

Supporting Information

Reducing indoor levels of ‘outdoor PM_{2.5}’ in urban China: impact on mortalities

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There are 8 figures, 8 tables and 47 pages in total in the SI.

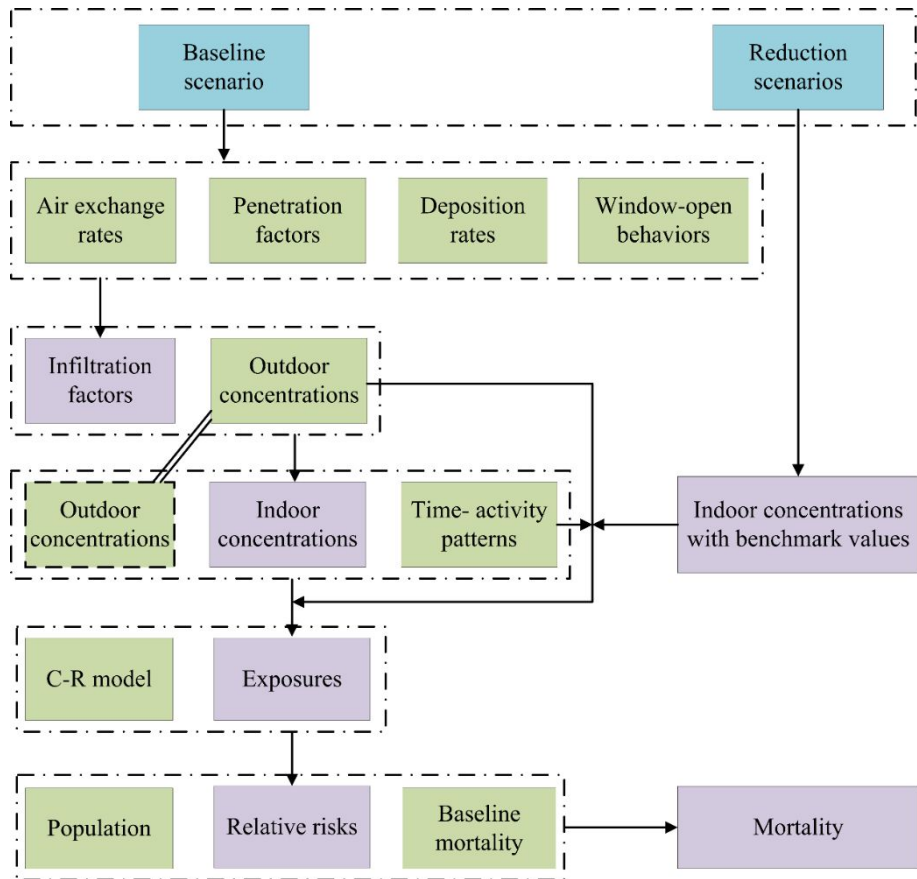
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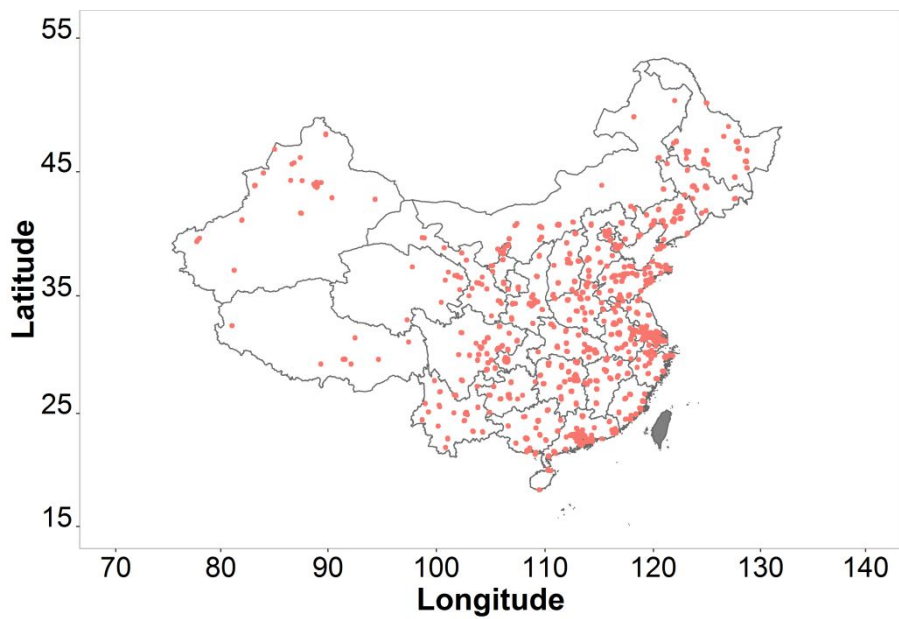
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79 **Figure S1. Overview of methodology used in this study**

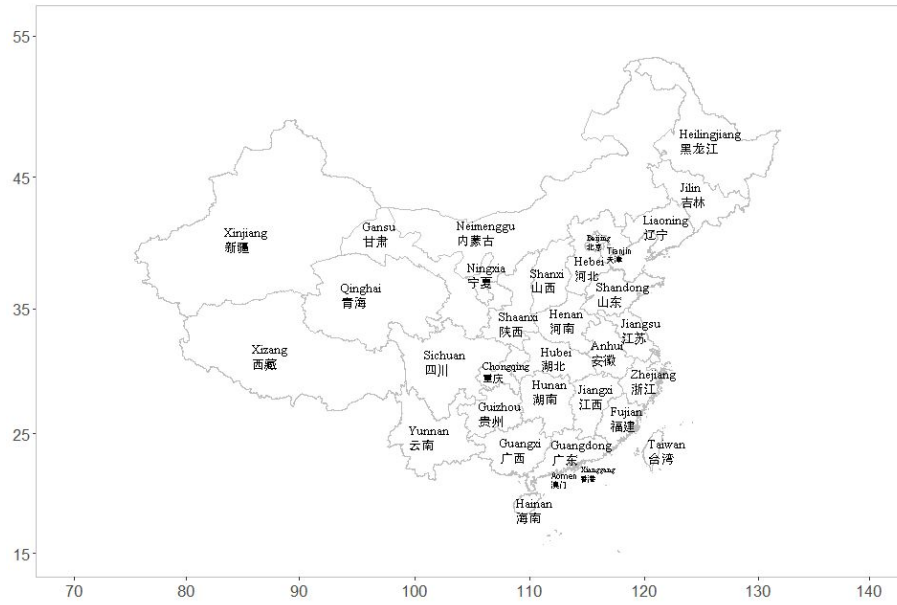
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82 **Figure S2. Public monitoring stations for PM_{2.5} in China**

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85 **Figure S3. Map of mainland China**

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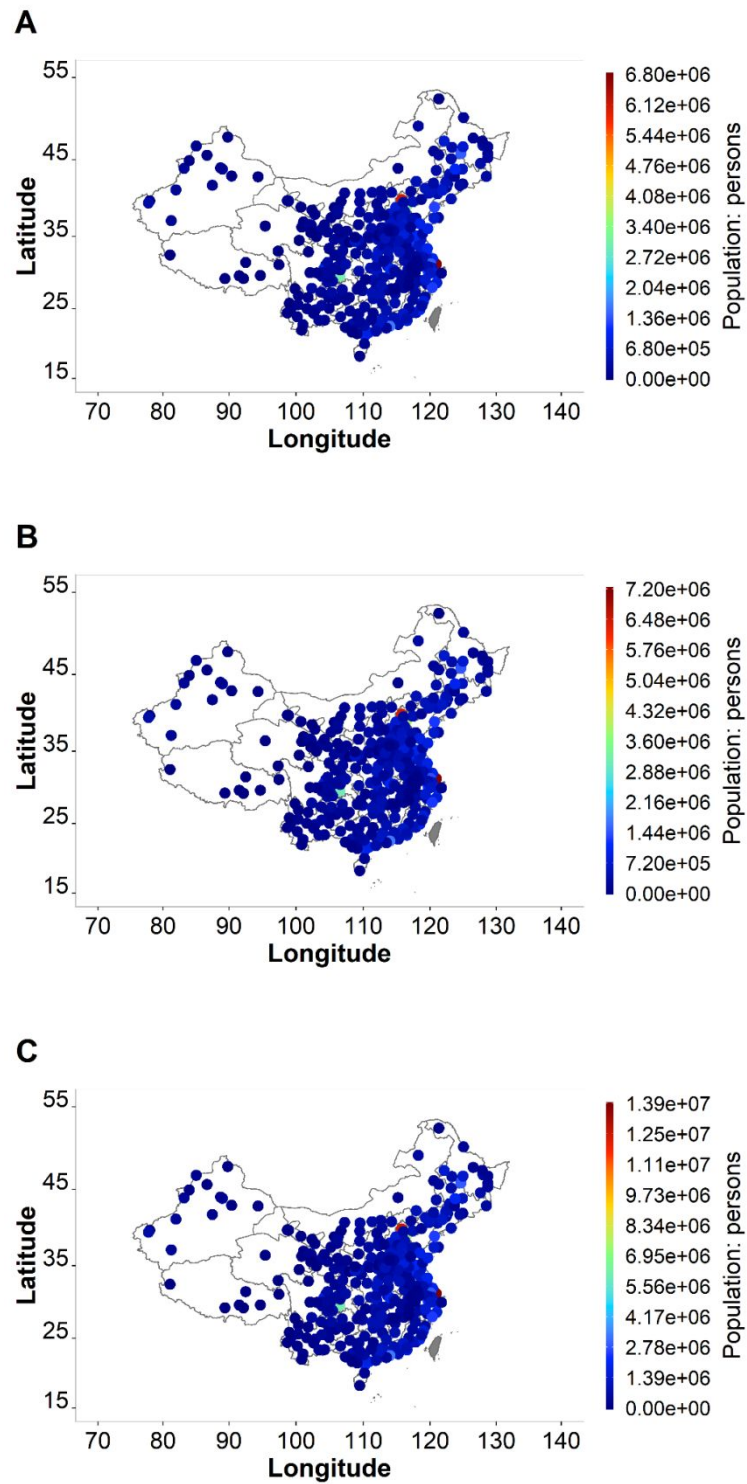


Figure S4. Distribution of population ≥ 25 years of age across urban areas in mainland China: (a) female, (b) male and (c) both sexes.

