**Table S1: CANJEM exposures and definitions**

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| **CANJEM agent** | **Definition** | **Exposed SOCs\* (%)** | **Excluded SOCs\*\* (%)** | **Unexposed SOCs\*\*\* (%)** |
| Aliphatic Aldehydes | *A family of organic compounds represented by general formula RCHO (where R is a hydrogen or an alkyl group). The most important exposures in this group are formaldehyde and acrolein.* | 55 (6.5) | 340 (40.5) | 445 (53.0) |
| Alkanes (C18+) | *Includes all saturated hydrocarbons having more than 18 carbon atoms. They are all solids at standard conditions, examples of these long-chained hydrocarbons are petroleum jelly, and paraffin waxes.* | 42 (5.0) | 334 (39.8) | 464 (55.2) |
| Alkanes (C5-C17) | *Saturated hydrocarbons containing between 5 and 17 carbon atoms. They are liquids at standard conditions and the main components of petroleum solvents such as petroleum ether, rubber solvent, VM&P naphthas, mineral spirits, Stoddard solvent, kerosene and fuels such as gasoline, jet fuel and heating oils.* | 50 (6.0) | 339 (40.4) | 451 (53.7) |
| Asbestos | *Naturally occurring fibrous hydrated silicates. The amphibole fibers are straight and needle-like silicate structures generally more brittle than chrysotile asbestos fibers. Chrysotile fibers are curly serpentine fibers made up of tiny individual fibrils which take the shape of a spirally wound tube.* | 21 (2.5) | 329 (39.2) | 490 (58.3) |
| Biocides | *Includes all products used to disinfect, deodorize, sterilize and sanitize. This implies the capability of killing micro-organisms. This group includes bactericides, algicides, fungicides, germicides and preservatives. Agricultural pesticides were coded separately.* | 33 (3.9) | 338 (40.2) | 469 (55.8) |
| Carbon Monoxide | *A colorless, tasteless and almost odorless gas which is lighter than air and burns in air with a blue flame. It is an active reducing agent for chemicals at elevated temperatures, but is mostly encountered as a waste product of incomplete combustion of carbonaceous material.* | 51 (6.1) | 332 (39.5) | 457 (54.4) |
| Cleaning Agents | *Materials which have cleansing action such as soap to aid water in the cleaning process. They may be simple sulphonated fatty acids or complex synthetic materials. Organic solvents were excluded.* | 51 (6.1) | 332 (39.5) | 457 (54.4) |
| Crystalline Silica | *The crystalline forms of free silica are quartz, cristobalite and tridymite. Many sands, clays and rocks are largely composed of small silica crystals* | 25 (3.0) | 333 (39.6) | 482 (57.4) |
| Diesel engine emissions | *Emissions of internal combustion engines running on diesel fuels.* | 46 (5.5) | 343 (40.8) | 451 (53.7) |
| Engine Emissions | *Emissions of internal combustion engines running on leaded or unleaded gasoline (automobiles, aircraft, lawnmowers, motorboats, chainsaws).* | 70 (8.3) | 339 (40.4) | 431 (51.3) |
| Isocyanates | *Basic constituents in the production of polyurethanes, which in turn are used as flexible and rigid foams, and in resins, paints and varnishes.* | 1 (0.1) | 319 (38.0) | 520 (61.9) |
| Lead | *Comprises lead dust, lead oxides, lead fumes, dust from lead-containing alloys and ores, and all other lead-containing substances (e.g., lead chromate, basic lead carbonate).* | 42 (5.0) | 325 (38.7) | 473 (56.3) |
| Lubricating Oils/Greases | *Substances which are intended to reduce friction between surfaces in relative motion. They can be of animal, vegetable, synthetic, or mineral origin. The term greases applies to solid or semi-solid lubricants.* | 19 (2.3) | 333 (39.6) | 488 (58.1) |
| Mononuclear Aromatic Hydrocarbons | *Includes all aromatic compounds that have only one benzene ring including products such as xylene, toluene, styrene, phenol and ethyl benzene and others.* | 44 (5.2) | 335 (39.9) | 461 (54.9) |
| Nitrogen Oxides | *Formed when nitrogen is oxidized in a high temperature flame, an electric arc or an internal combustion engine.* | 31 (3.7) | 333 (39.6) | 476 (56.7) |
| Organic Solvents | *Organic liquids used as paint thinners, spot removers, dry cleaning agents, diluents, degreasers, chemical reagents, liquid extraction agents, and for many other purposes.* | 84 (10.0) | 329 (39.2) | 427 (50.8) |
| PAHs from any source | *Polycyclic aromatic hydrocarbons are naturally present in fossil fuels or can be formed by thermal decomposition of any organic material containing carbon and hydrogen. This includes: PAHs from coal, PAHs from petroleum; PAHs from wood and PAHs from other sources. In addition, exposure to benzo(a)pyrene was included* | 60 (7.1) | 341 (40.6) | 439 (52.3) |
| Pesticides | *Substances capable of killing some form of organism that is deemed to be undesirable. Pesticides include insecticides, herbicides, rodenticides, fungicides, molluscicides and nematodicides.* | 3 (0.4) | 322 (38.3) | 515 (61.3) |
| Phthalates | *Various esters of phthalic acid used as plasticizers to impart flexibility to certain plastics, notably polyvinyl chloride or PVC.* | 1 (0.1) | 320 (38.1) | 519 (61.8) |
| Welding Fumes | *Any fumes generated during the joining or cutting of metals using gas or arc welding techniques. Welding fumes include metal fumes from base and filler metals, fumes from the fluxes and from the combustible gases used, and/or any decomposition product* | 21 (2.5) | 333 (39.6) | 486 (57.9) |
| Wood Dust | *Generally composed of cellulose, hemicellulose, and lignin but may also include chemicals such as pentachlorophenols and chromated copper arsenate used to improve decay resistance of wood.* | 30 (3.6) | 334 (39.8) | 476 (56.7) |

\*SOCs that met inclusion criteria (had ≥ 10 jobs from ≥ 10 subjects between 1985-2005) and were deemed to have any probability of exposure to the agent

\*\*SOCs that did not meet inclusion criteria; these SOCs could be exposed or unexposed

\*\*\*SOCs that met inclusion criteria but were not deemed to be exposed to the agent