

# 2008 Statistical Report on the use of Animals for Experimental and other Scientific purposes in Ireland.

## Licences and Certificates valid year ending 31 December 2008

Licences by category:

Without Certificate	26
Certificate A	691
Certificate B	607
Certificate C	26
Certificate D	1
Certificate E	27
Certificate EE	26
Certificate F	31
Certificate G	1

**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> )	71,224	12,271	57,264	1,009	680	58
1.b. Rats ( <i>Rattus norvegicus</i> )	11,741	4,396	4,423	2,880	42	12
1.c. Guinea-Pigs ( <i>Cavia porcellus</i> )	91	59	32	0	0	0
1.d. Hamsters ( <i>Mesocricetus</i> )	68	4	64	0	0	0
1.e. Other Rodents (other <i>Rodentia</i> )						
1.f. Rabbits ( <i>Oryctolagus cuniculus</i> )	204	6	198	0	0	0
1.g. Cats ( <i>Felis catus</i> )	295	295	0	0	0	16
1.h. Dogs ( <i>Canis familiaris</i> )	557	547	10	0	0	198
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> )	144	45	0	99	0	8
1.l. Pigs ( <i>Sus</i> )	224	224	0	0	0	0
1.m. Goats ( <i>Capra</i> )						
1.n. Sheep ( <i>Ovis</i> )	456	359	0	10	87	120
1.o. Cattle ( <i>Bos</i> )	4,019	3,855	0	91	73	46
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> )	32	0	0	0	32	0
1.u. Quail ( <i>Coturnix coturnix</i> )						
1.v. Other birds (other <i>Aves</i> )	582	105	12	180	285	0
1.w. Reptiles ( <i>Reptilia</i> )						
1.x. Amphibians ( <i>Amphibia</i> )						
1.y. Fish ( <i>Pisces</i> )	23,198	4,443	0	0	18,755	0
1.z. TOTAL	112,835	26,609	62,003	4,269	19,954	458

**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	15,813	2,487	0	0	51,456	426	14	1028	71,224
2.b. Rats	6,750	4,506	0	0	243	57	12	173	11,741
2.c. Guinea-Pigs	32	0	0	0	59	0	0	0	91
2.d. Hamsters	4	64	0	0	0	0	0	0	68
2.e. Other Rodents									
2.f. Rabbits	6	114	0	0	84	0	0	0	204
2.g. Cats	0	197	0	0	98	0	0	0	295
2.h. Dogs	0	442	0	0	105	0	0	10	557
2.i. Ferrets									
2.j. Other Carnivores									
2.k. Horses, donkeys and cross breeds	21	0	0	99	0	3	13	8	144
2.l. Pigs	175	21	0	12	16	0	0	0	224
2.m. Goats									
2.n. Sheep	282	2	0	10	0	120	42	0	456
2.o. Cattle	3,563	29	0	139	0	90	12	186	4,019
2.p. Prosimians									
2.q. New World Monkeys									
2.r. Old World Monkeys									
2.s. Apes									
2.t. Other Mammals	0	32	0	0	0	0	0	0	32
2.u. Quail									
2.v. Other birds	201	287	0	0	4	90	0	0	582
2.w. Reptiles									
2.x. Amphibians									
2.y. Fish	3,019	1,400	0	0	0	0	0	18,779	23,198
2.z. TOTAL	29,866	9,581	0	260	52,065	786	93	20,184	112,835

**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	12	0		0		0		0	51,444	51,456
3.b. Rats									243	243
3.c. Guinea-Pigs	0	0		0		0		0	59	59
3.d. Hamsters										
3.e. Other Rodents										
3.f. Rabbits									84	84
3.g. Cats	98	0		0		0		0	0	98
3.h. Dogs	105	0		0		0		0	0	105
3.i. Ferrets										
3.j. Other Carnivores										
3.k. Horses, donkeys and cross breeds										
3.l. Pigs	16	0		0		0		0	0	16
3.m. Goats										
3.n. Sheep										
3.o. Cattle										
3.p. Prosimians										
3.q. New World Monkeys										
3.r. Old World Monkeys										
3.s. Apes										
3.t. Other Mammals										
3.u. Quail	4	0		0		0		0	0	4
3.v. Other birds										
3.w. Reptiles										
3.x. Amphibians										
3.y. Fish										
3.z. TOTAL	235	0	0	0	0	0	0	0	51,830	52,065

