

#### A View Indoors:

### Three Steps to Clean Your Way to Healthier Indoor Air

You can safeguard your health and that of your family by protecting the indoor air quality in your home with three basic principles for cleaning your house.

## 1. Minimize Your Chance of Being Exposed to Potentially Harmful Cleaning Chemicals

Many products used when cleaning and/or fixing-up an area will introduce new pollutants into the air, some of them harmful. Even the act of cleaning can stir-up dust, allergens or other contaminants already in the area and cause them to become airborne which cause health problems for some people. So, how likely is it that you'll experience health impacts from exposure to indoor air pollutants when cleaning? Well, as you may have guessed, it will vary from person to person and situation to situation. It will depend on several things, including your age, preexisting health conditions, your individual sensitivity to pollutants, the type and toxicity of pollutants, how long you are exposed, the size of the space where you are exposed, and the amount of ventilation provided.

Regardless of these variables, most people can reduce the risk of exposure and thereby protect their health by taking these simple precautions:

- Follow the directions on the product you're using.
   This may include using appropriate protective equipment for the task such as gloves and goggles.
- Whenever possible do your cleaning when other people aren't present.
- Try to have anyone who could be harmed by cleaning-related pollutants, especially those with an existing condition or sensitivity, leave the room during and immediately after cleaning.

# Three Steps to Protect your Health and Indoor Air Quality when Cleaning

- Minimize your chance of being exposed to contaminants.
- Minimize the use of products or practices that may cause you or others in the area harm.
- Increase ventilation before, during and immediately after cleaning.

- Buy only as much product as you need. Throw away unused or little-used containers safely. If you must keep a supply of cleaning products, remember to make sure they are closed tightly and properly stored in a well-ventilated area.
- Read and follow all manufacturers' instructions and precautions. Meet or exceed any health-related precautions.
- Minimize the use of powdered or spray products that can disperse pollutants throughout the area. If using a spray, consider spraying the product on a cloth or sponge instead of the surface or into the air. Always spray away from occupants.
- Keep product containers closed as much as possible while cleaning. If you are
  using cleaning solution from an open bucket try to place the bucket as far away
  from people as possible to reduce exposure to fumes.
- After cleaning change your clothes and wash your hands and any skin that was exposed during cleaning tasks.

### 2. Minimize the Use of Products or Practices that May Cause You or Others in the Area Harm

The health risk of any single chemical or product depends on how much of a given pollutant it emits and how harmful it is. Products and materials usually have warnings and instructions for proper use that are intended to reduce the user's risk, but often do not give warnings for other people who also may be in the area during use. For the sake of everyone who may be around during cleaning it is important for you to control what you use and how you use it by following the guidelines:

- Learn about the products, materials and cleaning practices you plan to use before you get started.
- Never mix products. Products that may be safe when used alone can sometimes cause dangerous fumes if mixed with other products. For example, never mix products containing ammonia with products containing chlorine bleach.
- Use the least harmful products and cleaning practices available to you that will do
  the job. Be aware that even products labeled as "safe" or "natural" as well as some
  common household alternative products may contain ingredients that could be
  harmful or irritating to some people, especially if overused or used improperly.
- Avoid products with strong fragrances or odors if someone is sensitive to them.
   Strong fragrances and odors can trigger negative health symptoms especially in people who have pre-existing conditions such as allergies or asthma.

### 3. Increase Ventilation Before, During and Immediately After Cleaning

Ventilation can replace indoor air with air from the outdoors. Too little ventilation can increase the amounts of indoor contaminants by not bringing in enough outside air to dilute them or by not flushing them out of the indoor space.

- Open windows and let the fresh air in shortly before, during and immediately after the cleaning process. It is important to evaluate carefully the outdoor sources of pollution, such as smoke or refuse that may be nearby. In some extreme cases, you may need to filter the air before allowing it inside.
- Be sure that a whole house mechanical ventilation system is working properly and set to allow the maximum amount of outside air to come in shortly before, during and immediately after the cleaning process.
- Use portable fans that are set-up to blow fumes away from you and the cleaning area. Local fans that exhaust to the outside, such as those that can be found in some kitchens or bathrooms also can be used. Even if the kitchen or bathroom fan in your house does not exhaust to the outside, it may still be helpful to turn the fans on when cleaning those areas.

Remember...the practices you use when cleaning are an important part of managing indoor contaminants and creating healthier indoor air for you and your family.

For more information, please visit the following sites:

General Indoor Air Issues -- www.epa.gov/iag

IAQ in Homes -- www.epa.gov/iag/homes/index.html

Health Effects from Indoor Contaminants www.epa.gov/iag/ia-intro.html#Pollution\_and\_Health

Ventilation

www.epa.gov/iaq/homes/hip-ventilation.html