

PATHOGEN MOVEMENT FROM A FARM

Possible distance spread from acutely infected unit	<i>Actinobacillus pleuropneumoniae</i>	Aujeszky's Disease (Pseudorabies)	<i>Brachyspira hyodysenteriae</i>	Brucellosis	Classical and African Swine Fever	<i>Escherichia coli</i> (<i>E. coli</i>)	Foot and Mouth Disease	<i>Lawsonia intracellularis</i>	Leptospirosis	<i>Mycoplasma hyopneumoniae</i>	<i>Pasteurella multocida</i>	PMWS (cause unknown – best guess)	PRRSv	Salmonellosis	<i>Sarcophyes scabiei</i> - Mange	Swine Influenza virus	TGE/PEVD
Less than 10 metres																	
10 to 50 metres																	
50 metres to 1 km																	
1 to 10 km																	
More than 10 km																	

The minimum expected spread from an acutely infected farm is highlighted in red



The movement of smoke from a farm fire.

Estimating distance a pathogen may spread is always difficult. Some pathogens like *Escherichia coli* and *Salmonella* are ubiquitous (everywhere). Other pathogens may be moved because they exist in wild animals and movement of the pathogen is dependent on these animals, *Lawsonia intracellularis* and *Brucella* are examples. Note all the pathogens can be spread by pigs, and therefore, the movement of feral pigs will transmit the pathogen over their range. In addition, pathogens that are faecal borne and environmentally resistant (which may be seasonal) can be transmitted over vast distances – PRRSv for example when winter gets below 0°C, the pathogen will survive in frozen faeces carried on boots or vehicles, potentially over 100's km. It is interesting, that pathogens like APP, do not move far from the pig, and yet is present on almost all pig farms.