Table S1: Associations of Temperature at Home Address and FEV ${ }_{1}$ by Asthma and COPD

|  |  | Difference in $\mathrm{FEV}_{1}$, mL (95\% CI) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Temperature Average | Unit | $\begin{gathered} \text { Asthma } \\ (n=2,112 \text { obs) } \end{gathered}$ | No Asthma ( $n=7,038$ obs) | $\begin{gathered} \text { COPD } \\ (n=426 \text { obs }) \end{gathered}$ | $\begin{gathered} \text { No COPD } \\ (n=8,724 \text { obs }) \end{gathered}$ |
| 1-Day | $5^{\circ} \mathrm{C}$ | -16.2 (-28.9, -3.5) | -16.9 (-27.1, -6.7) | -30.3 (-52.8, -7.8) | -15.9 (-25.8, -6.0) |
| 2-Day | $5^{\circ} \mathrm{C}$ | -15.7 (-29.4, -1.9) | -15.0 (-26.4, -3.7) | -28.7 (-52.4, -5.1) | -14.3 (-25.4, -3.2) |
| 7-Day | $5^{\circ} \mathrm{C}$ | -21.1 (-37.5, -4.8) | -19.5 (-33.4, -5.5) | -27.0 (-53.7, -0.3) | -19.5 (-33.2, -5.7) |

Associations ( $95 \% \mathrm{CI}$ ) are from linear mixed models with an interaction term for asthma or COPD, adjusted for participant sex, age, age ${ }^{2}$, height, weight, smoking status, packyears, household smoking, asthma, COPD (in models with interaction term for COPD), education, census tract median household income, season (as sine and cosine terms of the date), prior-day regional relative humidity and $\mathrm{PM}_{2.5}$ level, exam 8, cohort. The $p$ value for the interaction term was $>0.1$ for all 6 models.

