

2005 Statistical Report on the use of Animals for Experimental and other Scientific purposes in Ireland.

Licences and Certificates valid year ending 31 December 2005

Licences by category:

Without Certificate	33
Certificate A	445
Certificate B	422
Certificate C	44
Certificate D	0
Certificate E	16
Certificate EE	18
Certificate F	36
Certificate G	0

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 D	is necessary where setting the animal free is necessary for the legitimate purposes of the experiment
Certificate C	is necessary for experiments illustrating lectures.
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>)	17776	8767	8532		477	
1.b. Rats (<i>Rattus norvegicus</i>)	7722	5733	1864	60	65	
1.c. Guinea-Pigs (<i>Cavia porcellus</i>)	4	4				
1.d. Hamsters (<i>Mesocricetus</i>)						
1.e. Other Rodents (other <i>Rodentia</i>)						
1.f. Rabbits (<i>Oryctolagus cuniculus</i>)	379	19	360			
1.g. Cats (<i>Felis catus</i>)	119	119				60
1.h. Dogs (<i>Canis familiaris</i>)	167	137	30			92
1.i. Ferrets (<i>Mustela putorius furo</i>)						
1.j. Other Carnivores (other <i>Carnivora</i>)						
1.k. Horses, donkeys and cross breeds (<i>Equidae</i>)	189					
1.l. Pigs (<i>Sus</i>)	382					
1.m. Goats (<i>Capra</i>)						
1.n. Sheep (<i>Ovis</i>)	601					
1.o. Cattle (<i>Bos</i>)	2109					
1.p. Prosimians (<i>Prosimia</i>)						
1.q. New World Monkey (<i>Ceboidea</i>)						
1.r. Old World Monkeys (<i>Cercopithecoidea</i>)						
1.s. Apes (<i>Hominoidea</i>)						
1.t. Other Mammals (other <i>Mammalia</i>)	48					
1.u. Quail (<i>Coturnix coturnix</i>)						
1.v. Other birds (other <i>Aves</i>)	2024					
1.w. Reptiles (<i>Reptilia</i>)						
1.x. Amphibians (<i>Amphibia</i>)						
1.y. Fish (<i>Pisces</i>)	6420					
1.z. TOTAL	37940					

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	9922	603			6703	158	15	375	17776
2.b. Rats	6367	1209				76	26	44	7722
2.c. Guinea-Pigs		4							4
2.d. Hamsters									
2.e. Other Rodents									
2.f. Rabbits	61	304						14	379
2.g. Cats		10	45		64				119
2.h. Dogs		38	42		87				167
2.i. Ferrets									
2.j. Other Carnivores									
2.k. Horses, donkeys and cross breeds				172			5	12	189
2.l. Pigs	130	123				10	99	20	382
2.m. Goats									
2.n. Sheep	62	1		72		3	463		601
2.o. Cattle	1417	15		329	15		20	313	2109
2.p. Prosimians									
2.q. New World Monkeys									
2.r. Old World Monkeys									
2.s. Apes									
2.t. Other Mammals	4	44							48
2.u. Quail									
2.v. Other birds		7				110	60	1847	2024
2.w. Reptiles									
2.x. Amphibians									
2.y. Fish	6408							12	6420
2.z. TOTAL	24371	2358	87	573	6869	357	688	2637	37940

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

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 contami- nants in the general envi- ronment which do not appear in other columns	3.10 Other toxico- logical or safety evaluations	3.11 Total
3.a. Mice	150								6553	6703
3.b. Rats										
3.c. Guinea-Pigs										
3.d. Hamsters										
3.e. Other Rodents										
3.f. Rabbits										
3.g. Cats	64									64
3.h. Dogs	87									87
3.i. Ferrets										
3.j. Other Carnivores										
3.k. Horses, donkeys and cross breeds										
3.l. Pigs										
3.m. Goats										
3.n. Sheep										
3.o. Cattle	15									15
3.p. Prosimians										
3.q. New World Monkeys										
3.r. Old World Monkeys										
3.s. Apes										
3.t. Other Mammals										
3.u. Quail										
3.v. Other birds										
3.w. Reptiles										
3.x. Amphibians										
3.y. Fish										
3.z. TOTAL	316								6553	6869

