

British Veterinary Association / Kennel Club Elbow Dysplasia Scheme

Breed Specific Statistics – 1 January 2001 to 31 December 2016

Elbow grades by breed 1999 - 2016

Elbow grading should be considered along with other criteria as part of a responsible breeding programme, and it is strongly recommended that breeders choose breeding stock (both dogs and bitches) from animals with an overall elbow grade of 0. Dogs with elbow grades of 2 or 3 have marked osteoarthritis which is highly likely to be due to ED. Dogs of elbow grades of 1 show mild or early osteoarthritis which is also likely to be due to ED. Lameness is not a good indicator of elbow status and many dogs with ED do not show signs of lameness (i.e. they are affected sub-clinically) at the age at which they are used for breeding. ED status of parents, siblings and progeny for Kennel Club registered dogs should also be considered, and these together with a three generation Health Test Pedigree may be downloaded via the Health Test Results Finder, available on the Kennel Club's online health tool Mate Select (www.mateselect.org.uk). In addition, estimated breeding values (EBVs) are available for breeds in which a significant number of dogs have been graded, via the same link.

The table below shows ED results for all breeds that have been tested in the last 18 years broken down by breed and grade (both numerically and as a percentage)

Breed	No. dogs graded	Grades					Grades 1, 2 and 3
		0	1	2	3		
Airedale Terrier	9	6 (66.7%)	3 (33.3%)	0 (0.0%)	0 (0.0%)	3 (33.3%)	
Akita	7	7 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Alaskan Malamute	45	39 (86.7%)	4 (8.9%)	2 (4.4%)	0 (0.0%)	6 (13.3%)	
Anatolian Shepherd Dog	3	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Australian Cattle Dog	101	77 (76.2%)	16 (15.8%)	7 (6.9%)	7 (6.9%)	24 (23.8%)	
Australian Shepherd	267	256 (95.9%)	8 (3.0%)	2 (0.7%)	1 (0.4%)	11 (4.1%)	
Basenji	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Basset Hound	5	1 (20.0%)	1 (20.0%)	3 (60.0%)	0 (0.0%)	4 (80.0%)	
Bavarian Mountain Hound (Imp)	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Beagle	3	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Bearded Collie	113	103 (91.2%)	5 (4.4%)	3 (2.7%)	2 (1.8%)	10 (8.8%)	
Beauceron	5	4 (80.0%)	1 (20.0%)	0 (0.0%)	0 (0.0%)	1 (20.0%)	
Bernese Mountain Dog	1922	1217 (63.3%)	272 (14.2%)	280 (14.6%)	153 (8.0%)	705 (36.7%)	
Basset Fauve De Bretagne	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Basset Griffon Vendéen Grand	2	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)	
Bloodhound	34	18 (52.9%)	9 (26.5%)	6 (17.6%)	1 (2.9%)	16 (47.1%)	
Border Collie	233	228 (97.9%)	5 (2.1%)	0 (0.0%)	0 (0.0%)	5 (2.1%)	
Border Terrier	1	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	