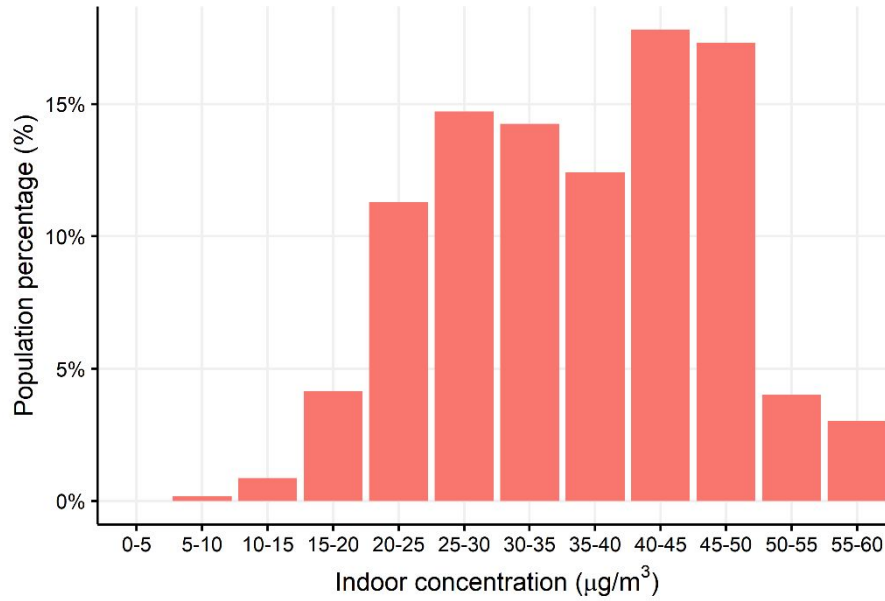
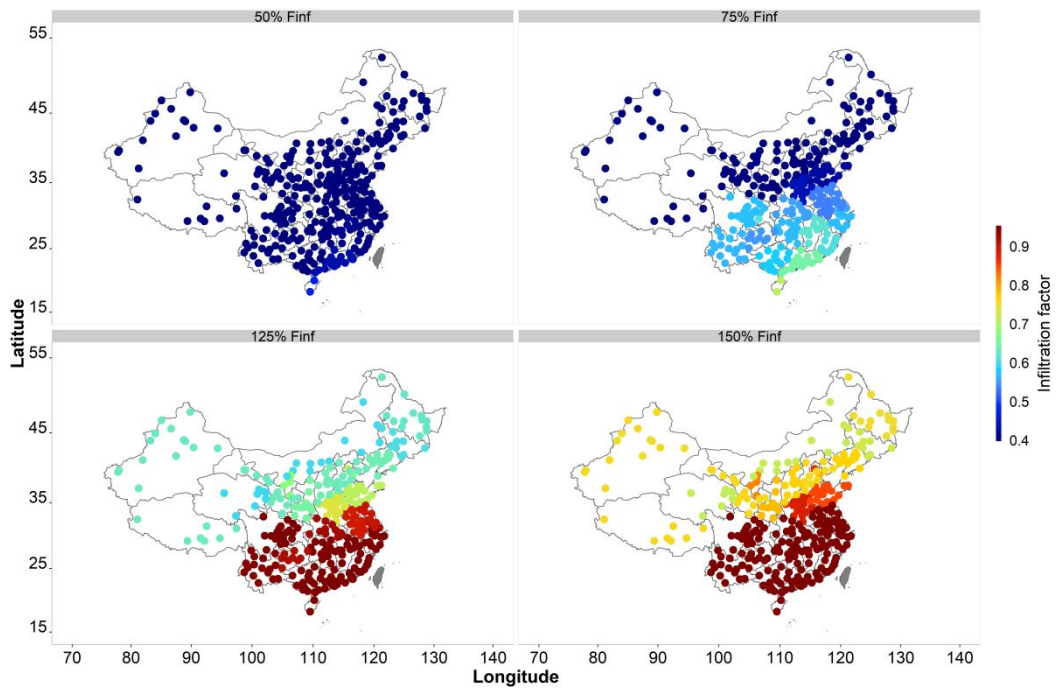
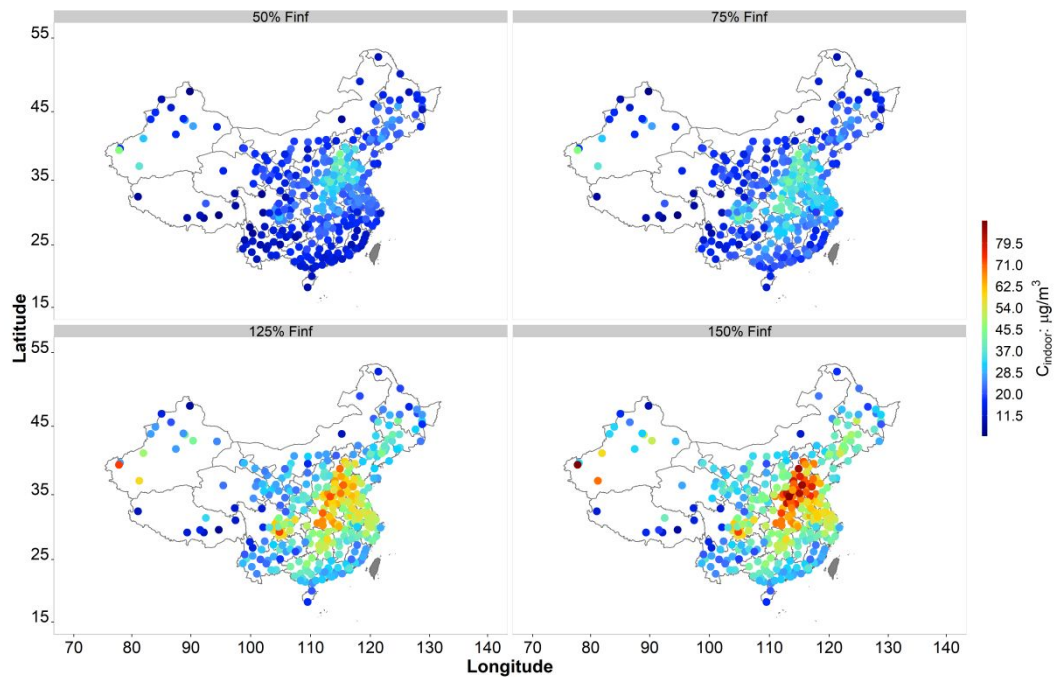


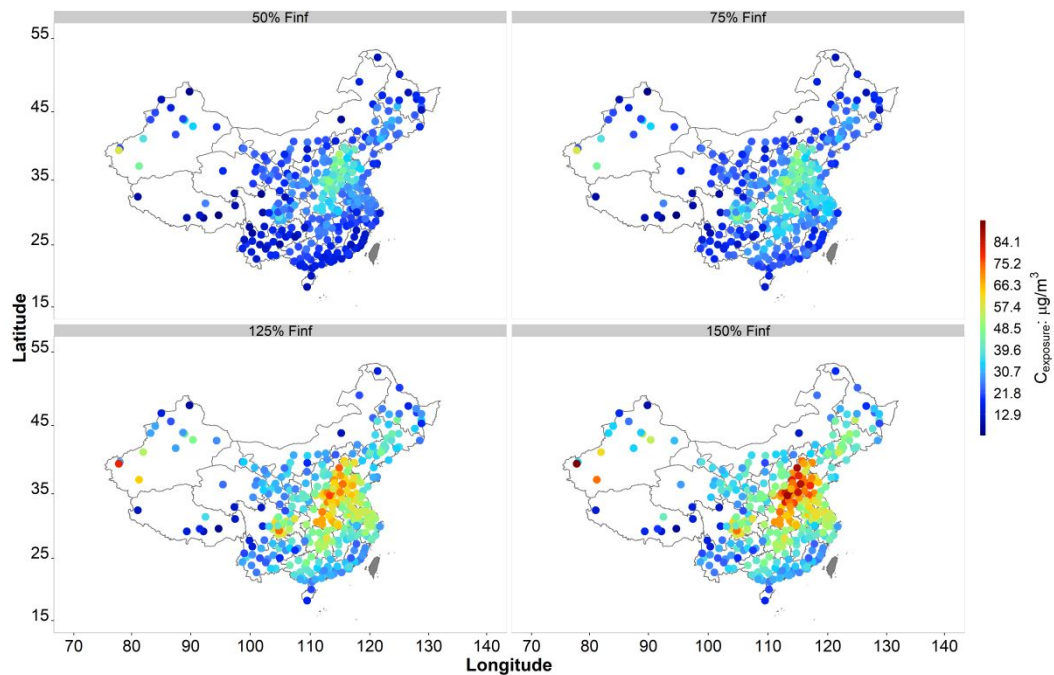
Figure S5. Percentage of the urban population ≥ 25 years of age with calculated residential indoor levels of outdoor-origin $\text{PM}_{2.5}$ in different concentration bins in the baseline scenario.



(A)



(B)



(C)

Figure S6. Distribution of exposure parameters across urban China based on different values of the province-specific population-average F_{inf} within the range of 0.40 to 0.95 for: (A) $PM_{2.5}$ infiltration factors (F_{inf}), (B) annual mean indoor concentration (C_{in}) and (C) $PM_{2.5}$ annual mean exposure concentration (C_{exp}).

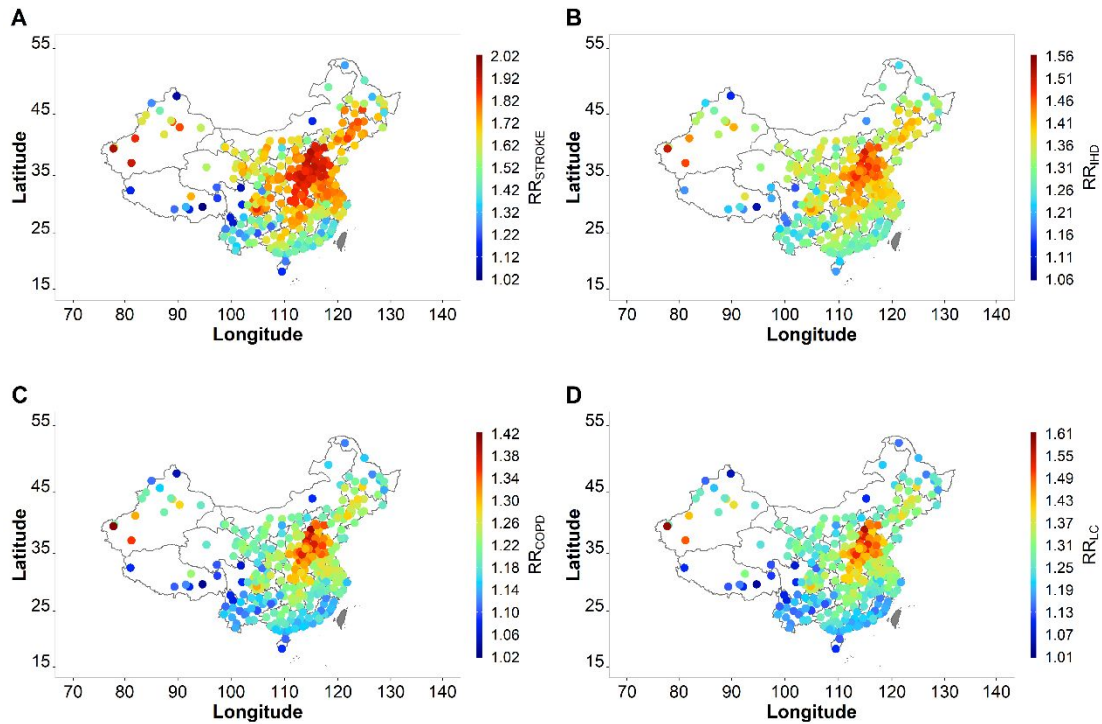


Figure S7. Distributions of mean relative risks (RRs) for (A) stroke, (B) ischemic heart disease (IHD), (C) chronic obstructive pulmonary disease (COPD), and (D) lung cancer (LC) across urban areas in China in 2015. The reference (for RR=1) is under the scenario where annual mean outdoor PM_{2.5} concentrations are lower than the counter-factual concentration.

