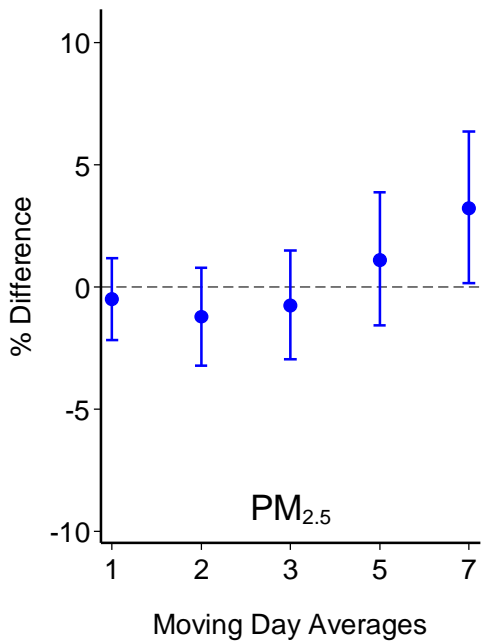
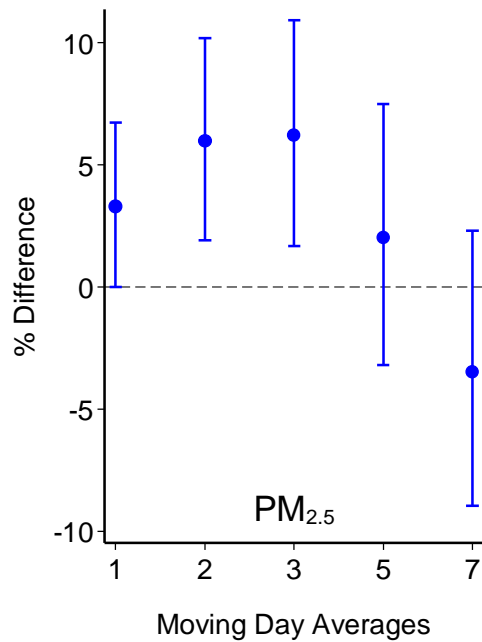


