

SECTION 2: ALL USES OF ANIMALS FOR RESEARCH, TESTING, ROUTINE PRODUCTION AND EDUCATION AND TRAINING PURPOSES - TRENDS

Excludes the uses of animals for the creation and maintenance of genetically altered animals.

FILTERS

- Reporting year:All
- Country:All
- EC ID:All
- File name:All
- EU Submission:Yes
- ID 1:All
- ID 2:All
- ID 3:All
- Species:All
- Other species:All
- Species grouping level 1:All
- Species grouping level 2:All
- Mammals:All
- Non-human primates:All
- Reuse:All
- Place of birth:All
- NHP Place of birth:All
- NHP Colony type: Self-sustaining colony:All
- NHP generation:All
- Genetic status:All
- Purpose:All
- Purpose category level 1:All
- Purpose category level 2:All
- Purpose category level 3:All
- Purpose category level 4:All
- Type of legislation:All
- Other legislation:All
- Origin of legislation:All
- Severity:All
- Custom severity:All
- Method of tissue sampling:All
- Severity of genotyping:All

ALL USES OF ANIMALS

Uses of animals by species

Species	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Mice	83492	75806	65714	52163	61745	57782	60827	38917	44556	46195
Rats	34977	38638	33946	22975	31663	28728	27083	21000	26488	20442
Guinea-Pigs	4113	5047	5765	4867	3529	2778	3951	2786	3028	620
Hamsters (Syrian)	1	63	0	0	0	48	74	14	368	176
Other rodents	36	40	0	0	0	0	0	0	0	0
Rabbits	5124	3140	1431	1985	1052	1538	1493	644	1043	408
Cats	60	14	16	15	24	11	11	9	3	6
Dogs	495	630	463	428	367	485	408	209	255	283
Ferrets	0	8	4	0	0	0	0	0	0	0
Horses, donkeys and cross-breeds	0	0	0	15	19	17	58	115	95	91
Pigs	2884	3629	2405	2248	2528	3810	3079	1571	1400	950
Goats	0	0	0	0	0	0	0	20	0	0
Sheep	110	91	0	0	47	4	82	13	142	284
Cattle	20	16	33	33	40	7	3	1	0	132
Cynomolgus monkey	0	0	0	0	0	0	0	0	12	33
Rhesus monkey	3	0	2	5	1	2	8	5	0	15
Domestic fowl	48230	27304	25169	28328	24612	32597	39055	37168	25422	22347
Turkey	0	0	0	0	0	0	0	414	755	0
Other birds	1887	2039	2084	786	739	872	3804	2616	2359	439
Reptiles	12	2	0	0	0	0	0	500	376	83
Rana	0	6	0	0	0	0	0	0	0	0
Other amphibians	6286	8137	0	0	6280	2200	0	300	0	0
Zebra fish	1874	1322	1676	2409	1103	3144	11355	11697	2416	2102
Salmon, trout, chars and graylings	0	0	0	0	0	0	360	0	0	0
Guppy, swordtail, molly, platy	0	0	0	0	0	0	528	100	395	240
Other fish	4516	2932	1174	2737	1754	2522	530	1418	1686	265
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111

Excel

Uses of animals by severity

Severity	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Non-recovery	23734	31775	12314	10773	10901	7388	4490	3030	4413	3366
Mild [up to and including]	131107	82449	69792	64770	63049	70555	76445	67719	55218	50355
Moderate	27526	40709	39760	27386	41722	40288	38223	28411	31912	29117
Severe	11753	13931	18016	16065	19831	18314	33551	20357	19256	12273
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111

Excel

Severity	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Non-recovery	12.23%	18.82%	8.8%	9.05%	8.04%	5.41%	2.94%	2.54%	3.98%	3.54%
Mild [up to and including]	67.54%	48.83%	49.89%	54.43%	46.53%	51.67%	50.06%	56.66%	49.84%	52.94%
Moderate	14.18%	24.11%	28.42%	23.01%	30.79%	29.51%	25.03%	23.77%	28.8%	30.61%
Severe	6.05%	8.25%	12.88%	13.5%	14.64%	13.41%	21.97%	17.03%	17.38%	12.9%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Excel										