**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	770	5,534	2,374	9,030	1,018	18,726
4.b. Rats	1,525	7,778	42	1,840	128	11,313
4.c. Guinea-Pigs	0	0	0	32	0	32
4.d. Hamsters	0	0	0	64	4	68
4.e. Other Rodents						
4.f. Rabbits	49	0	0	69	2	120
4.g. Cats	0	0	0	0	197	197
4.h. Dogs	0	0	0	4	438	442
4.i. Ferrets						
4.j. Other Carnivores						
4.k. Horses, donkeys and cross breeds					24	24
4.l. Pigs	94		43	0	59	196
4.m. Goats						
4.n. Sheep	2	0	0	0	402	404
4.o. Cattle	0	0	0	0	3,682	3,682
4.p. Prosimians						
4.q. New World Monkeys						
4.r. Old World Monkeys						
4.s. Apes						
4.t. Other Mammals					32	32
4.u. Quail						
4.v. Other birds	12		2	1	563	578
4.w. Reptiles						
4.x. Amphibians						
4.y. Fish	60	0	0	0	4,359	4,419
4.z. TOTAL	2,512	13,312	2,461	11,040	10,908	40,233

**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							
5.h. Dogs							
5.i. Ferrets							
5.j. Other Carnivores							
5.k. Horses, donkeys and cross breeds	0	99	0	0	0	0	99
5.l. Pigs	12	0	0	0	0	0	12
5.m. Goats							
5.n. Sheep	0	10	0	0	0	0	10
5.o. Cattle	0	91	0	0	0	48	139
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	12	200	0	0	0	48	260

**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	0	5,106	0	0	46,328	22	51,465
6.b. Rats	15	0	0	0	228	0	243
6.c. Guinea-Pigs	0	0	0	0	59	0	59
6.d. Hamsters							
6.e. Other Rodents							
6.f. Rabbits	0	0	0	0	84	0	84
6.g. Cats	83	15	0	0	0	0	98
6.h. Dogs	57	48	0	0	0	0	105
6.i. Ferrets							
6.j. Other Carnivores							
6.k. Horses, donkeys and cross breeds							
6.l. Pigs	16	0	0	0	0	0	16
6.m. Goats							
6.n. Sheep							
6.o. Cattle							
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	4	0	0	0	0	0	4
6.w. Reptiles							
6.x. Amphibians							
6.y. Fish							
6.z. TOTAL	175	5,169	0	0	46,699	22	52,065

**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 Carci- nogenicity	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	42,721	1,866	0	0	0	0	0	0	0	0	0	0	0	6,869	51,456
7.b. Rats	0	0	0	0	0	0	0	0	15	0	0	0	0	228	243
7.c. Guinea-Pigs	0	0	0	0	0	0	0	0	0	0	0	0	0	59	59
7.d. Hamsters															
7.e. Other Rodents															
7.f. Rabbits	0	0	0	0	0	0	0	0	0		0	0	0	84	84
7.g. Cats	0	0	0	0	0	0	0	0	0		0	0	0	98	98
7.h. Dogs	0	0	0	0	0	0	0	0	0		0	0	0	105	105
7.i. Ferrets															
7.j. Other Carnivores															
7.k. Horses, donkeys and cross breeds															
7.l. Pigs	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16
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	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
7.w. Reptiles															
7.x. Amphibians															
7.y. Fish															
7.z. TOTAL	42,721	1,866	0	0	0	0	0	0	15	0	0	0	0	7,463	52,065

**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 Carcino- genicity	8.8 Develop- mental toxicity	8.9 Muta- genicity	8.10 Repro- ductive toxicity	8.11 Toxicity to aquatic vertebra- tes 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	12	0	0	0	0	0	0	0	0	0	0	0	223	235
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	0	0	0	0	0	0	0	0	0	0	0	0	46,328	46,328
8.i. Other toxicological or safety evaluations	1,866	0	0	0	0	0	0	0	15	0	0	0	3,621	5,502
8.j. TOTAL	1,878	0	0	0	0	0	0	0	15	0	0	0	50,172	52,065

**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	6,436	59,387	5,401	0	71,224
9.b.	Rats	6,725	2,619	2,397	0	11,741
9.c.	Guinea-Pigs	32	59	0	0	91
9.d.	Hamsters	0	68	0	0	68
9.e.	Other Rodents	0	0	0	0	0
9.f.	Rabbits	55	33	116	0	204
9.g.	Cats	0	295	0	0	295
9.h.	Dogs	0	543	14	0	557
9.i.	Ferrets					
9.j.	Other Carnivores					
9.k.	Horses, donkeys and cross breeds	0	144	0	0	144
9.l.	Pigs	91	94	39	0	224
9.m.	Goats					
9.n.	Sheep	17	397	42	0	456
9.o.	Cattle	152	3,857	10	0	4,019
9.p.	Prosimians					
9.q.	New World Monkeys					
9.r.	Old World Monkeys					
9.s.	Apes					
9.t.	Other Mammals	0	0	32	0	32
9.u.	Quail					
9.v.	Other birds	1	581	0	0	582
9.w.	Reptiles					
9.x.	Amphibians					
9.y.	Fish	21,560	179	1,459	0	23,198
9.z.	TOTAL	35,069	68,256	9,510	0	112,835

