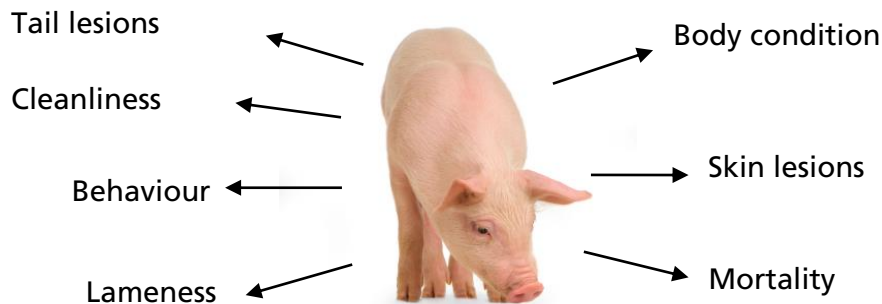


# PIG

## 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 and finishing pigs.

**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](http://www.assurewel.org/pigs/lameness).

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

**TARGET:** Average <5% lameness.

### BODY MARKS

**WHAT:** Assess prevalence and severity of lesions.

**WHY:** Body marks and wounds arise from aggression or mounting behaviour, typically from mixing unfamiliar pigs, 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](http://www.assurewel.org/pigs/bodycondition). Defra visual guide: <http://adlib.everysite.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).

**CLEANLINESS**

**WHAT:** Assess coverage of manure on the body (excluding mud, used for thermoregulation).

**WHY:** Pigs lie in manure when space or environmental temperatures are inadequate; indicating discomfort and risking skin diseases, parasites, irritation and boar taint.

**HOW:** AssureWel manure on the body protocol: [www.assurewel.org/pigs/manureonthebody](http://www.assurewel.org/pigs/manureonthebody).

❖ Observe one side of the animal and assign score of 0 (clean) to 2 (very dirty).

**TARGET:** >80% pigs with score of 0 and <5% with score 2.

**ENRICHMENT USE**

**WHAT:** Assess use of enrichment substrates in pen.

**WHY:** Successful enrichment provision reduces abnormal behaviour and increases positive species-specific behaviours, including exploration, foraging, play, and social interaction.

**HOW:** AssureWel enrichment use protocol: [www.assurewel.org/pigs/enrichmentuse](http://www.assurewel.org/pigs/enrichmentuse).

❖ Assign standing/sitting pigs' oral behaviour as using enrichment, manipulating other pigs or fixtures, or stone chewing (sows).

**TARGET:** Pigs are occupied by enrichment for 15-20% of their time.

**TAIL LESIONS**

**WHAT:** Assess prevalence and severity of tail lesions of meat pigs.

**WHY:** Tail lesions result from tail biting, due to boredom and frustration, low space, poor thermal comfort, or illness. Lesions can be painful and lead to culling/ carcase downgrading.

**HOW:** AssureWel tail lesion protocol: [www.assurewel.org/pigs/taillesions](http://www.assurewel.org/pigs/taillesions). Photo guide (p.8-9): <http://smartstore.bpex.org.uk/articles/dodownload.asp?a=smartstore.bpex.org.uk.26.3.2013.16.13.6.pdf&i=302866>

❖ Observe the individual from behind and assign score from 0 (none-minimal) to 2 (severe).

**TARGET:** >80% pigs with score 0 and <5% with score 2.

**MORTALITY**

**WHAT:** Record the number of pigs dead or culled on farm and the causes.

**WHY:** Mortality may be due to chronic injury, disease, suboptimal management or environmental conditions, and indicates pain, suffering and suboptimal performance.

**HOW:** AssureWel mortality protocol: [www.assurewel.org/pigs/mortality](http://www.assurewel.org/pigs/mortality).

❖ Piglets: Common causes are crushing, chilling, low birth weight, failure to thrive.

❖ Growers: Common causes are lameness, tail bitten, failure to thrive.

❖ Sows: Common causes are lameness and poor reproductive performance.

**TARGET:** Pre weaning <5% mortality, growing pigs <3% mortality, sow mortality <3%.

**OTHER MEASURES:** Pigs needing further care/hospital pens; breeding sows: longevity; shoulder and vulva lesions; growing pigs: failure to thrive ear/flank biting.

**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).