COCONINO COUNTY HEALTH DEPARTMENT
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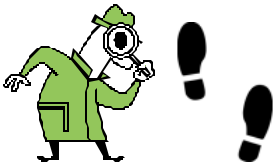
Epi News



Winter 2005

Pertussis in Coconino County

Three members of a Grand Canyon area family were diagnosed in December, 2004, with confirmed whooping cough (pertussis). Early in January, 2005, four members of a Flagstaff area family were diagnosed with confirmed pertussis. Household contacts of the sick individuals were given antibiotics to prevent the development of illness. No connection was found between the two families.

Pertussis is characterized by persistent cough that lasts from 2-8 weeks, a high-pitched "whooping" sound when inhaling after coughing, and occasional vomiting after coughing. The illness can be particularly severe in young children. The "whooping" and vomiting are often absent in adolescents and adults. If you or your child have had a cough for more than two weeks, especially if accompanied by a whoop or vomiting, see a healthcare provider as soon as possible. Physicians who suspect pertussis in a patient should report to Coconino County Health Department (CCHD) by calling 522-7920.

In an effort to prevent pertussis outbreaks, CCHD offers the DTaP (diphtheria, tetanus, and acellular pertussis) vaccine series to children on Mondays, Wednesdays, and Fridays from 8:00 am to 4:00 pm. The vaccine is given to young children in five doses – one at 2 months, 4 months, 6 months, 15 to 18 months, and around 5 years of age. For more information, call 522-7920.

Neisseria Blood Infection

In December, 2004, a 23-year-old man was confirmed to have a severe blood infection (septicemia) caused by the bacterium *Neisseria meningitidis*. Eight people who were found to have had close contact with the case were monitored for symptoms and were given antibiotics to prevent the development of illness. Ten days earlier, a 23-month-old child (an out-of-state resident who was in Flagstaff for two days) was diagnosed with the same infection. The two cases were not related.

The primary syndromes caused by this bacterium are meningitis (infection of the lining of the brain) and septicemia (infection of the bloodstream). The symptoms of the illness may include sudden onset of intense headache, fever, stiff neck, nausea, vomiting, joint pain, and sensitivity to light. A spotty or blotchy rash develops later in about half of patients. The disease is transmitted through close contact, which can include any activity that results in the transfer of fluids from the nose and mouth (e.g. saliva, mucous, or droplets created by sneezing or coughing) from an infectious individual to another person's mouth, nose, or eyes. Physicians who suspect *Neisseria* illness in a patient should report the case to CCHD within 24 hours by calling 522-7920.

Norovirus Outbreak

In December, an outbreak of nausea-vomiting-diarrhea (NVD) illness occurred in a long-term care facility in Coconino County. CCHD conducted an epidemiological and environmental investigation. The outbreak was confirmed to have been caused by norovirus (previously called Norwalk-like virus) by laboratory analysis of two patient stool specimens. CCHD staff interviewed residents and staff of the facility and collected samples from surface swabbing throughout the facility. In all, 42 cases occurred from Dec 8-17, most of which became ill on Dec. 10 and 11. Eight residents visited the Emergency Department for their illness. The overall attack rate at the facility was 21%. No meals were found to be in common among the cases. The likely means of spread was through touching contaminated surfaces. The laboratory results of the surface swabbing are still pending at the time of publication.

Noroviruses are extremely infectious, and they usually cause mild illness. Only ten virus particles are required for infection. Infants and the elderly are at risk for dehydration caused by excessive vomiting and diarrhea. The virus can be spread through contaminated food or water, but it is also commonly spread through contaminated surfaces or objects (fomites). These viruses also have been implicated in recent outbreaks on cruise ships, in casino-hotels, on river rafting trips, and on houseboats. The spread of the illness can be prevented by frequent and proper hand washing (hot water and soap for 20 seconds) and by cleaning surfaces with bleach or Lysol.

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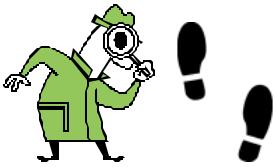

Winter 2005

Communicable Disease Summary Report*

DIAGNOSIS	2003	2004	2005
aseptic (viral) meningitis	15	2	0
campylobacteriosis	64	47	2
Chlamydia infection, genital	197	355	14
coccidioidomycosis (valley fever)	4	5	3
cryptosporidiosis	0	2	0
E. coli O157:H7 infection	2	0	0
giardiasis	8	5	0
gonorrhea	16	22	0
Haemophilus influenzae: invasive disease	3	3	1
hepatitis A	6	1	0
hepatitis B and delta hepatitis	19	24	2
hepatitis C	137	140	4
genital herpes	8	12	1
legionellosis	0	1	0
listeriosis	1	0	0
measles	1	0	0
meningococcal invasive disease	1	1	0
methicillin-resistant *Staphylococcus aureus*	23	42	0
pertussis (whooping cough)	5	4	5
Rocky Mountain spotted fever	0	1	0
salmonellosis	26	19	0
scabies (sarcoptic itch)	2	0	0
scarlet fever	1	1	0
shigellosis (bacterial dysentery)	11	8	0
Streptococcus pneumoniae (pneumococcal disease)	23	14	3
streptococcal group A: invasive	17	20	5
streptococcal group B: invasive	5	5	0
syphilis	4	2	0
syphilis reactor	29	15	0
tuberculosis (active)	2	2	0
trichomoniasis	1	5	0
tularemia (rabbit fever, deerfly fever)	1	0	0
varicella (chicken pox)	30	41	3
Vibrio infection	2	1	0
vancomycin-resistant *Enterococcus*	12	19	7
TOTAL	676	820	50

*The number of cases diagnosed during the given year in residents of Coconino County (As of 2/15/2005). Data are provisional and subject to change.

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