Supplemental Materials: The Burden of COPD Morbidity Attributable to the Interaction between Ambient Air Pollution and Temperature in Chengdu, China

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Table S1. GCV score in different cut-off points of temperature ranging from 5th and 95th to 25th and 75th percentiles in interactive model.

Model	GCV scores				
	Tem_P5	Tem_P10	Tem_P15	Tem_P20	Tem_P25
$PM_{2.5}$ (lag 06)	3.180382	3.209705	3.129714	3.128002	**3.126682**
PM_{10} (lag 05)	3.194187	3.22229	3.145043	**3.143943**	3.153561
SO_2 (lag 05)	3.27661	3.288076	3.174095	**3.167676**	3.189079
NO_2 (lag 05)	3.262214	3.278444	3.185947	**3.164945**	3.186649
CO (lag 05)	3.200159	3.214341	3.112365	**3.108569**	3.118869

The cut-off points are 5th and 95th for Tem_P5, 10th and 90th for Tem_P10, 15th and 85th for Tem_P15, 20th and 80th for Tem_P20, 25th and 75th percentiles for Tem_P25. Bolded figures are the lowest GCV scores in each pollutant model, when using different cut-off points.

Table S2. Spearman's correlations between the different pollutants and meteorological variables.

	$PM_{2.5}$	SO_2	PM_{10}	CO	NO_2	O_3	Tem	RH
$PM_{2.5}$	1	0.62*	0.97*	0.79*	0.79*	-0.21*	-0.42*	-0.04
SO_2		1	0.66*	0.51*	0.65*	-0.07	-0.11*	-0.16*
PM_{10}			1	0.75*	0.81*	-0.18*	-0.40*	-0.11
CO				1	0.71*	-0.31*	-0.44*	0.07*
NO_2					1	-0.11	-0.23*	-0.08
O_3						1	0.74*	-0.52*
Tem							1	-0.1
RH								1

* $p < 0.05$; Tem: temperature; RH: relative humidity.

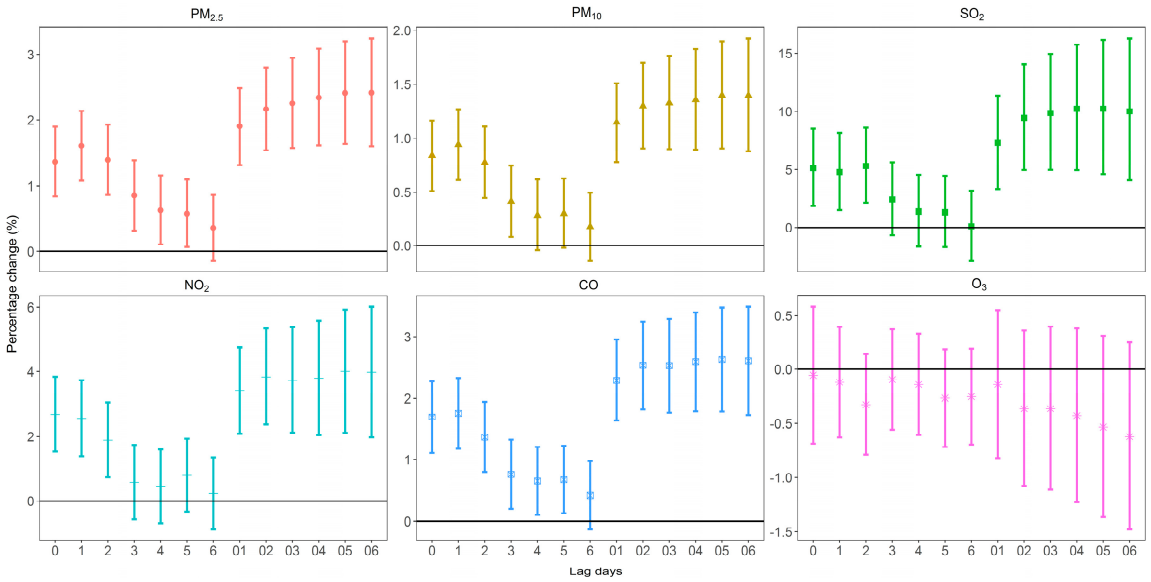

Figure S1. Percentage changes with 95% confidence interval in daily COPD admissions associated with air pollutants concentrations with different lag days in single-pollutant models. The percentage change in daily COPD admissions per 10μg/m³ increase in air pollutants, except for CO per 0.1mg/m³.

