



13 July 2017

Statistical News Release: Annual Statistics of Scientific Procedures on Living Animals, Great Britain 2016

The Home Office released the National Statistics publication 'Annual Statistics of Scientific Procedures on Living Animals, Great Britain, 2016' on 13 July 2017. The publication provides information about scientific procedures performed using living animals during the year 2016, as regulated by the Animals (Scientific Procedures) Act 1986.

Introduction

Following the transposition of European Directive 2010/63/EU into UK law through amendment regulations to the Animals (Scientific Procedures) Act 1986, some changes were applied to the 2014 collection. In particular, information is now being collected on procedures completed, not procedures started, as for publications prior to 2014. As a result, we are now able to collect information on the actual severity of procedures. The 2016 figures in this release are the third year for which these changes apply.

Total procedures

In 2016, 3.94 million procedures were completed. Of those, 51% (2.02 million) were experimental procedures¹ and 49% (1.91 million) related to the creation/breeding of genetically altered animals² not used in further experimental procedures.

Between 2007 and 2016, the total number of procedures increased by 23% (735,000 procedures). The creation/breeding of genetically altered animals primarily accounted for this rise (745,000 procedures), while the number of experimental procedures decreased by 9,400 procedures.

When comparing 2016 with 2015:

- there were 3.94 million procedures in 2016 representing a decrease of 5% (206,000), within which:
 - there were 2.02 million experimental procedures in 2016 representing a decrease of 3% (57,000)

¹ Experimental procedures includes all animals used in basic research, regulatory use, translational/applied research, protection of the natural environment, higher education and training, preservation of species and forensic enquiries. It excludes the use of animals for the creation of new lines of genetically altered animals and the breeding of established lines of genetically altered animals that were not used in further regulated procedures.

² The creation/breeding of genetically altered animals includes the use of animals for the creation of new lines of genetically altered animals and the breeding of established lines of genetically altered animals that were not used in further regulated procedures. This category also includes some animals that were bred with the intention of producing genetically altered animals, but resulted in non-genetically altered animals being born (5% of procedures involving the creation/breeding of genetically altered animals in 2016).

- there were 1.91 million genetically altered animals created/bred but not used in further procedures in 2016, representing a decrease of 7% (149,000)

Experimental procedures

Of the 2.02 million experimental procedures completed in 2016, the majority involved mice, 60% (1.22 million procedures); fish, 14% (287,000 procedures); rats, 12% (239,000 procedures) and birds; 7% (150,000 procedures). Experimental procedures involving specially protected species (i.e. horses³, dogs, cats, and non-human primates) accounted for 0.9% (18,000) of procedures in 2016.

Comparing 2016 with 2015 by species, there were notable changes to the number of experimental procedures involving:

- guinea pigs, up 20% (4,400) to 26,000, similar to the number in 2014
- domestic fowl, up 9% (12,000) to 138,000, while procedures involving 'other birds' fell by 18% (2,500) to 12,000
- rabbits, up 9% (1,300) to 15,000
- sheep, up 3% (1,300) to 48,000
- rats, down 7% (19,000) to 239,000, similar to the number in 2014
- mice, down 4% (49,000) to 1.22 million
- fish, down 2% (7,000) to 287,000 overall, within which:
 - the number of zebrafish procedures increased 28% (42,000) while procedures involving 'other fish' fell by 34% (49,000)

Of the severity assessments undertaken for the 2.02 million experimental procedures completed in 2016:

- 12% (235,000) were assessed as sub-threshold, compared with 13% (268,000) in 2015
- 8% (154,000) were assessed as non-recovery⁴, compared with 6% (123,000) in 2015
- 46% (938,000) were assessed as mild, compared with 51% (1.06 million) in 2015
- 29% (581,000) were assessed as moderate, compared with 24% (502,000) in 2015
- 6% (114,000) were assessed as severe, compared with 6% (123,000) in 2015

³ Includes donkeys and cross-bred horses.

⁴ Non-recovery procedures are procedures performed entirely under general anaesthesia from which the animal does not recover consciousness.

Creation/breeding of genetically altered animals

Of the 1.91 million procedures in 2016 relating to the creation/breeding of genetically altered animals that were not used in further procedures, nearly all involved mice, 86% (1.65 million); zebrafish, 13% (248,000); and rats, 0.6% (11,000).

Of the severity assessments undertaken for these 1.91 million procedures:

- 67% (1.28 million) were assessed as sub-threshold, compared with 55% (1.13 million) in 2015
- 0.1% (1,500) were assessed as non-recovery, compared with 0.2% (3,300) in 2015
- 29% (546,000) were assessed as mild, compared with 39% (806,000) in 2015
- 3% (50,000) were assessed as moderate, compared with 3% (65,000) in 2015
- 2% (40,000) were assessed as severe, compared with 3% (62,000) in 2015

Notes to editors

1. The purpose of this publication is to meet the requirements of the 1986 Act to collect and publish statistical information on the use of protected animals in regulated procedures during the previous calendar year and to lay that information before Parliament.

2. This publication is available online at:

<https://www.gov.uk/government/statistics/statistics-of-scientific-procedures-on-living-animals-great-britain-2016>.

Press enquiries

Journalists with enquiries can call the Home Office news desk on 020 7035 3535. The desk operates from 7am to 8pm, Monday to Friday.

If you are not a member of the media, please use the Home Office public enquiries line: 020 7035 4848.

Press office out of hours number: 07659 174240. Only urgent media calls will be attended to.