

ABOUT US

Understanding Animal Research aims to achieve understanding and acceptance of the need for humane animal research in the UK, by maintaining and building informed public support and a favourable policy climate for animal research.

The information provided by Understanding Animal Research is based on thorough research and understanding of the facts, historical and scientific.

Understanding Animal Research seeks to engage with and inform many sectors to bring about its vision. Key stakeholders include members of the public, the media, policy makers, schools and the scientific research community.

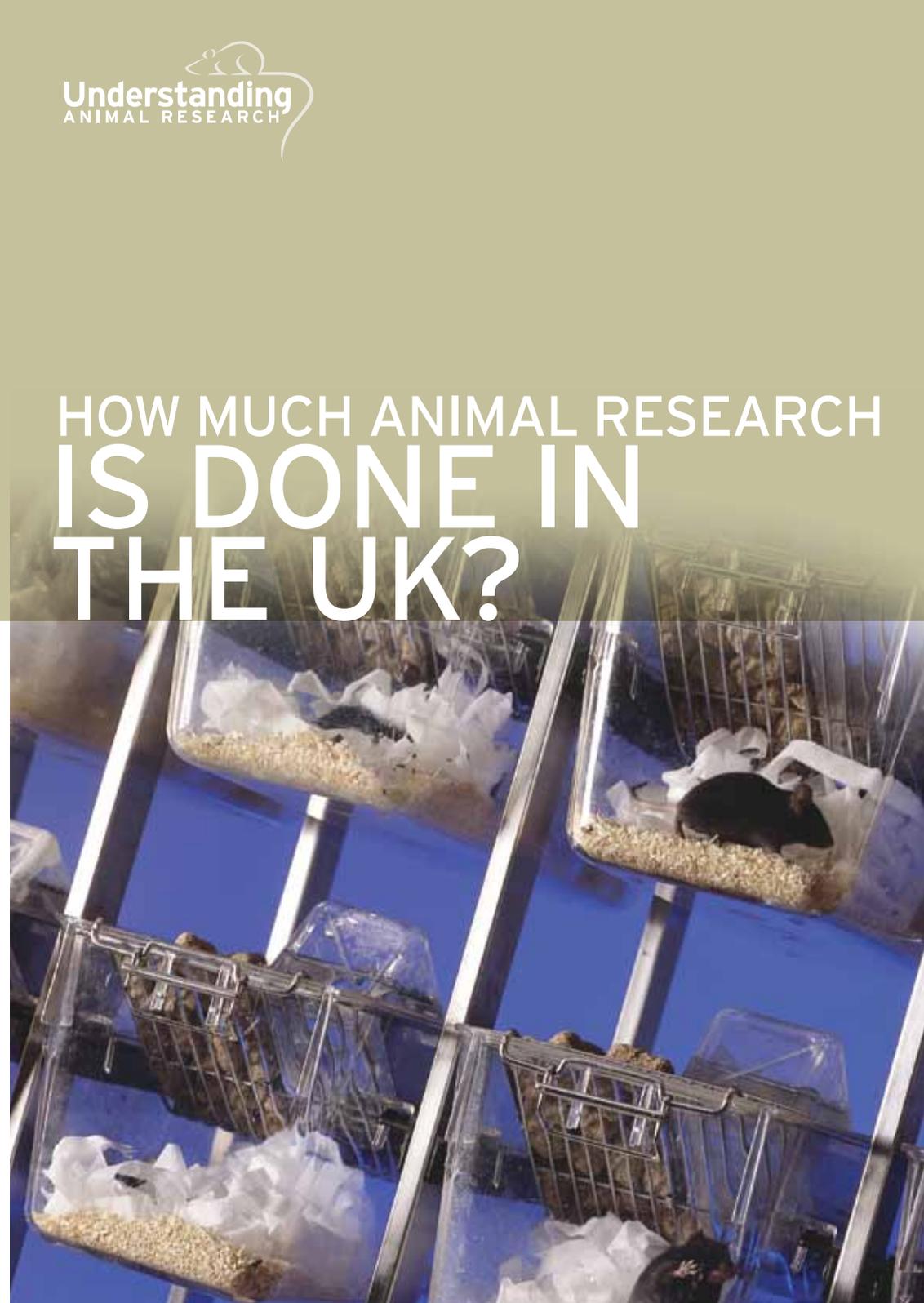
HOW MUCH ANIMAL RESEARCH IS DONE IN THE UK?

The recent increase in animal use does not mean that efforts to advance the 3Rs are failing, rather it reflects new research trends that use genetically modified mice to study the links between genes and disease. There have been many exciting developments in understanding the genetic bases of disease by the study of genetically modified mouse models, and the exploitation of these new opportunities is reflected in the growth of research in this area.
Professor Steve Brown, Director, MRC Harwell, 2011

ALSO AVAILABLE IN THIS SERIES:

[Why do we use animals in medical research?](#)
[Animal research benefits us - and animals too](#)
[How is animal research regulated?](#)
[Animal welfare and the three Rs: replacement, refinement and reduction](#)

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"We are learning more from animal experiments than in the past. Genetically modified animals accounted for over half of all animal experiments in 2009, compared with just 8 per cent in 1995. More than nine out of 10 of these animals were mice and rats." *The Independent*, 21 June 2011

UK ANIMAL RESEARCH IN CONTEXT

Although animal studies account for only a very small part of all medical research, animals do need to be used in certain situations. UK law says that animals must never be used when there is an alternative, but regulations also make sure that no new medicine may be trialled in humans until it has been thoroughly tested in other ways, including safety testing in animals.

