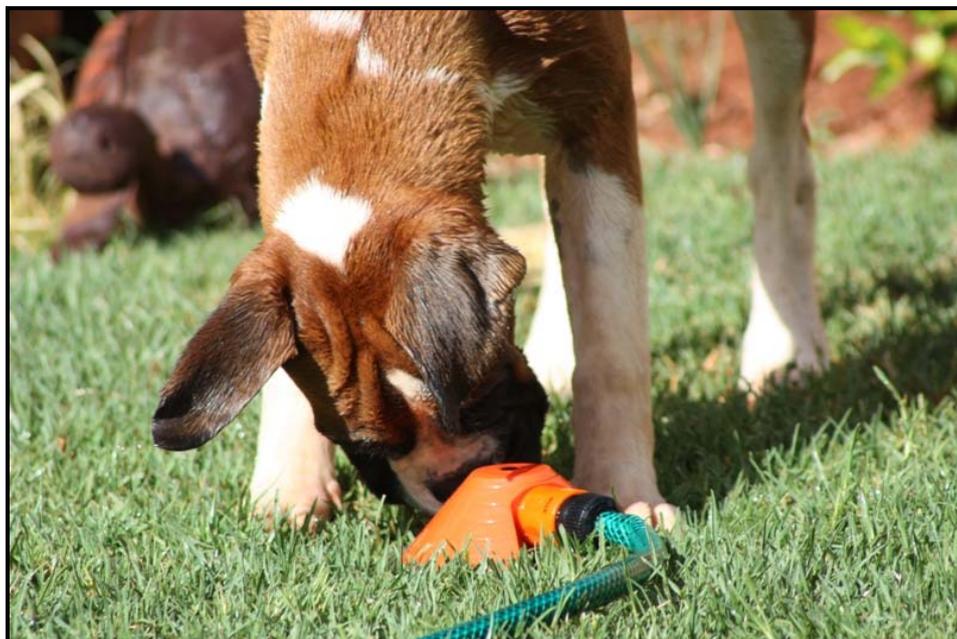


BREEDERS PANEL NEWSLETTER

Summer 2011



“Summer fun”!

The Festive Season is nearly upon us with another year behind us. Hope you all had a great year with your Boxers. One thing is certain: *life with Boxers is never dull.*

Our Summer Newsletter contains two very interesting articles. The first one shows you **how to register your litter**. Please breeders take a good look at this list and keep it for reference! Pam Zeiler, our FBCSA secretary, very often experiences difficulties with procedures not being followed properly. The second article is about **Temik poisoning in dogs**. Sadly we often hear about dogs being poisoned. Dr. Gareth Zeiler explains how it works, signs to be on the lookout for and treatment options once dogs have ingested this poison.



Who serves on the 2011/2012 committee?

Chairperson: Dr Marinda Oosthuizen

Secretary: Mrs Els Sporen

Committee members: Ms Adri Erasmus (FBCSA Representative),
Mrs Helen Rennie, Mrs Pam Zeiler, Ms Magda Koekemoer, Mrs Angela Roeland

A Refresher on how to register your Boxer Puppies

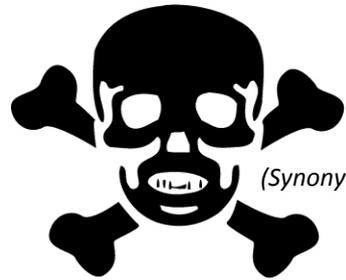
The FBCSA has registered a number of new Breeders and Prefixes this year and a refresher for the long time breeders will not go amiss. There are number of steps to follow and while it may appear rather daunting it in fact is very simple.