A) PAT ratio

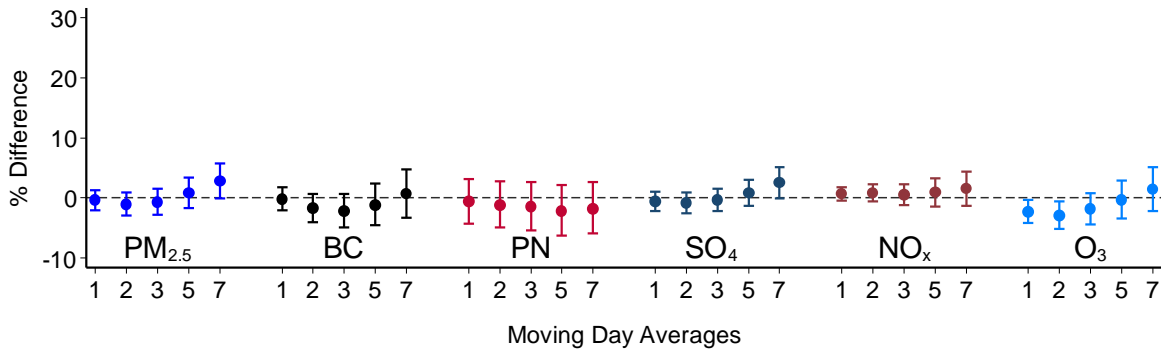


B) Baseline Pulse Amplitude

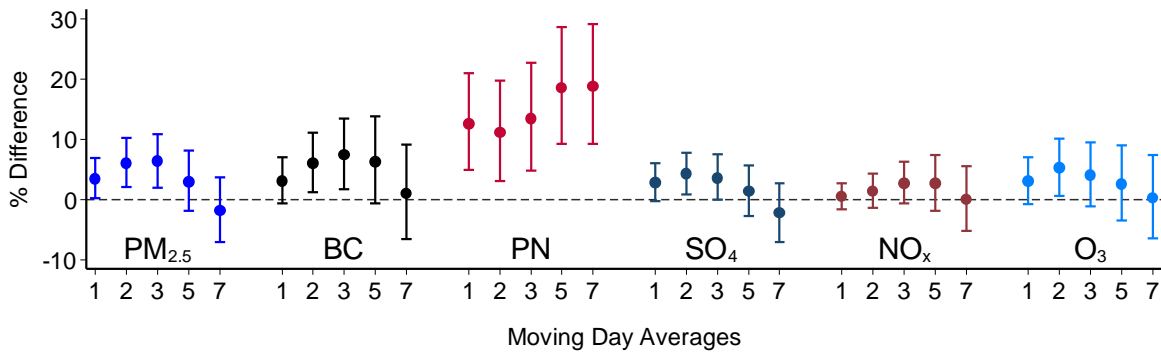


Web Figure 1. Associations of moving day averages in air pollutants with measurements of microvascular function excluding days with 24 averages exceeding US Environmental Protection Agency’s air quality index of maximum $35 \mu\text{g}/\text{m}^3$ for Particles with an aerodynamic diameter $\leq 2.5 \mu\text{m}$ (PM_{2.5}), in the Framingham Heart Study, Greater Boston Area, Massachusetts, 2003-2008. A) Peripheral arterial tonometry (PAT) ratio. B) Baseline pulse amplitude. Results expressed as percent difference in measurement per increment in air pollution. Unit change in PM_{2.5}: $5 \mu\text{g}/\text{m}^3$. Models adjusted for age, age², sex, cohort, presence of diabetes, body mass index, triglyceride level, ratio of total cholesterol to high density lipoprotein, mean systolic blood pressure, median household income of census tract 2000, years of education, smoking status, day of week, season (sine and cosine of day of year), time trend, temperature, relative humidity, temperature*relative humidity and use of statin or anti-hypertensive medication.

A) PAT ratio

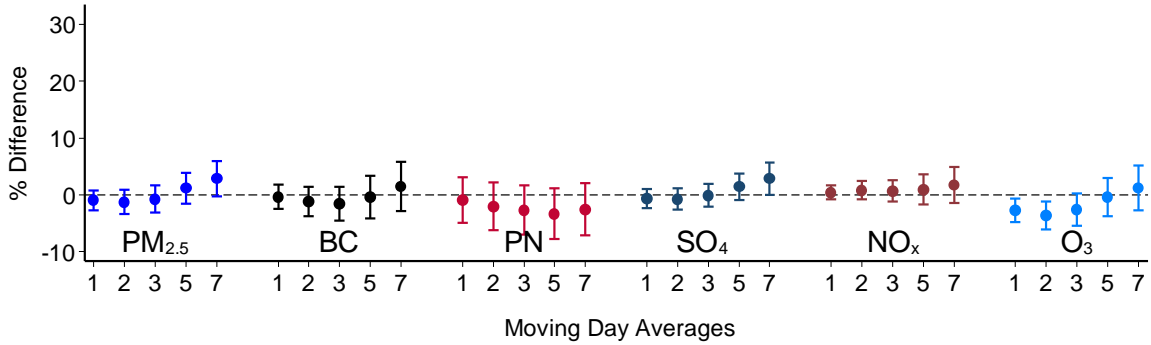


B) Baseline Pulse Amplitude

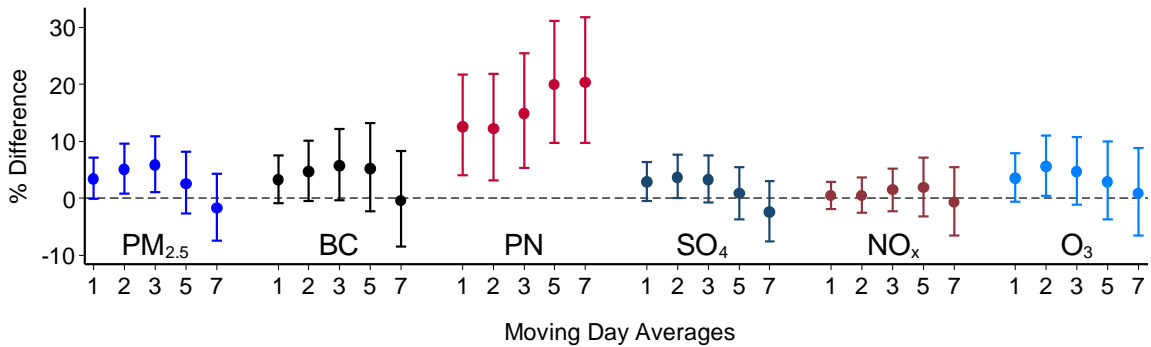


Web Figure 2. Associations of moving day averages in air pollutants with measurements of microvascular function unadjusted for systolic blood pressure in the Framingham Heart Study, Greater Boston Area, Massachusetts, 2003-2008. A) Peripheral arterial tonometry (PAT) ratio. B) Baseline pulse amplitude. Results expressed as percent difference in measurement per increment in air pollution. Unit change in air pollutants: Particles with an aerodynamic diameter $\leq 2.5 \mu\text{m}$ (PM_{2.5}), black carbon (BC) $0.4 \mu\text{g}/\text{m}^3$, particle number (PN) $15000 \#/\text{cm}^3$, sulfate (SO₄) $2 \mu\text{g}/\text{m}^3$, nitrogen oxides (NO_x) 0.01 ppm , and ozone (O₃) 0.01 ppm . Models adjusted for age, age², sex, cohort, presence of diabetes, body mass index, triglyceride level, ratio of total cholesterol to high density lipoprotein, median household income of census tract 2000, years of education, smoking status, day of week, season (sine and cosine of day of year), time trend, temperature, relative humidity, temperature*relative humidity and use of statin or anti-hypertensive medication.