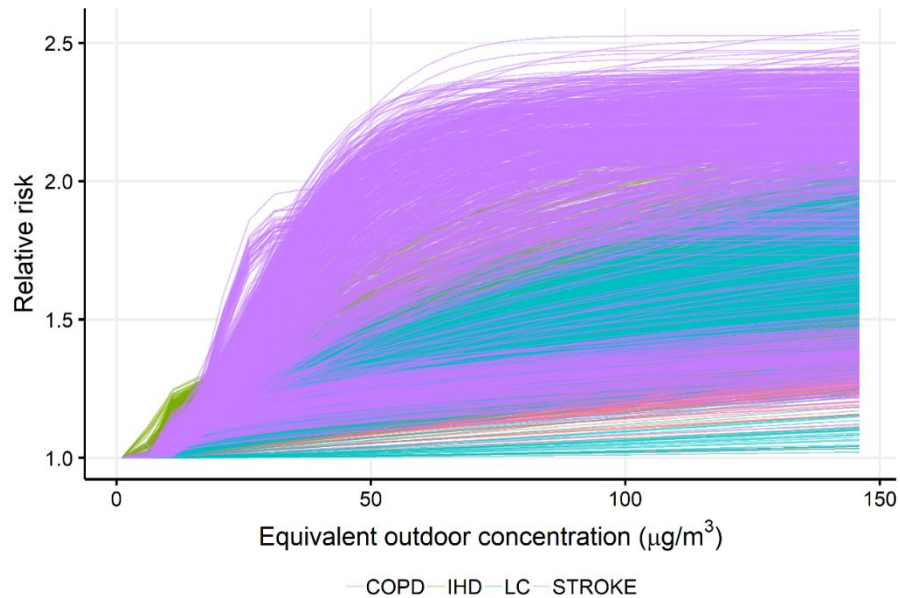


Figure S8. The relationship between relative risk and outdoor PM_{2.5} concentrations for COPD, IHD, LC and stroke

118 **Tables**

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120 **Table S1. Results for provincial exposure parameters under the baseline scenario. In the case of C_{out}^* , C_{in}^* , and C_{exp}^* , the listed values are averages for the major cities**
 121 **(rural areas excluded) within the identified province.**

Province	C_{out} ($\mu\text{g}/\text{m}^3$)	$t_{open}^\dagger$	$t_{closed}^\dagger$	F_{inf}	C_{in} ($\mu\text{g}/\text{m}^3$)	$t_{out}^\dagger$	$t_{in}^\dagger$	C_{exp} ($\mu\text{g}/\text{m}^3$)	$Fr_{indoor}^\ddagger$	f_{exp}
Beijing	83.5	0.32	0.68	0.58	48.2	0.13	0.87	52.8	0.80	0.63
Tianjin	72.0	0.23	0.77	0.53	38.0	0.13	0.88	42.8	0.78	0.60
Hebei	79.7	0.19	0.81	0.51	40.3	0.11	0.89	44.6	0.80	0.56
Shanxi	56.9	0.20	0.80	0.51	29.1	0.12	0.88	32.4	0.79	0.57
Inner Mongolia	41.2	0.14	0.86	0.48	19.7	0.13	0.88	22.7	0.76	0.55
Liaoning	56.5	0.20	0.80	0.51	28.9	0.10	0.90	31.6	0.82	0.56
Jilin	56.9	0.15	0.85	0.48	27.5	0.09	0.91	30.2	0.83	0.53
Heilongjiang	40.0	0.18	0.82	0.50	20.0	0.09	0.91	21.8	0.84	0.55
Shanghai	55.2	0.34	0.66	0.74	40.7	0.11	0.89	42.3	0.86	0.77
Jiangsu	59.3	0.29	0.71	0.72	42.7	0.10	0.90	44.3	0.87	0.75
Zhejiang	47.1	0.41	0.59	0.76	35.7	0.11	0.89	37.0	0.86	0.79
Anhui	55.5	0.27	0.73	0.71	39.5	0.11	0.89	41.3	0.85	0.74
Fujian	28.4	0.56	0.44	0.81	23.0	0.12	0.88	23.6	0.86	0.83
Jiangxi	42.5	0.60	0.40	0.82	34.9	0.14	0.86	36.0	0.84	0.85
Shandong	74.5	0.30	0.70	0.57	42.2	0.09	0.91	45.1	0.85	0.61
Henan	82.2	0.34	0.66	0.59	48.4	0.17	0.83	54.2	0.74	0.66
Hubei	66.6	0.35	0.65	0.74	49.2	0.15	0.85	51.8	0.81	0.78
Hunan	51.9	0.41	0.59	0.76	39.4	0.12	0.88	40.9	0.85	0.79
Guangdong	32.9	0.73	0.27	0.87	28.5	0.14	0.86	29.1	0.84	0.89

Guangxi	40.3	0.45	0.55	0.77	31.1	0.18	0.82	32.8	0.78	0.81
Hainan	19.8	0.96	0.04	0.94	18.7	0.16	0.84	18.9	0.83	0.95
Chongqing	55.3	0.58	0.42	0.82	45.1	0.15	0.85	46.7	0.82	0.84
Sichuan	47.4	0.42	0.58	0.76	36.2	0.17	0.83	38.1	0.79	0.80
Guizhou	31.3	0.33	0.67	0.73	22.9	0.12	0.88	23.9	0.84	0.77
Yunnan	27.9	0.38	0.63	0.76	21.1	0.20	0.80	22.5	0.75	0.80
Tibet	23.0	0.19	0.81	0.51	11.6	0.17	0.83	13.6	0.71	0.59
Shaanxi	52.1	0.22	0.78	0.52	27.2	0.16	0.84	31.2	0.73	0.60
Gansu	42.3	0.19	0.81	0.51	21.4	0.21	0.79	25.8	0.66	0.61
Qinghai	43.7	0.13	0.88	0.48	20.8	0.10	0.90	23.1	0.81	0.53
Ningxia	47.2	0.26	0.74	0.55	25.7	0.11	0.89	28.1	0.82	0.60
Xinjiang	53.0	0.19	0.81	0.50	26.7	0.16	0.84	30.9	0.73	0.58

[†] Average fraction of time windows are open (t_{open}) or closed (t_{closed}), or residents are outside (t_{out}) or inside (t_{in}) for the cities within the identified province.

[‡] Fraction of total $\text{PM}_{2.5}$ (of outdoor origin) exposure that occurred indoors.

125 Table S2. Provincial population and mortality rates for individuals ≥ 25 years of age in urban China in 2015

Province	Population			Baseline mortality rate							
	Female	Male	Both sexes	Female				Male			
				COPD	IHD	LC	STROKE	COPD	IHD	LC	STROKE
Beijing	6.07E+06	6.41E+06	1.25E+07	2.85E-04	1.33E-03	3.56E-04	1.20E-03	3.91E-04	1.71E-03	7.29E-04	1.76E-03
Tianjin	3.51E+06	3.98E+06	7.49E+06	3.20E-04	1.53E-03	4.51E-04	1.21E-03	3.53E-04	1.76E-03	7.62E-04	1.70E-03
Hebei	4.83E+06	4.85E+06	9.69E+06	3.44E-04	1.54E-03	3.09E-04	2.11E-03	5.09E-04	2.13E-03	8.59E-04	3.14E-03
Shanxi	3.03E+06	3.19E+06	6.23E+06	4.54E-04	1.34E-03	3.03E-04	1.86E-03	7.48E-04	1.67E-03	8.17E-04	2.43E-03
Inner Mongolia	2.77E+06	2.99E+06	5.76E+06	7.12E-04	1.79E-03	3.76E-04	2.01E-03	8.31E-04	2.26E-03	7.52E-04	3.12E-03
Liaoning	8.18E+06	8.25E+06	1.64E+07	3.83E-04	1.61E-03	5.36E-04	1.67E-03	4.50E-04	2.22E-03	1.12E-03	2.94E-03
Jilin	3.69E+06	3.75E+06	7.44E+06	3.48E-04	2.00E-03	4.32E-04	1.75E-03	4.07E-04	2.45E-03	8.10E-04	2.82E-03
Heilongjiang	5.11E+06	5.21E+06	1.03E+07	4.90E-04	2.12E-03	5.92E-04	1.75E-03	5.19E-04	2.50E-03	1.01E-03	2.92E-03
Shanghai	6.76E+06	7.14E+06	1.39E+07	3.81E-04	5.73E-04	2.72E-04	1.05E-03	7.07E-04	6.91E-04	7.39E-04	1.19E-03
Jiangsu	1.08E+07	1.06E+07	2.14E+07	5.85E-04	8.05E-04	2.91E-04	1.48E-03	8.39E-04	1.02E-03	7.67E-04	1.85E-03
Zhejiang	7.22E+06	7.52E+06	1.47E+07	6.67E-04	4.95E-04	2.77E-04	1.10E-03	9.01E-04	5.74E-04	8.59E-04	1.38E-03
Anhui	4.16E+06	4.13E+06	8.29E+06	6.95E-04	1.23E-03	3.15E-04	1.95E-03	9.46E-04	1.35E-03	8.82E-04	2.38E-03
Fujian	4.26E+06	4.39E+06	8.65E+06	6.97E-04	8.33E-04	2.74E-04	1.50E-03	1.24E-03	1.15E-03	8.99E-04	2.24E-03
Jiangxi	2.36E+06	2.35E+06	4.71E+06	7.46E-04	1.13E-03	3.14E-04	1.57E-03	1.08E-03	1.43E-03	8.78E-04	1.83E-03
Shandong	1.01E+07	9.93E+06	2.00E+07	5.96E-04	1.48E-03	3.96E-04	1.65E-03	8.28E-04	2.01E-03	1.03E-03	2.50E-03
Henan	5.75E+06	5.50E+06	1.12E+07	6.04E-04	1.61E-03	3.08E-04	2.27E-03	9.28E-04	1.98E-03	7.53E-04	2.75E-03
Hubei	5.77E+06	5.88E+06	1.17E+07	6.89E-04	1.16E-03	2.91E-04	1.87E-03	1.05E-03	1.38E-03	8.49E-04	2.38E-03
Hunan	4.38E+06	4.52E+06	8.90E+06	7.00E-04	1.22E-03	2.56E-04	1.36E-03	1.02E-03	1.64E-03	7.66E-04	2.08E-03
Guangdong	1.63E+07	1.73E+07	3.36E+07	6.31E-04	1.08E-03	2.82E-04	1.36E-03	9.93E-04	1.57E-03	7.90E-04	1.93E-03
Guangxi	2.66E+06	2.77E+06	5.43E+06	1.04E-03	1.16E-03	2.98E-04	1.57E-03	1.39E-03	1.81E-03	9.00E-04	2.41E-03

