

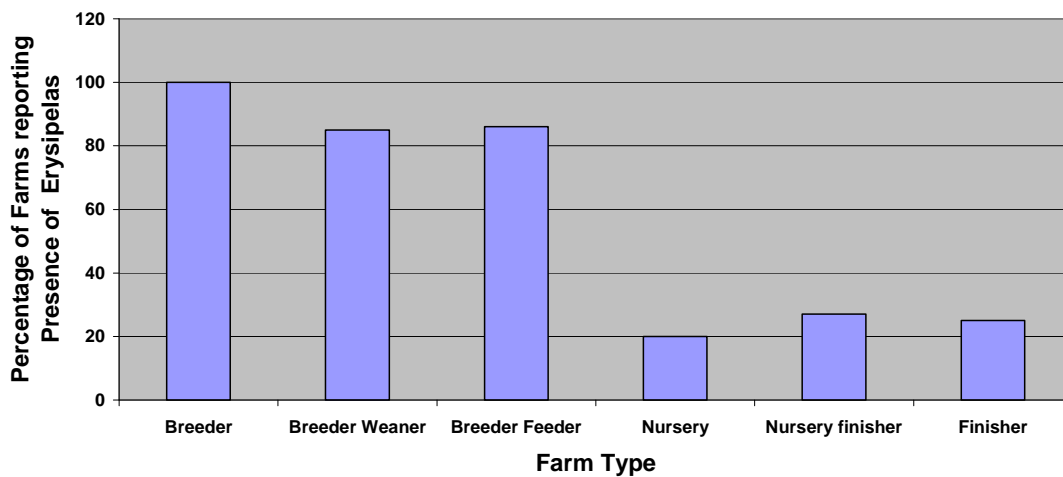
NADIS BPEX Commentary – March 2010

Erysipelas has long been recognised as one of the most common diseases of pigs. The causative organism is ubiquitous being widely distributed within the wild bird population and rodents; given the pig's particular sensitivity to infection and disease, it is no surprise that it is often reported. The disease can manifest in a wide range of forms. In sows, abortion can occur as well as the classic 'diamonds' with heart lesions a common sequel, whereas in the growing pig acute disease can lead to rapid death, diamonds can occur in otherwise healthy pigs (often seen in the slaughter pig, requiring skinning of the carcass) or in the longer term, crippling arthritis can result requiring euthanasia. Heart lesions can lead to sudden death.

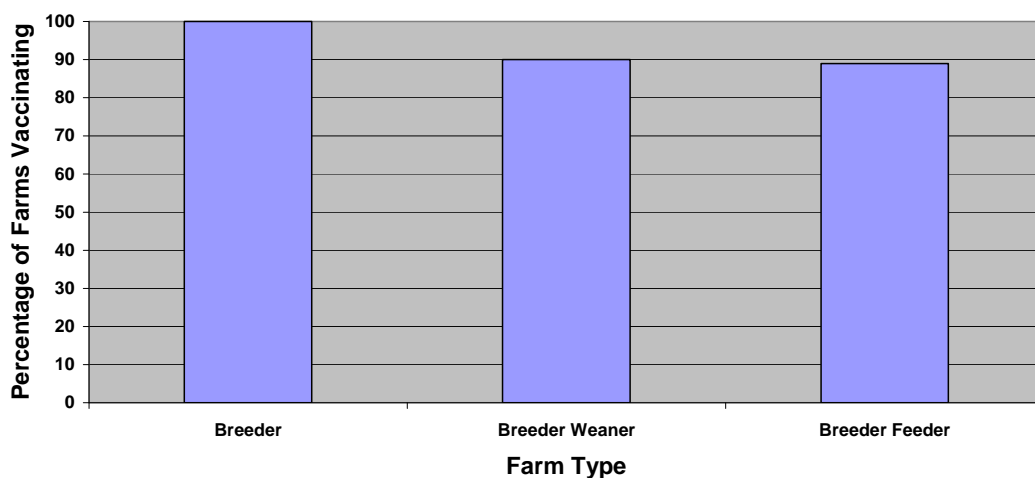
NADIS surveillance does not record the individual prevalence of cases of Erysipelas but maintains a record of the presence or absence within a population, and the control measures employed. Anecdotal comments frequently highlight instances of clinical disease.

Typically, herds will vaccinate breeding animals as a routine, whilst growing pigs will often only be vaccinated if a problem has been experienced within the system previously. Thus, the majority of herds containing sows vaccinate, whereas the minority of growing pigs are vaccinated given that only 20% report presence of disease (fig 1 & 2).

