

Emerging Infectious Diseases Update

- *Influenza A H7N9*
- *Influenza A H3N2v*
- *Middle East Respiratory Syndrome Coronavirus*

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Influenza A H7N9

- New avian strain first reported in April 2013
- All cases to date have been in China
 - By June, over 130 cases reported: most patients had severe respiratory illness, and there were 43 deaths
 - Most had been exposed to infected poultry or contaminated environments before illness
- *New illness reports have decreased since April*
 - Control measures (closing live bird markets)
 - Natural seasonal pattern of avian flu viruses

Influenza A H7N9

- Currently, H7N9 *does not* meet criteria for a pandemic influenza virus:
 - YES - Novel strain that is not recognized by the human immune system
 - YES - Causes increased sickness and death
 - NO - Sustained person-to-person transmission
- To date, any person-to-person transmission has been limited, not sustained.

Influenza A H3N2v (Swine Origin)

- In 2012, a multi-state outbreak of influenza H3N2v
 - 306 cases, including 16 hospitalizations and 1 death
 - Associated with exposure to swine at agricultural fairs, primarily among individuals showing animals
 - *No cases in Virginia*
- Since June 2013, 12 cases of H3N2v infection identified in Indiana, again associated with county fairs
- VDH working with VDACS on information sharing with county fairs, extension services, 4-H groups, local health departments

Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

- Newly identified virus causing severe acute respiratory illness - first seen in April 2012.
- Most of the reported cases occurred since April 2013.
- 90 cases, including 45 deaths; **50% fatality rate** (7/19/2013)
- 8 countries: 78% in Saudi Arabia
- *No cases in United States*
- No sustained person-to-person transmission, but can spread person-to-person during *close* contact
 - Family caregivers
 - Healthcare settings

World Health Organization

“Based on ... the currently available information, the Director-General accepted the International Health Regulations Emergency Committee’s assessment that the current MERS-CoV situation is serious and of great concern, but does not constitute a Public Health Emergency of International Concern at this time.”

WHO Statement
17 July 2013

Public Health Steps Being Taken

Centers for Disease Control and Prevention (CDC)

- Providing current information and up-to-date guidance
- *In airports*, heightening awareness among returning international travelers
- Assessing need for specific recommendations for travelers
- Planning for and communicating about response to first case(s) in United States
- Providing test kits to public health laboratories

Public Health Steps Being Taken

Virginia Department of Health (VDH)

- Monitoring situation nationally and internationally
- Keeping clinicians aware and up-to-date
 - *Dear Colleague* letter of July 19th had current guidance for all three infections
- Preparing for a potential first case in Virginia

Resources

- Virginia Department of Health: www.vdh.virginia.gov

- Centers for Disease Control and Prevention:

Influenza

H7N9

<http://www.cdc.gov/flu/avianflu/h7n9-virus.htm>

H3N2v

<http://www.cdc.gov/flu/swineflu/variant.htm>

MERS-CoV

<http://www.cdc.gov/coronavirus/MERS/index.html>

- World Health Organization:

http://www.who.int/csr/disease/coronavirus_infections/en/index.html