Hainan	2.27E+05	2.48E+05	4.75E+05	6.88E-04	7.62E-04	1.80E-04	1.50E-03	1.05E-03	1.20E-03	6.51E-04	1.89E-03
Chongqing	3.06E+06	3.09E+06	6.15E+06	1.25E-03	9.28E-04	3.79E-04	1.44E-03	1.78E-03	1.12E-03	1.07E-03	2.04E-03
Sichuan	5.43E+06	5.51E+06	1.09E+07	1.45E-03	8.10E-04	3.96E-04	1.55E-03	1.80E-03	1.02E-03	9.88E-04	2.10E-03
Guizhou	1.65E+06	1.70E+06	3.35E+06	1.58E-03	9.42E-04	2.76E-04	2.10E-03	2.03E-03	1.15E-03	7.74E-04	3.52E-03
Yunnan	1.97E+06	2.10E+06	4.06E+06	1.25E-03	9.76E-04	2.51E-04	1.48E-03	1.82E-03	1.35E-03	6.84E-04	1.99E-03
Tibet	8.01E+04	8.38E+04	1.64E+05	5.39E-04	1.12E-03	7.00E-05	2.95E-03	6.60E-04	1.23E-03	1.05E-04	3.19E-03
Shaanxi	2.89E+06	3.02E+06	5.91E+06	5.07E-04	1.50E-03	2.34E-04	2.02E-03	7.07E-04	1.82E-03	5.82E-04	2.29E-03
Gansu	1.67E+06	1.71E+06	3.38E+06	1.69E-03	1.02E-03	1.63E-04	1.62E-03	1.82E-03	1.39E-03	3.44E-04	1.75E-03
Qinghai	4.25E+05	4.57E+05	8.82E+05	1.58E-03	1.69E-03	2.60E-04	2.08E-03	1.69E-03	1.85E-03	4.49E-04	2.34E-03
Ningxia	6.50E+05	6.77E+05	1.33E+06	8.20E-04	1.64E-03	2.83E-04	1.56E-03	8.36E-04	2.07E-03	5.78E-04	1.91E-03
Xinjiang	1.88E+06	2.03E+06	3.91E+06	1.19E-03	2.02E-03	2.95E-04	2.04E-03	1.24E-03	2.40E-03	5.70E-04	2.12E-03

127 **Table S3. For each province, the sum of its major cities' disease-specific premature mortalities (95% CI) attributable to *total PM_{2.5} exposure* under baseline scenario**
128 **(rural areas excluded)**

Province	STROKE	IHD	COPD	LC	Total	Total (per 100000)
Beijing	8342 (3245-10625)	5757 (4149-9329)	1027 (559-1443)	2097 (812-2848)	17225 (11373-22107)	137 (91-177)
Tianjin	4804 (1787-6236)	3588 (2571-5838)	563 (296-809)	1301 (473-1808)	10259 (6772-13293)	136 (90-177)
Hebei	11208 (4434-14309)	5332 (3851-8537)	1006 (554-1410)	1741 (691-2351)	19288 (11966-24538)	199 (123-253)
Shanxi	5476 (1951-7332)	2546 (1809-4088)	733 (365-1084)	867 (287-1242)	9623 (5831-12433)	154 (93-199)
Inner Mongolia	5252 (1856-7360)	2838 (1999-4389)	708 (325-1093)	656 (191-982)	9456 (5796-12396)	164 (100-215)
Liaoning	15504 (5578-20725)	8563 (6086-13734)	1344 (671-1983)	3374 (1127-4822)	28786 (17936-37363)	175 (109-227)
Jilin	7013 (2515-9349)	4532 (3223-7292)	557 (279-820)	1159 (389-1653)	13263 (8315-17493)	178 (111-235)
Heilongjiang	8803 (3146-12228)	5958 (4215-9284)	880 (417-1335)	1758 (540-2592)	17401 (11135-22818)	168 (107-221)
Shanghai	6329 (2244-8530)	2361 (1672-3783)	1452 (712-2152)	1710 (554-2465)	11853 (7352-15048)	85 (52-108)
Jiangsu	14732 (5259-19651)	5342 (3797-8611)	3021 (1512-4439)	2824 (945-4030)	25921 (15866-33059)	121 (74-154)
Zhejiang	7069 (2483-9689)	2024 (1429-3196)	2037 (968-3085)	1871 (575-2746)	13002 (7991-16548)	88 (54-112)
Anhui	7320 (2609-9819)	2883 (2046-4625)	1315 (652-1944)	1209 (398-1735)	12729 (7698-16333)	153 (92-196)
Fujian	4395 (1611-6949)	1790 (1256-2576)	1010 (410-1633)	760 (181-1212)	7956 (5082-10632)	92 (58-122)
Jiangxi	2890 (1002-4030)	1469 (1034-2279)	686 (313-1064)	562 (161-844)	5608 (3548-7218)	119 (75-153)
Shandong	17912 (6829-23193)	10147 (7284-16336)	3223 (1716-4593)	4083 (1526-5625)	35367 (22937-44980)	176 (114-224)
Henan	12578 (4863-16070)	6048 (4357-9799)	2060 (1118-2902)	1793 (691-2441)	22481 (14048-28555)	199 (124-253)
Hubei	10633 (3909-13928)	4209 (3008-6823)	2186 (1133-3162)	1811 (642-2536)	18840 (11686-23945)	161 (100-205)
Hunan	6110 (2159-8281)	3365 (2381-5363)	1416 (687-2118)	1067 (339-1549)	11959 (7585-15479)	134 (85-173)
Guangdong	17185 (6068-25381)	9952 (6990-14816)	3710 (1580-5876)	3076 (792-4791)	33925 (21725-44191)	100 (64-131)
Guangxi	3880 (1349-5428)	1964 (1383-3040)	1044 (474-1618)	652 (186-981)	7541 (4791-9714)	138 (88-178)
Hainan	151 (64-249)	83 (58-111)	38 (14-65)	22 (4-37)	296 (205-396)	62 (43-83)

Chongqing	4354 (1544-5867)	1685 (1193-2701)	1776 (871-2632)	1071 (347-1543)	8888 (5665-11180)	144 (92-181)
Sichuan	7637 (2742-10395)	2593 (1838-4105)	3234 (1581-4825)	1740 (561-2520)	15205 (9717-19122)	139 (88-174)
Guizhou	2784 (1005-4131)	762 (535-1126)	795 (337-1269)	288 (74-450)	4631 (2814-6133)	138 (84-183)
Yunnan	1992 (722-3042)	1008 (706-1471)	781 (323-1254)	298 (73-471)	4080 (2676-5317)	100 (65-130)
Tibet	104 (42-162)	35 (24-50)	9 (3-16)	1 (0-2)	151 (87-212)	92 (53-129)
Shaanxi	5079 (1797-6862)	2593 (1837-4137)	671 (327-999)	571 (183-827)	8916 (5389-11656)	150 (91-197)
Gansu	2066 (721-2873)	1003 (707-1558)	960 (441-1479)	174 (50-261)	4205 (2678-5426)	124 (79-160)
Qinghai	733 (260-1007)	396 (280-624)	250 (118-378)	68 (21-100)	1449 (922-1872)	164 (104-212)
Ningxia	877 (307-1206)	626 (441-985)	188 (88-287)	124 (37-183)	1817 (1170-2392)	136 (88-180)
Xinjiang	3214 (1222-4261)	2356 (1683-3723)	973 (508-1413)	441 (160-617)	6986 (4669-9004)	178 (119-230)
China	206440 (75336-279179)	103824 (73854-164344)	39671 (19368-59195)	39184 (13024-56280)	389121 (245439-500866)	139 (88-179)

130 Table S4. For each province, the sum of its major cities' disease-specific premature mortalities attributable to *indoor PM_{2.5} exposure* under baseline scenario (rural
131 areas excluded)

Province	STROKE	IHD	COPD	LC	Total	Total (per 100000)
Beijing	5789 (1765-8296)	2732 (1650-6077)	706 (439-924)	1473 (701-1779)	10701 (5933-15539)	85 (47-124)
Tianjin	3520 (988-5134)	1734 (1035-3944)	389 (232-518)	921 (409-1137)	6566 (3557-9739)	87 (47-129)
Hebei	7754 (2516-11134)	2697 (1630-5674)	708 (440-931)	1249 (599-1519)	12410 (6523-17437)	128 (67-180)
Shanxi	4600 (1244-6773)	1434 (850-3240)	554 (306-763)	671 (259-881)	7261 (3512-10455)	116 (56-167)
Inner Mongolia	4652 (1288-7059)	1805 (1065-3752)	563 (281-812)	533 (176-750)	7555 (3753-10982)	131 (65-190)
Liaoning	13861 (3950-19833)	5536 (3263-11908)	1104 (595-1538)	2827 (1061-3797)	23330 (11996-33363)	142 (73-203)
Jilin	6361 (1836-9036)	3003 (1784-6438)	464 (251-646)	985 (369-1322)	10815 (5556-15694)	145 (74-210)
Heilongjiang	8350 (2674-12009)	4901 (3051-8685)	799 (391-1180)	1611 (524-2310)	15662 (9092-21626)	151 (88-209)
Shanghai	6145 (1902-8500)	1963 (1100-3697)	1356 (683-1944)	1615 (551-2313)	11081 (6317-14586)	79 (45-104)
Jiangsu	14296 (4524-19566)	4452 (2535-8387)	2824 (1455-4034)	2669 (937-3759)	24242 (13488-32039)	113 (63-149)
Zhejiang	6981 (2302-9683)	1865 (1146-3170)	1977 (951-2941)	1826 (575-2664)	12651 (7484-16254)	85 (50-110)
Anhui	6991 (2138-9716)	2242 (1303-4403)	1190 (615-1695)	1109 (390-1549)	11535 (6169-15646)	139 (74-188)
Fujian*	*	*	*	*	*	*
Jiangxi	2851 (930-4028)	1348 (801-2251)	664 (306-1004)	547 (160-814)	5411 (3243-7140)	114 (68-151)
Shandong	15640 (4826-21648)	6631 (4039-13703)	2651 (1520-3614)	3415 (1435-4406)	28338 (15768-39266)	141 (78-196)
Henan	7157 (2118-10595)	2435 (1472-5375)	1259 (800-1631)	1120 (553-1327)	11971 (6290-16935)	106 (55-150)
Hubei	8705 (2431-12540)	2311 (1382-5241)	1640 (947-2219)	1390 (580-1769)	14048 (7012-19601)	120 (60-168)
Hunan	5900 (1817-8232)	2740 (1566-5186)	1307 (655-1886)	997 (335-1420)	10945 (6188-14975)	123 (69-168)
Guangdong*	*	*	*	*	*	*
Guangxi	3589 (996-5347)	1335 (773-2747)	876 (424-1273)	559 (177-802)	6360 (3366-8933)	117 (62-164)
Hainan*	*	*	*	*	*	*