Graph 1 - Erysipelas Presence - Farm Type

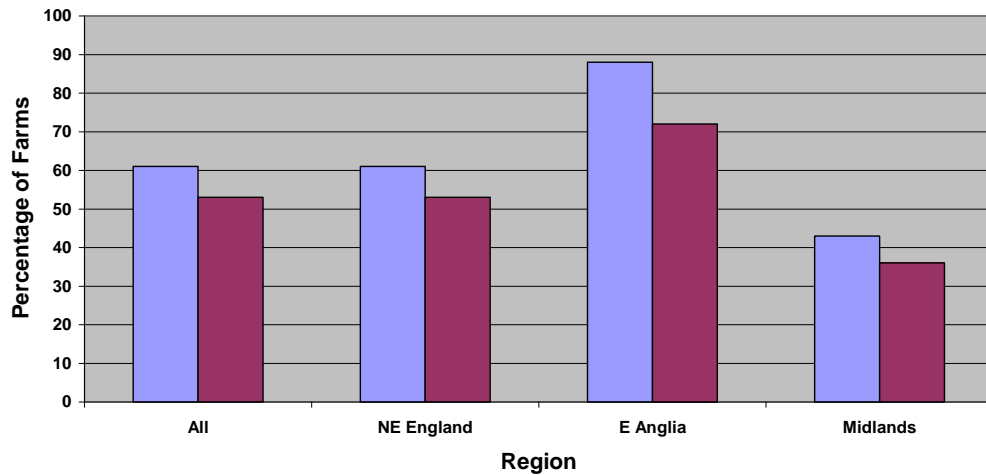


Graph 2 - Erysipelas Vaccination - by Farm Type



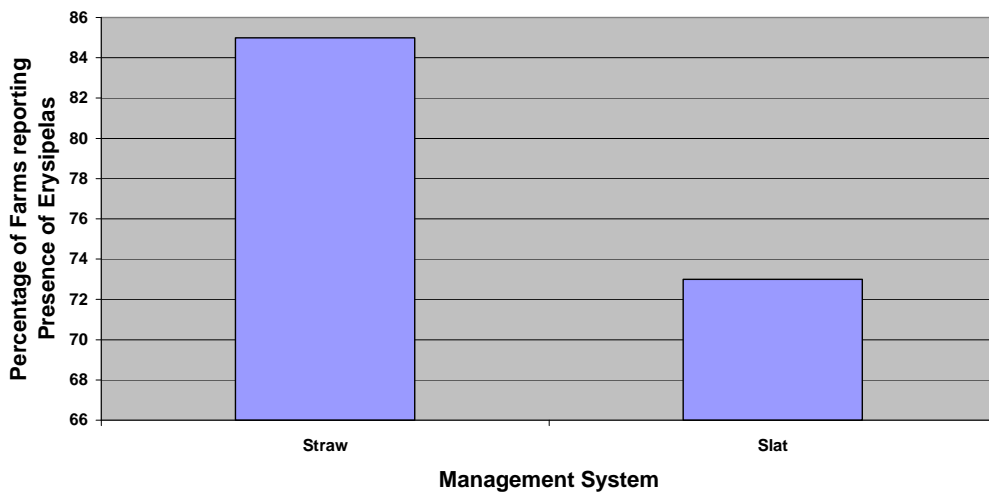
Across the regions, vaccination is applied to more than 82% of all farms, which classify the disease as present (fig 3).

Graph 3: Erysipelas Present and Vaccinating - Regional



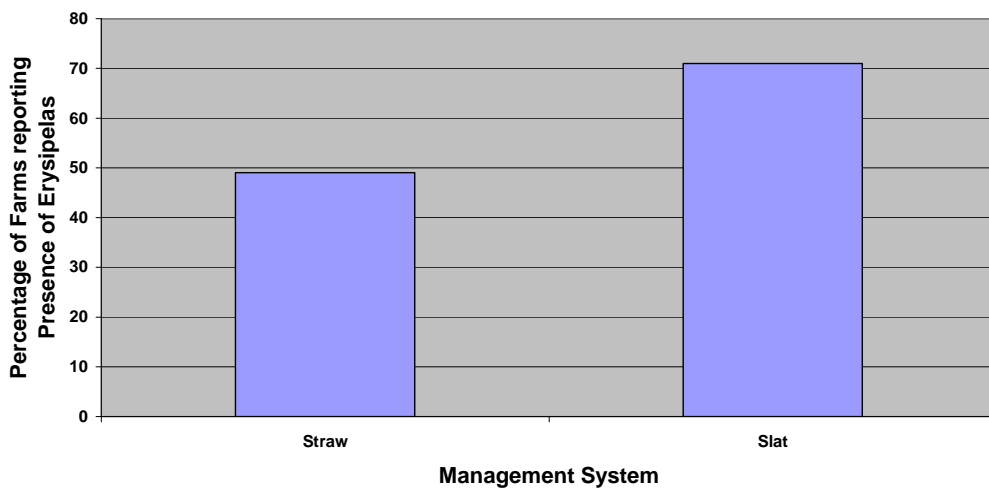
The causative organism can survive well in soil and wet dung and if combined with bird contamination it is no surprise that presence of Erysipelas in sows is recorded as far higher where sows are kept on straw, compared to the relatively few herds where sows are housed on slats (fig 4).

