HOUSING

Mold and mildew in the home no. 9.501

by C. Birdsong[1]

Quick Facts...

Mildew is a thin, whitish to bluish-green growth produced on many surfaces by molds.

It often is present in areas that are damp, warm, poorly aired, and poorly lighted.

Molds and mildew can cause considerable damage to home furnishings if permitted to grow.

Sunlight is the best prevention for mildew, but there are remedies for many items that have mildew stains.

About Mold

Although most of Colorado has a dry climate, mold and mildew may present problems in some households.

What is it? Mildew is a thin, often whitish to bluish-green growth produced on many kinds of surfaces by molds.

Where does it grow? Molds that cause mildew flourish in areas that are damp, warm, poorly aired and poorly lighted, such as in cellars and basements, closets, on draperies and rugs, on shower curtains and shower stalls, and even in newly built houses because of moisture in the building materials.

What harm does it do? Other than the unpleasant musty odor, molds and mildew cause considerable damage to home furnishings if permitted to grow. They discolor fabrics and sometimes eat into them so severely that the fabrics rot and fall to pieces. Cotton, linen, rayon, silk and wool tend to be most affected. Leather, paper and wood also can become discolored and eventually damaged by mold and mildew.

How Can It Be Prevented

The best and easiest way to prevent mildew from occurring is to let the sun shine in! Ventilation helps to remove excess moisture from the air, and when the air outside is drier than the air inside, it absorbs excess moisture. If natural breezes are not sufficient, use electric fans, air conditioners or dehumidifiers. If the house is very damp, it may be necessary to turn the heat on for a short time, then open the doors and windows to let the moist air out.

An electric light burning in a closet may provide sufficient heat to prevent mildew. Chemical moisture absorbers such as silica gel, activated alumina or calcium chloride may be used to retard or prevent mildew. Silica gel and activated alumina are particularly effective in small closed areas such as drawers and closets since they do not harm fabrics.

How Can It Be Removed?

If there is mildew on clothing or household fabrics, brush the mold off outdoors so spores do not scatter in the house. When using a vacuum, be sure to throw out the vacuum cleaner bag since it may contain some moisture as well as the mildew-producing fungi.

Small items

Launder **washable items** with soap or detergent and chlorine bleach if safe for the fabric. Otherwise, soak the item in an oxygen bleach, then wash.

Take **non-washable items** non-washable items to the dry cleaner. Be sure to identify the stain for the dry cleaner's information.

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Wipe **leather goods** with a cloth wrung out in dilute alcohol (1 cup denatured or rubbing alcohol to 1 cup water). Dry in a current of air. If mildew remains, wash with a thick suds of mild soap or detergent, saddle soap or a soap containing a germicide or fungicide. Wipe with a damp cloth and dry in an airy place. Polish leather shoes and luggage with a good wax dressing.

On **paper and books**, remove dry, loose mold with a clean, soft cloth. If mildewed paper is still damp, dry it first in an airy place. Spread pages of books out fanwise to air. If the books are very damp, sprinkle cornstarch or talcum powder between the leaves to absorb the moisture. Leave starch or powder on for several hours, then brush off. (Microwave ovens also can be used for drying papers and books.)

Upholstery and mattresses

Take upholstered pieces and mattresses outdoors and brush away the surface mold with a broom. Then vacuum them using an upholstery attachment over the surface to draw out more mold. If the article is still damp, carefully use an electric heater or fan to dry it out. Place the item in the sun and air thoroughly to stop any further mold growth.

If the mildew remains, sponge the item with thick dry soap or detergent suds and wipe with a clean, damp cloth. If the mold is growing deep in the padding of an upholstered piece or in the mattress, nothing will eliminate the mold or odor except renovation by a trained upholsterer or replacement of the item.

Rugs and carpets

Sponge rugs and carpets with a thick dry soap or detergent suds and wipe clean with a damp cloth, or use an electric shampoo machine on the mildewed area. It is important to turn the rug or carpet upside down if excess water is a problem, allowing the wicking process to move stains or color bleeding to the base of the carpet fibers rather than to the surface. Let the item dry in the sun.

