



NIDOVIRUS

Nidoviruses are a group of related viruses known to cause a severe and sometimes fatal respiratory disease in snakes. The nidovirus order is comprised of four families of positive-stranded RNA viruses, including well-known human pathogens like MERS- and SARS-coronavirus and economically important animal nidoviruses like those causing porcine reproductive and respiratory syndrome (PRRSV), porcine epidemic diarrhea (PEDV), equine arteritis (EAV), and chicken infectious bronchitis (IBV).

Viruses in the order Nidovirales have recently been described predominantly in pythons and some boas.

The clinical signs can vary from mild and non-specific to severe respiratory signs or sudden death. Typically, snakes will begin to have increased amounts of clear mucus in the mouth and nose and the gums may become reddened. This can progress to wheezing, breathing with the mouth open, more rapid breathing, or coughing. Other signs include a poor or non-existent appetite, weight loss, decreased activity level, dehydration, and spending more time on the bottom of the vivarium (if a perching snake). Secondary bacterial infections may also play a role in disease, so mouth rot could be evidence of an underlying nidovirus infection (although there are many other causes for this as well).

Some snakes remain nidovirus positive for over a year. Other snakes succumb to disease and die within 6-12 months of being infected. There is also evidence that some snakes can clear the infection following 6-12 months of infection, but the data to support this remains anecdotal and this is not clearly established. Overall, this disease is chronic and usually results in long-term infection in snakes.

The virus is found in the oral/nasal cavity, lungs, and faeces. Therefore, transmission is thought to occur by direct or indirect exposure to respiratory secretions (similar to the common cold) or to faeces from infected snakes.

There is no evidence that this virus can infect or cause disease in humans.

Currently, there is no specific treatment for nidovirus infection in snakes. Typical treatment includes supportive care and antibiotics to prevent secondary bacterial infections.

We now offer a PCR for Nidovirus.

Samples required are a Plain Oral swab, Tracheal Wash, Lung or Tracheal tissue.

The Acorns, Town House Farm, Clotton, Cheshire CW6 OEG

Tel: 01829 781855 · Email: sales@palsvetlab.co.uk · Website: palsvetlab.co.uk · Follow Us:   @palsvetlab