



Staying Healthy in the Hot Tub

By Fred Reiff, P.E.



What is a hot tub? A stress-free, aqueous haven, or a water barrel brimming with bacteria? That was the essence of the question addressed in a recent [Huffington Post interview](#) with Centers for Disease Control and Prevention (CDC) epidemiologist Michele Hlavsa and University of Arizona Professor Charles Gerba. Although the headlines asserted, “This Will Make You Never, Ever Want to Get in a Hot Tub Again,” these two experts provide the kind of straight talk that can help you enjoy a healthy hot tub experience. As usual, knowledge is power.

Hot Tub Rash and More

In the interview, CDC epidemiologist Michele Hlavsa discussed “hot tub rash,” a condition that may result from using an inadequately disinfected hot tub. Levels of the bacterium *Pseudomonas aeruginosa*¹ may increase when hot tub disinfectant levels, such as chlorine and bromine, fall. Bacteria in water-soaked bathing suits can cause an infection of the hair follicles of the skin to which wet bathing suits cling. The infection is technically known as *Pseudomonas folliculitis*. Fortunately, hot tub rash—which may follow the shape of a person’s bathing suit—normally disappears within a week.

Another potential condition associated with inadequately disinfected hot tubs is Legionnaire’s disease, a severe type of pneumonia, and its milder counterpart, Pontiac Fever which according to Ms. Hlavsa, causes flu-like symptoms. These illnesses are transmitted by the inhalation of mists or tiny airborne droplets containing the

¹ *Pseudomonas aeruginosa* is the bacterium that is the common cause of swimmer’s ear. According to a [2011 CDC report](#), “swimmer’s ear” accounts for 2.4 million doctor visits and nearly \$500 million in health care costs annually.

Legionella bacterium. Senior citizens, smokers and those with weakened immune systems are most susceptible to these illnesses.

Download the following tip sheet for staying healthy in the hot tub:

Tips for a Safe Soak in the Hot Tub

➤ **Shower before using the hot tub (It's all about the "gluteal fold")**

Professor Gerba offers a memorable statistic: "The average bather has about a tenth of a gram of feces in his gluteal fold, which is a nice way of saying butt crack." Don't be average. Shower with soap and thoroughly clean that "gluteal fold" *before* entering the hot tub. Need we say more about this?

➤ **Control bacteria in the hot tub by maintaining a proper disinfectant level**

If chlorine disinfectant is used, the level of free available chlorine should be 2 to 4 parts per million. If bromine disinfectant is used, the level should fall in the range of 4 to 6 parts per million. The pH should be in the 7.2 to 7.8 range.

➤ **Check the water before you get in**

If the hot tub water chemistry is out of your control, check for adequate disinfectant and pH with user-friendly test strips that can be purchased at hardware, big box and pool supply stores. Use the strips before you get in the hotel or resort hot tub to make sure you're getting into a "healthy hot tub." This summer, the Water Quality and Health Council is offering free pool test kits at www.healthypools.org.

➤ **Keep cosmetics to a minimum in the hot tub**

Oils, lotions and makeup deplete disinfectant, potentially leaving you and your fellow bathers at a disadvantage in the battle against waterborne bacteria.

➤ **Don't use the hot tub if you have diarrhea**

➤ **Avoid swallowing hot tub water**

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