What to do?	Why?
1. JOIN one of the affiliated clubs	This is a requirement to register puppies with the FBCSA. By being a club member you are kept up to-date with all the news in the club and the FBCSA.
2. Make sure both the stud dog and the brood dam are REGISTERED with the FBCSA. <ul style="list-style-type: none"> They must both have an Adult Health Certificate completed from age 12 months and BEFORE being mated. Both dogs MUST be micro-chipped. 	<p>This is a requirement.</p> <p>This is to ensure that both dogs are free from audible heart murmurs, that the stud dog is entire and that in general the dogs are in good health. Please note: even if the adult dogs may be free from heart murmurs this in no way is a guarantee that the puppies will be free from heart murmurs. It is a recommendation that both adult dogs have their hips x-rayed for Hip Dysplasia, especially so if the dogs are being used regularly for breeding purposes. Dogs with D and E hips should NOT be used for breeding purposes.</p> <p>This is a requirement.</p>
3. Register a KENNEL PREFIX .	This is a requirement . The prefix has to be approved by both the SA Stud Book and the FBCSA.
4. When the litter is born, please INFORM YOUR CLUB SECRETARY . <ul style="list-style-type: none"> You also have the option to ADVERTISE the puppies with the FBCSA on the website for a fee. 	<p>As a responsible breeder the onus is on you to contact your Club Secretary or the FBCSA Secretary to ensure that you have all the correct information to register the litter and that you understand the process.</p> <p>There is no guarantee that the pups will be sold through the website. The onus is on the breeder to advertise the pups using different media of their choice.</p>
5. At age 6 weeks the pups MUST be taken to your local vet for a HEALTH CHECK , inoculations, de-worming and micro-chipping.	This is a requirement . Please ENSURE that the Application for Registration Form is taken with you to the vet so the vet can complete, date and sign the form .
6. When the vet visit is complete please contact your club secretary to arrange for a PUPPY INSPECTION .	This is a requirement where feasible as there may not be an inspector in your area. If not then photos of the pups are required. Pups may only leave the dam at the earliest age of 8 weeks.
7. PAYMENTS and COMPLETION OF FORMS: <ul style="list-style-type: none"> The entire litter MUST be registered except white puppies. FORMS REQUIRED: <ul style="list-style-type: none"> Prefix Application (once off) Adult Health certificates Application for Registration Stud Certificate (you MUST receive this from the owner of the stud dog if you are NOT using your own stud dog) Litter Data form Photos of pups if no inspection took place Proof of payment 	<p>Ensure that ALL forms and payments are received by the FBCSA Secretary BEFORE the pups are 12 weeks of age otherwise an increased fee is payable and a penalty fee is charged. All forms MUST be completed in FULL. Any incomplete forms will be sent back to you, delaying the registration process.</p> <p>As a breeder you have the choice to register whites or not.</p> <p>These are all available on the website: www.fbcsa.net</p>
8. CONTACT DETAILS:	<ul style="list-style-type: none"> FBCSA Secretary – Pam Zeiler 012 664 2156 secretary@fbcsa.net BCSA Secretary – Helen Rennie 012 654 5755 bcsa@fbcsa.net EBC Secretary - Driekie du Plessis – 016 976 4050 cassidy99@telkomsa.net NBC Secretary - Pam Zeiler 012 664 2156 nbc@fbcsa.net.

(Compiled by Pam Zeiler)

The FBCSA in terms of the Animal Improvement Act No 62 of 1998 - Registration Certificate No 62/98/B-12, is now the **only recognised breed society in the country to legally register ALL Boxer dogs**. The Act further stipulates that there can only be one Breeders' Society of a particular breed and registration of these animals may only be done through a registered Registering Authority, such as SA Stud Book. The Boxer has been declared by the Registrar as a "Breed" and was accordingly announced as such in the Government Gazette.

The Federation of Boxer Clubs of SA is therefore the only legal Breeders' Society for Boxers in South Africa and therefore only breeders who are members of the Federation can legally claim to be breeding Boxers



Aldicarb or Temik Poisoning in Dogs

(Synonyms: Carbamate poisoning in dogs, Two-Step poisoning in dogs, malicious poisoning in dogs)

Author: Dr Gareth Zeiler (BVSc)

"Aldicarb, also known as "two-step" (Temik is the brand name) is one of the most potent insecticides on the market. 1 teaspoon is enough to kill a grown rhino, a mere 1 mg can kill a rodent, around 8 granules will kill your beloved dog – this substance is more poisonous than arsenic..."

INTRODUCTION

Malicious poisoning is sadly a rather common finding in some countries. Typically insecticides and crop worm remedies are used due to their rapid action. In most countries these dangerous drugs are very closely regulated. Perhaps the most abused of all the drugs is one by the trade name Temik. Its active ingredient common name is Aldicarb which belongs to the carbamate family of pesticides. Its main action is to inhibit cholinesterase, which prevents the breakdown of Acetylcholine and further production of more cholinesterase. This article will explain what this means and what clinical signs to expect in a poisoned dog and the action you should take if you suspect this.