Chongqing	3990 (1118-5719)	1097 (650-2436)	1480 (790-2065)	912 (330-1233)	7479 (4115-10063)	121 (66-163)
Sichuan	6497 (1832-9651)	1572 (952-3321)	2503 (1342-3519)	1375 (510-1850)	11949 (6523-16044)	109 (59-146)
Guizhou	2778 (994-4131)	751 (504-1125)	790 (336-1252)	287 (74-446)	4607 (2748-6112)	137 (82-182)
Yunnan	1916 (616-3032)	828 (487-1393)	712 (304-1106)	275 (72-426)	3732 (2196-5076)	91 (54-124)
Tibet	95 (36-155)	30 (19-45)	8 (3-14)	1 (0-2)	136 (74-197)	83 (45-120)
Shaanxi	3842 (989-5881)	1239 (733-2881)	452 (253-620)	396 (155-512)	5930 (2714-8812)	100 (45-149)
Gansu	1472 (354-2382)	421 (247-1005)	582 (314-807)	109 (40-144)	2585 (1240-3756)	76 (36-111)
Qinghai	677 (195-984)	277 (163-565)	212 (107-304)	59 (20-83)	1226 (653-1720)	139 (74-195)
Ningxia	829 (239-1193)	460 (265-923)	165 (82-239)	111 (36-158)	1566 (853-2240)	118 (64-168)
Xinjiang	2001 (480-3107)	1065 (646-2260)	614 (368-824)	284 (128-357)	3966 (2159-5768)	101 (55-147)
China	178980 (54856-257959)	70713 (43375-137347)	33321 (17208-47884)	33197 (12148-45579)	316212 (175518-435211)	113 (62-156)

* For provinces with relatively low outdoor PM_{2.5} levels, such as Fujian, Guangdong and Hainan, the present analysis is inappropriate. In such cases, outdoor exposures are often lower than the minimum-risk concentration, which translates to no health benefits from reductions in PM_{2.5} exposure. Thus, we leave such cells in Table S4 blank.

Table S5. For each province, the sum of its major cities' *avoidable mortalities* that could be achieved by meeting different indoor PM_{2.5} guidelines (rural areas excluded)

Province	Mortalities that might be avoided by meeting different indoor PM _{2.5} guidelines ($\Delta\text{Mort}_{\text{avoidable}}$)							
	35 µg/m ³	30 µg/m ³	25 µg/m ³	20 µg/m ³	15 µg/m ³	10 µg/m ³	5 µg/m ³	0 µg/m ³
Beijing	1204 (709-1784)	1801 (1043-2664)	2521 (1416-3730)	3411 (1854-4951)	4543 (2339-6544)	6020 (3038-8609)	8006 (4542-11527)	10701 (5933-15539)
Tianjin	201 (118-297)	584 (338-866)	1047 (586-1537)	1625 (882-2375)	2367 (1209-3425)	3352 (1706-4914)	4703 (2651-6916)	6566 (3557-9739)
Hebei	953 (519-1507)	1470 (774-2297)	2106 (1074-3243)	2990 (1451-4512)	4273 (1926-6331)	6121 (2653-8915)	8729 (4179-12522)	12410 (6523-17437)
Shanxi	0 (0-0)	105 (52-156)	488 (229-717)	1079 (474-1556)	1971 (822-2839)	3200 (1469-4675)	4937 (2370-7229)	7261 (3512-10455)
Inner Mongolia	0 (0-0)	0 (0-0)	26 (11-39)	308 (128-449)	1092 (437-1622)	2498 (1108-3815)	4638 (2064-7148)	7555 (3753-10982)
Liaoning	159 (88-238)	542 (292-805)	1452 (733-2135)	3422 (1580-4975)	6223 (2729-9073)	10133 (4895-14942)	15723 (7737-23326)	23330 (11996-33363)
Jilin	0 (0-0)	116 (60-178)	567 (277-856)	1398 (632-2086)	2640 (1125-3932)	4438 (2079-6683)	7086 (3447-10720)	10815 (5556-15694)
Heilongjiang	1 (0-2)	231 (127-347)	527 (281-780)	1144 (558-1687)	2709 (1234-4027)	5542 (2654-8459)	9757 (4716-14932)	15662 (9092-21626)
Shanghai	638 (334-873)	1322 (666-1800)	2159 (1048-2955)	3203 (1541-4433)	4531 (2389-6319)	6245 (3212-8844)	8360 (4213-11749)	11081 (6317-14586)
Jiangsu	1671 (843-2367)	3089 (1478-4319)	4845 (2220-6741)	7062 (3209-9859)	9922 (4963-13961)	13666 (6824-19379)	18341 (8899-25835)	24242 (13488-32039)
Zhejiang	423 (224-569)	1133 (570-1529)	2147 (1038-2928)	3429 (1686-4770)	5070 (2640-7188)	7155 (3574-10194)	9652 (4840-13412)	12651 (7484-16254)
Anhui	636 (307-916)	1291 (592-1833)	2103 (917-2966)	3184 (1391-4518)	4581 (2209-6563)	6410 (3111-9241)	8706 (4108-12486)	11535 (6169-15646)
Fujian	0 (0-0)	0 (0-0)	80 (35-121)	762 (334-1195)	2291 (974-3601)	4172 (1825-6779)	6364 (3223-9386)	7956 (5082-10632)

Jiangxi	47 (23-66)	344 (158-496)	808 (375-1178)	1379 (672-2059)	2093 (1008-3148)	2977 (1405-4452)	4019 (1968-5884)	5411 (3243-7140)
Shandong	2059 (1232-3002)	3188 (1857-4622)	4804 (2682-6910)	7076 (3719-10080)	10204 (5156-14460)	14466 (7640-20533)	20375 (11098-29080)	28338 (15768-39266)
Henan	1408 (760-2132)	2113 (1111-3175)	2957 (1509-4401)	3989 (1944-5861)	5281 (2456-7629)	6934 (3131-9873)	9095 (4489-12845)	11971 (6290-16935)
Hubei	1780 (920-2577)	2622 (1295-3758)	3642 (1728-5144)	4897 (2249-6848)	6466 (3096-9018)	8463 (4373-11859)	11001 (5596-15420)	14048 (7012-19601)
Hunan	571 (291-810)	1232 (603-1754)	2066 (970-2961)	3103 (1485-4484)	4419 (2253-6452)	6106 (3024-8990)	8181 (4034-11920)	10945 (6188-14975)
Guangdong	0 (0-0)	531 (235-784)	2694 (1255-4122)	6763 (3138-10492)	12028 (5441-18693)	18376 (8426-28462)	25827 (13078-38093)	33888 (21691-44170)
Guangxi	46 (23-64)	250 (118-356)	762 (352-1102)	1463 (697-2165)	2339 (1132-3510)	3431 (1613-5151)	4746 (2246-7038)	6360 (3366-8933)
Hainan	0 (0-0)	0 (0-0)	0 (0-0)	4 (2-8)	67 (28-126)	151 (70-262)	258 (154-371)	296 (205-396)
Chongqing	807 (457-1083)	1308 (727-1760)	1904 (1017-2574)	2624 (1389-3563)	3508 (1940-4835)	4605 (2470-6419)	5929 (3105-8201)	7479 (4115-10063)
Sichuan	1028 (611-1382)	1681 (959-2248)	2538 (1396-3403)	3611 (1936-4873)	5059 (2706-6929)	6933 (3747-9645)	9269 (4896-12847)	11949 (6523-16044)
Guizhou	0 (0-0)	25 (10-35)	171 (69-247)	535 (227-804)	1219 (518-1885)	2266 (935-3558)	3497 (1579-5171)	4607 (2748-6112)
Yunnan	0 (0-0)	0 (0-0)	57 (27-83)	325 (155-489)	894 (412-1366)	1654 (748-2556)	2576 (1232-3882)	3732 (2196-5076)
Tibet	0 (0-0)	0 (0-0)	0 (0-1)	3 (0-5)	6 (1-10)	18 (5-29)	71 (26-130)	136 (74-197)
Shaanxi	0 (0-0)	22 (10-33)	348 (152-516)	843 (347-1229)	1594 (630-2350)	2627 (1145-3922)	4046 (1885-6057)	5930 (2714-8812)
Gansu	0 (0-0)	0 (0-0)	12 (6-16)	147 (78-204)	502 (250-714)	1021 (504-1487)	1704 (830-2505)	2585 (1240-3756)
Qinghai	0 (0-0)	0 (0-0)	16 (9-23)	88 (45-124)	232 (111-332)	443 (218-646)	773 (377-1143)	1226 (653-1720)
Ningxia	0 (0-0)	0 (0-0)	37 (18-55)	163 (75-242)	365 (171-550)	643 (319-984)	1028 (492-1567)	1566 (853-2240)
Xinjiang	200 (131-288)	335 (214-484)	498 (308-720)	740 (439-1067)	1190 (661-1720)	1812 (977-2654)	2717 (1432-4023)	3966 (2159-5768)

China	13839 (7599-19964)	25348 (13300-36308)	43397 (21754-62219)	70784 (34331-101979)	109697 (52983-159167)	161894 (78915-236948)	230128 (115519-333379)	316212 (175518-435211)
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Table S6. For the top 20 cities, avoidable mortalities achieved by meeting different indoor PM_{2.5} guidelines (rural areas excluded)

