Healthy Environment

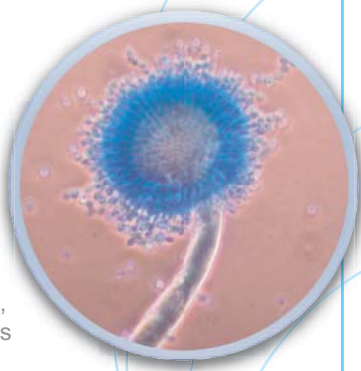
Everything about mold

AirFree PRODUCTS

Mold, undesirable and hard to control

What is mold?

Mold is formed by microscopic creatures belonging to the Fungi Kingdom. When tiny airborne spores of mold burst, and then land on a favorable surface, they proliferate into visible colonies, and find new favorable surfaces on which to further develop. Fungal growth requires oxygen, adequate temperature, nutrients and water.



Temperature tolerance:
Thermophiles - 35ºC + human pathogens such as Aspergillus Fumigatus
Mesophiles – 18ºC to 35ºC
Psychrophiles – some fungi grow at 4ºC or below.

Nutrients:
Paper, wallpaper, wallboard, sugars (fruits, vegetables), fabrics, wood, dust, etc

How do I know if my environment has mold problems?

• If you see whitish, greenish, bluish, or even dark spots on the walls or ceiling the place may have mold problems.
• Rooms that accumulate humidity such as bathrooms, kitchens or air conditioning systems usually have problems with mold because fungi develop in high humidity environments.
• Rooms with water leakage or infiltrations may have mold infection.
• If the mold infection is in closets, check for leakages from water pipes nearby.
• High risk buildings :
- Near forests, due to high concentration of mold colonies
- Nearby the sea or a river as the high humidity level raises the development of new colonies.
- Buildings with poor sun exposure, as the sun is a natural germicide and helps prevent humidity.

Can mold make me sick?

Yes. In addition to its being an unpleasant odor and sight, mold can cause harmful effects to human health that might turn to allergic infections and toxic reactions.

Allergic Effects

The most common are:
- Nasal congestions and irritation;
- Mucous membrane irritation;
- Allergic reactions – Rhinitis and Asthma;
- Sneezing and coughing;
- Throat and eye irritation;
- Difficulty breathing;
- Asthmatic attacks;
- Itching and skin stains.

Infectious Effects

Immune suppressed patients are more likely to develop mold infections. Included in such groups we can highlight the danger to patients such are:
- HIV positive
- Organ transplanted
- Burned
- Under chemotherapy or radiotherapy;
- Newborns
- Elderly
- Other immune-suppressed patients

Toxic Effects

Mold toxins studies suggest that toxins may be the cause of:
- Pulmonary hemorrhage;
- Reactions in the immunological system (reducing the ability of the organism to react to diseases);
- Neurotoxin effects such as fatigue, headaches, memory loss, depression, erratic moods, convulsions and shaking;
- Potential cancer trigger.

How to control mold?

It is impossible to completely eliminate airborne mold. Specialists warn that living in environments entirely safe from mold spores, bacteria or viruses would not be healthy since our immunological system needs to be active. It is recommended that steps be taken to reduce airborne microorganisms, not complete extermination.

Prevention

• Reduce humidity in your home by opening windows for approximately 30 minutes daily;
• Prevent leaks due to rain; and when unavoidable, dry and treat water damage within 24 to 48 hours;
• Regularly clean places that accumulate humidity such as showers, faucets and pipes and the floor areas around such fixtures;
• Limit carpets and plants in your home;
• Use Airfree to drastically reduce high contamination levels.

Clean your home

• Use a cloth or a sponge with one solution containing: 1 cup of chlorine diluted in 1 quart of water. Scrub surfaces with this solution, then clean again with water and detergent. Allow to dry. (WARNING: Never mix chlorine with ammonia products, as the result is extremely toxic.).
• Whenever possible, leave objects exposed to sunlight after cleaning. It is very important that objects are dried after cleaning otherwise they will be subject to new mold contamination.
• Porous materials such as wood, fabric, cushions, and mattresses retain water and are likely to be contaminated, making it difficult to clean them. In the event that these objects are contaminated, it is advised to dispose them.
• Use great care: always use gloves, mask, and apron and maintain high air circulation during the cleaning process.

