

EU Statistical Data of all uses of animals

Member State: Denmark

Year: 2016

All uses of animals by species

Animal Species	Number of uses	Percentage
Mice	155,291	56.84%
Rats	46,682	17.09%
Guinea-Pigs	3,056	1.12%
Hamsters (Syrian)	152	0.06%
Hamsters (Chinese)		
Mongolian gerbil		
Other Rodents	4	0.00%
Rabbits	2,325	0.85%
Cats	18	0.01%
Dogs	266	0.10%
Ferrets	2	0.00%
Other carnivores	579	0.21%
Horses, donkeys & cross-breeds	319	0.12%
Pigs	7,970	2.92%
Goats	6	0.00%
Sheep	37	0.01%
Cattle	2,110	0.77%
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	55	0.02%
Domestic fowl	1,732	0.63%
Other birds	373	0.14%
Reptiles	262	0.10%
Rana		
Xenopus	56	0.02%
Other Amphibians	30	0.01%
Zebra fish	3,308	1.21%
Other Fish	48,591	17.78%
Cephalopods		
Total uses	273,224	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	220,338	82.06%
Animals born in the EU but not at a registered breeder	40,159	14.96%
Animals born in rest of Europe	684	0.25%
Animals born in rest of world	7,342	2.73%
Total uses	268,523	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		

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Purpose for which animals are used

Purpose Category level 1	Number of uses	Percentage
Basic Research	103,812	38.00%
Translational and applied research	138,170	50.57%
Regulatory use and Routine production	21,532	7.88%
Protection of the natural environment in the interests of the health or welfare of human beings or animals	2,792	1.02%
Preservation of species	1,491	0.55%
Higher education or training for the acquisition, maintenance or improvement of vocational skills	5,387	1.97%
Forensic enquiries	40	0.01%
Maintenance of colonies of established genetically altered animals, not used in other procedures		
Total uses	273,224	100.00%

Basic Research	Number of uses	Percentage
Oncology	6,121	5.90%
Cardiovascular Blood and Lymphatic System	4,288	4.13%
Nervous System	17,747	17.10%
Respiratory System	1,601	1.54%
Gastrointestinal System including Liver	4,618	4.45%
Musculoskeletal System	2,723	2.62%
Immune System	18,852	18.16%
Urogenital/Reproductive System	1,638	1.58%
Sensory Organs (skin, eyes and ears)	940	0.91%
Endocrine System/Metabolism	13,703	13.20%
Multisystemic	949	0.91%
Ethology / Animal Behaviour /Animal Biology	25,748	24.80%
Other basic research	4,884	4.70%
Total uses	103,812	100.00%

Translational and applied research	Number of uses	Percentage
Human Cancer	11,936	8.64%
Human Infectious Disorders	7,424	5.37%
Human Cardiovascular Disorders	1,399	1.01%
Human Nervous and Mental Disorders	34,826	25.21%
Human Respiratory Disorders	137	0.10%
Human Gastrointestinal Disorders including Liver	139	0.10%
Human Musculoskeletal Disorders	401	0.29%
Human Immune Disorders	7,015	5.08%
Human Urogenital/Reproductive Disorders	623	0.45%
Human Sensory Organ Disorders (skin, eyes and ears)	455	0.33%
Human Endocrine/Metabolism Disorders	40,930	29.62%
Other Human Disorders	9,135	6.61%
Animal Diseases and Disorders	19,684	14.25%
Animal Welfare	2,524	1.83%
Diagnosis of diseases	884	0.64%
Plant diseases		
Non-regulatory toxicology and ecotoxicology	658	0.48%
Total uses	138,170	100.00%

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Regulatory use and routine Production	Number of uses	Percentage
Quality control (incl batch safety and potency testing)	8,833	41.02%
Other efficacy and tolerance testing	113	0.52%
Toxicity and other safety testing including pharmacology	12,586	58.45%
Routine production		
Total uses	21,532	100.00%

Regulatory use and routine production – Quality control (incl batch safety and potency testing)	Number of uses	Percentage
Batch safety testing	3,295	37.30%
Pyrogenicity testing		
Batch potency testing	5,486	62.11%
Other quality controls	52	0.59%
Total uses	8,833	100.00%

Regulatory use and routine production - Toxicity and other safety testing including pharmacology	Number of uses	Percentage
Acute and sub-acute	5,366	42.63%
Skin irritation/corrosion	35	0.28%
Skin sensitisation	80	0.64%
Eye irritation/corrosion		
Repeated dose toxicity	1,701	13.52%
Carcinogenicity		
Genotoxicity		
Reproductive toxicity		
Developmental toxicity		
Neurotoxicity		
Kinetics	267	2.12%
Pharmaco-dynamics (incl safety pharmacology)	552	4.39%
Phototoxicity		
Ecotoxicity	4,585	36.43%
Safety testing in food and feed area		
Target animal safety		
Other toxicity/safety testing		
Total uses	12,586	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	5,366	100.00%
Other lethal methods		
Non lethal methods		
Total uses	5,366	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	862	50.68%
29 - 90 days	229	13.46%
> 90 days	610	35.86%
Total uses	1,701	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Ecotoxicity	Number of uses	Percentage
Acute toxicity	57	1.24%
Chronic toxicity	3,030	66.09%
Reproductive ecotoxicity		
Endocrine activity	1,440	31.41%
Bioaccumulation	58	1.26%
Other ecotoxicity		
Total uses	4,585	100.00%

Regulatory use and routine production – Routine production	Number of uses	Percentage
Blood based products		
Monoclonal antibodies		
Other product types		
Total uses		

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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	17,000	78.95%
Legislation on medicinal products for veterinary use and their residues	4	0.02%
Medical devices legislation		
Industrial chemicals legislation	2,458	11.42%
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	2,070	9.61%
Total uses	21,532	100.00%

Legislative Requirement	Number of uses	Percentage
Legislation satisfying EU requirements	271,090	99.22%
Legislation satisfying national requirements only [within EU]	2,134	0.78%
Legislation satisfying Non-EU requirements only		
Total uses	273,224	100.00%

First use and re-use

Re-Use	Number of uses	Percentage
No	268,523	98.28%
Yes	4,701	1.72%
Total uses	273,224	100.00%

Use in creation of a new genetic line

Creation of New GL	Number of uses	Percentage
No	271,228	99.27%
Yes	1,996	0.73%
Total uses	273,224	100.00%

Actual severity of uses

Severity	Number of uses	Percentage
Non-recovery	22,662	8.29%
Mild [up to and including]	166,746	61.03%
Moderate	79,219	28.99%
Severe	4,597	1.68%
Total uses	273,224	100.00%

Use by genetic status

Genetic Status	Number of uses	Percentage
Not genetically altered	231,739	84.82%
Genetically altered without a harmful phenotype	27,890	10.21%
Genetically altered with a harmful phenotype	13,595	4.98%
Total uses	273,224	100.00%

Speaking of Research