Uses of animals by genetic status

Genetic status	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Not genetically altered	187251	161430	131890	110318	127891	127753	142899	110519	101311	83974
Genetically altered without a harmful phenotype	6531	6626	7386	7960	6930	8061	9226	8725	9060	10235
Genetically altered with a harmful phenotype	338	808	606	716	682	731	584	273	428	902
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111

Excel

Proportions of uses of animals by genetic status

[illegible]

Excel

Reuse of animals

Reuse	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
No	191329	166915	132929	116882	134502	134560	151581	116780	106859	91887
Yes	2791	1949	6953	2112	1001	1985	1128	2737	3940	3224
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111

Excel

Proportions of reuse of animals

[illegible]

Exce

ALL USES OF ANIMALS BY SPECIES CATEGORY

Species category level 1

Species category	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cold-blooded vertebrates	12688	12399	2850	5146	9137	7866	12773	14015	4873	2690
Warm-blooded vertebrates	181432	156465	137032	113848	126366	128679	139936	105502	105926	92421
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111

Proportions of species category level 1

[illegible]

Excel

Species category level 2

Species category	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Amphibians	6286	8143	0	0	6280	2200	0	300	0	0
Birds	50117	29343	27253	29114	25351	33469	42859	40198	28536	22786
Fish	6390	4254	2850	5146	2857	5666	12773	13215	4497	2607
Mammals	131315	127122	109779	84734	101015	95210	97077	65304	77390	69635
Reptiles	12	2	0	0	0	0	0	500	376	83
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111

Excel

Proportions of species category level 2

[illegible]

Excel

Uses of mammals

Species	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Mice	83492	75806	65714	52163	61745	57782	60827	38917	44556	46195
Rats	34977	38638	33946	22975	31663	28728	27083	21000	26488	20442
Guinea-Pigs	4113	5047	5765	4867	3529	2778	3951	2786	3028	620
Hamsters (Syrian)	1	63	0	0	0	48	74	14	368	176
Other rodents	36	40	0	0	0	0	0	0	0	0
Rabbits	5124	3140	1431	1985	1052	1538	1493	644	1043	408
Cats	60	14	16	15	24	11	11	9	3	6
Dogs	495	630	463	428	367	485	408	209	255	283
Ferrets	0	8	4	0	0	0	0	0	0	0
Horses, donkeys and cross-breeds	0	0	0	15	19	17	58	115	95	91
Pigs	2884	3629	2405	2248	2528	3810	3079	1571	1400	950
Goats	0	0	0	0	0	0	0	20	0	0
Sheep	110	91	0	0	47	4	82	13	142	284
Cattle	20	16	33	33	40	7	3	1	0	132
Cynomolgus monkey	0	0	0	0	0	0	0	0	12	33
Rhesus monkey	3	0	2	5	1	2	8	5	0	15
Total	131315	127122	109779	84734	101015	95210	97077	65304	77390	69635

Excel

Proportions of uses of mammals

Species	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Mice	63.58%	59.63%	59.86%	61.56%	61.12%	60.69%	62.66%	59.59%	57.57%	66.34%
Rats	26.64%	30.39%	30.92%	27.11%	31.34%	30.17%	27.9%	32.16%	34.23%	29.36%
Guinea-Pigs	3.13%	3.97%	5.25%	5.74%	3.49%	2.92%	4.07%	4.27%	3.91%	0.89%
Hamsters (Syrian)	0%	0.05%	0%	0%	0%	0.05%	0.08%	0.02%	0.48%	0.25%
Other rodents	0.03%	0.03%	0%	0%	0%	0%	0%	0%	0%	0%
Rabbits	3.9%	2.47%	1.3%	2.34%	1.04%	1.62%	1.54%	0.99%	1.35%	0.59%
Cats	0.05%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0%	0.01%
Dogs	0.38%	0.5%	0.42%	0.51%	0.36%	0.51%	0.42%	0.32%	0.33%	0.41%
Ferrets	0%	0.01%	0%	0%	0%	0%	0%	0%	0%	0%
Horses, donkeys and cross-breeds	0%	0%	0%	0.02%	0.02%	0.02%	0.06%	0.18%	0.12%	0.13%
Pigs	2.2%	2.85%	2.19%	2.65%	2.5%	4%	3.17%	2.41%	1.81%	1.36%
Goats	0%	0%	0%	0%	0%	0%	0%	0.03%	0%	0%
Sheep	0.08%	0.07%	0%	0%	0.05%	0%	0.08%	0.02%	0.18%	0.41%
Cattle	0.02%	0.01%	0.03%	0.04%	0.04%	0.01%	0%	0%	0%	0.19%
Cynomolgus monkey	0%	0%	0%	0%	0%	0%	0%	0%	0.02%	0.05%
Rhesus monkey	0%	0%	0%	0.01%	0%	0%	0.01%	0.01%	0%	0.02%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Uses of non-human primates