CHOLINESTERASE AND ACETYLCHOLINE EXPLAINED

It is imperative to know what this poison does to the body, before this is explained the normal body function will be introduced for clarity.

Everyone has a brain attached to a spinal cord. The spinal cord has many branches that run to all parts of the body. This is all grouped together called the nervous system. The nervous system is divided in subconscious activity and conscious activity. The conscious activity is what you have direct control over, like moving your arm, blinking your eye, etc. You tell your brain to do it and it will, if you are healthy. The subconscious activity is also called the autonomic nervous system. This is explained next.

In general the body has two states, the first being a normal relaxed state when normal body functions needed to survive are done. This will include digesting food, moving food through the gastrointestinal tract, keeping the heart beating at a resting rate, breathing at a resting rate, producing urine, etc. The parasympathetic nervous system is responsible for this normal body state. When you get a fright your body will move over to a stress response state, we call this the fight or flight state. So you will either fight what is scaring you or you will run away. Either way you will have an increased heart rate, increased breathing rate, your pupils will dilate for maximum vision and blood will be sent to your muscles so that you may use them to fight or run. The sympathetic nervous system is responsible for this stress response and is only needed when you are in danger.

The parasympathetic and sympathetic nervous systems make use of either acetylcholine (cholinergic neurons) or norepinephrine (adrenergic neurons) as neurotransmitters.

In general the parasympathetic nervous system most makes use of cholinergic neurons and acetylcholine is the neurotransmitter of choice. Cholinergic receptors have two different forms called Nicotinic receptors and Muscarinic receptors. These are found in different areas of the body.

When a parasympathetic nerve sends an impulse down the nerve, it will stimulate the release of acetylcholine at the end of one nerve. This neurotransmitter will bind to the next nerve ending and stimulate it. This happens inside a nerve synaptic gap (area where one nerve sends a message to the next nerve so that that nerve can have an effect on the tissue it innervates). This is done by binding to either a Nicotinic receptor site or a Muscarinic receptor site. Once it acetylcholine (the neurotransmitter) binds to the receptor site (Nicotinic or Muscarinic) it will fire that nerve and have a stimulus on the tissue it is connected too. This could be a sweat gland, heart, airways, stomach, iris in the eye, skeletal muscles, etc.

Once the acetylcholine has had its effect an enzyme called acetylcholine esterase (cholinesterase) will bind to the neurotransmitter and destroy it. This will then free the receptor for another acetylcholine molecule when it is stimulated again.

Aldicarb is specifically designed to block the production and effect of cholinesterase. This means that the acetylcholine will never be destroyed at the receptor (Nicotinic or Muscarinic) site. This means that these nerves will continue to send messages and not be able to stop because the acetylcholine cannot be destroyed at the receptor site. The clinical signs you will see in a dog are all related to this effect of overstimulation of the parasympathetic nervous system. Most often the Muscarinic effects are most pronounced.

CLINICAL SIGNS

Muscarinic clinical signs are those that result from the stimulation of Muscarinic receptors found in smooth muscles, especially around the heart and glands. Clinical signs include:

- Difficulty breathing due to bronchoconstriction
- Slow heart rate
- Increased bronchial secretions, sweating, and salivation
- Nausea
- Vomiting
- Diarrhoea
- Abdominal cramps
- Involuntary urination
- Miosis (pupil constriction)

Nicotinic clinical signs result from the accumulation of Acetylcholine at the endings of motor nerves that communicate with skeletal muscles and ganglia. Clinical signs include:

- Muscular effects like stiffness with fatigue that follows, weakness, and cramps and tremors.
- High blood pressure
- Hyperglycaemia

Some dogs may even exhibit central nervous stimulation which will include:

- Restlessness
- Ataxia (drunken walking)
- Convulsions (seizures)
- Cardiorespiratory depression (slow breathing that will eventually stop)



CONFIRMING CLINICAL DIAGNOSIS

Malicious poisonings in dogs develop clinical signs very quickly. If Aldicarb was used it will have the same clinical signs as any organophosphate and/or carbamate poisoning. Treatment needs to be given as soon as possible so if the history and clinical signs are present than treatment is begun immediately without confirming the diagnosis with fancy tests. Treatment in emergency cases is always done on suspicion. There is often no time to run blood tests to confirm the diagnosis. Some local communities may speak of a poison called “two-step”. This is Aldicarb, it has an extremely rapid onset of clinical signs and is known to cause death in animals so quick that they literally take two steps forward and die.

