

Section 8.8

Aerosol Mitigation

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AEROSOL MITIGATION

RECOMMENDATIONS

1. If you are in an area of elevated risk due to high pig density, you should consider implementing preventive measures (e.g., wind break, an air filtration system).

RATIONALE

- a. Aerosol transmission of some organisms has been documented. It is a significant transmission mode that should be considered in densely farmed areas for some key diseases like porcine reproductive and respiratory syndrome (PRRS), pneumonia and meningitis.
- b. The secure distance between farms varies depending on farm size, pathogen load, different climatic conditions, local geography and pathogenic survival in the air.

GUIDANCE

It is recommended that the preventive measures below be followed:

- a. Consult government or swine industry websites to stay informed of new pig health problems.
- b. Design transportation routes to avoid regions with high pig densities.
- c. Establish a vaccination protocol to prevent diseases that are spread through aerosols.
- d. Implement all-in/all-out housing in the nurseries and finishing units to limit the impact of aerosol disease contamination within the farm.
- e. Install an air filtration system, especially if you are in a region with a high pig density or located within 1 km of a neighbouring farm. Air filtration systems have proven effective in preventing aerosol contamination when used in conjunction with conventional biosecurity protocols.
- f. Determine if your farm is in location with a high pig density (e.g., using Google Earth or GPS technology). The distance to neighbouring farms should be taken into account when developing the SOP to help reduce the risk of aerosol contamination.
- g. Prior to building or establishing a new facility, determine the pig density in surrounding areas, particularly the density of boar studs and nucleus and multiplier farms, to plan according to wind direction, health status of the surrounding herds, etc.

BIOSECURITY QUESTIONS

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
Q8.8.1	Highly recommended	If you are in an area of elevated risk due to high pig density, have you implementing preventive measures (e.g., wind break, an air filtration system)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

N/A = not applicable; SOP = standard operating procedure