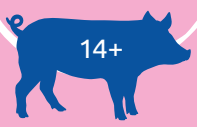
AHDB
PORK

BREEDING 4
ACTION FOR PRODUCTIVITY

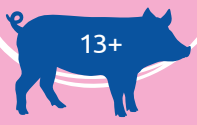
Factsheet 24

Key Targets

1 Total born: aim for 14+



2 Born alive: aim for 13+



3 Pre-weaning mortality: aim for 10% or less

(Based on top 10% national figures 2016)

Improving Key Performance Indicators:

Pre-weaning

Piglets that are successfully reared through to weaning are the essential building blocks for the sale of finished pigs and income to the business. Improving the number of pigs born alive and piglet survival rate through to weaning has a significant impact on profitability – an increase of 1.7 pigs weaned per litter (the difference between average and top 10% performance) improves net margin by £120 per sow per annum (based on costs and prices AHDB 2016).

MANAGEMENT GUIDELINES

As well as having a significant impact on herd profitability, piglets born and mortality are two of the most straightforward areas of the pig herd to record and monitor. All the activity you need to record happens over a short period (farrowing to weaning) and, on indoor units, within a relatively compact and dry space.

An individual sow card can be used to record numbers born and the age, piglet condition and causes of pre-weaning mortality. Keep the recording as simple as possible and capture useful information, for example to track piglet fosterings.

Sow Card

Sow number and parity		Small non-viable		Overlaid	
Farrowing date		Starvation		Savaged	
Number born alive		Weak/poor viability		Splayed legs	
Number born dead		Chilled		Infection/diarrhoea	
Number born mummified		Agalactia/mastitis		Total weaned	
Piglets fostered on		Pre-weaning deaths (record number and age of piglets deaths)			
Piglets fostered off		Other: note detail, e.g. deformity, meningitis, etc.			

It is important to decide with your staff the definitions you will use to ensure you are consistent in the way you record deaths. For example, agree how you will differentiate between small non-viable and weak/poor viability.

ANALYSING DATA FROM YOUR RECORDS

Totalling up each month or per farrowing batch will illustrate your successes and highlight areas where you can improve.

Total born tells you about the overall lifetime management of the sow, from gilt introduction to point of first service, sow condition, nutrition, service, environment and management of the parity profile.

Mummified pigs may indicate a herd health problem and possibly the need for improved hygiene and a vaccination programme.

Pigs (healthy) born dead tells you whether your management at and around farrowing is adequate. It is important to record these piglets as usually they were capable of life but a slow farrowing resulted in death. Monitoring and assisting farrowings where appropriate, especially for older sows, can reduce stillbirths and improve the survival of pigs born alive.

