

2010 Statistical Report on the use of Animals for Experimental and other Scientific purposes in Ireland.

Licences and Certificates valid year ending 31 December 2010

Licences by category:

Without Certificate	37
Certificate A	621
Certificate B	604
Certificate C	35
Certificate D	1
Certificate E	16
Certificate EE	16
Certificate F	36
Certificate G	2

Note: If the licence is held alone without Certificate, the animal must be kept in anaesthesia throughout the whole of the experiment, and if the pain is likely to continue after the effect of the anaesthetic has ceased, or if any serious injury has been inflicted on the animal, it must be killed before the anaesthesia has passed off.

- Certificate A dispenses altogether from the obligation to use anaesthetic. It will be necessary in cases of simple inoculation calculated to give pain but not involving any surgical operation.
- Certificate B dispenses altogether from the obligation to kill the animal before the anaesthetic has passed off, it is necessary therefore whenever the initial operation is to be done under anaesthetics, but the animal is to be allowed to survive.
- Certificate C is necessary for experiments illustrating lectures.
- Certificate D is necessary where setting the animal free is necessary for the legitimate purposes of the experiment
- Certificate E is never held alone, but is necessary whenever an experiment is to be performed on a Dog or Cat under Certificate A.
- Certificate EE is never held alone, but is necessary whenever an experiment is to be performed on a Dog or Cat under Certificate B.
- Certificate F is necessary whenever an experiment is to be performed on a Horse, Ass or Mule.
- Certificate G is necessary where an experiment may require the animal to experience severe pain that is likely to be prolonged.

TABLE 1: NUMBER OF ANIMALS USED IN RELATION TO THEIR PLACE OF ORIGIN

Origin versus species							
	1.1 Species	1.2 Total	1.3 Animals coming from registered breeding or supplying establishments within the reporting country	1.4 Animals coming from elsewhere in the EC	1.5 Animals coming from Member Countries of the Council of Europe which are parties to the Convention ETS 123 (excluding EC Member States)	1.6 Animals coming from other origins	1.7 Re-used animals
1.a.	Mice (<i>Mus musculus</i>)	242,890	16,005	207,523	16,045	3,317	146
1.b.	Rats (<i>Rattus norvegicus</i>)	14,437	2,568	10,319	1,550	0	336
1.c.	Guinea-Pigs (<i>Cavia porcellus</i>)	441	0	441	0	0	0
1.d.	Hamsters (<i>Mesocricetus</i>)	0					
1.e.	Other Rodents (other <i>Rodentia</i>)	0					
1.f.	Rabbits (<i>Oryctolagus cuniculus</i>)	932	16	898	18	0	522
1.g.	Cats (<i>Felis catus</i>)	180	180	0	0	0	108
1.h.	Dogs (<i>Canis familiaris</i>)	831	831	0	0	0	373
1.i.	Ferrets (<i>Mustela putorius furo</i>)	0					
1.j.	Other Carnivores (other <i>Carnivora</i>)	0					
1.k.	Horses, donkeys and cross breeds (<i>Equidae</i>)	62	62	0	0	0	0
1.l.	Pigs (<i>Sus</i>)	755	748	0	0	7	0
1.m.	Goats (<i>Capra</i>)	5	5	0	0	0	0
1.n.	Sheep (<i>Ovis</i>)	11	11	0	0	0	0
1.o.	Cattle (<i>Bos</i>)	2,672	2,662	10	0	0	140
1.p.	Prosimians (<i>Prosimia</i>)	0					
1.q.	New World Monkey (<i>Ceboidea</i>)	0					
1.r.	Old World Monkeys (<i>Cercopithecoidea</i>)	0					
1.s.	Apes (<i>Hominoidea</i>)	0					
1.t.	Other Mammals (other <i>Mammalia</i>)	669	0	0	0	669	112
1.u.	Quail (<i>Coturnix coturnix</i>)	0					
1.v.	Other birds (other <i>Aves</i>)	333	313	20	0	0	0
1.w.	Reptiles (<i>Reptilia</i>)	0					
1.x.	Amphibians (<i>Amphibia</i>)	13	0	13	0	0	0
1.y.	Fish (<i>Pisces</i>)	15,378	727	14,641	0	10	0
1.z.	TOTAL	279,609	24,128	233,865	17,613	4,003	1,737

