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The Observer **Scientists told to stop wasting animal lives**

Animal experimentation

<http://www.theguardian.com/science/2015/apr/18/animal-lives-wasted-in-drugs-safety-tests>

Research agencies have ordered UK scientists to improve the way they use animals in experiments. Too often poorly designed projects – to test new medicines for strokes, cancer and other conditions – have produced meaningless results and wasted animals' lives, the organisations have warned.

In some cases, researchers – desperate to control the costs of their work – have underestimated the number of animals needed to test a new medicine. As a result, their tiny studies have lacked the power to pinpoint biological effects in the drugs under scrutiny. These unreliable results mean the lives of the animals involved have been wasted, along with scientists' time and resources. The over-use of animals in experiments has also led to unnecessary loss of their lives.

The problem of poorly designed studies has been under investigation for two years and culminated, last week, in Research Councils UK – the umbrella group for the councils that fund UK research – announcing changes to its guidelines for those carrying out research using animals. Scientists will now have to show their work will not only produce physiological insights but will also generate statistically robust data. If not, they will lose their funding.

"There has been an increasing awareness that some animal experiments are not sufficiently robust. These guidelines should therefore be welcomed, although they have taken a long time to be introduced," said neuroscientist Malcolm Macleod of Edinburgh University.

In 2013, 4.12 million scientific procedures on animals – mostly rats and mice – were started in Great Britain. Half involved breeding genetically modified animals while the other half involved experiments on unmodified animals. Many of these are done to test drugs before human trials are launched. However, it takes a fairly large number of animals to reveal whether a drug is having a pharmacological effect, said Macleod.

Mark Prescott, head of research policy for the UK National Centre for the Replacement, Refinement and Reduction of Animals in Research, said the guidelines represented a change for the scientific community.

"Yes, you can use animals in experiments, but no more than necessary – and no fewer. It is ethically questionable to get the numbers wrong either way."