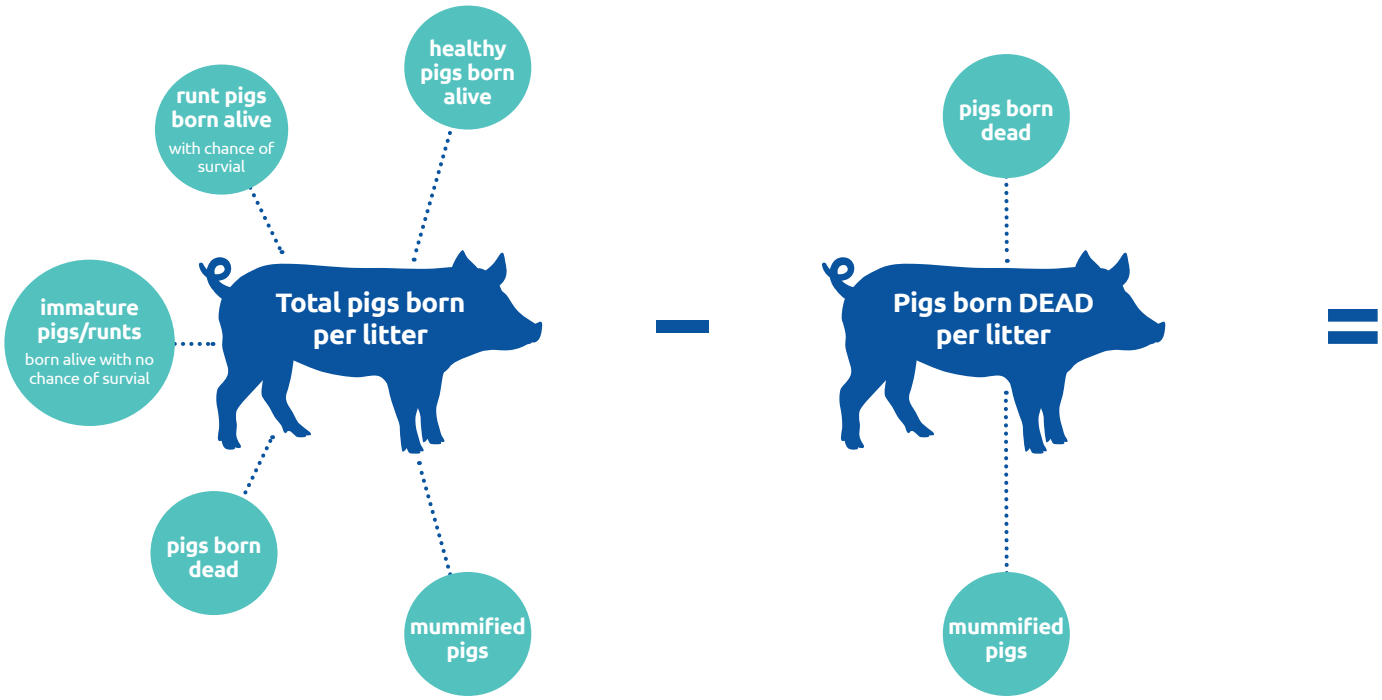
Small non-viable pigs may be linked to an aged herd profile, with older sows having more variable piglet weights, inducing sows to farrow too early, herd genetics and PRRS (Blue Ear). It can also indicate that you need to look at how you feed the sow during gestation.

Pre-weaning mortality and causes provides valuable pointers to how survival rates can be improved. It is important not to rely on recorded data alone, but to combine this with quality stock observations. For example, your records might highlight that a major cause of death is overlying. Stock observation will help you determine whether this is primarily due to:

- over-fat clumsy sows
- creeps that are too hot or cold
- drafts leading to restless sows and chilled pigs
- poor crate design
- lack of milk so piglets are continually close to the sow and in the danger area.

Are piglets too hot or too cold?

Are piglets getting enough milk?



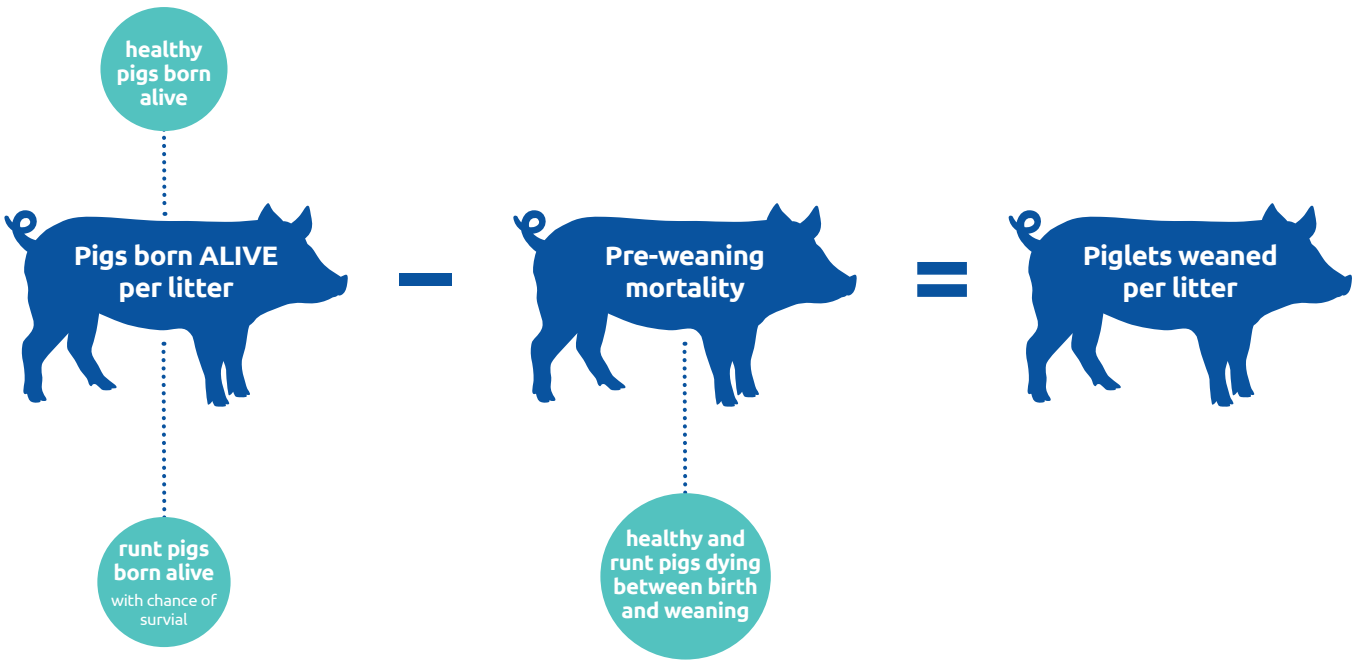
It is also important to look at the data in a joined-up way. For example, high stillbirths can be associated with increased post-weaning mortality as piglets born alive may have been weakened as a result of a protracted farrowing and be more susceptible to overlying.

