

AVMA Guidelines for the Euthanasia of Animals Report: Carbon Dioxide Inhalation

From: [AVMA Guidelines for the Euthanasia of Animals](#):

"Carbon dioxide is acceptable with conditions for euthanasia in those species where aversion or distress can be minimized. Carbon dioxide exposure using a gradual fill method is less likely to cause pain due to nociceptor activation by carbonic acid prior to onset of unconsciousness; a displacement rate from 30% to 70% of the chamber volume/min is recommended. Whenever gradual displacement methods are used, CO₂ should be maintained for at least 1 minute after respiratory arrest.¹⁵³ If animals need to be combined, they should be of the same species and, if needed, restrained so that they will not hurt themselves or others. Immature animals must be exposed to high concentrations of CO₂ for an extended period of time to ensure death. Oxygen administered together with CO₂ appears to provide little advantage and is not recommended for euthanasia." (p 24)