

# NADIS Pig Disease Focus

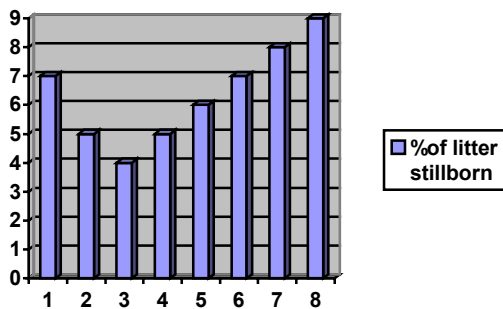
## Stillborn Pigs

Pigs that are born dead may have died at any time during the farrowing process or before. If they have died in earlier pregnancy (up to 110 days gestation) there will be evidence of complete or partial mummification, whereby the fluid component of the foetus is reabsorbed leaving just skin and bone. If the piglet dies in the few days prior to birth, it is likely to be swollen, slimy and may show early signs of decomposition.

However, studies have shown that in the “normal” herd, more than 90% of stillborn piglets are alive at the start of farrowing and this incidence only changes in the face of infectious disease e.g. PRRS, Parvovirus.

### Incidence

In a normal indoor herd unaffected by specific disease, a target for stillborn pigs would be 7% of the total number born. However, this target would assume a normal distribution of sow ages within the herd. There is a variable incidence of stillbirths with parity along the following lines:-



The reasons for this distribution are:-

- 1) Gilts tend to produce smaller litters of bigger pigs, which may become obstructed and, therefore, die before birth. With a lower litter size the percentage stillbirth will be inflated.
- 2) In older sows the farrowing process is prolonged. In effect the uterus acts like a child's balloon; each time it is inflated and deflated it never returns back to its original form becoming more and more flabby. The tone in the muscle of the uterus in older sows is lost and, as such, the farrowing process is slowed down.

The economic effect of a raised stillborn level can be quite high; for a 300 sow breeding herd running at 10% stillbirths this would represent a loss of 235 pigs per year above the 7% target. If each of these piglets was valued fully within a breeder feeder enterprise, this represents a financial loss of over £9000 per year.

It should also be borne in mind that some pigs recorded as born dead are actually alive at birth but are weakened (possibly by a shortage of oxygen during farrowing) and never move away from the rear of the sow. Whilst the definition of death may be arguable, the causes and effects are the same.

### **What Causes Stillbirth?**

During gestation, the piglet is supplied with oxygen by direct transfer from the sows' blood to the piglets' across the placenta and this continues up until the point of delivery.

The stimulus for the piglet to breathe is the loss of this oxygen supply. If the piglet is still inside the sow, it will either suffocate or drown depending on how far down the birth canal it has got. Therefore, premature separation of the placenta or early breaking of the umbilical cord will kill the piglet. The former is the most common problem and will result from either obstruction of the passage of the piglet or a failure of the uterus to contract and expel the pig.

### **Slow Farrowing**

As well as being strongly age related, a number of factors can slow down farrowing by reducing the contraction of the uterus – under the control of Oxytocin. In general, it can be said that in the second half of the farrowing process, if there is more than a 30 minute interval between delivery of pigs, stillbirths are likely to result. Farrowing can be slowed by:-

- 1) High adrenaline levels e.g. in excitable gilts
- 2) Hot sows
- 3) Fat sows
- 4) Emaciated sows
- 5) Chronically stressed sows producing excess cortisone, which “weakens” muscle. Over-sized sow in cramped crates is a common problem with large modern sows.
- 6) Specific dietary deficiency e.g. Vitamin E.

Where stillbirths are excessive, a full veterinary investigation is needed to highlight the contributory factors.

Stockmanship plays a very large part in reducing stillbirths; supervision of farrowing with accurate recording of delivery times will permit intervention and judicious use of extraneous Oxytocin to speed up farrowing. Where stillbirths are a problem, seek veterinary advice to develop a strategy of control.

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**The Meat and Livestock Commission is a sponsor of NADIS (National Animal Disease Information Service), which is a network of 40 veterinary practices and 6 veterinary colleges monitoring diseases in cattle, sheep and pigs in the UK**