

# 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	336,052	62.83%
Rats	30,337	5.67%
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	8.98%
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	6.97%
Other Fish	24,965	4.67%
Cephalopods		
<b>Total uses</b>	<b>534,854</b>	<b>100.00%</b>

## Origin as registered at the first use

Place of Birth	Number of uses	Percentage
Animals born in the EU at a registered breeder	494,820	93.94%
Animals born in the EU but not at a registered breeder	26,817	5.09%
Animals born in rest of Europe	48	0.01%
Animals born in rest of world	5,034	0.96%
<b>Total uses</b>	<b>526,719</b>	<b>100.00%</b>

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		
<b>Total uses</b>	<b>4</b>	<b>100.00%</b>

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

# EU Statistical Data of all uses of animals

## Purpose for which animals are used

Purpose Category level 1	Number of uses	Percentage
Basic Research	283,739	53.05%
Translational and applied research	105,760	19.77%
Regulatory use and Routine production	132,925	24.85%
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	6	0.00%
Higher education or training for the acquisition, maintenance or improvement of vocational skills	8,819	1.65%
Forensic enquiries		
Maintenance of colonies of established genetically altered animals, not used in other procedures	2,599	0.49%
<b>Total uses</b>	<b>534,854</b>	<b>100.00%</b>

Basic Research	Number of uses	Percentage
Oncology	54,616	19.25%
Cardiovascular Blood and Lymphatic System	14,443	5.09%
Nervous System	56,699	19.98%
Respiratory System	6,121	2.16%
Gastrointestinal System including Liver	19,837	6.99%
Musculoskeletal System	5,877	2.07%
Immune System	50,140	17.67%
Urogenital/Reproductive System	11,536	4.07%
Sensory Organs (skin, eyes and ears)	3,772	1.33%
Endocrine System/Metabolism	18,300	6.45%
Multisystemic	10,342	3.64%
Ethology / Animal Behaviour /Animal Biology	19,464	6.86%
Other basic research	12,592	4.44%
<b>Total uses</b>	<b>283,739</b>	<b>100.00%</b>

Translational and applied research	Number of uses	Percentage
Human Cancer	18,857	17.83%
Human Infectious Disorders	18,443	17.44%
Human Cardiovascular Disorders	920	0.87%
Human Nervous and Mental Disorders	22,383	21.16%
Human Respiratory Disorders	3,243	3.07%
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	12,467	11.79%
Animal Welfare	1,514	1.43%
Diagnosis of diseases	6,481	6.13%
Plant diseases		
Non-regulatory toxicology and ecotoxicology	10,308	9.75%
<b>Total uses</b>	<b>105,760</b>	<b>100.00%</b>

# EU Statistical Data of all uses of animals

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%
<b>Total uses</b>	<b>132,925</b>	<b>100.00%</b>

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%
<b>Total uses</b>	<b>82,222</b>	<b>100.00%</b>

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%
<b>Total uses</b>	<b>5,467</b>	<b>100.00%</b>

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%
<b>Total uses</b>	<b>392</b>	<b>100.00%</b>

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%
<b>Total uses</b>	<b>964</b>	<b>100.00%</b>

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		
<b>Total uses</b>	<b>358</b>	<b>100.00%</b>

# EU Statistical Data of all uses of animals

Regulatory use and routine production – Routine production	Number of uses	Percentage
Blood based products	41,781	99.74%
Monoclonal antibody by mouse ascites method		
Other product types	110	0.26%
<b>Total uses</b>	<b>41,891</b>	<b>100.00%</b>

## 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%
<b>Total uses</b>	<b>132,925</b>	<b>100.00%</b>

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%
<b>Total uses</b>	<b>132,925</b>	<b>100.00%</b>

## First use and re-use

Re-Use	Number of uses	Percentage
No	526,723	98.48%
Yes	8,131	1.52%
<b>Total uses</b>	<b>534,854</b>	<b>100.00%</b>

## Use in creation of a new genetic line

Creation of New GL	Number of uses	Percentage
No	513,065	95.93%
Yes	21,789	4.07%
<b>Total uses</b>	<b>534,854</b>	<b>100.00%</b>

## Actual severity of uses

Severity	Number of uses	Percentage
Non-recovery	21,229	3.97%
Mild [up to and including]	297,600	55.64%
Moderate	119,243	22.29%
Severe	96,782	18.10%
<b>Total uses</b>	<b>534,854</b>	<b>100.00%</b>

## Use by genetic status

Genetic Status	Number of uses	Percentage
Not genetically altered	408,773	76.43%
Genetically altered without a harmful phenotype	108,899	20.36%
Genetically altered with a harmful phenotype	17,182	3.21%
<b>Total uses</b>	<b>534,854</b>	<b>100.00%</b>

## MEMBER STATE NARRATIVE

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

**Compared to 2015 (561.551 animals used), there is a decrease of 4.75 % in the number of animals used for scientific purposes in 2016 (534.854 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 figures 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, Estrildida, 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 authorised, the details of the use and the reasons why 'severe' classification was exceeded.

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