



Dog Health Group Report 2019 DNA TEST RESULT SUMMARY BY BREED

Data Calculated to 31/12/19

The following summary covers the results of all breeds that have had Kennel Club registered dogs DNA tested under an official Kennel Club DNA testing scheme in the last 15 years. This data is further broken down by test result. Please note that dogs with repeated tests may alter final numbers.

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
Alaskan Malamute	799	98	270	29	23	2					506	67				
AMPN	551	48	184	15	19	1					348	32				
CD	248	50	86	14	4	1					158	35				
Australian Cattle Dog	162	20	32	6	20	8	1				102	6	7			
prcd-PRA	162	20	32	6	20	8	1				102	6	7			
Australian Shepherd	1832	126	504	51	111	9	40	3	22	2	1139	61	16			
CEA/CH	394	14	103	8	12						279	6				
CEA/CH (linkage)	6	5	6	5												
HC-HSF4	786	64	187	13	2				22	2	575	49				
MDR1	278	31	101	13	97	9	40	3			24	6	16			
prcd-PRA	362	7	101	7							261					
prcd-PRA (linkage)	6	5	6	5												
Basset Griffon Vendéen (Petit)	587	54	169	2	163	3	23				227	48	5	1		
POAG	587	54	169	2	163	3	23				227	48	5	1		

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
Basset Hound	90	26	38	10	7						45	16				
POAG	90	26	38	10	7						45	16				
Beagle	26938	3371	2352	198	288	17	13	4			24278	3152	7			
FVIID	652	116	146	25	69	7	10	3			426	81	1			
IGS	1187	268	248	39	10						929	229				
Lafora's	1487	537	247	61	21	3	1	1			1212	472	6			
MLS	14597	1444	991	33	118	3	2				13486	1408				
NCCD	9015	1006	720	40	70	4					8225	962				
Bearded Collie	1359	123	259	8	7		1				1092	115				
CEA/CH	1357	122	257	7	7		1				1092	115				
CEA/CH (linkage)	2	1	2	1												
Bedlington Terrier	1505	218	400	40	99	8	5	1			1001	169				
COMMD1	1505	218	400	40	99	8	5	1			1001	169				
Border Collie	22637	2306	4463	618	415	54	9	2			17745	1632	5			
CEA/CH	6102	274	857	51	170	5	2				5068	218	5			
CEA/CH (linkage)	44	35	40	33	4	2										
CL	5345	436	943	76	23	1					4379	359				
Gonio	360	132	281	101	73	30	6	1								
IGS	1469	340	444	79	11	5					1014	256				
MDR1	1364	342	512	102	4		1	1			847	239				
SN	585	259	248	95	9	3					328	161				
TNS	7368	488	1138	81	121	8					6109	399				

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
Border Terrier	6116	1548	1231	160	202	13	2				4681	1375				
SLEM	6116	1548	1231	160	202	13	2				4681	1375				
Boston Terrier	12202	1177	829	30	47	3					11326	1144				
HC-HSF4	12202	1177	829	30	47	3					11326	1144				
Briard	1567	106	183	1	43		1				1340	105				
CSNB	1567	106	183	1	43		1				1340	105				
Bull Terrier (Miniature)	1632	105	369	10	242	2	9				1005	93	7			
PLL	1632	105	369	10	242	2	9				1005	93	7			
Bulldog	8022	1234	1810	195	694	77	52	1			5378	955	88	6		
HUU	8022	1234	1810	195	694	77	52	1			5378	955	88	6		
Cavalier King Charles Spaniel	28386	3521	4559	312	715	44	31				23049	3165	32			
CC/DE	14722	1838	2388	158	225	19	2				12107	1661				
EF	13664	1683	2171	154	490	25	29				10942	1504	32			
Chinese Crested	1043	92	209	17	75		1				758	75				
PLL	839	75	153	11	74		1				611	64				
prcd-PRA	204	17	56	6	1						147	11				
Collie (Rough)	524	71	164	19	193	17	86	11			68	24	5		8	
CEA/CH	33	5	9	2	10	1	6	2			3		5			
CEA/CH (linkage)	5	3	1		4	3										
DM	92	25	33	4	31	5	13	6			15	10				
MDR1	376	34	108	9	148	8	67	3			45	14			8	

