

#### intro

Dear owner,

Thank you very much for your contribution. Unfortunately, epilepsy in the Labradoodle is very common and is sometimes very difficult to treat. The condition therefore has a considerable impact on the life of the dog and you as the owner. That is why we are doing this research. Partly it is about mapping the epilepsy, how we can treat it better and whether we can also find a genetic cause. More information about epilepsy is published on the website

www.veterinair-neuroloog.nl

Genetic testing is only possible if we also receive DNA from your dog. A form to submit this can be found here <u>downloaden</u>. If your dog has already passed away, no DNA is available, but your contribution remains valuable.

This research is a project of the Faculty of Veterinary Medicine in Utrecht (the Netherlands) and is part of ongoing research of the <u>Expertise Centrum Genetica van Gezelschapsdieren</u>. We are working closely together with the <u>Epicentrum van de faculteit</u> <u>Diergeneeskunde in Merelbeke (Gent-België)</u>. If we do not yet have a blood sample from your dog, and it is possible, we would like to receive it! The request is then to ask your vet to send us 4 ml of EDTA blood (not coagulated). If you do not have the form, you can also download it from the following website: <u>https://www.veterinair-neuroloog.nl/onderzoek/epilepsie-onderzoekbij-de-labradoodle</u>

Completing the survey takes 30 minutes. That's a long time but we think the answers will really help us further.

Before you continue, it is best to get your dog's pedigree, vaccination booklet, epilepsy diary and medication. Not every question requires an answer. Some do. All data is treated confidentially and is not shared with third parties. We therefore apply the rules regarding the AVG / GDPR.

If you have any questions and/or comments, please post them on the last page of the survey. You may be unsure whether your dog has epilepsy. Then watch these videos beforehand. Both focal and generalized seizures are possible. If you first want to read more about this, you can go to this website for more information: www.veterinair-neuroloog.nl

Examples of focal seizures: <u>https://youtu.be/AZhL9-\_MvEM</u>

An example of a generalised tonic-clonic seizure: <u>https://youtu.be</u> /<u>6ticKGNgojw</u> Next to this we rarely see in the labradoodle paroxsymal dyskinesia. An example is visible here: <u>https://youtu.be/96UMxPZH1OA</u>

It could be that you dog has both. If there are questions contact us

Many thanks for your help.

dr. Paul Mandigers (Veterinaire Neurologie, Universiteit Utrecht & Evidensia Dierenziekenhuis Arnhem)

Do you permit us to use the information you are going to provide?

Yes I doNo I do not

You have not agreed to the use of your entered data, hence you have reached the end of this survey.

#### Informatie eigenaar

Information about yourself. Entry is not mandatory but we think an important factor is the interaction between dog and owner. Hence these questions.

Which city and country do you live? (you are not obliged to answer this question)

What is your email address? (Input is not mandatory, but it is desirable so that we can reach you afterwards in case of ambiguities).

How would you describe your own life situation. Several questions follow. Please go through them all. I am,...

- Single
- ◯ Together with my partner
- Family with children

#### Where do you live?

- O I live in a rural / village and it is quiet here
- O I live in a rural / village but it can be busy
- O It is quite busy here but it is not a city
- O I live in a city but it is quiet here
- O I live in a city and it is rather busy here

Different, I will give my own text

### Your home situation

- O It is always quiet at home
- O There is always something to do but it isn't busy at home
- O It is always busy at home

()

O It is always vey busy at home and lots of things happen

Different, I will give my own textl

## I regard myself to be

- O A very calm balanced person
- O A very calm balanced person but I am busy
- O A very busy but still balanced person
- O An extremely busy and sometimes hurried person
- O A rather stressfull life
- O Extremely stressfull life

Different, I will give my own text

If you live with others (a partner or with children). If not applicable, skip this question.

- O My house/roommates are calm and balanced people
- O My house/roommates are busy but balanced persons
- O My house/roommates are very busy but still balanced persons
- O My roommates are extremely busy and sometimes very rushed
- O My roommates make it a rather stressful existence
- O My roommates make it extremely stressful

Diffenet, I will give my own text

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## If you have several pets: which is applicable. If not applicable, skip this question.

O I have one or more dogs

- I have one or more cats
- I have one or more cats and dogs
- I do not have any other pets

Different, I will give my own text

If you have several pets: which is applicable. If not applicable, skip this question.

