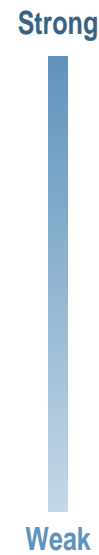
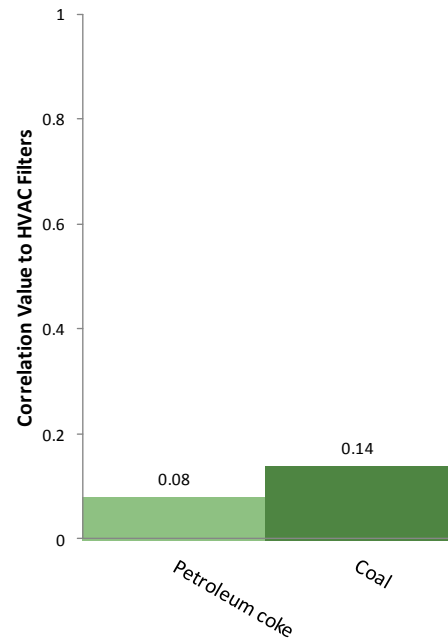


Petroleum Coke and Coal Are Not Correlated with HVAC Filters

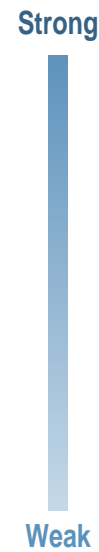
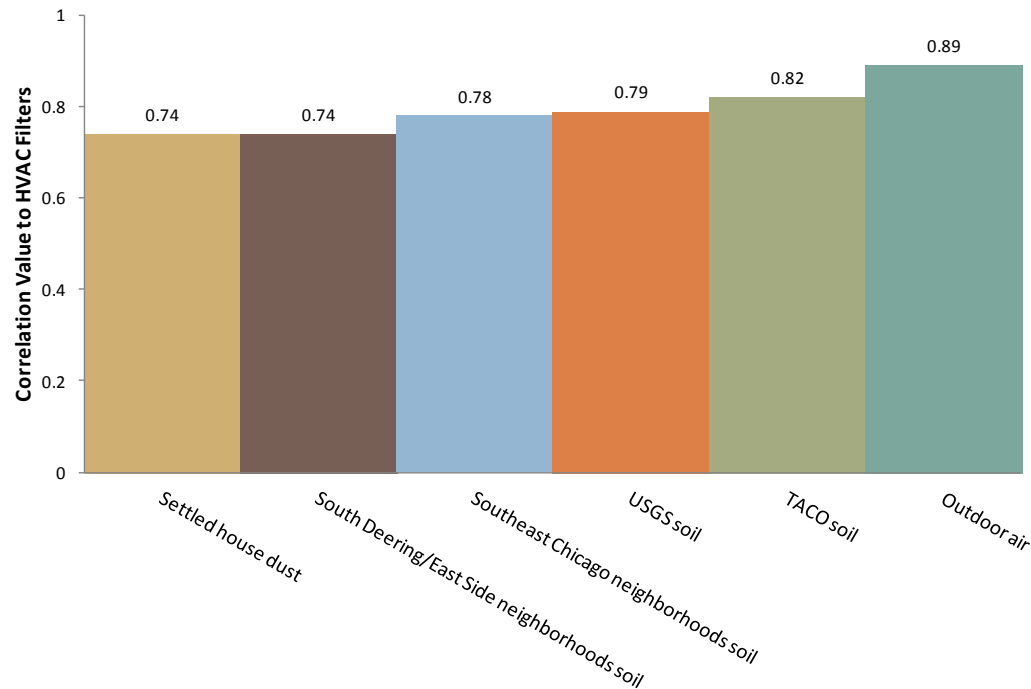


PAHs were measured in heating, ventilating, and air-conditioning (HVAC) filters from two homes in the South Deering or East Side neighborhoods. Those levels were compared to PAHs in environmental media that could reasonably be expected to contribute to material captured by residential HVAC filters. The proportions of 16 PAHs in the HVAC air filter samples were compared to the corresponding values in petroleum coke and coal from the KCBX terminals. PAH levels in the HVAC filters were also compared to other media not known to be impacted by petroleum coke or coal. These other media include air, settled dust, and soil from urban areas in Chicago and other parts of the United States.

Correlations are used to show agreement between two groups of information. Weak correlations are close to 0, meaning that the two variables are not related to each other, whereas the strongest positive correlation would be 1. Correlations can go to -1 for relationships that have exactly opposite associations. For simplicity the charts only show the range from 0 to 1.

PAHs in the HVAC air filters are **not associated** with petroleum coke or coal based on the low correlations of 0.08 and 0.13 in the top bar chart.

Other Sources Are Highly Correlated with HVAC Filters



PAHs in the HVAC filter samples were **strongly associated** (range=0.70-0.89) with PAHs in outdoor air in Chicago, settled house dust in urban areas of the United States, the Illinois TACO program, and soil samples collected in other locations in and around Chicago. These other media are not known to be impacted by petroleum coke or coal.