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
PRA (rcd2)	18	4	13	4							5					
Collie (Smooth)	385	55	79	7	84	11	46	5			78	7	38	14	60	11
CEA/CH	43	10	13	1	14	8	1	1			8		7			
CEA/CH (linkage)	12	11	1	4	10		1					7				
DM	81	34	31	2	6	3		4			44			14		11
MDR1	222	797	21	45	54	27	44				12	725	31		60	
PRA (rcd2)	27	797	13	45		27					14	725				
Dachshund (Miniature Long Haired)	8201	797	1059	45	904	27	109				5881	725	224		24	
PRA (cord1)	8201	797	1059	45	904	27	109				5881	725	224		24	
Dachshund (Miniature Smooth Haired)	23920	4388	2128	175	1763	76	325	5			18728	4114	938	18	38	
PRA (cord1)	23920	4388	2128	175	1763	76	325	5			18728	4114	938	18	38	
Dachshund (Miniature Wire Haired)	7534	1103	912	49	332	25	41	1			6190	1028	59			
Lafora's	3465	584	392	30	200	12	37	1			2803	541	33			
PRA (cord1)	4069	519	520	19	132	13	4				3387	487	26			
Dobermann	6039	391	581	30	414	9	28	1			4923	344	93	7		
vWD	6039	391	581	30	414	9	28	1			4923	344	93	7		
English Setter	12	7	11	7							1					
NCL8	6	4	5	4							1					
PRA (rcd4)	6	3	6	3												
Entlebucher Mountain Dog (Imp)	6	4	4	3	2	1										

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
prcd-PRA	6	4	4	3	2	1										
Finnish Lapphund	864	51	185	8	65	1	1				610	42	3			
GSD (II)	440	33	82	3	1						357	30				
prcd-PRA	423	18	102	5	64	1	1				253	12	3			
prcd-PRA (linkage)	1	0	1													
French Bulldog	23351	3819	4849	716	615	78	66	7			17752	3002	68	16	1	
DM	5743	1412	1664	327	582	76	66	7			3362	986	68	16	1	
HC-HSF4	17608	2407	3185	389	33	2					14390	2016				
German Shepherd Dog	1516	436	401	115	169	42	29	9			910	268	7	2		
DM (CDRM)	1516	436	401	115	169	42	29	9			910	268	7	2		
German Wirehaired Pointer	3184	472	321	17	1						2862	455				
vWD	3184	472	321	17	1						2862	455				
Giant Schnauzer	163	33	39	14							124	19				
DCM	103	13	18	2							85	11				
PRA5	10	10	6	6							4	4				
prcd-PRA	50	10	15	6		15					35	4				
Glen Of Imaal Terrier	486	45	84	2	60		1				341	43				
PRA (crd3)	486	45	84	2	60		1				341	43				
Gordon Setter	1807	72	329	12	315	15	72				865	45	220		6	
PRA (rcd4)	1807	72	329	12	315	15	72				865	45	220		6	
Great Dane	324	124	92	25	8	1	1	1			223	97				

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
IMGD	324	124	92	25	8	1	1	1			223	97				
Greyhound	93	0	19		4						70					
GN	93	0	19		4						70					
Hungarian Wire Haired Vizsla	641	144	153	36	129	28	17	1			313	79	29			
HUU	641	144	153	36	129	28	17	1			313	79	29			
Irish Red & White Setter	2503	78	131	6	3						2369	72				
CLAD	1272	39	54	3							1218	36		6		
vWD	1231	39	77	3	3						1151	36				
Irish Setter	32153	1769	1369	55	696	24	87				29521	1684	447	6	33	
CLAD	14100	695	208	6	11						13881	689				
PRA (rcd1)	12648	694	316	7							12332	687				
PRA (rcd4)	5405	380	845	42	685	24	87				3308	308	447	6	33	
Irish Terrier	236	44	87	14	3						146	30				
HFH	236	44	87	14	3						146	30				
Italian Spinone	118	50	118	50												
CA (linkage)	118	50	118	50												
Jack Russell Terrier	715	252	265	85	9	7					441	160				
LOA	234	82	87	30	1						146	52				
PLL	237	84	90	26	7	6					140	52				
SCA	244	86	88	29	1	1					155	56				
Keeshond	1481	70	148	1							1333	69				

