

Serosurveillance of canine and human Influenza infection in Canis-lupis Familiars

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The likelihood of exposure of dogs to diverse influenza viruses including human, avian and canine influenza viruses has raised the concern of a potential role of dogs in the epidemiology of influenza viruses. In this study, a total of 456 dog sera were collected via puncture from both sexes and different age groups that had various clinical diseases to see if they obtained pandemic H1N1, seasonal H3N2 and H3N8 using a hemagglutination inhibition (HI) test. All sera were heat inactivated at 56°C for 30 minutes. HI testing was carried out according to the World Organization for Animal Health manual with a modification using 8 hemagglutination units (HA) of each virus. Results from the statistics program Stata 11.0 indicated that dogs are receptive to human influenzas both pandemic H1N1 and seasonal H3N2. Interestingly, gender and temperature did not affect the prevalence of influenzas in dogs like it does in cats. However, there was correlation between the age and health status of the dog and the strains of influenzas they were being challenged for. Based on this, dogs may serve as intermediate hosts for influenzas however it is unsure more research needs to be conducted in order to confirm this hypothesis.