New Zealanders' Attitudes to Animal Research in 2023

Research Report for ANZCCART

20 September 2023

Contents

Acknowledgements

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A steering team managed the project and worked closely with NielsenIQ throughout. Marc Rands of the Royal Society led the project supported by Kate Littin (MPI/Associate Member representative), Ngaio Beausoleil (Massey University), Mike King (University of Otago) and Arnja Dale (SPCA NZ).

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1. Introduction

Background

Ethical concerns about use of animals in research, teaching, and testing (RTT) remain at the forefront of both academic and public discussion in New Zealand. The country's regulatory framework, provided in Part 6 of the Animal Welfare Act 1999, establishes clear legal norms for animal use in these contexts. Following an open discussion at the 2003 ANZCCART (Australian and New Zealand Council for the Care of Animals in Research and Teaching) conference in Christchurch, which addressed balancing of the public's demand for transparency with the scientific community's need for a secure environment, a study was conducted in 2005 to gauge New Zealanders' views on animal use in RTT, and their understanding of the regulatory framework[1].

This investigation offered a crucial insight into the public's stance at that time. It revealed that a majority were neither interested nor concerned about the use of animals in RTT, and accepted this use under the conditions that there was no unnecessary pain or suffering, or that the research is for medical purposes[1].

In twelve years, both the scientific and legal landscape have changed, and societal perspectives may have changed along with them. Given this, the New Zealand Board of ANZCCART commissioned a new study, co-funded by MPI (Ministry for Primary Industries), to determine the current attitudes of New Zealanders towards animal research. This study revisits questions about public awareness, acceptability, and general attitudes and introduces a comparison with views from similar studies in Australia.

There are at least two reasons for this current study. First, these surveys are a robust method for understanding shifting societal values and ethical perspectives on a topic that holds significant implications for both human and animal communities. Second, comparing New Zealand and Australian views, we can generate a broader regional understanding and promote informed discussion across the trans-Tasman area on ethical animal use in RTT. These are both important conditions for informed scientific, ethical, legal and political debate and for progress to be made in those domains for the benefit of all stakeholders, in particular the animals, who cannot represent themselves.

As we present the findings of this 2023 survey, it is important to recognise the path established by ANZCCART and its members that brought us to this point, emphasising ongoing efforts towards greater transparency and the continuous challenge of aligning scientific advancement with ethics.

Study objectives

The objective of the study was to provide a benchmark of New Zealanders' attitudes toward animal research, with focus on:

- Public awareness of and interest in animal research
- Acceptability of animal research
- General attitudes towards animal research.

The intention was to compare the views of New Zealanders with those of Australians.

[1] Williams, V. M., I. T. Dacre, and M. Elliott. 2007. "Public Attitudes in New Zealand towards the Use of Animals for Research, Testing and Teaching Purposes." New Zealand Veterinary Journal 55 (2): 61–68. https://doi.org/10.1080/00480169.2007.36743

2. Methodology and the report

Method

We conducted an online survey to provide an understanding of current public attitudes toward the use of animals in scientific research, testing and teaching, and awareness of the work of ANZCCART.

Respondents were recruited online from two external partner panels (Dynata and Toluna), which are professionally managed and validated. We sent email invitations to panellists inviting them to complete the survey, including an individual link in the invitation.

Fieldwork dates

The survey was piloted with online panellists beginning on May 15, 2023. Recruitment and data collection proper began on May 29 following notification of the low risk nature of the project (see below) and ended on June 24, 2023. Following notification, one set of panellists involved in the pilot phase were provided with the participant information sheet (Appendix 3) and asked whether their data could be included in the main dataset. This was feasible as none of the questions were changed following piloting; 20 participants agreed and their data were included in the final dataset for analysis.

The questionnaire

ANZCCART had approval to use the Australian questionnaire. We conducted a questionnaire workshop with the ANZCCART sponsor team to review and update the questionnaire, ensuring it was appropriate for New Zealand respondents. The survey was programmed for online completion on the Decipher survey platform, with an initial soft launch to check programming elements such as skip logic and prompts and questionnaire look and feel.

The survey took an average of 15 minutes to complete.

Ethics requirement

The potential ethical risks of the project to participants, organisations and the researchers were evaluated by peer review and the risks were judged to be low. Thus, the project was registered as low risk with Massey University (Notification number: 4000027548). Consequently, it was not reviewed by one of the University's Human Ethics Committees. Participants were provided with an information sheet at the beginning of the online questionnaire (Appendix 3), and informed consent to take part in the survey and for the use of the information provided was indicated by clicking "Continue" to the next screen.

Sample

The minimum age for participation in the survey was 18 years. A total of 1,317 New Zealand citizens and permanent residents completed the survey.

Booster sampling was used to achieve minimum sub-samples of 300 Māori and 200 Pasifika. In total, n= 431 Māori and n= 227 Pasifika were surveyed.

Further details about the sample are included in Appendix 1.

Data analysis

Analysis: All survey questions were analysed by key demographic variables, such as age, gender, ethnicity, pet ownership, involvement in animal research and/or animal protection agencies, and by attitudes toward the use of animals in research. Data tables included analysis of statistically significant differences.

Coding of open ended data: Questions 10 to 14 asked which of a series of animal species/types are considered acceptable to use in each of five research settings. Those who thought that it was not acceptable to use any of the nominated species/types for that research setting were to be asked their reasons. This would mean that some respondents would answer this question five times. To keep questionnaire length

manageable, and avoid respondent burden, respondents were asked this question a maximum of three times. The survey was programmed using the 'least fill basis' to randomise which scenarios respondents were asked about and to ensure robust sample sizes for each of the five settings.

Data weighting: The survey data were weighted for the population aged 18 years and over (using 2018 Census data) to ensure final results were representative of the New Zealand population by gender, age, region and ethnicity. Rim weighting was used, with the first rim being age/gender/region interlocked. A second weight for ethnicity was also applied to counteract any effects the boosting of Māori and Pasifika respondents may have had on the sample.

Methodology limitations

A quantitative method (survey) was used to understand attitudes towards animal research. Quantitative methods have limitations, however, in that they do not provide an in-depth understanding of context or the reasons underlying responses. In future, diagnostic qualitative research could be used to to understand specific views or attitudes in greater detail.

Use of **online panels** as the source for the sample population was considered the most efficient and timely way to conduct this survey. Using commercial online panels as the sample source has some limitations, as people have to be a panel member to participate in surveys. These limitations include:

- The exclusion of those without internet access.
- The potential exclusion of some hard-to-reach subgroups (who may well include people from more rural areas and/or lower socio-economic groups).
- Potential under-representation of those who are generally less likely to respond online (elderly respondents and those with low computer literacy).
- Those who opt into online research panels may have different attitudes and behaviours than those who do not join such panels.

Notes to report

Ethnicity and related definitions

Ethnicity was classified using the 'total ethnicity' approach, whereby respondents could choose more than one ethnicity with which they identified. There was no prioritisation for those who indicated multiple ethnicities. This means for example, that a respondent who self-identified as being of 'Māori' and 'Samoan' ethnicity is included in data tables as 'Māori' and as 'Pasifika'.

- 'Asian' includes respondents who self-identified as Chinese, Indian, and 'other Asian'.
- 'Māori' respondents: Respondents who self-identified as Māori. (Cook Island Māori were included in the subgroup of 'Māori' ethnicity, if the respondent self-identified as Māori as well as Cook Island Māori).
- 'Pasifika' respondents: Respondents who self-identified as Cook Island Māori, Fijian, Samoan, Niuean, Tongan, or 'Other Pacific people'
- 'New Zealand European' respondents: Respondents who self-identified as New Zealand European.

Analysis

Margin of error: All sample surveys are subject to sampling error, which is the measure of uncertainty arising from survey estimates because only a sample of the population is observed. The maximum sampling error for the total sample of n=1,317 is plus or minus 2.7%. That is, there is a 95% chance that the true population value of a result of 50% lies between 47.4% and 52.6%. The margin of error increases, as the observed result moves further away from 50%.

Margins of error for key subgroup sample sizes are shown below.

Table 1: Margins of error for key subgroups:

Sample size	Sample size (un-weighted)	Margin of error	Sample size (weighted)	Percentage of total sample (weighted)
Total sample	**1,317**	**+/- 2.7%**		
Of Māori ethnicity *(Māori)*	431	+/- 4.7%	182	14%
Of Pasifika ethnicity *(Pasifika)*	227	+/- 6.5%	87	7%
Male	495	+/-4.4%	642	49%
Female	640	+/-3.9%	675	51%
Have pets	799	+/-3.1%	801	61%
Have no pets	336	+/-2.6%	350	27%
Involved with research, testing and/or teaching using animals	164	+/-7.7%	152	12%
Not involved with research, testing and/or teaching using animals	934	+/-3.2%	970	74%
Support or work for animal protection organisation	191	+/-7.1%	182	14%
Not involved in supporting or working for animal protection organisation	886	+/-3.3%	912	69%

Significance testing: Significance testing was undertaking using t-tests, that estimate the true difference between two groups using the ratio of the difference in the groups. Overlapping t-testing was used, in which a subgroup is compared against the total that includes this subgroup. The overlapping t-test incorporates a correction to take into account any correlations between the overlapping data.

Reporting of subgroup differences: All subgroup differences reported are statistically significant at the 95% confidence interval unless otherwise stated. This means that the difference is a true difference statistically, and not due to random variation.

All differences commented on between subgroups are statistically significant. Only subgroups with differences of at least three percentage points above or below the total sample results are included. Subgroup differences are presented on the basis of relevance to the question, rather than being exhaustive lists.

Sample composition: Note, the composition of the sample can impact the sensitivity of the significance testing results. That is, the larger the sub-sample size (e.g., of a particular ethnicity), the greater the chance of detecting statistically significant results compared with other sub groups of respondents.

'Don't know' responses have been included where relevant (that is, when they are valid responses and add value to the findings). Please refer to the base descriptions on each page for more information.

Rounding: In some cases, NET percentages may not add up exactly to the individual response categories and may differ by one percentage point, due to rounding. For example for Q4: Attitude toward the issue of animal use in research, the combined total of care '*very much'* and '*moderately*'' is 67%. However, the individual response categories '*very much*' (37%) and '*moderately*' (31%) add to 68%.

Verbatim comments: Verbatim comments were sourced from responses to the open- ended survey questions.

Abbreviations and acronyms

The following abbreviations are used in this report.

- ANZCCART: the Australian & **New Zealand** Council for the Care of Animals in Research and Teaching located in both **New Zealand** and Australia.
- 'ANZCCART Openness Agreement' refers to the *ANZCCART Openness Agreement on Animal Research and Teaching in New Zealand*
- HUHA: Helping You Help Animals
- MPI: Ministry for Primary Industries
- SAFE: Save Animals From Exploitation
- SPCA: New Zealand Society for the Prevention of Cruelty to Animals
- Questions asked respondents about their views on various aspects of the use of animals in '*scientific research, testing and teaching*'. For ease, these are referred to as 'research'.
- Section 6 asks about the acceptability of the use of animals in research for twenty-one species/types of animal. For ease, these are referred to as 'species'.
- Cf. is an abbreviation used for 'compared with'.
- 'Involved with animal research' is used to refer to those involved with research, testing and or teaching using animals.
- 'Involved with animal protection' is used to refer to those who support or work for an animal protection organisation such as NZAVS, SAFE or HUHA.

References

Reference in the report is made to studies conducted in other countries. These include:

- **Australia:** The University of Adelaide: Research Survey on Australian Attitudes to Animal Research, July 2022
- **United Kingdom:** Ipsos Mori: Public Attitudes to animal research (October 2018).

3. Key takeouts

Attitudes toward and knowledge of the use of animals in research

While two in three of those surveyed (67%) said they care about the issue of animal use in research, respondents did not feel well informed, either about how animals are used, or the process required to gain approval to use animals in research. Sixteen percent felt well informed about how animals are used, while 13% felt well informed about the process.

- Those more likely to care about the issue than the total sample included respondents involved with animal protection organisations, pet owners, women, and those in two age groups: 25- to 34-year-olds and 55- to 64-year-olds.
- Not surprisingly, subgroups who felt most well-informed about the process required to gain approval for animal use included those involved with animal research and/or animal protection, and those who work with animals.

Views about the practice of using animals in scientific research

Just under half of those surveyed (48%) agreed that the use of animals for medical research purposes is important to human health.

Fewer than half (40%) thought that scientific research using animals is only undertaken when there is no alternative. Nearly a quarter (23%) disagreed that research using animals is only undertaken when there is no alternative.

Just over half the respondents (53%) agreed that researchers are working to find alternatives to using animals in scientific research (with a low level of disagreement).

There were higher levels of ‘don’t know’ response for knowledge-based questions than for belief-based statements, with nearly one in five unsure whether or not scientific research using animals is always carried out to high standards, or whether researchers are working to find alternatives to using animals.

There was widespread agreement (70%) that researchers could do more to reduce the suffering of animals used in research.

Acceptability of animal use for different purposes

Knowledge of **the types of research for which animal use is allowed** in New Zealand (assuming appropriate approvals are in place) was mixed, with the proportion of those able to say whether a specific use is allowed or not, ranging from 50% to 64%. The level of ‘don’t know’ response ranged from 36% not knowing if observational studies are allowed, to 53% not knowing if safety testing of non-medical products such as chemicals used in industry or farming is allowed.

- At least half of the sample thought the following types of research are allowed: observational studies (53%), biological research to advance our understanding of animal health and welfare (52%), and work to develop new treatments / procedures for specific diseases (50%).
- Fewer than half thought that animals are allowed to be used in research to develop new methods of medical diagnosis (46%) or in biological research to advance our understanding of the human body (43%).
- Fewer than three in ten thought that animals can be used in product testing areas: safety testing of non-medical products such as chemicals used in industry or farming (28%), or non-medical products for household use (24%). Twenty seven percent thought that animals can be used to test cosmetics and cosmetic ingredients, while 33% thought this was not allowed. (Note; this is the only use of the eight assessed that is actually banned.)

The **use of animals in research** is conditional on the purpose of the activity (as surveys in Australia and the UK have shown).

- Uses aimed at improving animal health, species conservation, basic biological research, environmental management, developing alternatives to live animal use, and animal husbandry were considered more acceptable than other areas, with at least six in ten respondents considering these acceptable. Using animals for veterinary research was most accepted, with 69% considering it acceptable and 8% considering it unacceptable.
- Developing alternatives to live animal use (the use related to one of the foundational 3Rs - Replacement, Reduction, and Refinement) ranked fifth equal in terms of perceived acceptability (62% thinking it acceptable and 16% unacceptable).
- Three uses were considered acceptable by fewer than four in ten respondents, with the unacceptable percentage matching, or exceeding the proportion considering it acceptable. Thirty five percent considered using animals to produce biological agents acceptable (32% unacceptable), while 34% considered using animals in testing (e.g., for public health or products) acceptable, and 33% considered this unacceptable. Using animals to produce offspring with compromised welfare was the least acceptable use: only 17% thought it acceptable while 56% considered it unacceptable to use animals for this purpose.

There was little support for using animals to **test chemicals that could cause harm**. Around six in ten respondents considered it is unacceptable to use animals to test chemicals that could cause harm to people, animals and/or plants and the environment, a level of unacceptability on par with the perceived acceptability of using animals to produce offspring with compromised welfare. Just under one in five (19%) considered it is acceptable to use animals to test chemicals that could cause harm to each of the three.

Support for research using different animal species/types

Respondents were asked about the acceptability of the use of twenty-one animal species/types for each of five areas (medical research to benefit people, research into animal health, environmental research, teaching and safety testing of non-medical products).

- Support for using any of the twenty-one species/types was greatest for research into animal health and teaching, with 77% and 76% respectively considering the use of at least one animal type acceptable in these settings.
- Support was lowest for using any of the nominated species/types for safety testing of non-medical products, with 59% considering the use of at least one acceptable, and 41% considering that no animals should be used for this.

Patterns of response about the **most** and **least** acceptable animal species/types were similar across the five areas.

- The same five species, all of which are commonly regarded as pest species, ranked in the **top five most acceptable species/types**. Rats and mice were the two species thought to be most acceptable (with over half the sample thinking their use acceptable across four of the uses, and 42% considering their use acceptable for safety testing of non-medical products.). The higher level of acceptability of rodent use in research is likely to reflect people's familiarity with their extensive use in medical research as well as their pest status.
- Possums, stoats or ferrets, and rabbits (all considered pest species) also featured in the top five most acceptable species/types. Note however, that the level of acceptability of their use was not high, with fewer than half considering their use acceptable, other than for research into animal health.
- Seven marine, companion and livestock mammal species/types were consistently considered **least acceptable** across the different areas. The use of marine mammals was considered the least acceptable species across four of the five types (second least acceptable for environmental research). Dogs, horses, cats, deer, cattle and sheep also featured in the top seven least acceptable species.

Several themes emerged, when respondents who considered the use of any animals unacceptable for a particular purpose were asked the reasons for this.

- A belief that using animals in a way that might harm them is cruel and/or inhumane.
- A perception that the use of animals is unethical or morally wrong – mentioned particularly in association with safety testing of non-medical products.
- The view that animals have rights and they cannot give informed consent, or defend themselves.
- A love of animals and a belief that animals have feelings, a soul, and/or personality.
- A perception that there are alternatives to the use of animals, particularly for research areas such as teaching and environmental research.
- A perception that the use of some animal species could be acceptable if the research/activity is critical to saving human lives and there are no alternatives (for medical research to benefit people, for example), or if for observation purposes only (in teaching, for example), if the animal has died of natural causes and/or died in a humane way, or if pest species are used (for example for environmental research).

Views of the regulatory system and how well the regulations are applied

There was strong support for institutions involved in animal research being more open about their use of animals in research, testing and teaching (with 76% agreeing on the need for this and only 4% disagreeing), and respondents would also like to see greater public involvement in the process (with 54% agreeing about the need for this).

Decision making processes around the approval of animal use were considered unclear (while 38% agreed they are clear, 27% disagreed).

Feedback about the **adequacy of approvals** lying with Animal Ethics Committees (AEC) vs. greater government involvement was mixed: 48% agreed that approval of animal use in research, testing and teaching by an AEC rather than directly by government, is satisfactory, while 44% agreed that the government should have more direct involvement in approval.

Respondents did not have a good understanding of **how well the rules and regulations for using animals in research, testing and teaching in New Zealand are applied**, with a relatively high level of ‘don’t know responses’ for knowledge-based dimensions.

- For example, 22% did not know whether New Zealand has strict rules in place on the use of animals in research, testing and teaching, 28% did not know whether the use of animals in research, testing and teaching sometimes takes place without an official approval, and 31% did not know whether the rules and regulations are well enforced. Only one in five (22%) considered information about approval processes is easy to find.

The general lack of knowledge correlated with **levels of trust in the regulations**, with fewer than half of respondents having positive trust.

- Just under half (45%) agreed that New Zealand has strict rules on the use of animals in research, testing and teaching – 7% disagreed. Nearly half of respondents (49%) agreed that they trust regulators to uncover misconduct at animal research facilities and 46% agreed that they trust those using animals not to cause them unnecessary suffering.
- A lack of trust in the regulatory system around the use of animals in research outweighed trust: 35% agreed that they do not trust the regulatory system, while 22% disagreed. Over a third (38%) agreed that the use of animals in research, testing and teaching sometimes takes place without an official approval, while only 13% disagreed.

Views of organisations that undertake research using animals in New Zealand

Not surprisingly, perceptions of organisations that undertake research using animals in New Zealand were muted, with one in four saying they did not know which of the associations applied to such organisations.

- The most prevalent association was that such organisations carry out work that is essential for human health (34% mention).
- There was a perception that such organisations are well regulated (27% mention) although as already noted, respondents did not feel well informed about this.
- While 21% associated such organisations with providing good mechanisms for oversight of animal research, 24% thought that such organisations may have conflicts of interest, since animal research may be an aspect of their business.
- Positive perceptions of animal welfare standards outweighed negative perceptions (26% saying these organisations adhere to good animal welfare standards, compared with 14% saying they have poor animal welfare standards).
- In terms of communication about their work, the most prevalent view (held by 27%) was that such organisations are secretive, while fewer (16%) thought they are open about their work. A minority (11%) thought they are dishonest about the results of their work.

Those aware of the ANZCCART Openness Agreement and those involved in animal research generally held more positive views of organisations that use animals for research in New Zealand than other respondents. Note however, that those involved in animal research were also more likely than others to note dishonesty and poor welfare standards. Business people, men and/or older people also held more positive views.

Respondents involved with animal protection organisations held more negative views than others.

Awareness of and familiarity with the ANZCCART Openness Agreement

One in ten respondents (9%) said they were aware of the ANZCCART Openness Agreement, with above average awareness among those involved with animals, whether as researchers, during their work, or through their involvement with animal protection organisations.

Familiarity with the Openness Agreement among those aware of it was mixed: while 37% felt *very* or *moderately* familiar with it, just under a third (32% felt only *slightly* or *not at all* familiar with it.

The ANZCCART NZ website and scientific / medical journals were the two main sources of awareness of the ANZCCART Openness Agreement, with lesser mention of television and social media.

Trusted information sources and interest in finding out more

Awareness of media content about the use of animals

Awareness of any media content about the use of animals in research was low, with 11% of respondents having seen or heard anything in the last twelve months. Social media (47%) was the main channel recalled among those with any recall, followed by television (35%), websites (31%) and online sources (27%).

Trusted sources of balanced information

Three sources stood out as being trusted sources of balanced information about the use of animals in scientific research, testing and teaching in New Zealand. Animal welfare organisations such as the SPCA, SAFE and HUHA, were considered the most trusted, with 50% mention, with veterinarians who look after the animals used in research (42%) and people with knowledge of the subject (36%) ranking second and third.

Government agencies, research institutes, environmental organisations, medical research charities and universities were less trusted, each being mentioned by between 26% and 28% of respondents.

Interest in finding out more about ongoing work

There was reasonable interest in finding out more about ongoing work, with 45% of respondents interested in finding out more about alternatives to using animals in research, testing and teaching, and 42% interested in finding out about ongoing work to improve the welfare of animals used in research. At least one in five expressed strong interest in each of these.

Conclusions

This research highlights that animal use in scientific research in New Zealand is an issue that New Zealanders care about. However, unless they are involved with research, testing and/or teaching using animals (and/or with animal protection organisations) or they work with animals, they are not well informed about research areas for which animal use is allowed, the regulations governing animal use, or the application of those regulations.

New Zealanders have clear views on the types of research that are acceptable and unacceptable (particularly safety testing, producing offspring with compromised welfare and testing potentially harmful chemicals).

Views about which animal species and types are acceptable to use, and those which are not acceptable to use are consistent across uses, with species already used in medical research in New Zealand (such as rodents) and/or those commonly considered to be pests in New Zealand being most acceptable. All five of the most acceptable species are mammals. Marine, companion and livestock mammals are considered least acceptable, as in other countries.

The view that organisations involved in animal research should be more open about their work is widespread and strongly held. This research confirms that a significant proportion of New Zealanders are open to hearing more about the use of animals in research, the approval processes and about ongoing work to improve animal welfare standards.

Currently New Zealanders see or hear about animal use in research on social media and via online sources but very few reported having seen/heard about this in recent months.

Animal welfare organisations are currently considered the most trusted source of balanced information about animal use in research. Working with these organisations and ensuring accessibility to relevant information on the ANZCCART official website, is important to help increase awareness about why animal use in scientific research, testing and teaching matters and how such use is regulated in New Zealand.

4. Knowledge of and attitudes toward the use of animals in scientific research

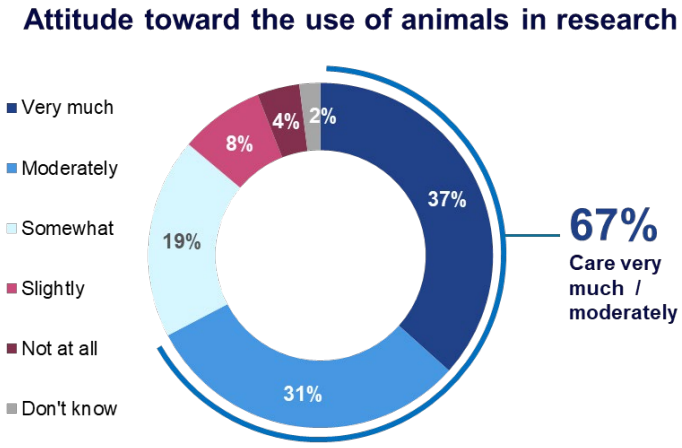
Key findings

Two in three of those surveyed said that they care about the use of animals in research. However, they did not feel well informed, either about how animals are used in research, or the approval process required to use animals in research in New Zealand.

Attitudes toward using animals in scientific research, testing and teaching

Two in three respondents (67%) said they care *very much* or *moderately* about the use of animals in scientific research, testing and teaching, with 37% saying they care *very much*. One in eight (12%) said they care only *slightly* or *not at all*.