Species	2015	2017	2018	2019	2020	2021	2022	2023	2024
Cynomolgus monkey	0	0	0	0	0	0	0	12	33
Rhesus monkey	3	2	5	1	2	8	5	0	15
Total	3	2	5	1	2	8	5	12	48

Excel

[illegible]

USES OF ANIMALS BY MAIN CATEGORIES OF SCIENTIFIC PURPOSES

Uses of animals by main categories of scientific purposes

Purpose	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Basic Research	37061	39467	37658	36826	36501	36921	40491	35050	31567	25655
Translational and applied research	63815	57752	41847	26122	33257	24136	39758	25856	21826	20306
Regulatory use and Routine production	84310	62895	58007	54016	57775	70921	70386	55352	54968	47258
Protection of the natural environment in the interests of the health or welfare of human beings or animals	6006	950	0	0	86	1360	478	875	1260	135
Preservation of species	960	5112	0	0	6280	2200	0	800	0	83
Higher education or training for the acquisition, maintenance or improvement of vocational skills	1968	2688	2370	2030	1604	1007	0	0	0	0
Higher education	0	0	0	0	0	0	1106	967	1114	1339
Training for the acquisition, maintenance or improvement of vocational skills	0	0	0	0	0	0	490	617	64	335
Total	194120	168864	139882	118994	135503	136545	152709	119517	110799	95111
Excel										

BASIC RESEARCH RELATED USES

Basic research related uses

Purpose	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Oncology	5013	3669	3346	4388	3635	2768	3410	2769	2433	1674
Cardiovascular Blood and Lymphatic System	2813	2392	3342	3622	3883	2401	2455	1818	3473	3294
Nervous System	12852	15923	16376	16176	18663	18393	21420	9001	13030	11325
Respiratory System	299	993	718	372	471	518	720	354	794	417
Gastrointestinal System including Liver	2069	3230	1865	1901	2433	2381	2030	2576	2126	1864
Musculoskeletal System	320	547	189	334	448	502	666	633	442	631
Immune System	3015	3088	4412	3189	2239	3582	5098	2307	3001	2395
Urogenital/Reproductive System	2389	1688	1678	2471	1872	1217	1192	477	857	505
Sensory Organs (skin, eyes and ears)	239	721	488	329	597	604	96	252	458	297
Endocrine System/Metabolism	1126	2204	1417	835	1121	277	1587	2279	415	351
Developmental Biology	0	0	0	0	0	0	100	1163	1417	1425
Multisystemic	2126	1568	1802	1811	781	2004	650	322	225	510
Ethology / Animal Behaviour /Animal Biology	2443	1634	526	436	31	428	692	2650	2601	180
Other basic research	2357	1810	1499	962	327	1846	375	8449	295	787
Total	37061	39467	37658	36826	36501	36921	40491	35050	31567	25655

Excel

ROUTINE PRODUCTION USES

Routine production uses

Purpose	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Blood based products	0	114	40	95	0	141	38	26	42	8
Monoclonal antibody by mouse ascites method	0	350	157	134	0	66	0	0	2	0
Monoclonal and polyclonal antibodies (excluding ascites method)	0	0	0	0	0	0	46	30	0	0
Other product types	603	382	512	389	62	10854	4	4	0	0
Total	603	846	709	618	62	11061	88	60	44	8

Excel

REGULATORY USES

Regulatory uses

[illegible]

