

Table 1

Sources of Common Air Contaminants	
Contaminant	Source
Asbestos	
Chrysotile	Some wall and ceiling insulation installed between 1930 and 1950
Crocidolite	Old insulation on heating pipes and equipment
Amosite	Old wood stove door gaskets
Tremolite	Some vinyl floor tiles Drywall joint-finishing material and textured paint purchased before 1977 Cement-asbestos millboard and exterior wall shingles Some sprayed and troweled ceiling finishing plaster installed between 1945 and 1973 Sprayed onto some structural steel beams as fire retardant
Combustion byproducts	
Carbon monoxide	Gas ranges
Nitrogen dioxide	Wood and coal stoves
Sulfur dioxide	Gas and propane engines
Particulate soot	Fireplaces
Nitrogenated compounds	Backdrafting of exhaust flues Candles and incense
Tobacco smoke	
Carbon monoxide	Cigarettes
Nitrogen dioxide	Pipes
Carbon dioxide	Cigars
Benzene	
Formaldehyde	
Nicotine	
Formaldehyde	Some particle board, plywood, pressed board paneling Some carpeting and carpet backing Some furniture and dyed materials

	Urea-formaldehyde insulting foam Some household cleaners and deodorizers; permanent press textiles Combustion (gas, tobacco, wood) Some glues, resins, tobacco smoke, cosmetics
Biologic organisms	
Fungal spores	Mold, mildew, and other fungi
Bacteria	Humidifiers with stagnant water
Virus	Water-damaged surfaces and materials
Pollens	Condensing coils and drip pans in HVAC systems
Arthropods	Drainage pans in refrigerators
Protozoa	Some thermophilics on dirty heating coils Animals, rodents, insects, humans
Radon	
Radon gas and radon progeny	Radon gas emanating from soil, rocks, and water that diffuses through cracks and holes in the foundation and floor Radon in well water Radon in natural gas used near the source wells
Volatile organic compounds	
Alkanes	Solvents and cleaning compounds
Aromatic hydrocarbons	Paints
Esters	Glues and resins
Alcohols	Spray propellants
Aldehydes	Fabric softeners and deodorizers
Ketones	Dry-cleaning fluids, some fabrics and furnishings Stored gasoline, some building materials Waxes, polishing compounds, pens and markers

SOURCE: Data from Turner WA, Bearg DW, Brennan T: Ventilation, in: Seltzer JM (ed), *Effects of the Indoor Environment on Health*. Philadelphia, PA, Hanley & Belfus, 1995, pulmonary physiology 4 1-58; Samet JM, Utell MJ: Indoor and Outdoor Air Pollution, in: Fishman AP, Elias JA, Fishman JA, Grippi MA, Senior RM, Pack AI (eds), *Pulmonary Diseases and Disorders*, McGraw Hill, 2008, pulmonary physiology. 1009-1036.