- O There is no hassle between my various pets
- O There is rarely a bit of hassle between my various pets
- O There is always a lot of hassle between my various pets
- I do not have any other pets

Different, I will give my own text

### Vragen hond, vaccinatie etc

Questions about your dog, vaccination history etc.

What is your dog's name?

_	
[	Does your dog have a pedigree from the Australian Labradoodle
	Club (ALAEU) or from the Dutch Australian Labradoodle Club
	(DALC)?
	Yes from the ALAEU
	Yes from the DALC
$\Box$	It's a labradoodle and he has a registration but none of the above, I'll fill it in
	It's a labradoodle but it doesn't have a registration number
	It is a doodle but different from above, namely
	It is not a doodle, namely
	Otherwise, I'll fill it in

If applicable: what is your dog's pedigree name?

If applicable: Pedigree number (please provide full number including figures from the publisher. So for example ALAEU 000000)

Chipnumber of your dog?

What is your dog's date of birth? You may write it down or fill it in like this: dd/mm/yyyy

What is the gender of your dog?

) Male

🔵 Female

Has your dog been spayed or neutered?

🔿 Yes

🔿 No

If spayed or castrated: do you remember the approximate date on which the spaying/neutering took place? (dd/mm/yyyy)

Was your dog vaccinated before he/she had the first epileptic seizure?

] Yes ] No

] If the answer is YES. Which brand? You can find this in the vaccination booklet.

If the answer is YES. When was that

# Did your dog receive deworming tablets before he/she had the first epileptic seizure?

Yes
 No
 If YES: do you also know what the brand of this deworming was?
 If YES: do you also know when that was approximately?

Did you treat your dog with anti-flea/tick products before he/she had the first epileptic seizure?



## What was your dog's diet before having the first epileptic seizure (Indicate brand if possible)?

Type of food 1	
Type of food 2	
Type of food 3	

Has your dog's	diet changed?
O Yes	
🔿 No	
0	If yes, which brand?

Before having the first epileptic seizure, did your dog have a serious illness? If in doubt, always fill in Yes and state which disease it was.



#### Woonsituatie

General questions about	your	dog
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How would you describe your dog's character? (multiple answers are correct)

Οv	′ivid	
🗌 C	Cheerfull	
□ C	Calm	
🗌 N	lervous	
🗌 A	Inxious	
🗌 A	ggressive	
ПГ		Other, namely

Do you keep your dog outside or mainly inside?

- Inside
- Outside
- A combination of both
- Other, namely

## How many hours per day is your dog supervised by you or one of your housemates?

- O Less than 5 hours a day
- Five to 10 hours a day
- Ten to 15 hours a day
- 🔘 15 to 20 hours a day
- O More than 20 hours a day

#### Eerste aanvallen

Questions concerning the first seizures

When did you see the first seizure in your dog? If you do not remember the exact date, please give an approximate date. (dd/mm /yyyy)

When did the most recent seizureoccur?

Did you dog suffer from more than one seizure?

) Yes

) No

How many seizures has your dog had to date? Enter a number.

Dogs can have several types of epileptic seizures.

Both focal and generalized seizures are possible. If you first want to read more about this, you can go to this website for more information: https://www.veterinair-neurologisch.nl/gezondheids /epilepsy

Examples of focal seizures can be seen here: <u>https://youtu.be</u> /AZhL9-\_MvEM An example of a tonic-clonic seizure: https://youtu.be/6ticKGNgojw

Next to this we see rarely paroxsymal dyskinesia in the labradoodle: <u>https://youtu.be/96UMxPZH1OA</u>

It could be that you see combinations within your dog. If there are questions do not hesitate to <u>contact</u> us.

#### What kind of seizures does your dog have?

Generalized tonic-clonic seizures. These are attacks in which the dog usually lies on
its side, has cramps and cycling movements, twitches with the mouth, as a rule you do
not have contact with him / her and saliva, urine and faeces may occur.

Focal seizures. These are, for example, seizures where only part of the body shows the abnormality. Examples are: pulling with the lips, salivating, just a paw, etc.

A combination of both tonic-clonic seizures and the focal seizures.

Other, namely,....

## Do you know what causes your dog's seizures? Only one answer is possible

- O Idiopathic (i.e. we don't know the cause, often presumably genetic). But no cause has been found.
- Metabolic / toxic / reactive (= the cause lies outside the brain. Think of a liver, kidney or sugar deficiency, for example). A blood test was then carried out which showed that the cause is not idiopathic.
- O Structural or secondary (= the cause is in the brain. Think of trauma, inflammation, tumor, for example)

Differently, namely,.....