Breed	No. dogs graded	Grades				Grades 1, 2 and 3
		0	1	2	3	
Bouvier des Flandres	26	22 (84.6%)	2 (7.7%)	2 (7.7%)	0 (0.0%)	4 (15.4%)
Boxer	8	7 (87.5%)	1 (12.5%)	0 (0.0%)	0 (0.0%)	1 (12.5%)
Bracco Italiano	137	103 (75.2%)	24 (17.5%)	8 (5.8%)	2 (1.5%)	34 (24.8%)
Briard	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Brittany	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Belgian Shepherd Dog (Groenendael)	9	9 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Belgian Shepherd Dog (Laekenois)	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Belgian Shepherd Dog (Malinois)	63	57 (90.5%)	6 (9.5%)	0 (0.0%)	0 (0.0%)	6 (9.5%)
Belgian Shepherd Dog (Tervueren)	10	9 (90.0%)	1 (10.0%)	0 (0.0%)	0 (0.0%)	1 (10.0%)
Bull Terrier (Miniature)	2	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)
Bulldog	5	3 (60.0%)	1 (20.0%)	1 (20.0%)	0 (0.0%)	2 (40.0%)
Bullmastiff	88	43 (48.9%)	19 (21.6%)	20 (22.7%)	6 (6.8%)	45 (51.1%)
Canaan Dog	5	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Catalan Sheepdog	8	7 (87.5%)	1 (12.5%)	0 (0.0%)	0 (0.0%)	1 (12.5%)
Chow Chow	73	29 (39.7%)	12 (16.4%)	19 (26.0%)	13 (17.8%)	44 (60.3%)
Cavalier King Charles Spaniel	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Collie (Rough)	6	6 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Collie (Smooth)	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Dalmatian	66	60 (90.9%)	5 (7.6%)	1 (1.5%)	0 (0.0%)	6 (9.1%)
Dobermann	25	24 (96.0%)	1 (4.0%)	0 (0.0%)	0 (0.0%)	1 (4.0%)
Dogue de Bordeaux	384	210 (60.3%)	59 (17.0%)	54 (15.5%)	25 (7.2%)	138 (39.7%)
English Setter	4	3 (75.0%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	1 (25.0%)
Entlebucher Mountain Dog (Imp)	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Estrela Mountain Dog	12	9 (75.0%)	1 (8.3%)	2 (16.7%)	0 (0.0%)	3 (25.0%)
Eurasian	129	123 (95.3%)	3 (2.3%)	3 (2.3%)	1 (0.8%)	7 (5.4%)
Finnish Lapphund	11	11 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
French Bulldog	3	2 (66.7%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	1 (33.3%)
German Longhaired Pointer	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
German Spitz (Klein)	5	4 (80.0%)	1 (20.0%)	0 (0.0%)	0 (0.0%)	1 (20.0%)
German Wirehaired Pointer	33	31 (93.9%)	2 (6.1%)	0 (0.0%)	0 (0.0%)	2 (6.1%)
Giant Schnauzer	27	26 (96.3%)	1 (3.7%)	0 (0.0%)	0 (0.0%)	1 (3.7%)
Glen of Imaal	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Gordon Setter	11	7 (63.6%)	2 (18.2%)	1 (9.1%)	1 (9.1%)	4 (36.4%)
Great Dane	176	154 (87.5%)	9 (5.1%)	6 (3.4%)	7 (4.0%)	22 (12.5%)
Greater Swiss Mountain Dog	37	30 (81.1%)	5 (13.5%)	1 (2.7%)	1 (2.7%)	7 (18.9%)
German Shepherd Dog	3700	3036 (82.1%)	378 (10.2%)	187 (5.1%)	99 (2.7%)	664 (17.9%)
Havanese	6	4 (66.7%)	2 (33.3%)	0 (0.0%)	0 (0.0%)	2 (33.3%)