Province	City	Population*	C _{out} (µg/ m ³)	C _{in} (µg/ m ³)	ΔMort _{bi} [†]	Mortalities that might be avoided by meeting different indoor PM _{2.5} guidelines (ΔMort _{avoidable})							
						35 µg/m ³	30 µg/m ³	25 µg/m ³	20 µg/m ³	15 µg/m ³	10 µg/m ³	5 µg/m ³	0 µg/m ³
Shanghai	Shanghai	13898426	55	40	11853 (7352-15048)	638 (334-873)	1322 (666-1800)	2159 (1048-2955)	3203 (1541-4433)	4531 (2389-6319)	6245 (3212-8844)	8360 (4213-11749)	11081 (6317-14586)
Beijing	Beijing	12486846	83	48	17225 (11373-22107)	1204 (709-1784)	1801 (1043-2664)	2521 (1416-3730)	3411 (1854-4951)	4543 (2339-6544)	6020 (3038-8609)	8006 (4542-11527)	10701 (5933-15539)
Tianjin	Tianjin	7492555	71	38	10259 (6772-13293)	201 (118-297)	584 (338-866)	1047 (586-1537)	1625 (882-2375)	2367 (1209-3425)	3352 (1706-4914)	4703 (2651-6916)	6566 (3557-9739)
Chongqing	Chongqing	6152546	55	45	8888 (5665-11180)	807 (457-1083)	1308 (727-1760)	1904 (1017-2574)	2624 (1389-3563)	3508 (1940-4835)	4605 (2470-6419)	5929 (3105-8201)	7479 (4115-10063)
Guangdong	Guangzhou	4094549	37	32	4493 (2835-5804)	0 (0-0)	195 (86-288)	602 (280-912)	1102 (523-1693)	1723 (795-2657)	2478 (1142-3762)	3355 (1662-4988)	4481 (2829-5793)
Guangdong	Shenzhen	3339233	29	25	3146 (2037-4136)	0 (0-0)	0 (0-0)	69 (32-108)	500 (225-788)	1035 (459-1615)	1677 (765-2631)	2434 (1253-3557)	3146 (2037-4136)
Liaoning	Shenyang	3043059	75	38	5840 (3699-7476)	140 (79-211)	360 (196-536)	631 (332-934)	978 (491-1423)	1438 (678-2058)	2070 (984-2976)	2973 (1622-4281)	4225 (2177-6063)
Heilongjiang	Harbin	2865256	70	35	5775 (3711-7490)	1 (0-2)	231 (127-347)	517 (276-765)	885 (445-1302)	1378 (654-1997)	2066 (1029-2999)	3064 (1630-4506)	4446 (2341-6441)
Jiangsu	Suzhou	2844627	58	41	3427 (2093-4384)	205 (101-290)	395 (186-552)	630 (285-878)	926 (418-1297)	1310 (655-1842)	1811 (896-2576)	2436 (1172-3438)	3234 (1811-4267)
Guangdong	Dongguan	2650070	36	31	2841 (1796-3672)	0 (0-0)	70 (31-104)	336 (158-516)	663 (311-1018)	1069 (489-1656)	1561 (717-2381)	2135 (1063-3172)	2841 (1796-3672)
Liaoning	Dalian	2511569	49	25	4159 (2570-5448)	0 (0-0)	0 (0-0)	17 (7-25)	353 (148-517)	809 (337-1200)	1449 (699-2174)	2364 (1095-3578)	3602 (1854-5135)

Zhejiang	Wenzhou	2470237	45	34	2104 (1287-2688)	0 (0-0)	123 (58-168)	301 (139-417)	522 (256-737)	803 (406-1165)	1160 (563-1681)	1584 (784-2223)	2088 (1263-2675)
Zhejiang	Hangzhou	2356042	55	42	2214 (1368-2799)	154 (82-208)	286 (148-385)	446 (223-601)	645 (317-884)	897 (486-1236)	1218 (633-1695)	1608 (820-2210)	2096 (1199-2696)
Jiangsu	Xuzhou	2332154	67	48	2959 (1832-3747)	290 (152-415)	439 (220-617)	623 (299-865)	854 (399-1178)	1152 (585-1589)	1542 (813-2132)	2036 (1021-2818)	2628 (1417-3516)
Guangdong	Foshan	2319335	38	33	2582 (1626-3336)	0 (0-0)	140 (62-206)	369 (170-555)	650 (310-1000)	1000 (464-1537)	1425 (658-2148)	1920 (948-2857)	2566 (1608-3329)
Guangdong	Zhanjiang	2254536	27	23	1965 (1299-2611)	0 (0-0)	0 (0-0)	0 (0-0)	210 (92-332)	578 (254-917)	1017 (467-1674)	1545 (820-2266)	1965 (1299-2611)
Jiangsu	Nanjing	2175653	59	42	2648 (1623-3376)	179 (90-253)	323 (154-452)	501 (229-697)	726 (329-1015)	1017 (511-1430)	1397 (698-1983)	1872 (908-2637)	2476 (1369-3273)
Hubei	Wuhan	2127196	71	53	3515 (2195-4455)	380 (199-553)	530 (266-762)	710 (345-1005)	932 (434-1297)	1208 (580-1673)	1559 (823-2165)	2007 (1049-2787)	2552 (1283-3553)
Shandong	Linyi	2096253	81	46	3852 (2515-4880)	267 (158-390)	420 (242-608)	608 (340-875)	847 (449-1204)	1161 (591-1630)	1586 (850-2225)	2180 (1218-3086)	2968 (1607-4160)
Jilin	Changchun	2079361	68	32	3897 (2455-5118)	0 (0-0)	90 (46-138)	279 (139-421)	524 (245-785)	857 (377-1259)	1328 (621-1959)	2020 (1030-3013)	2992 (1511-4369)

* Urban population $\geq$ 25 years of age

† Premature mortality attributable to outdoor PM_{2.5} exposure under baseline scenario

140 **Table S7. For the major cities within each province, city-specific avoidable mortalities (95% CI) achieved by meeting different indoor PM_{2.5} guidelines (rural areas**
141 **excluded)**

Province	City	C _{out} (µg/ m ³)	C _{in} (µg/ m ³)	ΔMort _{bi} [†]	Mortalities that might be avoided by meeting different indoor PM _{2.5} guidelines (ΔMort _{avoidable})							
					35 µg/m ³	30 µg/m ³	25 µg/m ³	20 µg/m ³	15 µg/m ³	10 µg/m ³	5 µg/m ³	0 µg/m ³
Beijing	Beijing	83	48	17225 (11373-22107)	1204 (709-1784)	1801 (1043-2664)	2521 (1416-3730)	3411 (1854-4951)	4543 (2339-6544)	6020 (3038-8609)	8006 (4542-11527)	10701 (5933-15539)
Tianjin	Tianjin	71	38	10259 (6772-13293)	201 (118-297)	584 (338-866)	1047 (586-1537)	1625 (882-2375)	2367 (1209-3425)	3352 (1706-4914)	4703 (2651-6916)	6566 (3557-9739)
Hebei	Baoding	111	56	3240 (2081-4061)	258 (145-408)	345 (190-545)	452 (242-701)	585 (305-888)	757 (375-1130)	988 (453-1428)	1309 (610-1841)	1770 (1007-2452)
Hebei	Tangshan	89	45	2095 (1295-2658)	106 (56-167)	171 (87-266)	252 (125-386)	354 (170-534)	490 (217-724)	675 (286-973)	936 (466-1327)	1312 (677-1846)
Hebei	Langfang	87	44	1195 (735-1521)	54 (28-85)	92 (46-143)	139 (68-214)	199 (94-299)	279 (121-410)	388 (164-556)	542 (273-767)	764 (389-1083)
Hebei	Zhangjiakou	34	17	822 (491-1094)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	59 (23-94)	232 (92-374)	474 (191-746)	802 (453-1085)
Hebei	Chengde	43	21	749 (438-983)	0 (0-0)	0 (0-0)	0 (0-0)	25 (8-38)	115 (43-174)	242 (104-379)	423 (175-652)	667 (326-952)
Hebei	Cangzhou	72	36	1869 (1127-2406)	21 (10-32)	88 (42-134)	171 (79-261)	279 (120-418)	425 (170-619)	626 (264-904)	914 (460-1325)	1316 (627-1891)
Hebei	Shijiazhuang	89	45	2807 (1735-3563)	140 (74-220)	228 (116-354)	336 (167-516)	474 (227-714)	656 (290-969)	905 (384-1305)	1257 (628-1785)	1764 (908-2484)
Hebei	Qinhuangdao	49	25	686 (403-901)	0 (0-0)	0 (0-0)	0 (0-0)	53 (19-79)	126 (46-189)	230 (102-348)	378 (161-572)	570 (268-831)
Hebei	Hengshui	101	51	1233 (778-1554)	84 (46-134)	120 (64-188)	163 (85-251)	217 (109-329)	289 (137-427)	385 (170-555)	520 (251-731)	715 (394-1001)

Hebei	Xingtai	104	52	2029 (1286-2553)	145 (80-230)	202 (109-318)	272 (143-421)	360 (183-547)	475 (228-702)	630 (280-911)	846 (404-1191)	1158 (647-1613)
Hebei	Handan	93	47	2558 (1591-3239)	143 (77-227)	221 (115-345)	317 (160-488)	439 (213-660)	599 (271-887)	817 (350-1177)	1124 (554-1580)	1567 (823-2194)
Shanxi	Linfen	61	31	1195 (724-1541)	0 (0-0)	13 (6-19)	74 (34-108)	153 (68-219)	257 (107-369)	401 (183-580)	604 (295-874)	877 (420-1266)
Shanxi	Lvliang	45	23	915 (549-1194)	0 (0-0)	0 (0-0)	0 (0-0)	51 (19-74)	154 (63-229)	297 (136-453)	500 (220-759)	761 (372-1102)
Shanxi	Datong	41	21	777 (468-1013)	0 (0-0)	0 (0-0)	0 (0-0)	17 (6-25)	112 (44-167)	244 (109-379)	431 (187-660)	678 (341-968)
Shanxi	Taiyuan	60	30	1157 (700-1493)	0 (0-0)	8 (3-11)	68 (31-99)	145 (63-207)	247 (102-356)	388 (178-562)	587 (285-851)	855 (409-1234)
Shanxi	Xinzhou	60	30	845 (512-1091)	0 (0-0)	6 (3-9)	50 (23-73)	106 (47-152)	181 (75-260)	283 (130-410)	429 (208-621)	624 (298-900)
Shanxi	Jinzhong	58	29	883 (533-1141)	0 (0-0)	0 (0-0)	44 (20-64)	104 (45-150)	185 (76-266)	296 (138-434)	453 (217-662)	663 (316-957)
Shanxi	Jincheng	58	29	621 (375-802)	0 (0-0)	0 (0-0)	32 (14-47)	74 (32-106)	131 (54-187)	208 (97-304)	318 (153-464)	465 (222-671)
Shanxi	Shuozhou	52	27	450 (270-583)	0 (0-0)	0 (0-0)	11 (4-15)	44 (18-64)	88 (35-129)	150 (70-221)	237 (109-352)	351 (167-508)
Shanxi	Yuncheng	67	34	1465 (896-1880)	0 (0-0)	49 (25-73)	119 (58-176)	209 (95-305)	327 (142-465)	489 (223-697)	717 (365-1031)	1030 (502-1477)
Shanxi	Changzhi	65	33	946 (577-1215)	0 (0-0)	27 (14-41)	73 (35-109)	132 (60-193)	210 (90-299)	316 (144-452)	466 (235-669)	671 (326-964)
Shanxi	Yangquan	55	28	366 (220-474)	0 (0-0)	0 (0-0)	14 (6-21)	40 (17-58)	75 (30-107)	122 (57-180)	190 (89-280)	280 (133-403)
Inner Mongolia	Wulanchabu	45	21	868 (526-1139)	0 (0-0)	0 (0-0)	0 (0-0)	27 (10-39)	118 (46-177)	245 (111-373)	428 (190-659)	672 (313-1000)
Inner	Wuhai	55	26	233 (141-304)	0 (0-0)	0 (0-0)	3 (1-5)	19 (8-28)	40 (16-58)	68 (30-102)	109 (52-163)	166 (77-244)

