



# Animals in Laboratory Experiments

## What do we mean by 'laboratory experiments'?

Laboratory experiments are those in which animals are kept captive (usually in cages) and are used for medical or other research. The most common experiments are those in which animals are exposed to substances, such as new drugs, cosmetics or cleaning products. This exposure can involve being dosed with the substance, either orally or by injection, to test for toxicity, or direct contact with the skin or eyes to test whether or not the substance is an irritant. Other experiments involve invasive procedures to the brain or other parts of an animal's body. Animals are also used for a variety of psychological experiments, some of which are unlikely to cause distress to the animal (such as tasks that demonstrate ability to learn or remember) and others which may cause stress and anxiety.

## Laboratory experiments – the facts

In July 2013, *The Daily Mail* reported that the number of animal experiments conducted in the UK had risen to 4.1 million in the previous year, including experiments on 2,186 primates.<sup>1</sup>

It is estimated that 18.5 million animals are used in experiments in the USA each year, and 10.5 million in the EU.<sup>2</sup> In the UK in 2013, 2.1 million genetically-modified animals (some intentionally bred to have harmful genetic modifications) were bred for research.<sup>3</sup>

More than 6 million animals are used for research annually in Australia and New Zealand.<sup>4</sup>

It is now known that the animals used for laboratory experiments (mainly rodents, rabbits, cats, dogs, primates and other vertebrates) are sentient, capable of experiencing both physical pain and fear, anxiety and depression. Although humans and other mammals share many physical characteristics, each species differs from others to some degree physiologically, which means that the response to diseases, drugs and other agents shown in one species does not always accurately predict what will happen in humans.<sup>5</sup>

- *An example of this is the case of TGN1412, a cancer drug that was tested in five healthy volunteers in 2006 (a sixth volunteer received a placebo). Those that received the drug became seriously ill and suffered multiple organ failure. The company that produced the drug defended itself by saying this was unforeseeable as the drug had been extensively tested in rats and mice, and also tested in monkeys, with no ill effects.*<sup>6</sup>

## What drives animal experimentation?

The primary driver of animal experimentation is the law. Most, if not all countries, require new drugs to be tested on animals before they can be tested in humans.

- *As noted above, these laws are based on the false premise that animal testing guarantees that a drug is safe to use in humans.*
- *The European Union also requires the testing of new chemicals to be introduced into commercial use (and some chemicals that have been in use for some time, but never previously tested).*<sup>7</sup>

## What are the alternatives?

Several alternatives to animal testing exist, although which alternative will be most appropriate will depend on the type of research being done. Cell cultures, using cells from human tissue, computer modelling, non-invasive imaging (such as MRI), micro-dosing (giving very small doses of a drug to human volunteers), and the use of human cadavers, donated for medical research, to trial and refine new surgical techniques can all be used as alternatives to animal testing.<sup>5,8,9</sup>



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## What does the Bible say?

Not surprisingly, the Bible does not have anything to say on animal experimentation, as this was not something that existed in biblical times. There are, however, passages that can help us to consider what the Christian response to the use of animals in experimentation should be.

*Then God said, 'Let us make humankind in our image, according to our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the wild animals of the earth, and over every creeping thing that creeps upon the earth.'* (Genesis 1.26).

The concept of 'dominion' has often been used to justify human use and exploitation of the earth's resources and our fellow creatures. But dominion is not domination. It is the responsibility to exercise authority on God's behalf. Such 'rule' must therefore be a reflection of God's rule over the earth – one that comes from love, is caring and nurturing, and recognises the inherent goodness of the whole of creation.

*The earth is the Lord's and everything in it.* (Psalm 24.1).

The animals that we use in laboratory experiments are not ours, they belong to God and to God alone.

*Are not two sparrows sold for a penny? Yet not one of them will fall to the ground unperceived by your Father...So do not be afraid; you are of more value than many sparrows.* (Matthew 10.29–31; see also Luke 12.6–7).

Don't these verses show that humans are of greater value than animals, and that sacrificing animals to improve human health and save lives is justified? No. What Jesus is pointing out to his disciples is that God cares about and watches over even those things which humans deem of little value, so they should trust God to care for them, too. Although in human society, humans are valued more highly than sparrows, there is nothing in what Jesus says to indicate that this is also how God views the world. Remember what God says through his prophet, Isaiah: "For my thoughts are not your thoughts, nor are your ways my ways, says the Lord." (Isaiah 55.8). God sees and notes the suffering of the animals in the world's labs. Further evidence of human–animal equality is seen in Genesis

*Then God said to Noah and to his sons with him, "Behold, establish my covenant with you and your descendants after you, and with every living creature that is with you, the birds, the cattle, and every beast of the earth with you, as many as came out of the ark..."* (Genesis 9.9–17).

God sees not only the humans, but animals, as covenant partners, and there is no distinction made between humans and animals in the covenant that God makes with them.

## What can Christians do?

- Pray – include laboratory animal welfare in both public worship and private prayer.
- Be selective in shopping – There are cruelty-free alternatives for many household products. Choose products that carry BUAV (British Union for the Abolition of Vivisection) approval. When choosing cosmetics, ask if the product or its ingredients have been tested on animals and choose those that haven't.
- Support – there are charities, such as the BUAV and the European Coalition to End Animal Experiments (ECEAE), that speak out against animal experimentation. There are also charities, notably the Dr Hadwen Trust and FRAME that do research into alternatives to animal testing, particularly for medical research.
- Make your voice heard – write to your local and national representatives in government (EU residents can also write to their MEP) and ask them to support changes in legislation to reduce or remove the requirements for animal testing.
- Spread the word – tell friends, colleagues and others about the cruelty involved in animal experimentation and the drive to find alternatives, and ask them to get involved.