Figure 1: Care about the issue of the use of animals in scientific research, testing and teaching



Base: All respondents (n=1,317)
Q4. Firstly, thinking about your attitude toward the use of animals in scientific research, testing and teaching. How much do you care about this issue?

Subgroup differences

Those more likely to care *very much* or *moderately* about **the issue of animal use in research** (67%) were:

- *Moderately* or *well* informed about the use of animals in research (87%) and/or the process required to gain approval for animal use in research (78%)
- Involved with animal protection organisations (83%)
- Those who have seen or heard something about the use of animals in research in the last twelve months (78%)
- Female (74% cf. 61% among males)
- Pet owners (74% cf. 55% among those who do not have any pets)
- Aged 25 to 34 or 55 to 64 years (73%).

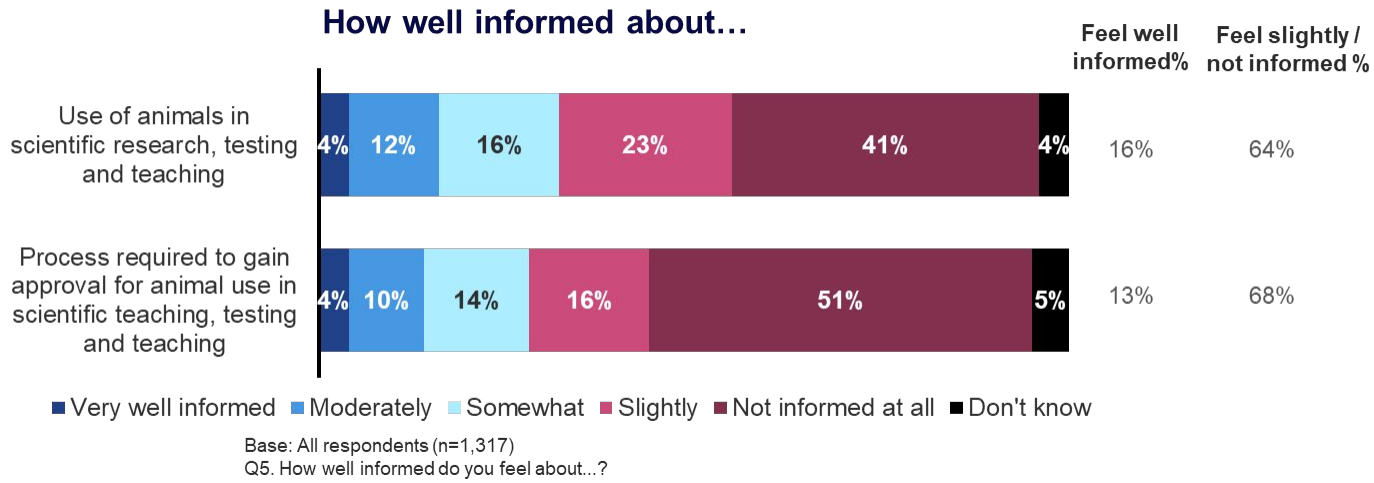
There were no significant differences by ethnicity, religion or diet.

How well-informed people are about animal use in research

While respondents generally cared about the use of animals in research, they did not feel well informed about the topic, with fewer than one in five feeling reasonably well informed. They felt slightly better informed about **the use of animals** than about **the process** required to gain approval for animal use.

- 16% said they are *very* or *moderately well informed* about the use of animals in scientific research, testing and teaching, while 64% were *slightly well informed* or *not informed at all.*
- 13% said they are *very* or *moderately well informed* about the process required to gain approval for animal use in scientific research, testing and teaching in New Zealand, while 68% were *slightly well informed* or *not informed at all.*

Figure 2: How well-informed New Zealanders are about animal use in research and the approval process



Base: All respondents (n=1,317)
Q5. How well informed do you feel about...?

Subgroup differences

Those more likely to feel *very* or *moderately well informed* about **the use of animals in research** (16%) were those who:

- Have heard about ANZCCART (58%)
- Worked with farm animals – farming (52%) or in veterinarian services (47%)
- Have seen or heard something about the use of animals in research in the last twelve months (50%)
- Were involved with animal research or animal protection organisations (both 47%)
- Practised the Hindu faith (34%) or another non-Christian based religion such as Buddhism or Islam (29%)
- Business people (34%)
- Were at least moderately interested in learning more about ongoing work to find alternatives to the use of animals (26%) and/or to improve the welfare of animals used in research (26%)
- Cared *very much* or *moderately* about the use of animals in research (21%)
- Aged under 35 (20%) or 35 to 44 years (19%)
- Were of Māori ethnicity (20%)
- Were male (19% cf. 13% among females).

Those who felt most well informed about **the process required to gain approval for animal use**, included those involved in animal research (47%), and those involved with animal protection organisations (39%). Those who worked with animals also felt better informed (53% of farmers and 40% of veterinarians feeling *very* or *moderately* well informed about the process required).

5. Views about animal use in research

Key findings

This section discusses views of the practice of scientific research that uses animals and the acceptability of using animals for various research purposes.

Views about the practice of research using animals

Just under half of those surveyed (48%) agreed that the use of animals for medical research purposes is important to human health, and fewer than half (40%) agreed that scientific research using animals is only undertaken when there is no alternative.

The majority of respondents (70%) agreed that researchers could do more to reduce the suffering of animals used in research.

There were significant gaps in people's knowledge of the use of animals in research, with nearly one in five unsure whether or not scientific research using animals is always carried out to high standards (19% don't know), or whether researchers are working to find alternatives to using animals (17% don't know).

Respondents had **mixed levels of knowledge of the types of research for which animal use is allowed** in New Zealand, with the proportion of those able to say whether a use is allowed or not ranging from 50% to 64%. Between a third and a half said they don't know if each of eight types of research are allowed. This ranged from 36% not knowing if observational studies are allowed, to 53% not knowing if safety testing of non-medical products such as chemicals used in industry or farming are allowed.

- At least half of the sample thought the following types of research are allowed: observational studies (53%), biological research to advance our understanding of animal health and welfare (52%), and work to develop new treatments / procedures for specific diseases (50%).
- Fewer than three in ten thought that animals can be used in product testing areas: safety testing of non-medical products such as chemicals used in industry or farming (28%), testing cosmetics or cosmetics ingredients (27%) or non-medical products for household use (24%),

The acceptability of **using animals for different activities was conditional on the purpose of the research** (as surveys in Australia and the United Kingdom have shown).

- Uses aimed at improving animal health, species conservation, basic biological research, environmental management, developing alternatives to live animal use, and animal husbandry were considered more acceptable than other areas, with around six in ten or more respondents considering these acceptable. Using animals for veterinary research was most accepted, with 69% considering it acceptable.
- Using animals to 'develop alternatives to live animal use' (the use related to the foundational 3Rs - Replacement, Reduction, and Refinement) ranked fifth equal in terms of perceived acceptability (62% acceptable), well behind veterinary research.
- Using animals in research for testing product safety or efficacy, producing biological agents and/or to produce offspring with compromised welfare were the least acceptable, with at least a third of respondents considering these unacceptable uses. Producing offspring with compromised welfare was the least acceptable activity (56% considering it unacceptable).

Testing chemicals that could cause harm to people, animals and/or plants and the environment is not generally considered acceptable. Around six in ten respondents thought using animals to test potentially harmful chemicals to be unacceptable, a level of unacceptability on par with the perceived acceptability of using animals to produce offspring with compromised welfare.

Just under one in five (19%) considered it is acceptable to use animals to test chemicals that could cause harm to people, to animals and/or to plants and the environment.

Views about the practice of scientific research using animals

Respondents rated their level of agreement or disagreement with five statements about the practice of scientific research involving animals.

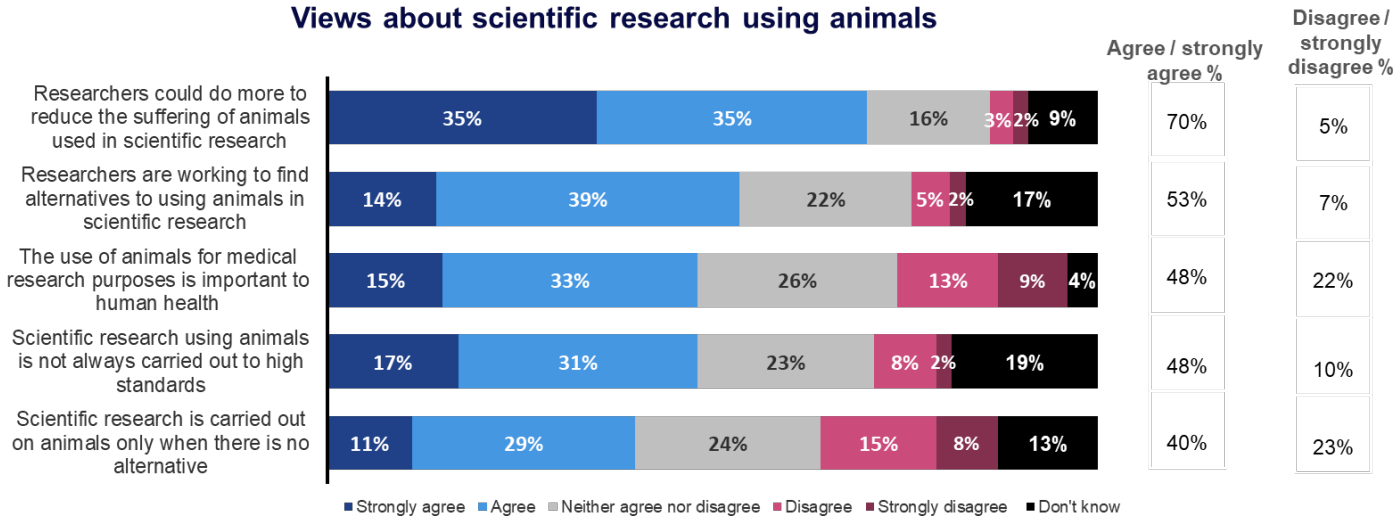
The level of 'don't know' responses was relatively high, ranging between 13% and 19% for three statements that were knowledge rather than belief based. These included whether or not **researchers are working to find alternatives to the use of animals,** or whether **scientific research is always carried out to high standards, or whether scientific research is carried out on animals when there is no alternative.**

There was widespread agreement that **researchers could do more to reduce the suffering of animals used in scientific research**, (with 70% agreeing and only 5% disagreeing).

Agreement with the other statements was lower. While just over half the respondents (53%) agreed that **researchers are working to find alternatives to using animals in scientific research** (with 7% disagreement), fewer than half (40%) agreed that **scientific research is carried out on animals only when there is no alternative** (with nearly a quarter (23%) disagreeing).

Just under half agreed that **the use of animals for medical research purposes is important to human health** (48% agreement and 22% disagreement).

Figure 3: Views about the practice of scientific research using animals



Base: All respondents (n=1,317)
Q8. How strongly do you agree or disagree with the following statements about the use of animals in scientific research?

Subgroup differences
There were significant differences in viewpoint across the statements, by gender, involvement in animal research and/or animal protection organisations, age, ethnicity and pet ownership.

Generally, men, older people and those of Asian ethnicities were more accepting of the use of animals in research than others; those involved in animal research were also more accepting of the importance of using animals in research.

See Appendix 2 for detailed subgroup analysis.

Types of research allowed in New Zealand

Context
RTT activities involving animals in New Zealand can only be carried out under the requirements of the Animal Welfare Act 1999. It must be approved by an animal ethics committee (AEC), which also monitors the use and ensures it is reported annually or at the end of every project. AECs must include at least three independent members: one a veterinarian nominated by the New Zealand Veterinary Association, one a nominee of the New Zealand Society for the Prevention of Cruelty to Animals (SPCA) and one from a local territorial authority.

The AEC has to decide whether the RTT is necessary, including weighing up the potential benefits against the costs to animal welfare. In addition, the AEC must be confident that researchers have fully addressed the Three Rs:

- Replacement of animals with non-sentient or less sentient alternatives;
- Reduction in animal numbers to the minimum required for statistical significance; and
- Refinement of procedures to ensure the minimum possible impact on animal welfare.

AECs themselves must operate under a code of ethical conduct, which is approved and audited by the government.

Types of research considered allowed
Respondents were asked which of eight types of research they thought researchers are currently allowed to use animals for in New Zealand (assuming appropriate approvals are in place).

As Figure 4 below highlights, New Zealanders did not really know what types are allowed, with the level of 'don't know' response ranging from 36% (for observational studies) to 53% (for safety testing of non-medical products such as chemicals used in industry or farming).

Around half of the respondents believed that the following types of studies are allowed in New Zealand.

- **Observational studies** (for example, monitoring species populations and effects on the environment (53% allowed and 11% not allowed)
- **Biological research** to advance our understanding of animal health and welfare (52% allowed and 10% not allowed)
- **Trying to develop new treatments** / procedures for specific diseases (50% allowed and 10% not allowed).
- **Developing new methods of medical diagnosis** (46% allowed and 9% not allowed).

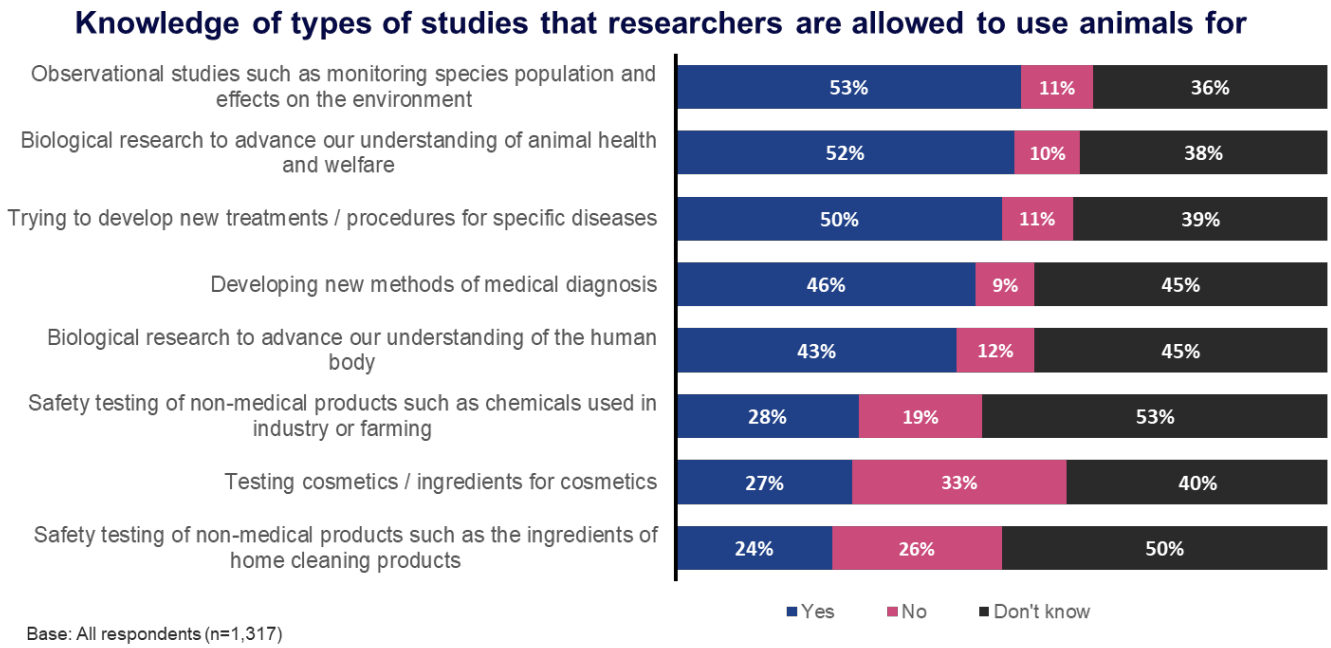
Around four in ten thought that the following types are allowed:

- **Biological research to advance our understanding of the human body** (43% allowed and 12% not allowed).

Fewer than three in ten thought that animals can be used in product testing areas:

- **Safety testing of non-medical products** such as chemicals used in industry or farming (28% allowed and 19% not allowed)
- **Testing cosmetics or cosmetics ingredients** (27% allowed and 33% not allowed). The 'not allowed' percentage outweighed the 'allowed' percentage. ***Note that this is the only use that is banned in New Zealand.***
- **Safety testing of non-medical products** such as home cleaning product ingredients (24% allowed and 26% not allowed).

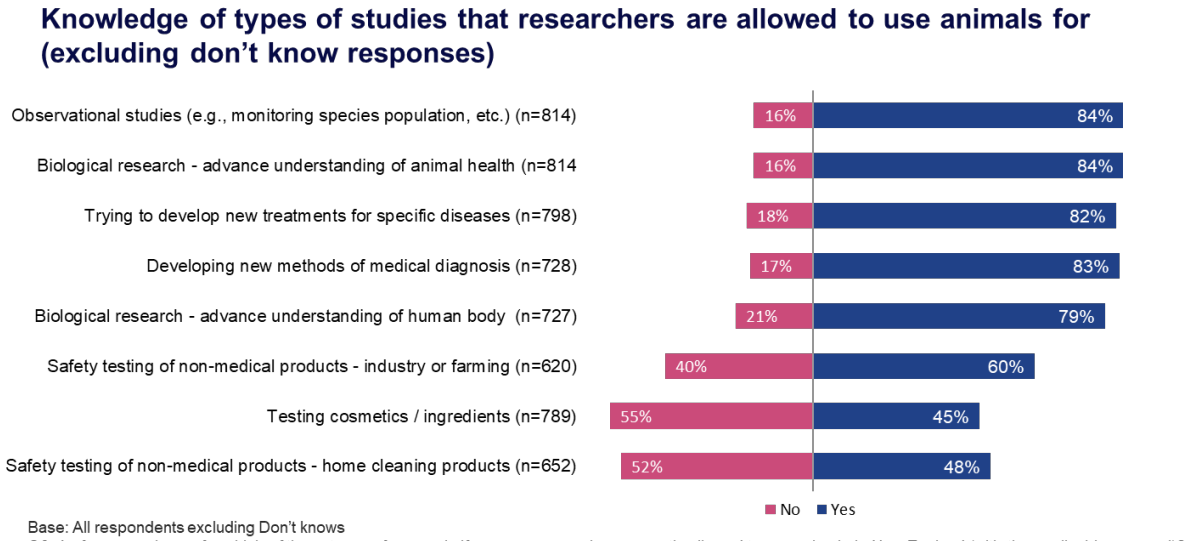
Figure 4: Knowledge of types of scientific studies animals can be used for in New Zealand



Base: All respondents (n=1,317)
Q9. As far as you know, for which of these types of research, if any, are researchers currently allowed to use animals in New Zealand (with the applicable approval)?

Once 'don't know' responses are removed, the balance of 'allowed' to 'not allowed' is clearer, as shown in Figure 5 below.

Figure 5: Knowledge of types of scientific studies animals can be used for in New Zealand (excluding Don't know responses)



Base: All respondents excluding Don't knows
Q9. As far as you know, for which of these types of research, if any, are researchers currently allowed to use animals in New Zealand (with the applicable approval)?

Subgroup differences
Subgroups who were consistently more likely than the total sample to think that each research type is allowed included those involved with animal research and/or protection organisations, those aware of the ANZCCART Openness Agreement, who were not pet owners, those who have seen or heard anything about animal research in the last twelve months, business people, those over 65, men, and those who were interested in finding out more about alternatives to animal use in research and/or improving animal welfare.

The acceptability of animal use for different purposes

Respondents were asked how acceptable they think the use of animals is for eleven different purposes. Their responses highlight that the use of animals is conditional on the purpose of the activity (as has been noted in the Australian study), with uses aimed at improving health, conservation and environmental management considered more acceptable than others.

Over half of respondents considered seven of the eleven uses to be acceptable, with around six in ten or more considering six types of animal use to be acceptable. These included the use of animals in:

- **Veterinary research:** *research aimed at improving the health and welfare of production and companion animals* (69% acceptable and 8% unacceptable)
- **Species conservation**: *work directed towards species conservation. The species may or may not be directly involved, e.g., nutritional studies using a more common species can benefit an endangered species* (63% acceptable and 10% unacceptable)
- **Basic biological research**: *research that aims to understand the workings of living things* (63% acceptable and 10% unacceptable)
- **Environmental management**: *including the control of animal pests and research into methods of reducing production of greenhouse gases* (62% acceptable and 11% unacceptable)
- **Development of alternatives to using live animals:** *work aimed at developing methods to replace or reduce the use of live animals in research, testing and teaching* (62% acceptable and 16% unacceptable). Note: this use relates to one of the foundational 3Rs (Replacement, Reduction, and Refinement)
- **Animal husbandry:** *Animal husbandry, including reproduction, nutrition, growth, production* (58% acceptable and 10% unacceptable).

There were middling levels of support for two activities, with higher proportions considering each to be unacceptable. These included:

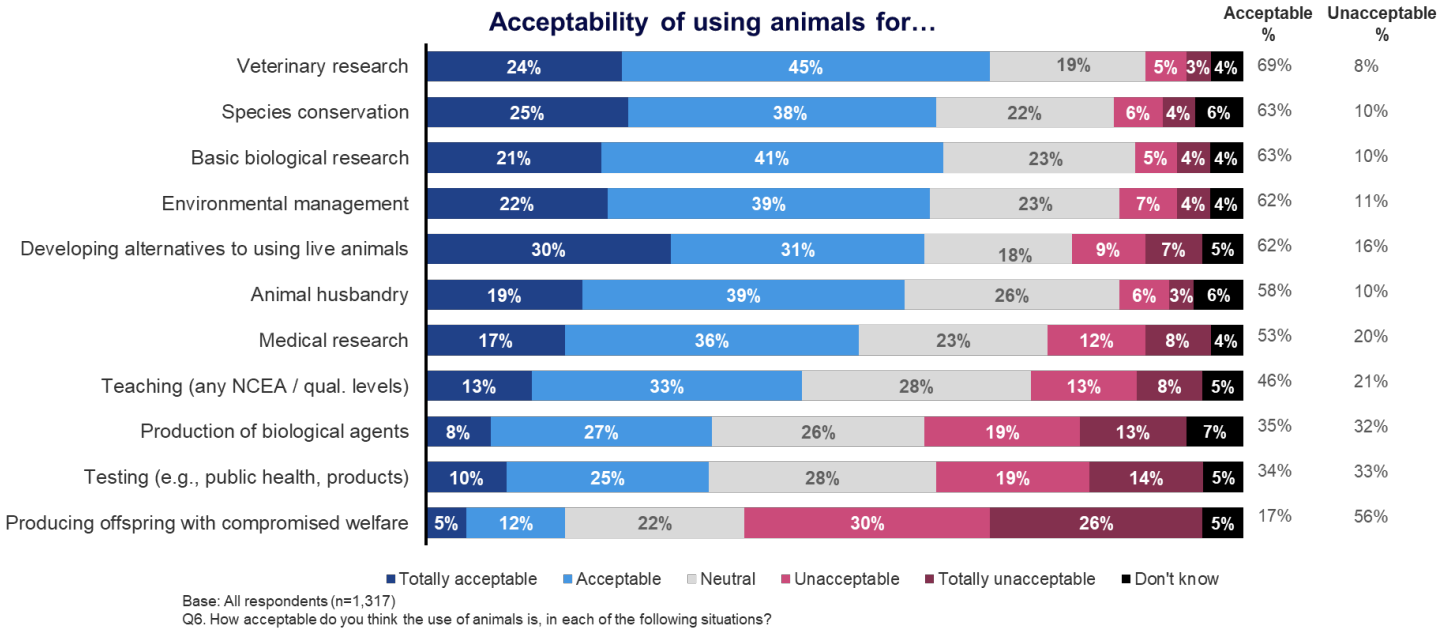
- **Medical research:** *research aimed at improving the health and welfare of humans, but not research on human subjects* (53% acceptable and 20% unacceptable).
- **Teaching:** *Animals used for teaching or instruction, at any NCEA or qualification level* (46% acceptable and 21% unacceptable)

Support for the other three activities was mixed, with levels of unacceptability equalling or exceeding acceptable levels.

- **Production of biological agents**: *animals used for raising antibodies or for the supply of blood products* (35% acceptable and 32% unacceptable)
- **Testing**: *animals used for public health testing or to ensure the safety, efficacy or quality of products to meet regulatory requirements for human or animal products, either in New Zealand or internationally* (34% acceptable and 33% unacceptable)
- **Produce offspring with compromised welfare**: *animals used for the purpose of producing offspring with compromised welfare, that is, offspring that may be/are likely to be more susceptible or at greater risk of pain or distress during their lifetime.* This is the least supported use, with 17% considering it acceptable and 56% considering it unacceptable.

Between 4% and 7% of respondents were unsure about the acceptability of each of the eleven purposes.

