

Vomit and Blood Contamination of Pool Water

Protection Against Recreational Water Illnesses (RWIs)

Check for existing guidelines from your local or state regulatory agency before use.

Healthy Swimming recommendations do not replace existing state or local regulations or guidelines.

The most common germs spread through recreational water are germs that cause diarrheal illnesses and skin rashes. These are spread by swallowing water contaminated with feces or by skin exposure to contaminated water. Coming in contact with blood in pool water is unlikely to spread illness.

Vomit in Pool Water

Vomiting while swimming appears to be a common event. Often, vomiting is a result of swallowing too much water and, therefore, the vomit is probably not infectious. However, if the full contents of the stomach is vomited, follow the guidance in these Q & As:

Q: What germs are likely to be spread by vomit?

A: Noroviruses (also known as Norwalk-like viruses).

Q: Assuming that norovirus is in the vomit, what should I do?

A: Respond to the vomit accident as you would respond to a formed fecal accident, using CDC's recommendations (http://www.cdc.gov/healthyswimming/fecal_response.htm).

The time and chlorine level combinations needed to kill noroviruses and *Giardia* are similar. Since killing *Giardia* is the basis of CDC's formed fecal accident response recommendations, this protocol should be adequate for disinfecting a potentially infectious vomit accident.

Blood in Pool Water

Germs (e.g., Hepatitis B virus or HIV) found in blood are spread when infected blood or certain body fluids get into the body and bloodstream (e.g., by sharing needles and by sexual contact). CDC is not aware of any of these germs being transmitted to swimmers from a blood spill in a pool.

Q: Does chlorine kill the germs in blood?

A: Yes. These germs do not survive long when diluted into properly chlorinated pool water.

Q: Swimmers want something to be done after a blood spill. Should the pool be closed for a short period of time?

A: There is no public health reason to recommend closing the pool after a blood spill. However, some pool staff choose to do so temporarily to satisfy patrons.



Cleaning Up Body Fluid Spills on Pool Surfaces

Protection Against Recreational Water Illnesses (RWIs)

Body fluids, including blood, feces, and vomit are all considered potentially contaminated with bloodborne or other germs. Therefore, spills of these fluids on the pool deck should be cleaned up and the contaminated surfaces disinfected immediately.

Appropriate Disinfectants

Bleach

One of the most commonly used chemicals for disinfection is a homemade solution of household bleach and water. Since a solution of bleach and water loses its strength quickly, a fresh mixture should be made before each clean-up to make sure it is effective.

Other Disinfectants

A listing of other approved commercial disinfectants can be found at www.epa.gov/oppad001/chemregindex.htm and <http://www.fda.gov/cdrh/ode/germlab.html>. These disinfectants are effective when used according to the manufacturer's instructions.

Recipe for Bleach Disinfecting Solution

9 parts cool water

1 part household bleach

Add the household bleach to the water. Gently mix the solution .

Clean-up Procedure Using Bleach Solution

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 plastic garbage bag.
4. Gently pour bleach solution onto all contaminated areas of the surface.
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 bags 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.

