

Table 5: Odds ratios of childhood leukemias by groups of carcinogenic and toxic substances.

Groups of pollutants	Individuals residing at $\leq 2.5$ km		
	Controls (n)	Cases (n)	OR (95%CI) <sup>a</sup>
Reference	2378	98	-
<i>IARC groups<sup>b</sup></i>			
Group 1	3438	191	1.35 (1.05-1.73)
Group 2A	2259	138	1.48 (1.13-1.93)
Group 2B	3541	192	1.54 (1.14-2.07)
<i>Groups of toxic substances<sup>c</sup></i>			
Metals	3002	173	1.40 (1.08-1.80)
Pesticides	781	52	1.61 (1.14-2.27)
PACs	1309	85	1.57 (1.16-2.11)
Non-HPCs	765	54	1.71 (1.21-2.40)
Plasticizers	433	30	1.67 (1.10-2.55)
POPs	1588	104	1.58 (1.19-2.10)
VOCs	3100	177	1.38 (1.07-1.78)
Solvents	1492	99	1.61 (1.20-2.14)
Other	2862	162	1.37 (1.06-1.77)

<sup>a</sup>ORs were estimated from various mixed multiple logistic regression models (an independent model for each of the categories of groups of pollutants), that included year of birth, sex, and autonomous region of residence (as a random effect).

<sup>b</sup>IARC carcinogenic classification: Group 1: carcinogens to humans (arsenic and compounds, cadmium and compounds, chromium and compounds, nickel and compounds, dioxins+furans, polychlorinated biphenyls, trichloroethylene, vinyl chloride, benzene, ethylene oxide, polycyclic aromatic hydrocarbons, particulate matter (PM<sub>10</sub>), total suspended particulate matter, and benzo(a)pyrene); Group 2A: probably carcinogenic to humans (lead and compounds, dichloromethane, tetrachloroethylene, and hexabromobiphenyl); Group 2B: possibly carcinogenic to humans (chlordane, DDT, 1,2-dichloroethane, dichloromethane, heptachlor, hexachlorobenzene, 1,2,3,4,5,6-hexachlorocyclohexane, lindane, mirex, pentachlorophenol, tetrachloromethane, trichloromethane, ethyl benzene, naphthalene, di-(2-ethyl hexyl) phthalate, cobalt and compounds, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene).

<sup>c</sup>Metals (arsenic and compounds, cadmium and compounds, chromium and compounds, copper and compounds, mercury and compounds, nickel and compounds, lead and compounds, zinc and compounds, thallium, antimony, cobalt, manganese, and vanadium); Pesticides (alachlor, aldrin, atrazine, chlordane, chlorfenvinphos, chlorpyrifos, DDT, dieldrin, diuron, endosulfan, endrin, heptachlor, lindane, mirex, pentachlorobenzene, pentachlorophenol, simazine, isoproturon, organotin compounds, tributyltin and compounds, triphenyltin and compounds, trifluralin, and isodrin); PACs: Polycyclic aromatic chemicals (anthracene, polycyclic aromatic hydrocarbons, fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene); Non-HPCs: Non-halogenated phenolic chemicals (nonylphenol and nonylphenol ethoxylates, and octylphenols and octylphenol ethoxylates); Plasticizers (di-(2-ethyl hexyl) phthalate); POPs: Persistent organic pollutants (aldrin, chlordane, DDT, dieldrin, endosulfan, endrin, heptachlor, hexachlorobenzene, 1,2,3,4,5,6-hexachlorocyclohexane, lindane, mirex, dioxins+furans, pentachlorobenzene, polychlorinated biphenyls, brominated diphenylethers, organotin compounds, polycyclic aromatic hydrocarbons, hexabromobiphenyl, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene); VOCs: Volatile organic compounds (non-methane volatile organic compounds, 1,2-dichloroethane, dichloromethane, hexachlorobutadiene, tetrachloroethylene, trichlorobenzenes, 1,1,1-trichloroethane, trichloroethylene, trichloromethane, vinyl chloride, benzene, ethyl benzene, ethylene oxide, and naphthalene); Solvents (1,2-dichloroethane, dichloromethane, tetrachloroethylene, trichlorobenzenes, 1,1,1-trichloroethane, trichloroethylene, trichloromethane, benzene, ethyl benzene, toluene, and xylenes); Other (tetrachloromethane, particulate matter (PM<sub>10</sub>), and total suspended particulate matter).