

Key issues to note:

- → Animals used in research and testing can and do experience pain and distress. The RSPCA believes much more can be done to replace animals and to avoid, or reduce, their suffering.
- → The Home Office figures show 3.06 million scientific procedures were carried out using animals in the UK in 2021 more than 8,000 a day.
- → Three quarters (76%) of UK adults agree that they are very concerned about the use of animals in scientific research and testing.
- → 79% of adults agree more needs to be done to speed up the development and uptake of alternatives to replace animal experiments.
- → Over three quarters (77%) of UK adults agree that the UK Government should commit to phasing out the use of animals in scientific research and testing.
- → Yet the transition to non-animal technologies and approaches is not happening anywhere near fast enough. More needs to be done.
- → The RSPCA believes the UK Government should commit to an ambitious and world leading strategy for 'phasing out' animal use in research and testing, in conjunction with a significantly increased commitment to promote the development, uptake and 'phasing in' of non-animal alternative methods.

Current regulation in the UK

The Home Office Animals in Science Regulation Unit (ASRU) is responsible for regulating the breeding, supply and use of animals in research and testing in the UK, and for assuring that those who hold licences under the Animals (Scientific Procedures) Act 1986 comply with its requirements. There are 137 licensed establishments (universities, pharmaceutical and chemicals companies etc), and more than 16,000 individuals authorised to undertake animal experiments in the UK. The main species of animals currently used in the UK are mice, rats, zebrafish and chickens. But significant numbers of other animals, including rabbits, guinea pigs, ferrets, sheep, dogs and monkeys are also used.

How many animals are used in animal research and testing?

The Home Office figures show a rise in the number of experiments carried out using animals to 3.06 million - more than 8,000 a day¹. This is 6% more than the 2.88 million procedures on animals carried out in 2020 - although there were two national lockdowns during 2020 which affected activity at research establishments. This figure includes 2.92 million procedures on mice, 253,686 on rats, 418,965 on fish, 13,876 on rabbits, 4,107 on dogs and 3,246 on monkeys. 49.9% of the experimental procedures undertaken were categorised as causing animals 'mild' suffering, 22.2% involved 'moderate' suffering and 3.4% - 58,003 - involved 'severe' suffering.

What are the ethical and welfare concerns for these animals?

Animals used in research and testing can and do experience pain and distress - which can even be categorised as 'severe' (for example, where an animal dies as part of a study testing the toxicity of a new chemical, or where animals are exposed to a serious infectious disease). The RSPCA believes that much more could be done to avoid, or reduce, their suffering. This requires fuller implementation of the 3Rs²- with Replacement as the principal goal - as well as more effective challenge around whether and how animals are used.

There is much talk of ensuring 'the highest possible standards' of animal welfare - but in practice labs may do little or nothing above the minimum they have to do by law. ASRU has stated that their role is only to assure that

For further information or if you have any questions please contact: politicalaffairs@rspca.org.uk

¹ https://www.gov.uk/government/collections/animals-in-science-statistics

² **REPLACEMENT** of animals - by using humane methods which avoid or replace the use of animals; **REDUCTION** - reducing the animal numbers to the minimum needed to achieve the scientific objectives; **REFINEMENT** - improving experiments, housing and care to reduce suffering and improve welfare throughout animals' lives.

labs are meeting the basic *minimum* standards required. This means that adult rats, for example, who require 30cms of cage height to stand up on their hind legs, are allowed to be kept in cages that are only 20cms high.

Animal experiments are not all for 'essential and vital medical research'. Many animals are used in the development and testing of products ranging from food additives to pesticides, and in fundamental or basic research (which can include anything from why hair turns white with ageing, to using animal 'models' to gain insights into how we make decisions, to understanding how wild animals adapt to different temperatures).

Some experiments are badly designed or poorly carried out, which wastes animals' lives and causes suffering that could have been avoided. For example, scientists often know which animals have received a potential new medicine, and which have not, so their observations of the animals and analysis of their studies can be subconsciously biased to confirm the results that they were expecting or hoping to see. This is just one cause of the current 'reproducibility crisis' in science where the findings of studies involving animals often can't be replicated by others. One third to one half of animal experiments undertaken are never even published³.

There is serious debate, including among scientists themselves, about the usefulness of many animal experiments. For example, as a report by the NC3Rs comments: "Only 5 to 10% of development projects that enter clinical trials result in a new medicine. One important reason for this is a lack of translation from experimental animal data to human volunteer and patient efficacy and safety."

Public opinion

Opinion polls⁴ repeatedly illustrate the UK public's concern regarding the use and welfare of animals in scientific research and testing, and they expect strong regulation on animal use that is enforced effectively. Indeed, recent polling⁵ conducted for the RSPCA by Savanta ComRes shows that:

- three quarters (76%) of UK adults agree that they are very concerned about the use of animals in scientific research and testing, and
- 79% of UK adults agree that more needs to be done to speed up the development and uptake of alternatives to replace animal experiments
- over three quarters (77%) of UK adults agree that the UK Government should commit to phasing out the
 use of animals in scientific research and testing, and
- three quarters (76%) agree that the UK should be a global leader in moving towards the use of non-animal alternatives in scientific research.

What needs to be done?

Phasing-out animal experiments, coupled with phasing-in advanced, non-animal technologies (NATs) and new approach methodologies (NAMs), offers clear ethical, animal welfare, scientific and economic benefits. Indeed, the global non-animal alternatives testing market is growing annually and is expected to be worth an estimated \$2.6 billion by 2026⁶. Recent years have seen new technological advances that are offering increasing potential and opportunities for replacing current animal use in some specific tests and areas. For example, advanced in vitro models, such as organoids and organs-on-chips, are increasingly available in biomedical research, and a rising number of approaches which avoid the use of animals are being introduced to assess the safety of chemicals⁷. But the transition to non-animal technologies and approaches is not happening anywhere near fast enough. More needs to be done to encourage the development of non-animal technologies and to support their use.

We believe the UK Government should commit to an ambitious and world leading strategy for 'phasing out' animal use in research and testing, in conjunction with a significantly increased commitment to promote the development, uptake and 'phasing in' of non-animal alternative methods.

For further information or if you have any questions please contact: politicalaffairs@rspca.org.uk

³ https://www.nature.com/articles/d41586-019-02676-4

⁴ e.g https://www.ipsos.com/en-uk/public-attitudes-animal-research-2018

⁵ https://comresglobal.com/polls/rspca-animal-testing-poll/

https://www.researchandmarkets.com/reports/5515092/non-animal-alternatives-testing-global-market

https://www.unilever.com/news/news-search/2020/ending-animal-testing-behind-the-scenes-at-our-research-hub/