

Hereditary Testing:

CERF: All of our dogs are tested annually and each of our dogs have continually tested clear for eye diseases!

An eye exam is performed by a board certified Veterinary Ophthalmologist. This exam looks for a multitude of eye diseases. Annual re-examination is recommended for all dogs. The CERF (Canine Eye Registration Foundation) database provides a registry of dogs that have been certified free of heritable eye disease. For more information on CERF examination and the categories of disease that are tested for visit www.vmbd.org

PRA-PrCd: We do have a few dogs in our program that are carriers of PRA-prcd. We are ethically committed to producing healthy puppies so our carriers are always mated with dogs that are clear of prcd-PRA to avoid producing puppies that will be affected by this disease. The dogs in our program that are carriers are remaining in our program due to their genetic potency. We feel at this time that these dogs have much to offer the future of our breed regardless of their prcd-PRA carrier status.

The genetic disorder Progressive Rod-cone Degeneration-Progressive Retinal Atrophy, causes cells in the retina at the back of the eye to degenerate and die, even though the cells seem to develop normally early in life. The result is declining vision and eventual blindness. The "rod" cells operate in low light levels and are the first to lose normal function. Night blindness results. Then the "cone" cells gradually lose their normal function in full light situations. Most affected dogs will eventually go blind. It's important to remember that not all retinal disease is PRA and not all PRA is the prcd form of PRA. DNA testing will make the diagnosis, prior to the onset of disease.

Inheritance:

PrCd-PRA is inherited as a recessive trait in most cases. This means a disease gene must be inherited from each parent in order to cause disease in an offspring. Parents were either clear, carrier or affected. A carrier has one disease gene and one normal gene, and is termed "heterozygous" for the disease. A normal dog has no disease gene and is termed "homozygous normal" - both copies of the gene are the same. And a dog with two disease genes is termed "homozygous affected" - both copies of the gene are abnormal. All of our dogs have been DNA tested and are clear or carriers of PRA-prcd. Therefore, none of our dogs or your puppy will lose their sight to PRA-prcd.

MDR1 All of our dogs have DNA tested clear for MDR1!

In dogs affected with MDR1, the blood brain barrier is compromised. This gene encodes a protein, P-glycoprotein, that is responsible for pumping many drugs and other toxins out of the brain. Dogs with the mutant gene cannot pump some drugs out of the brain as a normal dog would, which may result in abnormal neurologic signs. The result may be an illness requiring an extended hospital stay--or even death. It is well known that all sizes of Australian Shepherds and related breeds can have adverse reactions to drugs such as ivermectin, loperamide (Imodium®), and others. DNA testing is now available through Washington State University.

Dogs that are affected by MDR1 will have a sensitivity to Ivermectin and other related drugs.

Dogs that are carriers of MDR1 may experience some sensitivity to Ivermectin and other related dogs.

Dogs that test clear for MDR1 should not exhibit any drug sensitivities.

Here is a list of Medications that should be avoided if the status of an aussies MDR1 status is not known:

Acepromazine (tranquilizer and pre-anesthetic agent)

Butorphanol (analgesic and pre-anesthetic agent)

Erythromycin

Ivermectin (antiparasitic agent)

Loperamide (ImodiumTM; antidiarrheal agent)

Selamectin, milbemycin, and moxidectin (antiparasitic agents)

Vincristine, Vinblastine, Doxorubicin (chemotherapy agents)

Domperidone

Etoposide

Mitoxantrone

Ondansetron

Paclitaxel

Rifampicin

Drugs that are known to be pumped out of the brain by the protein that the MDR1 gene is responsible for producing but appear to be safely tolerated by dogs with the MDR1 mutation:

Cyclosporin (immunosuppressive agent)

Digoxin (cardiac drug)

Doxycycline (antibacterial drug)

Drugs that may be pumped out by the protein that the MDR1 is responsible for producing, but appear to be safely tolerated by dogs with the MDR1 mutation:

Morphine, buprenorphine, fentanyl (opioid analgesics or pain medications)

At Lulu's Lil Aussies we feel that health testing is vital to the current and future success of our breeding program. Testing is a costly endeavor but we are committed to the health of our dogs. The status of our dogs will be updated as individual testing is completed. Please contact us at any time with questions.