

# CCAC FACTS & FIGURES

DATE OF REVISION: October 2023



The Canadian Council on Animal Care (CCAC) is a national, non-profit organization acting in the interest of Canadians to advance high standards of ethical animal care and use in science throughout Canada.

Created in 1968, the CCAC develops guidelines based on expert peer advice and current interpretation of scientific evidence, oversees their implementation, assesses and certifies institutions working with animals for scientific purposes, and provides tools and training resources.

## FUNDING

The CCAC is financed by the Canadian Institutes of Health Research (CIHR) and the Natural Sciences and Engineering Research Council of Canada (NSERC), with additional contributions from annual program participation fees paid by CCAC-certified institutions participating in its programs.

Designed to be equitable and affordable, while preserving the arm's-length nature of the CCAC and its programs, the fee structure ensures that the contribution of an institution is not linked to the resources required from the CCAC.

**\$3,234,274**



Audited report for April 1, 2022 - March 31, 2023

**2000+**

- VOLUNTEER EXPERTS  
veterinarians, animal welfare experts,  
researchers, bioethicists, etc.
- COMMUNITY MEMBERS

SERVE  
ON

**~200**

LOCAL ANIMAL  
CARE COMMITTEES

to help fulfill the  
CCAC's mandate and  
deliver its programs  
in institutions across  
Canada.

In both Canada and abroad, animals are studied and counted in the wild, on farms, and in research facilities for Canadian science.



From biomedical laboratories where researchers study fundamental science, to veterinary colleges where students learn to treat animals, and national parks where biologists study wildlife populations, the CCAC and its network of volunteer experts are there to ensure high standards of ethical animal care and use.

[www.ccac.ca](http://www.ccac.ca)

# 3,521,143

ANIMALS USED FOR SCIENTIFIC PURPOSES WERE REPORTED TO THE CCAC IN 2022.

In 2022, scientists and educators worked with these animals the most:



