

Notifiable Diseases 2005: A Year in Review Five Key Lessons

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This Public Health Update includes 5 brief lessons reinforced regarding communicable disease surveillance and control efforts. In addition, summary numbers for notifiable diseases in 2005 are presented in a table. A list of notifiable disease in Colorado and a case report form are included at the end of this update.

1. For pertussis cases, PCR testing should be used instead of serology

The polymerase chain reaction (PCR) test on a nasal wash (nasopharyngeal aspirate) specimen is the preferred test for pertussis, because of high sensitivity, high specificity, and rapid results. Other laboratory tests for pertussis are not as reliable or as rapid as PCR. Serologic testing for pertussis is not standardized; if it is used it should always be ordered as a multi-antibody panel (IgM, IgA, and IgG) to seek evidence of recent infection. Culture and direct fluorescent antibody (DFA) testing for pertussis are rarely done because of low sensitivity.

2. Norovirus is the most common cause of gastro-intestinal outbreaks

In the Tri-County region there were a total of 13 outbreaks reported in 2005, of which 10 were confirmed or likely to be norovirus. Norovirus is the most common cause of gastro-intestinal illness in the United States. CDC estimates that 23 million cases of acute gastroenteritis are due to norovirus infection, and it is now thought that at least 50% of all foodborne outbreaks of gastroenteritis can be attributed to noroviruses. Most foodborne outbreaks of norovirus illness are likely to arise through direct contamination of food by a food handler immediately before its consumption. Outbreaks have frequently been associated with consumption of cold foods, including various salads, sandwiches, and bakery products. A common location for norovirus outbreaks is long-term care facilities, where the virus can spread quickly and often infect a high proportion of residents and staff. **As with any communicable disease, healthcare workers and other high risk employees should stay home and not return to work until they are no longer contagious.**

3. Avian influenza has heightened Americans interest in pandemic influenza

Although there is a lot of hype about the "Bird Flu", currently there are no cases of H5N1 virus among humans or birds in North America and no sustained person-to-person transmission anywhere in the world. The current risk to Americans from the H5N1 avian influenza outbreak in Asia is low. The strain of H5N1 virus found in Asia has not been found in the United States. Physicians who evaluate patients with influenza-like symptoms should ask patients if they have recently been traveling to Asia. If so, also inquire if they had bird contact while abroad. Please notify TCHD of any possible risks for avian influenza. People should avoid direct contact with dead wild birds. Persons who have direct contact with wildlife should practice good hygiene to avoid acquiring infectious diseases from animals.



4. Displaced persons have a critical need to obtain prescription medications

After the destruction of Hurricane Katrina last year, over 6,000 persons displaced from their home states arrived in Colorado. During the first week that evacuees came to Colorado, 500 evacuees arrived in the Tri-County Health Department (TCHD) jurisdiction. TCHD conducted a rapid needs assessment of a sample of these evacuees. The aim of this needs assessment was to prepare for the medical and service needs of these evacuees and of future evacuees expected to arrive in the following weeks. One of the key findings from this assessment was that of the 106 households surveyed, 60% had at least one family member on prescription medications and 39% of those were lacking the appropriate medications. This assessment was published in a Morbidity and Mortality Weekly Report. If you are interested, you can access the report at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5509a7.htm>.

5. Pertussis treatment is for cases and their close contacts

After a diagnosis of pertussis, antibiotics should be prescribed for the patient **AND** all household and close contacts regardless of immunization status. The household and close contacts of a laboratory-confirmed pertussis case can receive prophylaxis without undergoing pertussis testing. Based on the very high (up to 81%) secondary transmission rate among members of the same household, Tri-County Health Department (TCHD) recommends timely prophylaxis of close contacts to prevent further spread of pertussis. Please contact Tri-County Health Department for the latest antibiotic recommendations. **To prevent further spread of illness**, persons reported as cases of pertussis and persons identified as symptomatic (including slight cough) contacts of cases should be excluded from work, childcare, and/or school until they are no longer contagious. Persons are considered no longer contagious after completing 5 days of an appropriate antibiotic or 21 days after cough onset if antibiotics are not taken.

Summary numbers for notifiable diseases in 2005 are presented in Table 1. A list of notifiable diseases in Colorado and a case report form are included at the end of this update. You can also visit <http://www.cdphe.state.co.us/dc/Medlist.pdf> for a list of notifiable diseases in Colorado. Please know that upon receiving a report of any of these diseases, the public health department is likely to contact your patient to assess exposure and put appropriate control measures into place. If for some reason you would not like us to contact your patients, please let us know.

