

Appendix C: Additional Results

This section provides additional results as described in the main text.

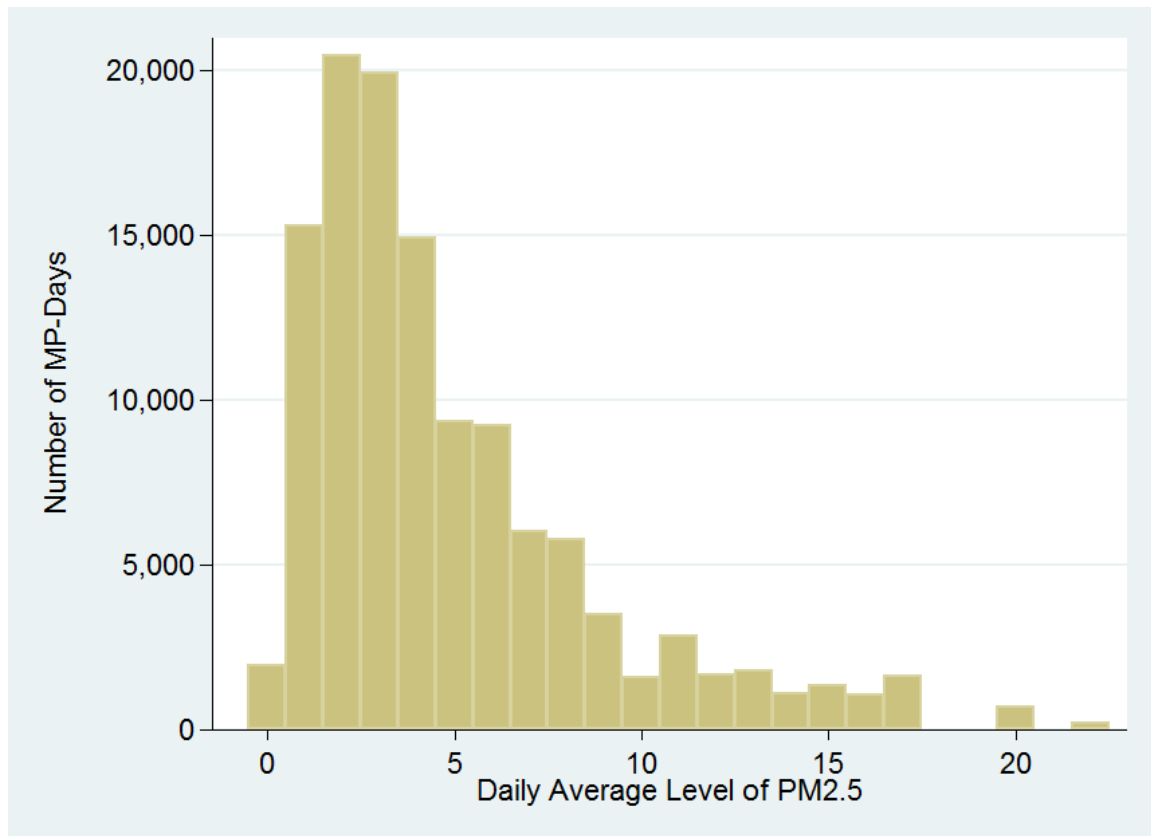


Figure C1: Distribution of Canadian MP-Days at Distinct Daily Average PM_{2.5} Levels

