K9MD Press Release

What is canine medical detection?

Infectious diseases and cancer are serious threats to the health and wellbeing of all New Zealanders and dogs can make a difference. Medical detection dogs are trained to identify volatile organic compounds (VOCs) which are released from tumours present in medical conditions, such as cancer. Infectious disease detection dogs can work to identify diseases such as norovirus or legionnaires and be deployed anywhere in New Zealand where immediate identification is required. Medical Alert Assistance dogs are trained to assist people with life-threatening conditions. K9MD dogs undertake rigorous training at purpose-designed facilities where all training is recorded with a specialised computer programme and peer-reviewed to an international standard.

Cancer in New Zealand, how big is the problem?

Chances are you probably know someone who has been touched by the devastating effects of cancer, whether through the loss of a loved one, stressful invasive testing or something similar. Today, cancer is New Zealand's number one killer, with a shocking 9,500 kiwis dying every year. We know that early detection and diagnosis can make a huge difference in the fight against cancer and that could make a huge difference to the lives of the more than 23,000 kiwis that are diagnosed every year.

What drives K9MD? How did K9MD begin?

[Pauline Blomfield (Founder and Director)](#) is driven by the belief that we can all make a positive difference. Using dogs for the early detection of cancer and other diseases is operating successfully overseas, Pauline was determined a similar programme should be available here in New Zealand. Supported by a couple of talented like-minded friends Pauline established the K9 Medical Detection New Zealand Charitable Trust. Two years later K9MD now has a full medical advisory team; an international scent detection expert to review their work; [Otago University](#) as the official research partner; a training facility in the North Island complete with a laboratory for the storing and handling of all medical samples; specifically designed scent detection equipment; an adult dog ready to start work and an eight-month old puppy in the K9MD puppy development programme.

What's the science in all this?

A dog's sense of smell is truly amazing, dogs can detect stable concentration thresholds of 1-2 parts per trillion, that's the equivalent of one teaspoon of sugar in two Olympic sized swimming pools of water. Compared to humans, who have 5 million scent receptors, dogs can have up to 300 million! Dogs are currently used across the world to detect drugs, explosives, money, food, to find missing persons, or find specific bird species (like our very own bird the kiwi).

When it comes to detecting cancer, there is growing evidence that elevated levels of a 'signature' of volatile organic compounds (VOCs) are associated with disease growth. Research has shown that dogs can be trained to detect these odours and identify the 'signature smell' associated with cancer. In the UK, an investigation is underway to use non-invasive methods such as dog detection for colorectal cancer in urine samples. This would hopefully see a less invasive method of screening and consequently an increase in patient uptake and improved health outcomes. For more info on this study [see Medical Detection Dogs UK](#).

The first scientific report of a dog detecting a disease was reported in 1989, the first robust and successful clinical investigation into the training of dogs to detect cancers was conducted in 2011, with a Belgian Malinois detecting prostate cancer in urine with a specificity of 91%. Since then, similar promising results have been published for a variety of cancer types, for the latest in scientific research see the latest research compiled by Dr Katrin Kramer, Postdoctoral Fellow at the University of Otago.

How can you help?

K9 Medical Detection NZ Charitable Trust is working hard to establish medical detection dogs that can not only identify serious diseases but can help in the fight against New Zealand's number one killer; Cancer. You can help by supporting K9 Medical Detection to train more dogs, like Frieda, K9MD's first cancer detection dog. The training is understandably rigorous, with the utmost in accuracy needed. These are no ordinary dogs, these dogs are bred and selected from well-known working dog lines, with prodigious lineages.

Levi is a pure-bred German shepherd who recently joined the K9MD team, a rambunctious and hardworking puppy, the cool thing is, you can help raise Levi. Will Levi be a medical detection dog? Or will he become a medical alert assistance dog looking after someone with a life-threatening medical condition? Or will he work across NZ detecting infectious diseases? We don't know, one thing we do know is Levi is going to help change people's lives for the better, and you can help Levi get there.

Please give generously and help support K9MD in raising Levi, so that he can become a specifically trained medical detection dog. See the K9MD Give A Little Page, Frieda's Give A Little page and Levi's Give A Little Page and help us make a difference to the lives of New Zealanders.