

Procedure for a Pool Contaminated with Vomit or Feces

Contact Time Value:

CT Value is the concentration (C) of free available chlorine in ppm multiplied by time (T) in minutes (CT value = C x T). The CT value for Giardia is 45 and the CT value for Crypto is 15,300. If you choose to use a different chlorine concentration or inactivation time, you must ensure that the CT values remain the same. For example, to determine the length of time needed to disinfect a pool at 15 ppm after a diarrheal accident use the following formula: $C \times T = 15,300$. Solve for time: $T = 15,300 \div 15 \text{ ppm}$. $T = 17 \text{ hours}$. It would take 17 hours to inactivate Crypto at 15 ppm. You can do the same for Giardia by using the CT of 45.

Formed Stool

Remove bathers from the pool.

Close the pool.

Remove the fecal material from the pool by use of a scooping device.

Clean and disinfect the scoop with 100 ppm chlorine.

Achieve a chlorine contact time (CT) of 45.

Contact Time Value of 45

Chlorine Levels ppm	Disinfection Time
1.0	45 minutes
2.0	25 minutes
3.0	19 minutes

Test and document chlorine and pH levels at the start of the disinfection time. Test at least three widely spaced locations away from the water outlets. The desired chlorine and pH levels must be obtained in all three areas.

Test and document the chlorine and pH levels at the end of the disinfection time.

Pool may reopen when your chlorine level is at or below 10 ppm.

Document the incident.

Wading Pool or Hot Tub

Remove all bathers from the pool, drain the water, clean and disinfect the pool, refill and balance the water, document the incident.

Diarrhea Stool and or Vomit

Remove bathers from the pool.

Close the pool.

Shut off circulation pump and chemical feeders.

Remove the fecal material or vomit from the pool by use of a scooping device.

Clean and disinfect the scoop with 100 ppm chlorine and water.

Vacuum to waste any remaining diarrhea or vomit.

Achieve chlorine contact time (CT) of 15,300.

Contact Time of 15,300

Chlorine Levels ppm	Disinfection time
1.0	10.63 days
5.0	223 days
10.0	26 hours
15.0	17 hours
20.0	13 hours

Turn on the circulation pumps.

Test and document chlorine and pH levels at beginning of the disinfection time. Test at least three widely spaced locations away from the water outlets. The desired chlorine and pH levels must be obtained in all three areas.

Test and document the chlorine and pH levels at the end of the disinfection time.

Backwash filters.

Pool may reopen when your chlorine level is at or below 10 ppm.

Document the incident.