

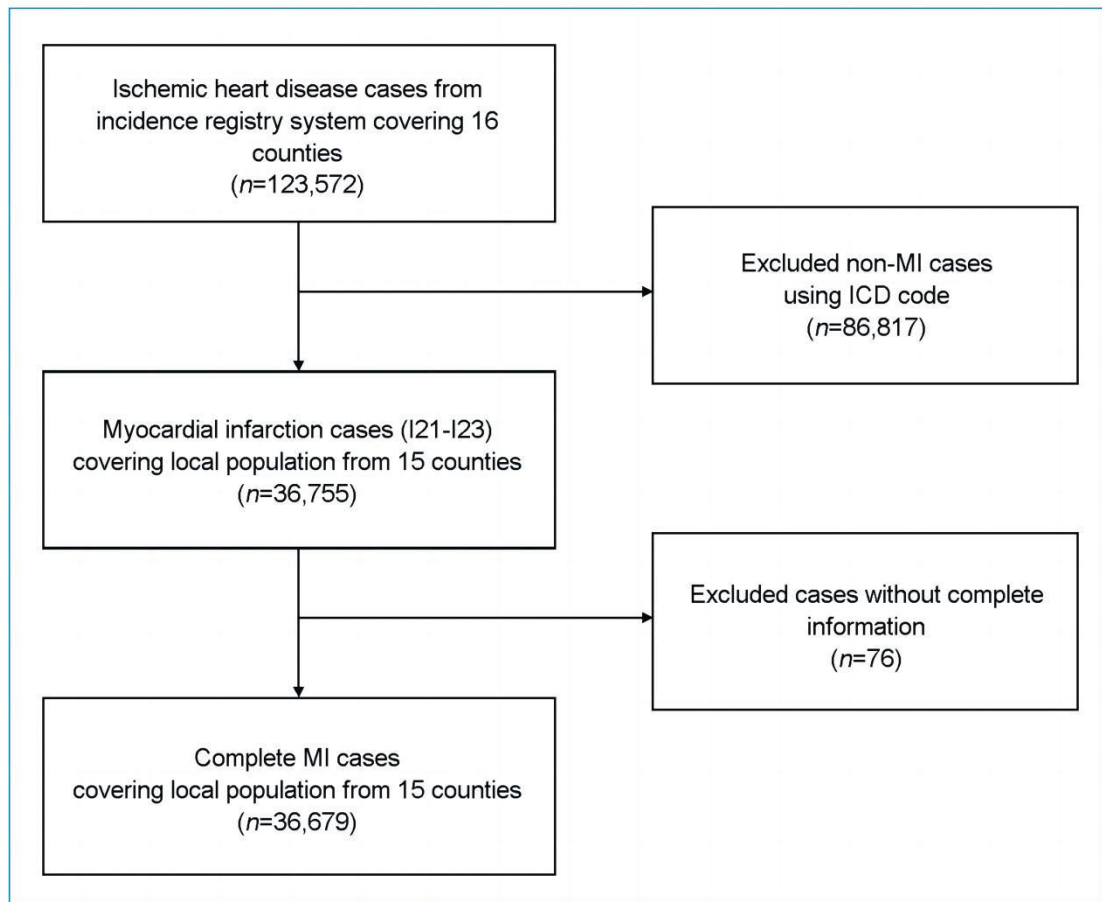


Figure S1. Flow chart of myocardial infarction cases selection

MI: myocardial infarction; ICD: International Classification of Diseases

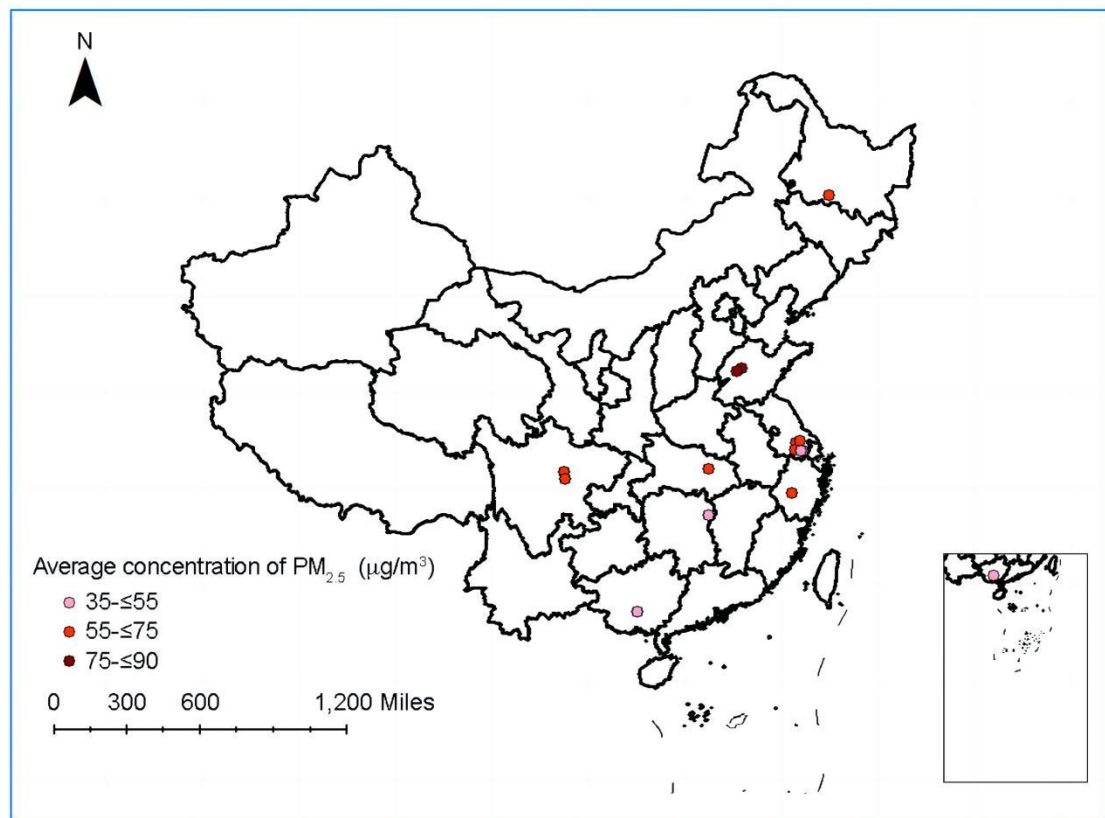


Figure S2. Map of the study sites (the map was created in ArcGIS 10.2)

PM_{2.5}: fine particulate matter

Table S1. Summary statistics for daily PM_{2.5} exposure of 15 counties during the study period (µg/m³)

County/city	Mean	Standard deviation	Minimum	P ₂₅	P ₇₅	Maximum
Daoli/Harbin	58.7	57.1	4.0	23.0	74.2	567.0
Binhu/Wuxi	58.0	37.1	4.0	33.0	73.0	376.0
Jiangyin/Wuxi	60.9	36.6	7.9	35.2	76.8	356.0
Gusu/Suzhou	50.8	29.8	4.3	28.7	65.7	233.8
Zhangjiagang/Suzhou	58.1	38.9	5.5	31.3	73.0	297.2
Wucheng/Jinhua	58.0	36.5	3.0	34.0	72.5	475.5
Yuhuan/Taizhou	36.1	26.1	2.0	19.3	45.0	304.9
Licheng/Jinan	81.5	49.0	8.5	48.7	99.0	401.3
Changqing/Jinan	72.8	46.6	8.9	41.9	91.0	377.0
Xiaonan/Xiaogan	55.9	35.8	6.0	31.4	70.3	254.8
Liuyang/Changsha	51.9	38.0	3.0	26.0	64.0	300.4
Qingxiu/Nanning	38.3	26.5	2.0	20.0	50.0	338.0
Qingyang/Chengdu	72.5	49.3	9.5	37.6	93.4	398.0
Pidu/Chengdu	76.5	48.1	12.0	39.0	103.5	248.0
Pengzhou/Chengdu	64.1	40.8	7.0	34.0	82.0	261.0

PM_{2.5}: fine particulate matter; P: percentile.

Sensitivity analysis

To examine the robustness of the main model, we conducted several sensitivity analyses based on the main model: (1) we fitted two-pollutant model to control the potential effect of O₃; (2) we fitted two-pollutant models to control