

## Dust and indoor allergen control

House dust is a mixture of fine particles of fibers or rugs, feathers, cotton, sand, insect scales, human hair and dander. The whole house should be kept dust free as much as possible. Since we sleep 8 to 10 house in the bedroom, a great effort should be made to keep a clean, dust free bedroom.

## Tips for minimizing dust

With a good vacuum cleaner, suction walls, ceilings, and windows and wipe with a damp cloth. Bedroom furnishings should be kept to a minimum.

Remove heavy drapes, upholstery, stuffed animals, animal skins and furs from the bedroom, as well as feather beds and pillows, down comforters and wool blankets.

Strip floors of only wearing carpets, substituting them with hardwood, vinyl or tile. Carpets and the padding beneath are notorious nesting grounds for mites.

Vacuum bedrooms weekly; including the bed itself with a brush attachment that is used for the bed only. Systematically, vacuum the pillow, box spring, mattress, sheets, bedspread, etc. Bedspreads/ quilts/comforters gather settling dust. At bedtime, roll the bedspread and put it on the floor and use another blanket to cover.

Do not use fans in the bedrooms as they stir up dust. If there is a heat vent by the bed, cover it with a filter to prevent direct air flow on the sleeper's face.

Vacuum the entire house regularly. If dust settles on furniture within a day or two of vacuuming, the vacuum cleaner may be inefficient in holding dust particles in the bag. Use impermeable bags made of special material (Hysurf-Dupont). Consider buying a vacuum cleaner with HEPA bags- (Nilfisk, Fantom) [HEPA is a fine filter that filters 99/9% of particle more than 0.3 u in size.] For new homes, central vacuum systems are highly recommended as the dust is carried outside the house.

Frequently, the duct system is the source of the dust (especially in very old houses). Open heat registers and vacuum as far as you can. Professionally suction-clean duct system once every 3-4 years (preferable in the fall before heating season). Ordinary filters on the furnace allow too much dust to pass through. A special washable electrostatic lifetime filter (cost \$75-100) is recommended. 3M's 'Filtrete' is also a good filter for the furnace. Remember, environmental changes are a key component to changing allergic conditions in addition to drop immunotherapy.

Central air conditioners control the amount of air allowed in the house; hence they control the amount of outdoor particles coming in . Air that is allowed in is filtered before it is cooled. Air conditioners are excellent devices in controlling pollen and mold spore exposures int eh summer. Air purifiers are not as beneficial devices as air conditioners and quality vacuum cleaners except when there is a continual dust pollutions within the house (a smoker or a pet that sheds fine dander particles). Very old, dusty homes or those near unpaved roads may also benefit from an air purifier.

## Common Allergens

Dust Mite:: these are small creatures that live in old, dusty carpets, mattresses, fluffy stuffed animals, and upholstery. They thrive on dead skin shed by humans and animals. They multiply on animal skins like furs, buckskin, down feathers, silk, etc. The mites do not directly harm humans, but their fecal pellets dry and float in the air which people inhale, and some people reach to these. Mites multiply rapidly in warm, humid air, especially in the winter. It is also an important cause of asthma in childhood. Old worn carpets are best removed and a vinyl or hardwood floor installed.