Figure 6: Acceptability of using animals for eleven purposes



Base: All respondents (n=1,317)
Q6. How acceptable do you think the use of animals is, in each of the following situations?

Subgroup differences

Subgroup differences were generally consistent across the different research areas. Those involved in animal research considered the use of animals for all eleven activities more acceptable than the total sample did. Europeans and those of Asian ethnicities tended to be more accepting of animal use for each purpose than Māori and Pasifika. Business people were also more accepting.

See Appendix 2 for detailed subgroup analysis.

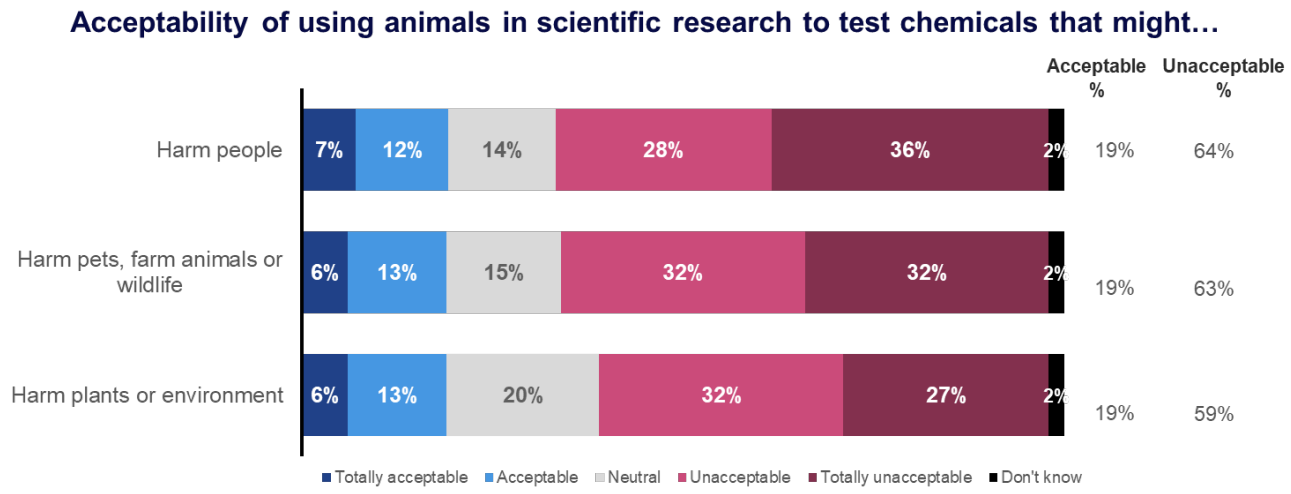
The acceptability of animal use in scientific research to test potentially harmful chemicals

At least six in ten respondents considered it is unacceptable to use animals to test chemicals that could cause harm to people, animals and/or plants and the environment, a level of unacceptability on par with the perceived unacceptability of using animals to produce offspring with compromised welfare.

Just under one in five (19%) considered it is acceptable to use animals to test chemicals that could harm people, pets, farm animals or wildlife, or harm plants or the environment.

Using animals to test chemicals that could potentially harm plants or the environment was considered slightly less unacceptable than using chemicals on animals that could potentially harm live beings, with 59% considering this unacceptable, compared with 64% and 63% respectively considering use unacceptable if there is potential harm to people or animals. (Note: this result suggests that respondents misunderstood the question, conflating outcomes of the research with the subject of the research.)

Figure 7: Acceptability of animal use to test chemicals that might cause harm



Base: All respondents (n=1,317)
Q7. How acceptable do you think it is to use animals in scientific research to test chemicals that could

Subgroup differences

Subgroup patterns were similar to those noted in the previous question set: those involved in animal research were more accepting than others.

Women and those under 25 were less accepting. Pet owners considered the use of animals for testing potentially harmful chemicals particularly unacceptable.

See Appendix 2 for detailed subgroup analysis.

6. Support for research using different animal types / species

Key findings

This section discusses which animal species/types, if any, were considered acceptable in five different activities.

When asked about the **acceptability of the use of twenty-one animal species for each of five areas**, a substantial proportion of respondents said that the use of any species is not acceptable in each case. The proportion considering the use of any animals to be unacceptable ranged from 24% for teaching to 41% for safety testing of non-medical products.

- Use of any animal species for safety testing of non-medical products was least acceptable, with four in ten saying that no animal species should be used for this.
- There was slightly more support for using animal species for research into animal health and/or for teaching, with around one in four respondents considering it acceptable to use any of the nominated animal species for these purposes.

Patterns of response about the most and least acceptable animal species were similar across the five research areas.

- The same five species, all of which are commonly regarded as pest species and/or are already extensively used in medical research (rodents), ranked in the top five **most acceptable species**. Rats and mice were considered the two most acceptable, followed by possums, stoats or ferrets, and rabbits.
- The seven species considered **least acceptable** for use were also consistent across the different types of research. The use of marine mammals was considered the least acceptable species across four of the five research types (second least acceptable for environmental research). Dogs, horses, cats, deer, cattle and sheep also featured in the top seven least acceptable species.

Reasons for considering the use of any animal species unacceptable

Several themes emerged, when respondents who considered the use of any of the twenty-one nominated animal species unacceptable for a particular type of research were asked their reasons. Several themes emerge.

- A belief that using animals in a way that might harm them is cruel and/or inhumane.
- Being unethical or morally wrong – mentioned particularly in association with safety testing of non-medical products.
- The fact that animals have rights and they cannot give informed consent, or defend themselves.
- Love of animals and a belief that animals having feelings, a soul, and/or personality.
- There is a perception that there are alternatives to the use of animals, particularly for research settings such as teaching and environmental research.
- A perception that a particular type of research could be acceptable if the research is critical to saving human lives and there are no alternatives (for example for medical research to benefit people), or if only for observation purposes (for instance in teaching), if the animal has died of natural causes and/or died in a humane way, or if pest species are used, for example for environmental research.

Support for using different animal species/types in research and other purposes

Respondents were asked which of twenty-one animal species/types they thought acceptable to be used in five activities:

1. Medical research to benefit people
2. Research into animal health
3. Environmental research
4. Teaching
5. Safety testing of non-medical products.

The list of twenty-one animal types was adapted from the Australian research (which included various primate species) to include species more relevant to the New Zealand context. The list was developed from MPI's Animal Use Statistics[2]. The list was as follows, noting that respondents were provided with an option that "*it is not acceptable to use any animals for this purpose*".

Table 2: Animal species/types included in the survey

Animal species/types included
Amphibia, e.g., frogs
Reptiles
Birds, e.g., chickens, ducks, pigeons, parrots
Mice
Rats
Cats
Dogs
Pigs
Cattle
Sheep
Deer
Goats
Horses
Guinea pigs or hamsters
Stoats or ferrets
Rabbits
Possums
Fish (e.g., trout, goldfish, eels)
Crustaceans, e.g., crabs, lobsters, crayfish
Cephalopods, e.g., octopus, squid
Marine mammals, e.g., dolphins, whales

Note: In presenting options to respondents, the order of the areas and the order of the animal species/types were randomised to minimise order bias.

[2] https://www.mpi.govt.nz/dmsdocument/1477-Animal-Use-Statistics-Guidance-for-Completing-Statistical-Returns

Summary

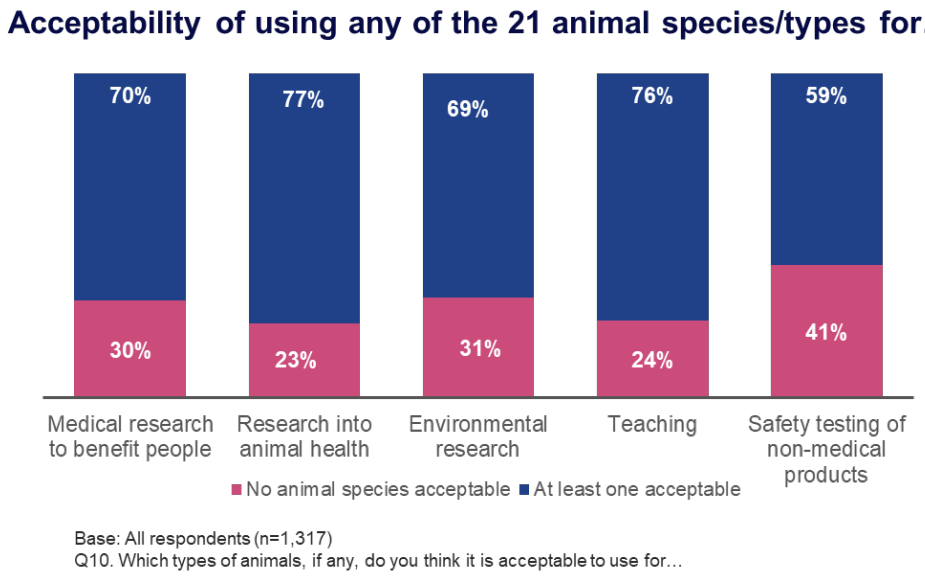
Fourteen percent (14%) of the total sample considered it is unacceptable to use any animals for any of the five purposes, while 48% considered it unacceptable to use any animal species for at least one of the five.

The use of any of the nominated animals for **safety testing of non-medical products** was thought less acceptable than the other four purposes, with 41% saying that using any animals for this is unacceptable.

Environmental research was the second least acceptable area, with 31% saying using any animals is unacceptable.

There was slightly more support for using **animals for research into animal health** and/or for **teaching**, with 23% and 24% of respondents respectively, considering the use of any animals unacceptable.

Figure 8: Proportion considering the acceptability of using any animal species/types for the purpose



Base: All respondents (n=1,317)
Q10. Which types of animals, if any, do you think it is acceptable to use for…

Most and least acceptable animal species/types

Respondents were asked which of 21 species they consider acceptable for use for each purpose. Patterns of response were similar across all five.

The same species ranked in the top five **most acceptable:** rats, mice, possums, stoats or ferrets and rabbits. With the exception of rats and mice, the level of acceptability of the other top three (possums, stoats or ferrets and rabbits) was not high, with fewer than half considering their use acceptable, other than for research into animal health.

Rats and mice were the two most acceptable species (with over half the sample thinking their use acceptable across four of the uses, and 42% considering their use acceptable for safety testing of non-medical products.). Their use is likely to be considered more acceptable as people are familiar with their extensive use in medical research.

All five of the most acceptable species are commonly considered to be pest animals that impact New Zealand's native bird populations, cause damage to natural environments (for example, rabbits degrading vegetation in Central Otago and the Mackenzie country), or spread disease (for example, possums spreading bovine Tb). The proportions considering any of these five species are acceptable vary across the five research areas, with their use considered most acceptable for animal health research and lower levels of acceptability for safety testing of non-medical products.

The seven species considered **least acceptable** for use were also consistent across the research areas: these included marine mammals, dogs, horses, cats, deer, cattle and sheep.

Respondents considered marine mammals to be the least acceptable species across four of the five types (second least acceptable for environmental research). While the research didn't assess reasons for any

specific species being more acceptable or less acceptable, media have highlighted the endangered status of many marine mammal species, including Hector's Dolphins and blue whales, and these marine mammals have featured in many television series and movies (for example, Free Willy). Hence, their presence at the top of the unacceptability list is not surprising.

Dogs, horses, cats, deer, cattle and sheep also featured in the top seven least acceptable species. Dogs and cats are the most commonly owned household pets (with 64% of respondents having at least one dog and/or cat). The use of horses for research was generally considered as unacceptable as the use of dogs and cats, with use of deer, cattle and sheep considered nearly as unacceptable.

The reasons for acceptability of each species varied across the purposes. In addition to the above, this may relate to the perceived likelihood of harm to the species, and/or the suitability of the animal type for the purpose: for example, lower acceptability of fish and invertebrates for medical research than mice, rats, guinea pigs, rats and possums.

Table 3: Animal species/types that are considered most and least acceptable

Acceptability of using animals for...	Medical research to benefit people	Research into animal health	Environmental research	Teaching	Safety testing of non-medical products
Base	1,317	1,317	1,317	1,317	1,317
Five most acceptable species/types (% acceptable)					
1. Rats	54	61	51	57	42
2. Mice	53	60	50	57	42
3. Possums	46	54	47	49	38
4. Stoats or ferrets	41	51	41	44	34
5. Rabbits	38	50	39	46	31
Seven least acceptable species/types (% not acceptable)					
1. Marine mammals	42	32	38	35	35
2. Dogs	41	30	40	30	37
3. Horses	41	28	38	31	36
4. Cats	39	28	38	31	35
5. Deer	36	25	32	30	32
6. Cattle	34	25	32	29	31
7. Sheep	35	23	32	28	32
Not acceptable to use any species for this use (%)	**30**	**23**	**31**	**24**	**41**

Subgroup differences

Subgroups who were more supportive tend to be the same groups who held more supportive views on related topics: that is, men, those involved with animal research, those who are not pet owners, those who have seen or heard anything about animal research in the last twelve months, and respondents of Asian ethnicity.

See Appendix 2 for detailed subgroup analysis.

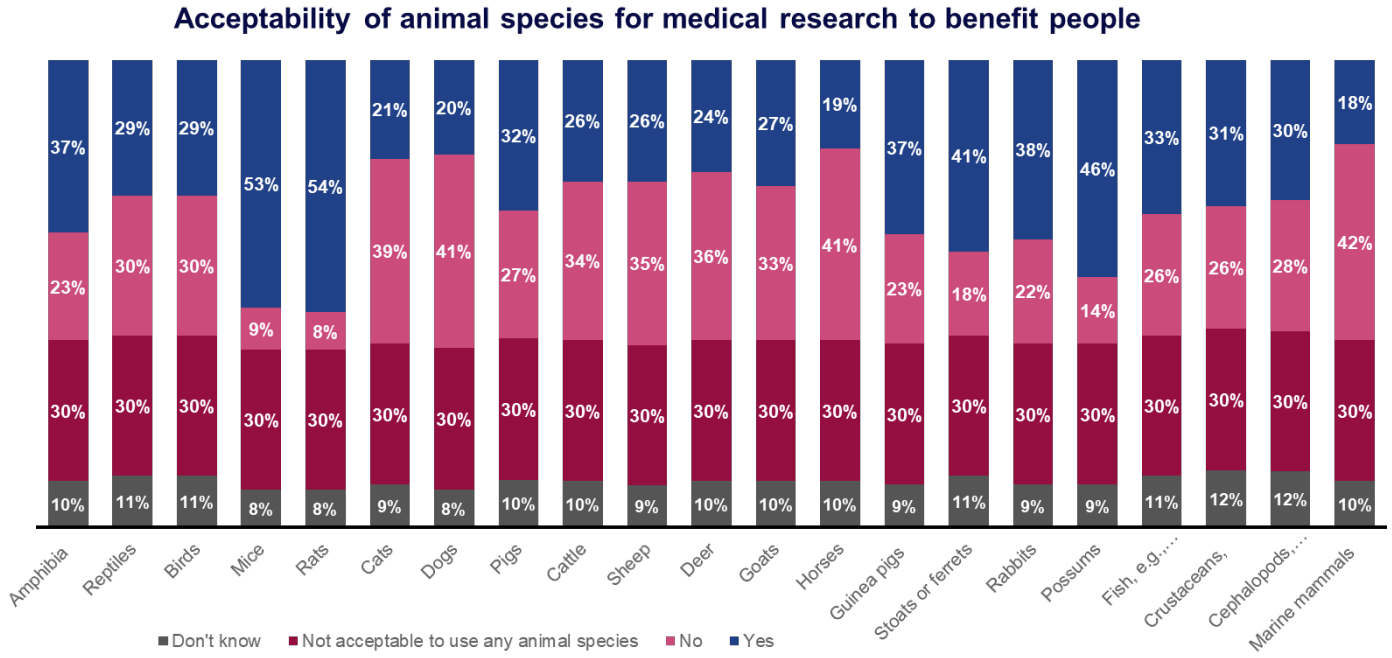
The following sections discuss the acceptability of the twenty-one animal species/types for each of the five areas, along with key reasons for considering the use of any those species unacceptable.

Using animal species/types for medical research to benefit people

Seven in ten respondents considered it acceptable to use at least one of the twenty-one animal species for medical research to benefit people.

Rats, mice and possums are the three most commonly accepted, with around half considering their use to be acceptable. Over four in ten respondents consider it unacceptable to use marine mammals (42%), horses or dogs (41% each) for this purpose (in addition to the 30% considering use of any of the twenty-one species/types to be unacceptable).

Figure 9: Acceptability of animal species for medical research to benefit people



Base: All respondents (n=1,317)
Q10. Which types of animals, if any, do you think it is acceptable to use for medical research to benefit people?

Reasons for considering the use of any animal species for medical research to benefit people unacceptable

Those who considered using any animals was unacceptable were asked their reasons. A perception that it is cruel if animals are harmed was the main objection. Respondents pointed out that animals, like humans, can feel pain, and that they have rights, while being unable to give informed consent. There was some feeling that to use animals for this purpose might be inevitable, but still not acceptable.

The main reasons given (down to the 8% level of mention) were as follows:

- It is cruel, inhumane for animals to be harmed (31%)
- It is cruel to use animals for the benefit of humans (17%)
- We should use consenting humans, not animals (12%)
- Animals are living beings, feel pain (10%)
- Animals have rights as humans do. We are all animals, just different species (9%)
- Animals cannot consent, cannot defend themselves (9%)
- It is unethical, morally wrong (8%)
- Animals have different traits. Might not benefit humans (8%).

The following verbatim comments highlight reasons given for considering it unacceptable to use any of the twenty-one species/types for medical research to benefit people.

"It may not have any benefit to the human anyway and animals shouldn't be harmed for experimental purposes."

"Although it has helped a lot in the past, I believe there is no justification in torturing other animals for our own survival. I'm optimistic that modern research techniques involving AI could bypass this previously necessary toll for research."

"Animals feel pain in many of the same ways that humans do; in fact, their reactions to pain are virtually identical (both humans and animals scream, for example). When animals are used for product toxicity testing or laboratory research, they are subjected to painful and frequently deadly experiments."

"I understand that it would benefit people, but I can't imagine hurting an animal to benefit a person. It truly makes me so sad!"

"I do not think animals should suffer for the health of people because they cannot consent."

"I feel like it is probably necessary but I still don't feel that it is acceptable to let one species suffer for the benefit of another."

"Our arrogant species has no right to use animals for our own purposes."

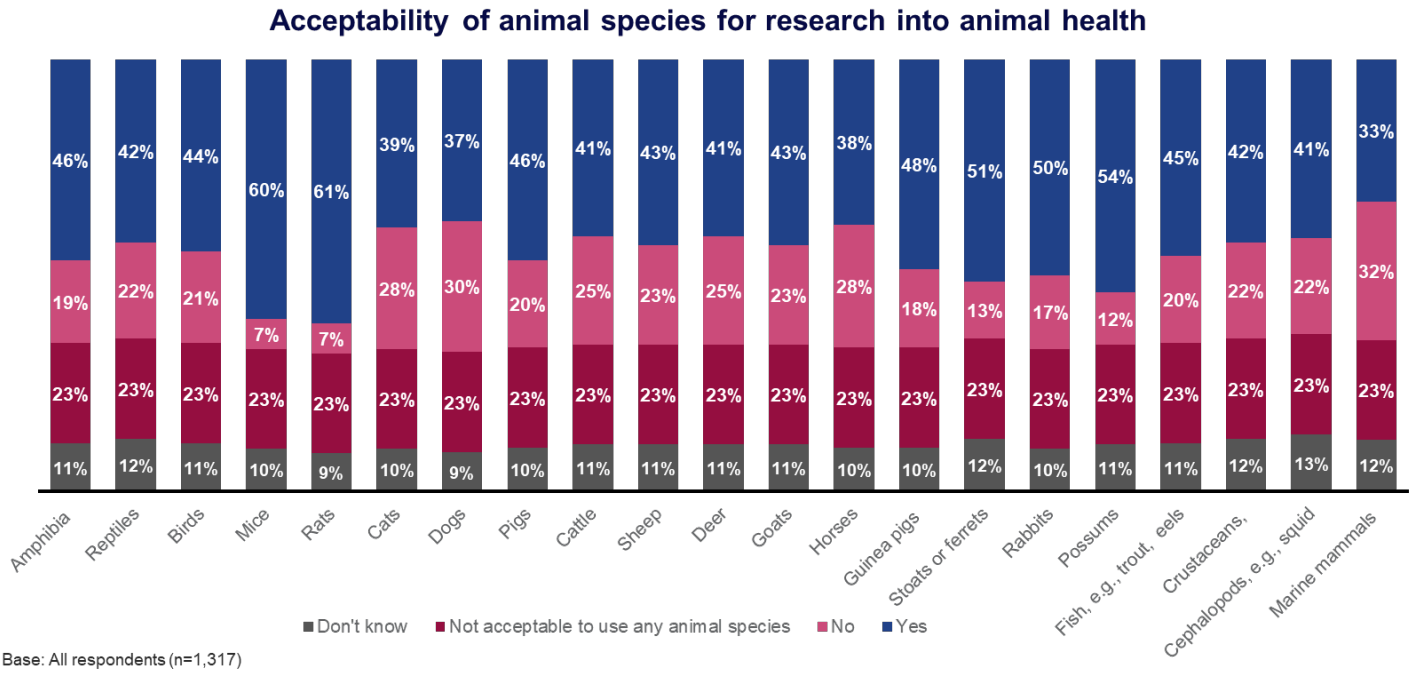
The full list of reasons given for this and the other research purposes is included at the end of this section.

Using animal species/types for research into animal health

Over three in four respondents (77%) considered it acceptable to use at least one of the nominated animal species for research into animal health. This was the most acceptable area of research, along with teaching.

There was a comparatively high level of support for using rats and mice for animal health research, with six in ten considering their use acceptable. Marine mammals, dogs, horses and cats were considered least acceptable in this context, with around three in ten respondents considering the use of each to be unacceptable (in addition to the 23% considering use of any of the twenty-one species/types to be unacceptable).

Figure 10: Acceptability of animal species for research into animal health



Base: All respondents (n=1,317)
Q11. Which types of animals, if any, do you think it is acceptable to use for research into animal health?

Reasons for considering the use of any animal species for research into animal health unacceptable

Considering it cruel if animals are harmed was the overwhelming concern for this use also. A view that it is unethical also received significant levels of mention. The main reasons given (to the 8% level) were as follows:

- It is cruel, inhumane for animals to be harmed (34%)
- It is unethical, morally wrong (12%)
- There needs to be an alternative. I wish there were an alternative (8%)
- Animals cannot consent. They can't defend themselves (7%).

The following verbatim comments highlight the views of those who considered it unacceptable to use any of the twenty-one species/types for research into animal health.

"No animal should go through torture for research purposes."

It's is not acceptable to cause harm to any living creature simply for "research". (The single exception being testing of animal medicines / treatments the same as is done in human medical trials - i.e., treating an already sick animal in the hopes of helping it, but not prolonging suffering). "It's for the animals so why would you test on them and risk their health."

"I don't like animals to suffer just because we are doing some research on them for health and other things. It's like doing it on humans. They are also living things like humans."

"Because any creature on this earth has feelings, feel pain and know what they can so should not be forced to have unnatural things done to them. Maybe the people doing the tests should stand in themselves to do the tests at least they know what is happening to them."

"Animal health is based in nature and familial environment, animals run in herds or groups, all family groups and that is the way of nature."

"There are certain cases where it's appropriate but taking a life or more than one life is never acceptable."

