



Methods of euthanasia for exotic species in animal shelters in Canada

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Introduction

When people think about animals entering a shelter environment they normally think about dogs and cats, however many exotic species are also encountered

The purpose of this study was to:

- Establish what methods of euthanasia are used for exotic species in Canadian animal shelters.
- Identify whether these are likely to be associated with any animal welfare concerns.

Criteria for a euthanasia method¹:

- Restraint of the animal should cause minimal distress.
- The method should induce immediate and permanent insensibility with minimum distress to the animal.
- Be aesthetically acceptable to the public and to the person administering the procedure.
- Be easily administered by non-veterinary personnel without extensive training.
- Have minimal risks to the person administering the procedure.

A prominent issue affecting the choice of euthanasia method is the availability of controlled drugs to non-veterinarians

Materials and methods

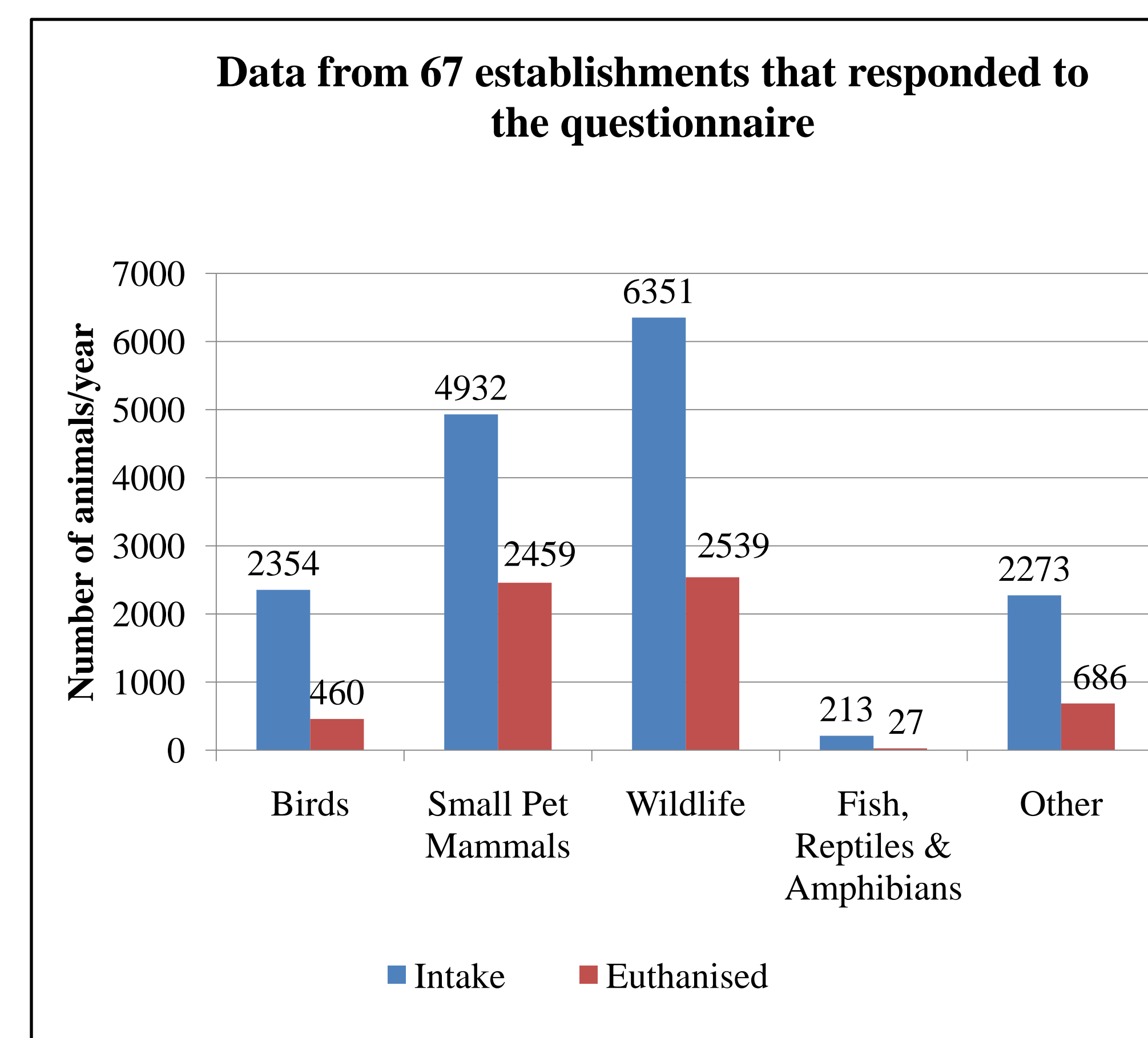
A questionnaire was developed and distributed to 196 organizations following discussions with the CVMA, the Canadian Federation of Humane Societies (CFHS) and a number of veterinarians. Questions included:

- Numbers taken in per year
- Number euthanized per year
- Methods of euthanasia
- Methods of administration of drugs
- The euthanasia environment

Information was collected on birds, small pet mammals, wildlife, fish, reptiles, amphibians and an 'other' category.

Results

What numbers of different types of animal are taken into shelters and subsequently euthanized?



What methods are used for euthanasia of exotic species in the shelter environment?

Method used for euthanasia	Birds		Small Pet Mammals		Wildlife		Fish, Reptiles & Amphibians	
	No.	%	No.	%	No.	%	No.	%
Sodium Pentobarbital	5	19	9	33	4	18	7	58
T-61	15	57	13	48	10	46	2	17
Carbon Dioxide (CO ₂)	1	4	1	4	1	4.5	0	0
Carbon Monoxide (CO)	1	4	2	7.5	1	4.5	0	0
Other methods	4	16	2	7.5	6	27	3	25
Total	26	100	27	100	22	100	12	100

Other Methods

- Isoflurane was used by three establishments for euthanasia of birds, wildlife, fish, reptiles and amphibians.
- Gunshot was used for euthanasia of wildlife in two establishments.
- Cervical dislocation was used by one establishment for euthanasia of birds.

