

EU Statistical Data of all uses of animals

Member State: Denmark

Year: 2017

All uses of animals by species

Animal Species	Number of uses	Percentage
Mice	164,522	68.97%
Rats	38,498	16.14%
Guinea-Pigs	2,947	1.24%
Hamsters (Syrian)	282	0.12%
Hamsters (Chinese)		
Mongolian gerbil		
Other Rodents	3	0.00%
Rabbits	2,443	1.02%
Cats		
Dogs	214	0.09%
Ferrets	4	0.00%
Other carnivores	1,035	0.43%
Horses, donkeys & cross-breeds	119	0.05%
Pigs	5,989	2.51%
Goats	1	0.00%
Sheep	66	0.03%
Cattle	3,694	1.55%
Prosimians		
Marmoset and tamarins		
Cynomolgus monkey		
Rhesus monkey		
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	28	0.01%
Domestic fowl	466	0.20%
Other birds	408	0.17%
Reptiles	289	0.12%
Rana	4	0.00%
Xenopus	285	0.12%
Other Amphibians	47	0.02%
Zebra fish	1,587	0.67%
Other Fish	15,606	6.54%
Cephalopods		
Total uses	238,537	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	205,734	87.14%
Animals born in the EU but not at a registered breeder	24,599	10.42%
Animals born in rest of Europe	552	0.23%
Animals born in rest of world	5,215	2.21%
Total uses	236,100	100.00%

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

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

EU Statistical Data of all uses of animals

Purpose for which animals are used

Purpose Category level 1	Number of uses	Percentage
Basic Research	84,006	35.22%
Translational and applied research	121,595	50.98%
Regulatory use and Routine production	19,916	8.35%
Protection of the natural environment in the interests of the health or welfare of human beings or animals	2,875	1.21%
Preservation of species	5,637	2.36%
Higher education or training for the acquisition, maintenance or improvement of vocational skills	4,463	1.87%
Forensic enquiries	16	0.01%
Maintenance of colonies of established genetically altered animals, not used in other procedures	29	0.01%
Total uses	238,537	100.00%

Basic Research	Number of uses	Percentage
Oncology	6,727	8.01%
Cardiovascular Blood and Lymphatic System	4,354	5.18%
Nervous System	18,254	21.73%
Respiratory System	2,444	2.91%
Gastrointestinal System including Liver	2,529	3.01%
Musculoskeletal System	3,280	3.90%
Immune System	23,667	28.17%
Urogenital/Reproductive System	2,220	2.64%
Sensory Organs (skin, eyes and ears)	77	0.09%
Endocrine System/Metabolism	12,632	15.04%
Multisystemic	485	0.58%
Ethology / Animal Behaviour /Animal Biology	2,454	2.92%
Other basic research	4,883	5.81%
Total uses	84,006	100.00%

Translational and applied research	Number of uses	Percentage
Human Cancer	18,429	15.16%
Human Infectious Disorders	7,665	6.30%
Human Cardiovascular Disorders	2,016	1.66%
Human Nervous and Mental Disorders	31,509	25.91%
Human Respiratory Disorders	176	0.14%
Human Gastrointestinal Disorders including Liver	762	0.63%
Human Musculoskeletal Disorders	378	0.31%
Human Immune Disorders	4,959	4.08%
Human Urogenital/Reproductive Disorders	647	0.53%
Human Sensory Organ Disorders (skin, eyes and ears)	336	0.28%
Human Endocrine/Metabolism Disorders	37,015	30.44%
Other Human Disorders	9,168	7.54%
Animal Diseases and Disorders	4,825	3.97%
Animal Welfare	1,568	1.29%
Diagnosis of diseases	1,355	1.11%
Plant diseases		
Non-regulatory toxicology and ecotoxicology	787	0.65%
Total uses	121,595	100.00%

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)	8,139	40.87%
Other efficacy and tolerance testing	725	3.64%
Toxicity and other safety testing including pharmacology	10,308	51.76%
Routine production	744	3.74%
Total uses	19,916	100.00%

Regulatory use and routine production – Quality control (incl batch safety and potency testing)	Number of uses	Percentage
Batch safety testing	2,504	30.77%
Pyrogenicity testing		
Batch potency testing	5,601	68.82%
Other quality controls	34	0.42%
Total uses	8,139	100.00%

Regulatory use and routine production - Toxicity and other safety testing including pharmacology	Number of uses	Percentage
Acute and sub-acute	3,968	38.49%
Skin irritation/corrosion	28	0.27%
Skin sensitisation	177	1.72%
Eye irritation/corrosion		
Repeated dose toxicity	2,205	21.39%
Carcinogenicity		
Genotoxicity		
Reproductive toxicity	935	9.07%
Developmental toxicity		
Neurotoxicity		
Kinetics	818	7.94%
Pharmaco-dynamics (incl safety pharmacology)	26	0.25%
Phototoxicity		
Ecotoxicity	2,100	20.37%
Safety testing in food and feed area		
Target animal safety		
Other toxicity/safety testing	51	0.49%
Total uses	10,308	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	3,968	100.00%
Other lethal methods		
Non lethal methods		
Total uses	3,968	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	1,382	62.68%
29 - 90 days	586	26.58%
> 90 days	237	10.75%
Total uses	2,205	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Ecotoxicity	Number of uses	Percentage
Acute toxicity	120	5.71%
Chronic toxicity	1,800	85.71%
Reproductive ecotoxicity		
Endocrine activity		
Bioaccumulation	180	8.57%
Other ecotoxicity		
Total uses	2,100	100.00%

EU Statistical Data of all uses of animals

Regulatory use and routine production – Routine production	Number of uses	Percentage
Blood based products	18	2.42%
Monoclonal antibody by mouse ascites method	270	36.29%
Other product types	456	61.29%
Total uses	744	100.00%

Use of animals to meet legislative requirements

Testing by Legislation	Number of uses	Percentage
Legislation on medicinal products for human use	16,634	83.52%
Legislation on medicinal products for veterinary use and their residues	51	0.26%
Medical devices legislation		
Industrial chemicals legislation	2,987	15.00%
Plant protection product legislation		
Biocides legislation		
Food legislation including food contact material		
Feed legislation including legislation for the safety of target animals, workers and environment		
Cosmetics legislation		
Other legislation	244	1.23%
Total uses	19,916	100.00%

Legislative Requirement	Number of uses	Percentage
Legislation satisfying EU requirements	19,816	99.50%
Legislation satisfying national requirements only [within EU]	100	0.50%
Legislation satisfying Non-EU requirements only		
Total uses	19,916	100.00%

First use and re-use

Re-Use	Number of uses	Percentage
No	236,100	98.98%
Yes	2,437	1.02%
Total uses	238,537	100.00%

Use in creation of a new genetic line

Creation of New GL	Number of uses	Percentage
No	234,849	98.45%
Yes	3,688	1.55%
Total uses	238,537	100.00%

Actual severity of uses

Severity	Number of uses	Percentage
Non-recovery	22,871	9.59%
Mild [up to and including]	127,584	53.49%
Moderate	86,320	36.19%
Severe	1,762	0.74%
Total uses	238,537	100.00%

Use by genetic status

Genetic Status	Number of uses	Percentage
Not genetically altered	198,631	83.27%
Genetically altered without a harmful phenotype	27,907	11.70%
Genetically altered with a harmful phenotype	11,999	5.03%
Total uses	238,537	100.00%