FARROWING PERFORMANCE

The farrowing performance of similar herds can be used to provide a standard against which to assess your herd's performance and the scope for improvement. Setting your own targets will enable you to track progress as you put new management practises into effect. Use the table below to set targets for your unit:

Industry averages	Average	Top 1/3	Top 10%	Your herd	Your targets
Born alive per litter - average all herds	**12.4**	**13.3**	**13.9**		
Outdoor herds	11.7	12.2	12.4		
Indoor herds	13.0	13.5	13.9		
Born dead per litter - average all herds	**0.6**	**0.7**	**0.8**		
Outdoor herds	0.5	0.6	0.6		
Indoor herds	0.8	0.7	0.7		
Mummified - average all herds	**0.2**	**0.2**	**0.3**		
Outdoor herds	0.1	0.1	0.2		
Indoor herds	0.2	0.3	0.2		
Total born per litter - average all herds	**13.0**	**14.1**	**14.9**		
Outdoor herds	12.1	12.8	13.0		
Indoor herds	13.9	14.4	14.8		
Pre-weaning mortality (%) - average all herds	**12.7**	**10.9**	**10.1**		
Outdoor herds	13.8	13.0	13.3		
Indoor herds	11.7	10.1	9.4		
Weaned per litter - average all herds	**10.8**	**11.8**	**12.5**		
Outdoor herds	10.1	10.6	10.7		
Indoor herds	11.4	12.1	12.6		

Source: Agrosoft/AHDB 2016



FINANCIAL BENEFITS OF INCREASING SURVIVAL RATES

There has been a gradual reduction of time available for the farrowing department and individual litter management with batch farrowing enterprises.

With the data collected providing important signposts for improving performance, it is important to reassess the cost benefit of strategic labour deployment to allow time for the adoption of colostrum management techniques and the effective establishment of newborn piglets. Further information is given in *Action for Productivity 14 and 17*.

The following table provides a means of evaluating the potential financial benefits of increasing survival rates and how you can assess the benefit of this against anticipated extra labour costs.

It is important to allocate time to establish newborn piglets.

FARROWING PERFORMANCE

The farrowing performance of similar herds can be used to provide a standard against which to assess your herd's performance and the scope for improvement. Setting your own targets will enable you to track progress as you put new management practises into effect. Use the table below to set targets for your unit:

	Example	Your herd
(A) Number productive sows and gilts	350	
(B) Farrowing index	2.33	
(C) Current number of piglets born dead and number of pre-weaning deaths	0.8 plus 1.4	
(D) Target number of piglets born dead and number of pre-weaning deaths	0.6 plus 1.2	
(E) Number of extra pigs weaned per litter (C – D)	0.4	
(F) Number of additional pigs weaned/annum (A x B x E)	326	
(G) Increase in net margin/year assuming no additional labour costs required £20/pig (based on AHDB 2016 costs and prices for breeder finisher herds)	£36/pig weaned	
(H) Increase in net margin/year for the unit assuming no increase in costs required (F x G)	£11,763	
(I) Additional cost of extra labour/year (Estimate the amount of additional cost £4,160 to achieve targeted performance improvements, for example 10 hours/week at £11.50/hour for 52 weeks)	£5,980	
(J) Increase in net margin/year after deduction of additional labour £2,400 costs (H – I)	£5,756	

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