

**Environmental Management Department** Protecting Public Health and the Environment

## **GUIDELINES FOR DISINFECTING PUBLIC SWIMMING POOLS AND SPAS**

## AFTER FECAL, VOMIT, OR BLOOD CONTAMINATION

Purpose The purpose of this bulletin is to provide pool operators with recommended procedures and guidelines to follow in the event of an incident involving fecal, vomit, or blood contamination. Background Fecal, vomit, and blood contamination in public pools can lead to the transmission of serious illness from microorganisms such as Giardia, Cryptosporidium, E. coli O157:H7 and Shigella. Precautionary measures should be taken to help reduce the risk of illness to pool users. Close Pool or Spa When fecal, vomit, or blood contamination occurs, the pool operator shall instruct all users to exit the pool or spa immediately. Do not allow anyone to enter the contaminated pool or spa until all the following steps are completed. Disinfection The pool operator shall immediately remove as much of the contaminating material as **Procedures** possible using a net or scoop and shall dispose of it in a sanitary manner. After removal, the pool operator shall clean and disinfect all equipment used during this step. If the contamination consists of formed stool, vomit, or blood, the pool operator shall maintain the free-chlorine residual for the pool or spa at 2 ppm or higher and the pH at 7.5 or lower for a period of time not less than 25 minutes. If the contamination consists of diarrhea or a loose stool, the pool operator shall increase the free-chlorine concentration to 20 ppm and maintain the concentration for at least 12.75 hours. If the pool water contains cvanuric acid, the pool operator shall increase the free-chlorine concentration to 40 ppm or higher and reduce the pH to 6.5 or lower for a period of time not less than 30 hours. For fecal accidents involving diarrhea or loose stools, the filter should be thoroughly backwashed to a sanitary sewer. If the pool or spa has a cartridge filter, the cartridges should be replaced. The pool operator shall not allow pool users back into the public pool until the disinfection process has been completed and the free-chlorine concentration and pH of the public pool water have returned to normal operating ranges. Free-chlorine in pools without cyanuric acid (CYA) shall be maintained at 1.0 ppm - 10.0 ppm and with CYA shall be maintained at 2.0 ppm - 10.0 ppm. Free-chlorine in spas shall be maintained at 3.0 ppm - 10.0 ppm. pH shall be maintained at 7.2-7.8. The pool operator shall immediately document all incidents of fecal, vomit, or blood Documentation contamination in the pool or spa by recording the following information: a. Date and time of incident b. Free-chlorine and pH reading at time of incident c. Free-chlorine and pH reading after completing disinfection procedures d. Free-chlorine and pH reading when reopening the pool or spa Formed stool or diarrhea е Procedures followed in responding to the contamination incident f. Number of pool or spa users at time of incident g. For further information or to report fecal, vomit, or blood contamination at a public swimming Questions pool or spa, please contact this office at (916) 875-8440.

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