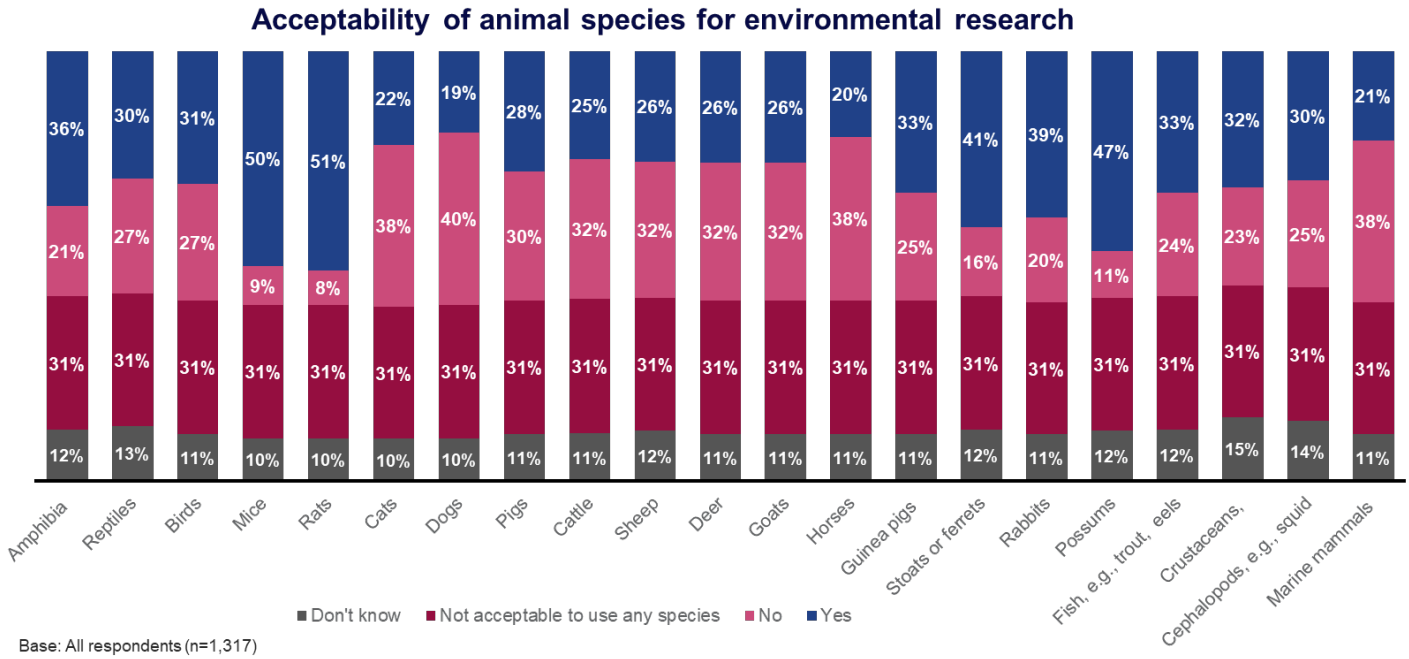
The full list of reasons given for this and the other research purposes is included at the end of this section.

Using animal species/types for environmental research

Around seven in ten respondents (69%) thought it acceptable to use at least one of the nominated animal species for environmental research.

Rats, mice and possums were considered acceptable animal species for this use, by around half of all respondents. Dogs were considered least acceptable, with 40% mention, followed closely by marine mammals, cats and horses, each considered unacceptable in the environmental research context by 38% of respondents (in addition to the 31% considering use of any of the twenty-one species/types to be unacceptable).

Figure 11: Acceptability of animal species for environmental research



Base: All respondents (n=1,317)
Q12. Which types of animals, if any, do you think it is acceptable to use for environmental research ?

Reasons for considering the use of any animal species for environmental research unacceptable

Again, a perception that it is cruel if animals are harmed was the main objection to using any animal species for environmental research. Respondents made greater mention about the need for (or existence of) alternatives for this context. The main reasons given (to the 7% level) were as follows:

- It is cruel, inhumane for animals to be harmed (28%)
- It is unethical, morally wrong (11%)
- Animals have rights as humans do. We are all animals, just different species (8%)
- There needs to be an alternative. I wish there were an alternative (8%)
- There are alternative options available; e.g., computer simulations, etc. (7%).

The following verbatim comments highlight the views of those who thought it unacceptable to use any species for environmental research.

"The chemicals used may harm animals."

"Because environmental research can be carried out using other methods rather than animals."

"Animal testing pollutes air, groundwater, and soil. Animal testing results into large amounts of environmental waste and toxic chemical. The disposal process resulting from animal testing leads to dangerous exposure to biohazards and radioactive materials."

"Humans are destroying the environment, not other animals. Why don't we test on those humans? Start with Elon Musk, he deserves it."

"Once again they have the same right to live a normal life as we humans have."

"It's irrelevant to the animal."

"It's not very sanitary to do that and I also think it's not a very safe way to do research especially if it's for the environment."

"That is harming the animal in what will most likely be them in their natural habitats. Not fair."

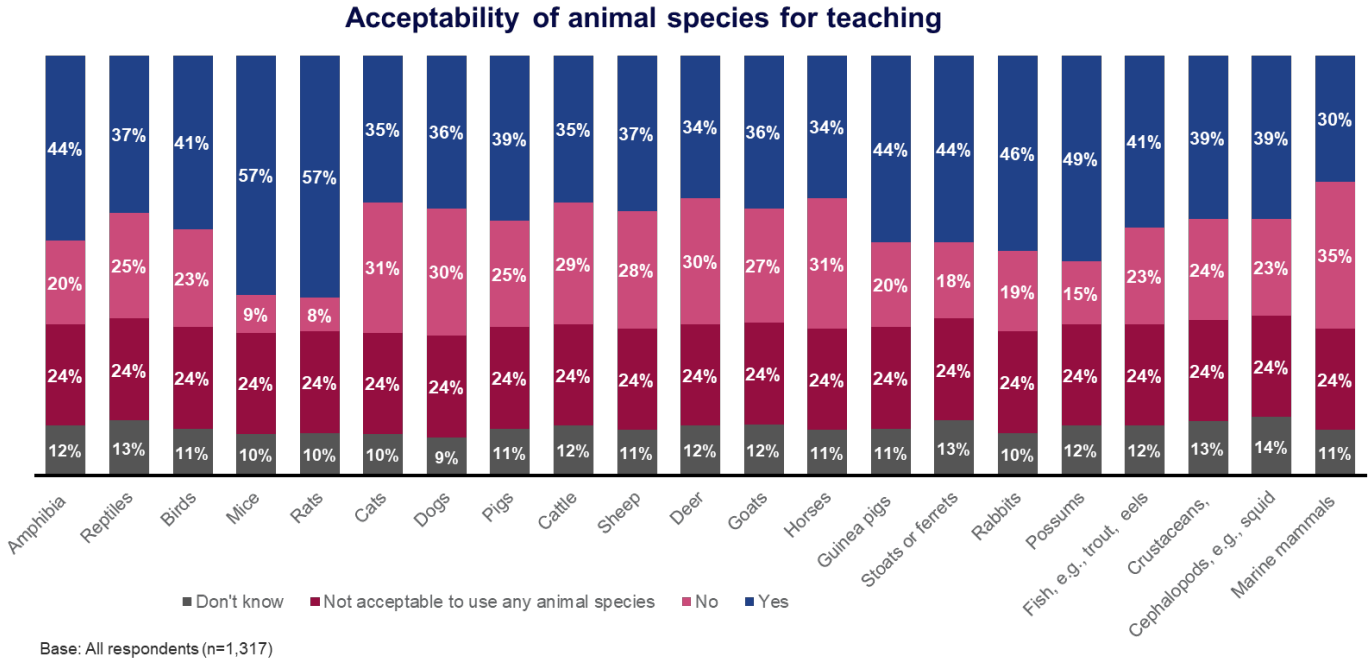
The full list of reasons given for this and the other research purposes is included at the end of this section.

Using animal species/types for teaching

Three in four respondents (76%) thought it acceptable to use at least one of the twenty-one animal species for teaching purposes, a higher proportion than for other research areas.

Using rats and/or mice was considered most acceptable, with nearly six in ten considering their use acceptable, as with the animal research setting. Marine mammals were considered least acceptable, with 35% mention. Cats, dogs, deer and horses were each considered unacceptable in this context by around three in ten (in addition to the 24% considering use of any of the twenty-one species/types to be unacceptable).

Figure 12: Acceptability of animal species for teaching



Base: All respondents (n=1,317)
Q13. Which types of animals, if any, do you think it is acceptable to use for teaching?

Reasons for considering the use of any animal species for teaching unacceptable

Again, perception that it is cruel if animals are harmed was the main objection. As with environmental research, respondents thought there must be viable alternatives available for use in teaching, other than animals. The main reasons given (to the 7% level) were as follows:

- It is cruel, inhumane for animals to be harmed (22%)
- It is unethical, morally wrong (16%)
- Alternative technologies available for this, e.g., computer simulations (11%)
- Use other options for teaching (8%)

- Could be acceptable if animals are not harmed. Need to balance the benefit against the potential harm (7%).

The following verbatim comments highlight the views of those who considered using any animal species/type for teaching to be unacceptable.

"*If they are already deceased then I don't think any animals should suffer for these types of products don't see any problem but if you kill them purposely for teaching that's really not ok.*"

"Use computer teaching as it is so realistic nowadays."

"I am assuming that we are discussing dissecting frogs in class. hell no. If we are discussing dogs for the blind, that's fine. Question is hard to give an accurate answer."

"Unless it is in a humane and safe way, or for scientific use cadavers are used then it doesn't feel right to do."

"If it's vet training then intern style involvement watching surgeries are the answer. Otherwise, a video should cut it for school kids."

"People can simulate most things in a computer these days."

The full list of reasons given for this and the other research purposes is included at the end of this section.

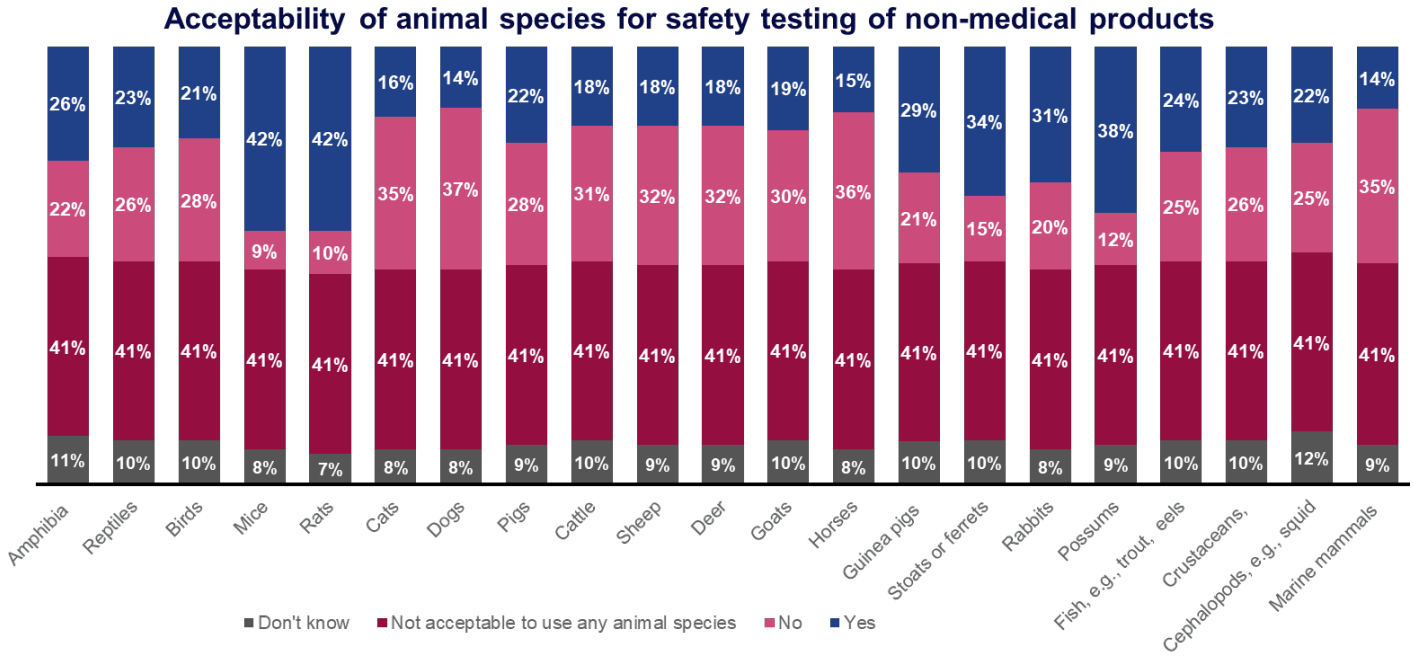
Using animal species/types for safety testing of non-medical products

Nearly six in ten respondents (59%) considered it acceptable to use at least one of the nominated animal species for safety testing of non-medical products. This was the lowest proportion across the five research settings, making it the least acceptable type of work using animals.

Given activism around animal testing and the prevalence of retailers and skincare brands using non-animal product testing as a marketing strategy, a lower rate of support for using any animals to test non-medical products is to be expected.

Using rats, mice and/or possums was considered most acceptable, with around four in ten considering their use acceptable. Four species were considered particularly unacceptable: dogs (37%), horses (36%), cats and marine mammals (35% each), in addition to the 41% considering any species use unacceptable.

Figure 13: Acceptability of animal species for safety testing of non-medical products



Base: All respondents (n=1,317)
Q14. Which types of animals, if any, do you think it is acceptable to use for safety testing of non-medical products?

Reasons for considering the use of any animal species for safety testing of non-medical products unacceptable

Ethical and moral considerations were the main objection to using any animal species for such safety testing. (Mentions of being unethical were highest for this research area.) Some respondents acknowledged that such safety testing could be acceptable for life-critical factors, but this still did not sit well with their consciences. There was a perception that there must be alternatives available.

The main reasons given were as follows (to the 7% level):

- It is unethical, morally wrong (26%)
- It is cruel, inhumane for animals to be harmed (24%)
- I love animals. Opposed to use of animals (9%)
- Cruel to use animals for the benefit of humans (9%)
- Alternative technologies available for this (7%)
- Depends on the research. Could be acceptable if it helps save lives of humans and/or animals (7%).

The following verbatim comments highlight the views of those who considered it unacceptable that any species are used for safety testing of non-medical products.

“I don’t believe in animal testing. It is morally wrong.”

“Because animals could be unnecessarily harmed during testing.”

I don't think any animals should suffer for these types of products.”

“I am at odds with logic and my morals - I know it needs to be done.”

“I just think it is a step too far. Animal use for testing should only be used for the most important testing, that is medical, where there is no reasonable alternative.”

“Because it has a non-medical benefit which is not crucial neither does it have urgency.”

The full list of all reasons given for this and the other research purposes is included below.

Summary of reasons given for considering use of any animal species/types unacceptable

The table below compares the prevalence of reasons given for considering use of any animals unacceptable, across the five types of research. Several themes emerge.

A belief that **using animals in a way that might harm them is cruel and/or inhumane** was the key reason for objection to using any animal species across four of the five research areas. Associated with this were perceptions that it is cruel to use animals for the benefit of humans, and that animals are living beings, who feel pain as humans do.

Being **unethical or morally wrong** was a related theme that received high levels of mention in relation to safety testing of non-medical products.

The fact that **animals cannot give informed consent** was a significant concern, with comments to the effect that they have rights, and that they cannot defend themselves.

For some respondents love of animals motivated their beliefs. There was comment about **animals having feelings, or a soul, and/or personality.** A preference for leaving animals alone in their natural environments was also expressed.

There was a perception that **there are alternatives to the use of animals**, particularly for settings such as teaching. Suggestions included using computer simulations or AI, or using videos of live animals (for teaching topics such as animal handling, etc.). If there aren't alternatives, these respondents wished there were.

"It depends" or **"it could be acceptable if…"** was another theme. Some respondents said it might be acceptable if the research/activity is critical to saving human lives and there are no alternatives, while others said using animals might be acceptable if only for observation purposes, or if the animal has died of natural causes and/or died in a humane way, or if pest species are used, for example for environmental research.

A list of all responses follows in Table 4.

Table 4: Summary of reasons for considering use of any animals is unacceptable

Reasons given for considering use of any animals is unacceptable	Medical research to benefit people	Research into animal health	Environ-mental research	Teaching	Safety testing of non-medical products
Base (those considering use of any animals unacceptable for this purpose)	**320**	**304**	**330**	**307**	**333**
	%	%	%	%	%
Cruel. Inhumane to harm animals	31	34	28	22	24
Unethical / morally wrong/unacceptable	8	12	11	16	26
Cruel to use animals to benefit humans	17	4	5	4	9
Use consenting humans (rather than animals)	12	3	3	1	3
Animals are living beings / feel pain	10	6	4	4	2
Animals have rights, as humans do. We are all animals, just different species	9	4	8	3	4
Animals cannot consent / have no say / can't defend selves	9	7	6	4	3
Animals and humans work differently / might not benefit humans	8	1	1	0	1
There needs to be an alternative / wish there were an alternative	7	8	8	6	5
Alternative technology options available, e.g., computer simulations, etc.	7	4	7	11	7
Use other options (for teaching)	1	1	0	8	0
I love animals - opposed to use of animals	5	5	6	4	9
Animals have feelings / a soul / personality	5	4	2	3	1
Animal lives matter / animals deserve respect/love	5	2	3	2	1
Leave animals alone / in their natural environment / animals were here first	4	6	4	5	2
Humans created problems, use humans	1	2	5	0	1
Depends on the research / acceptable if it helps save lives (human and animals)	3	5	3	3	7
Could be acceptable if animals not harmed in any way / need to balance benefit against potential harm	1	3	3	7	2
Could be acceptable if animal has died / of natural causes / humanely	1	4	1	6	0
Do not support using chemicals on animals / inhumane culling of species	1	1	1	1	4
Could be acceptable to use pest animals	0	0	1	1	0
Not sure how animals are / would be used in this situation	1	1	4	2	2
OK if only to observe – use live animals to show handling	0	0	0	2	0
Other	5	7	4	4	3
None/nothing	1	2	2	3	3
Don't know	1	5	5	4	10
Total mentions	**153**	**131**	**125**	**125**	**129**

7. Governance and regulations

Key findings

This section discusses understanding of rules and regulations and approvals processes for animal use in research and perceptions of how well they are applied.

Views of the rules and regulations and how well they are applied

Respondents wanted to see greater openness on the part of institutions involved in animal research, and they would also like to see greater public involvement. However, more than 25% of respondents regarded the approval process as unclear. Feedback about the adequacy of approvals lying with Animal Ethics Committees vs. greater government involvement was mixed.

Respondents did not have a good understanding of how well the rules and regulations for using animals in research, testing and teaching in New Zealand are applied, with a relative high level of 'don't know responses' particularly for knowledge-based dimensions. For example, 22% did not know whether New Zealand has strict rules in place on the use of animals in research, and 31% did not know whether the rules and regulations are well enforced. Only one in five (22%) considered information about approval processes is easy to find.

The general lack of knowledge correlated with respondents' levels of trust in the regulations. While nearly half of respondents (49%) agreed that they trust regulators to uncover misconduct at animal research facilities and 46% agreed that they trust those using animals not to cause them unnecessary suffering, there was a comparatively low level of trust in the regulatory system around the use of animals in research (35% agreeing and 22% disagreeing that they trust the regulatory system).

Views of organisations that undertake research using animals in New Zealand

Not surprisingly therefore, perceptions of organisations that undertake research using animals in New Zealand were relatively muted, with one in four saying they did not know which associations applied to such organisations.

The most prevalent view was that such organisations **carry out work that is essential for human health (**with 34% mention). There was a perception that such organisations are **well regulated** (27% mention) although as already noted, respondents did not feel they knew about this.

While one in five (21%) thought they **provide good mechanisms for oversight of animal research**, 24% thought that such organisations may have **conflicts of interest**, since animal research may be an aspect of their business. Positive perceptions of **animal welfare standards** outweighed negative perceptions (26% agreeing they adhere to good animal welfare standards, and 14% thinking they have poor animal welfare standards).

In terms of communication about their work, the most prevalent view (held by one in four) was that such organisations are **secretive** (27% mention), while fewer thought they are **open about their work (16%)**. A minority (11%) thought such organisations are **dishonest** about the results of their work.

Views of the rules and regulations for use of animals in research

Respondents were shown the following statement about the rules and regulations governing the use of animals in research, testing and teaching in New Zealand, and then asked for their views of the rules and regulations in New Zealand.

> "New Zealand law requires researchers to apply to a body known as an Animal Ethics Committee (AEC) to obtain approval to use animals for research, testing and teaching. The AECs are also involved in monitoring of approved research, testing and teaching.
>
> Membership of any AEC must include a veterinarian, a scientist, a member of an animal welfare advocacy organisation (e.g., SPCA), and a member of the public (lay person) who has never been involved in research on animals.
>
> While the government is not directly involved in decision-making by AECs, it plays a role in the regulation of animal research through issuing licences to host AECs to institutions such as universities that conduct the research, testing or teaching and by requiring those institutions to submit annual reports."

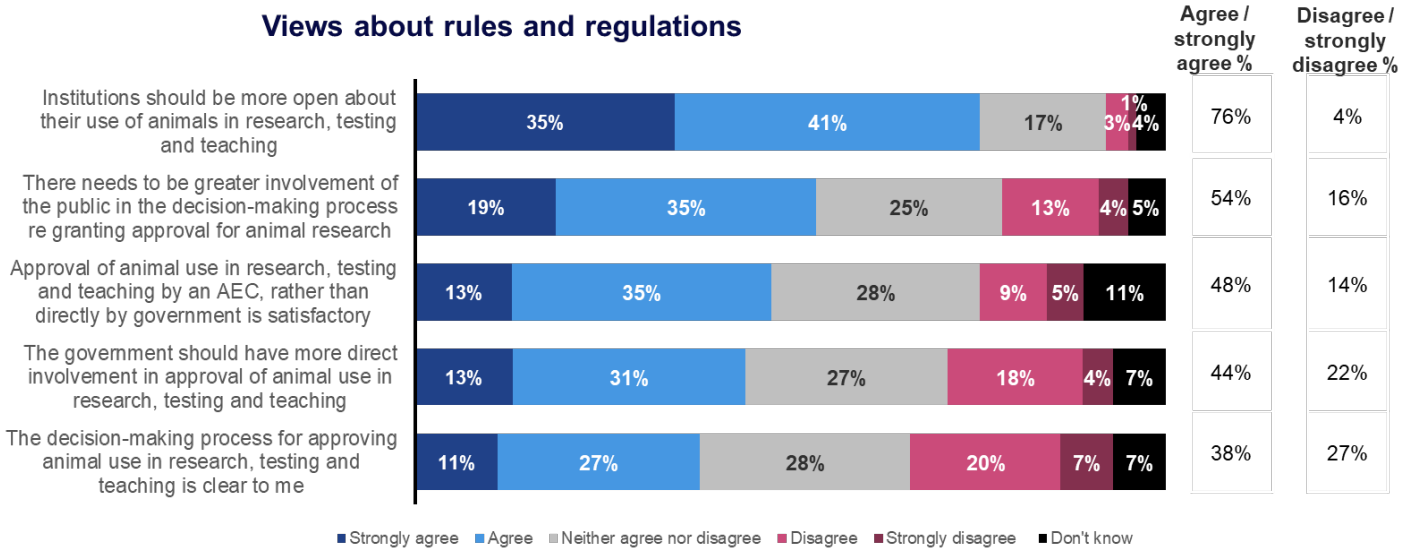
There was strong support for **institutions being more open about their use of animals in research, testing and teaching**, with 76% agreeing and only 4% of respondents disagreeing.

Over half agreed that **greater involvement of the public in the decision-making process around granting approval for animal research** is needed (54% agreeing and 16% disagreeing).

While weaker, agreement outweighed disagreement about the **role of Animal Ethics Committees and government in the approvals process**. Nearly half (48%) agreed that having approval of animal use in research resting with an Animal Ethics Committee (AEC) rather than the government is satisfactory while 14% disagreed that this is satisfactory. However, 44% thought the government should have more direct involvement.

Decision making processes for approving animal use in research are unclear: Only 38% agreed that they are clear, but 27% disagreed.

Figure 14: Views about rules and regulations



Base: All respondents (n=1,317)
Q16. How strongly do you agree or disagree with the following statements about the rules and regulations for use of animals in scientific research, testing and teaching?

Subgroup differences

Greater agreement with each statement was apparent among those involved in animal research, or animal protection organisations, also among those aware of the ANZCCART Openness Agreement (who were generally those involved in animal research and/or protection). Agreement with each statement among men tended to be around five percentage points higher than the overall sample result.

See Appendix 2 for detailed subgroup analysis.

Views about how well rules and regulations are applied

Respondents were asked their views about eight aspects of the application of rules and regulations for using animals in research, testing and teaching in New Zealand. Fewer than half the respondents agreed with any aspect.

The high level of 'don't know' responses should be noted, ranging from 8% to 15% for trust-based statements, and as high as 31% for knowledge-based statements such as whether **the rules and regulations are well enforced**. Nearly three in ten (28%) were unsure whether **the use of animals in research sometimes takes place without an official approval**, and 22% were unsure whether or not **New Zealand has strict rules on the use of animals in research**.

