

***Cryptosporidium hominis* Infections Associated with a Municipal Aquatic Center**

July-August

Redwood County

Routine surveillance interviews conducted by the Minnesota Department of Health (MDH) during August identified four laboratory-confirmed cases of cryptosporidiosis who had gone to the municipal aquatic center in Redwood Falls during the 2 weeks prior to illness onset. Sanitarians from Southwest Health and Human Services (SWHHS) were contacted and an outbreak investigation was initiated on August 21.

Cases of cryptosporidiosis that were identified through routine surveillance were interviewed to determine if they had exposure to the aquatic center. Ill contacts of routine surveillance cases of cryptosporidiosis were also interviewed about aquatic center exposure. A case was defined as an aquatic center user who developed either a laboratory-confirmed *Cryptosporidium* infection or diarrhea (≥ 3 loose stools in a 24-hour period) or vomiting lasting 3 or more days, with illness onset 2 to 14 days following aquatic center exposure.

The aquatic center had closed for the season on August 17. A SWHHS sanitarian visited the aquatic center on August 21 to determine if the aquatic center had received any reports of illness or if any fecal accidents or mechanical issues had occurred in July or August. SWHHS sanitarians interviewed staff regarding recent illness and job duties.

MDH staff interviewed 12 patrons who met the case definition. All 12 cases reported diarrhea, 6 of 8 (75%) reported abdominal cramps, 6 of 9 (67%) reported vomiting, and 1 of 8 (13%) reported fever. Reported onset dates ranged from July 20 to August 23. The median incubation period was 5 days (range, 5 to 11 days) for the seven cases who only reported swimming at the aquatic center once in the 2 weeks prior to illness onset. The median duration of illness was 5 days (range, 3 to 13 days) for the seven cases who had recovered at the time of interview. Eight cases had *Cryptosporidium* identified in a stool sample. All samples were received at the MDH Public Health Laboratory, where *Cryptosporidium hominis* subtype HGP11 was identified.

No specific day or aquatic center activity was associated with illness.

Upon reviewing the facility's aquatic center logs, the aquatic center was found to be consistently open when chlorine levels were recorded at less than 1.0 parts per million, the state regulatory minimum limit.

Five aquatic center staff were interviewed about recent illness and job duties. Two employees reported being recently ill with vomiting and/or diarrhea; however, all of them reported illness durations of less than 3 days.

This was an outbreak of cryptosporidiosis associated with swimming at a community aquatic center. Although the original source of contamination was not identified, an infected aquatic center user most likely introduced the parasite into the aquatic center. The lack of adequate disinfection allowed *Cryptosporidium* to survive for a longer period, prolonging the outbreak.