



ANKC Ltd Protocols for DNA-based Disease Testing Adopted October 2010

The DNA Program

The program focuses on DNA testing to determine genetic status of breeding stock. It is vital that ANKC Ltd confirms effective protocols to ensure that:

- a) There is scientific validity and accuracy in test results:
 - the test must be published and/or peer reviewed;
 - there must be no room for fraud on the part of owners;
 - there must be no room for unknown/accidental matings.
- b) Breed councils and clubs are aware of the requirements should they wish to introduce Litter Registration Limitations.

The Protocols

1. DNA collection

DNA collection is by approved, independent, trained collectors, including veterinarians. Owners/breeders cannot collect from their own dogs. Approved collectors would be those accepted by State CC's or nominated by breed clubs.

2. Positive identification

Identification of the dog by microchip or unique (as part of a recognised Australia wide based tattoo system) tattoo is required, it must be verified by the collector at the time of DNA collection and recorded on the form.

3. Collection method

DNA sample collection is via non-intrusive buccal swab, or blood collection. Blood samples if required, should be collected by a registered veterinarian.

4. Parentage testing

For verification of parentage, both parents and the offspring concerned must have DNA profiles.

5. Clear by parentage (CBP) for a Specific Disease

Where both parents are clear for a specific disease-causing gene, their offspring may be assumed to be clear of that disease. Where specific LRL's are in place, those offspring that go on to become breeding stock, parentage must be confirmed either by parentage test or disease test prior to breeding.

Where litter registration limitations in a breed require disease testing of breeding stock, after a number of generations with no reported cases of the disease, the breed council (or in the absence of a council, the majority of breed clubs) may declare the Australian population of the breed to be clear of the disease. The litter registration limitations may then be altered to require only imported animals, imported semen and stored frozen semen to be tested.

[The number of generations would be decided in conference with the relevant breed club(s) and the CHWC. Additional advice to be sought from geneticists/advisory breed council.]

If there is any deviation from the protocols, e.g. a dog not having positive ID, then the result is classed as 'not confirmed'.

'Clear by parentage', was introduced primarily to reduce costs for owners, particularly where both parents were tested and found genetically clear and testing was for more than one disease. For responsible breeders, it should be safe to assume the offspring from parents both confirmed as clear and sold as pets would not develop the diseases concerned, but, for the necessary accuracy in genetic status of breeding stock, any of those offspring going on to be used for breeding need either a disease test or a parentage test to ensure there is no fraud or unknown mating involved.

The ANKC Ltd needs to maintain accuracy and credibility throughout the program for the benefit of pedigreed dogs.