But how many animals are used, and for what? Which species are involved? This leaflet uses the official figures to provide a precise snapshot of the extent of animal research in the UK.

HOW ARE ANIMALS USED IN RESEARCH AND TESTING?

Animals are used in five main areas of research and testing. Government figures for 2010 show the proportion of animals used in the following areas:

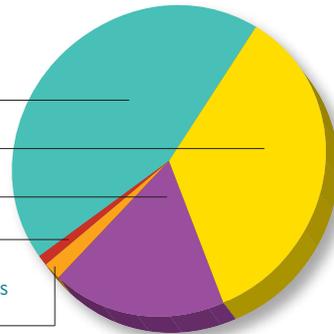
Breeding of laboratory animals (mostly for research and developing new treatments) 44%

Fundamental biological and medical research 35%

Developing new treatments for diseases or ways of preventing disease 18%

Developing new methods of diagnosis < 1%

Safety testing of non-medical products or ingredients for use in the home, agriculture or industry (no cosmetics or toiletries have been tested on animals in the UK since 1998) 2%



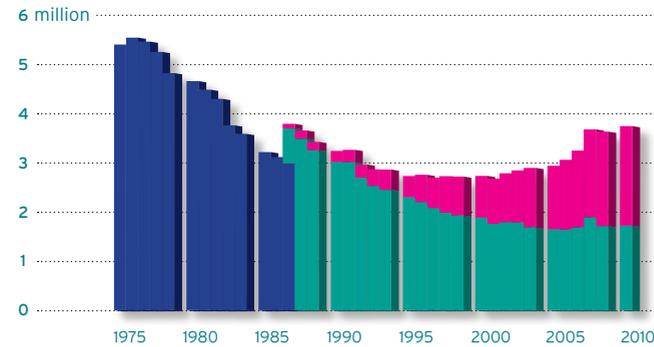
HOW MUCH ANIMAL RESEARCH IN THE UK?

3,724,726 scientific procedures used animals in 2010. In some strictly controlled situations animals were used in more than one procedure, so slightly fewer animals were used than is reflected in the number of procedures.

The number of animals used is lower than it was 30 years ago, largely due to scientific advances, better animal welfare and stricter controls; but there has been a gradual rise over the last decade. Much of this is accounted for by animals - mostly GM mice - used in breeding programmes to develop better understanding of genes and models of disease.

To put the figures into perspective, although the number of animal procedures increased by one million (over a third) in the 12 years to 2010, UK expenditure on bioscience and medical research more than doubled in real terms over the same period.

HOW MUCH ANIMAL RESEARCH IS DONE IN THE UK?



HOW MUCH ANIMAL RESEARCH IS DONE IN THE UK?

■ Animal experiments in the UK
■ Animal experiments / procedures (normal animals)
■ Procedures (animals with genetic modifications or harmful mutations)

WHAT TYPES OF ANIMAL ARE USED IN RESEARCH?

UK law protects vertebrate species such as mammals, fish and birds, and it is the number of such animals used in research that is counted by the Government each year. Invertebrates such as fruit flies and worms are also used in large numbers, but are not protected by the law or counted.

The figures relating to procedures on animals in Great Britain in 2010 are:

Primates, mainly marmoset and macaque monkeys 0.1%

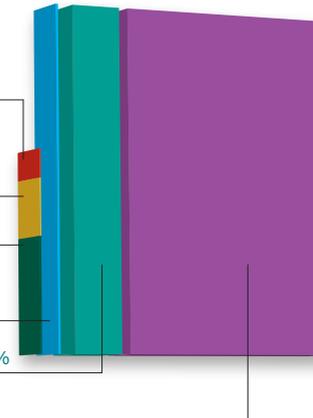
Dogs and cats, all bred for research (no strays or unwanted pets can be used) 0.2%

Sheep, cows, pigs and other large mammals 0.4%

Small mammals, excluding rodents (mostly rabbits and ferrets) 1%

Fish, amphibians, reptiles and birds 18%

Rats, mice and other rodents (all purpose-bred laboratory species) 81%



Chimpanzees, gorillas and orang-utans have not been used in UK medical research for over 25 years. Smaller primates are used for research into very serious conditions such as AIDS and Alzheimer's disease, and in important basic research.

WHICH SPECIES ARE USED, AND WHY

As you can see from the official figures in this leaflet, 19 in every 20 animals used in research are mice, rats, other rodents or fish. Dogs are used for less than 0.2% of all research - although they are important for the study of the heart, lungs and blood vessels. They are of course also important for understanding and treating illnesses in dogs themselves. Even fewer primates are used, and hardly any cats.

INTERNATIONAL ESTIMATES

It is difficult to estimate the number of animals used in research worldwide every year. However, we do know that the major research centres are the USA (about 20 million procedures), the EU including the UK (about 12 million), Japan (5 million), Canada (2 million), Switzerland (1 million) and Australia (under 1 million). If, at a generous estimate, there are 10 million procedures carried out elsewhere in the world, the total worldwide number is unlikely to exceed 60 million procedures per year.

FURTHER INFORMATION

See also our website www.understandinganimalresearch.org.uk. The annual *Statistics of Scientific Procedures on Living Animals* reports are available as free downloads from the Home Office website <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/science-research/spanimals10/>