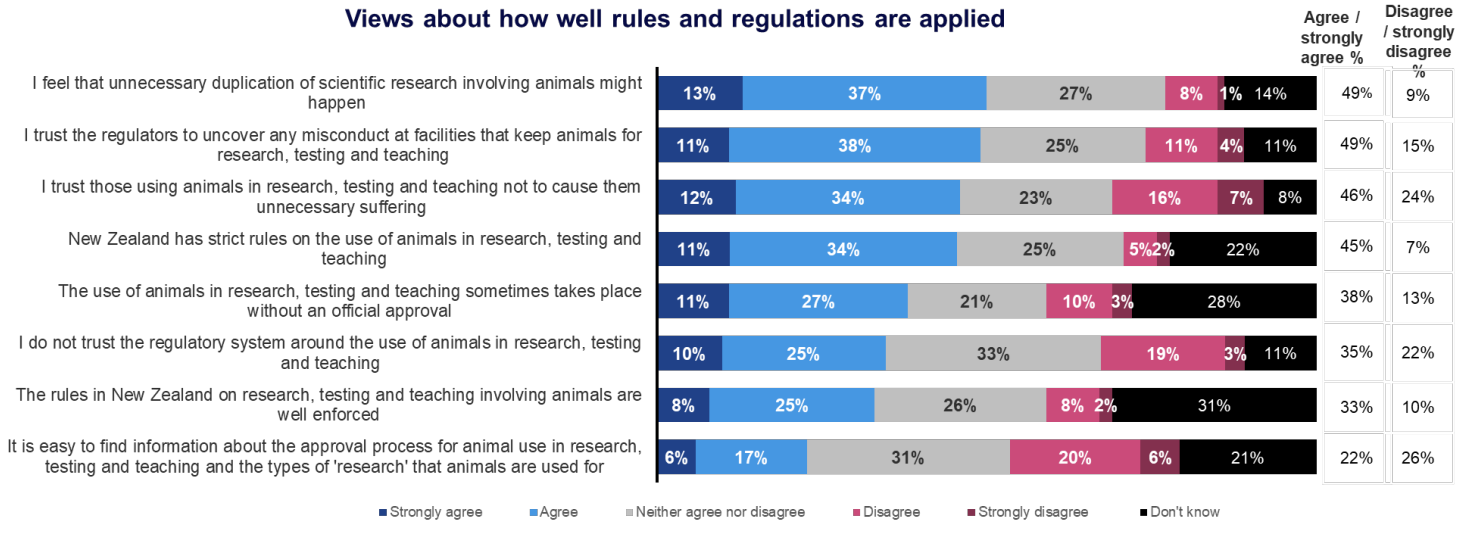
There was a perception that **unnecessary duplication of scientific research involving animals might happen with the Animal Ethics Committees**, with 49% agreeing that this could happen and only 9% disagreeing.

Just under half of respondents **trusted regulators to uncover misconduct at animal research facilities** (49% agreement) and/or **trusted those using animals not to cause them unnecessary suffering** (46% agreement).

A **lack of trust in the regulatory system around the use of animals in research** outweighed trust, with 35% agreeing that they did not trust the system and 22% disagreeing (that is, they did trust it).

Information about the approval processes for animal research was not considered easy to find. While 22% agreed that it is easy, 26% disagreed, and 21% were unsure.

Figure 15: Views about how well rules and regulations are applied



Base: All respondents (n=1,317)
Q17. How strongly do you agree or disagree with the following statements about the rules and regulations on the use of animals in scientific research, testing and teaching in New Zealand?

Subgroup differences

In general, those involved in animal research and business people (those describing their occupation as business manager, business proprietor or farm manager) had higher levels of trust in the regulatory system.

Those involved with animal protection have lower levels of trust. Those who follow a vegan diet had low levels of trust.

See Appendix 2 for detailed subgroup analysis.

Perceptions of organisations that use animals for 'research' in New Zealand

Respondents were asked about their views of organisations that use animals for scientific research, testing and teaching in New Zealand, via a series of nine statements. Comparatively low levels of mention for each statement indicate that respondents generally did not have strong views, and 24% said they don't know what associations apply to such organisations.

The most prevalent view, held by only one in three, was that such organisations **carry out work that is essential for human health** (34%).

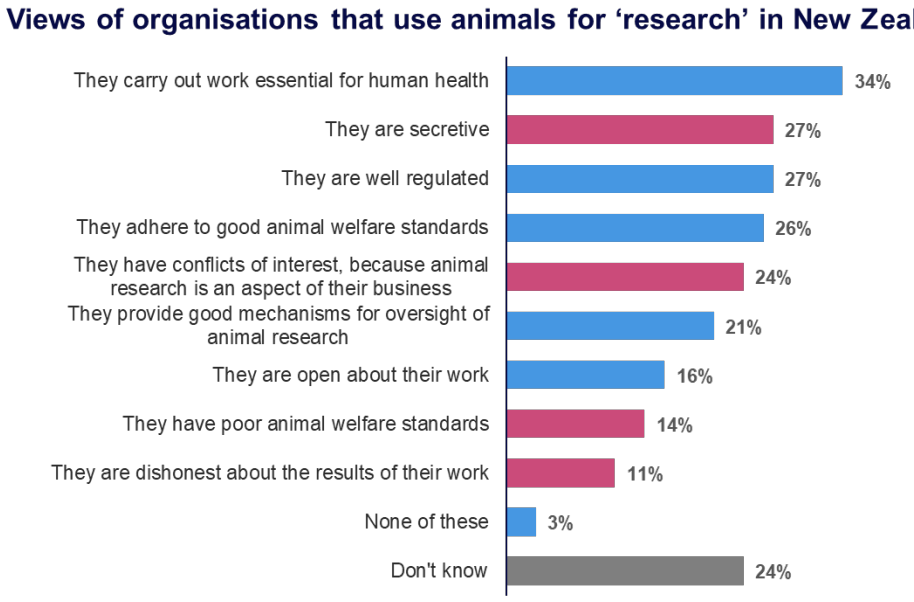
Over one in four respondents (27%) considered such organisations are **well regulated**, but as already noted, respondents did not feel they are well informed about this. One in five (21%) thought they **provide good mechanisms for oversight of animal research**.

One in four (24%) thought such organisations may have **conflicts of interest**, since animal research may be an aspect of their business.

Positive perceptions of **animal welfare standards** outweighed negative perceptions: 26% thought such organisations adhere to good animal welfare standards, while only 14% thought they have poor animal welfare standards.

In terms of communication about their work, the most prevalent view (held by 27%) was that such organisations are **secretive,** while only 16% thought they are **open about their work**. One in ten (11%) thought they are **dishonest** about the results of their work.

Figure 16: Perceptions of organisations that use animals for scientific research in New Zealand



Base: All respondents (n=1,317)
Q18. Which, if any, of the following fit your view of organisations that use animals for scientific research, testing and teaching in New Zealand?

Subgroup differences

Those aware of the ANZCCART Openness Agreement and those involved in animal research generally held more positive views of organisations that use animals for research than others.

Note however, that those involved in animal research were also more likely than others to note dishonesty and poor welfare standards. Business people, men and/or older people also held more positive views.

People aged under 35 had more negative perceptions than others relating to perceived organisational secrecy and/or dishonesty. Respondents involved with animal protection also held more negative views.

See Appendix 2 for detailed subgroup analysis.

8. Trusted information sources and interest in knowing more

Key findings

This section discusses whether or not people have seen or heard anything about the use of animals in scientific research, testing or teaching in New Zealand, and where that was seen. It also identifies the sources they would trust to provide balanced information, and respondents' interest in learning more about ongoing work in the area.

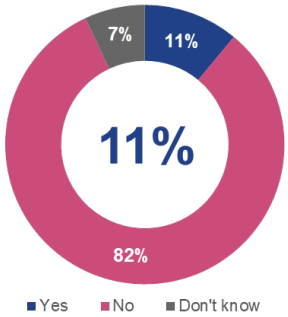
- There was low awareness of any media content about the use of animals in research, with fewer than one in ten respondents having seen or heard anything in the last twelve months. Social media and other online sources are the main channels recalled among those with any recall.
- Three sources stood out as being **trusted sources of balanced information** about the use of animals in scientific research, testing and teaching in New Zealand. Animal welfare organisations were the most trusted (50% mention), with veterinarians who look after the animals, and people with knowledge of the subject ranking second and third (42% and 36% mention respectively). There was lower trust in government agencies, research institutes, environmental organisations, medical research charities and universities (each receiving between 26% and 28% mention).
- There was reasonable interest in finding out more about ongoing work, with 45% interested in finding out more about alternatives to using animals in research, testing and teaching, and 42% interested in finding out about ongoing work to improve the welfare of animals used in research. At least one in five expressed strong interest in each of these.

Whether seen or heard anything about the use of animals in 'research'

One in nine respondents (11%) said they have seen or heard something about the use of animals in scientific research, testing or teaching in New Zealand in the last twelve months.

Figure 17: Whether seen or heard anything

Whether seen or heard anything about use of animals in research in last 12 months



Base: All respondents (n=1,317)
Q19. Over the past twelve months, have you seen or heard anything about the use of animals in scientific research, testing or teaching in New Zealand?

Subgroup differences
The prevalence of seeing or hearing anything about animal research was greater among those involved in animal research or animal protection organisations, men, younger people and those of Māori and Pasifika ethnicity:

- Heard of ANZCCART Openness Agreement (64%)
- Those involved with animal research (46%)
- Farmers (46%) or those involved with wildlife or veterinary animals (50%)
- Those involved with animal protection organisations (44%)
- Business people (23%)
- Those who follow a vegan diet (22%)
- Aged under 35 years (17%)
- Those of Māori (18%) or Pasifika ethnicity (16%)
- Pet owners (14% cf. 4% among non-pet owners)
- Men (13% cf. 9% among women).

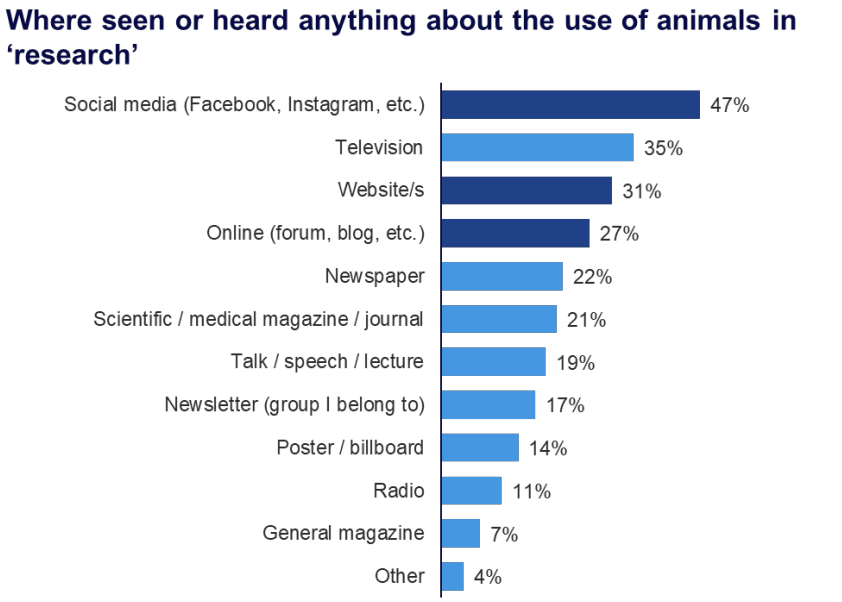
Where seen or heard anything about the use of animals in 'research'

On average those who have seen or heard anything about the use of animals in research recalled over two sources. Social media was the primary source (noted by 47%), with 31% mentioning websites and 27% mentioning other online sources, such as forums, blogs, etc.

Recall of more traditional media was lower, with 35% recalling television, 22% recalling newspapers and 11% recalling radio.

One in five (21%) recalled seeing or hearing about animal research in a specialist publication.

Figure 18: Sources recalled



Base: Those who have seen anything about use of animals in scientific research, testing or teaching in New Zealand (n=175)
Q20. Where did you see or hear about that?

Subgroup differences

- Those involved in animal research were more likely than others to mention websites (38%), newspaper (30%), scientific journals (28%) or posters/billboards (24%).
- Those involved in animal protection were more likely than others to mention websites (37%), online forums (34%), newsletters (27%) or posters/billboards (22%).

Trusted sources of balanced information

Three sources (of the seventeen presented to respondents) stood out as being trusted sources of balanced information about the use of animals in scientific research, testing and teaching in New Zealand.

1. Animal welfare organisations such as the SPCA, SAFE and HUHA (Helping You Help Animals) are considered the most trusted balanced source (a clear first rank at 50% mention).
2. Veterinarians who look after the animals used (42% mention)
3. People with knowledge of the subject (36% mention).

Government agencies, research institutes, environmental organisations, medical research charities and universities made up a second level tier, each mentioned by between 26% and 28% of respondents.

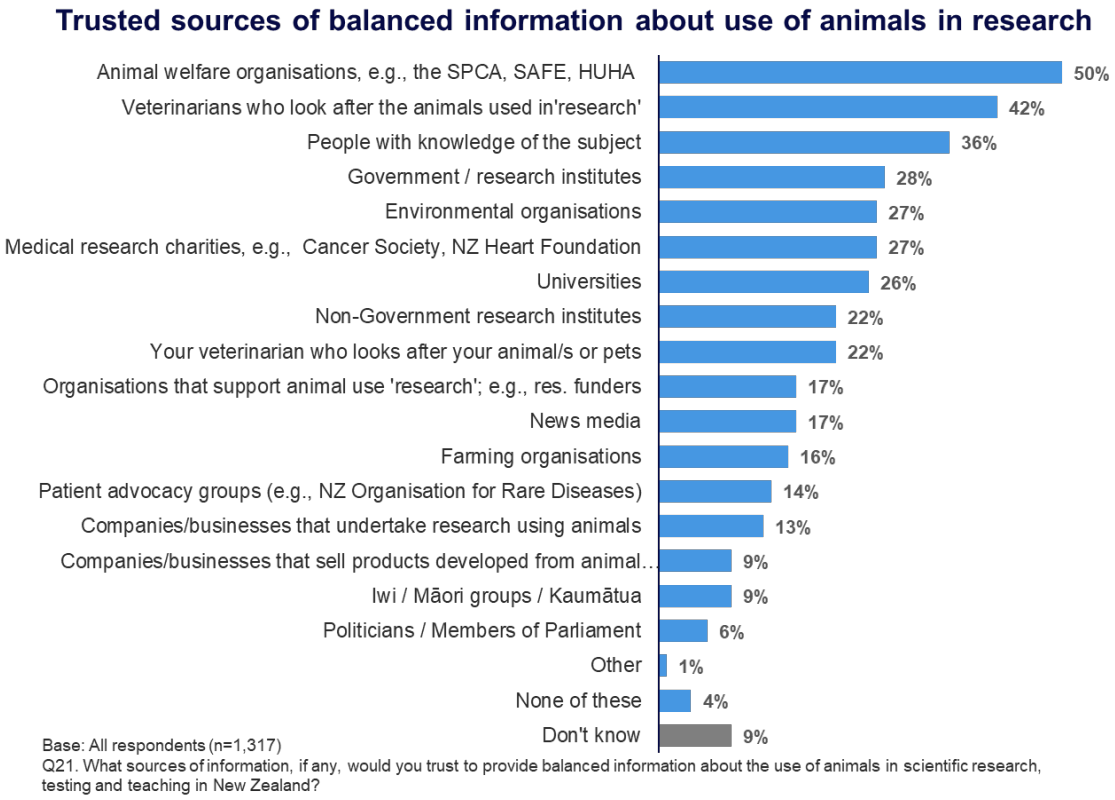
Trust in businesses and companies involved in animal research to provide balanced information was lower (with less than 20% mention):

- Organisations that support the use of animals in research, testing or teaching, for example, animal research funders were mentioned by 17%.
- Companies and businesses which carry out ‘research’ using animals (13% mention)
- Companies and businesses which sell products developed from animal research (9% mention)

Politicians and members of parliament are the least trusted source (6%).

Respondents mentioned about four sources, each.

Figure 19: Sources of balanced information about use of animals in research



Subgroup differences

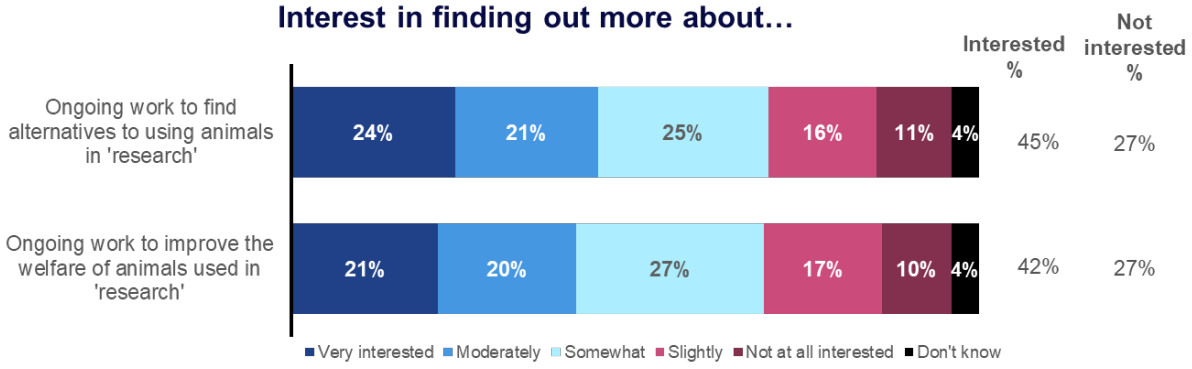
See Appendix 2 for analysis of subgroup differences.

Interest in finding out more about ongoing work

Nearly half of respondents said they were interested in finding out more about ongoing work to find alternatives to using animals in research, testing and teaching, with 45% expressing at least some interest and 24% expressing *strong* interest.

Interest was slightly lower in finding out about ongoing work to improve the welfare of animals used in research (42%), but again there is a group who were strongly interested (21%).

Figure 20: Interest in finding out more about ongoing work



Base: All respondents (n=1,317)
Q22. How interested are you in finding out more about...?

Subgroup differences

The profiles of those with higher interest in ongoing work to find alternatives and/or to improve the welfare of animals used in research were generally similar. They included those with farm animals, business people, those involved with animal research and/or animal protection, pet owners, women and those aged under 35 years.

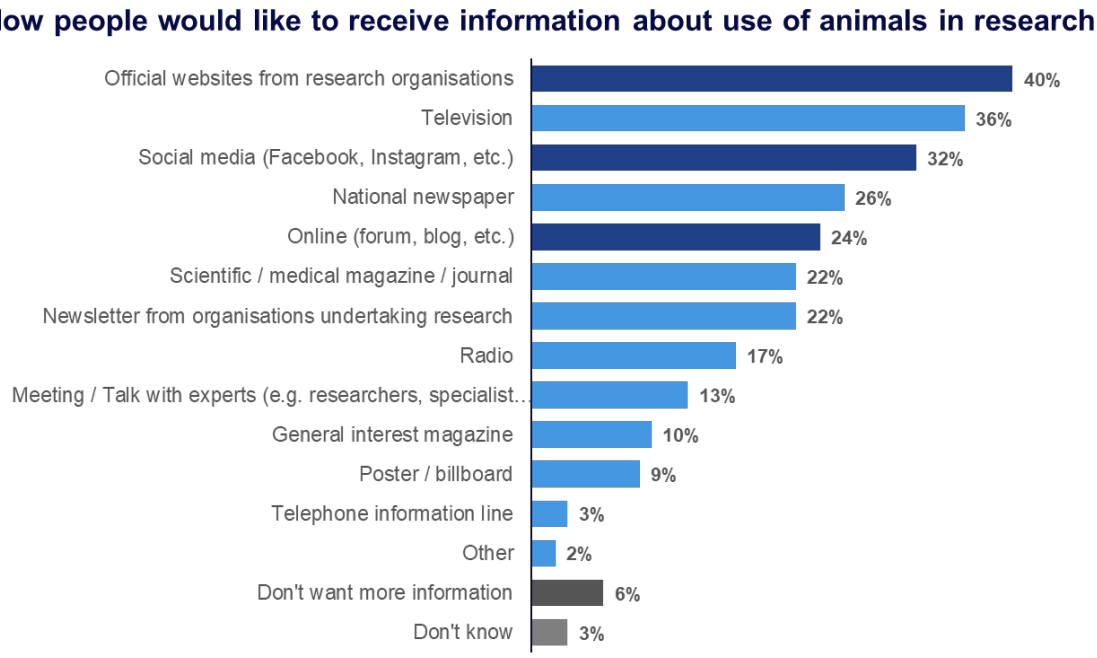
See Appendix 2 for detailed subgroup analysis.

Preferred channels for receiving information about use of animals

Official websites from research organisations were the preferred way of receiving information about the use of animals in research, with 40% of those who were interested in learning more, mentioning this source. (Newsletters from organisations undertaking research were less preferred, with 22% mention.)

Television ranked second with 36% mention, with social media ranking third (32% mention).

Figure 21 Preferred channels for finding out about use of animals in research



Base: Those interested in finding out more (n=1,135)
Q23. In which ways, if any, would you personally like to receive information about the use of animals in scientific research, testing and teaching?

Subgroup differences

There were some age differences in preferred channels for receiving information.

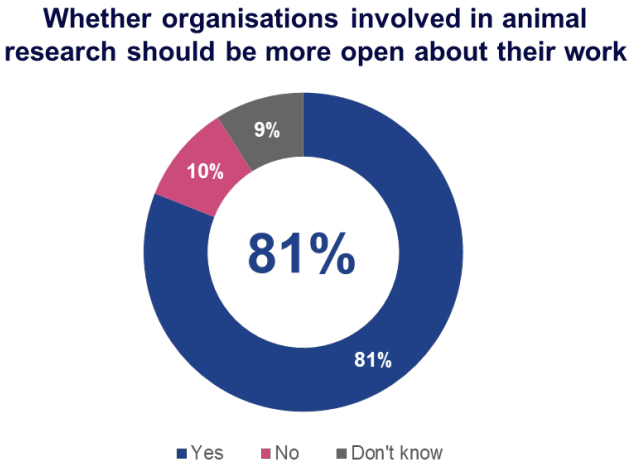
- Overall preference for **social media** was 32%, but 50% of under 35-year-olds considered it a preferred way of getting information.
- One in four (26%) mention **national newspapers**. Preference for this channel was stronger among those aged over 55 years (32%).
- While around one in four (24%) mentioned **online forums and blogs**, these were more popular among the under 35 age group (34% mention).

Whether organisations involved in animal research should be more open with the public

Four in five (81%) thought that organisations involved in research, testing and teaching should be more open with the public about their work.

This result is consistent with other survey feedback about the need for greater openness: 76% agreed that institutions should be more open about animal use, 27% said animal users are secretive, 26% disagreed that information about approval to use animals was easy to find.

Figure 22: Whether there should be greater openness



Base: All respondents (n=1,317)
Q24. Do you think that organisations involved in research, testing and teaching should be more open with the public about the work they do?

Subgroup differences

Those more likely to think that **organisations should be more open with the public** included:

- Those of Māori and/or Pasifika ethnicities (89%)
- Those interested in finding out more about ongoing work to find alternatives to the use of animals and/or to improve animal welfare (88% and 90% respectively)
- Those who follow a flexitarian diet (88%)
- Those who care moderately or a lot about the use of animals in research (87%)
- Those who feel slightly or not at all informed about the use of animals in research (83%) and/or the process required to gain approval for animal use in research (84%)
- Those in business (86%)
- Those involved with animal protection organisation (84%)
- Those who have seen or heard something about the use of animals in research in the last 12 months (78%)
- Women (84%)
- Pet owners (82%).

8. Awareness of and familiarity with the ANZCCART New Zealand Openness Agreement

Key findings

This section discusses respondents' awareness of the ANZCCART New Zealand Openness Agreement, familiarity with it and sources of awareness.

One in ten were aware of the Agreement, with above average awareness among those involved with animals, whether as researchers, during their work, or through their involvement with animal protection.

Familiarity with the Agreement was mixed: while 37% felt *very* or *moderately* familiar with it, just under a third (31%) had *limited* or *no* familiarity.

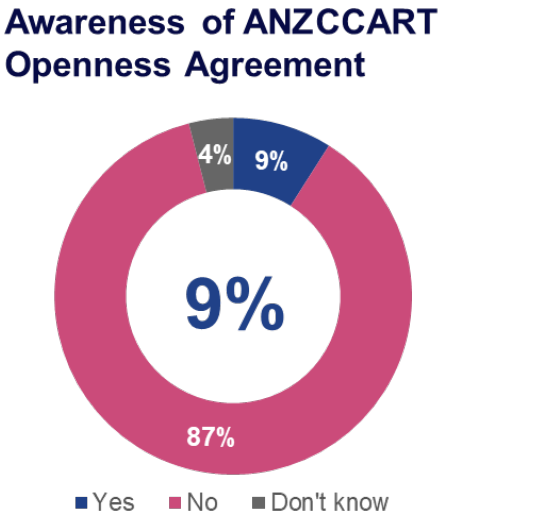
The ANZCCART website and scientific / medical journals were the two main sources of awareness of the ANZCCART Openness Agreement.

Awareness of the ANZCCART Openness Agreement

Respondents were asked if they have heard of the ANZCCART Openness Agreement on Animal Research and Teaching in New Zealand.

Just under one in ten have heard of it.

Figure 23: Awareness of the ANZCCART Openness Agreement



Base: All respondents (n=1,317)
Q25. Before today, have you heard of the ANZCCART Openness Agreement on animal research and teaching in New Zealand?

