

Laboratory animal evaluation

1. Which of the following tasks is the responsibility of the ACC?

- 1) To ensure that no animal is obtained without its authorization
 - 2) To give authorization to deviate from a SOP
 - 3) To inspect institutions within jurisdiction (at least 1 inspection per year)
 - 4) Ensure that the policies and guidelines of the CCAC are being followed
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- A. 1 and 2
 - B. 1, 2 and 3
 - C. 1, 3 and 4
 - D. All of the above

2. What are the two animal care committees at Université Laval that review protocols?

- A. CCAC and CPAUL
- B. CPAC and CCAC
- C. CPAUL and CPAC
- D. None of these

3. A researcher decides to modify his/her protocol to use 120 mice instead of the 90 indicated in the protocol. The researcher must:

- A. Inform the Animal Care Committee (ACC) a month after the use of the animals
- B. Order the animals, then inform the ACC
- C. Tell the technicians of the animal lab to prepare more cages to hold the animals
- D. Obtain authorization from the ACC before ordering the animals

4. What do the three Rs stand for?

- A. Recycle, recovery, reduction
- B. Replacement, reduction, refinement
- C. Respiration, reduction, recovery
- D. Replacement, recycle, recovery

5. Which of the following signifies Reduction in a research environment?

- A. Minimal use of disposable products to reduce waste
- B. Shortening the duration of the project
- C. Using the least amount of animals to obtain valid results without loss of important information

6. Which of the following does not correspond to the duty of an employer concerning occupational health and safety?

- A. The employer must inform employees of work-related risks
- B. The employer must provide the necessary training to allow employees to work in safety
- C. The employer must assure proper maintenance of the workplace facilities
- D. None of the these

7. What risks are controlled by the local Radiation Protection Committee?

- A. Radio waves
- B. Chemical substances
- C. Ionizing radiation
- D. Allergies

8. What does WHMIS stand for?

- A. Workplace Hazardous Material Information Supply
- B. Workplace Hazardous Materials Information System
- C. Workplace Harmful Materials Information System
- D. Workplace Hazardous Materials Information in Science

9. The main ways of exposure to infectious agents are:

- 1) Aerosols
 - 2) Ingestion
 - 3) Injection
 - 4) Skin absorption
- A. 1, 2 and 3
 - B. 1, 3 and 4
 - C. 2, 3 and 4
 - D. 1, 2, 3 and 4

10. Which of the following equipment must be used when dealing with infectious substances?

- A. Fume hood
- B. Positive pressure laminar flow hood
- C. Biological safety cabinet
- D. All of the above

11. Allergies are one of the risks of working with animals. What are the methods of reducing risks of developing allergies?

- A. Properly wearing gloves
- B. Properly wearing respiratory protective equipment
- C. Following the current dress code
- D. All of the above

12. Which of the following is not part of a veterinarian's role?

- A. Carry out daily inspections
- B. Visit the animal labs on a regular basis and put forward recommendations
- C. Act as a resource person for care staff
- D. Act as an advisor on the animal care committee

13. What must be done with the animal files after euthanasia or their departure?

- A. Throw them into a confidential document container
- B. Keep them until the end of the protocol
- C. Keep them for five years
- D. Keep them for one year

14. Which of the following environmental conditions can affect research results?

- A. Temperature
- B. Humidity
- C. Frequency of air exchange
- D. Lighting
- E. Noise
- F. All of the above

15. What is the purpose of an acclimation period upon animal arrival?

- A. To allow the animals to adapt to their new environment and to reduce the stress hormones released during transport
- B. To allow the staff to get used to the species
- C. To allow the staff to prepare all that is necessary for the study

16. Which of the following rules must be respected during the acclimation period?

- A. Avoiding changes in stable animal groups
- B. Avoiding changes in food
- C. Avoiding location changes
- D. Avoiding noise and abrupt movement
- E. All of the above

17. True or False: A sick animal will respond in the same as a healthy animal, to the effects of different experimental procedures.

- A. True
- B. False

18. A good choice of analgesia treatment is judged by:

- A. Healing time
- B. Cost
- C. Efficiency and compatibility with the protocol objective
- D. None of these

19. What is an infectious disease?

- A. A chronic disease
- B. A fatal disease
- C. A contagious disease
- D. None of these

20. In an animal laboratory, what are the possible sources of infection?

- A. Animal
- B. Humans
- C. Environment
- D. Experimental procedures
- E. All of the above

21. SOPs are implemented in order to:

- 1) Standardize work methods
 - 2) Ensure the well-being of users
 - 3) Ensure ethical use of the animals
 - 4) Ensure the well-being of the animals
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- A. 1, 3, and 4
 - B. 1, 2, and 4
 - C. 2, 3, and 4
 - D. 1, 2, and 3

22. What is the meaning of the word analgesia?

- A. Absence of the sensation of pain
- B. Numbness in a region of the body
- C. Anesthesia of a region of the body

23. Of the three types of anesthetic used on animals, which is the method of choice?

- A. Injectable anesthetics
- B. Local anesthetic
- C. Inhalable anesthetics

24. What is an endpoint?

- A. The critical period of a protocol
- B. The maximum duration of a protocol
- C. The maximum number of trials for a given technique
- D. The moment when pain and/or distress must be stopped, minimized, or reduced

25. What is the objective of the method of euthanasia chosen by the researcher in consultation with the veterinarian?

- A. Rapid loss of consciousness and absence of pain and/or distress
- B. Rapid loss of consciousness
- C. Absence of pain and/or distress
- D. Respecting budget costs