

EU Statistical Data of all uses of animals

Member State: Belgium

Year: 2016

All uses of animals by species

Animal Species	Number of uses	Percentage
Mice	337,027	62.90%
Rats	30,337	5.66%
Guinea-Pigs	16,223	3.03%
Hamsters (Syrian)	1,880	0.35%
Hamsters (Chinese)		
Mongolian gerbil	118	0.02%
Other Rodents	175	0.03%
Rabbits	48,036	8.96%
Cats	123	0.02%
Dogs	1,529	0.29%
Ferrets	13	0.00%
Other carnivores		
Horses, donkeys & cross-breeds	231	0.04%
Pigs	3,630	0.68%
Goats	101	0.02%
Sheep	581	0.11%
Cattle	1,279	0.24%
Prosimians		
Marmoset and tamarins		
Cynomolgus monkey		
Rhesus monkey	40	0.01%
Vervets Chlorocebus spp.		
Baboons		
Squirrel monkey		
Other species of New World Monkeys (Ceboidea)		
Other species of Old World Monkeys (Cercopithecoidea)		
Other species of non-human primates		
Apes		
Other Mammals	153	0.03%
Domestic fowl	26,230	4.90%
Other birds	4,504	0.84%
Reptiles	172	0.03%
Rana		
Xenopus	769	0.14%
Other Amphibians	457	0.09%
Zebra fish	37,256	6.95%
Other Fish	24,965	4.66%
Cephalopods		
Total uses	535,829	100.00%

Origin as registered at the first use

Place of Birth	Number of uses	Percentage
Animals born in the EU at a registered breeder	496,542	94.10%
Animals born in the EU but not at a registered breeder	26,034	4.93%
Animals born in rest of Europe	48	0.01%
Animals born in rest of world	5,034	0.95%
Total uses	527,658	100.00%

NHP Source (origin)	Number of uses	Percentage
Animals born at a registered breeder within EU	4	100.00%
Animals born in rest of Europe		
Animals born in Asia		
Animals born in America		
Animals born in Africa		
Animals born elsewhere		
Total uses	4	100.00%

NHP Generation	Number of uses	Percentage
F0		
F1		
F2 or greater	4	100.00%
Self-sustaining colony		
Total uses	4	100.00%

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Purpose for which animals are used

Purpose Category level 1	Number of uses	Percentage
Basic Research	284,346	53.07%
Translational and applied research	105,804	19.75%
Regulatory use and Routine production	132,925	24.81%
Protection of the natural environment in the interests of the health or welfare of human beings or animals	1,006	0.19%
Preservation of species	256	0.05%
Higher education or training for the acquisition, maintenance or improvement of vocational skills	8,882	1.66%
Forensic enquiries		
Maintenance of colonies of established genetically altered animals, not used in other procedures	2,610	0.49%
Total uses	535,829	100.00%

Basic Research	Number of uses	Percentage
Oncology	54,432	19.14%
Cardiovascular Blood and Lymphatic System	14,443	5.08%
Nervous System	56,761	19.96%
Respiratory System	6,002	2.11%
Gastrointestinal System including Liver	19,797	6.96%
Musculoskeletal System	5,877	2.07%
Immune System	50,275	17.68%
Urogenital/Reproductive System	11,536	4.06%
Sensory Organs (skin, eyes and ears)	3,772	1.33%
Endocrine System/Metabolism	17,305	6.09%
Multisystemic	10,037	3.53%
Ethology / Animal Behaviour /Animal Biology	19,464	6.85%
Other basic research	14,645	5.15%
Total uses	284,346	100.00%

Translational and applied research	Number of uses	Percentage
Human Cancer	18,857	17.82%
Human Infectious Disorders	18,443	17.43%
Human Cardiovascular Disorders	920	0.87%
Human Nervous and Mental Disorders	22,383	21.16%
Human Respiratory Disorders	3,240	3.06%
Human Gastrointestinal Disorders including Liver	1,328	1.26%
Human Musculoskeletal Disorders	1,047	0.99%
Human Immune Disorders	2,329	2.20%
Human Urogenital/Reproductive Disorders	284	0.27%
Human Sensory Organ Disorders (skin, eyes and ears)	3,290	3.11%
Human Endocrine/Metabolism Disorders	2,634	2.49%
Other Human Disorders	232	0.22%
Animal Diseases and Disorders	12,508	11.82%
Animal Welfare	1,520	1.44%
Diagnosis of diseases	6,481	6.13%
Plant diseases		
Non-regulatory toxicology and ecotoxicology	10,308	9.74%
Total uses	105,804	100.00%

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Regulatory use and routine Production	Number of uses	Percentage
Quality control (incl batch safety and potency testing)	82,222	61.86%
Other efficacy and tolerance testing	3,345	2.52%
Toxicity and other safety testing including pharmacology	5,467	4.11%
Routine production	41,891	31.51%
Total uses	132,925	100.00%

Regulatory use and routine production – Quality control (incl batch safety and potency testing)	Number of uses	Percentage
Batch safety testing	12,844	15.62%
Pyrogenicity testing		
Batch potency testing	66,345	80.69%
Other quality controls	3,033	3.69%
Total uses	82,222	100.00%