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	675	1927	1155	6768	158	10683
4.b. Rats	1386	5379		887		7652
4.c. Guinea-Pigs		4				4
4.d. Hamsters						
4.e. Other Rodents						
4.f. Rabbits	313	2		50	20	365
4.g. Cats	10					10
4.h. Dogs				38		38
4.i. Ferrets						
4.j. Other Carnivores						
4.k. Horses, donkeys and cross breeds						
4.l. Pigs	101			56	106	263
4.m. Goats						
4.n. Sheep	1			38	27	66
4.o. Cattle					1432	1432
4.p. Prosimians						
4.q. New World Monkeys						
4.r. Old World Monkeys						
4.s. Apes						
4.t. Other Mammals	4				44	48
4.u. Quail						
4.v. Other birds	7				110	117
4.w. Reptiles						
4.x. Amphibians						
4.y. Fish		23		4790	1595	6408
4.z. TOTAL	2497	7335	1115	12627	3472	27086

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							
5.b. Rats							
5.c. Guinea-Pigs							
5.d. Hamsters							
5.e. Other Rodents							
5.f. Rabbits							
5.g. Cats					45		45
5.h. Dogs					42		42
5.i. Ferrets							
5.j. Other Carnivores							
5.k. Horses, donkeys and cross breeds		172					172
5.l. Pigs							
5.m. Goats							
5.n. Sheep		72					72
5.o. Cattle		286				43	329
5.p. Prosimians							
5.q. New World Monkeys							
5.r. Old World Monkeys							
5.s. Apes							
5.t. Other Mammals							
5.u. Quail							
5.v. Other birds							
5.w. Reptiles							
5.x. Amphibians							
5.y. Fish							
5.z. TOTAL		530			87	43	660

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	6.3 EC legislation including European Pharmacopoeia (requirements)	6.4 Member Country of Council of Europe (but not EC) legislation	6.5 Other legislation	6.6 Any combination of 6.2/ 6.3/ 6.4/ 6.5	6.7 No regulatory requirements	6.8 Total
6.a. Mice		5238			1465		6703
6.b. Rats							
6.c. Guinea-Pigs							
6.d. Hamsters							
6.e. Other Rodents							
6.f. Rabbits							
6.g. Cats	64						64
6.h. Dogs	87						87
6.i. Ferrets							
6.j. Other Carnivores							
6.k. Horses, donkeys and cross breeds							
6.l. Pigs							
6.m. Goats							
6.n. Sheep							
6.o. Cattle						15	15
6.p. Prosimians							
6.q. New World Monkeys							
6.r. Old World Monkeys							
6.s. Apes							
6.t. Other Mammals							
6.u. Quail							
6.v. Other birds							
6.w. Reptiles							
6.x. Amphibians							
6.y. Fish							
6.z. TOTAL	151	5238			1465	15	6869

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 Carcino- genicity	7.8 Develop- mental toxicity	7.9 Muta- genicity	7.10 Repro- ductive toxicity	7.11 Toxicity to aquatic vertebra- tes 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	875	4363					1465								6703
7.b. Rats															
7.c. Guinea-Pigs															
7.d. Hamsters															
7.e. Other Rodents															
7.f. Rabbits															
7.g. Cats														64	64
7.h. Dogs														87	87
7.i. Ferrets															
7.j. Other Carnivores															
7.k. Horses, donkeys and cross breeds			15												15
7.l. Pigs															
7.m. Goats															
7.n. Sheep															
7.o. Cattle															
7.p. Prosimians															
7.q. New World Monkeys															
7.r. Old World Monkeys															
7.s. Apes															
7.t. Other Mammals															
7.u. Quail															
7.v. Other birds															
7.w. Reptiles															
7.x. Amphibians															
7.y. Fish															
7.z. TOTAL	875	4363	15				1465							151	6869

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 sensitisation	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	875	4363	15									1465	151	6869
8.b.	Products/substances used or intended to be used mainly in agriculture														
8.c.	Products/substances used or intended to be used mainly in industry														
8.d.	Products/substances used or intended to be used mainly in the household														
8.e.	Products/substances used or intended to be used mainly as cosmetics or toiletries														
8.f.	Products/substances used or intended to be used mainly as additives in food for human consumption														
8.g.	Products/substances used or intended to be used mainly as additives in food for animal consumption														
8.h.	Potential or actual contaminants in the general environment which do not appear in other columns														
8.i.	Other toxicological or safety evaluations														
8.j.	TOTAL	875	4363	15									1465	151	6869

TABLE 9: NUMBER OF ANIMALS USED IN EXPERIMENTS BY CERTIFICATE
Certificate versus species