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
PHPT	1481	70	148	1							1333	69				
Kooikerhondje	34	2	22	2		4					12					
ENM	17	1	11	1		4					6					
vWD	17	1	11	1		1					6					
Lagotto Romagnolo	383	131	99	26	29	11					255	94				
JE	177	53	45	12	19	7					113	34				
LSD	206	78	54	14	10	4					142	60				
Lancashire Heeler	1045	111	333	37	203	4	10				497	70	2			
CEA/CH	37	9	15	4	1	1					21	4				
CEA/CH (linkage)	11	10	11	10												
PLL	997	92	307	23	202	3	10				476	66	2			
Large Munsterlander	718	57	102	7	42	1	3				567	49	4			
HUU	718	57	102	7	42	1	3	3			567	49	4			
Leonberger	410	129	136	39	11	4		3			263	86				
LEMP	49	37	21	11	4	2					24	24				
LPN1	304	55	90	15	7	2					207	38				
LPN2	57	37	25	13							32	24				
Lhasa Apso	1552	398	444	50	87	8	6	3			1015	337				
GPRA (pra4)	1552	398	444	50	87	8	6	3			1015	337				
Manchester Terrier	1624	129	150	2	51		1				1422	127				
vWD	1624	129	150	2	51		1				1422	127				
Miniature Schnauzer	2998	1012	478	145	6	2					2514	865				

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
MAC	2998	1012	478	145	6	2					2514	865				
Newfoundland	2889	205	350	26	86	6					2453	173				
CU	2889	205	350	26	86	6					2453	173				
Norwegian Buhund	114	16	45	1	4						65	15				
HCA	114	16	45	1	4						65	15				
Norwegian Elkhound	560	15	106	1	71		10				363	14	4		6	
CDSL	1	0	1													
POAG	1	0	1													
prcd-PRA	558	15	104	1	71		10				363	14	4		6	
Old English Sheepdog	1165	116	161	10	5	1					999	105				
PCD	1165	116	161	10	5	1					999	105				
Papillon	1112	166	337	46	34	5	1				739	115	1			
NAD	116	40	52	24	1						63	16				
Pap-PRA1	996	126	285	22	33	5	1				676	99	1			
Parson Russell Terrier	6430	690	896	43	225	8	6				5296	639	7			
LOA	1979	240	298	16	69	3	3				1609	221				
PLL	2898	219	411	14	149	3	3				2328	202	7			
SCA	1553	231	187	13	7	2					1359	216				
Poodle (Miniature)	4818	635	738	141	150	5	4				3925	489	1			
OC	128	40	65	19							63	21				
prcd-PRA	4679	586	663	114	149	4	4				3862	468	1			
prcd-PRA (linkage)	11	9	10	8	1	1										

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
	Poodle (Standard)	559	183	188	61	4	1					367	121			
PRA (rcd4)	15	12	8	5							7	7				
prcd-PRA	15	12	8	5							7	7				
prcd-PRA (linkage)	5	5	5	5												
vWD	524	154	167	46	4	1					353	107				
Poodle (Toy)	4404	492	699	140	181	15	12	2			3484	335	28			
prcd-PRA	4380	470	676	119	180	14	12	2			3484	335	28			
prcd-PRA (linkage)	24	22	23	21	1	1										
Portuguese Water Dog	618	63	117	24	49	3	1				451	36				
GM1	100	17	41	12							59	5				
prcd-PRA	518	46	76	12	49	3	1				392	31				
Pug	78	24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PDE*	78	24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Retriever (Chesapeake Bay)	1117	15	114	5	35	1	4				964	9				
DM	640	12	84	2	33	1	4				519	9				
prcd-PRA	476	2	29	2	2						445					
prcd-PRA (linkage)	1	1	1	1												
Retriever (Golden)	23927	3088	2435	261	230	42	48	13			21083	2729	131	43		
GR_PRA1	12124	1465	1161	104	78	10	4				10856	1351	25			
GR_PRA2	11081	1401	1103	110	57	8					9921	1283				
ICT-A	722	222	171	47	95	24	44	13			306	95	106	43		

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
Retriever (Labrador)	124002	25813	12874	292 5	1979	348	117	15			10874 8	22510	284	15		
CNM	40216	7658	3258	510	232	19	8				36718	7129				
EIC	19823	5407	2707	611	438	74	40	7			16548	4715	90			
HNPk	4752	1859	1341	514	149	44	10	2			3199	1284	53	15		
prcd-PRA	47325	6784	3481	525	733	66	37	3			42975	6190	99			
prcd-PRA (linkage)	46	32	42	28	3	3	1	1								
SD2	11840	4073	2045	737	424	142	21	2			9308	3192	42			
Retriever (Nova Scotia Duck Tolling)	3571	269	490	58	134	9	3				2941	202	3			
CEA/CH	1692	84	173	14	17	1					1502	69				
CEA/CH (linkage)	1	1	1	1												
DE	188	36	51	9	12						125	27				
DM	422	53	112	18	27	3					283	32				
prcd-PRA	1266	93	151	14	78	5	3				1031	74	3			
prcd-PRA (linkage)	2	2	2	2												
JADD*	9	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rhodesian Ridgeback	944	275	239	60	31	11					674	204				
JME	944	275	239	60	31	11					674	204				
Rottweiler	2170	475	483	79	72	10					1615	386				
JLPP	2170	475	483	79	72	10					1615	386				
Russian Black Terrier	324	36	103	9	108	4	24				75	23	14			
HUU	235	7	62	3	101	4	24				34		14			

