

Paralytic Shellfish Poisoning

Information for vets and pet owners

Symptoms

The list of symptoms below are those described for human intoxication, similar symptoms are expected to occur in mammals exposed to toxic levels of PSP. Symptoms develop quickly, usually within 30 minutes, and include:

- Tingling/burning sensation followed by numbness in the lips, tongue and face which progresses to extremities.
- Paralysis of limbs, loss of muscle co-ordination, constrictive sensation in the throat.
- In high doses, paralysis can extend to the respiratory system, affecting breathing.
- Other symptoms exhibited in canines exposed to PSP toxins have included vomiting, reduction in movement, difficulty walking and/or standing, loss of consciousness

PSP toxins reversibly bind to the sodium channels in nerve cell membranes disrupting normal depolarisation.

Treatment

No antidote is available.

When required, artificial respiration to support breathing.

Toxins are excreted in the urine (regular samples should be taken – see below).

Actions

Any animals ingesting materials suspected to contain PSP toxins should be taken immediately to a veterinary practice. Do not leave the animal unattended and continually ensure they appear alert. If any of the listed symptoms are experienced, seek emergency medical assistance immediately. Onset of symptoms is usually rapid at high toxin concentrations so observe the subject for a minimum of 1 hour after exposure. With any sign of severe symptoms in animals, especially paralysis of the limbs (including reduced ability to stand), artificial respiration must be made available quickly at a suitable establishment. **If treated properly, PSP intoxication is completely reversible and has no long-term health effects.**

Samples

To enable analysis to be conducted to assess the potential for PSP intoxication, the following samples should be taken:

- Regular urine samples (ideally within 2 hours, 4-6 hours and 10-12 hours of symptoms)
- Any samples of vomit
- Blood samples (ideally within 2 hours, 4-6 hours and 10-12 hours of symptoms)
- Once taken, samples should be stored in a refrigerator until they can be shipped to Cefas for toxin testing

Cefas contacts:

- 1) Dr Andrew Turner, Principal Chemist Food Safety
Cefas, Barrack Road, Weymouth, Dorset, DT4 8UB
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- 2) Lewis Coates, Shellfish Hygiene Scientist
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Information on management of specific cases

- Contact the Veterinary Poisons Information Service for advice (for veterinary professionals); available 24 hours: www.vpisglobal.com/