Also, a reminder that all outbreaks from any cause are notifiable conditions and should be reported to the local or state health department within 24 hours of identification. The health department can facilitate testing for pathogens, and can provide guidance/assistance for outbreak investigation and infection control measures. Thank you!

If you have questions please contact your state or local health department:

Colorado Department of Public Health and Environment:
(303) 692-2700 / (303) 370-9395 (after hours)
Fax: (303) 782-0338

Tri-County Health Department:
(303) 220-9200 / 303-461-2342 (after hours)
Fax: (303) 220-9208

Table 1. Reported Cases of Notifiable Disease in Adams, Arapahoe and Douglas Counties, 2005.

Diagnosis	Adams	Arapahoe	Douglas	Total
AIDS	19	45	2	66
Amebiasis	0	4	0	4
Campylobacter	67	98	51	216
Chlamydia	1,447	1,566	170	3,183
Cryptosporidiosis	0	3	3	6
E. coli O157:H7	4	6	2	12
E. coli STEC + non-0157	0	1	0	1
Encephalitis Other	0	2	0	2
Giardiasis	31	44	43	118
Gonorrhea	225	377	33	635
Group A Strep Invasive	39	43	7	89
Group B Strep Invasive	31	36	8	75
Haemophilus influenzae	6	3	1	10
Hemolytic Uremic Syndrome	1	0	0	1
Hepatitis A	5	7	7	19
Hepatitis B, Acute	10	6	1	17
Hepatitis B, Chronic	62	106	29	197
Hepatitis C, Acute	2	2	0	4
Hepatitis C, Chronic	350	362	89	801
HIV	10	36	4	50
Influenza, hospitalized	91	117	25	233
Influenza, pediatric death	0	0	1	1
Kawasaki Syndrome	8	8	4	20
Legionnaires Disease	1	3	2	6
Malaria	0	6	2	8
Meningitis Aseptic	25	35	26	86
Meningococcal Disease	2	1	0	3
Mumps	1	0	0	1
Pertussis Syndrome	119	169	55	343
Salmonellosis	46	76	30	152
Shigellosis	21	19	8	48
Strep, Pneumo Invasive	55	56	9	120
Syphilis	15	14	2	31
Toxic Shock-Strep	0	1	0	1
Toxic Shock-Other	0	1	0	1
Tuberculosis	6	17	0	23
Tularemia	0	1	0	1
Typhoid Fever	1	0	0	1
Varicella	135	215	85	435
Vibrio parahaemolyticus	2	1	1	4
West Nile Virus Infection	4	2	1	7
Yersiniosis	1	2	1	4
Total	2,842	3,491	702	7,035

**TRI-COUNTY HEALTH DEPARTMENT
REPORTABLE DISEASE NOTIFICATION FORM
FOR PHYSICIANS AND OTHER HEALTH CARE PROVIDERS**

Case Information

Case's Name: _____ **Parent's Name:** _____

Age: _____ **Date of Birth:** _____ **Sex:** () Male () Female **Race:** _____

Home Phone(s): _____ **Work Phone(s):** _____

Address: _____ **City:** _____ **Zip:** _____

County of Residence: () Adams () Arapahoe () Douglas

If another county, please specify: _____ **School/Employer:** _____

Medical Information

Disease: _____ **Onset Date:** _____ **Specimen:** _____

Specimen Collect Date: _____ **Lab Tests Performed:** _____

Lab Confirmed: () Yes () No **Name of Lab Used:** _____

Other Relevant Medical/Rx/Immunization Info: _____

Doctor's Information

Doctor's Name: _____ **Doctor's Phone:** _____

Doctor's Address: _____ **City:** _____ **Zip:** _____

Report Submitted By: _____ **Phone:** _____

Organization: _____ **Date Reported:** _____

For your convenience, you may report diseases by phone Monday through Friday, 8:00 A.M. to 5:00 P.M. at (303) 220-9200 or you may complete this form and fax it 24 hours a day to (303) 220-9208.

For after hour and weekend emergencies:

Contact the Tri-County Health Department at (303) 461-2342

or the Colorado Department of Public Health and Environment at (303) 370-9395

For Internal Use:

Date Report Received: _____ **Received By** _____