Record Number of Tularemia Cases and Influenza Hospitalizations

2014 Communicable Disease Control Summary

In 2014, there were 481 cases of confirmed and probable disease conditions reported in Boulder County. Among these reportable diseases, one out of three (152 cases) were due to enteric infections. Among them, the highest number of cases were from giardia (52 cases), campylobacter (47 cases), and salmonella (35 cases). Other infections reported included: shiga toxin producing E.coli (5), shigellosis (4), Yersinia non-pestis (4), cryptosporidiosis (3), hepatitis A (1), and vibriosis (1). Case investigations of these enteric illnesses often yield a high association of travel and outdoor activities as the probable source of infection in Boulder County residents.

Vaccine preventable diseases accounted for 26% (124 cases) of reported case investigations in 2014. Although the number of pertussis cases significantly decreased from 2013 (97 cases), it still remains very prevalent among school-aged children. Thirty-five schools or child care facilities within Boulder County were affected, and 19 of these reported multiple cases. There were 27 cases of varicella reported in the same age groups.

Compared to 2013, the number of outbreak investigations in Boulder County increased in 2014, especially during the second half of the year. There were a total of 24 outbreaks consisting mostly of norovirus and influenza in long-term care facilities. Norovirus outbreaks peaked in March (6 reported) and norovirus and influenza activity increased during December, with 11 outbreaks reported (4 norovirus and 7 influenza).

Zoonotic Activity: There has been an increase of terrestrial (ground dwelling) animals testing positive for rabies since the previous summer, when it became re-established in the area. In 2014, there were 21 lab confirmed rabies-positive animals in Boulder County: 12 bats, 6 skunks, 1 fox, 1 raccoon, and 1 coyote. Post-exposure prophylaxis was recommended for 37 Boulder County residents who had exposure to animals that may have been infected with rabies.

Human West Nile Virus (WNV) infections were relatively low in 2014, considering the above average amounts of rainfall that we received. There were 12 cases of WNV in Boulder County with a clinical diagnosis of uncomplicated fever (8 cases) or meningitis (4 cases). Across the state, 115 cases and 4 deaths from WNV were reported. The majority of cases were uncomplicated fever (62%) with the others being meningitis (23%) or encephalitis (16%).

In 2014, 16 cases of tularemia were identified in Colorado with five of those cases reported in Boulder County, representing a significant increase from the historical average of about three cases a year for the state. Tularemia bacteria can survive for extended periods in soil and water and the season’s widespread tularemia epizootic in rabbits and rodents greatly increased the amount of bacteria present in the environment. Providers should maintain a high index of suspicion for this illness, particularly in patients engaging in frequent outdoor activities and especially in Boulder County since many cases have been reported.

Public Health is Partnering for Ebola Preparedness Planning

Efforts to reduce the Ebola outbreak in west Africa are working; however, as long as the Ebola outbreak continues, all individuals returning to the United States from the three affected countries (Sierra Leone, Guinea, and Liberia) will be monitored by public health practitioners. Boulder County

Help Reduce Stigma for Travelers Returning from Ebola-Affected Areas

Reducing the fear of Ebola transmission is important for minimizing the stigma faced by returning travelers. Public health monitoring of travelers from one of the three Ebola-affected countries is very comprehensive and the risk of a returning traveler developing Ebola is extremely low. Monitoring for symptoms starts in the country of departure and again at one of the five select U.S. airports. By the time a traveler arrives in Colorado, they have been screened for symptoms three separate times. The majority of travelers will not be required to restrict their activities during the 21 day monitoring period and are free to attend events, including routine doctor’s appointments. As a partner in health, please help these individuals feel welcome in our community by addressing their non-Ebola related health issues as you would with any other patient. You can help minimize fears about Ebola by sharing the facts with your staff and setting expectations about the importance of caring for these individuals.
Influenza Activity: For calendar year 2014, there were 106 total influenza hospitalizations reported in Boulder County. The greatest number of cases (73) for the year were reported during the current 2014-2015 flu season, along with seven influenza outbreaks in Boulder County long-term care facilities. In Colorado, there have been two influenza-associated pediatric deaths, over 100 influenza-associated outbreaks in long-term care facilities, and 2,504 hospitalizations reported as of January 17, 2015. Surveillance shows that the current influenza season may have peaked during the week ending December 27, 2014 with 570 hospitalizations reported. This is the highest number of hospitalizations reported during a single week since hospitalizations became a reportable condition in the 2004-2005 season, including the pandemic 2009-2010 season when the highest number of weekly reported hospitalizations was 355.

State surveillance data indicates that influenza A (H3N2) viruses have predominated so far, with low levels of detection of influenza B viruses and even less detection of H1N1 viruses. Influenza viral characterization data, analyzed by the Centers for Disease Control and Prevention (CDC), indicates that about 33% of the influenza A (H3N2) viruses tested were antigenically “like” the 2014-2015 influenza A (H3N2) vaccine component and about 67% of these viruses have drifted from the H3N2 vaccine virus. Influenza vaccination is still recommended for everyone age 6 months and older since vaccination can still offer protection against circulating influenza strains that have not drifted from the vaccine.

The 65-year and older age group accounts for the largest proportion of hospitalizations and the highest hospitalization rate this flu season. During past seasons when influenza A (H3N2) viruses have predominated, higher overall and age-specific hospitalization rates and more mortality were observed, especially among older people, very young children, and persons with certain chronic medical conditions compared with seasons during which influenza A (H1N1) or influenza B viruses predominated.