Mold is another in a line of “things” that can interfere with our health quality. What is mold? How does it affect us? How do we combat it? These are questions that are being asked by those who have to deal with it.

There are more than 100,000 species of mold and 1,000 of these are present in the USA. Mold is everywhere – indoors and outdoors. It is more likely to grow in areas where moisture and dampness are present. The most common types are cladosporium, penicillin, and aspergillius.

The Environmental Protection Agency (EPA) tells us that mold has the potential to cause allergic and hypersensitivity diseases, along with some other health problems.

**How Does it Affect Us?**
- Most types of mold that are encountered routinely aren’t hazardous to healthy individuals.
- Too much exposure to mold may cause or worsen conditions such as asthma, hay fever, or other allergies.
- The most common symptoms of overexposure are cough, congestion, runny noses, eye irritation, and aggravation of asthma.
- Depending on exposure and human vulnerability, more health effects, such as breathing problems and fever, can occur but are unusual.

There have been a few lawsuits filed regarding mold problems:
- Two employees of United Airlines filed suit against the city of Denver, Colorado amounting in the millions of dollars against the Stapleton International Airport for mold present in offices.
- Parents in a Florida school district filed a lawsuit for millions of dollars for mold in school buildings.
- In San Antonio, Texas, a judge has given the “green” light for failing to clean mold from city buildings.

**Basic Mold Clean-up**
- The primary key to mold control is moisture control – find the source of the water and moisture and mitigate the problem.
- Secondly – it is most important to dry the damaged area and items surrounding it for 24-48 hours to prevent mold growth. You may need to consider fans to assist in the drying time.
- In mitigating the damaged areas, there are several types of chemicals that can be useful in this process. We shall review them in this article.
- Gloves, face mask, and an apron should be used when doing the clean-up.

**Prevention of Mold**
- Find the source of water and moisture.
- Reduce the humidity in the bathrooms by venting with air conditioners and/or dehumidifiers.
- Increase ventilation by using exhaust fans in the kitchen areas.
- Prevent condensation by reducing its potential on cold surfaces, such as windows, pipes, roofs, etc., with insulation.

**Methods for Mold Clean-up**
There are several types of chemicals that are recommended for cleaning up the presence of mold. Following is an overview of these:

- **Bleach.** Bleach can kill most every type of indoor mold that it comes in contact with, leaving a clean surface that is resistant to future mold growth.
  - Killing mold with bleach, use 1 cup of bleach per 1 gallon water.
  - Apply to the damaged area with a spray bottle or bucket with a sponge or cloth.
  - No need to rinse the surface unless it is used for food prep or small children touching it. The bleach will inhibit mold growth in the future. Depending upon the surface, painting over a cleaned area enhances the appearance and helps in preserving the future growth of more mold.
  - Bleach is good for surface areas but doesn’t penetrate into the core of wood.

- **Borax.** Borax has some advantages over other chemicals for killing mold. It is a natural cleaning product, toxic if swallowed, but doesn’t emit chemicals or dangerous fumes like some products. It is also used as a deodorizer for cleaning toilets and drains, and as an insecticide, herbicide, and fungicide. Mix it with water to kill and remove mold.
  - To kill mold using borax, use 1 cup of borax to 1 gallon of water.
  - Vacuum any loose mold with a HEPA vacuum cleaner to lessen the spores stirred up in the air with the cleaning.
  - Use a scrub brush with the solution to clean up the mold.
  - Do not rinse the surface.
  - Wipe up the excess to keep it from spreading during the drying period.

- **Vinegar.** Vinegar is a mild acid which can kill 82% of mold species. It also has the distinct advantage of being natural and safe. It is non-toxic and doesn’t give off dangerous fumes like bleach.
  - To kill mold with vinegar, buy white distilled vinegar which is inexpensive and can be bought at most all grocery stores.
  - Pour vinegar in a spray bottle without using water.
  - Spray the vinegar on to the damaged surface and leave it for 1 hour.
  - Wipe the area clean with water and allow the surface to dry. The vinegar smell will dissipate in a few hours.
  - You can also spray vinegar on damaged areas and just leave it. Every few days go back and spray over the same area to help control the growth. It also can be used to mop tile floors as well. There are some other types of chemicals that can be used for abating mold such as ammonia, hydrogen peroxide, detergents, and baking soda. The ones mentioned above normally do the best job.

**Mixing Ammonia and Bleach Can Be Dangerous!**

**ACCIDENTS HURT <> SAFETY DOESN’T**