Summary of ALSPAC participant reported and study collected measures

Assessment Name	Method	Type	Description	Sample n (units)	Timepoint
BRE Study[a]	Fieldwork by BRE	Sensors	Formaldehyde, toluene and other volatile organics Nitrogen dioxide Fungi, house dust mite and bacteria Temperature and humidity	174 (*homes*)	Antenatal to G1 6m
Heavy metals	Antenatal clinic ICP-DRC-MS[b]	Biosample	Lead, cadmium and total mercury concentrations (*venous blood*)[c]	4285, 4286, 4134, respectively (*G0*)	Antenatal
	Maternity hospital ICP-OES[d]/ICP-MS[e]		Lead, cadmium and total mercury concentrations (*cord tissue*)[f]	889, 2832, 2600, respectively (*G0/G1*)	Birth
CiF NO2 Study	Tubes sent by post	Sensor	NO_2 measured using inside child's bedroom (*Palmes tube*)	1,200 (*G1*)	G1 3-12m
			NO_2 outside the front of the house (*Palmes tube*)	700 (*homes*)	
CO Study	Fieldwork	Sensor	CO indoor background (*Draeger diffusion tube*) CO exhaled breath (*Bedfort EC50 ToxCO breath CO monitors*)	80 (*homes*)	G1 96-124m
		Biosample	Carboxyhaemoglobin and methaemoglobin levels (*venous blood*)		

CiF Alveolar CO Study	Focus Clinic	Sensor	Alveolar carbon monoxide concentrations (*Bedfort EC50 ToxCO breath CO monitors*)	1,219 (*G0*)	G1 12m
Heavy metals	Focus Clinic AAS[g]	Biosample	Blood lead concentration in G1 children (*venous blood*)	582 (*G1*)	G1 30m
Indoor Environment	Self Report by mothers	Quest-ionnaires	Variables including: Type of housing, including storey Degree of damp and mould in each room Frequency with which windows were opened in summer/winter Type of heating and cooking used Wall-papering, painting, new furniture or carpets and in which rooms Household/Occupational/Hobby chemical use Noise	Various n depending on time point	Various times from pregnancy through childhood
Outdoor Environment & Lifestyle	Self Report by mothers	Quest-ionnaire	Variables including: Traffic density on the road Modes of transport Time spent outdoors	Various n depending on time point	Various times from pregnancy

			Mothers and fathers/partners occupational history (*coded to SOC90*) Neighbourhood quality		through childhood
School Environment	Head Teacher Report	School-based Quest-ionnaire	Variables including: Distance to road Noise Building and facility quality	Head teacher 1017 and 1004 responses; class teacher 1339 and 1435 class teachers	School-years 3 and 6

[a] The Building Research Establishment (BRE) study was of 174 homes (quasi-random selected) and each assessed over a 12 month period

[b]ICP-DRC-MS, inductively coupled plasma dynamic reaction cell mass spectrometry;

[c]In addition: Se.

[d] ICP-OES, inductively coupled plasma optical emission spectrometry.

[e]Elements (except Pb) were assayed by ICP-OES (n=2005), except for Se and Hg, which were measured by atomic fluorescence techniques (hydride generation and cold vapour, respectively); the final 911 samples were assayed for these elements plus Pb by ICP-MS.

[f]In addition: Se, Mg, Ca, Cr, Mn, Fe, Co, Ni, Cu, Zn, Sr, Mo, Sb, K.

[g]AAS, atomic absorption spectroscopy;