



### **Sampling from puppies with buccal swabs (or FTA cards).**

TNS carrier (or affected) status and CL status can be determined on young puppies by DNA testing. The preferred sample is a spot or two of blood on an FTA card. It only has to be the size of a pin head. Swabs can be used but are not as good for testing as blood samples and about 20% of swabs fail to give a result and repeat samples are required.

Skin pricks can be done to draw a tiny amount of blood to put on an FTA card. This can be taken yourself at home, or by the vet (if you want to have official identification of the dog for listing results on databases). Prick inside the animals ear with a sterile needle and apply any blood spots directly onto an FTA card. One drop the size of a pinhead may be enough for a test. Another source of DNA for testing that can be taken at home is a swab of the inside of the mouth.

We can supply kits to take skin pricks for blood samples or swabs. Our swabs are nylon cytology brushes but sterile swabs may be obtained at pharmacies (dry, not with gel in tube). Even ordinary clean cotton buds (as used for cleaning makeup and ears) will sometimes work satisfactorily. Email requests with your postal address to [a.wilton@unsw.edu.au](mailto:a.wilton@unsw.edu.au)

Instructions for skin prick blood test (like prick of the finger for human testing)

- Choose an area to sample with exposed skin eg ear or paw
- Swab area with alcohol wipe to sterilise.
- Jab quickly with the microlancet.
- If necessary squeeze to exude a drop of blood.
- Press FTA card against welling blood.
- Repeat squeezing if necessary for more blood.
- Label card with dogs name and information
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#### Instructions for sampling with swabs

- While holding the dogs head still put swab against cheek inside the mouth and rub firmly for 10-20 secs to get loose cells onto the swab. (It is not saliva that is needed but cells from rubbing against the side of the mouth)
- Do a second swab from the same dog as a backup.
- Let the swabs dry (~10 min) before placing them in an envelope (or bag) clearly labelled with the dogs name and identification details.

Send swabs or FTA cards together with

- Import permit (for international samples).
- Request form
- pedigree details
- payment (\$88 per test for TNS)

by mail to Alan Wilton at the address over the page

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If there is sufficient DNA on the swab for testing results will be available about 2 weeks after arrival of the samples. Samples sent by mail can take 2 weeks to arrive.  
Some swabs prove difficult to extract enough DNA to test. If the second swab has to be tested the results will take longer to be sent out. If the second sample fails a repeat sample may be needed.

Blood on FTA cards produce reliable results more often than swabs.  
It is not practicle to take intravenous blood samples from young pups but it is possible to draw a drop of blood or two from exposed areas like the ear.  
The blood drops can be applied directly to an FTA card.

Note; even FTA cards can have failures if the card is flooded with too much blood instead of following the instructions of adding just enough to soak in. A few drops is all that is needed.

## INSTRUCTIONS: for FTA cards

### Application of Blood Samples (fresh whole blood, or with the anticoagulants: EDTA, sodium citrate, ACD, or heparin):

1. Label the FTA card with the appropriate sample identification.
  2. Drop the blood (< 125  $\mu$ L per 1 inch circle; 5 or 6 drops) onto the card in a concentric circular motion within the printed circle area. Avoid "puddling" of the liquid sample, as it will overload the chemicals on the card. Also, do not rub or smear the blood onto the card.
  3. Samples applied to FTA cards are ready for immediate room temperature storage.  
Note: allow the sample to dry for one hour at room temperature Do not heat to shorten the drying period.
  4. Dried blood spots will appear darker than freshly spotted ones.
  5. The sample is now ready for mailing to UNSW with a copy of the Import Permit
- \* Do not flood the card with sample. Drops or streaks of blood should have white card visible between them.
- Label card with animals name and clearly indicate which samples are in which circle
  - Add blood sample to 1 or 2 circles for each animal.
  - For large sample numbers can put 2 animals on one half card (that is 1 per circle)
  - Allow to dry before closing card.