Mongolia												
Inner Mongolia	Xinganmeng	35	17	574 (351-752)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	34 (14-53)	141 (60-223)	292 (123-458)	502 (255-714)
Inner Mongolia	Baotou	52	25	1141 (691-1490)	0 (0-0)	0 (0-0)	2 (1-3)	81 (34-119)	187 (74-272)	334 (149-498)	544 (254-814)	830 (387-1223)
Inner Mongolia	Hulunbeier	32	15	858 (531-1132)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	18 (7-29)	192 (81-307)	439 (184-695)	787 (427-1090)
Inner Mongolia	Huhehaote	44	21	1152 (699-1511)	0 (0-0)	0 (0-0)	0 (0-0)	29 (11-43)	152 (60-229)	324 (146-495)	571 (252-877)	898 (420-1336)
Inner Mongolia	Bayanchuoer	45	21	678 (411-890)	0 (0-0)	0 (0-0)	0 (0-0)	22 (8-33)	93 (36-139)	192 (86-291)	334 (148-514)	523 (244-779)
Inner Mongolia	Chifeng	42	20	1707 (1037-2234)	0 (0-0)	0 (0-0)	0 (0-0)	16 (6-23)	205 (82-309)	471 (212-725)	852 (371-1314)	1357 (644-2012)
Inner Mongolia	Tongliao	55	26	1374 (833-1792)	0 (0-0)	0 (0-0)	19 (9-29)	111 (48-162)	234 (94-342)	404 (178-599)	647 (307-962)	980 (458-1441)
Inner Mongolia	Eerduosi	28	13	587 (375-790)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	101 (41-164)	297 (123-493)	571 (346-785)
Inner Mongolia	Xilinguolemeng	17	8	192 (143-248)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	77 (38-128)	192 (143-248)
Inner Mongolia	Alashanmeng	37	17	84 (51-110)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6 (2-10)	21 (9-34)	43 (18-66)	71 (35-104)
Liaoning	Dandong	48	24	1508 (932-1976)	0 (0-0)	0 (0-0)	0 (0-0)	121 (50-176)	288 (119-430)	523 (252-787)	860 (396-1302)	1321 (679-1873)
Liaoning	Dalian	49	25	4159 (2570-5448)	0 (0-0)	0 (0-0)	17 (7-25)	353 (148-517)	809 (337-1200)	1449 (699-2174)	2364 (1095-3578)	3602 (1854-5135)
Liaoning	Fushun	55	28	1394 (864-1818)	0 (0-0)	0 (0-0)	58 (27-85)	161 (71-233)	300 (127-	495 (242-	774 (371-	1145 (578-

									438)	735)	1151)	1649)
Liaoning	Chaoyang	41	21	1753 (1082-2295)	0 (0-0)	0 (0-0)	0 (0-0)	52 (20-77)	271 (113-409)	580 (267-899)	1019 (458-1564)	1648 (915-2263)
Liaoning	Benxi	56	28	1116 (691-1455)	0 (0-0)	0 (0-0)	47 (22-69)	130 (57-188)	241 (102-351)	396 (194-588)	619 (297-921)	915 (462-1317)
Liaoning	Shenyang	75	38	5840 (3699-7476)	140 (79-211)	360 (196-536)	631 (332-934)	978 (491-1423)	1438 (678-2058)	2070 (984-2976)	2973 (1622-4281)	4225 (2177-6063)
Liaoning	Panjin	53	27	894 (553-1169)	0 (0-0)	0 (0-0)	27 (12-39)	95 (41-138)	187 (78-274)	316 (153-470)	500 (237-750)	746 (378-1072)
Liaoning	Yingkou	51	26	1533 (947-2004)	0 (0-0)	0 (0-0)	25 (11-37)	146 (62-214)	309 (128-456)	538 (260-806)	865 (405-1303)	1304 (668-1869)
Liaoning	Huludao	54	27	1694 (1048-2213)	0 (0-0)	0 (0-0)	58 (27-84)	186 (81-269)	358 (150-525)	600 (292-890)	945 (449-1416)	1406 (711-2021)
Liaoning	Liaoyang	62	31	1258 (784-1630)	0 (0-0)	19 (10-29)	86 (42-127)	172 (79-248)	288 (127-419)	449 (223-656)	680 (339-1000)	991 (504-1431)
Liaoning	Tieling	59	30	1813 (1126-2351)	0 (0-0)	6 (3-9)	105 (50-154)	233 (105-337)	406 (175-590)	646 (316-952)	991 (486-1461)	1452 (735-2096)
Liaoning	Jinzhou	62	31	2120 (1321-2745)	0 (0-0)	35 (18-52)	147 (72-217)	292 (135-420)	487 (215-707)	757 (375-1104)	1145 (572-1681)	1666 (847-2406)
Liaoning	Fuxin	48	25	1125 (695-1474)	0 (0-0)	0 (0-0)	0 (0-0)	92 (38-134)	216 (89-322)	391 (188-587)	641 (296-970)	981 (504-1394)
Liaoning	Anshan	70	36	2570 (1616-3302)	18 (9-27)	119 (63-177)	244 (126-357)	405 (197-593)	620 (284-888)	916 (441-1310)	1340 (707-1942)	1921 (978-2765)
Jilin	Jilin	59	28	2152 (1345-2842)	0 (0-0)	0 (0-0)	91 (43-138)	239 (106-354)	441 (186-660)	728 (345-1093)	1152 (559-1745)	1739 (878-2555)
Jilin	Siping	65	31	1702 (1070-	0 (0-0)	26 (13-39)	110 (54-166)	219 (101-	368 (160-	579 (269-	890 (448-	1324 (668-

				2235)				328)	542)	864)	1333)	1941)
Jilin	Yanbianzhou	39	19	925 (582-1227)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	99 (40-154)	271 (121-436)	524 (230-822)	902 (534-1215)
Jilin	Songyuan	51	24	1323 (824-1756)	0 (0-0)	0 (0-0)	0 (0-0)	95 (39-143)	235 (95-356)	435 (205-669)	731 (337-1120)	1154 (593-1660)
Jilin	Baicheng	59	28	991 (619-1309)	0 (0-0)	0 (0-0)	42 (20-64)	110 (49-163)	203 (85-304)	335 (158-504)	530 (257-803)	801 (404-1176)
Jilin	Baishan	55	27	617 (384-814)	0 (0-0)	0 (0-0)	14 (6-22)	59 (25-87)	120 (49-179)	207 (97-314)	335 (159-509)	513 (260-747)
Jilin	Liaoyuan	59	28	572 (358-756)	0 (0-0)	0 (0-0)	23 (11-35)	63 (28-93)	117 (49-175)	193 (91-290)	307 (148-465)	463 (234-681)
Jilin	Tonghua	52	25	1081 (673-1433)	0 (0-0)	0 (0-0)	5 (2-8)	87 (36-129)	198 (81-298)	358 (168-549)	594 (276-908)	925 (471-1346)
Jilin	Changchun	68	32	3897 (2455-5118)	0 (0-0)	90 (46-138)	279 (139-421)	524 (245-785)	857 (377-1259)	1328 (621-1959)	2020 (1030-3013)	2992 (1511-4369)
Heilongjiang	Qitaihe	51	25	450 (284-591)	0 (0-0)	0 (0-0)	5 (2-8)	40 (18-60)	88 (38-132)	156 (77-236)	254 (122-385)	395 (210-565)
Heilongjiang	Yichun	24	12	362 (244-488)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	56 (23-91)	200 (94-335)	362 (244-488)
Heilongjiang	Jiamusi	30	15	948 (611-1252)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	15 (7-25)	235 (103-376)	546 (248-865)	948 (611-1252)
Heilongjiang	Shuangyashan	42	21	655 (414-862)	0 (0-0)	0 (0-0)	0 (0-0)	17 (7-25)	98 (42-150)	213 (101-334)	379 (174-584)	629 (374-857)
Heilongjiang	Haerbin	70	35	5775 (3711-7490)	1 (0-2)	231 (127-347)	517 (276-765)	885 (445-1302)	1378 (654-1997)	2066 (1029-2999)	3064 (1630-4506)	4446 (2341-6441)
Heilongjiang	Daxinganlingdiq u	23	11	155 (106-208)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	19 (8-33)	84 (40-142)	155 (106-208)
Heilongjiang	Daqing	46	23	1358 (857-1794)	0 (0-0)	0 (0-0)	0 (0-0)	80 (34-119)	236 (101-	459 (224-	780 (364-	1260 (704-

g									357)	705)	1192)	1758)
Heilongjian g	Mudanjiang	50	25	1353 (854-1784)	0 (0-0)	0 (0-0)	4 (2-6)	112 (49-167)	259 (111-387)	467 (231-710)	769 (366-1169)	1209 (646-1720)
Heilongjian g	Suihua	38	19	2294 (1460-3007)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	261 (116-404)	702 (322-1121)	1334 (607-2080)	2266 (1377-3001)
Heilongjian g	Jixi	27	13	640 (421-853)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	132 (57-212)	363 (166-589)	640 (421-853)
Heilongjian g	Hegang	41	20	469 (297-618)	0 (0-0)	0 (0-0)	0 (0-0)	8 (3-12)	67 (28-103)	151 (71-238)	272 (124-421)	454 (272-613)
Heilongjian g	Heihe	30	15	621 (400-820)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10 (4-16)	154 (67-246)	358 (162-567)	621 (400-820)
Heilongjian g	Qiqihaer	39	19	2317 (1471-3045)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	293 (127-452)	726 (336-1152)	1347 (614-2090)	2272 (1380-3044)
Shanghai	Shanghai	55	40	11853 (7352-15048)	638 (334-873)	1322 (666-1800)	2159 (1048-2955)	3203 (1541-4433)	4531 (2389-6319)	6245 (3212-8844)	8360 (4213-11749)	11081 (6317-14586)
Jiangsu	Nanjing	59	42	2648 (1623-3376)	179 (90-253)	323 (154-452)	501 (229-697)	726 (329-1015)	1017 (511-1430)	1397 (698-1983)	1872 (908-2637)	2476 (1369-3273)
Jiangsu	Nantong	59	42	2400 (1469-3063)	155 (77-220)	287 (136-401)	449 (205-625)	655 (296-915)	920 (462-1295)	1267 (631-1800)	1700 (822-2397)	2252 (1246-2975)
Jiangsu	Suqian	63	45	1591 (980-2021)	130 (67-186)	214 (104-299)	317 (148-440)	447 (206-618)	615 (310-857)	835 (426-1168)	1111 (547-1553)	1455 (792-1938)
Jiangsu	Changzhou	61	44	1539 (947-1959)	119 (60-169)	201 (97-281)	302 (140-418)	430 (196-594)	594 (297-832)	809 (410-1135)	1079 (529-1516)	1419 (777-1884)
Jiangsu	Xuzhou	67	48	2959 (1832-3747)	290 (152-415)	439 (220-617)	623 (299-865)	854 (399-1178)	1152 (585-1589)	1542 (813-2132)	2036 (1021-2818)	2628 (1417-3516)
Jiangsu	Yangzhou	55	39	1430 (868-1831)	62 (30-87)	144 (66-201)	246 (109-	374 (167-	540 (267-	758 (368-	1027 (490-	1373 (783-