the potential effect of NO₂; (3) we set 2 *dfs* for temperature and relative humidity in the spline in the main model; (4) we changed the *dfs* for temperature and relative humidity to 6 and 3, respectively; (5) we treated temperature and relative humidity as linear terms in the model; (6) we adopted for each MI case, that is, 14 and 7 days before the event occurred as well as 7 and 14 days after the event occurred. The latter two analyses were also used to examine the efficiency of different reference selection strategies. Table S2 presented the results of sensitive analysis. The survival, dlnm packages in R version 4.1.2 were used.

Table S2. Results of the sensitivity analysis from five different models

Models	Percentage change (95% CI)
Main model	0.98% (0.40%, 1.57%)
Model 1 ^a	0.88% (0.31%, 1.45%)
Model 2 ^b	0.82% (0.18%, 1.47%)
Model 3 ^c	0.97% (0.39%, 1.56%)
Model 4 ^d	1.04% (0.45%, 1.63%)
Model 5 ^e	0.94% (0.36%, 1.53%)
Model 6 ^f	0.93% (0.38%, 1.48%)

Model 1^a: Main model+O₃; Model 2^b: Main model+NO₂; Model 3^c: *df*=2 for temperature and relative humidity in *ns* function; Model 4^d: *df*=6 for temperature and *df*=3 for relative humidity in *ns* function; Model 5^e: Temperature and relative humidity were treated as linear term in the model; Model 6^f: Selecting 14, 7 days before and 7, 14 days after the day of incidence as control days.

95% CI: 95% confidence interval; MI: myocardial infarction; *df*: degrees of freedom; *ns*: natural cubic spline.