Subgroup differences

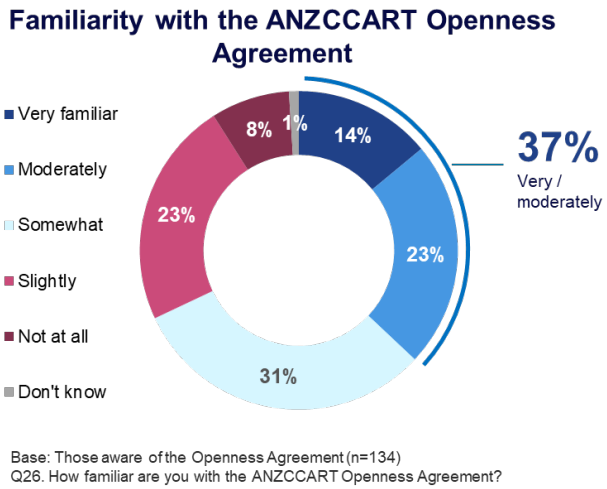
Awareness of the Openness Agreement was higher than average among:

- Those who have seen or heard anything about animal use in research in past 12 months (52%)
- Those involved with animal research (45%)
- Those involved with animal protection (43%)
- Those who feel *moderately* or *well* informed about the use of animals in research (32%) and/or the process required to gain approval for animal use in research (35%)
- Those who follow the Hindu faith (31%)
- Those who follow a vegan (21%) or 'other' (31%) diet
- Agricultural workers (21%)
- Business people (17%)
- Those aged under 35 (16%) or 35 to 44 years (15%)
- Those of Māori ethnicity (15%)
- Men (15%)
- Pet owners (12%).

Familiarity with the ANZCCART Openness Agreement

While over a third of respondents said they were *very* or *moderately* familiar with the ANZCCART Openness Agreement, 54 % said they were *somewhat* or *slightly* familiar with it. Eight percent said they were *not at all* familiar with the Openness Agreement.

Figure 24: Familiarity with the Openness Agreement



Base: Those aware of the Openness Agreement (n=134)
Q26. How familiar are you with the ANZCCART Openness Agreement?

Subgroup differences

Those with greater familiarity with the Openness Agreement (37%) were respondents:

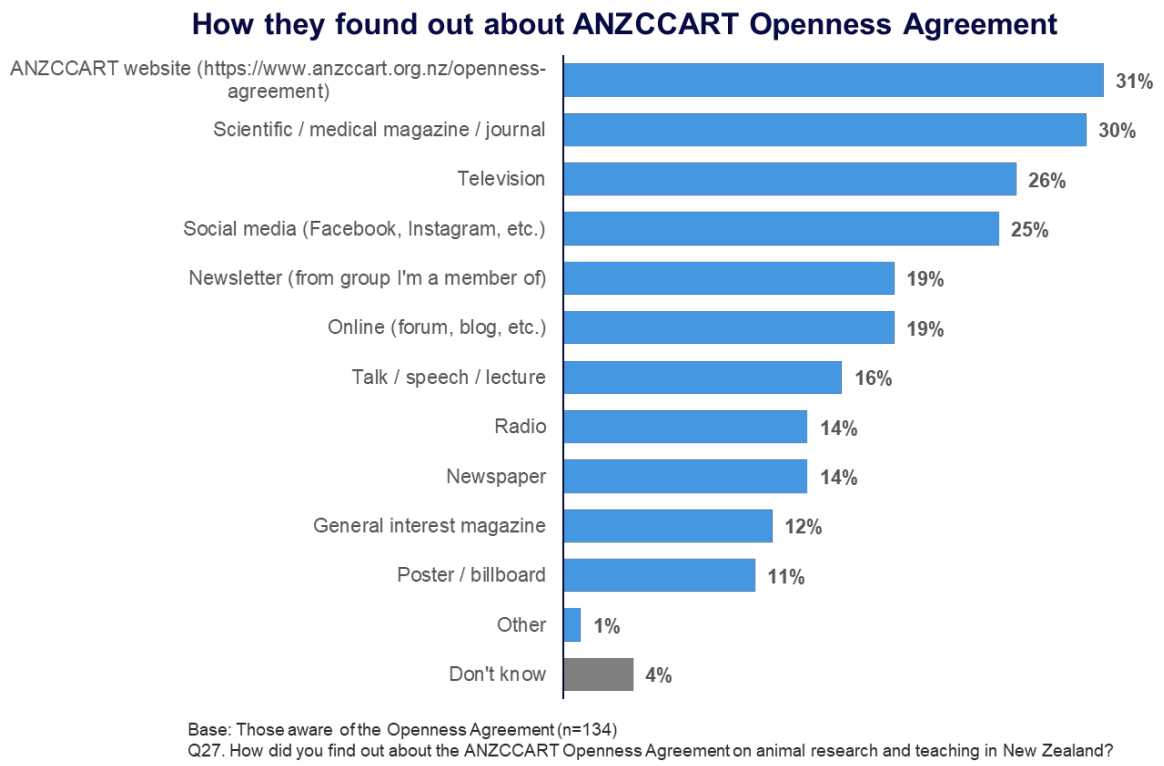
- Who have seen or heard anything about animal use in research in past 12 months (52%)
- Involved with animal research and/or animal protection organisations (44%)
- Who feel *moderately* or *well* informed about the use of animals in research (43%) and/or the process required to gain approval for animal use in research (45%).

In terms of their demographic profile, business people (54%), those aged 35 to 44 years (50%), and/or men (45%) also had greater familiarity with the Agreement than the total sample.

Sources of awareness about the ANZCCART Openness Agreement

The ANZCCART website (31% mention) and scientific / medical journals (30%) were the two main sources of awareness of the ANZCCART Openness Agreement, followed by television (26%) and social media (25%).

Figure 25: Source of awareness about the ANZCCART Openness Agreement



Base: Those aware of the Openness Agreement (n=134)
Q27. How did you find out about the ANZCCART Openness Agreement on animal research and teaching in New Zealand?

9. Comparing New Zealand survey results with Australian and UK results

Introduction

This section compares results for key questions with the following surveys:

- Australian study Research Survey on Australian Attitudes to Animal Research, undertaken in April 2022 and reported in July 2022
- UK IPSOS Mori study Attitudes to Animal Research undertaken in 2018.

Key points to note about the surveys in comparing results:

Table 5: Methodology summary for each survey

Specification	New Zealand	Australia	United Kingdom
Undertaken	May/June 2023	April 2022	August/September 2018
Method	Online survey, via online panel	Online survey, via online panel	Face to face omnibus
Sample size	1,317	2,964	1,011
Minimum age	18 years	15 years	16 years

Note:

- Some scales in the UK and Australian studies were different to those used in New Zealand. These are highlighted in the results presented below. ('*Don't know*' was included as a mid-point in the Australian survey, but as a last choice, in the New Zealand and UK studies.)
- Only collated results are available for some questions for the UK study.

Results are shown where there are comparative figures. Unless noted otherwise UK results included are from the 2018 survey. If they are from the 2016 survey, this date is included.

Comparison of survey results

Levels of care about the issue of animal use in research

Views were reasonably similar in terms of attitudes toward the use of animals in research with over half of both samples responding with a top two box score (68% In New Zealand and 62% in Australia).

Table 6: How much respondents care about the use of animals in scientific research, testing and teaching

Note: slight differences in the scales used.

How much people care the use of animals in 'research'	NZ	Very much	Moderate-ly	Some-what	Slightly	Not at all	Don't know
	Aus	Very much		Neutral / Don't know		Very little	-
Base (total sample)		%	%	%	%	%	%
How much do you care about this issue?	**NZ**	37	31	19	8	4	2
	Aus	25	37	28	5	4	-

How well-informed people feel

New Zealanders and Australians felt less well informed than people in the United Kingdom about the use of animals in scientific research and/or the processes involved. (Note: difference in the scale positioning of the *Don't know* response in the Australian study.)

Table 7: How well-informed people feel

Note: slight differences in the scales used.

How well-informed people feel about	NZ	Very well informed	Moderate-ly well informed	Some-what well informed	Slightly well informed	Not informed at all	Don't know
	Aus / UK	Very well informed	Fairly well informed	Unsure / Don't know	Not very well informed	Not informed at all	
Base (total sample)		%	%	%	%	%	%
The use of animals in scientific research, testing and teaching in <country>	**NZ**	4	12	16	23	41	4
	Aus	3	16	22	45	14	-
	UK	6	29	1	38	26	-
The process required to gain approval for animal use in scientific research, testing and teaching in <country>	**NZ**	4	10	14	16	51	5
	Aus	3	10	25	34	29	-

Views of the practice of using animals in research

Views about the use of animals in research were similar, with one exception. New Zealanders were slightly less likely than Australians to agree that the use of animals for medical research purposes is important to human health (48% of New Zealanders agreeing, compared with 56% of Australians).

Respondents in the UK held different views on some aspects, noting that the question format differed so direct comparisons are not possible. For example, only 41% of UK respondents said that the use of animals for medical purposes is important to human health, compared with 48% of New Zealand respondents agreeing. The only point on which their views matched was that of whether researchers are working to find alternatives to using animals in scientific research (41% saying this is true, compared with 43% of New Zealanders agreeing with the statement).

Table 8: Agreement with statements about the practice of using of animals in research

Views of use of animals in research	Coun-try	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Base (total sample)		%	%	%	%	%	%
The use of animals for medical research purposes is important to human health	**NZ**	15	33	26	13	9	4
	Aus	17	39	26	8	5	6
	UK*	41					
Researchers (*Scientists – Australia*) could do more to reduce the suffering of animals used in scientific research	**NZ**	35	35	16	3	2	9
	Aus	36	33	16	3	1	11
	UK*	47					
Scientific research using animals is not always carried out to high standards	**NZ**	17	31	23	8	2	19
	Aus	20	29	24	6	1	20
	UK*	34					
Scientific research is carried out on animals only when there is no alternative	**NZ**	11	29	24	15	8	13
	Aus	8	29	25	16	6	16
	UK*	23					
Researchers are working to find alternatives to using animals in scientific research	**NZ**	14	29	22	5	2	17
	Aus	10	32	27	5	1	25
	UK*	41					

** Note: Respondents in the UK study were asked to indicate if they felt each statement was true or not.*

Acceptability of using animals in (non-medical) research to test chemicals that are potentially harmful

(Note: the scale used in the New Zealand study was an Acceptability scale, whereas the scale used in the Australian and UK studies was an Agree scale.)

New Zealanders were less accepting of the use of animals to test chemicals that could harm people, than respondents in Australia or the UK.

In Australia using animals in scientific research to test chemicals that could harm plants or the environment was less acceptable than using chemicals that potentially could harm people and/or harm animals. This was also the case in the UK.

New Zealanders did not make the same distinctions between the usage settings, with acceptability levels for all three settings equivalent to Australian and UK views of potential harm to plants and/or the environment.

Table 9: Acceptability of using animals in scientific research to test chemicals that could…
(Note that New Zealand respondents used an 'Acceptability' scale to respond to, while Australian and UK respondents responded via agreeing or disagreeing with the statements.)

Using chemicals that could cause harm is…	**NZ**	**Totally accept-able**	**Accept-able**	**Neutral**	**Unaccept -able**	**Totally unaccept -able**	**Don't know**
It is acceptable to use chemicals that could harm…	**Aus / UK**	**Strongly agree**	**Agree (UK – tend to agree)**	**Neither agree nor disagree**	**Disagree (UK – tend to disagree)**	**Strongly disagree**	**Don't know**
Base (total sample)		%	%	%	%	%	%
Harm people	**NZ**	7	12	14	28	36	2
	Aus	7	21	21	24	21	5
	UK	33		24	43		-
Harm pets, farm animals or wildlife	**NZ**	6	13	15	32	32	2
	Aus	6	22	21	24	21	5
	UK	32		25	43		-
Harm plants or the environment	**NZ**	6	13	20	32	27	2
	Aus	5	15	22	28	25	5
	UK	22					

Perceptions of types of research allowed

While New Zealanders and Australians held similar views about whether biological research to advance understanding of the **human body** is allowed, New Zealanders were more likely to think that biological research to advance understanding of **animal health and welfare** are allowed.

While Australians were more likely than New Zealanders to consider that animal use in testing cosmetics is allowed (35% cf. 27% in New Zealand), New Zealanders were more likely than Australians to think that other types of use are allowed, for example, safety testing of non-medical products for industrial and/or household use, observational studies, and biological research to advance understanding of animal health and welfare.

Table 10: Which of the following types of research are researchers currently allowed to use animals in <country> with the applicable approval…

Researchers are allowed to…	New Zealand (2023)			Australia (2022)			UK (2018)
	Yes	No	Don't know	Yes	No	Don't know	Yes
Base (total sample)	%	%	%	%	%	%	%
Biological research to advance our understanding of the human body	43	12	45	43	10	47	41
Trying to develop new treatments / procedures for specific diseases	50	11	39	52	8	40	50
Biological research to advance our understanding of animal health and welfare	52	10	38	47	9	44	34
Testing cosmetics / ingredients for cosmetics	27	33	40	35	26	40	38
Developing new methods of medical diagnosis	46	9	45	42	9	49	43
Safety testing of non-medical products such as the ingredients of home cleaning products	24	26	50	18	24	58	21
Safety testing of non-medical products such as chemicals used in industry or farming	28	19	53	23	18	59	27
Observational studies such as monitoring species population and effects on the environment	53	11	36	46	10	43	*Not incl.*

Most acceptable animal species for different purposes

While the animal species sets were adapted for local context in each country, rats and mice emerged as the two most accepted species in both New Zealand, Australia and the United Kingdom.

Table 11: Two most acceptable animal species

Acceptability of using animals for...	Medical research to benefit people	Research into animal health	Environment-al research	Teaching*	Safety testing of non-medical products
Base	1,317	1,317	1,317	1,317	1,317
Two most acceptable species (% acceptable) - New Zealand					
Rats	54	61	51	57	42
Mice	53	60	50	57	42
Two most acceptable species (% acceptable) - Australia					
Rats	59	63	54	39	41
Mice	59	62	53	38	40
Two most acceptable species (% acceptable) – United Kingdom					
Rats	47	48	41		
Mice	44	43	37		
No species acceptable for this use (%) – New Zealand	**30**	**23**	**31**	**24**	**41**
None of the nominated species acceptable for this use %) - UK	**27**	**26**	**32**		

** The Australian study included the words: Teaching: where the procedures cause more than momentary harm or stress."*

UK study (2016): In the UK study, rats and mice were the two most accepted animal species (48% and 47% acceptable for use in research for medical research to benefit people.

Views of rules and regulations

New Zealanders and Australians held broadly similar view of the rules and regulations on the use of animals in 'research'. Australians were more inclined to strongly agree on the need for greater openness by institutions using animals in research, greater involvement by the public in decision making processes and more direct involvement by government in the approval process.

Table 12: Agreement with statements about rules and regulations on the use of animals in scientific research, testing and teaching in <country>

Agreement with statements about rules and regulations on the use of animals in 'research'	Coun -try	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Base (total sample)		%	%	%	%	%	%
The decision-making process for approving animal use in research, testing and teaching is clear to me	**NZ**	11	27	28	20	7	7
	Aus	11	28	27	19	9	7
I think that approval of animal use in research, testing and teaching by an AEC, rather than directly by government is satisfactory	**NZ**	13	35	28	9	5	10
	Aus	17	37	23	9	4	11
I think that the government should have more direct involvement in approval of animal use in research, testing and teaching	**NZ**	13	31	27	18	4	7
	Aus	20	26	27	14	5	8
There needs to be greater involvement of the public in the decision-making process around granting approval for animal research	**NZ**	19	35	25	13	4	5
	Aus	27	27	24	12	3	7
Institutions should be more open about their use of animals in research, testing and teaching	**NZ**	35	41	17	3	1	4
	Aus	54	28	11	2	1	5

Trust in the regulatory system

New Zealanders and Australians held broadly similar view of the rules and regulations on the use of animals in 'research'. New Zealanders held slightly more positive views about the quality of regulation and control, for example:

- Those using animals in research won't cause the animals unnecessary suffering (46% in New Zealand agreeing cf. 39% in Australia)
- Rules are well enforced (33% in New Zealand agreeing, cf. 27% in Australia)
- Regulators will uncover any misconduct at animal research facilities (49% in New Zealand agreeing, cf. 42% in Australia).

Those in the UK are more likely to have a view and less likely not to know about any of the regulatory factors.

Table 13: Trust in the regulatory system

Agreement with statements about rules and regulations on the use of animals in 'research'	Coun-try	Strong-ly agree	Agree (UK – tend to agree)	Neither agree nor disagree	Disagree (UK – tend to disagree)	Strongly disagree	Don't know
Base (total sample)		%	%	%	%	%	%
I do not trust the regulatory system around the use of animals in research, testing and teaching (UK: scientific research)	**NZ**	10	25	33	19	3	11
	Aus	12	25	29	17	4	13
	UK	32		37	29		2
I trust those using animals in research, testing and teaching not to cause them unnecessary suffering	**NZ**	12	34	23	16	7	8
	Aus	11	28	22	19	10	10
	UK - 2016	8	33	23	22	12	3
I feel that unnecessary duplication of scientific research involving animals MIGHT happen	**NZ**	13	37	27	8	1	14
	Aus	16	36	23	6	1	19
	UK	55					
The use of animals in research, testing and teaching sometimes takes place without an official approval (UK – official licence)	**NZ**	11	27	21	10	3	28
	Aus	14	27	21	8	2	28
	UK	50					
New Zealand (Australia/UK) has strict rules on the use of animals in research, testing and teaching	**NZ**	11	34	25	5	2	22
	Aus	11	33	24	6	3	23
	UK	51		31	12		6
The rules in New Zealand (Australia/UK) on research, testing and teaching involving animals are well- enforced	**NZ**	8	25	26	8	2	31
	Aus	7	20	28	11	4	31
	UK	29		43	22		6
I trust the regulators to uncover any misconduct at facilities that	**NZ**	11	38	25	11	4	11
	Aus	11	31	22	18	6	12

Agreement with statements about rules and regulations on the use of animals in 'research'	Coun-try	Strong-ly agree	Agree (UK – tend to agree)	Neither agree nor disagree	Disagree (UK – tend to disagree)	Strongly disagree	Don't know
keep animals for research, testing and teaching	**UK**	43		27	28		2
It is easy to find information about the approval process for animal use in research, testing and teaching and the types of research, testing and teaching that animals are used for	**NZ**	6	17	31	20	6	21
	Aus	7	18	28	19	7	21

Views of organisations that use animals for research

Perceptions of organisations that use animals for research were similar across New Zealand and Australia, with a few exceptions. Australians were less likely to think that:

- Such organisations adhere to good animal welfare standards (17% Australia, cf. 26% New Zealand)
- Provide good mechanisms for oversight of animal research (12% Australia, cf. 21% New Zealand)
- Are open about their work (9% Australia, cf. 16% New Zealand).

Table 14: Views of organisations that use animals for 'research'

Views of organisations that use animals	New Zealand (2023)	Australia (2022)	UK (2018)
	%	%	%
Carry out work essential for human health	34	29	32
Secretive	27	29	41
Well regulated	27	20	26
Adhere (stick) to good animal welfare standards	26	17	15
Have conflicts of interest, because animal research is an aspect of their business	24	23	*Not incl*
Provide good mechanisms for oversight of animal research	21	12	*Not incl.*
Open about their work	16	9	9
Have poor animal welfare standards	14	17	15
Dishonest about the results of their work	11	11	14
None of the above	3	5	5
Don't know	24	26	11

Sources trusted to provide balanced information about the use of animals

Rankings were similar in New Zealand and Australia, with animal welfare organisations being the most trusted source in both countries, and politicians being the least trusted.

In the United Kingdom, veterinarians who look after the animals used in research were the most trusted source, with universities ranking second.

Table 15: Sources trusted to provide balanced information about the use of animals in scientific research, testing and teaching in <country>

Ranking	New Zealand (2023)		Australia (2022)	UK (2018)
	%	*Ranked (most to least)*	*Ranked (most to least)*	%
Animal welfare organisations, e.g., the SPCA, SAFE, HUHA (UK: Animal protection agencies)	50	*1*	*1 (~55%)*	33
Veterinarians who look after the animals used in 'research'	42	*2*	*2*	45
Animal rights organisations	*Not incl.*	*-*	*3*	*Not incl.*
People with knowledge of the subject	36	*3*	*4*	32
The NHS	Not incl.	*-*	*Not incl.*	29
Government / research institutes	28	*4*	*6*	26
Environmental organisations	27	*5=*	*7*	25
Medical research charities, e.g., Cancer Society, NZ Heart Foundation	27	*5=*	*9*	24
Universities	26	*7*	*5*	40
Non-Government research institutes	22	*8*	*8*	19
Your veterinarian who looks after your animal/s or pets	22	*9*	*Not incl.*	*Not incl.*
Organisations that support animal use 'research'; e.g., research. funders	17	*10*	*10*	7
News media	17	*11*	*Not incl.*	*Not incl.*
Farming organisations	16	*12*	*11*	13
Patient advocacy groups (e.g., NZ Organisation for Rare Diseases)	14	*13*	*14*	9
Companies/businesses that undertake research using animals	13	*14*	*12*	6
Companies/businesses that sell products developed from animal research	9	*15*	*13*	4
Iwi / Māori groups / Kaumātua	9	*16*	*Not incl.*	*Not incl.*
Politicians / Members of Parliament	6	*17*	*15*	6
Other	1	*18*	*16*	1
None of these	4	-	-	8
Don’t know	9	-	-	7

Interest in finding out more about ongoing work

Australians and those in the United Kingdom expressed greater interest than New Zealand respondents in finding out more about ongoing work to find alternatives to using animals and/or to improve the welfare of animals used. (*Note: difference in the Don't know positioning in the scale and percentages.)*

Table 16: Interest in finding out more about ongoing work

Interest in finding out more about…	NZ	Very interest-ed	Moderate-ly interest-ed	Some-what interest-ed	Slightly interest-ed	Not at all interest-ed	Don't know
	Aus	Very interest-ed	Some-what interest-ed	Don't know	Some-what un-intereste d	Not at all	-
Base (total sample)		%	%	%	%	%	%
The ongoing work to find alternative to using animals in research, testing and teaching	**NZ**	24	21	25	16	11	4
	Aus	23	43	21	7	5	-
	UK	60					
The ongoing work to improve the welfare of animals used in research, testing and teaching	**NZ**	21	20	27	17	10	4
	Aus	30	40	19	6	5	-
	UK	59					

Preferred methods of receiving information about animal research

There were some differences between New Zealand and UK, which reflect changes in the media landscape since 2016.

Table 17: Preferred ways of receiving information about animal research

Preferred methods	New Zealand (2023)	UK (2018)
Based: Those who want more information	1,135	Total sample 1,011
	%	%
Official websites from research organisations / (*UK: websites*)	40	24
Television	36	29
Social media (Facebook, Instagram, etc.)	32	17
National newspaper	26	21
Online (forum, blog, etc.)	24	
Scientific / medical magazine / journal (*UK: specialist magazines*)	22	
Newsletter from organisations undertaking research	22	*Not incl.*
Radio (*UK: national radio*)	17	13
Local radio	*Not incl.*	
Meeting / Talk with experts (e.g., researchers, specialist charities) / lecture	13	

Preferred methods	New Zealand (2023)	UK (2018)
General interest magazine	10	
Poster / billboard	9	
Telephone information line	3	
Other	2	
Don't want more information	6	29
Don't know	3	

**Note: only the top 5 sources are shown for the UK sample. Results are based on total sample, not only those who have indicated interest in receiving more information*

Appendix 1: Sample profile

The tables below show details of the sample achieved. The first column indicates the numbers of respondents who responded to the survey, the second column indicates the number once the sample was weighted according to 2018 Census data (by age, gender and ethnicity) and the third column indicates the proportion of the total sample, for the weighted subgroups.

Table 18: Sample profile tables

Gender	Unweighted Count	Weighted Count	Weighted %
Male	579	642	49
Female	738	625	51

The gender question asked included a 'gender diverse' response option alongside male and female. Two respondents chose this option. For weighting purposes these responses were included in the larger group 'female'.

Age	Unweighted Count	Weighted Count	Weighted %
Under 25 years	173	162	12
25-34	325	247	19
35-44	232	210	16
45-54	204	225	17
55-64	168	203	16
65-74	148	181	14
75 plus	67	90	7

Ethnicity	Unweighted Count	Weighted Count	Weighted %
New Zealand European	773	969	66
Māori	431	182	14
Pasifika	227	87	7
Asian	130	197	15
Other	31	25	2

Note: Respondents could nominate more than one ethnicity.

