Cryptosporidiosis

Cryptosporidiosis in humans results from infection with protozoal parasites of the genus *Cryptosporidium* — most commonly *C. hominis* or *C. parvum*. Symptomatic infections are characterized by watery diarrhea and abdominal cramps. Symptoms typically resolve in one to four weeks in immunocompetent persons, but infections in immumocompromised persons can be difficult or impossible to cure. Studies suggest that the prevalence of cryptosporidiosis among young children, particularly those in large child-care facilities, is surprisingly high. Many of these infections are asymptomatic.

In Oregon, the rate of infection with *Cryptosporidium* remains elevated from rates observed at the millennium. Nationally, infections began to rise in the early millennium, but incidence has stabilized since 2009. Cases occur year-round with peaks in August, coincident with increases in exposure to recreational water. New antigen tests for *Cryptosporidium* might be playing a role in the apparent increase in incidence. In 2013, 276 cases were reported, the highest number of cases reported since we began officially counting in 2005. Many (119) of these were isolated with an outbreak in a municipal water system in Baker County. In 2007, the Oregon investigative guidelines were changed to reflect the increasing numbers of cases; previously, investigations had been required only for abnormally high case counts. All cases are now routinely investigated to identify the source of infection.

Treatment with an anitprotozoal agent has been shown effective in immunocompetent persons; however there are no proven effective treatments in immunocompromised hosts.

Given the number of asymptomatic and undiagnosed infections, surveillance data can be difficult to interpret. However, these data have been used to identify a number of outbreaks over the years, most commonly associated with child care or water (both drinking and recreational).



Incidence of cryptosporidiosis by age and sex: Oregon, 2013

Incidence of cryptosporidiosis: Oregon vs. nationwide, 1999-2013



Cryptosporidiosis by year: Oregon, 1988-2013



Year

Cryptosporidiosis by onset month: Oregon, 2013





Incidence of cryptosporidiosis by county of residence: Oregon, 2004–2013

Prevention

- Wash hands with soap carefully and frequently, especially after going to the bathroom, after changing diapers, or after touching livestock. Supervise hand washing of toddlers and small children after they use the toilet.
- Do not work or attend daycare, serve or prepare food, or work in health care while ill with diarrhea.
- Refrain from recreational water activities (pools, hot tubs, splash pads) for 2 weeks after symptoms from a bout of cryptosporidiosis subside.
- Do not drink untreated surface water.