

BRITISH VETERINARY ASSOCIATION / KENNEL CLUB ELBOW DYSPLASIA SCHEME

Breed Specific Statistics – Data collected to 31st December 2014

Elbow grading should be considered along with other criteria as part of a responsible breeding programme, and, ideally, breeders should 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 a three generation Health Test Pedigree may be downloaded via the Health Test Result Finder, available on the Kennel Club's online health tool *Mate Select* (www.mateselect.org.uk).

The table below shows ED results for all breeds that have been tested in the last 15 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	
Alaskan Malamute	39	34 (87.2%)	3 (7.7%)	2 (5.1%)	0 (0.0%)	5 (12.8%)
Australian Cattle Dog	83	63 (75.9%)	15 (18.1%)	4 (4.8%)	1 (1.2%)	20 (24.1%)
Australian Shepherd	241	232 (96.3%)	6 (2.5%)	4 (1.7%)	3 (1.2%)	3 (1.2%)
Belgian Shepeherd Dog (Malinois)	42	36 (85.7%)	6 (14.3%)	0 (0.0%)	0 (0.0%)	6 (14.3%)
Bernese Mountain Dog	2053	1268 (61.8%)	293 (14.3%)	320 (15.6%)	172 (8.4%)	785 (38.2%)
Bloodhound	31	15 (48.4%)	9 (29.0%)	6 (19.4%)	1 (3.2%)	16 (51.6%)
Border Collie	188	184 (97.9%)	4 (2.1%)	0 (0.0%)	0 (0.0%)	4 (2.1%)
Bouvier Des Flandres	14	12 (85.7%)	1 (7.1%)	1 (7.1%)	0 (0.0%)	2 (14.3%)
Bracco Italiano	81	64 (79.0%)	11 (13.6%)	4 (4.9%)	2 (2.5%)	17 (21.0%)
Bullmastiff	86	43 (50.0%)	17 (19.8%)	20 (23.3%)	6 (7.0%)	43 (50.0%)
Chesapeake Bay Retriever	26	23 (88.5%)	0 (0.0%)	2 (7.7%)	1 (3.8%)	3 (11.5%)
Chow Chow	45	22 (48.9%)	6 (13.3%)	12 (26.7%)	5 (11.1%)	23 (51.1%)
Clumber Spaniel	68	60 (88.2%)	3 (4.4%)	3 (4.4%)	2 (2.9%)	8 (11.8%)
Dalmatian	39	35 (89.7%)	3 (7.7%)	1 (2.6%)	0 (0.0%)	4 (10.3%)
Dobermann	16	15 (93.8%)	1 (6.3%)	0 (0.0%)	0 (0.0%)	1 (6.3%)
Dogue de Bordeaux	268	167 (62.3%)	41 (15.3%)	40 (14.9%)	20 (7.5%)	101 (37.7%)
Enlgish Springer Spaniel	46	40 (87.0%)	4 (8.7%)	2 (4.3%)	0 (0.0%)	6 (13.0%)
Eurasier	99	93 (93.9%)	2 (2.0%)	3 (3.0%)	1 (1.0%)	6 (6.1%)
Field Spaniel	13	13 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Flat Coated Retriever	211	206 (97.6%)	2 (0.9%)	2 (0.9%)	1 (0.5%)	5 (2.4%)
German Shepherd Dog	3148	2576 (81.6%)	324 (10.3%)	162 (5.1%)	86 (2.7%)	572 (18.2%)
German Shorthaired Pointer	23	23 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
German Wirehaired Pointer	20	19 (95.0%)	1 (5.0%)	0 (0.0%)	0 (0.0%)	1 (5.0%)
Giant Schnauzer	10	9 (90.0%)	1 (10.0%)	0 (0.0%)	0 (0.0%)	1 (10.0%)
Golden Retriever	3421	2678 (78.3%)	438 (12.8%)	244 (7.1%)	61 (1.8%)	743 (21.7%)
Gordon Setter	11	8 (72.7%)	1 (9.1%)	1 (9.1%)	1 (9.1%)	3 (27.3%)
Great Dane	153	132 (86.3%)	9 (5.9%)	6 (3.9%)	6 (3.9%)	21 13.7%
Greater Swiss Mountain Dog	24	19 (79.2%)	5 (20.8%)	0 (0.0%)	0 (0.0%)	5 (20.8%)
Hovawart	10	10 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Hungarian Vizsla	142	130 (91.5%)	10 (7.0%)	1 (0.7%)	1 (0.7%)	12 (8.5%)
Hungarian Wirehaired Vizsla	21	21 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Irish Water Spaniel	138	101 (73.2%)	25 (18.1%)	12 (8.7%)	0 (0.0%)	37 (26.8%)
Labrador Retriever	13090	11213 (85.7%)	1140 (8.7%)	502 (3.8%)	235 (1.8%)	1877 (14.3%)
Large Munsterlander	164	131 (79.9%)	19 (11.6%)	12 (7.3%)	2 (1.2%)	33 (20.1%)
Leonberger	1091	999 (91.6%)	72 (6.6%)	8 (0.7%)	12 (1.1%)	92 (8.4%)
Mastiff	128	100 (78.1%)	10 (7.8%)	11 (8.6%)	7 (5.5%)	28 (21.9%)

