

Online Supplement

Original Research

Association of Short-Term Pollen Exposure With Lung Function in COPD Patients

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Supplemental Table 1: The association of total pollen on FVC over lag day 1, 3, 7 and a cumulative 3-day lag.

Exposure	Lag	Difference (ml, 95% CI)
Total Pollen	Day 1	-1.3 (-9.7, 7.1)
Total Pollen	Day 3	-7.9 (-15.9, 0.1)
Total Pollen	Day 7	-1.5 (-4.6, 1.6)
Total Pollen	Days 1-3 Cumulative	-1.9 (-11, 7.1)

Supplemental Table 2: The association of pollen types on FEV₁ over lag day 1, 3, 7 and a cumulative 3-day lag.

Exposure	Lag	Difference (ml, 95% CI)
Grass	Day 1	0.3 (-1.5, 2.2)
Grass	Day 3	0.9 (-0.9, 2.8)
Grass	Day 7	0.5 (-0.3, 1.3)
Other	Day 1	0.2 (-1.6, 2.0)
Other	Day 3	-0.5 (-2.4, 2.5)
Other	Day 7	0.1 (-0.6, 0.9)
Tree	Day 1	-0.8 (-5.1, 3.5)
Tree	Day 3	-5.4 (-9.5, 1.3)
Tree	Day 7	-1.0 (-2.6, 0.6)

Supplemental Table 3: Sensitivity analyses on the association between total pollen on FEV₁ on a cumulative 3-day lag.

Confounder	Lag	Difference (ml, 95% CI)
Humidity	Days 1-3 Cumulative	-5.3 (-10.1, -0.6)
NO ₂	Days 1-3 Cumulative	-4.8 (-9.6, -0.1)
O ₃	Days 1-3 Cumulative	-4.9 (-9.5, -0.2)
PM _{2.5}	Days 1-3 Cumulative	-4.5 (-9.2, 0.2)
No Covariates	Days 1-3 Cumulative	-5.0 (-9.3, -0.7)
Sun-Tues Removed	Days 1-3 Cumulative	-4.6 (-10.6, 1.3)

Note: Humidity, NO₂, O₃, PM_{2.5} were added individually to the pre-existing model to test for confounding. No covariates, a model which only looked at the relationship between pollen and FEV₁ without controlling for covariates. Sun-Tues Removed, excluded cumulative weekend values.