



Pig Farm Biosecurity GUIDE

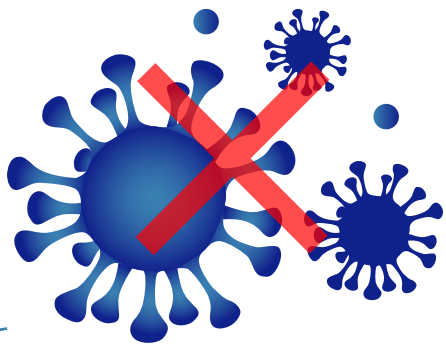


Our solutions enhance biosecurity practices, improve pig immune strength and achieve high feed hygiene standards. HELPING YOU MANAGE ASF IN A SAFE AND SUSTAINABLE WAY.

PREVENTION
CROSS INFECTION

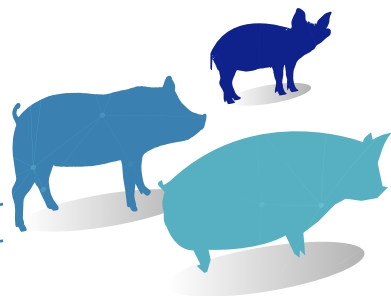
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Reduce the chance of external pathogens entering the farm and infecting the herd



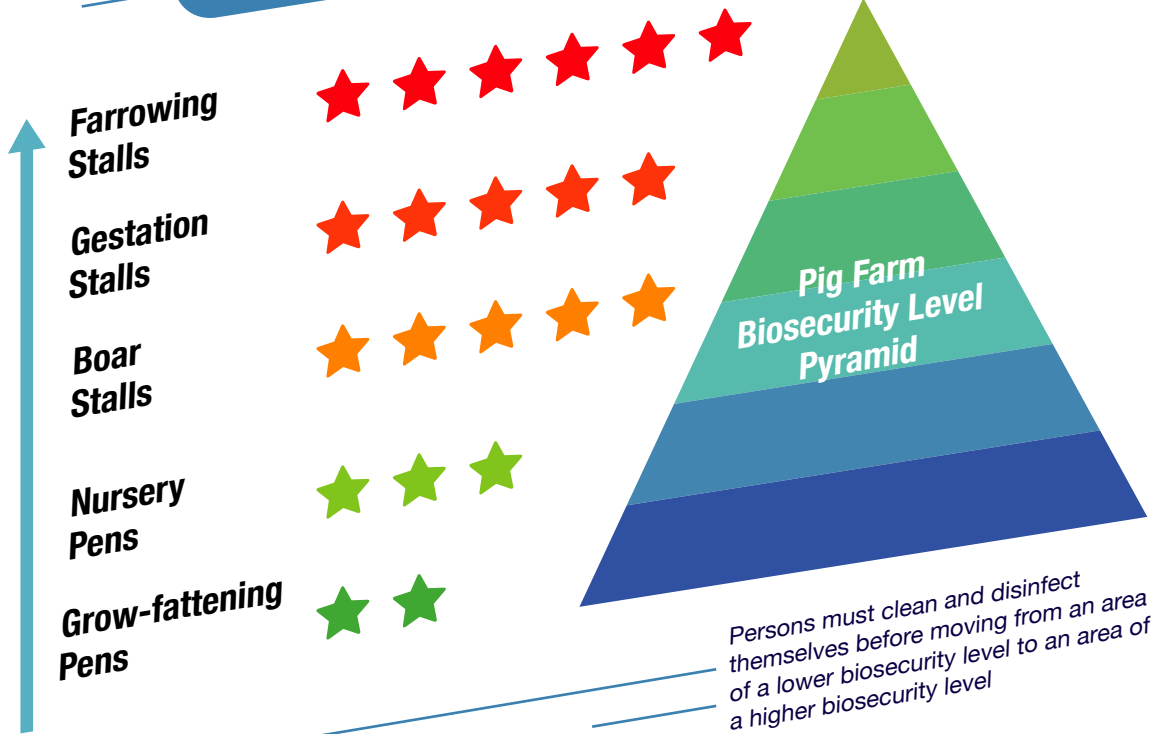
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Keep swine healthy in the farm and avoid cross-infection between swine of different growth stages



CONTROL
3 MAJOR SAFETY POINTS

Farm Internal Security Rating



1

DEDICATED PERSONNEL
Establish standardized management of safety personnel



2

MANAGE PEOPLE, VEHICLES AND MATERIALS
Ensure proper cleaning, disinfection and drying; reduce exposure to outside risks