### Who made this diagnosis?

🗌 l did	
My own veterinarian	
The sepcialist	
	Differently, namely,

#### Who is the veterinarian who treats you dog?

- O Firstline practitioner
- O Specialist in Veterinary Neurology
- O Resident in Veterinary Neurology
- O Specialist Internal Medicine

Other, namely,...

How did you end up with the specialist in Veterinary Neurology?

- O I arranged it myself
- My local veterinarian advised me

Ο

Other, namely

### Aanvullende vragen

Additional questions about the seizures

Is your dog still alive?

🔿 Yes

◯ No

#### At what age (in years) did your dog died?

#### What was the cause fo death?

O It was related to the epilepsy

 $\bigcirc$ 

Other, namely,....

How many seizures did you observe the FIRST year that your dog started having the seizures

Number of seizures during the first week



#### How many seizures did you observe the LAST year?

Not applicale, this is the first year

Number of seizures a year

Number of seizures during the first 6 months

Number of seizures during the first 3 months

Number of seizures during the first month

Number of seizures during the first week



How do you rate the severity of the attacks NOW compared to the first attacks. You can now use the slider to indicate whether it has become less or worse. If you put the bar in the middle it has remained the same. Less to the left and more to the right. Zero means not serious, Ten means very serious.



How long did it take you to start taking an anti-epileptic: counted from the first seizure you saw.

- O We are right, the first week, after the first attack started with a medication.
- O We haven't started any medication yet.
- O We waited: enter the number of months between the first attack and the start of the medication.

## Can you pinpoint a trigger for the seizures to occur? Multiple answers are correct.

Stress
Sexual arisement
The weather
Visits at homes
Visit to the vet
It is always the same moment
l do not recognize a trigger
Other, I will fill it in myself

You indicated that your dog has been spayed or neutered. Was this done AFTER the dog developed seizures?

- O Yes after that the siezures were first seen
- 🔿 No prior
- O I do not remember anymore

Has the seizure frequency changed after neutering?

- O Yes it dropped in number
- O No it did not
- O It actually increased

Other, namely,....

## Is your dog related to other dogs with epilepsy?

- O Yes
- O No
- 🔘 I do not know

If yes, what is the relationship?

Often we see an introductory phase. That is not the attack itself, but a phase (seconds to days before the actual attack) before the attack. Do you recognize this in your dog?

O Yes	
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- 🔿 No
- 🔘 I do not know

If you see an introductory phase, can you describe it?

- O Nausea
- Vomiting
- O Drooling
- Restlessness
- O He/She makes contact with us
- O The dog becomes aggressive

Other, namely,....

How long before the attack occurs do you see this introductory phase? Please state it in minutes.

### Can you predict the occurrence of a seizure?

- Yes, always (100% of the time)
- O Yes roughly in 75% of the time
- O Yes roughly in 50% of the time
- Yes roughly in 25% of the time
- O No

Have you ever seen your dog aware of a seizure?

O	Yes	
Ο	No	
0		Other, namely

#### What does your dog usually do before a seizure occurs?

Ο	Asleep	
Ο	Just woke up	
Ο	He/she was awake but still o	n his/her basket
Ο	Waling outside	
Ο	Was playing	
Ο	Was busy	
Ο	I never see it	
Ο		Other, namely,

Can you make contact with your dog during the attack?

- O Yes
- 🔿 No
- O I do not know

If you make contact during an attack. How does the dog react?

- O Awake, responds normal
- O Different but seems to react
- Unresponsive

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$\bigcirc$	

Other, namely,...

How long do the attacks last on average? Enter minutes. Do not

enter the time before the attack (preliminary phase) or after the attack (post-ictal phase). Purely attack only.

How long did the shortest attack last? Enter minutes.

How long did the longest attack last? Enter minutes.

### Vragen over de aanvallen zelf

Questions related to the seizures

# Below are several things that can occur during an attack. Do you want what you see click on regularly? Multiple answers are correct.

- Cramping with his legs and head
- Drops down
- During a seizure the dog lies on his side
- Cycle movements with the legs
- Turns with his head
- Chewing movements with his jaws
- Twitching of the facial muscles
- Urinary loss
- Defeacation loss
- Drooling
- Dilation of the pupils
- Circling
- Tail chasing
- Loss of consciousness
- Gazing / Stare
- Seeks attention
- Walk onto the furniture
- Seems to see less / appears to be blind
- Barking
- Anxiety
- Agression

Other, namely,...)

