

POSITION PAPER ON THE PROPOSED BAN OF CARBON DIOXIDE FOR RODENT EUTHANASIA

FELASA-ESLAV-ECLAM

The use of carbon dioxide for rodent euthanasia is currently a matter of intense debate, with an announced intention to discourage it, or even to prohibit it.

A systematic review of publications related to the use of carbon dioxide for euthanasia in mice and rats is being conducted by an IACLAM (International Association of Colleges of Laboratory Animal Medicine) task force {1}. Preliminary results reveal that there is very little scientific evidence supporting its prohibition so far and concluded in recommending additional research.

The AVMA (American Veterinary Medical Association) is working on revising its guidelines {2} for the euthanasia of animals at the moment. The revision will include updated guidance for carbon dioxide euthanasia in rodents {3}.

These initiatives will contribute to provide adequate guidance related to comprehensive “best practices”.

Other methodologies based on alternative gases and/or on physical methods, do not yet appear to be better alternatives, as they present serious drawbacks related to animal welfare and/or occupational safety and/or practicalities or use and/or research or study-related limitations.

For the time being, these considerations lead FELASA – ESLAV – ECLAM to express the following recommendations:

- No ban or interdiction should be laid down until sound scientific arguments are available about the use of carbon dioxide and relevant alternatives.
- Updated euthanasia guidelines provided by AVMA for the use of carbon dioxide shall be taken into consideration for best practice.
- Research initiatives in the field of laboratory animal euthanasia should be actively supported.
- Euthanasia shall be carried out exclusively by trained personnel, using an appropriate technique and equipment.

References

{1} The use of carbon dioxide as a method for euthanasia of laboratory mice and rats– a systematic review. Turner PV, Sargeant J, Hickman D, Kurosawa T.M., Mercer B, Ritskes M, van Luijk J. Systematic review protocol published online 4 May 2017, https://issuu.com/radboudumc/docs/the_use_of_carbon_dioxide_as_a_meth.

{2} AVMA Guidelines for the Euthanasia of Animals: 2013 Edition.

{3} <https://www.avma.org/News/JAVMANews/Pages/190101c.aspx> AVMA may change guidance for CO2 euthanasia in rodents. AVMA News, January 2019.