



© Iain Green

Animal Experiments

your most common questions answered

1) How many animals are used and for what ?

Nearly three million animals are used in experiments in Britain each year. Approximately one fifth of them are used in 'safety' tests whereby they are force-fed or injected with enormous doses of new products (medicines, pesticides, household products and industrial chemicals) to see if they are poisoned by them. However, the majority of animals are used in what is described as medical research - aimed at finding cures or treatments for human diseases. Species used include rats, dogs, mice, cats, monkeys, guinea pigs, sheep, rabbits, goats, birds and pigs.

2) Do the animals suffer?

Simply being restrained in captivity is very stressful for most animals. Recent studies have shown that the frustration of life in a standard barren laboratory cage literally drives many animals insane

- causing severe abnormalities in their brains. Even simple routine procedures, such as taking a blood sample, can be very distressing for animals, especially if undertaken by a clumsy or inexperienced technician. It is not always easy to find the vein in small, frightened animals, especially if they struggle. But most experiments involve far more suffering than this. In safety tests, a long tube is pushed down the throat to the stomach so that the test chemical can be force-fed to the animal. The purpose is to measure any vomiting, diarrhoea, convulsions, bloody tears, skin lesions, ulcers, breathing difficulty or damage to the eyes, lungs, kidneys or heart. In medical research experiments, animals are deliberately injured by surgery, chemicals or genetic manipulation to give them symptoms of the disease being studied. For example, large tumours are transplanted into them. They are infected with Ebola, AIDS or other viruses, or made to suffer painful conditions such as arthritis or heart attacks. Anaesthetics are only used in 40% of experiments.

3) Do safety tests on animals protect us?

Shocking though it may sound, they often do the exact opposite. Animals as 'models' to predict human reactions to drugs or chemicals are worse than useless, with a prediction rate (for harmful side-effects) of only 5-25% - and this is according to a former Director of Huntingdon Life Sciences, the notorious animal testing company! We would actually be better off tossing a coin than relying on animals in risk assessments. Because of this, millions of people suffer adverse drug reactions (ADRs) to their prescription medicines - even though they have all been 'safety' tested on animals. In America, ADRs kill over 100,000 people every year - more than all illegal drugs put together.



Animal test results are used by manufacturers to claim their products are safe, when proper, scientific testing methods might show otherwise. For example, smoking was said to be safe for decades because lung cancer is difficult to induce in animals - millions of people have died as a result. French scientific organisation Pro Anima (www.proanima.asso.fr) estimate that one million EU citizens die prematurely every year because of toxins in their food or environment - all of which have been passed as safe by animal tests.

'Normally, animal experiments not only fail to contribute to the safety of medication, but they even have the opposite effect.' - **Dr Kurt Fickentscher, University of Bonn**

4) Do animal experiments help us to find cures for human diseases?

Absolutely not - animal experiments are not the 'necessary evil' we have always been led to believe. In fact, using animals as 'models' of human disease has misled science and delayed medical progress for many decades (see our report 'Bred to Suffer' at www.animalaid.org.uk). Symptoms of various diseases are artificially induced in animals and then researchers try to cure them. The trouble is, the animal's disease is never exactly the same as the real human version and, more importantly, the cause is not the same - so a cure for the animal is not likely to work in humans. According to one expert: *'The history of cancer research has been a history of curing cancer in the mouse... We have cured mice of cancer for decades and it simply*

didn't work in humans.' - **Dr.**

Richard Klausner, National Cancer Institute

Everything we know about HIV and AIDS has been learned from studying people with the disease. But that has not prevented millions of pounds and animals' lives from being wasted in a fruitless search for an animal 'model'. *"What good does it do you to test something [a vaccine] in a monkey? You find five years from now that it works in the monkey, and then you test it in humans and you realise that humans behave totally differently from monkeys, so you've wasted five years"* - **Dr. Mark Feinberg, leading AIDS researcher**

Equally, our understanding of important diseases, such as polio - and how it is transmitted - was hampered through a reliance on animal experiments.

'Work on [the polio vaccine] was long delayed by the erroneous conception of the nature of the human disease, based on misleading experimental models of the disease in monkeys.' - **Dr. Albert Sabin, inventor of the polio vaccine**

The truth is, by using animals as surrogate humans we're not only hurting animals, we're hurting ourselves. *'Animal model systems not only kill animals, they also kill humans.'* - **Dr. Irwin Cross, former Director of Sloan - Kettering the largest cancer research institute in the world**

5) So why do they continue?

Individual scientists do not question the practice because it is how they were taught, and how those who instructed them were themselves taught. The use of animals has become an ingrained habit - one that is considered too inconvenient to break. But a key reason animals are still used so widely is money. Vivisection is very big business. The pharmaceutical industry is the most profitable industry in the world and its interests are strongly protected by governments. Animal experiments are in the industry's interests because they can be used to market their products more quickly and - most importantly - they provide a legal defence for the company when people are injured or killed by ADRs. They will argue that, having carried out the animal tests, no blame can be laid at their door.