#### Do all seizures always look the same?

I no, can you indicate why?
-

Is your dog normal between seizures? So in the periods when there are no seizures?

- O Yes it is otherwise a normal Labradoodle
- 🔿 No
- I do not know

If you don't know or answer no, can you clarify?

Do you have the impression that the left or the right half of the body is more active during an attack (think, for example, of the head always moving to one side)?

- 🔿 Yes
- No I do not see a difference
- I do not know

Can you shorten a s	seizure?
Yes	
🗌 No	
I do not know	
	If yes what do you do?

## Post-ictale fase

Questions about the post-seizure phase: the post-ictal phase. This phase can last seconds to days.

They often walk around aimlessly, are absent, often see poorly and so on, ..

Does your dog have a post-ictal phase?

O Yes

- 🔿 No
- O I do not know

Do you have the impression that your dog remembers the attack?

O Yes

🔿 No

O I do not know

How long does it take for the post-ictal phase to pass? Display it in minutes.

Does the dog respond to you during the post-ictal phase?

O Yes

🔿 No

I do not know

## What do you observe during this post-ictal phase?

The dog is tired
The dogs is walking restlessness around
The dog appears to see poorly
The dog is aggressive
The dog wants to drink
The dogs wants to eat
The dog wants to walk
The dogs doesn't want to do anything and lies still
The dog vomits
The dog starts stretching
Other, namely,

#### Dierenarts

What did your veterinarian do?

### What did your vet do to arrive at the diagnosis?

A physical exam
 Ultrasound heart
 Bloodexamination
 ECG (Electrocardiogram)
 EEG (Electro-encephalogram)
 MRI scan of the brain
 CT scan of the brain
 CSF examination / liquor punctie
 Urine analysis

Other, namely,.....

#### Does your dog have another illness?

Yes
No
If yes, please indicate what

## **Geslacht specifiek**

Specific questions concerning bitches and sires

## At what age did your bitch come into heat for the first time?

- She hasn't come into heat yet
- Not applicable

We saw it the first time:

Is her heat regular?

- O Yes
- 🔿 No
- O I do not know
- O Not applicable

Did you dog ever had pups?

- ] Yes
- 🗌 No
- 🗌 I do not know

If yes how often?

### For sires: does you dog have a normal sexual behaviour?

Yes
No
I do not know
If no

If not what is going on?

For sires: do your dog have offspring?

Yes	
🗌 No	
I do not know	
	If yes how many litters?

#### Aantallen, ernst, controle

How many seizures has your dog had in the last few months? Count the clusters\* as one seizure. \*A cluster is defined as seizures that follow one another (within 24 hours) where the dog has normal consciousness between seizures.

For the last 12 months my dog has had ..... seizures



For the last 6 months my dog has had ..... seizures

For the last 3 months my dog has had ..... seizures

During the last month my dog has had ..... seizures



Hoeveel clusteraanvallen\* heeft uw hond de laatste maanden gehad?Vul hier alleen de clusters in. Indien u ze niet ziet vult u hier dus niets in.

\* Met clusteraanvallen wordt bedoeld: aanvallen die op elkaar volgen (binnen 24 uur) maar waarbij de hond tussen de aanvallen door een normaal bewustzijn heeft.

For the last 12 months my dog has had	
clusters	

For the last 6 months my dog has had ..... clusters

For the last 3 months my dog has had ..... clusters

During the last month my dog has had ...... clusters
#### How often have you had a status epilepticus\* in the last few months? \* Status epilepticus means that the seizures follow each other within a very short time, with no recovery phase

There has been status epilepticus time in the last 12 months	n	

There has been ..... status epilepticus time in the last 6 months

There has been ..... status epilepticus time in the last 3 months

There has been ..... status epilepticus time in the last month

I rate the severity of the tonic-clonic seizures as: (with 0 not severe and 10 very severe) Drag the slider to the desired position



If present: I rate the severity of the focal seizures as: (with 0 not severe and 10 very severe) Drag the slider to the desired position



I can predict from the behavior of the dog when an attack is coming; my dog shows a changed behavior some time before the seizure. (with 0 disagree and 10 strongly agree) Drag the slider to the desired position



# How often does your dog come for a check-up with a vet or specialist?

- O Once a week
- O every 2 weeks
- O Every 3 weeks
- Once a month
- O Every two months
- O Every three months
- O Every four months
- O Every 5 months
- O Every 6 months
- Once a year
- O Never
- O Other, namely,...

