

Supplementary Table 3. Urban environment exposures

| Air pollution | |
|--------------------------------|---|
| Exposure type | Sub types |
| Particulate matter | PM _{0.1} <ul style="list-style-type: none"> - Diesel, elemental carbon - Pesticides |
| | PM ₁ <ul style="list-style-type: none"> - Black carbon, passive smoke, trash burning fumes, biomass for cooking - Diesel |
| | PM _{2.5} <ul style="list-style-type: none"> - Cigarette smoke, black smoke, PM_{2.5} absorbance, trash burning fumes, biomass for cooking, passive smoke, trash burning fumes, biomass for cooking, - Diesel, carbon elemental/organic, kerosene, firewood, - Saharan dust - PM_{2.5} absorbance - Lead |
| | PM >10 (includes PM ₄ , PM ₁₀) <ul style="list-style-type: none"> - Black smoke, pollen, household allergens, mould, passive smoke, trash burning fumes, biomass for cooking, carbon elemental/organic, Saharan dust |
| | Total suspended particles (pesticides, PM-coarse, manganese, PM<10) |
| Gases | NO _x (nitrous oxide) <ul style="list-style-type: none"> - NO₂, NO, NO₃ |
| | SO _x <ul style="list-style-type: none"> - SO₂, SO₄ |
| | CO (carbon monoxide) |
| | O ₃ (ozone) |
| | VOCs (volatile organic compounds) <ul style="list-style-type: none"> - BTEX (benzene, toluene, ethylbenzene, and xylene) |
| Other air pollutants (outdoor) | <ul style="list-style-type: none"> - Model estimating 19 specific pollutants: 1,3-butadiene, 1,4-para-dichlorobenzene, composite estimate, acetaldehyde, acrolein, arsenic, benzene, cadmium, chromium VI, DPM, ethylbenzene, formaldehyde, lead, manganese, methylene chloride, naphthalene, nickel, perchloroethylene, and trichloroethylene - Air quality index (perceived air quality) - Emissions based pollution (not specified) - PAHs (polyaromatic hydrocarbons) |
| Energy based pollution | |
| Exposure type | Sub types |
| Noise | Leqd, Leqn in dB, Equivalent diurnal (7-23h) and nocturnal (23-7h) |
| Electromagnetic fields | |
| Radiation | |
| Atmosphere | |
| Exposure type | Sub types |
| Rainfall | |

Urban environments and the first 2000 days

| Atmosphere | |
|--|---|
| Exposure type | Sub types |
| Temperature | |
| Humidity | |
| Atmospheric pressure | |
| Wind | Wind direction, wind speed |
| Sunlight exposure | Solar radiation |
| Chemical and metal exposure | |
| Exposure type | Sub types |
| Heavy metals | Lead, arsenic, cadmium, nickel, manganese, cobalt, copper, zinc, mercury |
| Other metals | Barium, strontium |
| Petroleum | Petroleum based substances |
| Chemical exposure | <ul style="list-style-type: none"> - Disinfection by-products (chloroform, bromodichloromethane, dibromochloro-methane, bromoform, dibromochloromethane, bromoform, dibromoacetic acid, trichloroacetic, monochloroacetic, dichloroacetic, monobromoacetic acid, dichloroacetaldehyde, tribromoacetic acid, dibromochloroacetic acid, bromodichloroacetic acid, bromochloroacetic acid, bromochloroacetaldehyde, dibromoacetaldehyde, bromodichloroacetaldehyde, chlorodibromomethane, haloacetaldehydes, haloacetoneitriles), perchloroethylene, polybrominated diphenyl ethers, o-xylene, pxylene, p,p-dichlorodiphenyldichloroethylene, hexachlorobenzene, congeners of polychlorinated biphenyls - Endocrine disrupting chemicals - Pesticides (unless specified as air pollution) |
| Other carcinogens | - Carcinogens not described |
| Neighbourhood built and natural environment features | |
| Exposure type | Sub types |
| Access to green/blue features | <ul style="list-style-type: none"> - Access to green space (including proximity to parks) - Access to blue space - No grass |
| Access to services/facilities | <ul style="list-style-type: none"> - Proximity to child-specific services - Proximity to health care services - Proximity to food outlets - Proximity to entertainment services - Facilities for outdoor activities |
| Proximity to pollution sources | <ul style="list-style-type: none"> - Roads (highways, major roads) - Industrial areas - Extremely low frequency power transmission lines |
| Quality of neighbourhood environment | <ul style="list-style-type: none"> - Walkability of neighbourhoods - Physical disorder - Waste in public spaces - High weeds - Graffiti - Structural decline - Slum area |

Urban environments and the first 2000 days

| Neighbourhood built and natural environment features | |
|--|--|
| Exposure type | Sub types |
| | <ul style="list-style-type: none"> - Built environment vulnerability index (comprising shelter/housing conditions, neighbourhood quality and connectivity) - Neighbourhood safety features (Presence of barbed wire, security bars, fencing, 'Beware of dog' sign, 'No trespassing sign', security sign) - Sustainable development indicators (n=16) |
| Geographic region | <ul style="list-style-type: none"> - Inner-city area |
| Neighbourhood community conditions | |
| Exposure type | Sub types |
| Community population characteristics | <ul style="list-style-type: none"> - Sociodemographics (ethnicity, population) - Socioeconomic status (number of and value of the units in the building, crowding rate, neighbourhood unemployment rate, average income of the neighbourhood, employment status, education, neighbourhood deprivation, gentrification) |
| Residential segregation | <ul style="list-style-type: none"> - Racial segregation - Economic segregation - Empowerment zones |
| Quality of social environment | <ul style="list-style-type: none"> - Social connectedness (includes perceived social support, social participation, neighbourhood commitment, social cohesion, trust) - Neighbourhood crime (includes violent crime, social disorder, vehicle crime, property crime, theft crime, vice crime) - Safety - Social stress |
| Residential living conditions | |
| Exposure type | Sub types |
| Dwelling | <ul style="list-style-type: none"> - Building materials (floor type, building condition [outdoors]), - Building characteristics (number of rooms, type of house, amenities, number of units in the building, value of units in the building, household renovation, slum/non-slum, condemned) - Access to sanitation (sewerage, tap water, water quality, sanitation facilities [shared or self-contained], home water treatment) - Tenure type (renting or owner occupied) |
| Indoor conditions | <ul style="list-style-type: none"> - Interior decay (e.g., peeling paint, leaks, cracks/holes in floor), disorganisation, household renovation, interior damage, boarded windows/doors, damage to roof - Risk of at home injuries - Crowding - Sanitation (cleanliness including dust) |
| Outdoor conditions | <ul style="list-style-type: none"> - Property disorder (no grass, garbage, high weeds, cars on lawn) - Presence of home outdoor space/yard |