TABLE 2: NUMBER OF ANIMALS USED IN EXPERIMENTS FOR SELECTED PURPOSES

Purpose versus species										
	2.1 Species	2.2 Biological studies of a fundamental nature	2.3 Research and development of products and devices for human medicine and dentistry and for veterinary medicine(excluding toxicological and other safety evaluations counted in column 2.6)	2.4 Production and quality control of products and devices for human medicine and dentistry	2.5 Production and quality control of products and devices for veterinary medicine	2.6 Toxicological and other safety evaluations (including safety evaluation of products and devices for human medicine and dentistry and for veterinary medicine	2.7 Diagnosis of disease	2.8 Education and training	2.9 Other	2.10 Total
2.a.	Mice	20,528	17,719	164	0	204,065	12	0	402	242,890
2.b.	Rats	5,759	1,784	92	0	6,640	127	35	0	14,437
2.c.	Guinea-Pigs	34	0	0	0	407	0	0	0	441
2.d.	Hamsters									0
2.e.	Other Rodents									0
2.f.	Rabbits	51	50	100	0	728	3	0	0	932
2.g.	Cats	0	108	0	0	72	0	0	0	180
2.h.	Dogs	0	671	0	0	160	0	0	0	831
2.i.	Ferrets									0
2.j.	Other Carnivores									0
2.k.	Horses, donkeys and cross breeds	6	0	56	0	0	0	0	0	62
2.l.	Pigs	286	44	0	0	75	0	4	346	755
2.m.	Goats	0	0	0	0	0	0	5	0	5
2.n.	Sheep	0	2	0	0	0	0	5	4	11
2.o.	Cattle	329	24	106	0	0	1,372	60	781	2,672
2.p.	Prosimians									0
2.q.	New World Monkeys									0
2.r.	Old World Monkeys									0
2.s.	Apes									0
2.t.	Other Mammals	0	669	0	0	0	0	0	0	669
2.u.	Quail									0
2.v.	Other birds	1	128	0	0	0	154	0	50	333
2.w.	Reptiles									0
2.x.	Amphibians	13	0	0	0	0	0	0	0	13
2.y.	Fish	737	0	0	0	0	0	0	14,641	15,378
2.z.	TOTAL	27,744	21,199	518	0	212,147	1,668	109	16,224	279,609

TABLE 3: NUMBER OF ANIMALS USED IN TOXICOLOGICAL AND OTHER SAFETY EVALUATION

Products versus species											
3.1 Species		3.2 Products/ substances or devices for human medicine and dentistry and for veterinary medicine	3.3 Products/ substances used or intended to be used mainly in agriculture	3.4 Products/ substances used or intended to be used mainly in industry	3.5 Products/ substances used or intended to be used mainly in the household	3.6 Products/ substances used or intended to be used mainly as cosmetics or toiletries	3.7 Products/ substances used or intended to be used mainly as additives in food for human consumption	3.8 Products/ substances used or intended to be used mainly as additives in food for animal consumption	3.9 Potential or actual contaminants in the general environment which do not appear in other columns	3.10 Other toxicological or safety evaluations	3.11 Total
3.a.	Mice	199,622	0	0	0	0	0	0	0	4,443	204,065
3.b.	Rats	6,640	0	0	0	0	0	0	0	0	6,640
3.c.	Guinea-Pigs	407	0	0	0	0	0	0	0	0	407
3.d.	Hamsters										0
3.e.	Other Rodents										0
3.f.	Rabbits	728	0	0	0	0	0	0	0	0	728
3.g.	Cats	72	0	0	0	0	0	0	0	0	72
3.h.	Dogs	160	0	0	0	0	0	0	0	0	160
3.i.	Ferrets										0
3.j.	Other Carnivores										0
3.k.	Horses, donkeys and cross breeds										0
3.l.	Pigs	0	0	0	0	0	0	0	0	75	75
3.m.	Goats										0
3.n.	Sheep										0
3.o.	Cattle										0
3.p.	Prosimians										0
3.q.	New World Monkeys										0
3.r.	Old World Monkeys										0
3.s.	Apes										0
3.t.	Other Mammals										0
3.u.	Quail										0
3.v.	Other birds										0
3.w.	Reptiles										0
3.x.	Amphibians										0
3.y.	Fish										0
3.z.	TOTAL	207,629	0	0	0	0	0	0	0	4,518	212,147

