

ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

INFORMATION PAPER

Suspected Botulism in Animals – Details of samples and historical information taken for examination for *Clostridium botulinum* toxin testing and archiving

The Veterinary Laboratories have instituted a protocol for sampling for archiving purposes from suspected botulism incidents in animals, collection of appropriate data and toxin testing of certain incidents.

Samples for archiving and historical data will be collect from all incidents. It is intended that archived samples will be used when improved assays not involving live animals become available.

Toxin Testing

In the meantime some limited toxin testing will be carried out as follow:

No samples will be taken from incidents involving less than three animals.

In incidents involving three to ten animals one batch of samples will submitted for testing

In incidents involving ten to ten or more animals two samples will be submitted for testing

Details of sampling instructions and the historical information to be collected are shown in the attached papers

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6 Botulism

- 6.1 In all cases where botulism is suspected, a farm visit must be carried out as a matter of urgency. Section F of the FSF (Appendix 8) must be completed for all incidents in addition to Parts 1 and 2 of the FSF form.
- 6.2 Where possible, heparin blood samples should be collected from all animals showing clinical signs consistent with botulism, up to a maximum of 10 samples. **Sample should only be collected if it is safe to do so, both for the people involved and the animals themselves.** Plasma should be removed and archived at -20°C .
- 6.3 Where the outbreak is thought to be feed-related a sample of feed should be collected and stored at -20°C .
- 6.4 Samples for possible toxicological examination should be collected from all carcasses submitted for post-mortem examination where botulism is suspected or cannot be ruled out. Approximately 2 x 25 grams of small intestine contents and 2 x 25 grams of large intestine contents/faeces should be collected from each animal. In addition a post-mortem serum sample and 1 x 25 grams of liver should be collected.
- 6.5 Samples should be archived at -20°C . Approval for toxicological examinations will be issued by the Project Leader. If instructed to do so, one sample of small intestine contents, large intestine contents or faeces should be sent to: XXX
- 6.6 Samples should be sent on ice as soon as possible after collection by XXX for next day delivery.
- 6.7 A submission form for submitting samples may be found at Appendix 9. The test code for botulinum toxin testing is TC0549 and test should be allocated to project code FZ2300. Testing for botulinum toxins **must not** be recorded to project OG0502.
- 6.8 Samples will be examined for botulinum toxins. Positive results will be expressed as Toxin type X. If no toxin is found on direct examination, samples will be cultured and then tested for toxin. Positive results will be expressed as C.bot.type X. Culture will not be carried out if toxin is found on direct examination. If no toxin is detected results will be expressed as TNA/BNA (toxin not detected/bacteria not detected). Turn around time is approximately 8 to 12 days.
- 6.9 Results should be reported to the Project Leader as soon as they are received.