Sodium Pentobarbital

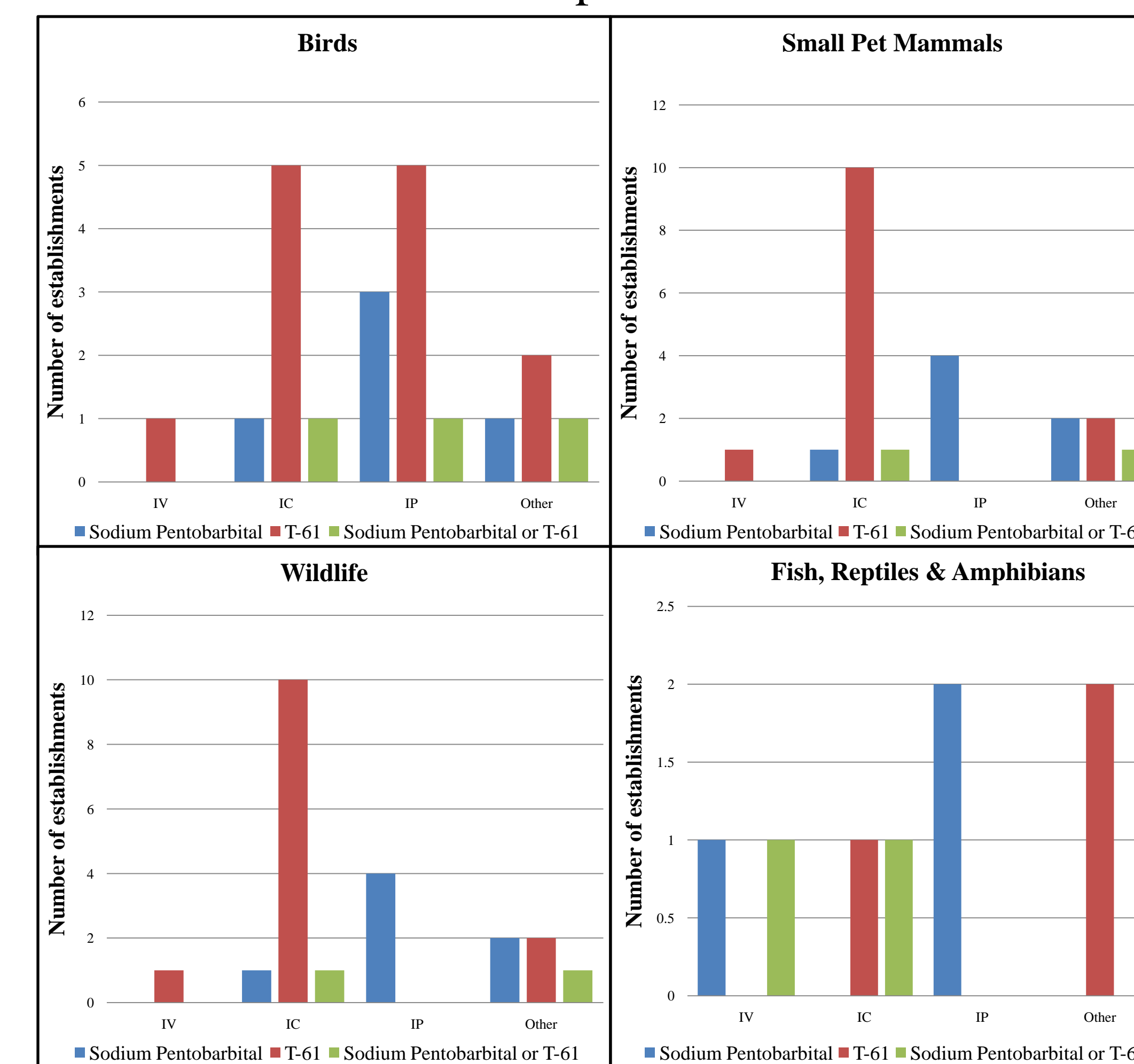
- The use of sodium pentobarbital for euthanasia of exotic animals was considered to be acceptable by the respondents to the questionnaire.
- The need for access to controlled drugs was an issue raised by respondents.

T-61

- T-61 is a common method of euthanasia used for all exotic species. All establishments using T-61 used a pre-medication prior to its use.

What routes of administration are used for injectable euthanasia drugs

IV: Intra-venous IP: Intra-peritoneal IC: Intra-cardiac



*Other category incorporated combinations of IV, IP, and IC with the method of administration depending on the person undertaking the euthanasia

Where was euthanasia carried out?

- In two-thirds of the establishments all or some of the euthanasia was undertaken on veterinary premises. The was considered 'best practice' by respondents.

Discussion

- Isoflurane was considered an acceptable method by staff when used for birds, reptiles and amphibians.
- Intravenous injection is the only acceptable method of administration for T-61 due to questions over the drugs onset of action when administered by other routes. This recommendation by the AVMA is recognised by the CVMA in its policy on euthanasia.
- The manufacturer of T-61 recommends a slow steady rate of intravenous administration when used in dogs. This method of administration is thought to reduce the likelihood of the animal experiencing respiratory paralysis before it becomes unconscious.

Conclusions

Many establishments do not use T-61 according to the manufacturer's recommendations.

The use of veterinary services for euthanasia was considered as best practice.

References

¹Blackmore DK. Euthanasia - not always eu. Aust Vet J. 1993;70:409-413.

Acknowledgements

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