

# The ethics of research involving animals

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COUNCIL ON  
BIOETHICS

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*Extract from Chapter 15 Discussion and recommendations*

*Paragraphs 15.3-15.20*

## Consensus statement by all members of the Working Party

### ***Research involving animals and other uses of animals***

15.3 It is important to consider the ethical issues raised by animal experimentation in the wider context of the other uses of animals in society, and to take into account:

- the impact on the lives and welfare of animals that different uses have;
- the broader consequences if there were a ban on using animals in specific circumstances;
- a comparison of the benefits arising from the different uses of animals; and
- the numbers of animals involved.

15.4 The involvement of animals in research cannot be justified simply by the fact that animals are used or abused in other ways. Each use requires special consideration. Members of the Working Party noted during their own discussions, and in considering responses to the Consultation, that views on animal research were not always consistent with views on the other uses of animals. Awareness that contradictory views are often held simultaneously is an important first step in considering the ethical issues raised by research involving animals.

### ***The benefits of research involving animals***

15.5 Historically, animals have been used in a wide range of scientific research activities that have provided many benefits to society, particularly in relation to the advancement of scientific knowledge, human and veterinary medicine and the safety of chemical products.

15.6 Some of these advances might have been achieved by other means, although we cannot know this. Neither can we know what a world would look like in which animal research had never been undertaken. Hypothetically, there may have been other options that could have produced acceptable levels of knowledge and healthcare. These levels might have been lower than our current standards, but perhaps if society had deemed the use of animals for research as unacceptable there would have been acceptance of greater limitations on scientific and medical progress. Alternatively, it is conceivable that equally good or better progress might have been achieved with other methods. The Working Party agreed that speculation about whether or not acceptable standards in basic and applied research could have been achieved in the past by means other than the use of animals is less important than the question of assessing the consequences of continuing or abandoning animal experimentation now.

15.7 It is sometimes assumed that to end animal research would be to end scientific and medical progress, but such generalisation is unhelpful. The UK Government has responded to changes in the moral climate by introducing policies that have ended some types of animal

research and testing in the UK. For example the use of animals for the testing of cosmetic products and their ingredients, alcohol and tobacco has ceased. Similar policies are in place regarding the use of the great apes. Independent of the moral acceptability of research, the scientific costs and benefits of abandoning specific types of animal research need to be assessed on a case by case basis. On the one hand, the possibility of the emergence of new diseases may require a reassessment of whether the abandonment of specific types of research is still justified. On the other, scientific advances that could replace the use of animals in some areas may enjoin us to assess whether further policies should be introduced to terminate these uses of animals accordingly.

- 15.8 The validity, usefulness and relevance of specific types of animal research, for example in relation to the use of animals for the study of human diseases, needs to be ascertained in each individual case.

#### ***Desirability of a world without animal research***

- 15.9 All research licensed in the UK under the A(SP)A has the potential to cause pain, suffering, distress or lasting harm to the animals used. Most animals are killed at the end of experiments. A world in which the important benefits of such research could be achieved without causing pain, suffering, distress, lasting harm or death to animals involved in research must be the ultimate goal.
- 15.10 We have considered the different arguments advanced in favour of and against continuing specific types of animal research in Chapters 3 and 14. Some believe the imperative to protect animal welfare should be overriding, whereas others believe that the moral arguments favour the continuation of research on animals. All members of the Working Party acknowledged that these viewpoints arise from moral convictions that should be given serious consideration. This approach requires open-mindedness in trying to understand the reasons and arguments of others. Genuine willingness is also required to test and, where necessary, revise one's own moral framework.
- 15.11 While we trust that more progress in the moral debate can be made, we are aware that, for the near future, further moral argument alone cannot provide a universal answer as to whether or not research on animals is justified. But practical advances in scientific methods can reduce areas of conflict. For this reason, the importance of the Three Rs, and especially of the need to find Replacements, cannot be overstated.

