Service Dogs for People with Seizure Disorders by Liz Rudy, DVM. Originally published in Alert, National Service Dog Center® Newsletter Vol. 6, No. 4 1995. Edited for the web and updates.

What Is a Seizure Alert Dog?

A seizure alert dog has the ability to warn a person of an impending seizure moments or hours before the person has clinical signs of a seizure. When trained to have safe, reliable behavior in public, seizure alert dogs can be service dogs for people with disabilities.

Beth experienced a type of seizure that caused her muscles to jerk suddenly without warning, often causing her to fall. Beth's golden retriever, Russet, was able to tell minutes before Beth would have a seizure. Russet would bark a warning, giving Beth time to sit down before the seizure occurred. The dog's ability allowed Beth to go about her daily tasks without sustaining severe injury from falls associated with her seizures. Russet served as an "early warning system" easing Beth's worry and giving her peace of mind.

How Do Dogs Know a Person Is Going to Have a Seizure?

This is a question that has yet to be answered. Right now, all the evidence about this phenomenon that has been gathered is anecdotal. There seems to be at least 2 distinct phases of altering behavior. First, the dog recognizes that a seizure is going to occur. Then the dog physically reacts to that perception. Several hypothesis have been proposed as to what a dog recognizes when a seizure is going to occur. Some people think that the dog perceives slight changes in a person's body language or behavior before a seizure and this is the trigger. It is a well-known fact that dogs are very perceptive at reading human body language. Another hypothesis is that the dog detects very subtle changes in a person's body odor prior to a seizure. Whatever the mechanism, this is an ability that the dog exhibits immediately or develops over time while in contact with a person who has seizures. The ability in dogs to detect seizures seems to be fairly common – numerous people with seizures report seizure alerting behavior in their dogs. Lacking scientific proof, it appears that a dog's perception of oncoming seizures is not a behavior that can be "trained" in the traditional sense; rather, it can only be identified and encouraged.

How Do Dogs Alert to Seizures?

Dogs display a wide range of alerting behaviors. Part of the challenge of working with a potential seizure alert dog is identifying the specific alerting behavior. Dogs have been observed to lick owner's hands, bark at the owner's face, or act restless and pace prior to the person's seizure. The amount of time from when the dog alerts to the actual onset of the seizure varies from dog to dog. One dog would consistently gather all his toys and dump them in front of the owner several hours prior to a seizure. Identifying consistent alerting behavior in a dog that alerts long before a seizure requires an astute and careful observer due to the lapse of time between the alert and the event. Some dogs alert only for their owners. Other dogs, given time and exposure to other people with seizures, can develop the ability to alert for more than one person. At least
one puppy has apparently learned to alert from an older dog. In Great Britain, a service dog training organization (Support Dogs) has placed several seizure alert dogs with people, and is videotaping the dogs at work. In the United States at the Epilepsy Institute, attempts have been made to study the phenomenon using EEG recording with simultaneous videotaping. A lack of funding has made it difficult to pursue such research long enough to be able to draw scientific conclusions. It is hoped that with further research, the question of how dogs alert can be answered. This might lead to the development of dog selection and training methods that could increase the number of seizure alert dogs available for people with seizure disorders.

What Breed of Dog Is Best for Seizure Alert Work?

The question often arises as to whether one breed of dog excels at seizure alert work. No one breed has been identified as superior. Seizure alert dogs come in many breeds and mixes: golden retrievers, setter mixes Samoyed crosses, border collie crosses, and German shepherds are among those that predict and alert to their owner's seizures. The most important factor seems to be the dog's individual disposition. Successful seizure alert dogs are people-oriented and very responsive to human emotions and feelings. Their ability to observe and respond to their owner's behavior makes them successful at seizure alert work. If a dog is to be used as a service dog in public places, it must also be friendly, and not dog-aggressive, overly protective of its owner, shy, or nervous.

In What Other Ways Can Dogs Assist People with Seizure Disorders?

Dogs can be trained in other capacities to assist people with seizure disorders. A dog can be taught to stay with a person throughout a seizure. After a seizure, when a person might often be confused and disoriented, a familiar dog can serve as a comforting presence and can assist in orienting the person to their surroundings. Also, the presence of a service dog can help deflect potential embarrassment away from the person who has had a seizure. People who have observed the seizure may become interested in the dog, and not dwell on the seizure episode itself. A dog can be trained to go get help or even activate an alarm when a person experiences a seizure. This can be useful for a person who has frequent seizures and requires constant supervision. If a trained dog can replace the need for the continuous presence of a caregiver, this may give the person with seizures a greater sense of independence. When a person has other disabilities in addition to seizures, the dog can potentially be cross-trained to address those limitations as well (picking up dropped items, providing support to help the person stand up, etc.).

For some people, stress can increase the frequency of their seizures. It has been shown in numerous studies that animals can lower our stress levels in daily life. The presence of a service dog in the life of a person with a seizure disorder can potentially reduce seizure frequency by lowering the person's stress level.

