Occupations or Occupational Groups Associated with Carcinogen Exposures

What are examples of occupational exposures that have been associated with exposure to carcinogens?

Examples of occupations and occupational groups that are more likely to have been exposed to carcinogens are listed in the following table.

Please note: This list was complied from information available from reputable sources, but it is not complete. It represents associations that have been reported in literature between occupations and examples of substances often linked to cancer that may have been used in the workplace.

Exposure to a carcinogen does not necessarily mean that you will develop cancer.

Some Occupations or Occupational Groups Associated with Carcinogen Exposure

Occupations and Occupational Groups	Suspect Substance
Aircraft and aerospace industries	Asbestos, Beryllium and beryllium compounds; Ionizing radiation
Aluminum production	Aromatic amines; Pitch volatiles
Asbestos cement industry	Asbestos
Auramine manufacture	Auramine; 2-Naphthylamine; Pigments
Battery production workers	Cadmium and cadmium compounds
Beryllium extraction and processing	Beryllium and beryllium compounds
Boot and shoe manufacture/repair	Leather dust, benzene and other solvents
Bus and truck drivers; Dock workers; Filling station attendants; Mechanics; Operators of excavating machines; Professional drivers; Railroad workers; Transport industry	Diesel engine exhaust
Cadmium-copper alloy workers; Cadmium-smelter workers	Cadmium and cadmium compounds
Carpentry and joinery; Furniture and cabinet making	Wood dust
Ceramic production	Cobalt and cobalt compounds
Chemical and rubber industries	Aromatic amines; 1,3-Butadiene; Isoprene
Chemical industry	Acetamide; Acrylamide; Benzene
Chromate production plants; Chromium ferro-alloy production	Chromium (VI) compounds

Coal gasification, coke production	Coal tar, coal-tar fumes; Polycyclic aromatic hydrocarbons (PAHs)
Construction; Insulation and maintenance workers	Asbestos; Glass wool; Silica (crystalline); Toluene diisocyanates
Dry cleaning	Carbon tetrachloride; Tetrachloroethylene; Trichloroethylene
Dye and pigment production	Aromatic amines (e.g., 2-naphthylamine, 4-aminobiphenyl); Benzidine; Cadmium and cadmium compounds; Chromium (VI) compounds
Electrical capacitor manufacturing	Polychlorinated biphenyls (PCBs)
Electronic production/industries	Beryllium and beryllium compounds; Dichloromethane (methylene chloride)
Electroplating processes	Cadmium and cadmium compounds
Fabric manufacture (heat-resistant)	Ceramic fibres (refractory; respirable)
Firefighters	Polycyclic aromatic hydrocarbons (PAHs)
Furnace insulators	Ceramic fibres (refractory; respirable)
Furniture restorers	Dichloromethane (methylene chloride)
Glass production	Cobalt and cobalt compounds
Hairdressers & barbers	Aerosols, Dyes (aromatic amines, amino-phenols with hydrogen peroxide); Propellants; Solvents
Hematite mining; Uranium miners	Radon daughters; Silica (crystalline)
Herbicide production	Polychlorophenols and their sodium salts
Hospitals	Ethylene oxide
Iron and steel founding	Formaldehyde; Metal fumes; PAHs; Silica (crystalline)
Isopropanol manufacture, strong-acid process	Diisopropyl sulfate; Isopropyl oils; Sulfuric acid
Jewellers	Beryllium and beryllium compounds
Leather manufacturing including tanning	Polychlorophenols and their sodium salts, Chromium (VI) compounds
Magenta manufacture	Magenta; 4,4´-Methylene bis(2-methylaniline); ortho-Nitrotoluene; ortho-Toluidine
Manufacture of pottery, paper, paint and cosmetics	Talc containing asbestiform fibres
Metal degreasing	Tetrachloroethylene; Trichloroethylene
Metals industry	Strong-inorganic mists containing sulfuric acid
Mineral processing	Acrylamide
Miners (including underground)	Cobalt and cobalt compounds; X- radiation, gamma-radiation
Mining and milling	Asbestos
Mining of ores containing arsenic	Arsenic and inorganic arsenic compounds
Nickel refining and smelting; Welding	Nickel and nickel compounds; Welding fumes
Nonferrous metal smelting	Arsenic and inorganic arsenic compounds
Nuclear industry; Clean-up workers following nuclear accidents	Beryllium and beryllium compounds; X-radiation, gamma-radiation
Outdoor workers	Solar radiation
Paint stripping; Cleaning and degreasing	Dichloromethane (methylene chloride); 1,2,3-Trichloropropane

Perfume preparation; Epoxy resin formulations; Styrene glycol production; Manufacture of cosmetics, surface coatings, agricultural and biological chemicals	Styrene-7,8-oxide
Petroleum refining and distribution	Acrylamide; PAHs; Benzene; Diesel fuel, marine; Fuel oils, residual (heavy); Gasoline
Pharmaceutical production	Dichloromethane (methylene chloride)
Plastics industries	Acetaldehyde; Acetamide; Acrylonitrile; Ethyl acrylate; Isoprene; Special purpose glass fibres (respirable); Styrene; Vinyl acetate
Plating and engraving; Lithography; Photography	Chromium (VI) compounds
Plutonium workers	X-radiation, gamma-radiation
Polyester resin manufacture; Production of packaging materials and fibreglass-reinforced polyester	Styrene
Printing processes	Inks; Solvents
Processing of copper and nickel ore	Cobalt and cobalt compounds
Production and use of resins, glycerin and propylene-based rubbers	Epichlorohydrin
Production of art glass, glass containers, and pressed ware	Arsenic; Antimony oxides; Asbestos; Lead; PAHs; Silica (crystalline)
Production of polyvinyl chloride and co-polymers	Vinyl chloride
Production, packaging, and use of arsenic-containing pesticides	Arsenic and inorganic arsenic compounds
Radiologists and technologists; Radium-dial painters	X-radiation, gamma-radiation
Sheep dip manufacture	Arsenic and inorganic arsenic compounds
Sheet-metal workers	Asbestos
Shiftwork that involves circadian disruption	_
Ship builders	Ceramic fibres (refractory; respirable); Toluene diisocyanates
Shipyard workers	Asbestos
Stainless-steel welding	Chromium (VI) compounds
Steel and lumber industries	Acrylamide
Sugar production	Acrylamide
Textile manufacturing/industries	Acrylonitrile; Textile dust in manufacturing process; Dyes and solvents in dyeing and printing operations; Formaldehyde
Water and wastewater treatment	Acrylamide; Chromium (VI) compounds
Wood manufacturing	Pentachlorophenol; Polychlorophenols and their sodium salts
Wood preservation	Chromium (VI) compounds; Pentachlorophenol
Wool fibre production	Arsenic and inorganic arsenic compounds
Workers in bars and restaurants	Tobacco smoke