

Asian Flu is for the Birds

by Steven H. Hinrichs, M.D.

The CDC is requesting increased surveillance for influenza this year in recognition of the potential threat following an outbreak of influenza A in Hong Kong. The influenza virus causing concern is an H5N1 serotype which previously was thought to only be capable of infecting chickens and other fowl, but not humans. The Public Health Laboratory at UNMC is part of a national and international surveillance program coordinated by the World Health Organization and the CDC. The goal of this program is to monitor the frequency of specific influenza serotypes and rapidly identify any significant change. This information is then used in determining which influenza strains are incorporated into the vaccine preparation each year. In addition to making a determination about whether the dominant virus in any one year is of an A or B type, the subtype or serotype information is equally important. However, current techniques require an isolate to be available, one that can grow and replicate in cell culture. Therefore, physicians throughout the state are requested to communicate with the state epidemiologist, Dr. Tom Safranek, the development of any new outbreaks of influenza so that efforts can be made to collect samples. For epidemiological purposes, it is not necessary to test every sample associated with a particular outbreak and usually only 2 or 3 are necessary, particularly if the presence of influenza A has been documented in most individuals by the antigen assay.

Expectations of practicing physicians has rapidly changed from the past when very few specimens were collected for virus testing. With the advent of rapid antigen assays, such as the Bectin -Dickinson Influenza A assay, which are excellent when used on appropriate specimens, timely treatment can be instituted and spread of virus can be limited. In addition to rapid antigen assays, the development of rapid screening tests and their

assembly into kits by companies such as Bartels or Chemicon has also made the detection of respiratory viruses possible and convenient for many hospital laboratories.

Currently it is possible to screen for the presence of parainfluenza virus types 1, 2 and 3, influenza virus A and B, adenovirus and respiratory syncytial virus. The Public Health Laboratory at UNMC is interested in helping other hospitals in establishing assays for viruses and can provide training for technologists as well as reference samples to establish initial proficiency. The virus laboratory has also provided mini-fellowship training experience for pathologists who are interested in expanding their capabilities. For more information on these educational opportunities please contact Dr. Steven Hinrichs at (402) 559-4116.