Corona viruses in humans and pets.

Today I want to address some recent stories regarding animal having “corona virus”, and hopefully correct some misconceptions and half truths.

1) Our current pandemic is not “corona virus”, there is no one corona virus, it is actually a very large family of viruses.

SARS-Cov-2, commonly called covid-19 is the cause of the pandemic, this is a specific virus. This may seem like a small sticking point, but it is very important to remember. The corona virus family includes viruses that affect individual species (cats, dogs, chickens, cows, ferrets, and many many more) and there are 4 corona virus species that commonly affect humans. These viruses cause the common cold (approximately 15% of common colds come from a corona virus).

So when we use corona virus as a short hand we can get confused with the other viruses in the same family.

2) Animal corona viruses generally cause gastro-intestinal signs (affect the gut and cause vomiting and diarrhoea), unlike in humans where we get respiratory tract infections. Most animal corona viruses are alpha viruses, most of the human corona viruses are beta viruses (including covid-19), there are also gamma (birds) and delta (birds and pigs) groups in the family.

3) **News story 1:** There is already a corona virus vaccination; While technically true, not helpful, we have a corona virus vaccination available in dogs, which we use very regularly. This is for the canine corona virus (alpha virus), it has no cross over with Human Covid-19 (beta virus), this vaccination would have no protective benefit for humans (or dogs) against covid19.

4) **News story 2:** Dogs can get, and spread, corona virus; half true. Dogs can carry corona virus on their fur, in much the same way as a phone, door handle, cash or any other object can carry the virus. There has also been a handful of cases where the virus has been isolated from swabs of dogs living in close contact with infected humans, none of these dogs have become sick, and there is no evidence they have been able to spread it beyond carrying it on their fur.

5) **News Story 3:** Cats can get and spread corona virus; as with dogs half true, cats can carry the virus on their fur in the same way as dogs, there is also more evidence that some cats can become infected with covid-19 as 2 have presented with mild clinical symptoms in the USA after being infected by their owners, both cats recovered.

A study has also been performed where cats were deliberately infected and placed with un-infected cats. The uninfected cats showed evidence of virus in their pharynx after this exposure, however none of these cats developed symptoms. This paper is not yet peer reviewed, so its data is not confirmed, and there is still no evidence that these cats can transmit the infection to humans, and at this stage cats are more at risk from us then the other way round.

6) **News story 4:** Ferrets and hamsters (not applicable in Australia) get corona virus; True, both ferrets and hamster appear to be at increased risk from covid-19 with clinical signs occurring. The study on cats also looked at ferrets with similar results, except the ferrets became sick. As with cats there is no

evidence that ferrets can transmit the virus to humans, but as they are at risk maintaining their isolation is important.

7) Advice with animals remains the same,

maintain social distancing from animals outside your household, as with people

Wash hands after touching animals

Keep cats indoors

Rabbits and ferrets should also maintain social isolation.

If you do get covid-19 or are in isolation due to suspicion of infection/exposure avoid contact with your household, including pets,

8) The WSAVA (world small animal veterinary association), labs around the world and insurance companies are monitoring the potential for animal transmission, so far with 5.5million infected humans, there have been animal cases in the 10s, there has also been no spike in respiratory tract infections in animals. To the best of our knowledge companion animals are not contributing to this pandemic, and most are at very low risk themselves.

Wishing you all good physical and mental health

Dr Tony