

Bleach, Ozone, Chemicals and Biocides are Not Effective and are Hazardous to Your Health

by Jacquelyn & Edward Close

Using Bleach and other chemicals is bad advice. Here is what the experts say:

US Environmental Protection Agency (EPA)

In the past, even the EPA recommended cleaning mold infested areas with bleach and water, and you can still find this advice on some websites dealing with mold. On their website in an article entitled "A Brief Guide to Mold, Moisture, and Your Home", the EPA now says:

"The use of a chemical or biocide that kills organisms such as mold (chlorine bleach, for example) is not recommended as a routine practice during mold remediation."

The American Industrial Hygiene Association (AIHA)

In answer to the question of whether bleach should be used in mold remediation, the AIHA says:

- 1) Biocides like bleach do not remove allergens that can lead to allergies in sensitive individuals nor do they remove other metabolites from mold that can cause adverse reactions in some people.
- 2) Commonly used chemicals do not effectively kill molds. For example, active fungal growth on a surface may produce a spore density of 1 million spores per square inch. Treating this site with a biocide that has an effectiveness of 99.999% would still leave an estimated 10 viable spores per square inch. As such, mold growth may recur if the underlying moisture problem is not resolved.

The California Department of Health Services evaluated ozone and had this to say:

"Ozone is a strong oxidizing agent that is used as a disinfectant in water and sometimes to eliminate odors. However, ozone is a known lung irritant.

Ozone generators have been shown to sometimes produce indoor levels above the safe limit. Furthermore, it has been shown that ozone is not effective in controlling molds and other microbial contamination, even at concentrations far above safe health levels. Also, ozone may damage materials in the home, for example, cause rubber items to become brittle.

For these reasons, the California Department of Health Services strongly recommends that you NOT use an ozone air cleaner in any occupied space."

Reference: The CDHS IAQ Info Sheet: Health Hazards of Ozone-generating Air Cleaning Devices (January 1998), available on the CDHS-IAQS web site.