

Cryptosporidiosis Associated with a Community Splash Pad

July

Benton County

Routine surveillance interviews of two laboratory-confirmed *Cryptosporidium* cases conducted by the Minnesota Department of Health (MDH) on July 23, 2012 revealed that both cases had played in a splash pad in Sauk Rapids, Minnesota multiple times in the 2 weeks prior to illness onset. Sanitarians from MDH Food, Pools, and Lodging Services (FPLS) were contacted on July 24, and an outbreak investigation was initiated.

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

MDH sanitarians visited the splash pad to conduct a field assessment.

Only the original two cases detected through routine surveillance were identified. Both cases had *Cryptosporidium* in a stool sample; one sample was received at the MDH Public Health Laboratory and tested positive for *Cryptosporidium parvum* subtype BGP18.

Both cases reported diarrhea, vomiting, cramps, and fever. Both cases reported onset dates of July 15. The median incubation period could not be calculated, as both cases reported being at the splash pad multiple times in the 2 weeks prior to illness onset. Both cases had ongoing illness at the time of interview.

The splash pad was closed on July 24 and superchlorinated at 20 parts per million for 12.75 hours, the necessary chlorine level and time needed to inactivate *Cryptosporidium*.

Review of the water quality reports from early July showed multiple occasions on which the free chlorine residual was recorded at zero while the splash pad was experiencing multiple mechanical problems. Additionally, combined chlorine was not being measured as required by the pool code.

An MDH sanitarian discussed appropriate chemical monitoring and noting any corrective actions or addition of chemicals in the daily pool record with the pool operator.

This was an outbreak of cryptosporidiosis associated with playing in a splash pad. Although the original source of contamination was not identified, an infectious splash pad user most likely introduced the parasite into the water. The lack of disinfectant in the water would have led to a protracted time at which splash pad users were at risk.