3

FARM SURROUNDINGS MANAGEMENT
Maintain safety control distance to prevent infection

PIG FARM AND ITS SURROUNDINGS

Farm location must be at least 3km away from other pig farms

Boar stalls and gestation stalls must maintain a safety distance of at least 5-10km from other pig farms

Farm must be at least 500m away from other livestock/poultry farms

Farm must be at least 500m away from the gilt quarantine house



STAFF AND VISITORS

PRE-ENTRY CONDITIONS

Staff must not have come into prior contact with related industry personnel or objects, vehicles or pigs, and must not have passed through infected areas (points), markets or slaughterhouses



Refuse unnecessary visits, entries and exits



Isolate for at least 72 hours

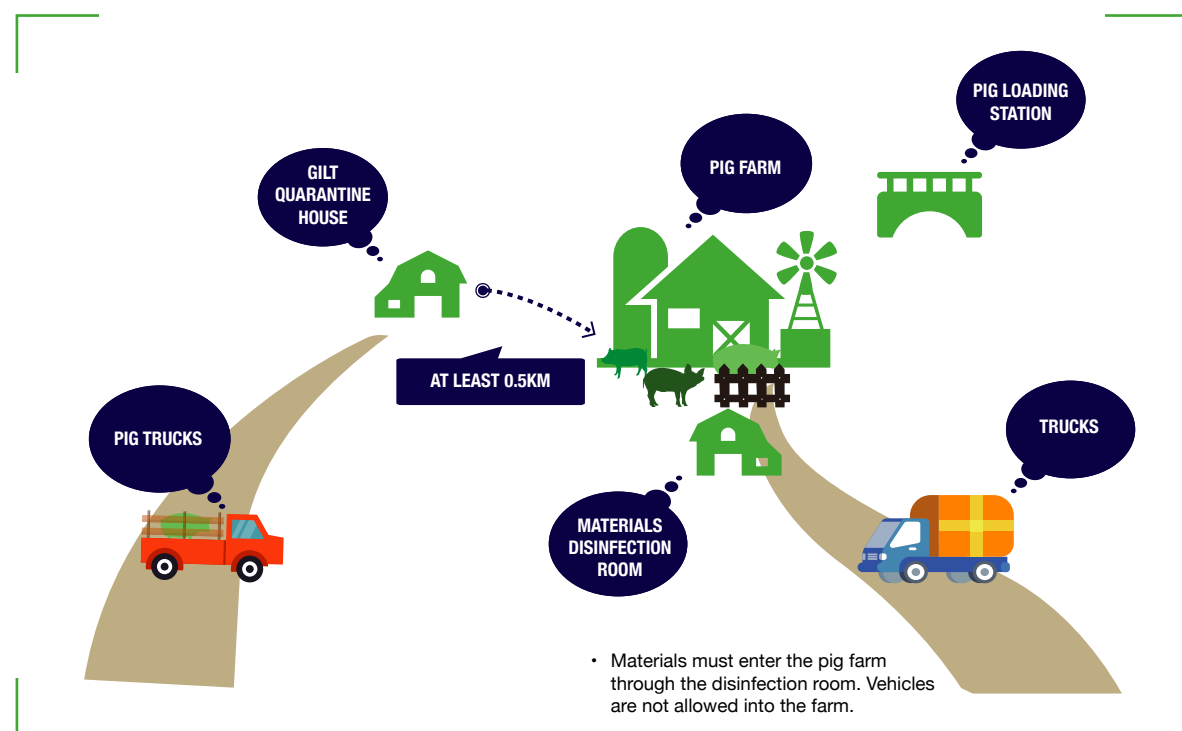


Isolate for at least 7 days after returning from overseas

STAFF ENTRY

	<< Entry and registration Bag storage		<< Disinfection of personal items Wash hands
>> Avoid bare-foot contact with dirty floor before entering clean area		>> Move over to clean area	
	<< Shower before entering clean area. No need to wash hands again after showering		<< Enter production area after disinfecting boots
>> Set up boot washing points between stalls		>> Prohibit access unless a person showers. Do not allow a person to bring dirty clothes into the clean area.	

ANIMAL MOVEMENT



ALL IN, ALL OUT

Strict implementation of 'all-in, all-out' principle each time an isolation stall is set up.



DEDICATED TOOLS

Materials, shoes, tools and drainage systems must be used independently in the isolation stall.