Breed	No. dogs graded	Grades				Grades 1, 2 and 3
		0	1	2	3	
Hovawart	12	12 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Hungarian Wirehaired Vizla	36	36 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Hungarian Pumi	6	6 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Hungarian Vizla	202	187 (92.6%)	13 (6.4%)	1 (0.5%)	1 (0.5%)	15 (7.4%)
Irish Red and White Setter	7	7 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Irish Setter	8	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Irish Wolfhound	3	1 (33.3%)	1 (33.3%)	1 (33.3%)	0 (0.0%)	2 (66.7%)
Italian Greyhound	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Italian Spinone	51	42 (82.4%)	4 (7.8%)	5 (9.8%)	0 (0.0%)	9 (17.6%)
Japanese Akita Inu	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Keeshond	9	5 (55.6%)	4 (44.4%)	0 (0.0%)	0 (0.0%)	4 (44.4%)
Kooikerhondje	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Korthals Griffon (Imp)	15	11 (73.3%)	2 (13.3%)	1 (6.7%)	1 (6.7%)	4 (26.7%)
Lagotto Romagnolo	9	9 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Large Munsterlander	203	160 (78.8%)	25 (12.3%)	14 (6.9%)	4 (2.0%)	43 (21.2%)
Leonberger	1057	968 (91.6%)	67 (6.3%)	9 (0.9%)	13 (1.2%)	89 (8.4%)
Maremma Sheepdog	3	2 (66.7%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	1 (33.3%)
Mastiff	143	115 (80.4%)	10 (7.0%)	11 (7.7%)	7 (4.9%)	28 (19.6%)
Neapolitan Mastiff	15	10 (66.7%)	3 (20.0%)	2 (13.3%)	0 (0.0%)	5 (33.3%)
Newfoundland	904	651 (72.0%)	130 (14.4%)	83 (9.2%)	40 (4.4%)	253 (28.0%)
Norwegian Elkhound	5	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Old English Sheepdog	27	24 (88.9%)	3 (11.1%)	0 (0.0%)	0 (0.0%)	3 (11.1%)
Otterhound	129	53 (41.1%)	36 (27.9%)	32 (24.8%)	8 (6.2%)	76 (58.9%)
Pointer	8	7 (87.5%)	1 (12.5%)	0 (0.0%)	0 (0.0%)	1 (12.5%)
Pomeranian	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Poodle (Miniature)	13	9 (69.2%)	3 (23.1%)	1 (7.7%)	0 (0.0%)	4 (30.8%)
Poodle (Standard)	52	47 (90.4%)	5 (9.6%)	0 (0.0%)	0 (0.0%)	5 (9.6%)
Poodle (Toy)	2	1 (50.0%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	1 (50.0%)
Portuguese Water Dog	27	22 (81.5%)	4 (14.8%)	1 (3.7%)	0 (0.0%)	5 (18.5%)
Pug	5	1 (20.0%)	3 (60.0%)	1 (20.0%)	0 (0.0%)	4 (80.0%)
Pyrenean Mountain Dog	40	40 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Pyrenean Sheepdog (Longhaired)	7	7 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Retriever (Chesapeake)	41	35 (85.4%)	2 (4.9%)	3 (7.3%)	1 (2.4%)	6 (14.6%)
Retriever (Curly Coated)	10	10 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Retriever (Flat Coated)	318	312 (98.1%)	3 (0.9%)	2 (0.6%)	1 (0.3%)	6 (1.9%)

Breed	No. dogs graded	Grades				Grades 1, 2 and 3
		0	1	2	3	
Retriever (Golden)	4296	3384 (78.8%)	541 (12.6%)	306 (7.1%)	65 (1.5%)	912 (21.2%)
Retriever (Labrador)	17004	14718 (86.6%)	1417 (8.3%)	588 (3.5%)	281 (1.7%)	2286 (13.4%)
Retriever (Nova Scotia Duck Tolling)	171	165 (96.5%)	4 (2.3%)	2 (1.2%)	0 (0.0%)	6 (3.5%)
Rhodesian Ridgeback	457	393 (86.0%)	41 (9.0%)	20 (4.4%)	3 (0.7%)	64 (14.0%)
Rottweiler	1089	535 (49.1%)	304 (27.9%)	224 (20.6%)	26 (2.4%)	554 (50.9%)
Russian Black Terrier	45	27 (60.0%)	9 (20.0%)	7 (15.6%)	2 (4.4%)	18 (40.0%)
Samoyed	5	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Schnauzer	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Scottish Terrier	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Shar Pei	7	3 (42.9%)	1 (14.3%)	2 (28.6%)	1 (14.3%)	4 (57.1%)
Shetland Sheepdog	14	13 (92.9%)	1 (7.1%)	0 (0.0%)	0 (0.0%)	1 (7.1%)
Shih Tzu	3	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Siberian Husky	20	20 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Slovakian Rough Haired Pointer (Imp)	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Small Munsterlander (Imp)	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Soft Coated Wheaten Terrier	1	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	1 (100.0%)
Spaniel (American Cocker)	1	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Spaniel (Clumber)	136	123 (90.4%)	7 (5.1%)	3 (2.2%)	3 (2.2%)	13 (9.6%)
Spaniel (Cocker)	93	88 (94.6%)	5 (5.4%)	0 (0.0%)	0 (0.0%)	5 (5.4%)
Spaniel (Field)	27	26 (96.3%)	1 (3.7%)	0 (0.0%)	0 (0.0%)	1 (3.7%)
Spaniel (Irish Water)	185	144 (77.8%)	27 (14.6%)	14 (7.6%)	0 (0.0%)	41 (22.2%)
Spaniel (English Springer)	90	80 (88.9%)	7 (7.8%)	3 (3.3%)	0 (0.0%)	10 (11.1%)
Spaniel (Sussex)	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Spaniel (Welsh Springer)	185	144 (77.8%)	27 (14.6%)	14 (7.6%)	0 (0.0%)	41 (22.2%)
Spanish Water Dog	9	9 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
St. Bernard	228	184 (80.7%)	17 (7.5%)	12 (5.3%)	15 (6.6%)	44 (19.3%)
Staffordshire Bull Terrier	7	5 (71.4%)	0 (0.0%)	1 (14.3%)	1 (14.3%)	2 (28.6%)
Swedish Lapphund (Imp)	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Swedish Vallhund	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Tibetan Mastiff	96	80 (83.3%)	14 (14.6%)	2 (2.1%)	5 (5.2%)	21 (21.9%)
Tibetan Terrier	3	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Weimaraner	24	23 (95.8%)	1 (4.2%)	0 (0.0%)	0 (0.0%)	1 (4.2%)
W5lsh Corgi (Cardigan)	5	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Welsh Corgi (Pembroke)	3	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
West Highland White Terrier	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Xoloitzcuintle (Mex Hairless) Standard (Imp)	8	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Elbow grades by year 1999 - 2016