	9.1 Species	9.2 Licence only (no certificate)	9.3 Without anaesthesia (Certificate A)	9.4 With anaesthesia but with permitted recovery (Certificate B)	9.5 Demonstrations (Certificate C)	9.6 Total
9.a.	Mice	1435	14040	2302	15	17776
9.b.	Rats	2821	2747	2154	22	7722
9.c.	Guinea-Pigs		4			4
9.d.	Hamsters					
9.e.	Other Rodents					
9.f.	Rabbits	35	2	342		379
9.g.	Cats		119			119
9.h.	Dogs		129	38		167
9.i.	Ferrets					
9.j.	Other Carnivores					
9.k.	Horses, donkeys and cross breeds		117	12	5	189
9.l.	Pigs	56	222	104	3	382
9.m.	Goats					
9.n.	Sheep	1	600	91		601
9.o.	Cattle	98	1935	76	8	2109
9.p.	Prosimians					
9.q.	New World Monkeys					
9.r.	Old World Monkeys					
9.s.	Apes					
9.t.	Other Mammals	4		44		48
9.u.	Quail					
9.v.	Other birds	170	1854		60	2024
9.w.	Reptiles					
9.x.	Amphibians					
9.y.	Fish	3838	100	2485		6420
9.z.	TOTAL	8454	21929	7557	113	37940

TABLE 10: GENETIC STATUS

10.1 Species	10.2 With genetic defect	10.3 Transgenic	10.4 Total
10.a. Mice	1099	2208	3307
10.b. Rats	29	0	29
10.c. Total	1128	2208	3336

TABLE 11: NUMBER OF ANIMALS USED BY CATEGORY OF USER ESTABLISHMENT
Laboratory versus species

	11.1 Species	11.2 Universities and 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	12207	635	116	725	4636	17776
11.b.	Rats	7244	341			137	7722
11.c.	Guinea-Pigs	4					4
11.d.	Hamsters						
11.e.	Other Rodents						
11.f.	Rabbits	331				48	379
11.g.	Cats					119	119
11.h.	Dogs					167	167
11.i.	Ferrets						
11.j.	Other Carnivores						
11.k.	Horses, donkeys and cross breeds	17				172	189
11.l.	Pigs	117	2	202		61	382
11.m.	Goats						
11.n.	Sheep	525		3		73	601
11.o.	Cattle	121		1702		286	2109
11.p.	Prosimians						
11.q.	New World Monkeys						
11.r.	Old World Monkeys						
11.s.	Apes						
11.t.	Other Mammals	4		44			48
11.u.	Quail						
11.v.	Other birds	1914		110			2024
11.w.	Reptiles						
11.x.	Amphibians						
11.y.	Fish	6420					6420
11.z.	TOTAL	28904	978	2177	725	5426	37940

TABLE 12**The number and species of live animals used in scientific procedures in the years 1988 -1999, 2002 and 2005**

SPECIES	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2002	2005
MICE	21,832	19,348	23,470	17,550	15,739	20,427	18,535	21,963	26,735	26,795	23,032	31,251	16,790	17,776
RATS	4,767	6,273	5,391	3,053	2,559	12,712	13,456	16,637	24,474	21,591	18,814	14,484	8,282	7,722
GUINEA PIGS	521	557	617	423	464	1,812	1,400	2,665	1,531	1,576	1,387	1,041	35	4
HAMSTERS													6	
OTHER RODENTS	630	638	192	249	202	603	385	164	118	113	165	133		
RABBITS	1,444	1,469	1,801	1,112	1,586	2,050	1,945	2,484	2,067	579	805	915	130	379
DOGS	146	257	204	45	90	241	245	172	332	153	190	312	195	167
CATS	33	33	33	17	8		60	60	181	138	74	129	46	119
FERRETS													21	
HORSES, DONKEYS & CROSSBREEDS	22	233	43	34	21	220	94	29	199	85	102	192	19	189
PIGS	25	175	109	153	197	288	180	133	124	96	276	844	65	382
GOATS													2	
SHEEP	818	1,156	1,001	990	836	1,085	786	1,164	1,010	655	951	1,472	1,656	601
CATTLE	1,993	1,622	1,629	1,488	538	2,250	2,593	1,217	1,196	2,057	2,072	1,862	3,778	2,109
OTHER MAMMALS	126	116	10	37	38	14	0	12	0	0	0	13	132	48
BIRDS	1	168	13	44	41	442	48	86	94	59	1,174	1,229	0	2,024
FISH	0	110	900	0	150	62	9,076	9,820	19,021	20,218	19,709	20,052	21,046	6,420
AMPHIBIANS	538			4		11								
TOTAL	32,896	32,155	35,413	25,199	22,469	42,244	48,803	56,606	77,157	74,148	68,806	73,929	55,203	37,940