30 DAYS

Quarantine period of at least 30 days for gilts purchased from other breeding farms. Actual duration to be determined by a veterinarian based on health of the herd.



WASHING, DISINFECTION AND DRYING

Wash, disinfect and dry the isolation stall thoroughly between quarantine periods.



12 HOURS

Staff at the isolation stall must be isolated for 12 hours (including showering) before they can return to production areas.

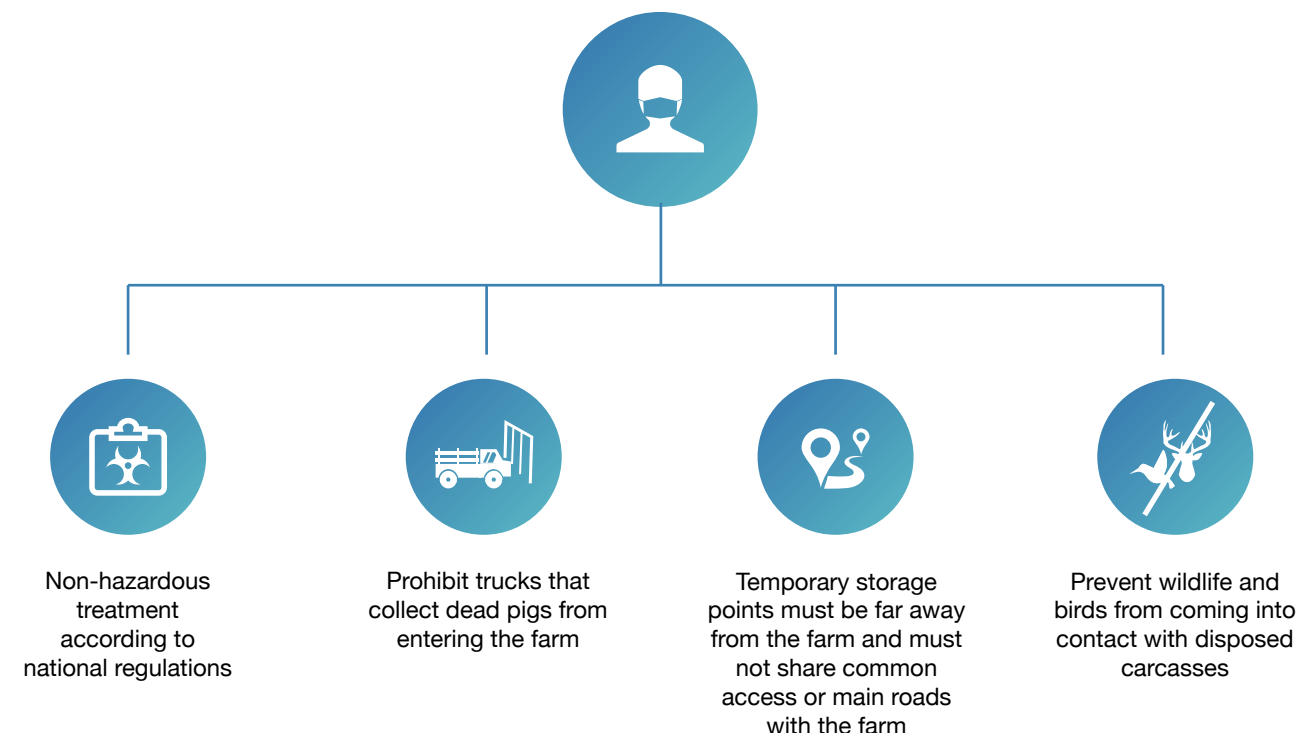


DISINFECTION OF EXTERNAL SEMEN

Remove outer packaging and disinfect inner surface of the container. Semen cannot be disinfected while under direct exposure to UV light.



