



FACT SHEET

BIOSECURITY - GET IN THE ZONE

December 2019

It is common practice for areas on farm sites to be categorised into one of two 'zones' – CLEAN and DIRTY.

CLEAN zones are areas of a farm/site that contain the pigs (sheds, shelters, and free range areas), and therefore access is restricted to authorised people, vehicles, and pigs of assured biosecurity status.

DIRTY zones are areas that are not CLEAN zones and are considered DIRTY because they are at risk of being contaminated by pathogens due to the movement of people, vehicles, and pigs of unknown biosecurity status. Quarantine areas, carparks, and roads/areas that can be accessed by truck drivers are examples of DIRTY areas. These areas should be clearly marked on a sketch, map, plan or photo of the property's layout.



Reducing the risk of contaminating dirty zones

While DIRTY zones are by nature at risk of contamination, it is possible to reduce the risk of staff accidentally bringing pathogens from DIRTY to CLEAN zones). Ways to do this include:

- Ensure visitors know to keep their vehicles clean both on the inside and outside.
- Ensure employee and visitor vehicles are parked away from CLEAN zones.

- Encourage the use of disposable plastic boot covers (especially for visitors) to ensure footwear does not come into direct contact with the ground. This prevents the site from contamination by visitors, but also prevents visitors from carrying any of the site's pre-existing pathogens to another site.
- Farm staff returning from shows, sales, and other events should use boot covers as a minimum. A better approach would be to change boots completely upon returning to the farm and entering the DIRTY zone.
- If possible, do not use a farm vehicle for the transport of pigs to and from shows, sales, and other events. If that cannot be avoided, ensure the truck/trailer used to transport pigs is clean and has been disinfected before loading. This reduces the risk of contaminating the destination with the farm's pathogens, and contaminating the DIRTY zone upon the vehicle's return.

Transitioning between zones

Drivers/other transport personnel, and vehicles must not be allowed to access pig sheds, shelters free range areas, or other CLEAN zones unless they comply with the farm's biosecurity requirements and have been given specific authorisation to do so.

Farm staff, however, are required to move between DIRTY and CLEAN zones due to the nature of their work, and so it is important for them to know where each zone begins and ends. DIRTY footwear, clothing, PPE, and other equipment should remain in the DIRTY zone. CLEAN equipment should likewise be kept on the CLEAN side. In an ideal set-up, this principle applies to vehicles too.



Pigs brought to the property (either as new stock, or returning/unsold stock) should be kept out of CLEAN zones and the farm's existing stock. These pigs should remain in DIRTY zones in quarantine/isolation sheds or shelters or outdoor areas, for a sufficient periods of time (the National Farm Biosecurity Manual for Pork Production suggests a minimum of 21 days).

On most sites, the transition will often take place in a changeroom or locker room. Ways to distinguish CLEAN from DIRTY can include:

- Drawing a line – use paint, tape, or reflective strips in an obvious colour (for example, red or fluoro).
- Placing physical barriers – use of benches, low shelves, or other barriers that must be consciously manoeuvred around, through, or over. This is sometimes referred to as a “Danish Entry System”.
- Shower barriers – ideally a two-way shower, with one door leading back to the DIRTY zone, and the other door leading forward into the CLEAN zone. This method ensures farm staff keep equipment and clothing on their respective sides.

Combining the above methods results in better biosecurity than any single method; a 2018 study by Anderson et al. found that adding a bench barrier before a shower barrier significantly reduced contamination of the CLEAN zone.

Other important features of the transition zone are:

- Have a shower barrier or sink or some other form of hand sanitisation station present
- Ensure the transition zone is kept tidy. The floors and walls should be easy to clean and disinfect, and this should be done regularly.

In outdoor and free range systems, or small indoor piggeries, these transition zones may not be located within changing rooms, but it is still important for CLEAN and DIRTY zones to be clearly distinguishable from each other. This can be done through the use of signs, fences, gates, or other physical barriers.

Farm staff should ensure fences and gates are well maintained, especially where they are essential in keeping pigs contained to CLEAN zones; just as farm visitors should not be able to access CLEAN zones, pigs should not be able to wander into DIRTY zones where they are at risk of contamination.

It is critical that farm staff understand how to transition between the zones in a way that does not compromise biosecurity, and that they are committed to following the procedures in place 24 hours a day, 7 days a week.