Communicable Disease Report 2011

The annual report of communicable condition reporting in Washington State provides a year review of disease surveillance, one of the public health functions conducted by local health jurisdictions. Each individual case report of a notifiable condition is investigated to identify and control sources of exposure, educate the public, prevent disease, and contribute to descriptions of disease trends.

Overview of Disease Surveillance

Based on guidance from national organizations and agencies, every state sets disease reporting requirements. Washington Administrative Code (WAC) 246-101 establishes notifiable conditions reporting responsibilities in this state with specific lists of conditions notifiable for health care providers, clinical laboratories, health care facilities, and veterinarians. Other agencies such as schools and child care centers have general reporting requirements.

Various sections of the Washington State Department of Health receive notifiable communicable disease reports. The largest number of conditions is reported to Office of Communicable Disease Epidemiology (CDE). The Infectious Disease Assessment Unit receives the largest number of case reports, covering sexually transmitted diseases, HIV/AIDS, chronic hepatitis, and tuberculosis. Surface antigen positive pregnant women are reported to Office of Immunization and Child Profile. Additional detailed data for these conditions are available online (see Resources).

As with any surveillance system, communicable disease reports represent only a portion of actual cases. For a case to be reported, a person must see a health care provider (typically due to symptoms of an acute condition)
and have appropriate laboratory tests ordered and done. For some conditions, such as acute viral hepatitis B or C, mild illness is common and many cases are never diagnosed. In contrast, infections resulting in severe symptoms such as meningococcal meningitis have a high probability of detection. Once a condition is identified, the provider and laboratory must then notify the local public health jurisdiction which investigates the case and then completes the report.

Surveillance Data for 2011

As in previous years, the most common communicable diseases reported in the state were sexually transmitted conditions. There were typically high numbers of reports: 23,237 cases of Chlamydia infection (343.3/100,000), giving the highest number and highest rate for the state ever recorded. There were 2730 cases of gonorrhea, 2149 cases of herpes simplex, and 329 cases of syphilis.

Among acute conditions reported to CDE, the most common are infections caused by enteric pathogens. There were 1558 cases of campylobacteriosis giving a rate of 22.7/100,000, the highest rate ever reported for the state. This increase may reflect increased detection in some jurisdictions through new non-culture testing methods. There were also 589 cases of salmonellosis and 203 cases of shiga toxin-producing E. coli. Giardiasis resulted in 529 case reports (Figure 1).

The number of pertussis cases reached a six-year high with 962 cases reported. Other vaccine-preventable conditions were rare. The state’s lowest recorded case number and rate for invasive meningococcal disease occurred in 2011, with only 22 cases reported. This is consistent with the steady decline in annual number of cases since the recommendation in 2005 to immunize adolescents.

While there was a decline in acute hepatitis B cases reported, recent downward trends in case counts reversed for both acute hepatitis A and acute hepatitis C, the latter reaching the highest number for the decade at 41 cases. Of the 31 acute hepatitis A cases, eight (26%) were attributed to international travel.
There were 248 reports of suspected human exposure to rabies, 69% involving bats. Of 204 bats tested, 11 (5%) were rabid. In the past two decades, in Washington the only animals other than bats identified as rabid are a cat (2002), llama (1994), and pony (1992), the first two with documented bat-variant rabies. Overall 34 persons were exposed abroad during 2011, necessitating assessing the risk of rabies exposure in those countries.

Although some parts of the county had record numbers of West Nile virus infection, Washington had no human cases. There were nine cases of dengue, another arboviral disease, all due to international travel.

Tuberculosis cases continued declining to the lowest number for the state, with 200 new reports of which 106 (53%) were from King County. The state’s tuberculosis rate of 3.0 per 100,000 is below the national rate of 3.3. About three-quarters of cases occur among foreign-born residents.

**Rare Notifiable Conditions**

In addition to specific notifiable conditions, the Washington Administrative Code requires health care providers and facilities to report rare diseases with public health significance. Diseases that were reported in 2011 included melioidosis, coccidioidomycosis, Creutzfeldt-Jakob disease (CJD), cryptococcosis (due to *C. gattii*), ehrlichiosis, Rocky Mountain spotted fever, tick paralysis, and a varicella-associated death.

Lymphogranuloma venereum is a rare sexually transmitted disease due to certain serovars of *Chlamydia trachomatis* resulting in swollen lymph nodes and skin ulcer or papule. An average of around two cases is reported each year, and there was one case reported in 2011.

Excluding HIV infections, deaths due to acute notifiable conditions occur but are rare. There were eight deaths due to tuberculosis, typical for the state. In addition there were four deaths associated with legionellosis, two with listeriosis, two with pertussis, two with salmonellosis, and one each with *Haemophilus influenzae*, hantavirus, hepatitis A, and shiga toxin-producing *E. coli* (STEC). In Washington there are usually deaths due to invasive meningococcal disease but none occurred in 2011.

**Outbreak Investigations**

In 2011 there were 30 foodborne disease outbreaks reported, involving 371 individual cases. The most frequently reported settings were restaurants (60%) which may reflect reluctance to implicate home cooking. The most common agent was presumptive viral including a banquet associated with 203 cases. Separate salmonellosis outbreaks resulted from contaminated cantaloupe (*S. Panama*), papayas (*S. Agona*), and sprouts (*S. Enteritidis*). An outbreak of diarrhetic shellfish poisoning was the first identified in this country when testing confirmed the toxin in implicated mussels that had been collected recreationally.

There were also two multi-state salmonellosis outbreaks associated with live poultry exposure that included residents from Washington. Additionally, one of the largest Q fever outbreaks reported in the United States occurred in our state and Montana with 12 cases in Washington associated with domestic goats.
Influenza causes an annual outbreak in the United States during winter months. Overall, influenza activity during the 2011–2012 influenza season was mild compared to previous seasons and occurred later than usual with a peak in April. Most of the identified isolates were influenza A (H3N2) and influenza B viruses with some influenza A (2009 H1N1) viruses detected. In addition to the seasonal peak, during late May and June there was a second smaller wave of influenza activity detected, predominantly due to influenza B.

Local health jurisdictions have the opportunity to contribute summaries of special investigations to the state’s annual report. In 2011 there were descriptions of a varicella-associated death, an imported measles case, an STEC outbreak associated with a petting zoo, and a case of tularemia resulting in potential laboratory exposure. These are just an indication of the dedication and efforts of local health jurisdiction investigators that help control disease and protect the public’s health in Washington.

**Resources:**


Tuberculosis [http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Tuberculosis/DataReports.aspx](http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Tuberculosis/DataReports.aspx)