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
JLPP	89	29	41	6	7						41	23				
Saluki	3	3	3	3												
Sal-NCL	3	3	3	3												
Schipperke	121	0	30		2						89					
MPSIIIB	121	0	30		2						89					
Schnauzer	228	38	41	4							187	34				
DCM	228	38	41	4							187	34				
Sealyham Terrier	819	83	158	5	167	3	9				478	75	7			
PLL	819	83	158	5	167	3	9				478	75	7			
Shar Pei	669	149	192	37	106	16	20				338	96	13			
POAG/PLL	669	149	192	37	106	16	20				338	96	13			
Shetland Sheepdog	794	132	308	49	231	35	48	3			177	30	26	15	4	
CEA/CH	358	26	130	7	76	5					152	14				
CEA/CH (linkage)	36	19	21	11	15	8										
MDR1	381	73	138	17	140	22	48	3			25	16	26	15	4	
vWD	19	14	19	14												
Spaniel (Clumber)	3098	296	441	41	165	22	8	1			2474	232	10			
EIC	893	162	207	25	161	22	8	1			507	114	10			
PDP-1	2205	134	234	16	4						1967	118				
Spaniel (Cocker)	89916	14013	9957	257 1	1103	112	104	4			78211	11326	531		10	
AMS	7470	2885	1811	827	149	42	5	1			5505	2015				

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
AON	1249	362	342	88	19	3					888	271				
FN	45513	6023	4321	830	35	4					41157	5189				
prcd-PRA	35625	4687	3430	776	894	57	99	3			30661	3851	531		10	
prcd-PRA (linkage)	59	56	53	50	6	6										
Spaniel (English Springer)	24536	2849	3952	625	375	30	20	1			20098	2193	91			
AMS	1061	290	340	130	19	6					702	154				
Fuco.	11337	1108	1379	167	16	2					9942	939				
PFK	2136	355	571	157			1				1564	198				
PRA (cord1)	10002	1096	1662	171	340	22	19	1			7890	902	91			
Spanish Water Dog	744	185	202	47	29	2					513	136				
CHG	178	66	58	17	2	1					118	48				
NAD	173	62	59	19	4						110	43				
prcd-PRA	393	57	85	11	23	1					285	45				
Staffordshire Bull Terrier	65367	4358	5348	193	334		4				59681	4165				
HC-HSF4	32183	2178	2631	97	80						29472	2081				
L-2HGA	33184	2180	2717	96	254		4				30209	2084				
Swedish Vallhund	225	19	44	8	95	5	23	2			23		36	4	4	
Retinopathy	225	19	44	8	95	5	23	2			23		36	4	4	
BR*	16	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tibetan Spaniel	1023	94	199	6	19	1					805	87				
PRA3	1023	94	199	6	19	1					805	87				

Breed	Total number tested		Clear		Carrier		Affected		Single affected		Hereditarily clear		Hereditarily carrier		Hereditarily affected	
	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019	15 yrs	2019
Tibetan Terrier	32336	3194	3425	86	974	27	56	1			27700	3071	174	9	7	
NCL12	9856	873	968	24	239	6	13				8625	843	11			
PLL	11040	861	1129	20	399	4	16				9494	837	2			
PRA (rcd4)	4859	657	606	21	321	17	26	1			3759	609	140	9	7	
PRA3	6581	803	722	21	15		1				5822	782	21			
Welsh Corgi (Cardigan)	1402	120	92	11	1						1309	109				
PRA (rcd3)	1402	120	92	11	1						1309	109				
Welsh Terrier	417	94	138	32	40	7	3	1			236	54				
PLL	417	94	138	32	40	7	3	1			236	54				
White Swiss Shepherd Dog (Imp)	2	0	2													
DM (CDRM)	2	0	2													
Grand total	641926	88747	78479	112 13	16468	136 8	1650	99	22	2	54143 2	75898	3674	156	201	11

* Risk Test (DNA based)

PDE : 01/01/2005-31/12/2019

Breed	Total tested	Total tested in 2019	Minimal risk (0)	Minimal risk (1)2	Increased risk (2)
Pug	78	24	58	17	3

JADD : 01/01/2005-31/12/2019

Breed	Total tested	Total tested in 2019	Minimal risk (0)	Minimal risk (1)
Retriever (Nova Scotia Duck Tolling)	9	0	5	4