#### ***The ethical importance of the Three Rs***

- 15.12 The Working Party therefore concludes that it is crucial that the Three Rs are, and continue to be, enshrined in UK regulation on research involving animals. The principle that animals may only be used for research if there is no other way of obtaining the results anticipated from an experiment is also fundamental.<sup>1</sup> Furthermore, we observe that for moral justification of animal research it is insufficient to consider only those alternatives that are practicably available at the time of assessing a licence application. The question of why alternatives are not available, and what is required to make them available, must also be asked. The potential of the Three Rs is far from being exhausted. The Working Party therefore agrees that there is a moral imperative to develop as a priority scientifically rigorous and validated alternative methods for those areas in which Replacements do not currently exist. It is equally important to devise mechanisms that help in the practical implementation of available validated methods.

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<sup>1</sup> A(SP)A, Section 5 (a).

15.13 In applying the Three Rs it is crucial to consider not only the context of the experiments but also the many other factors that can affect animal welfare, including breeding, transportation, feeding, housing, and handling. The quality of these factors, and the ability of animals to satisfy their species-specific needs, can usually be improved.

### **Regulation**

15.14 We acknowledge that the UK has the most detailed legislative framework regarding animal research in the world. But proper attention to the welfare of animals involved in research and the accountability of scientists who conduct animal research cannot be achieved merely by having detailed regulations. Regulation can act as an emotional screen between the researcher and an animal, possibly encouraging researchers to believe that simply to conform to regulations is to act in a moral way. It is therefore crucial to promote best practice more actively and to improve the culture of care in establishments licensed to conduct experiments on animals.

15.15 When considering the replacement of specific types of research by alternative methods, it is important to take account of the international context in which research involving animals takes place. Many chemical and pharmaceutical compounds that have been developed are being marketed in countries or regions that have different regulatory frameworks for animal research and testing. Alternatives have been internationally accepted for safety testing. Nonetheless, many Replacements are not universally accepted, and the process of validation is lengthy. These processes need to be optimised and initiatives aimed at abandoning and replacing specific types of animal testing at national levels complemented by initiatives at the international level. This is not to say that initiatives in the UK can only be taken once there is consensus at an international level. In the past, the UK has been a leader in working towards change in international policies related to research involving animals. This leadership should be encouraged.

### **Duplication of experiments on animals**

15.16 Scientific experiments involving animals are sometimes repeated by the same or other research groups. In considering whether the repetition of experiments should take place, it is important to distinguish between *duplication* and *replication* of experiments:<sup>2</sup>

- Duplication of harmful animal experiments is in principle unacceptable. We use the term to describe cases where there is insufficient scientific justification for the repetition. It occurs primarily when the scientist either does not know that another has carried out the experiment or test in question, or when he does know but is unable to attain reasonable access to the information.
- Replication refers to repetition of experiments or tests when this is necessary for sound progress in scientific enquiries. The scientific method demands that research findings need to be corroborated by the same and other research groups in order to establish the validity of the results.

15.17 The Working Party acknowledges that academic competitiveness and commercial confidentiality can sometimes complicate the sharing of information. But at its best, science is an open process, and mechanisms that prevent the sharing of information need to be reviewed carefully in terms of their justification and implications for the use of animals in research.

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<sup>2</sup> Animals are sometimes used in repeated experiments for the purpose of education or training. We have not addressed the issues raised by this particular use, see paragraph 1.18.

***The context of the debate***

- 15.18 The majority of researchers who use animals consider that, despite progress in the implementation of the Three Rs, animal research will remain an essential part of their work. Furthermore, the current regulatory frameworks for approval of chemical products and medicines require tests involving animals. We conclude that it is unrealistic to assume that all experiments on animals will end in the short term. It is crucial, therefore, to create a climate in which the necessity and justification for using animals is assessed and discussed fairly, and with due respect for all views.
- 15.19 Constructive debate would be facilitated by the provision of clear information about the full implications of research involving animals in terms of the numbers and species of animals used, as well as the pain, suffering and distress to which they are subjected. It is also important that society should be informed about the scientific, medical and other benefits of animal research. Information about selected aspects of research without provision of any further context can be misleading.
- 15.20 All members of the Working Party agreed that the use of violence and intimidation against members of the research community, research institutions, their business partners, family and neighbours, or against organisations and individuals representing animal welfare groups, is morally wrong and politically insidious. The freedom to promote or oppose research involving animals peacefully and democratically, however, must be maintained.