

Suspected Chemical Rashes Associated with a Fitness Club Pool and Spa Pool

April-May

Hennepin County

On May 8, 2017, the City of Edina Health Department (EHD) received a call from a membership club in Edina reporting that the facility had received four separate complaints of rash illness from patrons and staff over the past week. EHD notified the Minnesota Department of Health (MDH), and an investigation was initiated.

EHD obtained complainant contact information from the facility. MDH staff interviewed complainants about their illness and exposure histories. A case was defined as an individual who developed a rash within 24 hours of visiting the pool facility.

EHD sanitarians reviewed pool logs for the facility's three pools (leisure pool, lap pool, and spa pool) and conducted an on-site inspection of the facility on May 9 and May 19. Sanitarians also spoke with the facility's certified pool operator to discuss the facility's hyperchlorination procedures and determine if any process changes occurred that might have introduced high levels of chlorine or another chemical into the pools.

Seven individuals, including six staff members and one patron, were interviewed; all met the case definition. All cases reported red, itchy rashes. No other symptoms were reported. Rash onsets ranged from April 23 to May 7. For the two cases who had recovered at the time of interview, their illness durations were 24 and 48 hours. Three cases (43%) visited a healthcare provider because of their illness. Prior to their illness, all cases reported using the leisure pool, five (71%) reported using the lap pool, and three (43%) reported using the spa pool.

Upon inspection of the swimming pools and spa on May 9, chemical levels were in compliance with the Minnesota Pool Code. The daily pool logs indicated that the pool chemical levels were within the acceptable range specified in the Pool Code. The leisure pool was closed for hyperchlorination on May 1 and reopened on May 2 when the chlorine level fell below 10 parts per million. The facility's hyperchlorination policy was reviewed and found to be consistent with current recommendations. The facility also reported that they did not use any new chemicals in the pool or for cleaning the pool deck or pool toys. The locker rooms were also inspected, and nothing that would cause the reported rashes was found.

This was a waterborne outbreak of chemical rashes associated with a membership club swimming pool. Upon reviewing the facilities records and procedures, no clear cause of the illnesses was identified. A one-time change in procedure that was not captured in our investigation may have been the cause; however, this could not be confirmed. The leisure pool has a supplemental ultraviolet disinfection system and turnover rate of less than 2 hours; it was recommended the facility only hyperchlorinate that pool when responding to diarrheal fecal incidents to minimize the amount of chlorine entering the water.