

UK Miniature Schnauzer Clubs' Mycobacterium Avium Complex (MAC) testing recommendations

Questions & Answers

Miniature Schnauzer breeders & owners are urged to work together to help rid our breed of the genetic predisposition to avian tuberculosis (Mycobacterium Avium Complex - 'MAC')

The 'MAC' DNA test will not tell if you can, or cannot, breed, but **with whom** you may breed safely.

All three UK Clubs (MSC, NSC & SCGB) recommend that all Miniature Schnauzers are DNA tested for 'MAC', prior to breeding - unless **BOTH** parents have been DNA tested and **BOTH** are 'Normal/Clear'.

Buccal cheek swabs are available to members – just contact any one of the 3 Health reps.

Why?

Working together is the only way to finally rid our breed of the genetic predisposition to 'MAC'

Cost?

It's a one-off cost of \$75 (about £60) to test one Mini. For Stud dog owners, that's around 11% of a single 'normal' stud fee (most dogs have multiple studs, so the actual 'lifetime cost' is likely to be less than 2% of 'income'). For bitches (average Mini litter is 4.78, assume 3 are sold), this test also represents less than 2% of 'income' - from one litter. We're sure you'll agree, it's a small price to pay for your – & prospective puppy owners - peace of mind

How?

Register with PennGen on:

www.research.vet.upenn.edu/PennGenHome/tabid/91/Default.aspx

then go to 'Create an account' & follow the instructions.

When ready to send, do simple-to-take cheek swabs (**2 per dog**) – it's really easy to do - Cathryn Mellersh's video takes you through it at:

www.youtube.com/watch?v=ePulfn55clc *fast forward to 1min 8 seconds, to avoid the 'background'*

Hint: *have a self-seal C-4 envelope ready, with dog's name (registered & 'Call name'), KC & Microchip numbers plus DOB written on outside – then place both swabs inside & seal.*

How soon do I get my result?

PennGen say allow 4-weeks from the date they receive your swab. You can check this on-line and result is sent to you by email once you've paid your test fee.

What will it tell me?

The MAC DNA test will not tell if you can, or cannot, breed, but **with whom** you could breed safely. Results are expressed as '**Normal; Clear**' / '**Carrier**' / '**Affected**' (an 'affected' result can also be for a Mini that is not showing any signs of this condition – 'asymptomatic').

When & How do I pay?

Once PennGen have your results, they email you & ask for payment (\$75 per dog). It can be done via normal Bank Card (Visa, etc). Once funds are cleared, your certificate arrives within an hour or so. **It can then be easily forwarded** to our BHC on: doncleve@me.com

If a Carrier, can I still breed with my dog/bitch?

Yes, breeding 'Normal' x 'Carrier' matings may produce 'carriers' but can't produce 'affected'. Remember that any puppy from a 'Normal' x 'Carrier' mating & used in subsequent breeding **MUST** also be tested before mating.

Test is 'recommended' but can results be listed on my dog's registration at the KC

Yes. Simply send the pdf file of your DNA test certificate, together with your Mini's KC registration cert, to the KC; they will issue a new one (free of charge) & include the DNA test result on their database.

Because 'Normal' x 'Normal' can only produce 'Normal' **puppies and if that information is already registered with the KC, the KC registration database is set up to recognise that fact. The puppies registration certificates will show 'hereditary clear' status on their certificates.**

My friend/breed expert/eye panellist/vet/internet 'guru'/local soothsayer tells me it's not necessary!

With this (one-off) DNA test, breeders/owners have certainty as to the genetic status of their Mini in respect of MAC. Without this DNA result, no matter how 'expert' those sources claim to be, they're making it up!

We pay eye panellists a similar amount every year when breeding, yet the result doesn't tell us if 'our' Mini is at risk of passing on any one of the 3 (non-lethal) conditions.