Molly's physician had recently suggested adding another drug to her medication regimen to help relieve stress that was contributing to an increased number of seizures. Around this time, Molly acquired Murri, a golden retriever puppy she hoped to train for use as a service dog once he
matured. After Molly had worked with her new puppy for a while, she told her physician that she wouldn't need to take this extra medication because raising Murri was proving to be a great stress reliever all by itself. Training Murri opened up a whole new area of interest for Molly. Always shy, Molly became more extroverted because she began to interact with strangers who asked her questions about Murri when she and the dog were out in public.

Proper drug therapy is the cornerstone for successful seizure control, but a dog can play an important role in improving overall quality of life for a person with a seizure disorder.

Kelly had her service dog Kona, a Samoyed/border collie cross, for only a short period of time before she noticed the positive effect Kona had on her ability to cope with daily life. Kelly's seizures were "scary." She experienced a feeling of extreme fear before a seizure would occur. Kona's presence, a warm, furry body pressing against her would help to calm and focus Kelly when these sensations occurred. After she got Kona, Kelly felt more secure about going out in public – although she still couldn't predict when her seizures would occur, she knew Kona would be there to get her through the "scary" feelings. Kelly spent a lot of time working with Kona so they could function smoothly together. By focusing on Kona and her training, Kelly worried less about having a seizure in the wrong place. Kelly noticed a decrease in the number of stress-induced seizures she experienced after she acquired Kona. The results of this pairing were beneficial for both Kelly and Kona. Kona, rescued from an animal shelter, found a loving home and a job. Kelly developed new skills and gained confidence and security with Kona at her side.

**Where Can a Person with a Seizure Disorder Get a Service Dog?**

Service dogs can be obtained from several different sources: a service dog training program, a private trainer, or through owner training. Training service dogs for people with seizure disorders is relatively new and lacks training guidelines and credentialing for trainers. Locating a suitable dog, especially one that will reliably alert to seizures, can be challenging.

Some of the service dog training programs will train dogs for people with seizure disorders. The consumer is encouraged to contact the individual programs, and thoroughly investigate each one before making the decision to apply for a dog. The decision to obtain a dog from a specific program should be researched as carefully as any other major decision in order to avoid problems later on for both the consumer and the dog. The consumer should be alert for potential fraud and claims that sound too good (or easy) to be true, because they probably are. One organization claims that it can train seizure alert dogs over the phone. The consumer should be very wary of any trainer who guarantees that a dog she/he has raised or trained will alert to another person's seizures. Because so much of seizure alerting behavior is poorly understood and varies from dog to dog, successful results depend upon a good and carefully planned match between the dog and the person for whom it will alert. Seizure alerting is a behavior that a dog may possess but that can't be guaranteed in the way that conventional training can. A good training program will be willing to work to encourage the alerting behavior after the dog that alerts or has the potential to alert has been placed in the home with the person. This approach
minimizes unrealistic expectations, high costs, and frustrations for the applicant and possible harm to the dog.

Another method for obtaining a service dog is through a private trainer. Find a trainer with some knowledge of service dog training or seizure alert work. It is important that the consumer investigates and approves of the trainer's methods. A trainer may be able to select an appropriate dog with seizure alerting potential for the consumer. By living with the person, the dog might be able to develop recognizable seizure alert behavior which can be encouraged whenever the person has a seizure. A private trainer is also a good option for a person who already has a dog that alerts to their seizures but who wants to utilize the dog in public as a service dog. The trainer can assist the owner and dog to acquire the necessary obedience skills required for public access.

Owner training of the dog is another option. However, this requires a large time commitment, previous dog training experience, and the willingness to work in close cooperation with a dog trainer or obedience group for optimal success. Regardless of where the dog is obtained, or how well it alerts, it must have the proper advanced obedience skills in order to appear in public places as a service dog. The handler also needs to understand the rights and responsibilities of a service dog user.

Can Children with Seizure Disorders Have Service Dogs?

The question as to whether a child should have a service dog is a complex one. It is a question that must be answered on a case-by-case basis. Questions to be asked when considering obtaining a service dog for a child include:

- Is my child old enough to assume responsibility for a dog?
- Is my child so disabled (frequent and life threatening seizures) that caring for a dog will be more of a burden on the family than a help?
- Do I have realistic expectations about what a dog can do for my child?
- Will the dog receive proper care and handling?

For some mature children with seizure disorders, a match with the right service dog can promote self esteem, safety, independence, and social acceptance.

Summary

The training of service dogs for people with seizure disorders, especially the training of dogs that are able to sense and alert to a person's oncoming seizures, is still a new and evolving field. It is a challenging area where much research must still be done to answer the questions about how and why some dogs have this ability, and determine a method to easily identify these dogs.

For the person with a seizure disorder who likes dogs, teaming up with a service dog can be a liberating and rewarding experience.

Note: The names of individuals and their dogs used in this article have been changed.
Because seizure disorders are not visible, people who have them generally are not readily recognized as people with disabilities. Likewise, their service animals might not be immediately recognized as such. And the availability of trainers that work with animals for people who have seizures might be limited.