Recognizing Pain and Distress

Some signs of pain, illness and distress in rodents

- Limb guarding
- Temperature
- Vocalization
- Lethargy
- Aggressiveness
- Poor coat condition
- Pupil dilation and reaction
- Nasal discharge or lachrymation
- Rapid shallow breathing, grunting
- Panting, hiccups
- Decreased food or water consumption
- Ears flat against body
- Tail drags
- Gait abnormalities

- Decreased fecal or urine output
- Weight loss
- Dehydration
- Head tilts or bobbing
- Stereotyopies (circling etc)
- Posture ("hunched" posture OR belly touches floor)
- Licking, scratching or biting
- Porphyrin secretions ("red tears")
- Freezing
- Site Specific Grooming
- Social Withdrawal
Correct body posture and gait

Belly does not touch during ambulation, tail does not drag or touch during ambulation, toes spread, animals sniffs, whisks and moves ears, ears are pointed (either toward sound source or upright, not flat against body), tail does not stick straight up.
Healthy animals will rear, sniff and explore and interact with each other
Healthy animals will groom themselves and each other
Recognizing Pain and Distress

Porphyrin secretions
“Barbering” and fighting

Both rats and mice may fight - notice wounds (usually worse in males)
Pain posture - indicates abdominal pain

Agonal breathing- may be evident as gasping and/or as thoracic contractions
Overgrown teeth - the animal may not be gnawing
A bad sign!
Eyes closed, poor coat condition, note ear position
Do your animals get “hiccups” after surgery?

You may have damaged a nerve, muscle of trachea. There may be inflammation (and infection) near the nerve. This may actually be agonal breathing.
Notice: eyes, coat, ears
Limb guarding
notice neck
Probably non-sterile surgery - this wound is infected
This is a healthy incision
Notice lack of clarity in eye - rats and mice can get cataracts!
Eyes can be damaged during surgery without protective cream for cornea/lens
Notice - tail
Increased tail temp and tail specific grooming would have been noticeable to touch LONG before it got this bad
Poor fur condition (animal not grooming), wound or skin infection, notice ears are flat back (not pointed upright or mobile), notice eyes partially closed
This is not the posture of a happy, resting rat!
Take a look at what your rats normally do when they sleep or rest
This wound is infected - how can you tell?
Note- fur, posture, porphyrins and inflammation
Head tilt. It is normal for rats and mice to tilt their head to improve depth perception, but they should not walk like that.

How do you know this animal is sick?
(1) ruffled or “spikey” fur (rat looks unkempt);
(2) weight loss which may be mild to severe, anorexia, dehydration;
(3) ocular discharge which may include porphyrin staining around the eyes;
    (4) lethargy, depression, or reluctance to move;
(5) sitting with the back in a hunched position;
(6) ataxia (uncoordinated muscle movements), regional or generalized weakness;
(7) tremors, which may be intermittent to persistent depending on the condition of the animal;
(8) hypothermia characterized by cool extremities OR increased body temp (will be especially noticeable in tail)
    (9) labored respiration; and
(10) cyanosis, or a blue tinge to the mucous membranes