DEAD ANIMAL PROCESSING

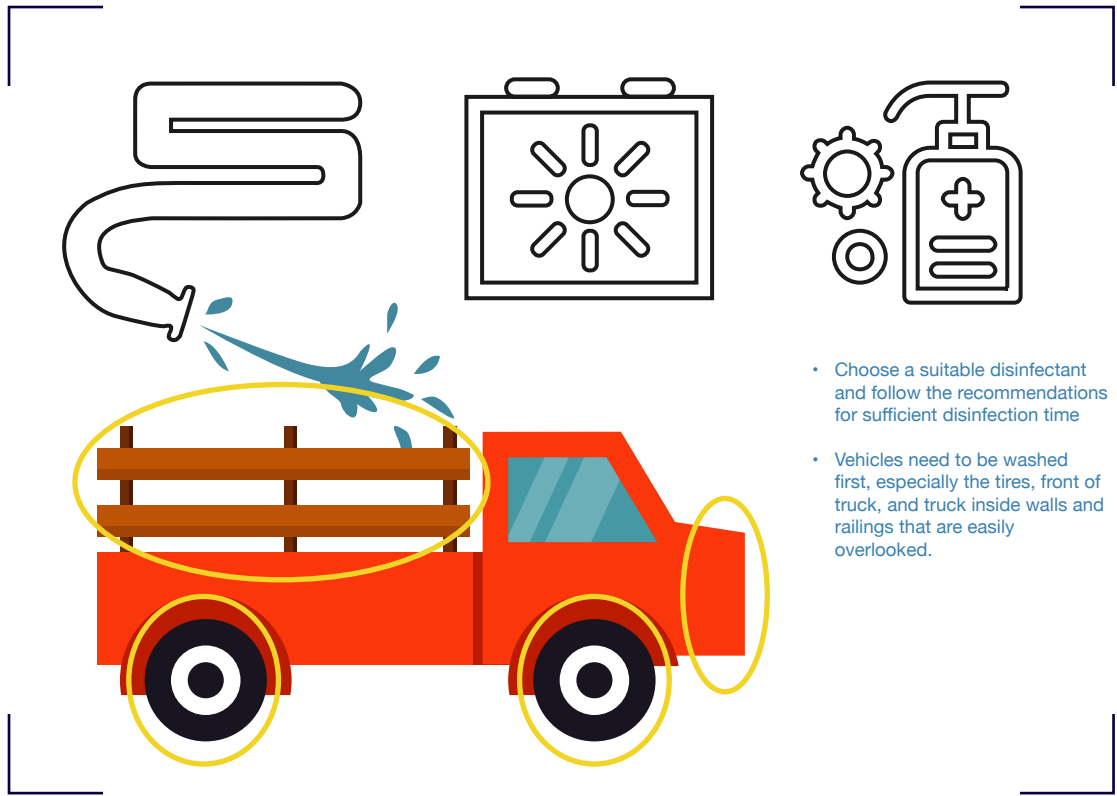


OTHER ANIMALS AND INSECTS



- Clean/Clear the ground of scattered feed
- Keep the production area clean, remove any debris and garbage
- Clear water pools/sewage inside and outside of stalls
- Repair any damage or holes at the stalls immediately
- Build fully enclosed walkways
- Install anti-bird nets
- Spray insecticide regularly and install sufficient rat baits
- Build a 1m wide, weed-free space around the stalls using herbicides and gravel
- Prohibit pets from entering production areas

VEHICLE WASHING,
DISINFECTION AND DRYING



- Choose a suitable disinfectant and follow the recommendations for sufficient disinfection time
- Vehicles need to be washed first, especially the tires, front of truck, and truck inside walls and railings that are easily overlooked.

- 1 Pre-washing** Flush out manure using a high-pressure water gun (filled with hot water)
- 2 Soaking** Spray an alkaline cleaner with a foam gun (non-corrosive) and after 30 minutes, scrub the vehicle.
- 3 Rinsing** Use a high-pressure water gun (filled with hot water of > 60 °C in temperature)
- 4 Disinfection** Disinfect for 30 minutes at room temperature (at least 20 degrees). The surface of the object being disinfected must be kept moist.
- 5 Drying** Ventilate and dry the surface of the vehicle at a surface temperature of at least 70 degrees for at least 30 minutes. This can effectively prevent PRRS, PED and ASF.

Set up two cleaning and disinfection stations for internal and external vehicles. Clean from outside to inside, top to bottom and front to back. Remove all dirt and mud from the wheels, fenders, storage boxes and chassis. Spray the driver seat with disinfectant and wipe clean. Finally, have the vehicle inspected by the person in-charge.

MATERIALS DISINFECTION



- Use and store tools on dedicated areas/buildings. Prohibit the use of tools between areas/buildings.
- Clean and disinfect all tools contaminated by dirt or feces.
- Clean and disinfect reusable machinery and items thoroughly before use.
- Disinfection duration for surfaces of tools must comply with recommended standards.
- Remove outer packaging of tools and bring tools into the clean zone via a disinfection room or window.
- Indoor disinfection tools should be placed on stainless steel strip racks and disinfected with ozone, fumigation or UV lamps.