The table below shows overall ED grade results for ED submissions for each year from 1999 to 2016, both numerically and as a percentage. The figures show a steady reduction in grades 1, 2 and 3 and a corresponding increase in the number of dogs of grade 0 (unaffected), suggesting a reduction in the incidence and severity of ED in tested dogs.

Year	Total No. Graded	Grades				Grades 1, 2 and 3
		0	1	2	3	
1999	583	408 (70.0%)	89 (15.3%)	54 (9.3%)	32 (5.5%)	175 (30%)
2000	503	359 (71.4%)	70 (13.95%)	49 (9.7%)	25 (5.0%)	144 (28.6%)
2001	578	441 (76.3%)	62 (10.7%)	53 (9.2%)	22 (3.8%)	137 (23.7%)
2002	598	471 (78.8%)	59 (9.9%)	43 (7.2%)	25 (4.2%)	127 (21.2%)
2003	714	570 (79.8%)	57 (8.0%)	54 (7.6%)	33 (4.6%)	144 (20.2%)
2004	1046	828 (79.2%)	111 (10.6%)	75 (7.2%)	32 (3.1%)	218 (20.8%)
2005	1229	1014 (82.5%)	97 (7.9%)	81 (6.6%)	37 (3.0%)	215 (17.5%)
2006	1501	1206 (80.3%)	152 (10.1%)	100 (6.7%)	43 (2.9%)	295 (19.7%)
2007	1639	1335 (81.5%)	167 (10.2%)	99 (6.0%)	38 (2.3%)	304 (18.5%)
2008	1994	1675 (84.0%)	172 (8.6%)	101 (5.1%)	46 (2.3%)	319 (16.0%)
2009	2354	1956 (83.1%)	234 (9.9%)	116 (4.9%)	48 (2.0%)	398 (16.9%)
2010	2582	2099 (81.3%)	268 (10.4%)	153 (5.9%)	62 (2.4%)	483 (18.7%)
2011	3080	2529 (82.1%)	332 (10.8%)	152 (4.9%)	67 (2.2%)	551 (17.9%)
2012	3270	2637 (80.6%)	380 (11.6%)	185 (5.7%)	68 (2.1%)	633 (19.4%)
2013	3453	2774 (80.3%)	402 (11.6%)	208 (6.0%)	69 (2.0%)	679 (19.7%)
2014	3679	2989 (81.2%)	399 (10.8%)	211 (5.7%)	80 (2.2%)	690 (18.8%)
2015	4208	3534 (83.9%)	391 (9.3%)	202 (4.8%)	81 (1.9%)	674 (16.0%)
2016	4176	3525 (84.4%)	385 (9.2%)	189 (4.5%)	77 (1.8%)	651 (15.6%)