

COWS

Upright ear posture longer - Cows are **excited**

Forward facing ear posture longer - Cows are **frustrated**

Clearly visible eye white and ears are forward or upright cows are **excited**

Ears Hanging Down – Cows are **relaxed**

Half Closed Eyes – Cows are **relaxed**

PIGS

Back Ear Position/Posture - Pigs are in **Aversion and Negative**

One Ear Forward, other ear sideward or backward (**Asymmetrical**) - Pig is in **Negative Emotions**

Both Ears in **Sidewards** - Pigs shows **positive emotions**

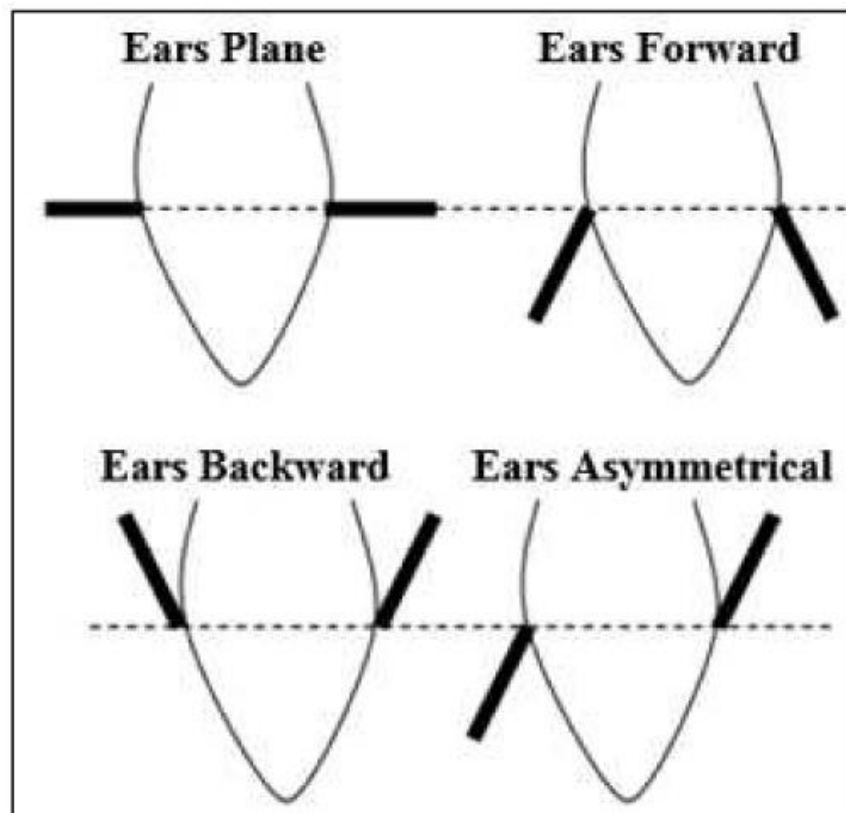
Standing **Upright Ears** - Pigs are in **Normal State**

Ears Hanging and flipping in the direction of eyes - Pigs are in **Normal State**

Both ears forward - Pig is **alert and neutral**

Ears Backwards and Eyes Open Less - Pigs **Retreat or Withdrawal** from attack (Camerlink et al., 2018)

Ears Erect (not necessarily upright) and Eyes **Widely Opened** - Pigs are in **aggression**



The Piglet Grimace Scale

Ear Position

Absent (0)



In the baseline position, ears are both facing forward

Somewhat present (1)



One ear is in the baseline position and one ear is not

Moderately present (2)



Neither ear is in the baseline position; both ears are pulled back but not pressed against the body

Obviously present (3)



Both ears are pulled back and pressed against the body

- Determine ear position by looking at the base of the ear (point that connects to the piglet's head)

Cheek Tightening/ Nose Bulge

Absent (0)



Smooth transition from snout to cheek. No bump or bulge present.

Moderately present (1)



Slight bulge on the snout

Obviously present (2)



Prominent and noticeable bulge on the snout

- Determine nose bulge when the piglet's face is in profile view by looking above the lip line

Orbital Tightening

Absent (0)



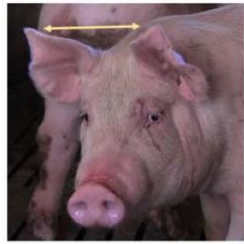
Eyes are bright and open

Present (1)

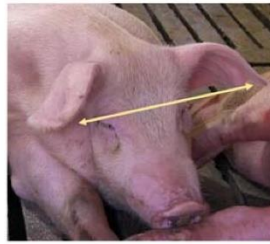


Orbital area is narrowed as the eyelids are squeezed together

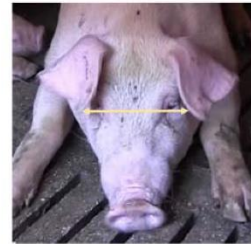
Ear position



Not present (0)
The ears are kept forward



Moderately present (1)
The ears are slightly moved backwards, the distance between the ear tip increase



Obviously present (2)
When the animal is in pain, the ears are drawn back from forward position

Orbital tightening



Not present (0)
The eyes are open, white can be visible



Moderately present (1)
The orbital area is narrowed, eyes are semi-closed and not focused on the environment or closed with eyelids are squeezed together

Cheek tightening / Nose bulge






Not present (0)
No snout bulge neither cheek tension is visible









Moderately present (1)
A bulge of skin is apparent on the snout in response to increased tension in the cheek, wrinkles are not visible







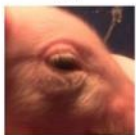

Obviously present (2)
A bulge of skin is apparent on the snout in response to cheek tightening, wrinkles are clearly visible




Temporal tension		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The ear base is moved slightly upwards and backwards. The distance between the base of the ears is slightly (1) or substantially reduced (2) with the ears moved upwards & backwards (2).</p>		




Forehead profile		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The gradient (slope) of the forehead changes from a slightly concaved profile (0) to an increased forehead gradient (1) and to an obviously increased forehead gradient with flat profile.</p>		




Orbital tightening		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The eye aperture decreases with eyelid semi-closed (1) to substantially and completely closed (2).</p>		




Cheek tension		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The cheek change from a rounded and bulging appearance (0) to a slight (1) or considerable (2) flattening as the cheek tension increases.</p>		




Tension above eyes		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The eyebrow changes from a gently (0) to a more pronounced (1) and to considerable curving of the eyebrow</p>		

Lower jaw profile		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The profile of the lower jaw changes from a concaved (0) to a slightly (1) or more obvious (2) flatter (less concaved) appearance, with skin on the lower jaw becoming tighter.</p>		

Upper lip contraction		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>A bulge above the upper lip increasingly becomes slightly (1) or obviously (2) evident, with the size of the canine notch increasing.</p>		

Snout plate changes		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The profile of the snout plate appears to flatten (become less concaved) and the thickness/depth of the snout plate seems to increase in thickness from 0 to 2.</p>		

Snout angle		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The snout appears contracted with a bulging of top-line and wrinkles increasing in depth and prominence on the bridge of the nose from 0 to 2. As the snout profile changes, the angle of the snout plate relative to the mouth decreases.</p>		

Nostril dilation		
Not present (0)	Moderately present (1)	Obviously present (2)
		
<p>The dilations of the nostrils appear to increase (expand) from a resting position (0) to slightly (1) or more obvious (2).</p>		