TABLE 4: NUMBER OF ANIMALS USED IN EXPERIMENTS FOR STUDIES ON HUMAN AND ANIMAL DISEASES

Main categories versus species							
4.1 Species		4.2 Human cardiovascular diseases	4.3 Human nervous and mental disorders	4.4 Human cancer (excluding evaluations of carcinogenic hazards or risks)	4.5 Other human diseases	4.6 Studies specific to animal diseases	4.7 Total
4.a.	Mice	619	20,696	2,973	13,889	82	38,259
4.b.	Rats	569	5,435	0	1,478	188	7,670
4.c.	Guinea-Pigs	0	0	0	0	34	34
4.d.	Hamsters						0
4.e.	Other Rodents						0
4.f.	Rabbits	24	0	0	77	3	104
4.g.	Cats	0	0	0	0	108	108
4.h.	Dogs	0	0	0	0	671	671
4.i.	Ferrets						0
4.j.	Other Carnivores						0
4.k.	Horses, donkeys and cross breeds	0	0	0	0	6	6
4.l.	Pigs	136	0	0	2	192	330
4.m.	Goats						0
4.n.	Sheep	2	0	0	0	0	2
4.o.	Cattle	0	0	0	0	1,725	1,725
4.p.	Prosimians						0
4.q.	New World Monkeys						0
4.r.	Old World Monkeys						0
4.s.	Apes						0
4.t.	Other Mammals	0	0	0	0	669	669
4.u.	Quail						0
4.v.	Other birds	0	0	0	1	282	283
4.w.	Reptiles						0
4.x.	Amphibians	0	0	0	0	13	13
4.y.	Fish	0	0	0	0	737	737
4.z.	TOTAL	1,350	26,131	2,973	15,447	4,710	50,611

TABLE 5: NUMBER OF ANIMALS USED IN PRODUCTION AND QUALITY CONTROL OF PRODUCTS AND DEVICES FOR HUMAN MEDICINE AND DENTISTRY AND FOR VETERINARY MEDICINE

Regulatory requirements versus species							
5.1 Species	5.2 National legislation specific to a single EC Member State ¹	5.3 EC legislation including European Pharmacopoeia (requirements)	5.4 Member Country of Council of Europe (but not EC) legislation ²	5.5 Other legislation	5.6 Any combination of 5.2/ 5.3/ 5.4/ 5.5	5.7 No regulatory requirements	5.8 Total
5.a. Mice	164	0	0	0	0	0	164
5.b. Rats	92	0	0	0	0	0	92
5.c. Guinea-Pigs							0
5.d. Hamsters							0
5.e. Other Rodents							0
5.f. Rabbits	100	0	0	0	0	0	100
5.g. Cats							0
5.h. Dogs							0
5.i. Ferrets							0
5.j. Other Carnivores							0
5.k. Horses, donkeys and cross breeds	0	56	0	0	0	0	56
5.l. Pigs							0
5.m. Goats							0
5.n. Sheep							0
5.o. Cattle	0	106	0	0	0	0	106
5.p. Prosimians							0
5.q. New World Monkeys							0
5.r. Old World Monkeys							0
5.s. Apes							0
5.t. Other Mammals							0
5.u. Quail							0
5.v. Other birds							0
5.w. Reptiles							0
5.x. Amphibians							0
5.y. Fish							0
5.z. TOTAL	356	162	0	0	0	0	518

TABLE 6: NUMBER OF ANIMALS USED IN TOXICOLOGICAL AND OTHER SAFETY EVALUATIONS

Regulatory requirements versus species								
6.1 Species		6.2 National legislation specific to a single EC Member State(1)	6.3 EC legislation including European Pharmacopoeia (requirements)	6.4 Member Country of Council of Europe (but not EC) legislation(2)	6.5 Other legislation	6.6 Any combination of 5.2/ 5.3/ 5.4/ 5.5	6.7 No regulatory requirements	6.8 Total
6.a.	Mice	1,466	2,977	0	0	199,612	10	204,065
6.b.	Rats	8	0	0	0	6,632	0	6,640
6.c.	Guinea-Pigs	0	0	0	0	407	0	407
6.d.	Hamsters							0
6.e.	Other Rodents							0
6.f.	Rabbits	0	0	0	0	728	0	728
6.g.	Cats	72	0	0	0	0	0	72
6.h.	Dogs	160	0	0	0	0	0	160
6.i.	Ferrets							0
6.j.	Other Carnivores							0
6.k.	Horses, donkeys and cross breeds							0
6.l.	Pigs	0	75	0	0	0	0	75
6.m.	Goats							0
6.n.	Sheep							0
6.o.	Cattle							0
6.p.	Prosimians							0
6.q.	New World Monkeys							0
6.r.	Old World Monkeys							0
6.s.	Apes							0
6.t.	Other Mammals							0
6.u.	Quail							0
6.v.	Other birds							0
6.w.	Reptiles							0
6.x.	Amphibians							0
6.y.	Fish							0
6.z.	TOTAL	1,706	3,052	0	0	207,379	10	212,147

