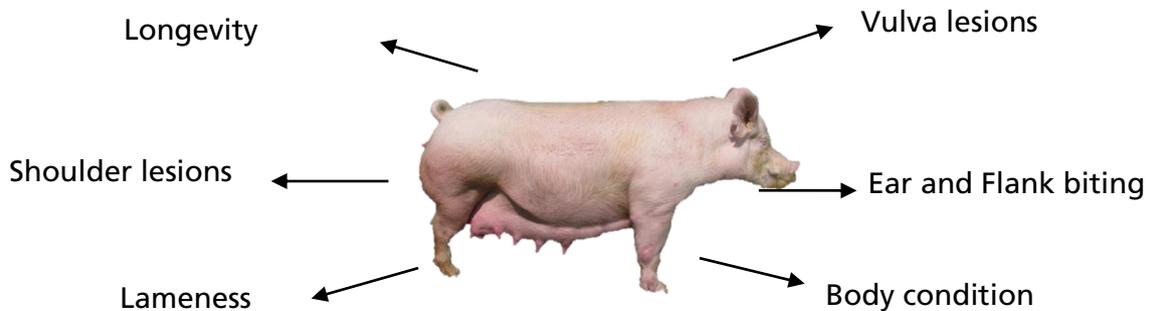


Sows

Welfare Outcomes



Welfare outcomes are an animal-based method of assessing factors that contribute to an animal's quality of welfare. Whilst provision of certain resources (inputs) in the environment is necessary to increase the welfare potential of a system, measuring animal-based outcomes indicate the animals' welfare state. Regularly scoring appropriate outcome measures can identify welfare problems and be used to set targets or benchmark for improvements through an active programme. Below is a selection of the main measures recommended.

LAMENESS

WHAT: Assess prevalence of lameness in dry breeding sows.

WHY: Lameness indicates injury and infection which can lead to pain, pigs being bullied and pigs being culled. Early detection allows for isolation, treatment and recovery.

HOW: *AssureWel* lameness protocol: www.assurewel.org/pigs/lameness.

❖ Observe individuals walking and record identities of lame pigs (mark lame pigs).

TARGET: Average <5% lameness.

EAR AND FLANK BITING

WHAT: Assess prevalence and severity of lesions on ears and flank.

WHY: Ear and flank bites arise from aggression behaviour, typically from mixing unfamiliar sows, high density, and poor pen design, indicating potential fear, pain and distress.

HOW: *BPEX* body mark protocol with photos (p.4-7):

<http://smartstore.bpex.org.uk/articles/dodownload.asp?a=smartstore.bpex.org.uk.26.3.2013.16.13.6.pdf&i=302866>

❖ Observe one side of the animal and record the number, type and severity of lesions.

TARGET: Minimal number of minor lesions and no severe lesions across all individuals.

BODY CONDITION

WHAT: Assess and monitor changes in body fat reserves (condition) of sows.

WHY: Good condition is required for successful reproduction/lactation and monitoring allows feed management to prevent excessive weight changes or to indicate feeding competition.

HOW: *AssureWel* body condition protocol: www.assurewel.org/pigs/bodycondition. Defra

visual guide: <http://adlib.eversite.co.uk/resources/000/250/231/PB3480.pdf>

❖ Observe pig from the side and behind, assign score from 1 (thin) to 5 (fat).

TARGET: Score 3 (not falling below score 2 during lactation). The body condition should not drop more than 1 point during lactation.

SHOULDER LESIONS

WHAT: Assess prevalence and severity of lesions on shoulders on dry sows (only)

WHY: Lesions on the shoulder are likely to be painful and are usually present long periods of time. They are also often reoccurring. They indicate inappropriate housing, feeding or management. They are a sign that comfort levels are poor.

HOW: *AssureWel* scoring protocol: <http://www.assurewel.org/pigs/shoulderlesions>

❖ Observe near the animal and visually assess one side only for shoulder lesions. Assign score of 0 = none, 1 = mild, 2 = severe

TARGET: Minimal number of mild lesions and no severe lesions across all individuals.

VULVA LESIONS

WHAT: Assess prevalence and severity of vulva lesions on dry sows (only)

WHY: Lesions on the vulva are caused by frustrated pigs biting one another. They are painful and risk infection and scarring. This can lead to problems during farrowing. They are associated with competition for resources and inadequate roughage in the diet.

❖ Observe sows from behind scoring 0 = none, 1 = mild, 2 = severe

TARGET: Minimal number of mild lesions and no severe lesions across all individuals.

MORTALITY & LONGEVITY

WHAT: Longevity is measured by both average number of litters per sow and replacement rate percentage (which can be calculated with mortality).

WHY: An indication of the health of sows in the herd.

HOW: Record of the number of litters produced per sow. Replacement rate percentage is the sum of the culling rate (voluntary and involuntary) and death loss.

TARGET: Sow mortality <3%. The average number of litters per sow should be greater than 4.

PIG SIGNALS

Positive behaviour	Negative behaviour
Rooting, foraging	Aggression – fighting, chasing, head butting, vulva biting (sows)
Social interaction, such as lying, play (growing pigs)	Redirected behaviour – belly nosing, tail biting, leg biting, ear biting
Exploration	Lethargy, no interest, not feeding
	Unrest, vocalisations (squeals)

PROCESS: Measure outcomes > identify risk factors (causes of poor outcomes) > assess performance (benchmark against other farms or suppliers) > adjust management practices (to improve welfare outcomes, using incentives or penalties for compliance with targets).