

Carcinogenic Chemicals

National Toxicology Program 12th Report on Carcinogens

<http://ntp.niehs.nih.gov/ntp/roc/twelfth/roc12.pdf>

Known to be Human Carcinogens

- Aflatoxins
- Alcoholic beverage consumption
- 4-Aminobiphenyl
- Analgesic mixtures containing phenacetin
- Aristolochic acids
- Arsenic compounds, inorganic
- Asbestos
- Azathioprine
- Benzene
- Benzidine
- Beryllium and beryllium compounds
- 1,3-Butadiene
- 1,4-Butanediol dimethylsulfonate (busulfan, Myleran[®])
- Cadmium and cadmium compounds
- Chlorambucil
- 1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea (MeCCNU)
- bis(chloromethyl) ether and technical-grade chloromethyl methyl ether
- Chromium hexavalent compounds
- Coal tar pitches
- Coal tars
- Coke oven emissions
- Cyclophosphamide
- Cyclosporin A
- Diethylstilbestrol (DES)
- Dyes metabolized to benzidine
- Environmental tobacco smoke
- Erionite
- Estrogens, steroidal
- Ethylene oxide
- Formaldehyde
- Hepatitis B virus
- Hepatitis C virus
- Human papilloma viruses: some genital-mucosal types
- Melphalan
- Methoxsalen with ultraviolet A therapy (PUVA)
- Mineral oils (untreated and mildly treated)
- Mustard gas
- 2-Naphthylamine
- Neutrons
- Nickel compounds
- Oral tobacco products
- Radon

- Silica, crystalline (respirable size)
- Solar radiation
- Soots
- Strong inorganic acid mists
containing sulfuric acid
- Sunlamps or sunbeds, exposure to
- Tamoxifen
- 2,3,7,8-Tetrachlorodibenzo-p-dioxin
(TCDD); "dioxin"
- Thiotepa
- Thorium dioxide
- Tobacco smoking
- Vinyl chloride
- Ultraviolet radiation, broad spectrum
UV radiation
- Wood dust
- X-radiation and gamma radiation

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Reasonably Anticipated to be Human Carcinogens

- Acetaldehyde
- 2-Acetylaminofluorene
- Acrylamide
- Acrylonitrile
- Adriamycin[®] (doxorubicin hydrochloride)
- 2-Aminoanthraquinone
- o-Aminoazotoluene
- 1-Amino-2,4-dibromoanthraquinone
- 1-Amino-2-methylanthraquinone
- 2-Amino-3,4-dimethylimidazo[4,5-f]quinoline (MeIQ)
- 2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline (MeIQx)
- 2-Amino-3-methylimidazo[4,5-f]quinoline (IQ)
- 2-Amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP)
- Amitrole
- o-Anisidine hydrochloride
- Azacitidine (5-Azacytidine[®], 5-AzaC)
- Benz[a]anthracene
- Benzo[b]fluoranthene
- Benzo[j]fluoranthene
- Benzo[k]fluoranthene
- Benzo[a]pyrene
- Benzotrichloride
- Bromodichloromethane
- 2, 2-bis-(bromoethyl)-1,3-propanediol (technical grade)
- Butylated hydroxyanisole (BHA)
- Captafol
- Carbon tetrachloride
- Ceramic fibers (respirable size)
- Chloramphenicol
- Chlorendic acid
- Chlorinated paraffins (C₁₂, 60% chlorine)
- 1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea
- Bis(chloroethyl) nitrosourea
- Chloroform
- 3-Chloro-2-methylpropene
- 4-Chloro-o-phenylenediamine
- Chloroprene
- p-Chloro-o-toluidine and p-chloro-o-toluidine hydrochloride
- Chlorozotocin
- C.I. basic red 9 monohydrochloride
- Cisplatin
- Cobalt sulfate

