

Supplementary Table 5. Health outcomes studied

Offspring life course health outcomes		
Primary classification	Sub-classification	Specific outcome
General health outcomes in utero	Intrauterine growth restriction	
General health outcomes at birth	Preterm birth	<ul style="list-style-type: none"> - Pre-term birth (<37 weeks) - Very pre-term birth (≥ 30 to <37 weeks) - Extreme pre-term birth (<30 weeks)
	Birth weight and/or length	<ul style="list-style-type: none"> - Large for gestational age (>90th Percentile) – includes macrosomia - Small for gestational age (<10th percentile) (for age and sex) – some defined this as <2500g - Extremely low birthweight (<1000g) - Critically ill small for gestational age. - Fetal growth (head size)
	Newborn general health	- Apgar Score
		- Anthropometric measurements (includes BMI, skin fold thickness, bioimpedance, waist and hip circumferences)
	Indicators of disease risk (newborns)	Jaundice
		Telomere length (relative leukocyte telomere length)
		<i>H19</i> DMR methylation in cord blood (from exposure to air pollution)
		DNA adducts
		Frequency of micronuclei
Congenital developmental abnormalities		Changes in the transcriptome
		Markers of umbilical cord endothelium dysfunction: <ul style="list-style-type: none"> - cord blood levels of endothelin-1, - Vascular adhesion molecule - Intercellular adhesion molecule
Death	Embryo	Spontaneous abortion
	Newborn	Still born

Offspring life course health outcomes		
Primary classification	Sub-classification	Specific outcome
Neurodevelopmental disorders or conditions (includes indicators of developmental learning disorder, attention deficit hyperactivity disorder, and autism spectrum disorder)	Infant	
	Child	
	Behavioural problems/disorders	Attention deficit hyperactivity disorder/related behaviours (inattention)
		Autism spectrum disorder/related behaviours
		Behaviour problems (conduct and emotional, e.g., Child Behaviour Check-list)
		Inhibited neurobehavioral development (e.g., Psychomotor Development Index)
	Learning problems/disorders	Externalising (hyperactivity and conduct problems – Strengths and Difficulties Questionnaire)
		- Academic achievement - Intelligence Quotient
	Other (neurodevelopmental disorders or conditions)	- Impaired neurological developments
		- Developmental maturity including, Social Competence, Emotional Maturity, Language and Cognitive Skills, and Communication Skills and General Knowledge - Mental Development Index
Mental health and sleep disorders	Sleep quality	- Duration - Efficiency
	Mental wellbeing	- Internalising (peer problems and emotional problems – Strengths and Difficulties Questionnaire score)
Respiratory diseases or conditions	Respiratory infectious diseases	Respiratory infection (acute)
		- Common cold - Bronchitis - COVID-19 - Pneumonia - Croup - Bronchiolitis
		Ear infections (otitis media)
	Respiratory allergic conditions	Asthma (and/or wheeze)
		Non-infectious cough Allergic rhinitis
Musculoskeletal diseases	Arthropathies	Juvenile idiopathic arthritis
		Obesity (child)

Offspring life course health outcomes		
Primary classification	Sub-classification	Specific outcome
Endocrine, nutritional or metabolic conditions		Anthropometric measurements <ul style="list-style-type: none"> - BMI - Skin fold thickness - Bioimpedance - Waist and hip circumferences
		Biochemical markers of insulin resistance and adiposity
		<ul style="list-style-type: none"> - Wasting (acute malnutrition, height-for-age, weight-for-age, weight-for-height) - Growth
		Anaemia
Digestive system conditions		Gastrointestinal disease
		Gut microbiota imbalance
		Diarrhoea (any cause)
Skin conditions	Inflammatory dermatoses	<ul style="list-style-type: none"> - Atopic eczema - Juvenile dermatomyositis
	Allergic conditions (skin)	Atopic (inhalant and food)
	Viral infections (skin or mucous membrane lesions)	Hand, foot and mouth disease
Neoplasms		Leukemia
		Ependymoma
		Astrocytoma
		Neuroblastoma
		Bilateral retinoblastoma
		Tumours <ul style="list-style-type: none"> - Wilms - Germ cell - Primitive neuroectodermal
		Hepatoblastoma
		Rhabdomyosarcoma
		Medulloblastoma
		Cancer risk (specific disease not mentioned)
Sensory functions		Hearing impairment

Offspring life course health outcomes		
Primary classification	Sub-classification	Specific outcome
Cardiovascular conditions/functioning		Systolic blood pressure
		Heart rate variability
Indicators of health risk	Accumulation of pollutants/chemicals	Lead poisoning/high blood lead levels
		High manganese levels
		Concentrations of polybrominated diphenyl ethers
		Monohydroxy metabolites
		Concentration of PHAs
	Other (indicators of health risk)	Lower resting vagal tone
		Cardiometabolic risk indicators
		Proteinuria
		Immunoglobulin E level (associated with asthma)
		Developmental maturity across 5 domains (including Physical Health and Wellbeing),
		Autoantibodies as indicators of risk of Type 1 diabetes (infant)
		TGFA gene polymorphism
		Biomarkers (e.g., PAH-DNA adducts and 8-isoprostanes)
Other acute	Emergency department admissions	<ul style="list-style-type: none"> - General symptoms - Heat related illness - Physical injuries - Temperature above 38C

Note. Offspring life course health outcomes include embryo, fetal, newborn, infant (<1 year), child (1 to 10 years) adolescent (10 to 19 years) and adult (over 19 years).