2012 Statistical Report on the use of Animals for Experimental and other Scientific purposes in Ireland.

Licences and Certificates valid year ending 31 December 2012

Licences by category:

Without Certificate	59
Certificate A	563
Certificate B	530
Certificate C	35
Certificate D	3
Certificate E	20
Certificate EE	19
Certificate F	41
Certificate G	6

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 (*Mus musculus*)	**212,693**	7,025	12,195	192,361	1,112	8
1.b.	Rats (*Rattus norvegicus*)	**12,612**	3,640	4,361	4,611		21
1.c.	Guinea-Pigs (*Cavia porcellus*)	**1,483**	209	4	1,270		
1.d.	Hamsters (*Mesocricetus*)						
1.e.	Other Rodents (other *Rodentia*)						
1.f.	Rabbits (*Oryctolagus cuniculus*)	**1,098**		49	1,049		659
1.g.	Cats (*Felis catus*)	**185**	185				122
1.h.	Dogs (*Canis familiaris*)	**697**	697				257
1.i.	Ferrets (*Mustela putorius furo*)						
1.j.	Other Carnivores (other *Carnivora*)						
1.k.	Horses, donkeys and cross breeds (*Equidae*)	**50**	12			38	3
1.l.	Pigs (*Sus*)	**331**	195	121		15	
1.m.	Goats (*Capra*)	**9**	9				
1.n.	Sheep (*Ovis)*	**82**	72			10	6
1.o.	Cattle (*Bos*)	**1,333**	1,182	23		128	54
1.p.	Prosimians (*Prosimia*)						
1.q.	New World Monkey (*Ceboidea*)						
1.r	Old World Monkeys (*Cercopithecoidea*)						
1.s.	Apes (*Hominoidea*)						
1.t.	Other Mammals (other *Mammalia*)	**755**	525			230	319
1.u.	Quail (*Coturnix coturnix)*						
1.v.	Other birds (other *Aves*)	**62**	62				
1.w.	Reptiles (*Reptilia*)						
1.x.	Amphibians (*Amphibia*)	**55**		26		29	
1.y.	Fish (*Pisces*)	**840**	540	300			
1.z.	**TOTAL**	**232,285**	**14,353**	**17,079**	**199,291**	**1,562**	**1,449**

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	18,817	26,245	110		167,341	142		38	**212,693**
2.b.	Rats	5,181	7,175			26	199	31		**12,612**
2.c.	Guinea-Pigs	4				1,270			209	**1,483**
2.d.	Hamsters									
2.e.	Other Rodents									
2.f.	Rabbits	34	15			635			414	**1,098**
2.g.	Cats		143			30			12	**185**
2.h.	Dogs		475			216			6	**697**
2.i.	Ferrets									
2.j.	Other Carnivores									
2.k.	Horses, donkeys and cross breeds				38		4		8	**50**
2.l.	Pigs	254	62						15	**331**
2.m.	Goats		9							**9**
2.n.	Sheep	66							16	**82**
2.o.	Cattle	427	26		320		56		504	**1,333**
2.p.	Prosimians									
2.q.	New World Monkeys									
2.r.	Old World Monkeys									
2.s.	Apes									
2.t.	Other Mammals	525	230							**755**
2.u.	Quail									
2.v.	Other birds						62			**62**
2.w.	Reptiles									
2.x.	Amphibians	55								**55**
2.y.	Fish	300				540				**840**
2.z.	**TOTAL**	**25,663**	**34,380**	**110**	**358**	**170,058**	**463**	**31**	**1,222**	**232,285**

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 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	97								167,244	**167,341**
3.b.	Rats	26									**26**
3.c.	Guinea-Pigs									1,270	**1,270**
3.d.	Hamsters										
3.e.	Other Rodents										
3.f.	Rabbits									635	**635**
3.g.	Cats	30									**30**
3.h.	Dogs	216									**216**
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										
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								540		**540**
3.z.	**TOTAL**	**369**							**540**	**169,149**	**170,058**

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	1,068	4,802	2,231	37,103		**45,204**
4.b.	Rats	1,176	6,124	26	5,133	96	**12,555**
4.c.	Guinea-Pigs					4	**4**
4.d.	Hamsters						
4.e.	Other Rodents						
4.f.	Rabbits	5			44		**49**
4.g.	Cats					143	**143**
4.h.	Dogs					475	**475**
4.i.	Ferrets						
4.j.	Other Carnivores						
4.k.	Horses, donkeys and cross breeds					4	**4**
4.l.	Pigs	282		10	24		**316**
4.m.	Goats				9		**9**
4.n.	Sheep					66	**66**
4.o.	Cattle					509	**509**
4.p.	Prosimians						
4.q.	New World Monkeys						
4.r.	Old World Monkeys						
4.s.	Apes						
4.t.	Other Mammals					755	**755**
4.u.	Quail						
4.v.	Other birds					62	**62**
4.w.	Reptiles						
4.x.	Amphibians					55	**55**
4.y.	Fish					300	**300**
4.z.	TOTAL	**2,531**	**10,926**	**2,267**	**42,313**	**2,469**	**60,506**

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)**	**5.3 EC legislation including European Pharmacopoeia (requirements)**	**5.4 Member Country of Council of Europe (but not EC) legislation)**	**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		110					110
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		38					38
5.l.	Pigs							
5.m.	Goats							
5.n.	Sheep							
5.o.	Cattle		320					320
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**		**468**					**468**