Ethnicity (detailed)	Weighted %
New Zealand European	66
New Zealand Māori	14
Samoan	3
Cook Island Māori	2
Tongan	1
Fijian	1
Other Pacific Islander	1
Chinese	5
Indian	5
Other European (including Australian, English)	10
Other Asian	5
Other	2
Prefer not to say	<1
Sum	**114**

Region	Weighted %
Auckland	33
Upper North Island (excluding Auckland)	24
Lower North Island	18
South Island	25

Urban status	Weighted %
A major centre	58
A provincial city	20
A provincial centre	12
A rural area	9

Qualification	Weighted %
School qualification	25
Trade Certificate	7
Advanced Trade Certificate	4
Other Certificate / Diploma	17
Bachelor degree/ Graduate Certificate / Graduate diploma	27
Honours degree / postgraduate certificate / postgraduate diploma	7
Masters degree	8
PhD / doctorate degree	2
Other New Zealand qualification (please specify)	1
Other overseas qualification (please specify)	1

Prefer not to say	3

Occupation	Weighted %
Student (secondary or tertiary)	77
Home duties (not otherwise in paid employment)	2
Social welfare beneficiary / unemployed	1
Retired / super annuitant	2
Clerical or sales employee	3
Semi-skilled worker	9
Technical or skilled worker	2
Business Manager / executive	3
Business proprietor or self-employed	4
Teacher / nurse / Police / other trained service worker	8
Professional or senior government official	10
Agricultural, labourer, manual or domestic worker	5
Farm owner or farm manager	1
Other	4
Net business person (includes business manager, business proprietor/self employed, farm owner/manager)	*16*

Household income	Weighted %
$40,000 or less	18
$40,001- $70,000	24
$70,001- $100,000	14
$100,001- $150,000	21
$150,001- $200,000	9
More than $200,000	5
Don’t know / prefer not to say	9

Involvement with animal research	Weighted %
I have been involved in the last five years	5
I have been involved, but not in the last five years	8
I have never been involved in research, testing or teaching using animals	85
Prefer not to say	3

Involvement with animal research varied by age: 15% across the total sample, compared with 24% among under 35-year-olds, 16% among those aged 35- to -54 years and 7% among the 55 plus age group.

Whether work with animals	Weighted %
I am a farmer	3
I am a veterinarian, veterinarian paraprofessional, etc.	2
I work with wildlife, or in a zoo	2
I work with animals in another way	3
Do not work with animals	90

The prevalence of working with animals in any capacity varied by age: 10% across the total sample, compared with 17% among under 35-year-olds, 7% among those aged 35- to -54 years and 6% among the 55 plus age group.

Involvement with animal protection organisation	Weighted %
I have been involved with an animal protection organisation in the last five years	6
I have been involved, but not in the last five years	8
I have never been involved with an animal protection organisation	80
Prefer not to say	6

Involvement with an animal protection organisation varied by age: 14% across the total sample, compared with 21% among under 35-year-olds, 14% among those aged 35- to -54 years and 9% among the 55 plus age group.

Pet ownership	Weighted %
Cat(s)	43
Dog(s)	37
Lamb(s)/ Sheep	2
Calf/ Calves/ Cattle	2
Bird(s)	6
Reptile(s) (Lizard, Etc.)	1
Fish and/or Amphibia (Frogs, etc.)	6
Other	4
No pets	33
Sum	**133**
Net Cats and/or dogs	64

Religion	Weighted %
Christianity	39
Islam	2
Buddhism	2
Hinduism	3
Judaism	0
Other	4
No religion	46
Prefer not to say	5

Diet	Weighted %
Omnivore (I eat both plant and animal-based foods)	77
Lacto-vegetarian (I eat dairy, but no meat or eggs)	2
Ovo-vegetarian (I eat eggs, but no meat or dairy)	1
Pescatarian (I eat fish, but no other meat)	2
Vegan (I eat no food of animal origin)	3
Flexitarian (I eat a primarily vegetarian diet, but occasionally eat fish or meat)	9
Other	2
Prefer not to say	3

Appendix 2: Subgroup analysis

This Appendix contains detailed subgroup analysis for key question sets.

For Section 5: Views about Animal Use in Research

Views about the practice of scientific research using animals

Key subgroup differences (level of agreement or disagreement) with five statements about the practice of scientific research involving animals are as follows.

- **Researchers could do more to reduce the suffering of animals used in scientific research (70% agreement and 5% disagreement):** agreement was significantly higher among those involved with animal protection (82%), women (75% cf. 65% among men), those of Māori ethnicity (74%), and pet owners (73%). There are no significant age differences.
- **Researchers are working to find alternatives to using animals in scientific research (53% agreement and 7% disagreement):** agreement was highest among those involved in animal research (67%), and men (59%). Disagreement was higher among under 25s (15%) and under 35s (11%), along with those involved in animal protection (11%).
- **The use of animals for medical research is important to human health (48% agreement and 22% disagreement)**: agreement was greater among those involved in animal research (70%), men (60% cf. 36% among women), respondents of Asian ethnicities (58%), those aged 35 to 44 or 65 plus (55% agreement) and those with no pets (57%). Disagreement was higher among those involved with animal protection (29%) and/or those who follow a vegan diet (42%).
- **Scientific research is not always carried out to high standards (48% agreement and 10% disagreement)**: agreement was highest among those involved in animal protection (69%) and higher than average among those involved with animal research (57%), those of Māori ethnicity (56%), those aged under 35 years (56%) and people with pets (52%). Disagreement was higher among those aged over 65 years (16%).
- **Scientific research is carried out on animals only where there is no alternative (40% agreement and 23% disagreement):** 56% of those involved in animal research agreed, as did 48% of men, and 44% of those with no pet animals). Those of Asian ethnicities (52%) were more likely to agree than other respondents. Only 29% of Māori agreed with this statement. Disagreement was greater among those involved in animal protection (11%). A high proportion of women (21%) said they don't know whether this is the case.

Whether animal use is allowed for each of eight types of research (Section 4)

Table 19: Subgroups who consider animal use is allowed for each of eight types of research

Subgroup	Observ-ational studies, e.g., monitor species popu-lations	Biological research re animal health & welfare	Develop new treat-ments for specific diseases	Develop new methods of medical diagnosis	Biological research re human body	Safety testing non-medical, e.g., industry / farming chemicals	Testing cosmetics / ingred-ients	Safety testing non-medical, e.g., home cleaning product ingreds
	%	%	%	%	%	%	%	%
Total sample % - Think this type of research is allowed	**53**	**52**	**50**	**46**	**43**	**28**	**27**	**24**
Involved with animal research	66	76	68	66	67	54	40	48
Involved with animal protection	61	64	56	56	58	42	41	45
Aware of ANZCCART Openness Agreement	70	77	68	67	72	56	46	63
Seen / heard something about animal research	78	82	68	71	66	54	42	52
Business people	62	65	59	53	51	41	26 *	33
Moderately / very interested in finding out more about work re alternatives to using animals	60	58	57	50	49	32	32	28
Moderately / very interested in finding out more about work to improve animal welfare	61	61	57	52	49	35	33	28
Men	55	55	53	51	50	30	27	28
65 years plus	61	61	58	53	48	24	41**	16

(Percentages shown in blue are statistically significantly higher than the total sample result. Percentages shown in red are statistically significantly lower than the total sample result.)

Note:
* 43% of business people thought that animal use in cosmetic testing is not allowed, compared with 33% of the total sample
** 34% of those aged 35 to 44 years, thought that cosmetic testing using animals is allowed.

Acceptability of animal use for eleven different research purposes

Subgroup differences tended to be consistent across the eleven different research areas:

- Those **involved in animal research** considered the use of animals for all eleven purposes more acceptable than the total sample. The greatest differences were apparent in their acceptance of using animals for biological research (81% cf. 63% overall) and for medical research (71% cf. 53% overall). They were also more likely to support animal use for research purposes that the total sample does not find acceptable. For example, 58% considered the use of animals for producing biological agents and/or public health/product testing to be acceptable, compared with only 35% and 34% of the total sample respectively. Four in ten (40%) considered using animals to produce offspring with compromised welfare acceptable, compared with only 17% overall.
- The views of those **involved in animal protection** were generally in line with those of the total sample, with a few exceptions. For example, 32% considered animal use acceptable to produce offspring with compromised welfare, compared with only 17% of the total sample. They were more likely to consider testing (public health / product) unacceptable than the total sample (43% cf. 33% overall), to regard basic biological research as unacceptable (14% cf. 10% overall) and/or to consider animal use for medical research is *completely unacceptable* (12% cf. 8% overall).
- There are **gender** differences: typically, men were more accepting of each type of research than women. For example, 70% of men considered that species conservation is acceptable, compared with 56% of women.
- Respondents who described themselves as **business people** were more supportive of animal use for all the areas, than respondents in other types of employment.
- Some **age differences** were apparent in perceived acceptability, although these were not consistent across all purposes. Those aged 75 plus were significantly more accepting of animal use for all purposes other than teaching, for example, 78% were accepting of animal use for species conservation (cf. 63% overall) and 81% were accepting of animal use for animal husbandry (81% cf. 58% overall). The 65 plus age group were more accepting of animal use for medical research purposes than younger people (64% cf. 50% among those aged under 65 years).
- Those aged 35 to 44 years were more accepting of animal use for teaching and instruction than other age groups (55% accepting cf. 46% overall).
- Some age groups considered a few research areas to be particularly unacceptable. For example, 28% of those aged under 25 and 29% of those aged 55 to 64 years considered animal use for medical research to be unacceptable, compared with 20% overall. Forty four percent of under 25-year-olds considered using animals to produce biological agents is unacceptable, compared with 26% of over 65-year-olds. And 39% of those aged under 35 considered animal use for testing (public health or product safety / efficacy) unacceptable, compared with 23% of those aged 65 plus over.
- **Ethnicity related differences** were apparent. Europeans and those of Asian ethnicities tended to be most accepting of animal use for each purpose. Those of Asian ethnicity were significantly more accepting than Europeans (and other ethnicities) of animal use for medical research (64% cf. 53%).
- Māori and Pasifika were less accepting of animal use for all purposes than respondents of other ethnicities. Their responses tend to be similar, although Pasifika are least accepting of use for animal husbandry (41% acceptable, compared with 48% among Māori respondents.

Table 20: Acceptability of animal use for different research purposes, by ethnicity

Acceptability of using animals for... (% Totally acceptable and Acceptable)	Total	European	Māori	Pasifika	Asian
Base	1,317	773	431	227	130
	%	%	%	%	%
Veterinary research	69	70	63	63	76
Species conservation	65	65	49	47	62
Basic biological research	63	63	56	59	69

Acceptability of using animals for... (% Totally acceptable and Acceptable)	Total	European	Māori	Pasifika	Asian
Environmental management	62	63	52	52	67
Developing alternatives to live animal use	62	65	54	47	53
Animal husbandry	58	60	48	41	58
Medical research	53	52	45	45	64
Teaching and instruction	46	47	35	34	50
Producing biological agents	35	35	24	25	46
Testing	34	34	27	28	41
Producing offspring with compromised welfare	17	15	15	18	27

(Note: percentages shown in blue are statistically significantly higher than the total sample result)

- Those who **do not own pets** were slightly more supportive of animal use for three research purposes than the total sample: finding animal use acceptable for teaching (50% acceptable cf. 46% overall), for medical health purposes (59% cf. 53% overall) and for testing (42% acceptable cf. 34% overall).
- While the sample size was small (n=33), those who **follow a vegan diet** were strongly opposed to the use of animals for testing (63% considering this unacceptable, compared with 33% of the total sample), and also to animal use for producing biological agents (68% considering this unacceptable, compared with 32% of all respondents). They were generally more unaccepting of all uses, other than for basic biological research, producing offspring with compromised welfare and developing alternatives to using live animals.

The acceptability of animal use in research to test potentially harmful chemicals in three use areas - harm to people, animals and/or plants and the environment

Subgroup patterns were similar to those noted in the previous question set: those involved in animal research were more accepting than others, while women and those under 25 were less accepting. Pet owners also considered the use of animals particularly unacceptable.

- Those **involved in animal research** were more accepting of animal use to test potentially harmful chemicals for each of the three areas; 36% considering use acceptable if the chemicals could potentially harm people, 38% if the chemicals could harm pets or other animals, and 29% considering it acceptable if the chemicals tested could harm plants or the environment (cf. 19% overall acceptability).
- Those involved in animal protection were more accepting of animal use in testing chemicals that might potentially harm animals (26% cf. 19% overall) and/or plants or the environment (29% cf. 19% overall).
- There are **gender differences**. Women were much more unaccepting of each potentially harmful use. For example, 71% of women considered testing chemicals that might cause harm to people unacceptable, compared with 58% of men. Results were similar for the other two potential uses.
- Two **age groups** were less supportive than other age groups; 71% of those aged under 25 and those aged 55 to 64 considered it unacceptable to use animals to test chemicals that might cause harm to people.
- **Pet owners** (particularly dog and cat owners) considered these three uses particularly unacceptable: 67% consider it unacceptable to use animals to test chemicals that might harm people, 66% unacceptable for chemicals that might harm pets and other animals, and 62% unacceptable for testing chemicals that might harm plants or the environment.
- Respondents who **follow a vegan diet** thought the use of animals to test chemicals that might harm people and/or pets to be highly unacceptable (with 83% and 84% unacceptable ratings respectively). Flexitarians held similar views to those of vegans, although not as marked (75% considering potential harm to people unacceptable, 72% considering harm to animals unacceptable, and 74% considering potential harm to plants and/or the environment unacceptable).

For Section 6: Support for using different animal species in research

The acceptability of using 21 animal species/types in five research settings

Subgroups who were more supportive tended to be the same groups who held more supportive views on related topics: that is, men, those involved with animal research, those who are not pet owners, those who have seen or heard anything about animal research in the last twelve months, and respondents of Asian ethnicity.

The following table shows subgroups who used the response "**all species are unacceptable for this use**" to a significantly greater level than the total sample, for at least one purpose.

Table 21: Subgroups more likely than total sample to consider the use of all animal species/types to be unacceptable in…

Subgroup: more likely to consider this unacceptable	Medical research to benefit people	Research into animal health	Environment -al research	Teaching	Safety testing of non-medical products
	%	%	%	%	%
Not acceptable to use any species for this use (total sample %)	**30**	**23**	**31**	**24**	**41**
Women	39	30	40	31	50
Māori	40	28	37	30	46
Pasifika	39	29	32	30	40
Aged under 35 years	35	23	31	26	43
Aged 55 to 64 years	31	30	33	30	48
Students	45	30	48	32	52
Own pet/s	36	27	34	27	45
Involved with animal protection	37	27	33	29	39
Follow a vegan diet	68	68	64	58	72
Follow a flexitarian diet	40	29	40	30	49
Have no religion	33	25	34	28	43
Moderately / very interested in finding out more about alternatives to using animals	36	29	36	29	49
Moderately / very interested in finding out more about animal welfare	36	27	34	28	47

(Percentages shown in blue are statistically significantly higher than the total sample result)

For Section 7: Governance and regulations

Views about rules and regulations

Greater agreement with each statement was apparent among those involved in animal research, or animal protection, also among those aware of the ANZCCART Openness Agreement (who are those involved in animal research and/or protection organisations). Agreement with each statement among men tended to be around five percentage points higher than the overall sample result. Subgroup differences of note were as follows:

- The call for **greater openness among institutions about their use of animals** was high across the whole sample, with particularly high levels of agreement among those aged 25 to 34 years (81%) and those involved in animal protection (82%).
- Those involved with animal protection had the highest agreement (76%) with the **need for greater public involvement in the decision-making process for granting approval for animal research.** Those of Māori and/or Pasifika ethnicities also had greater agreement than others (64% and 65% agreement respectively, compared with 54% across the total sample).
- Agreement that **the government should have more direct involvement in approval of animal use in research** was greater among those involved in animal protection (60%), those aware of the ANZCCART Openness Agreement (64%), those involved in animal research (56%) and the 25-to-44-year age group (55%). Respondents who practised the Hindu faith (64%) were more likely than those of other religions to agree, along with 53% of those who followed an 'other' religion (primarily Islam or Buddhism).
- Those involved in animal research were more likely than others to agree that **approval of animal use in 'research' by an AEC rather than directly by government is satisfactory** (68% cf. 48% of the total sample). And 20% of those involved with animal protection disagreed with this, compared with 14% of the total sample disagreeing.
- While 38% overall agreed that **the decision-making process is clear to them**, seven in ten (71%) of those involved in animal research agreed with this, as did 57% of those involved in animal protection and 68% of those aware of the ANZCCART Openness Agreement.
- The 25-to-44-year age group had higher levels of agreement with most statements than older people did. For example, 63% of the under 35s agreed that there needs to be greater public involvement in decision making. However, the 65 plus age group also had stronger agreement with statements about approval of animal use by an AEC being satisfactory (53%).

Views about how well rules and regulations are applied

In general, those involved in animal research and business people had higher levels of trust in the regulatory system, while those involved with animal protection have lower levels of trust. Those who follow a vegan diet had low levels of trust.

- While 35% overall agreed that **they do not trust the regulatory system around the use of animals in research**, 67% of those involved with animal protection agreed that they don't trust the system. Lack of trust was also greater than average among those who practised a vegan diet (60% agreement) and those who have heard of the ANZCCART Openness Agreement (56% agreement). Just under half of those involved in animal research (48%) agreed that they do not trust the regulatory system. People aged 25 to 34 were more likely than older people to agree that they do not trust the system, but not strongly so (44% agreement).
- Fewer than half (49%) of all respondents agreed that **they trust those using animals in research not to cause them unnecessary suffering,** while 24% disagreed. Agreement (i.e., positive trust) was higher among those aware of the ANZCCART Openness Agreement (61%), those involved with animal research (58%), those aged 65 plus, those of Asian ethnicities (56%), business people (54%) and men (52%). Disagreement (i.e., a lack of trust) was greater than the overall average of 24% among those who follow a vegan diet (46%), those involved with animal protection (31%) and respondents aged 55 to 64 years (30%).

- A similar pattern of above average trust was apparent for trust in regulators' uncovering any misconduct. Just under half (49%) agree that **they trust the regulators to uncover misconduct at animal research facilities**. Trust was highest among business people (64%), those aware of the ANZCCART Openness Agreement (65%), those involved with animal research (63%), those aged 65 plus (60%) or those aged 35 to 44 years (57%), those of Asian ethnicities (58%), and men (56%).
- While around half (49%) agreed that **there might be unnecessary duplication of scientific research involving animals,** agreement was much higher among those involved with animal protection and those who follow a vegan diet (71% each). It was also higher than average among those who have heard of the ANZCCART Openness Agreement (64%) and those involved with animal research (58%). Pet owners were also more inclined to agree (54%).
- The view that **there are strict rules on the use of animals in research, testing and teaching** was most strongly held by those involved with animal research and those who have heard of the ANZCCART Openness Agreement (65% each, cf. 45% across the total sample). Business people (63%) and those aged 65% (58%) also had comparatively high levels of agreement, along with those involved with animal protection (54%). Those of Māori ethnicity were much less likely to agree that there are strict rules (only 27% agreeing.)
- While nearly half the sample agreed that there are strict rules, only 33% agreed that **the rules are well enforced**. Positive views of enforcement were most strongly held among those involved with animal research (59%), and those aware of the ANZCCART Openness Agreement (65%). Views were also more positive among those involved with animal protection (44%), noting however that 17% of this subgroup disagreed that they are well enforced, compared with 10% disagreement overall. Those of Asian ethnicities (48%) and/or who practised the Hindu faith (47%), and people aged 25 to 34 (39%) or 35 to 44 years (43%) also had higher levels of agreement.
- Just under four in ten respondents (38%) agreed that **the use of animals sometimes takes place without an official approval**. Those involved with animal protection were most likely to agree that this happens (58%), while 54% of those aware of the ANZCCART Openness Agreement agreed, as did 51% of those involved with animal research. Business people had above average agreement, (45% agreeing that animal use may take place sometimes without official approval).
- Views about **the ease of finding information about the approval process** were reasonably consistent across the sample (only 22% finding it easy). Those with more positive views included those involved with animal research (56%) and those aware of the ANZCCART Openness Agreement (64%).

Perceptions of organisations that use animals for research in New Zealand

Those aware of the ANZCCART Openness Agreement and those involved in animal research tended to have more positive views of organisations that use animals for research in New Zealand than others, although those involved in animal research were also more likely than others to note dishonesty and poor welfare standards. Business people, men and/or older people also held more positive views.

People aged under 35 had more negative perceptions than others relating to perceived organisational secrecy and/or dishonesty. Respondents involved with animal protection also held more negative views.

Table 22: Subgroup differences for views of organisations that use animals in 'research'

Acceptability of using animals for... (% Acceptable)	More likely to mention			More likely to mention
Base	1,317			1,317
Carry out work essential for human health (34%)	• Aged 65 plus (46%) • Business people (45%) • Involved with animal research (44%)		**Unsure**	• Aged 45 to 64 years (32%) • Pasifika (31%) • Māori (29%)
Well regulated (27%)	• Aged 65 plus (40%) • Heard of ANZCCART Openness Agreement (35%) • Business people (33%) • Men (32%)		**Have conflicts of interest (24%) as animal research is an aspect of their business**	• Involved with animal protection (36%) • Have a flexitarian diet (35%) • Pet owners (28%)
Have good mechanisms for oversight of animal research (21%)	• Farmers (44%) • Involved with animal research (35%) • Heard of ANZCCART Openness Agreement (32%) • Business people (32%) • Aged 65 plus (31%) • Men (26%)		**Are dishonest about results of their work (11%)**	• Aged under 25 (22%) • Aged under 35 (18%) • Involved with animal research (20%) • Heard of ANZCCART (19%)
Adhere to good animal welfare standards (26%)	• Farmers (45%) • Involved with animal research (42%) • Practise Hindu faith (42%) • Heard of ANZCCART Openness Agreement (39%) • Business people (39%) • Aged 55 plus (32%) or 65 plus (39%)		**Have poor animal welfare standards (14%)**	• Involved with animal protection (25%) • Involved with animal research (17%) • Pasifika (20%) • Māori (17%) • Under 35 (19%)
Open about their work (16%)	• Heard of ANZCCART Openness Agreement (33%) • Involved with animal research (28%) • Involved with wildlife / vet (27%) • Business people (24%) • Aged 65 plus (24%)		**Secretive (27%)**	• Involved with animal protection (41%) • Aged under 25 (36%)

For Section 8: Trusted information sources and interest in knowing more

Sources of balanced information about use of animals in research

Respondents were asked about which organisations and groups they consider to be trusted information sources (from a prompted list).

- Trust in **animal welfare organisations** (50%) was higher among women (56%), over 55-year-olds (59%), beneficiaries (59%) and agricultural workers (58%).
- Trust in **universities** (26%) was higher among students (40%), those without pets (32%), those aged 55 or over (31%) and men (30%).
- Trust in **organisations and companies involved in research using animals** (17% mention overall) was higher among those aware of the ANZCCART Openness Agreement (27%), and those involved in animal research (34% mention) or animal protection organisations (24% mention). Farmers and/or those in business occupations also had greater trust in these entities.
- Trust in **iwi, Māori groups and/or kaumātua** to provide balanced information was higher among those of Māori ethnicity and/or Pasifika (26% and 16% respectively) compared with 9% overall.

Interest in finding out more about ongoing work

The profiles of those with greater interest in ongoing work to find alternatives and/or to improve the welfare of animals used in research were generally similar. They included those with farm animals, business people, those involved with animal research and/or animal protection organisations, pet owners, women and those aged under 35 years.

Table 23: Interest in finding out more about ongoing work

To find alternatives to using animals (45% interested; 27% very interested)		**To improve the welfare of animals used in research** (42% interested; 27% very interested)
Higher interest		**Higher interest**
• Have farm animals (61% interested) • Aware of ANZCCART Openness Agreement (66% interested; 42% very interested) • Seen or heard something about animals in research (66% interested; 43% very interested) • Involved with animal protection (66% interested; 33% very interested) • Involved with veterinary or with wildlife (63% interested) • Follow a flexitarian diet (58% interested) • Employed in business (55% interested; 32% very interested) • Involved with animal research (53% interested) • Pet owners (50% interested; 28% very interested) • Women (47% interested; 27% very interested) • Aged under 35 (49% interested; 28% very interested)		• Aware of ANZCCART Openness Agreement (70% interested; 37% very interested) • Have farm animals (70% interested; 42% very interested) • Seen or heard something about animals in research (68% interested; 38% very interested) • Farmers (64% interested; 47% very interested) • Involved with animal protection (64% interested; 33% very interested) • Involved with animal research (58% interested) • Employed in business (56% interested; 29% very interested) • Agricultural workers (52% interested) • Aged under 35 years (49% interested) • Pet owners (47% interested; 26% very interested)

Appendix 3: Questionnaire

ANIMAL RESEARCH QUESTIONNAIRE 2023 (29 May 2023)

Public Views on Use of Animals in Research, Testing and Teaching in Aotearoa New Zealand

Introduction

This study aims to understand the views of New Zealanders on the use of animals in scientific research, testing and teaching. We would like to invite you to participate in this study. Please read the information below to understand what is involved before deciding whether to participate.

