



# Rabbit Grimace Scale (RbtGS) Score Sheet

Developed by Dr Matt Leach and the Pain and Animal Welfare (PAWS) group at Newcastle University.

### Instructions

The Rabbit Grimace Scale describes five action units that should be scored. These action units have been shown to increase in intensity in response to post-procedural pain (Keating et al. 2012.) These action units **should** only be used in awake animals. Each animal should be observed for a short period of time to avoid scoring brief changes in facial expressions that are unrelated to the animal's welfare.

Observe the rabbit considering each of the facial action units outlined in this sheet to assign a score. To assist with scoring, use the scoring sheet alongside the poster and manual which contain visual and text descriptions of each action. This scoring sheet **should** always be used alongside other validated indices of pain.

|               |  |  |  |       |  |
|---------------|--|--|--|-------|--|
| Rabbit's Name |  |  |  | ID No |  |
| Condition     |  |  |  | Date  |  |

|                      |               |               |               |               |
|----------------------|---------------|---------------|---------------|---------------|
| Time of assessment   |               |               |               |               |
| Vet / Nurse initials |               |               |               |               |
| Observation          | Observation 1 | Observation 2 | Observation 3 | Observation 4 |

- Is there a narrowing of the orbital area with a closing of the eyelid? Over 1/2 closed is a score of '2'.
- A score of '2' can include an eye squeeze (contraction of muscles around the eye).

|                            |                    |   |   |   |   |
|----------------------------|--------------------|---|---|---|---|
| 1<br>Orbital<br>Tightening | Not present        | 0 | 0 | 0 | 0 |
|                            | Moderately present | 1 | 1 | 1 | 1 |
|                            | Obviously present  | 2 | 2 | 2 | 2 |

- Have the cheeks lost their rounded (bulging) shape and become flatter? At a score of '2' cheeks have a sunken look.
- Have the edges of the cheek muscles lost their definition (i.e. visibility)? At a score of '2' they are not very visible.
- Has the general face shape changed from rounded to angular and have the edges of the cheek muscles become less visible?

|                          |                    |   |   |   |   |
|--------------------------|--------------------|---|---|---|---|
| 2<br>Cheek<br>Flattening | Not present        | 0 | 0 | 0 | 0 |
|                          | Moderately present | 1 | 1 | 1 | 1 |
|                          | Obviously present  | 2 | 2 | 2 | 2 |

- Has the upper edge of the nostrils lost its 'U-shaped' profile and formed a more 'V-shaped' profile?
- Has the lower edge of the nostrils lost its curved profile and become straighter and more vertical?
- Please note, the openness of the nostrils is NOT related to the nostril shape.

|                              |                    |   |   |   |   |
|------------------------------|--------------------|---|---|---|---|
| 3<br>Nostril<br>(Nare) Shape | Not present        | 0 | 0 | 0 | 0 |
|                              | Moderately present | 1 | 1 | 1 | 1 |
|                              | Obviously present  | 2 | 2 | 2 | 2 |

- Have the whiskers lost their relaxed, natural curved profile to become increasingly straight?
- Have the whiskers clumped together?
- Do most of the whiskers point in the same direction? At a score of '2', most of the whiskers seem to point downwards.

|                                     |                    |   |   |   |   |
|-------------------------------------|--------------------|---|---|---|---|
| 4<br>Whisker<br>Shape &<br>Position | Not present        | 0 | 0 | 0 | 0 |
|                                     | Moderately present | 1 | 1 | 1 | 1 |
|                                     | Obviously present  | 2 | 2 | 2 | 2 |

- Have the ear apertures lost their open (dish-shaped) appearance and become folded/curled inwards (more cylindrical)?
- Has the distance between the lower inside edges of the ears decreased? At a score of '2' they are almost touching.
- Have the ears moved from standing vertically to the back or side of the rabbit? At a score of '1', the ears are at a 45° angle relative to the back or sides. At a score of '2', the ears are held closer to the back or sides of the body.

|                              |                    |   |   |   |   |
|------------------------------|--------------------|---|---|---|---|
| 5<br>Ear Shape<br>& Position | Not present        | 0 | 0 | 0 | 0 |
|                              | Moderately present | 1 | 1 | 1 | 1 |
|                              | Obviously present  | 2 | 2 | 2 | 2 |

|        |  |  |  |  |
|--------|--|--|--|--|
| Totals |  |  |  |  |
|--------|--|--|--|--|