When treating ***wall-to-wall*** *carpet*, the problem is somewhat different due to the size of the item to be cleaned. If a rug cleaner can pick up the carpet, transport it to the plant, give it a cleaning and dry it, in most situations this is the best recommendation.

Shrinkage may cause the carpet to need restretching. If the water did not appreciably damage the backing, a power stretcher may be able to supply sufficient force to restretch the carpet.

If the carpet cannot be removed, vacuums capable of removing water from carpet can be rented in many cities—from rental agencies or hardware and grocery stores. Hot water extraction units contain vacuums for water removal. Do not attempt to use a home vacuum unless it is specifically designed as a wet vacuum.

Vacuum the carpet until no more water can be removed. If the water has gotten under the carpet and into the underlayment, it may not be possible to pull this water through the carpet. If this is the case, raise a portion of the carpet by pulling the carpet off the installation strips at one of the corners. After lifting a corner of the carpet, if the underlayment is wet, remove the entire carpet and the underlayment. This is necessary so the flooring can dry, in many cases preventing bucking of the flooring. Once the floor has dried, reinstall the dry underlayment and carpet.

If the musty mildew odor is still present in the underlayment or padding, replace it with new underlayment. Do not reinstall the padding, thinking that, in time, the odor will disappear. Once the carpet is placed over the musty odor, the problem will only get worse since the moisture cannot readily escape.

Wall and floor surfaces

Painted surfaces also may attract mildew. Strangely enough, mildew attacks dark-colored paints more readily than it does white paints. The reason for mildew's preference for darker paints is that they contain more oil and thus are softer. This gives the probing roots of the mildew fungus an easier entry.

Surfaces that have been treated with linseed oil instead of paint are prime candidates for mildew.

Remove mild cases of mildew on painted surfaces with a stiff brush. If it comes off easily and leaves no stain, repainting with a mildew-resistant paint should eliminate the problem. Or, add the following ingredients to each gallon of regular paint: 1/2 ounce of bichloride of mercury mixed with 2 ounces of water or denatured alcohol. Stir into the paint. **Caution:** don't use mildew-resistant paints in areas where babies might chew the finish, i.e. play pens, window sills, etc.

Severe cases of mildew on finishes should be scrubbed thoroughly with a solution of chlorine bleach. Use 1/2 to 1 cup of bleach to each gallon of water. Rinse with clear water and wipe the surface as dry as possible. Use this method for cement floors, wall tiles and all types of floor tiles. The bleach not only kills the fungus but removes the dead particles as well. Work quickly and carefully on plastic and asphalt tile to avoid spotting the surface.

Treat **wood surfaces** first with a solution of 4 to 6 tablespoons washing soda to a gallon of water. Scrub well and then rinse with clear water. If this doesn't remove the mildew, use one of these remedies:

• 4 to 6 tablespoons trisodium phosphate cleanser and 2 tablespoons household ammonia per gallon of water; or

• 4 to 6 tablespoons trisodium phosphate cleanser and 1 cup liquid chlorine bleach per gallon of water.

Rinse and dry thoroughly before repainting.

Scrub **plaster surfaces** with a solution of 2 tablespoons formaldehyde in 1 gallon water. Allow to dry before painting or papering. When the surface has dried, it is ready to be repainted or refinished. Allow walls that will be papered to dry, then size. Add 1 tablespoon formaldehyde mixed in 1 cup water to each pail of wallpaper paste.

To dry **wallpaper**, heat the room for several hours or days to dry the plaster board as well as the paper. Drying should be done slowly to prevent cracking. If the paper is washable, wipe with a cloth wrung out in thick soapsuds, then with clear water. Pat, do not rub, with a soft, dry cloth. If stains remain, bleach with a solution of household bleach, then sponge with a cloth wrung out in clear water. Remove small stains with a commercial ink eradicator.

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