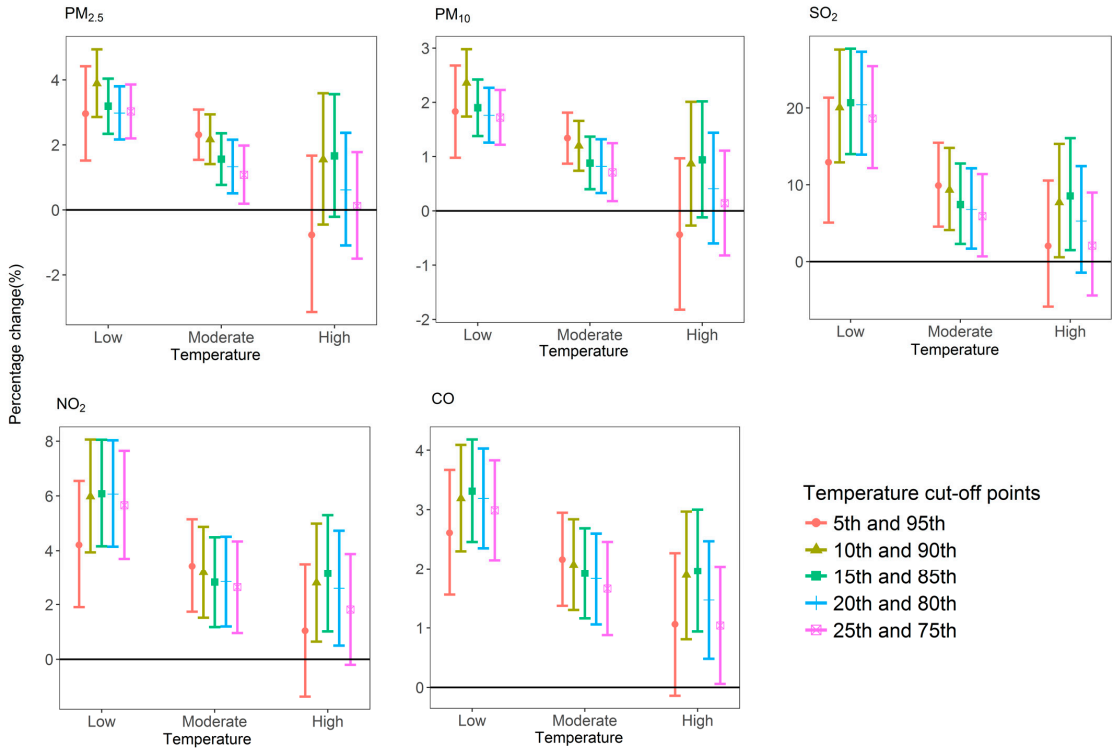

Figure S2. Associations between daily air pollutant concentrations and COPD HAs stratified by varying percentiles of temperature (lag 03) cut-off points.

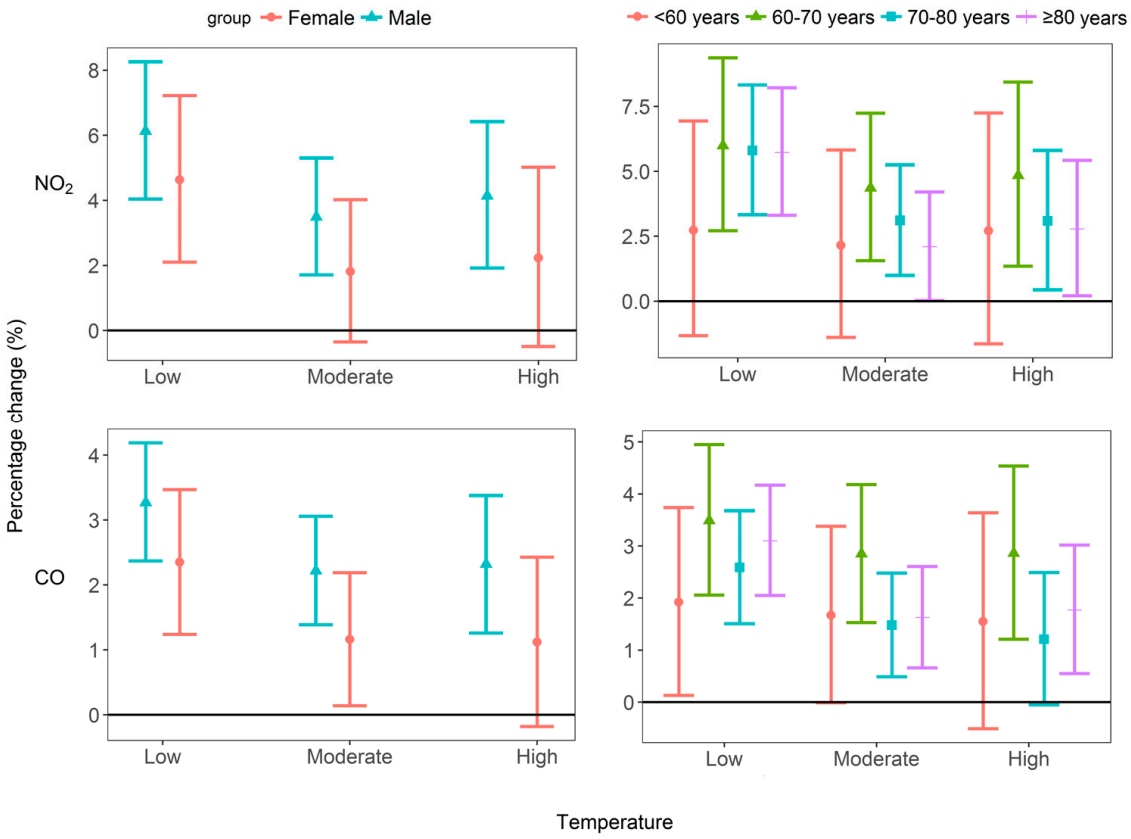

Figure S3. Associations between CO/NO_2 concentrations and daily COPD HAs in low, moderate and high temperature strata by age and gender.