TABLE 7: NUMBER OF ANIMALS USED IN TOXICOLOGICAL AND OTHER SAFETY EVALUATIONS

Types of tests versus species															
	7.1. Species	7.2 Acute and sub-acute toxicity testing methods (including limit test)			7.3 Skin irritation	7.4 Skin sensitisation	7.5 Eye irritation	7.6 Sub-chronic and chronic toxicity	7.7 Carcinogenicity	7.8 Developmental toxicity	7.9 Mutagenicity	7.10 Reproductive toxicity	7.11 Toxicity to aquatic vertebrates not included in other columns	7.12 Other	7.13 Total
		7.2.1. LD50, LC50	7.2.2 Other lethal methods	7.2.3 Non lethal clinical signs methods											
7.a.	Mice	113,080	2,977	0	0	0	0	0	0	0	0	0	0	88,008	204,065
7.b.	Rats	0	0	0	0	0	8	0	0	0	0	0	0	6,632	6,640
7.c.	Guinea-Pigs	0	0	0	0	0	0	0	0	0	0	0	0	407	407
7.d.	Hamsters														0
7.e.	Other Rodents														0
7.f.	Rabbits	0	0	0	0	0	0	0	0	0	0	0	0	728	728
7.g.	Cats	0	0	0	0	0	0	0	0	0	0	0	0	72	72
7.h.	Dogs	0	0	0	0	0	0	0	0	0	0	0	0	160	160
7.i.	Ferrets														0
7.j.	Other Carnivores														0
7.k.	Horses, donkeys and cross breeds														0
7.l.	Pigs	0	0	0	0	0	0	0	0	0	0	0	0	75	75
7.m.	Goats														0
7.n.	Sheep														0
7.o.	Cattle														0
7.p.	Prosimians														0
7.q.	New World Monkeys														0
7.r.	Old World Monkeys														0
7.s.	Apes														0
7.t.	Other Mammals														0
7.u.	Quail														0
7.v.	Other birds														0
7.w.	Reptiles														0
7.x.	Amphibians														0
7.y.	Fish														0
7.z.	TOTAL	113,080	2,977	0	0	0	0	8	0	0	0	0	0	96,082	212,147

TABLE 8: NUMBER OF ANIMALS USED IN TOXICOLOGICAL AND OTHER SAFETY EVALUATIONS

Types of tests versus products														
8.1. Products	8.2 Acute and sub-acute toxicity testing methods (including limit test)			8.3 Skin irritation	8.4 Skin sensitization	8.5 Eye irritation	8.6 Sub-chronic and chronic toxicity	8.7 Carcinogenicity	8.8 Developmental toxicity	8.9 Mutagenicity	8.10 Reproductive toxicity	8.11 Toxicity to aquatic vertebrates not included in other columns	8.12 Other	8.13 Total
	8.2.1. LD50, LC50	8.2.2 Other lethal methods	8.2.3 Non lethal clinical signs methods											
8.a. Products/ substances or devices for human medicine and dentistry and for veterinary medicine	34						8						307	349
8.b. Products/ substances used or intended to be used mainly in agriculture														0
8.c. Products/ substances used or intended to be used mainly in industry														0
8.d. Products/ substances used or intended to be used mainly in the household														0
8.e. Products/ substances used or intended to be used mainly as cosmetics or toiletries														0
8.f. Products/ substances used or intended to be used mainly as additives in food for human consumption														0
8.g. Products/ substances used or intended to be used mainly as additives in food for animal consumption														0
8.h. Potential or actual contaminants in the general environment which do not appear in other columns														0
8.i. Other toxicological or safety evaluations	113,046	2,977											95,775	211,798
8.j. TOTAL	113,080	2,977	0	0	0	0	8	0	0	0	0	0	96,082	212,147