Regulatory use and routine production - Toxicity and other safety testing including pharmacology	Number of uses	Percentage
Acute and sub-acute	392	7.17%
Skin irritation/corrosion		
Skin sensitisation		
Eye irritation/corrosion		
Repeated dose toxicity	964	17.63%
Carcinogenicity		
Genotoxicity	83	1.52%
Reproductive toxicity		
Developmental toxicity	1,697	31.04%
Neurotoxicity	30	0.55%
Kinetics	465	8.51%
Pharmaco-dynamics (incl safety pharmacology)		
Phototoxicity		
Ecotoxicity	358	6.55%
Safety testing in food and feed area	1,451	26.54%
Target animal safety	8	0.15%
Other toxicity/safety testing	19	0.35%
Total uses	5,467	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Acute and sub-acute toxicity testing methods	Number of uses	Percentage
LD50, LC50		
Other lethal methods		
Non lethal methods	392	100.00%
Total uses	392	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Repeated dose toxicity	Number of uses	Percentage
up to 28 days	864	89.63%
29 - 90 days	92	9.54%
> 90 days	8	0.83%
Total uses	964	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Ecotoxicity	Number of uses	Percentage
Acute toxicity	262	73.18%
Chronic toxicity	96	26.82%
Reproductive ecotoxicity		
Endocrine activity		
Bioaccumulation		
Other ecotoxicity		
Total uses	358	100.00%

Regulatory use and routine production – Routine production	Number of uses	Percentage
Blood based products	41,781	99.74%
Monoclonal antibodies		
Other product types	110	0.26%
Total uses	41,891	100.00%

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Use of animals to meet legislative requirements

Testing by Legislation	Number of uses	Percentage
Legislation on medicinal products for human use	115,307	86.75%
Legislation on medicinal products for veterinary use and their residues	15,187	11.43%
Medical devices legislation	1,299	0.98%
Industrial chemicals legislation	195	0.15%
Plant protection product legislation		
Biocides legislation		
Food legislation including food contact material	668	0.50%
Feed legislation including legislation for the safety of target animals, workers and environment	159	0.12%
Cosmetics legislation		
Other legislation	110	0.08%
Total uses	132,925	100.00%

Legislative Requirement	Number of uses	Percentage
Legislation satisfying EU requirements	118,429	89.09%
Legislation satisfying national requirements only [within EU]	19	0.01%
Legislation satisfying Non-EU requirements only	14,477	10.89%
Total uses	132,925	100.00%

First use and re-use

Re-Use	Number of uses	Percentage
No	527,662	98.48%
Yes	8,167	1.52%
Total uses	535,829	100.00%

Use in creation of a new genetic line

Creation of New GL	Number of uses	Percentage
No	514,040	95.93%
Yes	21,789	4.07%
Total uses	535,829	100.00%

Actual severity of uses

Severity	Number of uses	Percentage
Non-recovery	21,556	4.02%
Mild [up to and including]	298,189	55.65%
Moderate	119,291	22.26%
Severe	96,793	18.06%
Total uses	535,829	100.00%

Use by genetic status

Genetic Status	Number of uses	Percentage
Not genetically altered	410,313	76.58%
Genetically altered without a harmful phenotype	108,323	20.22%
Genetically altered with a harmful phenotype	17,193	3.21%
Total uses	535,829	100.00%

MEMBER STATE NARRATIVE

1. General information on any changes in trends observed since the previous reporting period.

Compared to 2015 (566.603 animals used), there is a decrease of 5.44% in the number of animals used for scientific purposes in 2016 (535.799 animals used).

2. Information on significant increase or decrease in use animals in any of the specific areas and analysis of the reasons thereof.

The use of animals in the specific areas is similar to the percentages of 2015.

3. Information on any changes in trends in actual severities and analysis of the reasons thereof.

There were no significant changes in actual severities.

4. Particular efforts to promote the principle of replacement, reduction and refinement and its impacts on statistics if any.

- **Funding of research projects for the development of alternative toxicity tests.**
- **Collaboration with the university board to promote the development and promotion of alternative methods.**
- **Collaboration between the different regions and other member states to promote the 3R principle.**

5. Further breakdown on the use of "other" categories if a significant proportion of animal use is reported under this category.

40.12% of the fishes are reported under the “other” category. They are mostly Cyprinidae, Cichlidae, Salmonidae, Percidae, Soleidae, Pleuronectidae and Aplocheilidae.

37,28% of the amphibians reported under the “other” category are mostly Ranidae (Lithobates catesbeianus), Salamandridae (in order of importance: Lissotriton helveticus, Pleurodeles waltl, Ichthyosaura alpestris) and Bombinatoridae (Bombina orientalis).

14.65% of the birds are reported under the “other” category. They are Paridae, Fringillidae, Meleagrididae, Phasianidae, Passeridae, Pycnonotidae, Estrildidae, Laridae, Columbidae and Psittacidae.

6. Details on cases where the 'severe' classification is exceeded, whether pre-authorized or not, covering the species, numbers, whether prior exemption was authorized, the details of the use and the reasons why 'severe' classification was exceeded.

There were no cases in which the ‘severe’ classification was exceeded.