



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH ENVIRONMENTAL HEALTH SECTION

EHS Circular Letter #2007-59

DATE: December 4, 2007

TO: Local Health Directors and Chief Sanitarians

FROM: Pamela E. Scully, Sanitary Engineer III
Recreation Program, Environmental Health Section

RE: FECAL, VOMIT AND BLOOD INCIDENTS IN AND AROUND
PUBLIC SWIMMING POOLS AND WHIRLPOOL SPAS

The Department of Public Health (DPH), Recreation Program, offers the following attached guidelines with regards to fecal, vomit and blood incidents in and around public swimming pools and whirlpool spas. The guidelines closely follow the recommendations of the Centers for Disease Control and Prevention (CDC). These guidelines are offered to help reduce the spread of recreational water illnesses (caused by the transfer of waterborne germs such as *Cryptosporidium*, *Giardia*, *E. coli*, and *Shigella*) in public swimming pools and whirlpool spas.

Please distribute the attached guidelines when you conduct your inspection of public swimming pools and whirlpool spas in your town or district. As always the DPH recommends annual inspections of all public swimming pools and whirlpool spas.

Further information about public swimming pools can be obtained from the DPH Recreation Program at (860) 509-7296 or by accessing the DPH website www.ct.gov, under CT keyword type in DPH, then click on Environmental Health and scroll down to Public Swimming Pool. Also visit the CDC website at http://www.cdc.gov/healthyswimming/fecal_response.htm#b

Thank you.

cc: Pamela Kilbey-Fox, Chief, Local Health Administration
Ellen Blaschinski, Chief, Regulatory Services Branch
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**STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
RECREATION PROGRAM**

**RECOMMENDED PROCEDURE FOR CLEAN-UP OF
FECAL, VOMIT AND BLOOD INCIDENTS IN AND AROUND
PUBLIC SWIMMING POOLS AND WHIRLPOOL SPAS**

Prevention Procedures:

1. Maintain all chemical feed systems and filtration equipment in good working order. Maintain the required minimum disinfection residual level at all times when the swimming pool and/or whirlpool spa are open for use.
2. All persons must be advised, through posting of signs, to bathe with warm water and soap before entering the swimming pool and/or whirlpool spa.
3. All persons with known or suspected of having a communicable disease must be advised, through posting of signs, not to use the swimming pool and/or whirlpool spa.
4. All persons wearing diapers should wear swimsuit diapers or tight fitting rubber or plastic pants.
5. Do not allow animals in the swimming pool.

Clean-Up Procedures:

Formed Fecal Incident in Swimming Pools and Whirlpool Spas:

1. Close the pool. Direct everyone to leave the pool. If there are multiple pools that use the same filter—all pools will have to be closed. Do not allow anyone to enter the contaminated pool(s) until all decontamination procedures are completed.
2. Remove as much of the fecal material as possible using a net or scoop and dispose of it in a manner in accordance with OSHA. Clean and disinfect the net or scoop (e.g., after cleaning, leave the net or scoop immersed in the pool during disinfection). Do not vacuum the fecal material from the pool.
3. Raise the free available chlorine level to 2 ppm (mg/l), while maintaining the pH between 7.2 - 7.5. Maintain these levels for at least 25 minutes before reopening the pool. Chlorine levels should be collected from various locations around the pool(s) to ensure that the entire pool is being treated. In the presence of chlorine stabilizers such as chlorinated isocyanurates, a level of 3.0 ppm (mg/l) of free available chlorine must be maintained.
4. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine level during the disinfection process.
5. Establish a fecal accident log. Document each fecal accident by recording date and time of the event, note whether formed stool or diarrhea, and note the chlorine levels at the time or observation of the event. Before reopening the pool, record the chlorine level and pH, the procedures followed in response to the fecal accident (including the process used to increase chlorine levels if necessary), and the contact time.

Loose (Diarrhea) Fecal Incident in Swimming Pools and Whirlpool Spas:

1. Close the pool. Direct everyone to leave the pool. If there are multiple pools that use the same filter—all pools will have to be closed. Do not allow anyone to enter the contaminated pool(s) until all decontamination procedures are completed.

2. Remove as much of the fecal material as possible using a net or scoop and dispose of it in a manner in accordance with OSHA. Clean and disinfect the net or scoop (e.g., after cleaning, leave the net or scoop immersed in the pool during disinfection). Do not vacuum the fecal material from the pool.
3. Raise the free available chlorine concentration to 20 ppm(mg/l) and maintain the pH between 7.2 and 7.5 and maintain these levels for at least 8 hours. Chlorine levels should be collected from various locations around the pool(s) to ensure that the entire pool is being treated.
4. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine level during disinfection.
5. Backwash all sand and DE filters thoroughly. Replace cartridges in cartridge filters.
6. Swimmers may be allowed back into the pool after 8 hours and when the free available chlorine level has been returned to the normal operating range.
7. Establish a fecal accident log. Document each fecal accident by recording date and time of the event, note whether formed stool or diarrhea, and note the chlorine levels at the time or observation of the event. Before reopening the pool, record the chlorine level and pH, the procedures followed in response to the fecal accident (including the process used to increase chlorine levels if necessary), and the contact time.

Vomit Incident in Swimming Pools and Whirlpool Spas:

1. Vomiting as a result of swallowing too much water is probably not infectious. No action is necessary.
2. Vomiting full contents of the stomach would require the same response as that of a formed fecal incident as outlined above.

Blood Incident in Swimming Pools and Whirlpool Spas:

There is no recommended procedure for clean-up or closing the pool after a blood spill in a swimming pool and/or whirlpool spa. However, as a matter of comfort for the patrons, the pool operator may opt to close the pool temporarily.

Dead Animals Found in the Swimming Pools and Whirlpool Spas:

1. It is the recommendation of this office that the animal should be removed, by a net or scoop, and disposed of properly.
2. The pool should be closed and the free available chlorine level should be increased to at least 10 ppm (mg/l), while maintaining a pH level between 7.2 - 7.5.
3. Swimmers may be allowed back into the pool when the free available chlorine level has been returned to the normal operating range.

Fecal, Vomit or Blood Incident on the Pool Deck Area:

1. Block off the area of the spill from patrons until clean-up and disinfection is complete.
2. Put on disposable latex gloves to prevent contamination of hands.
3. Wipe up the spill using paper towels or absorbent material and place in a plastic garbage bag.
4. Gently pour bleach solution (9 parts cool water and 1 part household bleach*) onto all contaminated areas of the deck.

5. Let the bleach solution remain on the contaminated area for 20 minutes.
6. Wipe up the remaining bleach solution.
7. All non-disposable cleaning materials used such as mops and scrub brushes should be disinfected by saturating with bleach solution and air dried.
8. Remove gloves and place in plastic garbage bag with all soiled cleaning materials.
9. Double-bag and securely tie-up plastic garbage bags and discard.
10. Thoroughly wash hands with soap and water.

* Add the household bleach to the water and gently mix the solution. Since a solution of bleach and water loses its strength quickly, it should be mixed fresh before each clean-up to make sure it is effective.

NOTIFY THE LOCAL HEALTH DEPARTMENT IN YOUR AREA OF ANY INCIDENTS THAT RESULT IN POOL CLOSING.