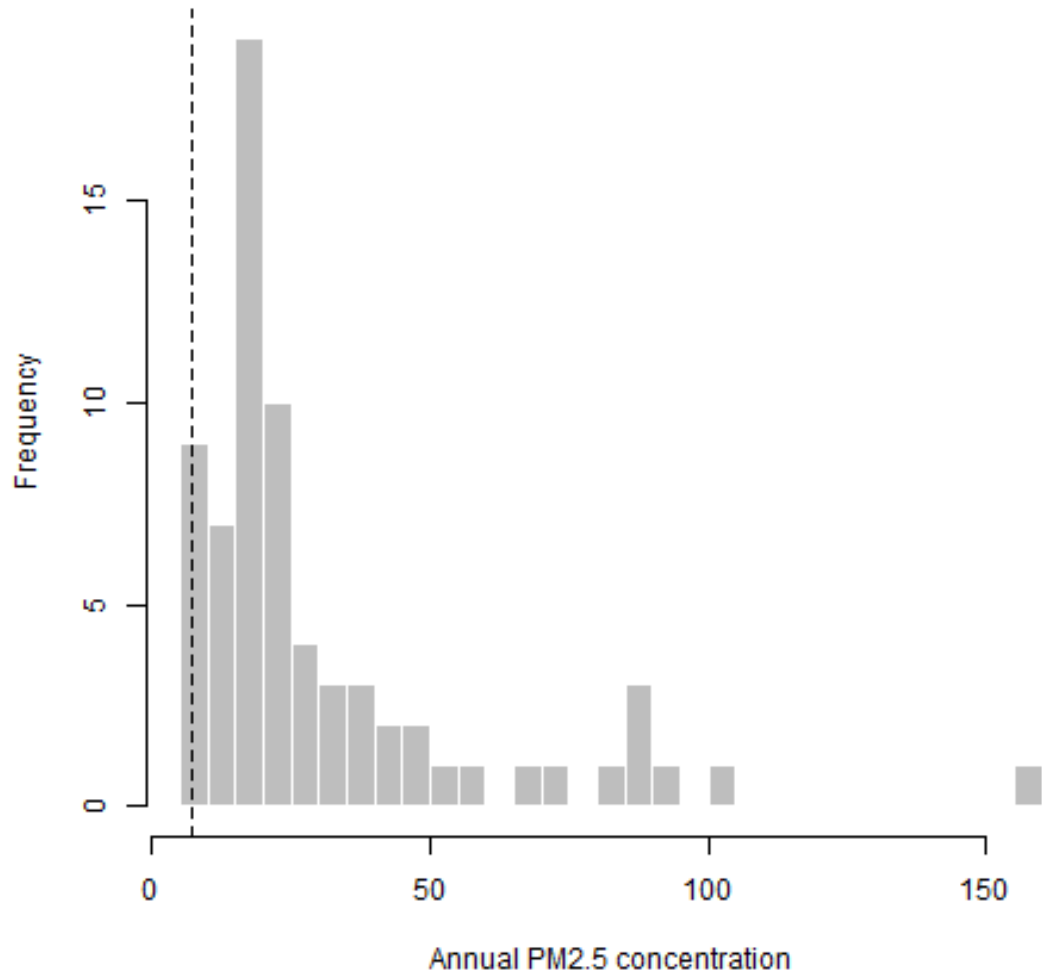


Figure C2: Distribution of National Capitals by Average PM_{2.5} Levels

This figure plots the mean PM_{2.5} concentrations for international capital cities. Ottawa is marked with the dashed line. Data is from the World Health Organization Ambient Air Pollution database, available at www.who.int.

Table C1: Effect of Elevated Particulate Matter Pollution Concentrations on the Speech Complexity of Canadian Members of Parliament, Alternative Specifications for Pollution Exposure

	<i>Flesch-Kincaid Index</i>			$\log(\text{Flesch-Kincaid Index})$		
<i>Panel A: Linear, Continuous Pollution Exposure</i>						
PM _{2.5}	-0.017 (0.007)	-0.010 (0.009)	-0.009 (0.009)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
<i>Panel B: Flexibly Binned Pollution Exposure</i>						
I(5 ≤ PM _{2.5} < 10)	-0.112 (0.055)	-0.079 (0.061)	-0.079 (0.061)	-0.013 (0.005)	-0.011 (0.005)	-0.011 (0.005)
I(10 ≤ PM _{2.5} < 15)	0.021 (0.095)	0.062 (0.105)	0.064 (0.105)	0.009 (0.009)	0.008 (0.010)	0.008 (0.010)
I(PM _{2.5} ≥ 15)	-0.432 (0.152)	-0.333 (0.172)	-0.324 (0.172)	-0.038 (0.018)	-0.036 (0.021)	-0.035 (0.021)
Weather controls		✓	✓		✓	✓
Day-of-week fixed effects		✓	✓		✓	✓
Month fixed effects		✓	✓		✓	✓
MP fixed effects			✓			✓
Number of MPs	488	488	488	480	480	480
Observations	119,225	119,225	119,225	110,913	110,913	110,913

Values in parentheses are standard errors clustered on individual MPs.

This table replicates the results from Table 2 using alternative specifications of the econometric model. The Panel A includes pollution exposure as a linear and continuous covariate. The Panel B includes dummy variables for two additional pollution exposure bins. The results corroborate the conclusions in the main text and Figure 2.

Table C2: Weather Coefficients for our Preferred Specification: Column (3) from Table 2

Temperature (°C)	0.004 (0.004)
Temperature ² (°C) [x10 ²]	0.008 (0.028)
Rain (mm)	-0.007 (0.004)
Rain ² (mm) [x10 ²]	0.008 (0.006)

Values in parentheses are standard errors clustered by MP.

Temperature refers to the mean daily temperature. Rain is the cumulative daily rainfall. The coefficients and standard errors for both temperature squared and rain squared are scaled by 100.