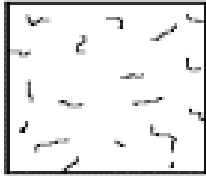


particle size vs. human impact

... the smaller they are, the harder we fall

Fibers - SLIGHT health effect



Fibers - visible, macroscopic filaments - are usually man-made. They come from clothing, carpeting, upholstery, paper. One sees fibers floating in bright shafts of sunlight. They settle in calm air, drift along the floor and tangle into "dust bunnies" in corners and under beds. Coarse filters can strain fibers out of air, but removing them isn't important because they pose housekeeping, not health problems.

Silts - MODERATE health effect



Silts - microscopic particles - stay suspended in calm air. Common silts are airborne soil, smoke, allergens (pollens, fungus & mildew spores), bacteria and viruses. They are not individually visible to the naked eye, but, in large numbers, form visible haze or smoke. Silts are pulled out of the air stream and held tightly by the attracting fibers of electrostatic filters. Some silts cause allergies.

Molecules - LARGE health effect



Odors and molecular irritants - sub-microscopic molecules - are about 10,000 times smaller than the smallest silts. Molecules are especially threatening because they travel into the lungs, dissolve and enter the bloodstream. They are the only pollutants which actually enter our bodies. Molecules are completely unaffected by particle filters. Fortunately, they are efficiently "sponged up" by adsorbents.