

**Detection of Antibody and Type A Subtype H9 Influenza Virus on Stray Cats
(*Felis sp.*) in Indonesia**

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ABSTRACT

The aim of this study was to detect the presence of antibody and type A subtype H9 influenza virus in cats from Surabaya, Sidoarjo, Lamongan, Gresik and Jakarta. The study was conducted from December 2015 to April 2016 in the BSL-2 Laboratory AIRC-Universitas Airlangga. 41 cats were collected from Surabaya, 33 from Sidoarjo, 14 from Gresik, 12 from Lamongan, and five from Jakarta. The samples being tested in the study were nasofaring swab and blood serum of the cats. After centrifuging the swab with media transport, the supernatant was inoculated into chicken eggs with embryo (9-11 days old) then were incubated at 37°C. On the fourth day, the allantois fluid's Hemagglutinin activity was analyzed using Hemagglutination (HA) test. The prepared blood serum was analyzed for its type A subtype H9 influenza virus antibody by using Hemagglutination Inhibition (HI) test. The result of this research showed that two samples from Surabaya (4.87 %), Sidoarjo (6.06 %), Gresik (14.28 %) and one sample from Jakarta (20 %) were positive, indicating the presence of potential type A subtype H9 influenza virus antibody in the cats. The result of HA tests was negative. We recommend to do further analysis using the protective titer detection method; such as Serum Neutralization Test (SNT) and to continue the surveillance of the viruses' presence in cats..

Key words: Influenza, H9, Cat, HA test, HI