A) PAT ratio

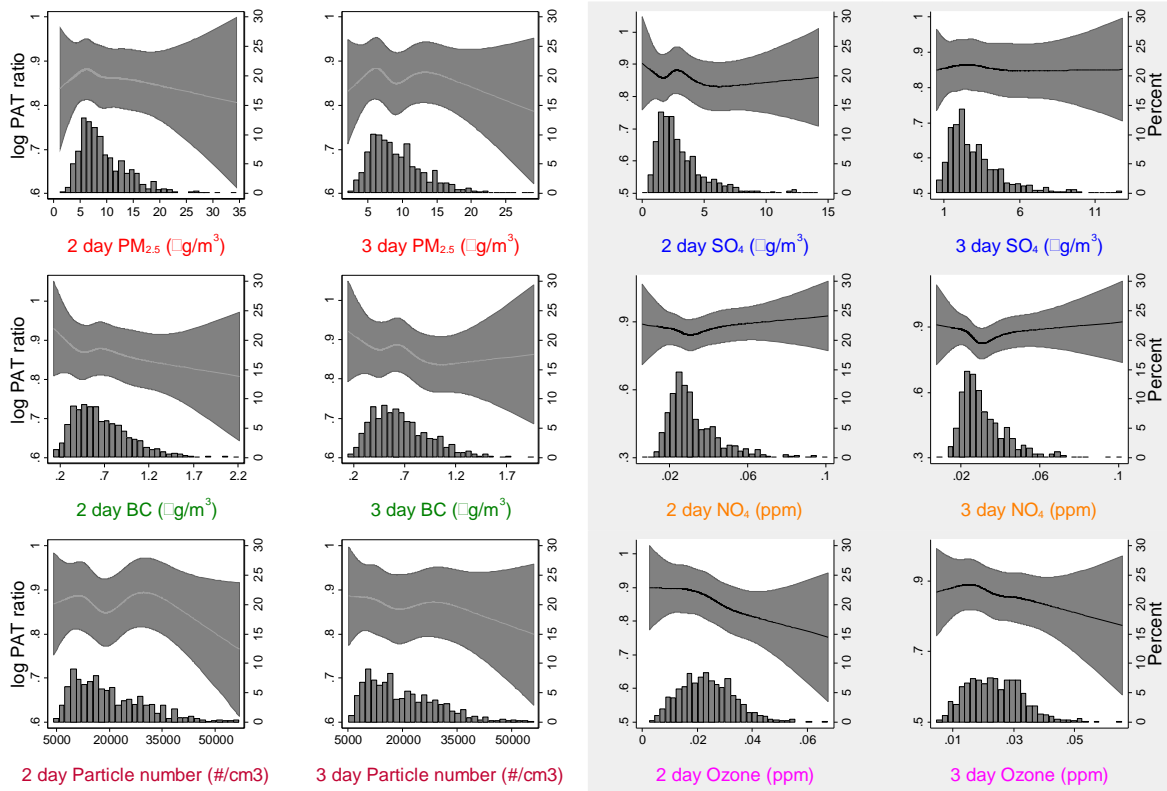


B) Baseline Pulse Amplitude



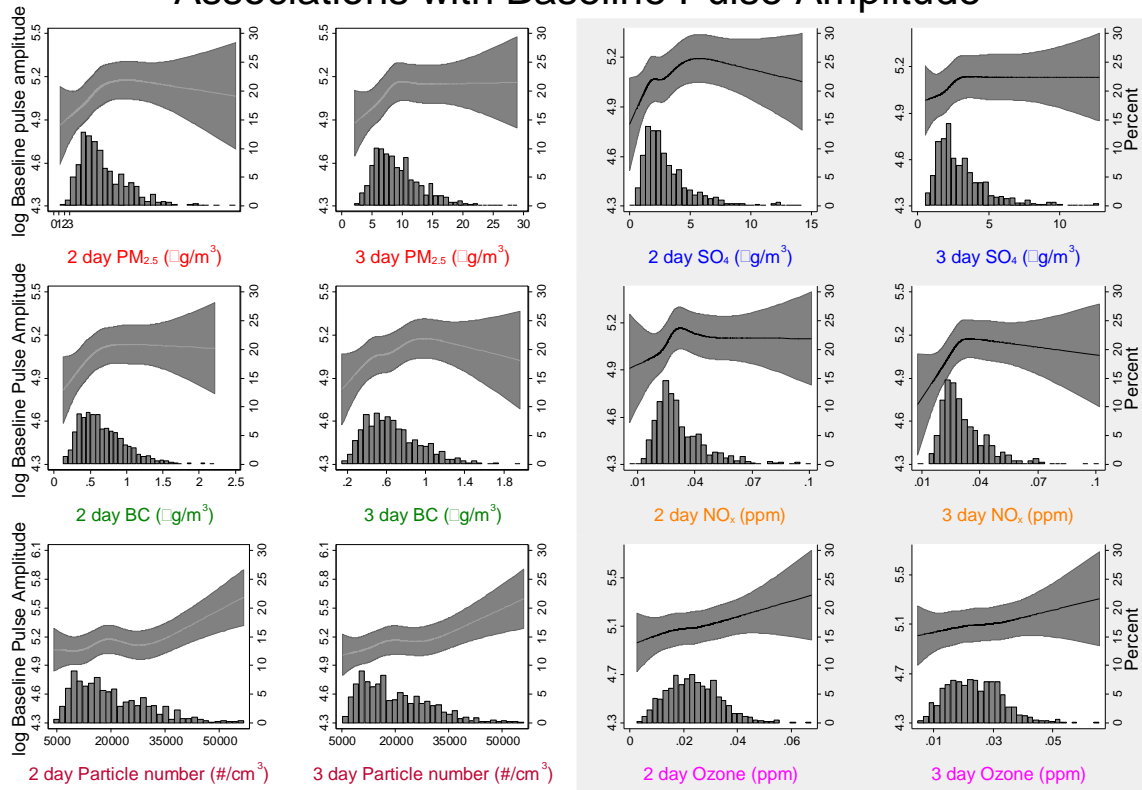
Web Figure 3. Associations of moving day averages in air pollutants with measurements of microvascular function excluding current smokers in the Framingham Heart Study, Greater Boston Area, Massachusetts, 2003-2008. A) Peripheral arterial tonometry (PAT) ratio. B) Baseline pulse amplitude. Results expressed as percent difference in measurement per increment in air pollution. Unit change in air pollutants: Particles with an aerodynamic diameter $\leq 2.5 \mu\text{m}$ (PM_{2.5}), black carbon (BC) $0.4 \mu\text{g}/\text{m}^3$, particle number (PN) $15000 \#/\text{cm}^3$, sulfate (SO₄) $2 \mu\text{g}/\text{m}^3$, nitrogen oxides (NO_x) 0.01 ppm, and ozone (O₃) 0.01 ppm. Models adjusted for age, age², sex, cohort, presence of diabetes, body mass index, triglyceride level, ratio of total cholesterol to high density lipoprotein, mean systolic blood pressure, median household income of census tract 2000, years of education, smoking status, day of week, season (sine and cosine of day of year), time trend, temperature, relative humidity, temperature*relative humidity and use of statin or anti-hypertensive medication.

Associations with PAT ratio



Web Figure 4. Non-linear associations and frequency distributions of 2 day and 3 day moving day averages in air pollutants with measurements of peripheral arterial tonometry (PAT) ratio in the Framingham Heart Study, Greater Boston Area, Massachusetts, 