'Animal studies are done for legal reasons and not for scientific reasons. The predictive value of such studies for man is often meaningless.' - Dr James Gallagher, Director of Medical Research Lederle Laboratories



6) How will we find cures without using animals?

The truly great contributions to modern medicine have come in the form of non-animal research techniques: clinical observation (monitoring patients), epidemiology (linking lifestyle factors with disease), human tissue research, organ culture, computer modelling and advanced technologies such as MRI scanners and ultrasound. Recent years have also seen the public turn increasingly to non-allopathic therapies, based on a holistic model of health and disease, whereby the focus is on strengthening and nourishing the body's immune defences rather than making a 'self-destructive' high tech war on pathogens, tumours and the like. All of these medical tools and techniques and many more have improved our ability to treat patients - and they owe nothing to animal experimentation. We must stop sinking valuable time, money and resources into

outdated animal experiments when valid, human-based research methods are readily available and provide accurate results. If animal experiments were stopped tomorrow, we would all benefit from safer drugs and greater investment in truly productive research techniques. Of course, prevention is the best medicine and investment in health education could reap untold benefits. The premature onset of most illnesses, including cancer and heart disease, is largely (at least 80%) preventable. As far as diseases such as AIDS are concerned, prevention is not just better than cure - it is the only cure.

7) Aren't animal experiments necessary because medicines need to be tested on a whole body?

It is true that experiments in human tissues, etc. cannot always predict what will happen when a drug, for example, is given to a living person. But the question is, can

animal tests do better? The answer is that a carefully designed battery of tests in a variety of human tissues, combined with sophisticated computer simulations will give much more accurate and reliable predictions for human responses than animal experiments ever could or ever will. Animals do indeed give results about the whole body - but it is the wrong body!

Ultimately, the first truly valid assessment of any new drug comes after it has been given to human volunteers and patients in clinical trials. This does not amount to experimenting on people, which we would never advocate. Ethically conducted clinical trials, with participants' fully informed consent, make a major contribution to finding and improving treatments for the diseases which blight our lives. Unfortunately, clinical trials are not entirely risk-free - largely because prior animal tests have often given a false sense of security through misleading indications of safety. Participants' risks in clinical trials would be significantly reduced if the animal testing stage was replaced. More than 80% of drugs fail in clinical trials after they have passed all the animal tests successfully.

8) Isn't it hypocritical of people who say they are opposed to animal experiments to take drugs which have been tested on animals?

Not at all. Anti-vivisectionists would rather choose drugs which have not been tested on animals, just as they choose to buy non-animal-tested cosmetics. But because all pharmaceutical products are tested on animals, we have no choice if we wish to use them. However, the volume of drugs being consumed in 'developed' countries is now a major cause of death and injury. We should apply more personal and political resources into health promotion and consider the growing range of holistic treatments, such as herbalism, homeopathy, acupuncture and osteopathy.

Where animal tested medicines work safely and effectively, it is despite animal tests, not because of them.

9) Would you rather let your child die than support experiments on animals?

Such artificial moral dilemmas are often quoted to blackmail people emotionally into accepting animal experiments. In fact, the real choice is not between dogs and babies - it is between good and bad science. Vivisection is bad science because it only tells us about animals and not about people.

10) This all sounds too good to be true. How can I believe such information from Animal Aid - you might be exaggerating to suit your own purposes?

Don't take our word for it. There are many organisations of doctors and scientists opposed to the animal model in medical research because of the harm it does to humans. Their arguments are strictly scientific. Check out www.curedisease.com - the website of Europeans For Medical Advancement (EFMA) and Americans For Medical Advancement (AFMA). According to Dr. Ray Greek, Medical Director for both organisations:

'Research money and personnel need to be directed towards methodologies that are viable. Using an archaic methodology like animal models to combat 21st century disease is more than foolish, it is immoral.'

Even the *Handbook of Laboratory Animal Science*, the leading manual on animal experimentation, stated 'Uncritical reliance on the results of animal tests can be dangerously misleading and has cost the health and lives of tens of thousands of humans.'

11) Do anti-vivisectionists care more about animals than people?

Most people who oppose animal experiments do so because of a compassionate desire to end all suffering, whether in animals or human beings. Such people are very often supporters of a wide range of charities and good causes aimed at helping disadvantaged people as well as animals. However, it is perfectly logical to oppose animal experiments from a human health perspective, even if you don't care about animals at all.

12) What can I do?

- Send a sae for the 20-page booklet *Of Mice, Money and Medical Misconceptions* - produced by EFMA. Better still, send a donation to cover postage costs and order 10 or more copies to distribute to family, friends, your doctor and local schools.
- Join Animal Aid and support our vital educational work on this subject.
- Educate yourself - read *Sacred Cows and Golden Geese - the human cost of experiments on animals* by Drs. Ray and Jean Greek. Also, *Vivisection or Science* by Professor Pietro Croce. Both are available from Animal Aid.
- Write to your MP and to newspapers asking why there has never been an independent scientific review of animal experimentation. Explain that animal research does not lead to cures for human disease and ask how the use of so much taxpayers' money can be justified when there is no evidence of success and so much evidence of harm. Demand accountability from the Government.