**MICE**  
1,340,916

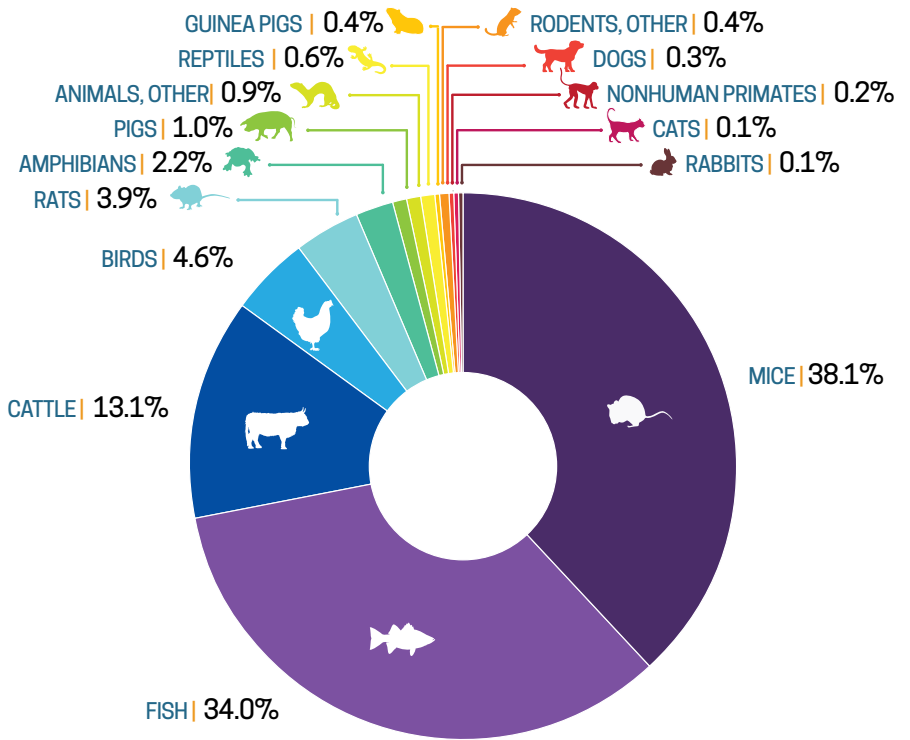


**FISH**  
1,198,299



**CATTLE**  
462,025

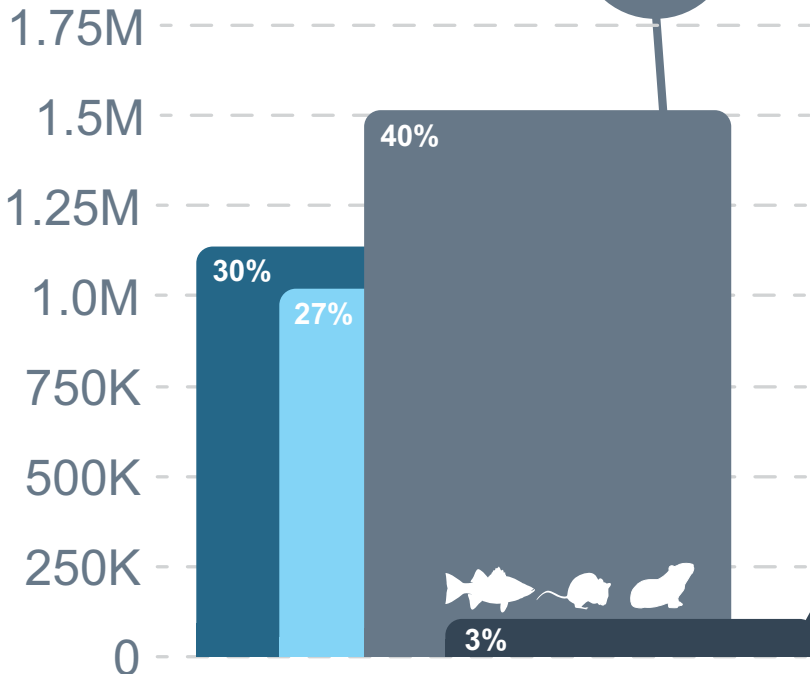
## PERCENTAGE OF ANIMALS USED IN SCIENCE AT CCAC-CERTIFIED INSTITUTIONS IN 2022 BY ANIMAL TYPE



The percentages in this graph may not total 100% due to rounding.

## PERCENTAGE OF ANIMALS USED IN SCIENCE AT CCAC-CERTIFIED INSTITUTIONS IN 2022 BY CATEGORY OF INVASIVENESS

Newly generated genetically modified animals are classified as Category of Invasiveness D as a precaution until the welfare status of the animals can be determined.



Categories of invasiveness are based on a precautionary approach and protocols are assigned a category according to the potential level of pain and distress that the animals might experience.

- B** Experiments which cause little or no discomfort or stress
- C** Experiments which cause minor stress or pain of short duration
- D** Experiments which cause moderate to severe distress or discomfort
- E** Procedures which cause severe pain near, at, or above the pain tolerance threshold of unanesthetized conscious animals

Fish, mice, and guinea pigs were the most frequently used animals in procedures which were classified as Category of Invasiveness E. The majority of these procedures were conducted for regulatory testing purposes (50.1%), studies of a fundamental nature in science relating to essential structures or functions (30.0%), and studies for medical purposes (including veterinary medicine) that relate to human or animal diseases or disorders (11.8%).

The percentages in this graph may not total 100% due to rounding.

Category of Invasiveness A is assigned where protocols involve the use of tissue, tissue culture, eggs, invertebrates, protozoa, or other animal use where neither vertebrates nor cephalopods are involved, and are not published in the CCAC annual animal data reports.

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# PERCENTAGE OF ANIMALS USED IN SCIENCE AT CCAC-CERTIFIED INSTITUTIONS IN 2022 BY PURPOSE OF ANIMAL USE

## FUNDAMENTAL RESEARCH



58%

Studies of a fundamental nature in science relating to essential structures or functions

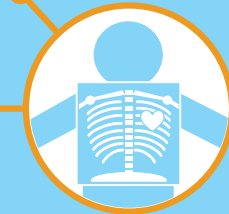
- e.g. Investigating how certain hormones produced from the gut and brain regulate energy balance, growth, and reproduction in fish
- e.g. Studying the migration patterns of an endangered species of bird

## DEVELOPMENT OF PRODUCTS OR DEVICES

Studies for the development of products or appliances for human or veterinary medicine

Studying pigs to develop artificial organs for humans e.g.

15%



## MEDICAL OR CLINICAL STUDIES



14%

Studies for medical purposes that relate to human or animal diseases or disorders

- e.g. Studying rodents to better understand the genes involved in human diabetes, cancer, and arthritis

## EDUCATION AND TRAINING

Teaching and training to communicate scientific concepts, and develop practical skills and expertise in specific technique

Training college and university students in animal health programs e.g.

8%



## REGULATORY TESTING



5%

Studies for regulatory testing of products for the protection of humans, animals, or the environment

- Health Canada's regulatory standards require medical research be performed on animals before human trials can commence
- e.g. Testing the efficacy of a new medication for Parkinson's Disease on nonhuman primates

The percentages in this graph may not total 100% due to rounding.

THE **MAJORITY** OF ANIMALS REPORTED IN 2022 WERE INVOLVED IN **FUNDAMENTAL RESEARCH**, REPRESENTING **2,196,099 ANIMALS**.

## CERTIFICATION

The CCAC assesses and certifies Canadian institutions that work with animals for scientific purposes (research, teaching, and testing), and meet the CCAC's high standards. In 2022-2023:

**202**

public and private sector institutions belonged to the CCAC program

**11**

institutions were on probation

## THREE Rs

There continues to be an increased focus on the Three Rs by researchers to develop new alternatives to animal models.

**R** Replacing or avoiding animals in science

**R** Reducing the number of animals in science

**R** Refining care and procedures to minimize pain and distress

While there are many alternatives to animal testing currently under development, only those methods that are validated and accepted by government agencies can be used in regulatory testing.

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