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H7N9 antibodies high among poultry workers'

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Singapore: Serological tests conducted on poultry workers of southern Guangdong province city of Shenzhen China, showed evidence of asymptomatic or mild infections in poultry workers, further affirming the fact that H7N9 spreads through poultry. Through the analysis, researchers studied the gradual increase in virus specific antibody titer values, with continued exposure to poultry.

According to the study published in the Clinical Infectious Diseases journal, blood samples were collected from around 500 retail poultry workers in May 2013 and in late December 2013 from seven districts where the environmental swabs had tested positive for the virus. Hem agglutination-inhibition (HI) assays were conducted and a 7 percent rise in titer values for the virus from May to December was demonstrated. This rise was in line with the second wave of H7N9 activity in China, with Guangdong as one of the hot spots. None of the participants had confirmed H7N9 infections, and investigators did not find evidence of infection in any of the general public group for either testing period.

On assessing the risk factors it was found that being female and having occupational exposure for 10 or more years was associated with infection. Women have a major share of poultry duties like selling poultry, de feathering, and cleaning etc. The researchers stressed that longer worker history could reflect greater susceptibility to infection in the older population.

The retail market settings are also thought to contribute to a rise in titer values as compared to the whole sale setting as shorter stay in ware house markets reduces the time of exposure to the virus.

"The increases in the incidence of human cases in Shenzhen in January and February 2014 suggested that prevalence in poultry may have also increased during this period, compared to the preceding months, and further serological studies in poultry workers and the general population would aid a comprehensive assessment," coined researchers.