This survey asks questions about your knowledge about and attitudes towards the use of animals in research, testing and teaching in New Zealand, as well as a few general questions about you. It is being undertaken by the NZ Board of ANZCCART (Australia New Zealand Council for the Care of Animals in Research and Teaching), a committee of the Royal Society Te Apārangi.

A broad range of New Zealanders over the age of 18 years will be asked to participate. The survey has 38 questions and should take you around 10 to 12 minutes to complete.

No identifying information will be collected in the survey so your responses will be anonymous. A summary of the findings will be available on the ANZCCART website (anzccart.org.nz). Results may also be published in a scientific journal or presented at a conference/meeting. Data collected will be securely stored in such a way that only the researchers and NielsenIQ will be able to access it. The data will be retained in secure storage for at least 5 years after the end of the study.

Your participation is voluntary. You have the right to withdraw at any point during the survey, for any reason, and without any disadvantage to you. After completion of the survey, you will not be able to withdraw because the data are collected anonymously.

By clicking **"Continue>>"** below you are indicating that you have read this information and give your consent to take part in the survey and to the use of the information you provide.

If you have questions about this survey, please contact Prof. Ngaio Beausoleil, School of Veterinary Science, Massey University phone 06-951-8714, email N.J.Beausoleil@massey.ac.nz or Dr Mike King, Bioethics Centre, University of Otago phone 03-471-6130, email mike.king@otago.ac.nz

If you would like to view (NielsenIQ)'s privacy statement, please click here. If you require assistance at any time during the survey, or would like to contact us, please click on the email image at the bottom of each screen (IsabelMorse@nielseniq.com).

This project has been evaluated by peer review and judged to be low risk (Notification number: 4000027548). Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researchers named above are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researchers, please contact Patsy Broad phone 06-356-9099 ext 83840 or email humanethics@massey.ac.nz

As you move through the survey, please use the buttons at the bottom of each screen. Do not use your browser buttons.

To begin, click on the "Continue >>" button below. As you move through the survey, please use the buttons at the bottom of each screen. Do not use your browser buttons.

Q1	What is your gender? [SA]	Code	Route
	Male	1	
	Female	2	
	Another gender	3	

Q2	Which of the following age groups are you in? [SA]	Code	Route
	Less than 18 years	96	End with thanks
	18-24 years	1	
	25-29 years	2	
	30-34 years	3	
	35-39 years	4	
	40-44 years	5	
	45-49 years	6	
	50-54 years	7	
	55-59 years	8	
	60-64 years	9	
	65-69 years	10	
	70-74 years	11	
	75 years plus	12	

Q3	Which ethnic group or groups do you belong to? [MA]	Code	Route
	New Zealand European	01	
	Other European (including Australian, English)	11	
	New Zealand Māori	02	
	Cook Island Māori	04	
	Samoan	03	
	Tongan	05	
	Nuiean	06	
	Fijian	07	
	Other Pacific Islander	08	
	Chinese	09	
	Indian	10	
	Other Asian	11	
	Other (please specify)	98	
	Prefer not to say	99	

Q4	Firstly, thinking about your attitude toward the use of animals in scientific research, testing and teaching. How much do you care about this issue? [SA]	Code	Route
	Not at all	1	
	Slightly	2	
	Somewhat	3	
	Moderately	4	
	Very much	5	
	Don't know	9	

Q5 ***Rotate statements***
How well informed do you feel about…?
One answer for each

	Not informed all	**Slightly well informed**	**Somewhat well informed**	**Moderately well informed**	**Very well informed**	***Don't know***
(R1) The use of animals in scientific research, testing and teaching in New Zealand	1	2	3	4	5	9
(R2) The process required to gain approval for animal use in scientific research, testing and teaching in New Zealand	1	2	3	4	5	9

Q6 ***Rotate statements***
How acceptable to you think the use of animals is, in each of the following situations?

	Totally unacceptable	**Unacceptable**	**Neutral**	**Acceptable**	**Totally acceptable**	***Don't know***
(R1) **Teaching:** Animals used for teaching or instruction, at any NCEA or qualification level.	1	2	3	4	5	9
(R2) **Species conservation:** Work directed towards species conservation: the species to be conserved may or may not be directly involved, e.g., nutritional studies using a more common species can benefit an endangered species.	1	2	3	4	5	9
(R3) **Environmental management:** Environmental management including the control of animal pests and research into methods of reducing production of greenhouse gases.	1	2	3	4	5	9
(R4) **Animal husbandry:** Animal husbandry, including reproduction, nutrition, growth, production	1	2	3	4	5	9
(R5) **Basic biological research**: Research that aims to	1	2	3	4	5	9

understanding the workings of living things						
(R6) **Medical research:** Research aimed at improving the health and welfare of humans, but not research on human subjects.	1	2	3	4	5	9
(R7) **Veterinary research**: Research aimed at improving the health and welfare of production and companion animals.	1	2	3	4	5	9
(R8) **Testing:** Animals used for public health testing or to ensure the safety, efficacy or quality of products to meet regulatory requirements for human or animal products, either in New Zealand or internationally.....	1	2	3	4	5	9
(R9) **Production of biological agents**: Animals used for raising antibodies or for the supply of blood products.	1	2	3	4	5	9
(R10) **Offspring with compromised welfare**: Animals used for the purpose of producing offspring with compromised welfare, that is, offspring that may be/are likely to be more susceptible or at greater risk of pain or distress during their lifetime.	1	2	3	4	5	9
(R11) **Development of alternatives to using live animals:** Work aimed at developing methods to replace or reduce the use of live animals in research, testing and teaching.	1	2	3	4	5	9

Q7 ***Rotate statements***

How acceptable do you think it is to use animals in scientific research to test chemicals that could…

	Totally unacceptable	**Unacceptable**	**Neutral**	**Acceptable**	**Totally acceptable**	***Don't know***
(R1) Harm people	1	2	3	4	5	9
(R2) Harm pets, farm animals or wildlife ..	1	2	3	4	5	9
(R3) Harm plants or the environment	1	2	3	4	5	9

Q8 ***Rotate statements***

How strongly do you agree or disagree with the following statements about the use of animals in scientific research?

ONE ANSWER FOR EACH

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	*Don't know*
(R1) The use of animals for medical research purposes is important to human health	1	2	3	4	5	9
(R2) Researchers could do more to reduce the suffering of animals used in scientific research	1	2	3	4	5	9
(R3) Scientific research using animals is not always carried out to high standards	1	2	3	4	5	9
(R4) Scientific research is carried out on animals only when there is no alternative	1	2	3	4	5	9
(R5) Researchers are working to find alternatives to using animals in scientific research	1	2	3	4	5	9

Q9 As far as you know, for which of these types of research, if any, are researchers currently allowed to use animals in New Zealand (with the applicable approval)? **One answer for each** **RANDOMISE ORDER**	Yes	No	Don't know
(R1) Biological research to advance our understanding of the human body	1	2	9
(R2) Trying to develop new treatments / procedures for specific diseases	1	2	9
(R3) Biological research to advance our understanding of animal health and welfare	1	2	9
(R4) Testing cosmetics / ingredients for cosmetics	1	2	9
(R5) Developing new methods of medical diagnosis	1	2	9
(R6) Safety testing of non-medical products such as the ingredients of home cleaning products	1	2	9
(R7) Safety testing of non-medical products such as chemicals used in industry or farming	1	2	9
(R8) Observational studies such as monitoring species population and effects on the environment	1	2	9

We now have a few questions about the acceptability of using different types of animals **for five** different types of research.

Programmer: Please randomise order of Q10, Q11, Q12, Q13, Q14

Q10	Which types of animals, if any, do you think it is acceptable to use for **medical research to benefit people**? **One answer for each** **RANDOMISE ORDER**	**Yes**	**No**	**Don't know**
(R1)	Amphibia, e.g., frogs	1	2	9
(R2)	Reptiles	1	2	9
(R3)	Birds, e.g., chickens, ducks, pigeons, parrots	1	2	9
(R4)	Mice	1	2	9
(R5)	Rats	1	2	9
(R6)	Cats	1	2	9
(R7)	Dogs…	1	2	9
(R8)	Pigs	1	2	9
(R9)	Cattle	1	2	9
(R10)	Sheep	1	2	9
(R11)	Deer	1	2	9
(R12)	Goats	1	2	9
(R13)	Horses	1	2	9
(R14)	Guinea pigs or hamsters …	1	2	9
(R15)	Stoats or ferrets	1	2	9
(R16)	Rabbits	1	2	9
(R17)	Possums	1	2	9
(R18)	Fish (e.g., trout, goldfish, eels)	1	2	9
(R19)	Crustaceans, e.g., crabs, lobsters, crayfish…	1	2	9
(R20)	Cephalopods, e.g., octopus, squid…	1	2	9
(R21)	Marine mammals, e.g., dolphins, whales	1	2	9
R98)	Not acceptable to use any animals for medical research to benefit people	1	-	-

Q11	Which types of animals, if any, do you think it is acceptable to use for **research into animal health**? **One answer for each** **RANDOMISE ORDER**	**Yes**	**No**	**Don't know**
(R1)	***Q10 animal list***	1	2	9
(R98)	Not acceptable to use any animals for research into animal health	1	-	-

Q12	Which types of animals, if any, do you think it is acceptable to use for **environmental research** (for example, to look at the effect of chemicals on the food chain or the effect of air pollution on health)? **One answer for each** **RANDOMISE ORDER**	**Yes**	**No**	**Don't know**

(R1)	***Q10 animal list***	1	2	9
(R98)	Not acceptable to use any animals for environmental research	1	-	-

		Yes	No	Don't know
Q13	Which types of animals, if any, do you think it is acceptable to use for **teaching?** **One answer for each** **RANDOMISE ORDER**			
(R1)	***Q10 animal list***	1	2	9
(R98)	Not acceptable to use any animals for teaching	1	-	-

		Yes	No	Don't know
Q14	Which types of animals, if any, do you think it is acceptable to use for **safety testing of non-medical products?** **One answer for each** **RANDOMISE ORDER**			
(R1)	***Q10 animal list***	1	2	9
(R98)	Not acceptable to use any animals for non-medical safety testing	1	-	-

Q15 ***Programmer: Ask relevant question below, to maximum 3. Please use Least Fill to randomise which Reasons question those who gave R98 response to more than 3 scenarios. Use question text below.***

If said Not acceptable to use any animals for medical research to benefit people (Q10)

Could you explain why you think it is not acceptable to use any animals for medical research to benefit people?

If said Not acceptable to use any animals for research into animal health (Q11)

Could you explain why you think it is not acceptable to use any animals for research into animal health?

If said Not acceptable to use any animals for environmental research (Q12)

Could you explain why you think it is not acceptable to use any animals for environmental research?

If said Not acceptable to use any animals for teaching (Q13)

Could you explain why you think it is not acceptable to use any animals for teaching?

If said Not acceptable to use any animals for non-medical safety testing (Q14)

Could you explain why you think it is not acceptable to use any animals for non-medical safety testing?

_____

NEW ZEALAND RULES AND REGULATIONS

Now for some questions about the rules and regulations governing the use of animals in research, testing and teaching in New Zealand.

Q16 New Zealand law requires researchers to apply to a body known as an Animal Ethics Committee (AEC) to obtain approval to use animals for research, testing and teaching. The AECs are also involved in monitoring of approved research, testing and teaching.
Membership of any AEC must include a veterinarian, a scientist, a member of an animal welfare advocacy organisation (e.g., SPCA), and a member of the public (lay person) who has never been involved in research on animals.
While the government is not directly involved in decision-making by AECs, it plays a role in the regulation of animal research through issuing licences to host AECS to institutions such as universities that conduct the research, testing or teaching and by requiring those institutions to submit annual reports.

Based on the above, how strongly do you agree or disagree with the following statements about the rules and regulations for use of animals in scientific research, testing and teaching?

ONE ANSWER FOR EACH
ROTATE STATEMENTS

	Strongly disagree	**Disagree**	**Neither agree nor disagree**	**Agree**	**Strongly agree**	***Don't know***
(R1) The decision-making process for approving animal use in research, testing and teaching is clear to me...	1	2	3	4	5	9
(R2) I think that approval of animal use in research, testing and teaching by an AEC, rather than directly by government is satisfactory.....	1	2	3	4	5	9
(R3) I think that the government should have more direct involvement in approval of animal use in research, testing and teaching	1	2	3	4	5	9
(R4) There needs to be greater involvement of the public in the decision-making process around granting approval for animal research.....	1	2	3	4	5	9
(R5) Institutions should be more open about their use of animals in research, testing and teaching	1	2	3	4	5	9

Q17 ***Rotate statements***
How strongly do you agree or disagree with the following statements about the rules and regulations on the use of animals in scientific research, testing and teaching in New Zealand?
ONE ANSWER FOR EACH…

	Strongly disagree	**Disagree**	**Neither agree nor disagree**	**Agree**	**Strongly agree**	***Don't know***
(R1) I do not trust the regulatory system around the use of animals in research, testing and teaching	1	2	3	4	5	9
(R2) I trust those using animals in research, testing and teaching not to cause them unnecessary suffering ..	1	2	3	4	5	9
(R3) I feel that unnecessary duplication of scientific research involving animals MIGHT happen.....	1	2	3	4	5	9

(R4) The use of animals in research, testing and teaching sometimes takes place without an official approval	1	2	3	4	5	9
(R5) New Zealand has strict rules on the use of animals in research, testing and teaching	1	2	3	4	5	9
(R6) The rules in New Zealand on research, testing and teaching involving animals are well enforced	1	2	3	4	5	9
(R7) I trust the regulators to uncover any misconduct at facilities that keep animals for research, testing and teaching	1	2	3	4	5	9
(R8) It is easy to find information about the approval process for animal use in research, testing and teaching and the types of research, testing and teaching that animals are used for	1	2	3	4	5	9

Q18		Code	Route
	Which, if any, of the following fit your view of organisations that use animals for scientific research, testing and teaching in New Zealand? [MA] Please select as many as you think apply **RANDOMISE ORDER (EXCEPT NONE OF THESE AND DON'T KNOW)**		
	They are secretive	1	
	They are well regulated	2	
	They have poor animal welfare standards	3	
	They carry out work essential for human health	4	
	They adhere to good animal welfare standards	5	
	They are open about their work	6	
	They are dishonest about the results of their work	7	
	They have conflicts of interest, because animal research is an aspect of their business	8	
	They provide good mechanisms for oversight of animal research	9	
	None of these	97	
	Don't know	99	

Q19		Code	Route
	Over the past twelve months, have you seen or heard anything about the use of animals in scientific research, testing or teaching in New Zealand? [SA]		
	Yes	1	
	No	2	
	Don't know	9	

Q20		Code	Route
	IF YES		

Where did you see or hear about that? [MA] Please select all that apply		
Television	1	
Radio	2	
Newspaper	3	
Scientific / medical magazine / journal	4	
General magazine	5	
Talk / speech / lecture	6	
Newsletter (from group I'm a member of)	7	
Poster / billboard	8	
Website/s	9	
Online (forum, blog, etc.)	10	
Social media (Facebook, Instagram, etc.)	11	
Other (Please specify)	98	
Don't know	99	

INFORMATION SOURCES

Q21		Code	Route
	ROTATE ORDER What sources of information, if any, would you trust to provide balanced information about the use of animals in scientific research, testing and teaching in New Zealand? [MA] Please select all that apply.		
	Universities	1	
	Animal welfare organisations, such as the SPCA, SAFE, HUHA (Helping You Help Animals)	2	
	Organisations that support the use of animals in research, testing or teaching, for example, animal research funders	3	
	Companies and businesses which carry out research, testing or teaching using animals	4	
	Companies and businesses which sell products developed from animal research	6	
	News media	7	
	Politicians / Members of Parliament	8	
	Government / research institutes	9	
	Non-Government research institutes	10	
	Environmental organisations	11	
	People with knowledge of the subject	12	
	Farming organisations	13	
	Medical research charities, such as Cancer Society, NZ Heart Foundation	14	
	Patient advocacy groups (e.g., NZ Organisation for rare diseases)	15	

Veterinarians who look after the animals used in research, testing or teaching	16	
Your veterinarian who looks after your animal/s or pets	17	
Iwi / Māori groups / Kaumātua	18	
Other (please specify)	98	
None of these	97	
Don't know	99	

Rotate statements

Q22 How interested are you in finding out more about…?

	Not all interested	Slightly interested	Some-what interested	Moderately interested	Very interested	*Don't know*
(R1) The ongoing work to find alternatives to using animals in research, testing and teaching	1	2	3	4	5	9
(R2) The ongoing work to improve the welfare of animals used in research, testing and teaching	1	2	3	4	5	9

Q23 **IF ANY INTEREST IN FINDING OUT MORE (Q22, R1 or R2 above (Codes 2, 3, 4, 5), ASK**	Code	Route
In which ways, if any, would you personally like to receive information about the use of animals in scientific research, testing and teaching? [MA]		
Please select up to three [MA]		
Television	1	
Radio	2	
National newspaper	3	
Scientific / medical magazine / journal	4	
General interest magazine	5	
Meeting / Talk with experts (e.g., researchers, specialist charities) / lecture	6	
Newsletter from organisations undertaking research	7	
Poster / billboard	8	
Official websites from research organisations	9	
Online (forum, blog, etc.)	10	
Social media (Facebook, Instagram, etc.)	11	
Telephone information line	12	
None of these	97	
Do not want more information	96	
Other (Please specify)	98	
Don't know	99	

New Zealand Openness Agreement on Animal Research and Teaching in New Zealand

		Code	Route
Q24	Do you think that organisations involved in research, testing and teaching should be more open with the public about the work they do? [SA]		
	Yes	1	
	No	2	
	Don't know	9	

		Code	Route
Q25	Before today, have you heard of the ANZCCART Openness Agreement on Animal Research and Teaching in New Zealand? [SA] ***Note to programmer: please put hover over ANZCCART:*** "Australian and New Zealand Council for the Care of Animals in Research and Teaching"		
	Yes	1	
	No	2	**) Go to classification**
	Don't know	9	**)**

		Code	Route
Q26	**IF YES TO Q25** How familiar are you with the ANZCCART Openness Agreement? [SA]		
	Not at all	1	
	Slightly familiar	2	
	Somewhat familiar	3	
	Moderately familiar	4	
	Very familiar	5	
	Don't know	9	

		Code	Route
Q27	How did you find out about the ANZCCART Openness Agreement on Animal Research and Teaching in New Zealand? [MA] Please select all that apply		
	Television	1	
	Radio	2	
	Newspaper	3	
	Scientific / medical magazine / journal	4	
	General interest magazine	5	
	Talk / speech / lecture	6	
	Newsletter (from group I'm a member of)	7	
	Poster / billboard	8	
	ANZCCART website (https://www.anzccart.org.nz/openness-agreement)	8	

Other website (please specify which website)	9	
Online (forum, blog, etc.)	10	
Social media (Facebook, Instagram, etc.)	11	
Other (Please specify)	98	
Don't know	99	

Profile questions

Finally, a few questions about you. We collect this information to ensure we interview a cross-section of the public. These details are grouped with those of other respondents and you will not be individually identified.

Q28 Do you own any pets? [MA]	Code	Route
Yes, cat/s	1	
Yes, dog/s	2	
Yes, lamb/s / sheep	3	
Yes, calf / calves	4	
Yes, bird/s	5	
Yes, reptile (lizard, etc.)	6	
Yes, fish and/or amphibia (frogs, etc)	7	
Yes, other (please specify)	98	
No	97	

Q29 Which of these statements best describes your involvement with research, testing and/or teaching using animals? [SA]	Code	Route
I have been involved in the last five years	1	
I have been involved, but not in the last five years	2	
I have never been involved in research, testing or teaching using animals	3	
Prefer not to say	4	

Q30 Do you work with animals in a paid or voluntary capacity? [SA]	Code	Route
Yes, I am a farmer	1	
Yes, I am a veterinarian, veterinarian paraprofessional, etc.	2	
Yes, I work with wildlife, or in a zoo	3	
Yes, I work with animals in another way (Please specify)	4	
No	5	

Q31	Do you support or work for an animal protection organisation, such as NZAVS, SAFE or HUHA? [SA]	Code	Route
	I have been involved with an animal protection organisation in the last five years	1	
	I have been involved, but not in the last five years	2	
	I have never been involved with an animal protection organisation	3	
	Prefer not to say	4	

Q32	Which best describes your occupation? [SA]	Code	Route
	Student (secondary or tertiary)	01	
	Home duties (not otherwise in paid employment)	02	
	Social welfare beneficiary / unemployed	03	
	Retired / super annuitant	04	
	Clerical or sales employee	05	
	Semi-skilled worker	06	
	Technical or skilled worker	07	
	Business Manager / executive	08	
	Business proprietor or self-employed	09	
	Teacher / nurse / Police / other trained service worker	10	
	Professional or senior government official	11	
	Labour, manual, agricultural or domestic worker	12	
	Farm owner or farm manager	13	
	Other (please specify)	98	

Q33	What is your highest completed qualification? [SA]	Code	Route
	School qualification	01	
	Trade Certificate	02	
	Advanced Trade Certificate	03	
	Other Certificate / Diploma	04	
	Bachelor degree/ Graduate Certificate / Graduate diploma	05	
	Honours degree / postgraduate certificate / postgraduate diploma	06	
	Masters degree	07	
	PhD / doctorate degree	08	
	Other New Zealand qualification – (please state)	09	
	Other overseas qualification (please state)	10	
	Prefer not to say	97	

Q34	What region do you live in?	Code	Route
	Northland	01	
	Auckland	02	
	Waikato	03	
	Bay of Plenty	04	
	Gisborne	05	
	Hawkes Bay	06	
	Taranaki	07	
	Manawatu-Whanganui	08	
	Wellington-Wairarapa	09	
	Tasman	10	
	Nelson	11	
	Marlborough	12	
	West Coast	13	
	Canterbury	14	
	Otago	15	
	Southland	16	
	Outside of New Zealand	98	

Q35	Which one of the following best describes the area where you live? [SA]	Code	Route
	A major centre (e.g., Auckland, Wellington, Christchurch, Dunedin)	1	
	A provincial city (e.g., Napier, Hastings, Tauranga, Timaru, Palmerston North)	2	
	A provincial town (e.g., Masterton, Westport, Kaikoura)	3	
	A rural area	4	

Q36	Which of the following best describes your diet? [SA]	Code
	Omnivore (I eat both plant and animal-based foods)	01
	Lacto-vegetarian (I eat dairy, but no meat or eggs)	02
	Ovo-vegetarian (I eat eggs, but no meat or dairy)	03
	Pescatarian (I eat fish, but no other meat)	04
	Vegan (I eat no food of animal origin)	05
	Flexitarian (I eat a primarily vegetarian diet, but occasionally eat fish or meat)	06
	Other (please specify)	98
	Prefer not to say	96

Q37	What is your religion? [SA]	Code

Christianity	01	
Islam	02	
Buddhism	03	
Hinduism	04	
Judaism	05	
Other (Please specify)	98	
No religion	97	
Prefer not to say	96	

		Code	Route
Q38	What is the total annual income of your household before tax or anything else is taken out? [SA]		
	Loss or zero income	01	
	$1-$30,000	02	
	$30,001 - $40,000	03	
	$40,001 - $50,000	04	
	$50,001 - $70,000	05	
	$70,001 - $100,000	06	
	$100,001 - $150,000	07	
	$150,001 - $200,000	08	
	$200,001 or more	09	
	Prefer not to say	97	
	Don't know	96	

Thank you for participating.

Please note: The aim of this survey is to understand people's honest attitudes towards animal research and is not intended to be upsetting or offensive in any way.

Please see https://www.anzccart.org.nz/ for more information about ANZCCART.

If you would like to find out more about the regulation and use of animals in research in New Zealand you may find the following links helpful:

- https://www.anzccart.org.nz/; https://www.naeac.org.nz/; https://www.mpi.govt.nz/animals/animal-welfare/animals-research-testing-teaching/

If you have questions about this survey, please contact Prof. Ngaio Beausoleil, School of Veterinary Science, Massey University phone 06-951-8714, email N.J.Beausoleil@massey.ac.nz or Dr Mike King, Bioethics Centre, University of Otago phone 03-471-6130, email mike.king@otago.ac.nz. This project has been evaluated by peer review and judged to be low risk (Notification number: 4000027548). Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researchers named above are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researchers, please contact Patsy Broad phone 06-356-9099 ext. 83840 or email humanethics@massey.ac.nz. A summary of the research findings will be available at anzccart.org.nz

About NIelsenIQ

NielsenIQ, the world's leading consumer intelligence company, reveals new pathways to growth for retailers and consumer goods manufacturers. With operations in more than 100 countries, NIQ delivers the most complete and clear understanding of consumer buying behavior through an advanced business intelligence platform with integrated predictive analytics. *NIQ delivers the Full View.*

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