

## Health - projects and objectives

Project 1.1	<p><b>Exposure to traffic related air pollution in early life, lung function and airway disease in 8-yearold children</b></p> <p><b>Project leader:</b> Tom Bellander Forsberg, IMM, Karolinska Institutet.</p>
Project 1.2	<p><b>Short-term health effects in susceptible subgroups, using newly developed source specific local time series of air pollution</b></p> <p><b>Project leader:</b> Tom Bellander, IMM, Karolinska Institutet.</p>
Project 1.3	<p><b>Health effects of short-term and cumulative seasonal exposure to road dust and wood smoke particles at real-world exposure conditions</b></p> <p>Panel studies of particles from road dust and wood smoke with focus on inflammatory and respiratory effects.</p> <p><b>Project leader:</b> Bertil Forsberg, Yrkes- och miljömedicin, Umeå universitet.</p>
Project 1.4	<p><b>Long-term exposure to traffic exhaust and incidence of obstructive airway disease in a prospective cohort - co-funding</b></p> <p>Studies of incident asthma and chronic bronchitis in a cohort of adults from three Swedish cities in relation to traffic pollution exposure at home.</p> <p><b>Project leader:</b> Bertil Forsberg, Yrkes- och miljömedicin, Umeå universitet.</p>
Project 1.5	<p><b>Is exposure to particulate air pollution associated with exhaled nitric oxide and blood markers of inflammation?</b></p> <p>To assess the acute impact of particulate air pollution, on exhaled nitric oxide, which is a marker for airway inflammation, and inflammatory markers in blood. The exposure will be modeled from stationary measurement of NO<sub>x</sub>, ozone, PM<sub>2.5</sub> and PM<sub>10</sub>, permanent address and time spent in heavy traffic within 48 hours. The overall aim is to examine 10 000 subjects with exhaled nitric oxide, lungfunction, inflammatory markers in blood and genotyping.</p> <p><b>Project leader:</b> Anna-Carin Olin, Arbets- och Miljömedicin (AMM), Sahlgrenska Akademin.</p>
Project 1.6	<p><b>Is long term exposure to particulate air pollution associated with an increased risk for ischemic heart disease</b></p> <p>To assess the effect of long term exposure to particulate air pollution on incidence of cardiovascular events in north-eastern Gothenburg 2001-2003.</p> <p><b>Project leader:</b> Anna-Carin Olin, Arbets- och Miljömedicin (AMM), Sahlgrenska Akademin.</p>
Project 1.7	<p><b>Cohort study on total public health burden related to long term-exposure to air pollution</b></p> <p><b>Project leader:</b> Göran Pershagen, IMM, Karolinska Institutet.</p>
Project 1.8	<p><b>Long term exposure to traffic related air pollution and genetic susceptibility in relation to myocardial infarction</b></p> <p><b>Project leader:</b> Göran Pershagen, IMM, Karolinska Institutet.</p>

## Scarp - Projects and objectives

<b>Project 1.9</b>	<b>DISOZPOLL; Diesel and ozone effects on the cardiovascular system</b>  To increase the understanding of how ozone and diesel exhaust interacts with the lungs, leading to events in the cardiovascular system that are linked to the increased health effects related to these pollutants.  <b>Project leader:</b> Thomas Sandström, Lung och allergikliniken, Norrlands universitetssjukhus.
<b>Project 1.10</b>	<b>PMMECH - Mechanisms behind particulate matter air pollution induced toxicological effects</b>  To increase the understanding of how source, size and chemical characteristics of particulate matter pollution contributes to adverse cellular and biomedical events, linked to adverse health effects.  <b>Project leader:</b> Thomas Sandström, Lung och allergikliniken, Norrlands universitetssjukhus.
<b>Project 1.11</b>	<b>Woodpart-2. A human experimental study using wood smoke for studies of acute effects of particulate air pollution on inflammation, coagulation and oxidative stress</b>  The specific aims are to find out whether effects of wood smoke on airway inflammation and blood coagulation found in a recently performed study (Barregard et al 2006) can be repeated at lower levels of particles and if the effects differ in relation to the fraction of ultrafines (UFP < 100 nm) in the smoke.  <b>Project leader:</b> Gerd Sällsten, Occupational and Environmental Medicine, Sahlgrenska Academy.
<b>Project 1.12</b>	<b>Health effects of long range transported particles: a population study using air mass trajectories</b>  The aim of the project is to test whether air masses of certain origins are associated with markers of pulmonary and/or systemic inflammation.  <b>Project leader:</b> Gerd Sällsten, Occupational and Environmental Medicine, Sahlgrenska Academy.