- Cobalt-tungsten carbide: powders and hard metals
- p-Cresidine
- Cupferron
- Dacarbazine
- Danthron (1,8-dihydroxyanthraquinone)
- 2,4-Diaminoanisole sulfate
- 2,4-Diaminotoluene
- Diazoaminobenzene
- Dibenz[a,h]acridine
- Dibenz[a,j]acridine
- Dibenz[a,h]anthracene
- 7H-Dibenzo[c,g]carbazole
- Dibenzo[a,e]pyrene
- Dibenzo[a,h]pyrene
- Dibenzo[a,i]pyrene
- Dibenzo[a,l]pyrene
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (ethylene dibromide)
- 2,3-Dibromo-1-propanol
- Tris (2,3-dibromopropyl) phosphate
- 1,4-Dichlorobenzene
- 3,3'-Dichlorobenzidine and 3,3'-dichlorobenzidine dihydrochloride
- Dichlorodiphenyltrichloroethane (DDT)
- 1,2-Dichloroethane (ethylene dichloride)
- Dichloromethane (methylene chloride)
- 1,3-Dichloropropene (technical grade)
- Diepoxybutane
- Diesel exhaust particulates
- Diethyl sulfate
- Diglycidyl resorcinol ether
- 3,3'-Dimethoxybenzidine
- 4-Dimethylaminoazobenzene
- 3,3'-Dimethylbenzidine
- Dimethylcarbonyl chloride
- 1,1-Dimethylhydrazine
- Dimethyl sulfate
- Dimethylvinyl chloride
- 1,6-Dinitropyrene
- 1,8-Dinitropyrene
- 1,4-Dioxane
- Disperse blue 1
- Dyes metabolized to 3,3'-dimethoxybenzidine
- Dyes metabolized to 3,3'-dimethylbenzidine
- Epichlorohydrin
- Ethylene thiourea
- Di(2-ethylhexyl) phthalate
- Ethyl methanesulfonate
- Furan
- Glass wool fibers (inhalable)

- Glycidol
- Hexachlorobenzene
- Hexachlorocyclohexane isomers
- Hexachloroethane
- Hexamethylphosphoramide
- Hydrazine and hydrazine sulfate
- Hydrazobenzene
- Indeno[1,2,3-cd]pyrene
- Iron dextran complex
- Isoprene
- Kepone[®] (chlordecone)
- Lead and lead compounds
- Lindane and other hexachlorocyclohexane isomers
- 2-Methylaziridine (propylenimine)
- 5-Methylchrysene
- 4,4'-Methylenebis(2-chloroaniline)
- 4,4'-Methylenebis(N,N-dimethyl)benzenamine
- 4,4'-Methylenedianiline and its dihydrochloride salt
- Methyleugenol
- Methyl methanesulfonate
- N-methyl-N'-nitro-N-nitrosoguanidine
- Metronidazole
- Michler's ketone [4,4'-(dimethylamino) benzophenone]
- Mirex
- Naphthalene
- Nickel (metallic)
- Nitrilotriacetic acid
- o-Nitroanisole
- Nitrobenzene
- 6-Nitrochrysene
- Nitrofen (2,4-dichlorophenyl-p-nitrophenyl ether)
- Nitrogen mustard hydrochloride
- Nitromethane
- 2-Nitropropane
- 1-Nitropyrene
- 4-Nitropyrene
- N-nitrosodi-n-butylamine
- N-nitrosodiethanolamine
- N-nitrosodiethylamine
- N-nitrosodimethylamine
- N-nitrosodi-n-propylamine
- N-nitroso-N-ethylurea
- 4-(N-nitrosomethylamino)-1-(3-pyridyl)-1-butanone
- N-nitroso-N-methylurea
- N-nitrosomethylvinylamine
- N-nitrosomorpholine
- N-nitrosornicotine
- N-nitrosopiperidine
- N-nitrosopyrrolidine
- N-nitrososarcosine

- o-Nitrotoluene
- Norethisterone
- Ochratoxin A
- 4,4'-Oxydianiline
- Oxymetholone
- Phenacetin
- Phenazopyridine hydrochloride
- Phenolphthalein
- Phenoxybenzamine hydrochloride
- Phenytoin
- Polybrominated biphenyls (PBBs)
- Polychlorinated biphenyls (PCBs)
- Polycyclic aromatic hydrocarbons (PAHs)
- Procarbazine hydrochloride
- Progesterone
- 1,3-Propane sultone
- beta-Propiolactone
- Propylene oxide
- Propylthiouracil
- Reserpine
- Riddelliine
- Safrole
- Selenium sulfide
- Streptozotocin
- Styrene
- Styrene-7,8-oxide
- Sulfallate
- Tetrachloroethylene (perchloroethylene)
- Tetrafluoroethylene
- Tetranitromethane
- Thioacetamide
- 4,4'-Thiodianiline
- Thiourea
- Toluene diisocyanate
- o-Toluidine and o-toluidine hydrochloride
- Toxaphene
- Trichloroethylene
- 2,4,6-Trichlorophenol
- 1,2,3-Trichloropropane
- Ultraviolet A radiation
- Ultraviolet B radiation
- Ultraviolet C radiation
- Urethane
- Vinyl bromide
- 4-Vinyl-1-cyclohexene diepoxide
- Vinyl fluoride