**TABLE 10: GENETIC STATUS**

10.1 Species	10.2 With genetic defect	10.3 Transgenic	10.4 Total
10.a. Mice	1,884	3,585	5,469
10.b. Rats	54	60	114
10.c. Total	1,938	3,645	5,583

**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	18,479	120	0	1,866	50,759	71,224
11.b.	Rats	7,913	52	668	0	3,108	11,741
11.c.	Guinea-Pigs	32	0	0	0	59	91
11.d.	Hamsters	64	0	4	0	0	68
11.e.	Other Rodents						
11.f.	Rabbits	120	0	0	0	84	204
11.g.	Cats					295	295
11.h.	Dogs	14	0	88	0	455	557
11.i.	Ferrets						
11.j.	Other Carnivores						
11.k.	Horses, donkeys and cross breeds	34	0	11	0	99	144
11.l.	Pigs	80	42	86	0	16	224
11.m.	Goats						
11.n.	Sheep	42	2	402	0	10	456
11.o.	Cattle	357		3,571	0	91	4,019
11.p.	Prosimians						
11.q.	New World Monkeys						
11.r.	Old World Monkeys						
11.s.	Apes						
11.t.	Other Mammals	0	0	32	0	0	32
11.u.	Quail						
11.v.	Other birds	3	0	567	0	12	582
11.w.	Reptiles						
11.x.	Amphibians						
11.y.	Fish	60	0	0	23,138	0	23,198
11.z.	TOTAL	27,198	216	5,429	25,004	54,988	112,835

**TABLE 12****The number and species of live animals used in scientific procedures in the years 1990 -1999, 2002 and 2005-2008**

<b>SPECIES</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2002</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
MICE	23,470	17,550	15,739	20,427	18,535	21,963	26,735	26,795	23,032	31,251	16,790	17,776	21,152	26,111	71,224
RATS	5,391	3,053	2,559	12,712	13,456	16,637	24,474	21,591	18,814	14,484	8,282	7,722	10,314	12,792	11,741
GUINEA PIGS	617	423	464	1,812	1,400	2,665	1,531	1,576	1,387	1,041	35	4	25	5	91
HAMSTERS	0	0	0	0	0	0	0	0	0	0	6	0	60	55	68
OTHER RODENTS	192	249	202	603	385	164	118	113	165	133	0	0	0	0	0
RABBITS	1,801	1,112	1,586	2,050	1,945	2,484	2,067	579	805	915	130	379	101	43	204
DOGS	204	45	90	241	245	172	332	153	190	312	195	167	297	477	557
CATS	33	17	8		60	60	181	138	74	129	46	119	169	421	295
FERRETS											21		4	0	
HORSES, DONKEYS & CROSSBREEDS	43	34	21	220	94	29	199	85	102	192	19	189	182	153	144
PIGS	109	153	197	288	180	133	124	96	276	844	65	382	189	190	224
GOATS	0	0	0	0	0	0	0	0	0	0	2	0	0	22	0
SHEEP	1,001	990	836	1,085	786	1,164	1,010	655	951	1,472	1,656	601	331	370	456
CATTLE	1,629	1,488	538	2,250	2,593	1,217	1,196	2,057	2,072	1,862	3,778	2,109	4,689	2,152	4,019
OTHER MAMMALS	10	37	38	14	0	12	0	0	0	13	132	48	61	38	32
BIRDS	13	44	41	442	48	86	94	59	1,174	1,229	0	2,024	69	1,016	582
FISH	900	0	150	62	9,076	9,820	19,021	20,218	19,709	20,052	21,046	6,420	36,151	20,519	23,198
AMPHIBIANS	0	4	0	11	0	0	0	0	0	0	0	0	0	14	0
<b>TOTAL</b>	<b>35,413</b>	<b>25,199</b>	<b>22,469</b>	<b>42,244</b>	<b>48,803</b>	<b>56,606</b>	<b>77,157</b>	<b>74,148</b>	<b>68,806</b>	<b>73,929</b>	<b>55,203</b>	<b>37,940</b>	<b>73,794</b>	<b>64,378</b>	<b>112,835</b>