Emerging and Reemerging Infectious Diseases, Region of the Americas

Vol. 1, No. 22—4 December 2003

Circulation of Human metapneumovirus in the United States could complicate management of respiratory infections this winter

In accordance with a study conducted by researchers of the Yale University Medical School in New Haven, Connecticut, the human metapneumovirus is circulating in the United States and can be a major cause of respiratory infections. The human metapneumovirus (hMPV) was discovered in The Netherlands in 1999. Researchers studying respiratory samples noted that the virus, previously thought to affect only avian populations, had been circulating undetected among humans for 20 years. The hMPV has since been identified in Australia, Canada, the United States, and the United Kingdom. It is believed that the distribution is more widespread, but that it yet is to be reported from other areas of the world. While respiratory syncytial (RSV), parainfluenza and influenza viruses account for most bronchiolitis and pneumonia cases among children in the United States, 15% to 34% of the causes are unknown. During the study period (Oct. 30, 2001 – Feb.28, 2002) 357 specimens from 296 children under five yearso of age were found negative to the aforementioned viruses (VRS, Influenza A or B, Parainfluenza 1-3 and adenovirus). Upon further analysis, 20 samples from 19 individuals were later found to be positive for hMPV by reverse polymerase chain reaction. All of the hMPV infections occurred between January and February 2002. Overall, hMPV was responsible for 6.4% of respiratory infections due to a previously unknown cause in children in New Haven, Connecticut.

For more information, see Esper, F.; Boucher, D.; Weibel, C. et al. (2003) Human Metapneumovirus Infection in the United States: Clinical Manifestations Associated with Newly Emerging Respiratory Infection in Children. *Pediatrics* 111 (6): 1407-1410.

Source: Infectious Diseases News. Emerging Diseases: U.S. Patients not immune to hMPV.