ENVIRONMENT DISINFECTION

After the pigs are moved out and the stalls are empty, pre-wash the stalls to remove the feces. Then, spray the pen with a foam cleaner and allow the cleaner to soak for at least an hour. Rinse the pen preferable with hot water (water temp > 60 °C) using a pressure washer. Spray with disinfectant and allow the pen to dry.

Manually wash all equipment that cannot be washed at high-pressure, such as heat lamps and ventilation equipment.

Recommendation: Disinfect with 8/1000 sodium hydroxide, hypochlorite with 2.3% available chlorine, 3/1000 formalin, or 3% ortho-phenylphenol for 30 minutes.

Or, use iodine compounds or other disinfectants that have been proven to be effective against the African swine fever virus.



Disinfection of livestock farms



Disinfection of carcasses and feces

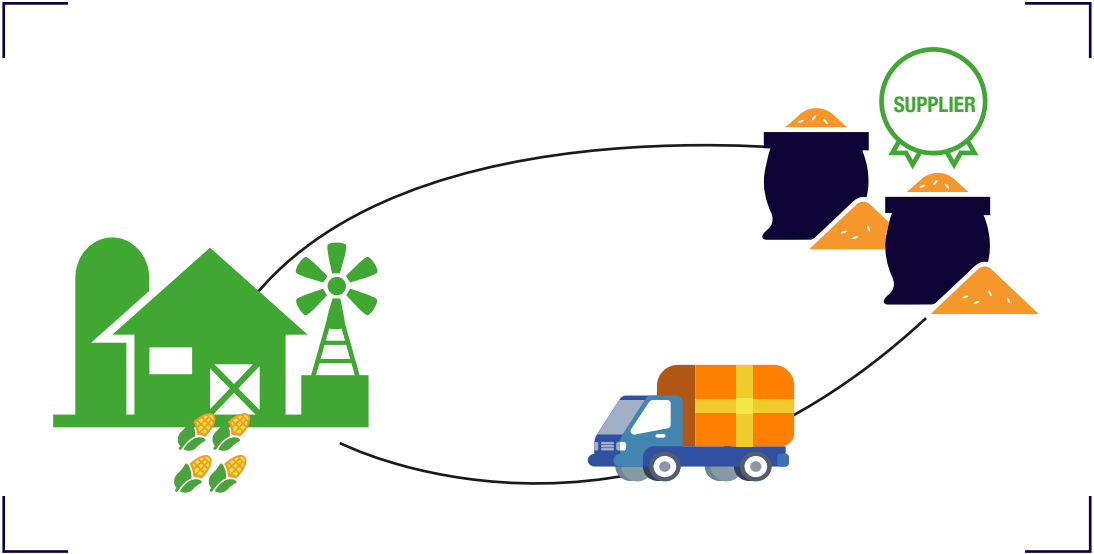


Disinfection of livestock farm floor and walls



Disinfection of transport vehicles and sites

FEED AND RAW MATERIALS



- Buy feed and raw materials from reputable, traceable suppliers
- Use raw materials that are dried or processed at high temperatures or buy raw materials that have been stored for at least 50 days
- Don't use raw materials from porcine origins and raw materials coming from known epidemic areas
- Disinfect warehouses; exterminate rats and pests
- Clean silos and equipment in a timely manner, wash the lines and arrange production sequence
- Clean packing lines in a timely manner to prevent cross-infection
- Prohibit feed trucks and drivers from entering the farm before they are thoroughly disinfected. Transport vehicles should be protected from contamination by a baffle or cover
- Feed trucks should enter the farm from a separate road different from where the pig trucks pass
- Clean internal feed transfer vehicles, transfer towers and disinfection rooms regularly
- Perform regular audits on prevention and control zones as well as canteen management within the farm

WATER AND FOOD



Water should be disinfected and filtered before use



Regularly (at least twice a year) test drinking water in pig farms, especially for E. coli concentration



Clean and disinfect water towers, water tanks and water pipes in the pig farm regularly



- Prohibit cooking in the production area to avoid the introduction of pathogenic bacteria
- Prohibit entry of raw pork or processed pork products into the farm
- Prohibit buying pork from external sources; select non-pork product suppliers carefully to prevent cross-infection
- Prohibit the feeding of left-over kitchen food to pigs
- Disinfect the staff canteen and food storage areas regularly

