

Risk assessment and management in animal experiments

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If you feel unable to assess risk properly, or to act accordingly, you should not start experimenting

- report to superior
- request more training

Assessing risks

Live animals = risks

When to assess

- animals in boxes
- approaching animals
- handling animals

Identifying increased-risk situations

- mice: crazy by default, expect the unexpected all the time
- rats: increased stress (fear, pain, etc.)



What is normal behavior for rats?

- in box
 - sleeping, yawning
 - grooming, drinking, peeing, etc
 - cautious observing: sniffing, rearing, light bites
 - escaping to observe
 - playing/fighting
- approaching the animal
 - avoiding hand
 - bunching, running around
 - sniffing hand
- handling
 - vocalizing lightly
 - trying to escape
 - gripping the cage top
 - turning head
 - peeing, defecating

What are the signs of increased stress in rats?

- in box
 - cornering
 - puffed out hair
 - pain: lying on side, heavy panting, arched back
- approaching
 - freezing, cornering and arched back
 - hissing
 - hair standing on end
 - baring teeth
- handling
 - strong and repeated vocalization

How to manage increased risk

- **do not panic, you are the boss**
 - animals sense your stress: don't let it feel insecure
- wear proper protective equipment
 - double glove
 - and the thick glove on top
- if animal is in hand
 - do not let the animal escape your grip
 - put the rat down while holding its tail
 - put it back to the cage slowly
- calm down the rat
 - be quiet
 - gently talk to the animal
 - pet the rat carefully (avoid head), let it smell your gloved hand
 - then start handling with determined and firm movements



**DON'T
PANIC**

How to manage injury

- if an animal escaped
 - do not panic
 - close all doors as quick as possible
 - let your superiors know immediately
 - find the animal, put it back to cage
- if an animal bit you
 - do not panic, you will survive
 - put the animal back to cage
 - let your superiors know immediately



**DON'T
PANIC**