TABLE 9: NUMBER OF ANIMALS USED IN RELATION TO CERTIFICATES GRANTED

Origin versus species					
9.1 Species	9.2 With anaesthesia (Licence only)	9.3 With anaesthesia (Licence A)	9.4 With anaesthesia but with permitted recovery (Certificate B)	9.5 Demonstrations (Certificate C)	9.6 Total
9.a. Mice	14,969	222,749	5,172	0	242,890
9.b. Rats	8,881	3,211	2,345	8	14,437
9.c. Guinea-Pigs	0	441	0	0	441
9.d. Hamsters					0
9.e. Other Rodents					0
9.f. Rabbits	139	711	82	0	932
9.g. Cats	0	180	0	0	180
9.h. Dogs	0	791	40	0	831
9.i. Ferrets					0
9.j. Other Carnivores					0
9.k. Horses, donkeys and cross breeds	0	62	0	0	62
9.l. Pigs	107	613	35	0	755
9.m. Goats	5	0	0	0	5
9.n. Sheep	11	0	0	0	11
9.o. Cattle	84	2,500	88	0	2,672
9.p. Prosimians					0
9.q. New World Monkeys					0
9.r. Old World Monkeys					0
9.s. Apes					0
9.t. Other Mammals	0	0	669	0	669
9.u. Quail					0
9.v. Other birds	4	329	0	0	333
9.w. Reptiles					0
9.x. Amphibians	0	13	0	0	13
9.y. Fish	14,641	737	0	0	15,378
9.z. TOTAL	38,841	232,337	8,431	8	279,609

TABLE 10: GENETIC STATUS

	10.1 Species	10.2 With genetic defect	10.3 Trangenic	10.4 Total
10.a	Mice	2,632	6,601	9,233
10.b	Rats	0	40	40
10.d	Total	2,632	6,641	9,273

TABLE 11: NUMBER OF ANIMALS USED BY CATEGORY OF USER ESTABLISHMENT

Laboratory Versus Species						
11.1 Species	11.2 Universities & Colleges	11.3 Hospitals	11.4 Agriculture and veterinary research institutes	11.5 Fisheries research institutes and farms	11.6 Commercial establishments	11.7 Total
11.a. Mice	23,799		16	2,977	216,098	242,890
11.b. Rats	6,653	42			7,742	14,437
11.c. Guinea-Pigs	34				407	441
11.d. Hamsters						0
11.e. Other Rodents						0
11.f. Rabbits	162	24			746	932
11.g. Cats	0				180	180
11.h. Dogs	0		134		697	831
11.i. Ferrets						0
11.j. Other Carnivores						0
11.k. Horses, donkeys and cross breeds	6				56	62
11.l. Pigs	61	43	613		38	755
11.m. Goats		5				5
11.n. Sheep		7	4			11
11.o. Cattle	28		2,538		106	2,672
11.p. Prosimians						0
11.q. New World Monkeys						0
11.r. Old World Monkeys						0
11.s. Apes						0
11.t. Other Mammals			669			669
11.u. Quail						0
11.v. Other birds	55		278			333
11.w. Reptiles						0
11.x. Amphibians	13					13
11.y. Fish	737			14,641		15,378
11.z. TOTAL	31,548	121	4,252	17,618	226,070	279,609

TABLE 12: THE NUMBER OF SPECIES OF LIVE ANIMALS USED IN SCIENTIFIC PROCEDURES IN THE YEARS 2005-2010

SPECIES	2005	2006	2007	2008	2009	2010
MICE	17,776	21,152	26,111	71,224	209,903	242890
RATS	7,722	10,314	12,792	11,741	16,198	14437
GUINEA PIGS	4	25	5	91	477	441
HAMSTERS	0	60	55	68	0	0
OTHER RODENTS	0	0	0	0	0	0
RABBITS	379	101	43	204	138	932
CATS	119	169	421	295	653	180
DOGS	167	297	477	557	202	831
FERRETS	0	4	0	0	0	0
HORSES, DONKEYS & CROSSBREEDS	189	182	153	144	40	62
PIGS	382	189	190	224	325	755
GOATS	0	0	22	0	0	5
SHEEP	601	331	370	456	24	11
CATTLE	2,109	4,689	2,152	4,019	1,326	2672
OTHER MAMMALS	48	61	38	32	389	669
BIRDS	2,024	69	1,016	582	345	333
AMPHIBIANS	0	0	14	0	0	13
FISH	6,420	36,151	20,519	23,198	19,186	15,378
TOTAL	37,940	73,794	64,378	112,835	249,206	279,609