The chief clinical signs include:

- Constricted pupils (often the first sign)
- Slow heart rate
- Possible vomiting and/or diarrhoea
- Muscle weakness

A rapid response to emergency treatment will confirm the suspicions of this type of poisoning. Patients typically show a dramatic recovery within a few minutes of treating them. After initiating emergency treatment further diagnostics can be run to confirm poisoning.

TREATMENT OPTIONS

The sooner treatment can be given the better the outcome in most cases. Organophosphates and carbamate have the same mechanism of action of inhibiting cholinesterase. This causes an over stimulation of the parasympathetic system as described above. So the veterinarian will want to counter act this as soon as they can by using drugs such as Atropine. Some veterinarians have also used antihistamines as an addition to a drug cocktail with success.

The next step is clinical support. The veterinarian will try and keep the heart going and blood pressure stable.

Some veterinarians will induce vomiting to rid the body of as much of this poison as possible. This must be done within 2 hours of ingestion and the dog must not suffer from muscle weakness or seizures. Stomach flushing has been tried with cold water solutions, there seems to be some benefit to this.

Dosing the dog with activated charcoal and a laxative is indicated to absorb the active poison inside the gastrointestinal tract. Dogs that do not receive activated charcoal treatment seem to have the same recovery rate.

If you are convinced that your dog has eaten this poison by seeing them eat something strange you can take immediate action by inducing vomiting as quickly as you can. You can try one of the following:

- Mix 3% hydrogen peroxide with water and offer your dog one to two teaspoons at a time. Vomiting will begin within 5 minutes. If nothing happens in 5 minutes try another teaspoon or two.
- Mix as much salt as you can in a small bit of water (50ml), warm water is better. Add salt until you cannot dissolve anymore in the water. Give one or two teaspoons to your dog. You can repeat at 5 minute intervals until you get vomiting.
- Washing soap powder as an absolute last resort may be used. Throw a fist full into the dog's mouth and wait 5 minutes, most dogs vomit well with this, if not then do not try again.

ENVIRONMENTAL CONTROL

Be conscious of what is happening in your local area. If poisonings are being reported in your area, perhaps you should consider:

- Moving your dogs to an area of the house where people cannot throw laced food. The most common is either baited chicken pieces or a small, thin plastic bag with mince laced with Aldicarb thrown close to the dogs.
- Look in your garden once a day for strange objects such as: bones from chickens and used clear plastic packets. Pay attention to low lying shrubs and bushes.
- Keep yourself up to date with your neighbours and hear if something has happened to their dogs.



Aldicarb has a very distinctive appearance. In most farm and crop remedies it is black in colour and is made into very fine granules less than 2 millimetres wide. It almost has the appearance of a mildly coarse powder. In its natural form it is actually a white powdery substance.

CONCLUSION

Aldicarb poisoning is a very serious emergency with a moderate survival rate if treated in time. If you suspect a poisoning than you must act very quickly to increase your dog's survival chances. The best is to seek veterinary assistance as soon as possible. This will give your dog a fighting chance to overcome the effects of this poison. A great way to determine if your dog is in danger is to look at its eyes, if the pupils are constricted, even in dark lighting, than there is a great chance that this poison is affecting your dog. Do not waste time trying to induce vomiting if there is a veterinarian close by, any unnecessary time delay will lower the survival rate. On a positive note, carbamate poisonings are not as serious as organophosphate poisoning despite this being a very urgent emergency situation. Aldicarb is traditionally a coarse black powder. Chicken and mince are by far the most common meats used to hide the Aldicarb inside.

(Dr Gareth Zeiler has very kindly granted the FBCSA Breeders Panel permission to make use of part of his article from his website www.petpatch.net. Feel free to visit this site to find out more.)



We wish you a very good Christmas and a very happy New Year!
Those of you going on holiday please travel safely!

Breeders Panel

December 2011

