



Orange County Health Care Agency, Epidemiology & Assessment, 1719 W. 17th St. Santa Ana, CA 92706, (714) 834-8180

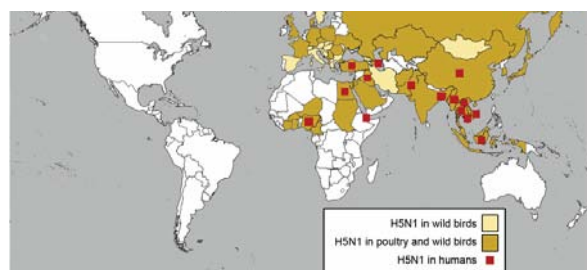
Although traditional influenza season is over in the U.S., consider influenza in returning travelers with fever and respiratory symptoms and report any suspect avian influenza to OC Epidemiology at 714-834-8180.

- **Case series describes factors associated with case fatality of human H5N1 infections in Indonesia.** Public health officials in Indonesia have analyzed clinical and epidemiological data from confirmed human H5N1 cases from June 2005 to February 2008. During this time period, Indonesia had the most confirmed human H5N1 cases (127) and one of the highest case-fatality rates (81%) worldwide. The median time to hospitalization was six days (range 1–16 days) and of the 122 hospitalized patients for whom data were available, 121 (99%) had fever, 107 (88%) cough, and 103 (84%) dyspnea. Median time from onset to oseltamivir treatment was seven days (range 0–21 days); initiation of antivirals within two days was associated with significantly lower mortality than was initiation after five days. Secondary cases were more likely to survive and received antiviral treatment about three days sooner than the primary cases in a cluster. Investigators concluded that development of better diagnostic methods and improved case management could allow for prompt identification of patients with H5N1, which could decrease mortality through earlier treatment with oseltamivir. See August 15, 2008 issue of *Lancet* or summary at www.cidrap.umn.edu/cidrap/content/influenza/avianflu/.
- **Evidence suggests that the majority of deaths during 1918-1919 influenza pandemic were a direct result of secondary bacterial pneumonia.** Researchers from the National Institutes of Health (NIH) examined lung tissue from 58 autopsies and reviewed published findings from 8,398 individual autopsy investigations during the 1918-1919 influenza pandemic (prior to the use of antibiotics). Both postmortem samples and bacteriologic and histopathologic results from published autopsy series on people who died of influenza during 1918–1919 suggest most influenza fatalities resulted from secondary bacterial pneumonia caused by common upper respiratory tract bacteria. Scientists suggest that infection with influenza virus damages bronchial and bronchiolar epithelium, allowing invasion and spread of respiratory tract bacteria. The researchers note that if the next pandemic virus behaves similar to the 1918 virus, pandemic planning needs to address prevention, diagnosis and treatment of bacterial pneumonia, including stockpiling of antibiotics and bacterial vaccines, in addition to the current focus on influenza vaccines and antiviral drugs. To read more, see *JID* October 1, 2008, available at www.journals.uchicago.edu/doi/full/10.1086/591708.
- **Study finds long-lived immunity to 1918 pandemic influenza virus.** Blood from 32 pandemic survivors (born in or before 1915) was found to have antibodies to the 1918 virus and B lymphocytes taken from a subset of the donors were able to be cultivated to generate antibodies that could neutralize the virus. This is the longest immunological memory that has been demonstrated. Monoclonal antibodies developed from these B cells were able to protect infected mice from death and could serve as a potential therapy against a 1918-like virus. See August 17, 2008 issue of *Nature* or summary at www.cidrap.umn.edu/cidrap/content/influenza/avianflu/
- **CDC releases 1918 pandemic influenza internet storybook** containing stories, videos and photos from survivors, families, and friends who lived through the 1918 and 1957 pandemics. See www.pandemicflu.gov/storybook/index.html.

Avian Influenza Update (as of Jun. 19th)

- No new cases have been reported by the WHO since June 19th. For the latest WHO updates, see www.who.int/csr/disease/avian_influenza/en/.

Nations with Confirmed H5N1 Avian Influenza Cases (as of August, 2008)



Recommended Resources
 CDC: <http://www.cdc.gov/flu/weekly/>;
 OC: <http://www.ochealthinfo.com/epi/flu/surveillance.htm>;
 CA: <http://www.dhs.ca.gov/ps/dcdc/YRDL/html/FLU/Fluintro.htm>;
 HHS: <http://www.pandemicflu.gov/>; **General:** <http://www.cdc.gov/flu/>

If you have any comments about this flyer, contact Alina Burgi or Pamela Hipp at (714) 834-8180. To receive this newsletter by email, please contact us at epi@ochca.com.