2003-2008. Models adjusted for age, age², sex, cohort, presence of diabetes, body mass index, triglyceride level, ratio of total cholesterol to high density lipoprotein, mean systolic blood pressure, median household income of census tract 2000, years of education, smoking status, day of week, season (sine and cosine of day of year), time trend, temperature, relative humidity, temperature*relative humidity and use of statin or anti-hypertensive medication. Abbreviations: Particles with an aerodynamic diameter ≤2.5 µm (PM_{2.5}), black carbon (BC), particle number (PN), sulfate (SO₄), nitrogen oxides (NO_x), and ozone (O₃).

Associations with Baseline Pulse Amplitude



Web Figure 5. Non-linear associations and frequency distributions of 2 day and 3 day moving day averages in air pollutants with measurements of baseline pulse amplitude in the Framingham Heart Study, Greater Boston Area, Massachusetts, 2003-2008. Models adjusted for age, age², sex, cohort, presence of diabetes, body mass index, triglyceride level, ratio of total cholesterol to high density lipoprotein, mean systolic blood pressure, median household income of census tract 2000, years of education, smoking status, day of week, season (sine and cosine of day of year), time trend, temperature, relative humidity, temperature*relative humidity and use of statin or anti-hypertensive medication. Abbreviations: Particles with an aerodynamic diameter ≤2.5 µm (PM_{2.5}), black carbon (BC), particle number (PN), sulfate (SO₄), nitrogen oxides (NO_x), and ozone (O₃).