Breed	No. dogs graded	Grades				Grades 1, 2 and 3
		0	1	2	3	
Neapolitan Mastiff	11	9 (81.8%)	0 (0.0%)	0 (0.0%)	2 (18.2%)	2 (18.2%)
Newfoundland	686	499 (72.7%)	96 (14.0%)	54(7.9%)	37 (5.4%)	187 (27.3%)
Nova Scotia Duck Tolling Retriever	116	111 (95.7%)	4 (3.4%)	1 (0.9%)	0 (0.0%)	5(4.3%)
Old English Sheepdog	11	9 (81.8%)	2 (18.2%)	0 (0.0%)	0 (0.0%)	2 (18.2%)
Otterhound	115	49 (42.6%)	33 (28.7%)	28 (24.3%)	5 (4.3%)	66 (57.4%)
Poodle (Standard)	33	31 (93.9%)	2 (6.1%)	0 (0.0%)	0 (0.0%)	2 (6.1%)
Portuguese Water Dog	12	8 (66.7%)	3 (25.0%)	1 (8.3%)	0 (0.0%)	4 (33.3%)
Rhodesian Ridgeback	336	286 (85.1%)	35 (10.4%)	14 (4.2%)	1 (0.3%)	50 (14.9%)
Rottweiler	871	411 (47.2%)	261 (30.0%)	180 (20.7%)	19 (2.2%)	460 (52.8%)
Russian Black Terrier	26	15 (57.7%)	6 (23.1%)	4 (15.4%)	1 (3.8%)	11 (42.3%)
Siberian Husky	14	14 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
St Bernard	202	162 (82.0%)	16 (7.9%)	9 (4.5%)	15 (7.4%)	40 (19.8%)
Tibetan Mastiff	63	49 (77.8%)	10 (15.9%)	2 (3.2%)	2 (3.2%)	14 (22.2%)
Weimaraner	14	13 (92.9%)	1 (7.1%)	0 (0.0%)	0 (0.0%)	1 (7.1%)

ELBOW GRADES BY YEAR 1999-2014

The table below shows total ED grade results for all breeds for each year from 1999 to 2014, 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 (13.9%)	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	1993	1674 (84.0%)	172 (8.6%)	101 (5.1%)	46 (2.3%)	319 (16%)
2009	2351	1953 (83.1%)	234 (10.0%)	116 (4.9%)	48 (2.0%)	398 (16.9%)
2010	2575	2095 (81.4%)	267 (10.4%)	152 (5.9%)	61 (2.4%)	480 (18.6%)
2011	3059	2509 (82.0%)	331 (10.8%)	152 (5.0%)	67 (2.2%)	550 (18%)
2012	3000	2420 (80.7%)	351 (11.7%)	168 (5.6%)	61 (2.0%)	580 (19.3%)
2013	3181	2554 (80.3%)	370 (11.6%)	194 (6.1%)	63 (2.0%)	627 (19.7%)
2014	3380	2757 (81.6%)	366 (10.8%)	183 (5.4%)	74 (2.2%)	623 (18.4%)