's business.

To minimise the risk of causing damage to aquatic environments:

- Use the product according to the label instructions.
- Read and follow instructions in the product Safety Data Sheet (SDS). The SDS will contain instructions on disposal, clean-up of spills and other environmental information.
- Ideally the wash-down and decontamination site should be on a hard stand with a collection sump that prevents drainage into gutters, culverts or areas that could drain to waterways or coastal waters. To prevent runoff to waterways, farmers are advised to:
 - bund the area where the wash down occurs.
 - contain large amounts of used wash water in a tail-water dam.
 - use the minimum amount of product required to clean and disinfect equipment.
- If a hard stand is not available choose a suitable site for wash down. Try to contain the waste water for as long as possible to allow for biodegradation of compounds (10 to 14 days is usually sufficient).
- Disposal of contained wastewater can be via absorption (e.g. diatomaceous earth or sawdust), evaporation and where this isn't possible wastewater can be directed to aerated soils, away from all production areas, gutters, culverts or areas that could drain to waterways or coastal waters, where biodegradation of compounds can take place. If these options are not available contained wastewater should be disposed of by a licensed contractor.



Seeking advice

Anyone who becomes aware of farmers using chemicals in a way that could potentially cause environmental harm, such as washing down equipment near a waterway, or allowing waste water to discharge directly to a drain, should contact the Department of Environment and Heritage Protection via the pollution hotline on 1300 130 372.

Additional information regarding environmental considerations can be found on the product label and in the product SDS.



Biosecurity Queensland

Contact us for more information:

 13 25 23

 www.biosecurity.qld.gov.au

 @BiosecurityQld

 Biosecurity Queensland



Australian Government



Queensland Government