Graph 4 - Erysipelas Presence - Straw v Slat (Sows)



The reverse, however, appears to be true in growing pigs (fig 5).

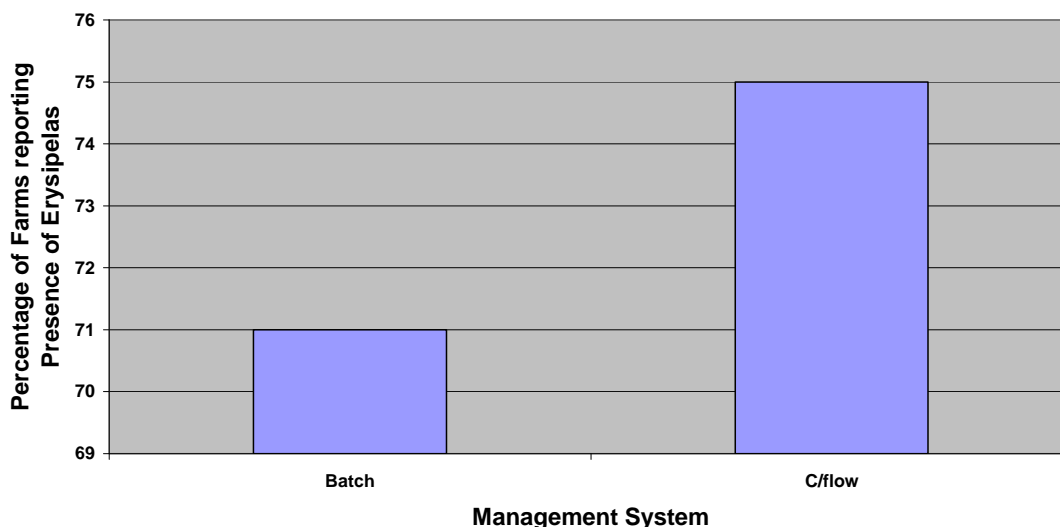
Graph 5 - Erysipelas Presence - Straw v Slat (Growing Pigs)



Not surprisingly, given free access to wild birds, the presence of Erysipelas in outdoor herds is recorded much higher (91%) compared to indoor herds (71%).

Hygiene is thought to play a significant role in the control of clinical disease, particularly given that it is faecally spread. It would, therefore, be entirely expected that batch production systems with a greater ability to clean and disinfect in between groups would see much less disease than continuous flow systems. Whilst there is indeed a difference in recorded presence of disease, it is small (fig 6).

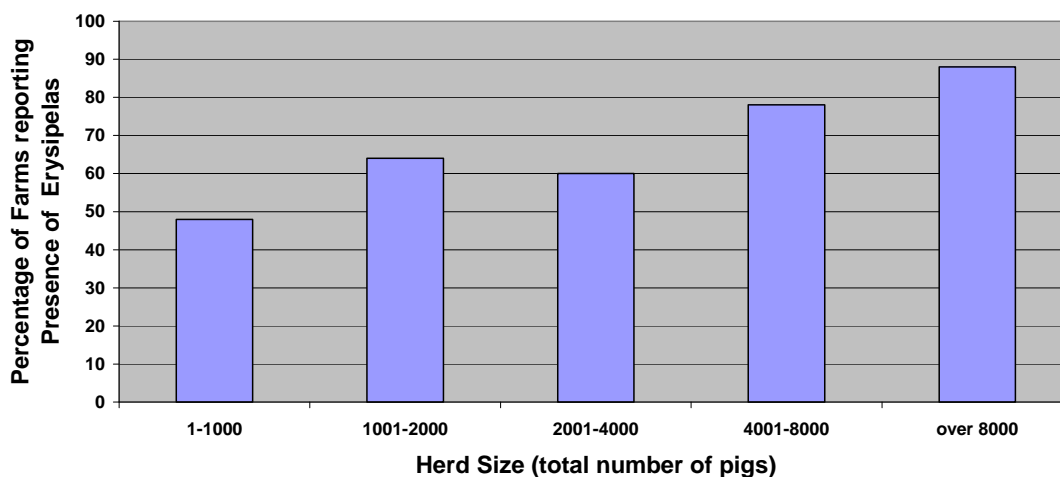
Graph 6 - Erysipelas Presence - Batch v C/Flow



However, this is probably distorted by the fact that the records are for all farms (breeding and feeding) and dry sow housing for batch production sows rarely has higher hygiene standards than that for continuous weekly production.

Finally, the largest herds are almost twice as likely to record Erysipelas presence than the smallest (fig 7) although this may simply reflect the greater chance of overt clinical disease in larger populations.

Graph 7 - Erysipelas Presence - Herd Size



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