Regulatory uses by type of legislation

Type of legislation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Biocides legislation	3	0	0	0	51	84	0	0	0	0
Feed legislation including legislation for the safety of target animals, workers and environment	180	0	0	342	558	70	0	0	0	0
Food legislation including food contact material	0	526	461	255	187	182	647	18	247	202
Industrial chemicals legislation	0	2966	834	423	2600	765	6953	6690	4870	3162
Legislation on medicinal products for human use	24629	26721	24550	17252	21615	17710	14588	6208	13387	9366
Legislation on medicinal products for veterinary use and their residues	51951	31160	28770	26854	31179	37437	38090	42249	35896	34244
Medical devices legislation	30	21	516	0	0	0	4	0	0	0
Other legislation	2250	655	0	1941	1385	573	1116	127	479	240
Plant protection product legislation	4664	0	2167	6331	138	3039	8900	0	45	36
Total	83707	62049	57298	53398	57713	59860	70298	55292	54924	47250

Excel

Proportions of regulatory uses by type of legislation

[illegible]

Excel

[illegible]

Proportions of regulatory uses by regulatory requirement

[illegible]

Excel

Regulatory uses: Quality control

REGULATORY USES: TOXICITY AND OTHER SAFETY TESTING INCLUDING PHARMACOLOGY

Regulatory uses: Toxicity

Purpose	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Acute and sub-acute	16836	19234	17639	12039	13517	10673	9478	5560	7994	6763
Skin irritation/corrosion	336	184	293	556	143	111	88	35	18	4
Skin sensitisation	4800	5438	4629	2532	3606	2293	2408	1580	720	1513
Eye irritation/corrosion	329	131	137	288	115	70	67	26	9	3
Repeated dose toxicity	3705	3804	1125	7165	5004	4783	5560	2577	4980	2846
Carcinogenicity	0	0	40	85	0	0	0	0	0	0
Genotoxicity	643	1272	562	96	638	730	1221	983	289	369
Reproductive toxicity	1048	340	833	1181	3086	3464	4056	1359	4119	1685
Developmental toxicity	667	1656	1286	122	738	549	204	0	549	438
Kinetics	486	875	1207	1548	1129	481	668	574	450	673
Pharmaco-dynamics (incl safety pharmacology)	392	204	569	0	1466	1803	296	128	1630	938
Phototoxicity	0	0	0	0	0	40	0	0	0	0
Ecotoxicity	3936	2555	1028	2533	1432	380	9429	100	395	315
Safety testing in food and feed area	0	0	0	0	0	0	0	18	0	0
Target animal safety	694	130	0	16	0	0	34	10	45	0
Other toxicity/safety testing	139	711	465	255	238	742	916	698	133	923
Total	34011	36534	29813	28416	31112	26119	34425	13648	21331	16470

Excel

REGULATORY USES : TOXICITY AND OTHER SAFETY TESTING INCLUDING PHARMACOLOGY: ACUTE AND SUB-ACUTE TOXICITY TESTING METHODS

Regulatory uses: Toxicity: Acute and sub-acute

[illegible]

REGULATORY USES: TOXICITY AND OTHER SAFETY TESTING INCLUDING PHARMACOLOGY: REPEATED DOSE TOXICITY

Regulatory uses: Toxicity: Repeated dose

Purpose	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
up to 28 days	2226	466	438	3314	1186	1960	3765	1574	1723	1396
29 - 90 days	615	126	75	2051	2746	2110	1317	967	2604	860
> 90 days	864	3212	612	1800	1072	713	478	36	653	590
Total	3705	3804	1125	7165	5004	4783	5560	2577	4980	2846

Excel

REGULATORY USES: TOXICITY AND OTHER SAFETY TESTING INCLUDING PHARMACOLOGY: ECOTOXICITY

Regulatory uses: Toxicity: Ecotoxicity

Purpose	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Acute toxicity	3936	2555	1028	2533	1432	380	529	100	320	315
Chronic toxicity	0	0	0	0	0	0	8900	0	0	0
Other ecotoxicity	0	0	0	0	0	0	0	0	75	0
Total	3936	2555	1028	2533	1432	380	9429	100	395	315

Excel