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Influenza—Never an off-season

News reports of influenza activity are likely to confuse the general public because the frequency of identification of new sub-types and reassortant viruses makes it difficult for non-experts to keep the H's and N's straight. Recent outbreaks have not caused widespread disease in humans, but the geographic reach and number of avian influenza virus strains is alarming.

Outbreaks of highly pathogenic avian influenza (HPAI) viruses have been reported thus far this year in flocks in Nigeria, Indonesia, Iraq, and Burkina Faso—all H5N1—the strain associated with high mortality in humans that has been monitored since its appearance in 2003. Human cases of H5N1 continue to be reported in Egypt and Indonesia especially.

Avian influenza outbreaks in Canada and the poultry growing states of Iowa, Minnesota, and recently Michigan, have been shown to be caused by H5N2 and H5N8 and a new H5N1 - a distinctly different strain than the H5N1 described in the previous paragraph. Over 30 million birds have been culled. Other poultry outbreaks have been documented in Hungary and China (H5N8), Mexico (H7N3), and Taiwan (H5N2). In Viet Nam, H5N6 is epizootic. Human cases have been reported in China (H5N6 and H7N9). In March of this year, U.S. researchers reported other flu strains (H10N8 and H6N1) that have begun causing sporadic infections among people on the Chinese mainland and in Taiwan. These two new strains have not been shown to infect humans easily.

Canadian researchers report that the HPAI H5N2 virus detected in poultry in British Columbia was sequenced and found to contain gene segments from the HPAI Eurasian H5N8 virus, saying this is the first time a "Eurasian lineage highly pathogenic H5 virus has caused an outbreak of avian influenza in poultry in North America." **ProMed Mail May 22, 2015**

Editor's Note:

Influenza strain nomenclature is in need of an upgrade to allow a clear recognition of the specific strain that is responsible for human or avian infections. It certainly is not enough to say that H5N1 is responsible for outbreaks of poultry infection in the American heartland, without clarifying that this strain is different from the H5N1 strain that threatened to invade the Western Hemisphere a decade ago, and still could be a source of a new, deadly and readily transmissible strain of the influenza type A virus. JL Beebe

MERS Corona Virus—South Korea

Transmission of the MERS Corona virus, heretofore relegated to person-to-person contact in Middle Eastern countries, especially Saudi Arabia, has been reported in South Korea. In a recent report, 14 new cases, bringing the country-wide total to 122 with 9 deaths was described. Beginning with the report of a single case on May 20, a progression of cases has been diagnosed. Thus far, all reported cases involved in this outbreak are individuals who were patients, healthcare workers or visitors in healthcare facilities where previously infected patients received care. The majority are cases are persons who were admitted to a hospital or treated in an emergency department for an underlying disease that predisposed the individual to disease onset when exposed to MERS-CoV..