Web Table 1 Currently available databases and cohorts for inclusion in PHENOTYPE

Study	n	Population	Collected outcomes	Relevant covariate and mechanism data
CREAL Spain				
PISCINA	3000	Children 6-9, 2006, Sabadell, Catalonia	Respiratory health BMI	Social economic status Physical activity Air pollution
INMA	3000	Children, 2-10, ongoing around Spain	Birth weight and gestation, respiratory health, neural development	Social economic status Physical activity Stress Air pollution
PAC-COPD	342	Patients with chronic obstructive pulmonary disease (PAC-CODP)	Hospital admissions All cause and specific mortality Functional data (lung function, cardiovascular function) Symptoms and co-morbidities Quality of life Mental status Body weight and composition	Social economic status Physical activity Air pollution
ECRHS	8500	Adult population in many cities around Europe	Respiratory health Short form SF36	Social economic status Physical activity

				Air pollution
Routine data Catalonia	Pop 7M 0.5 million deaths	All, 1999-2006, Catalonia	All cause and specific mortality	Social economic status
Hospital clinic database	16000	Births, 2000-2005 Barcelona	Birth weight and gestation	Social economic status Air pollution
Netherlands				
Cohort of Dutch inhabitants Netherlands	Pop 16M	All, 2000-2008	All cause and specific mortality and morbidity	Social economic status
Doetinchem cohort	Approximately 5000 over a period of 5 years	See: Verschuren WMM, Blokstra A, Picavet HSJ, Smit HA. The Doetinchem cohort study (cohort profile) Int J Epidemiol 2008; 37(6):1236-1241	Body weight, serum cholesterol, mortality, morbidity, health-related quality of life (RAND-36)	Social economic status, physical activity
Health survey Utrecht	3475	Adults 3475 (19-99 years)	lifestyle, perceived health, chronic diseases	Socioeconomic status, physical activity
United Kingdom				
Born in Bradford	12000	Babies, ongoing, England (large ethnic population) and their parents for a subgroup	Birth weight and gestation General and mental health parents in a subset of 1500	Social economic status Air pollution Detailed ethnicity
Routine hospital		Small area-level data for Stoke-on-Trent/Staffordshire	Rates and nature of hospital episodes (e.g.,	Social economic status

			respiratory, CVD), morbidity and mortality	Air pollution
National health data		Small area-level health data for UK	Nature and rates of morbidity and mortality	Social economic status Air pollution
Lithuania				
Routine morbidity data Lithuania	0.5 million	Lithuania population, all age groups. Classification of all registered cases causes according to ICD-10 revision codes	Urban-rural area, age, sex, cardiovascular, respiratory, cancer, and other morbidity by districts	Social and demographic status
Routine mortality data Lithuania	0.5 million	Lithuania population, all age groups. Classification of all registered cases causes according to ICD-10 revision codes	Urban-rural area, age, sex, cardiovascular, respiratory, cancer, and other morbidity by districts	Social and demographic status
Detailed Health survey	7000	Representative sample adults of Kaunas citizens, Lithuania	General health including Blood pressure, high cholesterol and diabetes, Depression Physical functioning Cognitive function Psychosocial factors	Social economic status Air pollution Physical activities Stress
Kaunas birth cohort	4,260	Kaunas babies and their parents for a subgroup http://www.birthcohorts.net/Cohort.Show.asp?cohortid=87	Birth weight and gestational age	Social, demograpgic, economic status Air pollution

Web Table 2. Summary of proposed experimental design in each partner country in PHENOTYPE

	Country	Sample	Summary design	Measures				
				Affect	Cognition	Physiological	Environment	Other
Preventive	UK: study 1	Healthy adults (n=40)	- Field-based - Within-subjects - 30-minute exposure to natural green, natural green/blue, and urban environment - Measures at baseline (pre-exposure), 30 and 60-minutes post exposure	Mood	Cognitive function	- Salivary cortisol - HR - HRV - BP	Perceived restoration	RPE Walking speed
	UK: study 2	Healthy adults (n=40)	- Field-based - Between groups - 30-minute exposure to natural *or* urban environment on three consecutive days - Measures at baseline (day 1), 0, 30 and 60-minutes on exposure days (days 2-4) and final follow-up on day 5	Mood	Cognitive function	- Salivary cortisol - HR - HRV - BP	Perceived restoration	RPE Walking speed Hedonic and eudemonic life satisfaction
	Netherlands: study 1	Healthy adults (n=50)	- Laboratory-base - Within subjects - Shown images of natural and urban environment before a stressor (model 1) and after a stressor (model 2) stressor (to explore buffering and restorative effects, respectively)	Mood	Cognitive function	- Salivary cortisol - HR - HRV - BP	Perceived restoration	
	Netherlands: study 2	Healthy adults (n=25)	- Laboratory-based - Within subjects - Shown images of natural and urban environment before a stressor (model 1) and after a stressor (model 2) stressor (to explore buffering and restorative effects, respectively)	Mood	Cognitive function	- Neurological response (fMRI) - Salivary cortisol - HR - HRV - BP	Perceived restoration	
Therapeutic	Spain	Adults with elevated stress levels (n=20-40)	- Field-based - Exposure to natural green, natural green/blue, and urban environment over several hours - Measures at baseline (pre-exposure), 30 and	Mood	Cognitive function	- Salivary cortisol - HR - HRV - BP	- Perceived restoration - Air pollution - Noise	RPE Walking speed Social interaction

			60-minutes post exposure - Participants given CALFIT phones for some days for longer term monitoring (mood, social interaction, physical activity)				pollution	and physical activity (CALFIT)
	Lithuania	Adults with CAD (n=20)	- Field-based - Between-subjects - 30-minute exposure to natural green *or* urban environment on two consecutive days (days 2 and 3) - Measures at baseline (pre-exposure), 30 and 60-minutes post exposure - Walking treadmill test at baseline (day 1) and follow-up (day 2)	Mood	Cognitive function	- Exercise capacity (treadmill test) - Salivary cortisol - HR - HRV - BP	Perceived restoration	RPE Walking speed

CAD, coronary artery disease; HR, heart rate; HRV, heart rate variability; BP, blood pressure, RPE, rate of perceived exertion; fMRI, functional magnetic resonance imaging