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 State1)	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	97				167,244		**167,341**
6.b.	Rats	26						**26**
6.c.	Guinea-Pigs					1,270		**1270**
6.d.	Hamsters							
6.e.	Other Rodents							
6.f.	Rabbits					635		**635**
6.g.	Cats	30						**30**
6.h.	Dogs	156				60		**216**
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							
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	540						**540**
6.z.	TOTAL	**849**				**169,209**		**170,058**

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 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	157,924						97						9,320	**167,341**
7.b.	Rats							26							**26**
7.c.	Guinea-Pigs													1,270	**1,270**
7.d.	Hamsters														
7.e.	Other Rodents														
7.f.	Rabbits													635	**635**
7.g.	Cats													30	**30**
7.h.	Dogs													216	**216**
7.i.	Ferrets														
7.j.	Other Carnivores														
7.k.	Horses, donkeys and cross breeds														
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	540													**540**
7.z.	**TOTAL**	**158,464**						**123**						**11,471**	**170,058**

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 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 humanmedicine and dentistry and for veterinary medicine	157,924						123						9,566	**167,613**
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 contaminents in the general environment which do not appear in other columns	540													**540**
8.i. Other toxicological or safety evaluations													1,905	**1,905**
8.j. TOTAL	**158,464**						**123**						**11,471**	**170,058**

TABLE 9: NUMBER OF ANIMALS USED IN RELATION TO CERTIFICATES A, B & C

	9.1 Species	9.2 With anaesthesia (Licence only)	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	5,819	195,459	11,415		**212,693**
9.b.	Rats	3,673	2,592	6,347	1	**12,612**
9.c.	Guinea-Pigs		454	1,029		**1,483**
9.d.	Hamsters					
9.e.	Other Rodents					
9.f.	Rabbits	15	1,049	34		**1,098**
9.g.	Cats		185			**185**
9.h.	Dogs		585	112		**697**
9.i.	Ferrets					
9.j.	Other Carnivores					
9.k.	Horses, donkeys and cross breeds		50			**50**
9.l.	Pigs	29		302	12	**331**
9.m.	Goats			9		**9**
9.n.	Sheep	6	10	66		**82**
9.o.	Cattle	4	1,329			**1,333**
9.p.	Prosimians					
9.q.	New World Monkeys					
9.r.	Old World Monkeys					
9.s.	Apes					
9.t.	Other Mammals		755			**755**
9.u.	Quail					
9.v.	Other birds		62			**62**
9.w.	Reptiles					
9.x.	Amphibians		55			**55**
9.y.	Fish	300	540			**840**
9.z.	**TOTAL**	**9,846**	**202,370**	**20,0699**	**13**	**232,285**

TABLE 10: GENETIC STATUS

	10.1 Species	10.2 With genetic defect	10.3 Trangenic	10.4 Total
10.a	Mice	2,499	3,029	**5,528**
10.b	Rats	14	129	**143**
10.d	**Total**	**2,513**	**3,158**	**5,671**

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	20,121	18			192,554	**212,693**
11.b. Rats	8,185	82			4,345	**12,612**
11.c. Guinea-Pigs	4				1,479	**1,483**
11.d. Hamsters						
11.e. Other Rodents						
11.f. Rabbits	44	5			1,049	**1,098**
11.g. Cats					185	**185**
11.h. Dogs					697	**697**
11.i. Ferrets						
11.j. Other Carnivores						
11.k. Horses, donkeys and cross breds			4		46	**50**
11.l. Pigs	288	28	15			**331**
11.m. Goats	9					**9**
11.n. Sheep			72		10	**82**
11.o. Cattle			1,213		120	**1,333**
11.p. Prosimians						
11.q. New World Monkeys						
11.r. Old World Monkeys						
11.s. Apes						
11.t. Other Mammals			755			**755**
11.u. Quail						
11.v. Other birds			62			**62**
11.w. Reptiles						
11.x. Amphibians	55					**55**
11.y. Fish				840		**840**
11.z. TOTAL	**28,706**	**133**	**2,121**	**840**	**200,485**	**232,285**

TABLE 12: THE NUMBER OF SPECIES OF LIVE ANIMALS USED IN SCIENTIFIC PROCEDURES IN THE YEARS 2006-2011

SPECIES	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
MICE	26,111	71,224	209,903	242,890	248,958	**212.693**
RATS	12,792	11,741	16,198	14,437	10,476	**12.612**
GUINEA PIGS	5	91	477	441	545	**1.483**
HAMSTERS	55	68	0	0	0	**0**
OTHER RODENTS	0	0	0	0	0	**0**
RABBITS	43	204	138	932	715	**1.098**
CATS	421	295	653	180	120	**185**
DOGS	477	557	202	831	473	**697**
FERRETS	0	0	0	0	0	**0**
HORSES, DONKEYS & CROSSBREEDS	153	144	40	62	238	**50**
PIGS	190	224	325	755	286	**331**
GOATS	22	0	0	5	13	**9**
SHEEP	370	456	24	11	348	**82**
CATTLE	2,152	4,019	1,326	2,672	1,700	**1.333**
OTHER MAMMALS	38	32	389	669	480	**755**
BIRDS	1,016	582	345	333	503	**62**
AMPHIBIANS	14	0	0	13	21	**55**
FISH	20,519	23,198	19,186	15,378	88	**840**
TOTAL	**64,378**	**112,835**	**249,206**	**279,609**	264,964	**232,285**