Healthy environment, healthy family

Airfree® Role

Indoor air pollution affects our health. It is known that the presence of mold spores may cause or aggravate respiratory problems at home or at work. Airborne mold spores are the seeds for new mold infection or building infestation. Therefore the key to control infections or infestations is to destroy airborne mold spores and clean preexisting mold colonies. Consequently, we recommend the use of Airfree high efficiency air sterilizers together with the preventions measures previously suggested. Airfree products have a worldwide record of excellence in controlling and preventing mold.

Treating the air you breathe, is a matter of health. Have an attitude!

Airfree® Air Products

Efficient: Airfree is tested in real working environments with people in them by credible ISO 17025 independent laboratories and universities in several countries.Airfree destroys any microorganism such as mold spores, bacteria, viruses, and dust mite allergens when passing through its patented high efficiency thermodynamic sterilizing system known as TSS™ technology regardless of how hazardous and small they might be.

Faster performance: Microorganisms reduction starts in 15 minutes.

Silent: No sound emission.

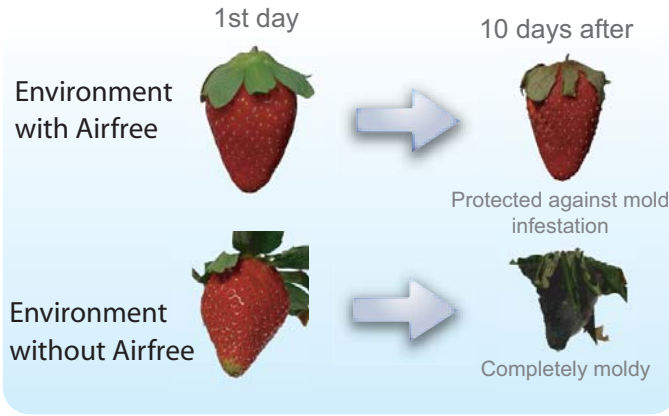
Exclusive: Airfree uses just heat TSS™ technology to destroy and incinerate airborne microorganisms. No fiber glass filters, triclosan coated paper or any kind of material that can be harmful to those operating or wasting it.

Ozone Reduction: Airfree exclusive TSS™ technology is the only one reducing ozone while destroying microorganisms.

Economic: Airfree model electric consumption is lower that a 50W light bulb. No replacement parts required like filters that may cost hundreds of dollars a year.

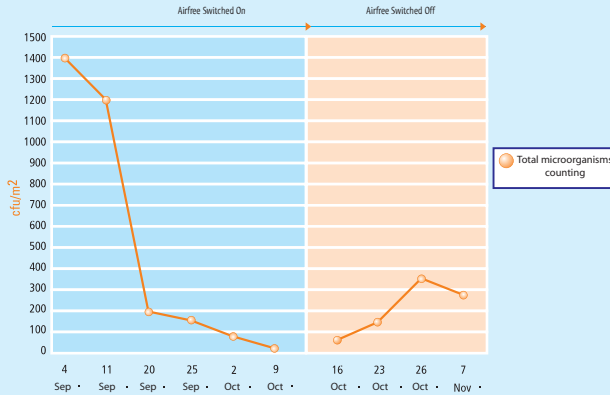
Easy Installation: Just place Airfree on the floor and plug it into the nearest electric outlet. No need for maintenance or special cleaning.

See the strawberries 10 day test*:



*test made in two separated closed chambers

Efficiency Test: microorganisms reduction



Test realized by SGS Natec - Germany - Test M00-4990
Independent Laboratory ISO 17025

See the complete list of test reports at:

www.airfree.com

This guide is based in “Humidity in internal environments and health” elaborated by the Medicine Institute of the National Academy of the United States, supplied by Harvard University and Revisited by Cristiane Minussi, biologist from University of São Paulo, who was responsible for the microbiological informations herein contained.

Airfree® AIR PURIFIERS