### In the past few months, how often did you have to go to a vet in the evenings or at weekends? related to your dog's epilepsy?

The past 12 months,.... times

The past month,.... times

#### **Medicatie**

What medication, in tablet or capsule form, does your dog use? (multiple answers possible)

Fenobarbital (brand names a.o.: Phenoral, Phenoleptil en Soliphen)

Imepitoine (Pexion)

Potassiumbromid (brand names: Epikal, Libromide)

Gabapentin (brand names: Neurontin of Gabapentine)

Levetiracitam (merknamen: Keppra of levetiracetam)

No medication

Other, namely,...

## What additional (often emergency) medication does your dog take? (multiple answers possible)

- Nasalspray midazolam
- Diazepam, valium, stesolid (rectal)
- Levetiracitam (brand names: Keppra of levetiracetam)
- Gabapentin (brand names: Neurontin of Gabapentine)
- No medication

Other, namely,...

# What side effects of the medication do you see in your dog? (multiple answers are possible)

Lethargy
More sleeping
Restlessness
Irritable
Incoordination
Muscle weakness
Increased appetite
Weight gain
Vomiting
Diarrhea
Defecating in house
Increased drinking
More ofte urinating
Coughing
Skinratch
None, my dog doesn't show any sidefeffects
Other, namely,

Do you make use of an alternative treatment?

- O Yes
- O No

What alternative treatment method(s) does your dog use? (multiple	Э
answers possible)	

Phytotherapy	
CBD oil	
CBD/THC oil	
MCT oil	
Special diet	
Music therapy	
	Other namely,.

#### Scores

Looking back to the period before your dog developed epilepsy, if that period was 100% correct. How do you rate your dog now? The number 0 indicates that you think the situation is very bad and 100 means that things are going very well. Drag the slider to the desired position



In the last 3 months I have been concerned about the frequency of my dog's seizures. Drag the slider to the desired position. With 0 no worries and 10 very worried.



The severity of my dog's seizures is acceptable to me. Drag the slider to the desired position. With 0 it is going very well and 10 it is going very badly



I dare to leave my dog at home alone. Drag the slider to the desired position. With 0 no problem at all and 10 I don't dare to alt him/her alone.



Taking care of my dog with epilepsy limits my daily activities; it causes a decrease in my own quality of life. Drag the slider to the desired position. With 1 you say that your quality of life is at its lowest point. With a 10 that it's going great.



Taking care of my dog with epilepsy is worth it. Drag the slider to the desired position. With 0 you say it is really a problem and with 10 that you think it is really worth it.



The administration of the medication to my dog causes problems. Drag the slider to the desired position. With 0 you say it's not a problem and with 10 it's really not a problem.



The side effects of the medication on my dog are acceptable to me. Drag the slider to the desired position. With 0 no problem / no side effects and 10 many side effects: not acceptable.



The cost of epilepsy treatment is acceptable to me. Drag the slider to the desired position. With 0 not acceptable/really a problem and 10 very acceptable



Is it a problem for you to go for a consultation with the vet or specialist (for example, for check-ups, research of the blood concentrations of the medication)? Drag the slider to the desired position. With 0 no problem at all and with 10 you say it is a big problem.



Score your dog's quality of life. Drag the slider to the desired position. With 1 very bad and 10 excellent.



Which stage of epilepsy do you consider to be the biggest drain on your dog's quality of life?

- O Introductory phase / prodromal phase: This is a phase of abnormal behavior, possibly accompanied by vomiting; it takes a few seconds to days.
- O The seizure / ictus: This is a phase of loss of consciousness and cramps; this may be accompanied by barking, drooling, urinating and defecating; this takes seconds to minutes.
- O The recovery phase / postictal phase: This is a phase where the dog is sometimes unable to walk, sleepy, restless and possibly aggressive; it takes seconds to weeks.
- O No specific phase

Unfortunately, it is very difficult to obtain complete freedom of attack. But what do you consider reasonably acceptable?

- One aweek
- One every two weeks
- One every three weeks
- One every month
- One every two months
- One every three months
- One every four months
- One every 5 months
- One every 6 months
- One a year
- No seizures at all

#### Einde

Thank you very much for your participation in this research. If you are interested in the results of the survey, please enter your email address below and you will receive the final survey results. If you have any questions and/or comments, please post them here.