							343)	529)	768)	1089)	1457)	1804)
Jiangsu	Wuxi	55	39	2044 (1241-2617)	89 (43-125)	206 (95-288)	352 (156-491)	535 (239-757)	773 (383-1098)	1083 (527-1557)	1468 (700-2082)	1962 (1119-2578)
Jiangsu	Taizhou	62	45	1557 (959-1979)	127 (65-181)	209 (102-292)	310 (145-430)	438 (201-605)	602 (303-839)	817 (417-1144)	1088 (535-1522)	1425 (776-1898)
Jiangsu	Huaian	60	43	1597 (981-2035)	115 (58-163)	201 (96-281)	307 (141-427)	442 (201-614)	615 (307-864)	841 (422-1188)	1125 (548-1582)	1485 (817-1967)
Jiangsu	Yancheng	51	37	2266 (1367-2903)	49 (23-68)	184 (82-258)	353 (153-495)	566 (252-807)	842 (412-1216)	1203 (569-1751)	1647 (779-2359)	2212 (1281-2876)
Jiangsu	Suzhou	58	41	3427 (2093-4384)	205 (101-290)	395 (186-552)	630 (285-878)	926 (418-1297)	1310 (655-1842)	1811 (896-2576)	2436 (1172-3438)	3234 (1811-4267)
Jiangsu	Lianyungang	55	40	1418 (862-1816)	68 (33-96)	149 (69-208)	249 (111-346)	375 (168-528)	538 (268-765)	751 (367-1078)	1015 (485-1442)	1354 (764-1782)
Jiangsu	Zhenjiang	60	43	1037 (637-1322)	76 (38-107)	131 (63-184)	200 (92-278)	287 (131-399)	399 (199-561)	546 (274-770)	730 (356-1026)	963 (528-1275)
Zhejiang	Lishui	39	29	451 (278-577)	0 (0-0)	0 (0-0)	39 (18-56)	92 (44-136)	160 (77-239)	246 (114-362)	346 (170-487)	451 (278-577)
Zhejiang	Taizhou	42	32	1335 (818-1706)	0 (0-0)	46 (21-63)	164 (74-228)	310 (153-447)	497 (246-730)	734 (350-1075)	1014 (500-1423)	1333 (815-1705)
Zhejiang	Jiaxing	52	40	1122 (689-1425)	60 (31-80)	129 (65-173)	213 (105-288)	317 (157-434)	450 (239-626)	618 (316-870)	822 (415-1132)	1078 (625-1390)
Zhejiang	Ningbo	46	35	1782 (1089-2275)	6 (3-8)	126 (60-171)	273 (128-376)	456 (223-640)	689 (352-991)	984 (482-1412)	1336 (663-1868)	1762 (1057-2259)
Zhejiang	Hangzhou	55	42	2214 (1368-2799)	154 (82-208)	286 (148-385)	446 (223-601)	645 (317-884)	897 (486-1236)	1218 (633-1695)	1608 (820-2210)	2096 (1199-2696)
Zhejiang	Wenzhou	45	34	2104 (1287-	0 (0-0)	123 (58-168)	301 (139-	522 (256-	803 (406-	1160 (563-	1584 (784-	2088 (1263-

				2688)			417)	737)	1165)	1681)	2223)	2675)
Zhejiang	Huzhou	55	42	735 (454-929)	50 (26-67)	94 (48-126)	147 (73-198)	214 (105-292)	297 (161-410)	404 (210-563)	534 (272-735)	696 (399-896)
Zhejiang	Shaoxing	54	41	1239 (764-1569)	78 (41-105)	153 (78-206)	244 (121-330)	357 (176-489)	500 (269-692)	682 (352-954)	903 (459-1244)	1181 (682-1520)
Zhejiang	Zhoushan	30	22	200 (126-265)	0 (0-0)	0 (0-0)	0 (0-0)	18 (8-28)	56 (25-85)	103 (46-158)	158 (79-228)	200 (126-265)
Zhejiang	Quzhou	42	32	477 (292-609)	0 (0-0)	18 (8-25)	60 (27-83)	112 (55-160)	178 (88-261)	262 (125-383)	361 (178-507)	476 (290-608)
Zhejiang	Jinhua	53	40	1338 (822-1700)	73 (38-98)	155 (79-208)	256 (126-346)	380 (188-519)	537 (286-747)	738 (377-1037)	980 (496-1350)	1284 (746-1658)
Anhui	Bozhou	57	41	1048 (631-1347)	54 (25-78)	110 (50-156)	180 (77-253)	268 (116-379)	381 (186-545)	529 (257-762)	716 (337-1028)	948 (502-1295)
Anhui	Liuan	56	39	1201 (722-1544)	53 (25-76)	119 (53-168)	200 (85-281)	302 (131-429)	434 (210-624)	608 (292-880)	825 (386-1187)	1100 (588-1491)
Anhui	Gefei	67	47	1300 (800-1654)	118 (59-172)	181 (87-260)	259 (120-364)	356 (159-496)	481 (231-671)	645 (330-904)	854 (421-1201)	1102 (568-1522)
Anhui	Anqing	53	38	1115 (669-1435)	33 (15-47)	95 (42-135)	173 (73-245)	272 (117-390)	399 (192-574)	566 (267-828)	774 (359-1118)	1041 (565-1395)
Anhui	Xuancheng	50	35	519 (311-669)	5 (2-7)	35 (15-50)	73 (30-104)	121 (52-176)	183 (86-268)	264 (121-390)	364 (167-530)	494 (275-656)
Anhui	Suzhou	62	44	1192 (725-1522)	88 (43-128)	149 (69-212)	223 (100-314)	317 (139-445)	438 (215-620)	597 (302-842)	798 (384-1129)	1038 (539-1434)
Anhui	Chaohu*	55	39	825 (496-1061)	33 (15-48)	79 (35-111)	135 (57-190)	206 (89-294)	298 (143-427)	418 (200-607)	568 (265-818)	759 (406-1026)
Anhui	Chizhou	34	24	235 (142-307)	0 (0-0)	0 (0-0)	0 (0-0)	27 (12-42)	65 (28-103)	115 (48-178)	174 (80-258)	235 (142-307)
Anhui	Huaibei	60	42	464 (280-594)	30 (14-43)	54 (25-76)	84 (36-118)	121 (53-171)	170 (82-242)	233 (116-	314 (149-446)	411 (215-565)

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Anhui	Huainan	50	35	478 (286-616)	4 (2-6)	32 (13-46)	67 (27-96)	111 (48-161)	168 (79-247)	243 (112-359)	336 (154-489)	455 (253-604)
Anhui	Chuzhou	63	45	879 (535-1123)	67 (33-97)	111 (52-158)	166 (74-234)	235 (103-329)	324 (158-457)	440 (224-620)	587 (283-832)	763 (395-1055)
Anhui	Wuhu	56	40	487 (293-626)	23 (11-34)	50 (22-71)	82 (35-116)	123 (53-175)	176 (86-252)	246 (119-355)	333 (156-479)	443 (235-603)
Anhui	Bangbu	64	46	713 (436-908)	59 (29-85)	94 (44-135)	138 (62-194)	192 (85-269)	263 (128-370)	355 (183-500)	473 (229-666)	612 (316-847)
Anhui	Tongling	58	41	157 (95-202)	9 (4-13)	17 (8-24)	27 (12-39)	40 (17-57)	57 (28-82)	79 (39-113)	107 (50-153)	141 (74-193)
Anhui	Fuyang	51	36	1573 (944-2026)	29 (13-41)	119 (51-169)	232 (96-328)	374 (160-539)	559 (266-812)	800 (372-1174)	1100 (507-1600)	1488 (812-1979)
Anhui	Maanshan	63	45	305 (186-390)	23 (11-34)	39 (18-55)	58 (26-81)	81 (36-114)	112 (55-159)	152 (77-215)	204 (98-288)	264 (137-366)
Anhui	Huangshan	35	25	230 (139-300)	0 (0-0)	0 (0-0)	0 (0-0)	28 (12-44)	65 (28-102)	113 (47-174)	170 (78-253)	230 (139-300)
Fujian	Sanming	29	23	550 (349-734)	0 (0-0)	0 (0-0)	0 (0-0)	59 (25-94)	164 (69-255)	291 (127-467)	439 (219-647)	550 (349-734)
Fujian	Nanping	24	19	501 (332-683)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	109 (45-180)	246 (108-427)	409 (219-608)	501 (332-683)
Fujian	Shamen	29	23	784 (497-1040)	0 (0-0)	0 (0-0)	0 (0-0)	90 (39-143)	238 (101-370)	417 (181-666)	625 (311-921)	784 (497-1040)
Fujian	Ningde	28	23	613 (390-822)	0 (0-0)	0 (0-0)	0 (0-0)	61 (26-97)	180 (76-280)	323 (141-521)	490 (246-725)	613 (390-822)
Fujian	Quanzhou	26	21	1654 (1072-2247)	0 (0-0)	0 (0-0)	0 (0-0)	83 (35-130)	428 (179-680)	846 (371-1434)	1335 (688-1984)	1654 (1072-2247)
Fujian	Zhangzhou	34	28	1203 (746-1556)	0 (0-0)	0 (0-0)	80 (35-121)	233 (105-359)	427 (186-663)	665 (292-1012)	940 (455-1362)	1203 (746-1556)

Fujian	Fuzhou	28	23	1546 (983-2072)	0 (0-0)	0 (0-0)	0 (0-0)	154 (66-244)	452 (191-705)	815 (355-1314)	1236 (621-1826)	1546 (983-2072)
Fujian	Putian	29	24	626 (395-827)	0 (0-0)	0 (0-0)	0 (0-0)	78 (34-124)	194 (82-302)	335 (146-529)	497 (247-729)	626 (395-827)
Fujian	Longyan	23	19	475 (314-646)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	97 (40-163)	230 (101-405)	390 (212-579)	475 (314-646)
Jiangxi	Shangrao	42	34	833 (527-1071)	0 (0-0)	55 (25-80)	123 (57-180)	208 (101-310)	313 (150-471)	443 (209-663)	596 (291-872)	805 (479-1063)
Jiangxi	Jiujiang	47	38	630 (398-809)	25 (12-35)	64 (30-92)	112 (51-162)	170 (84-247)	243 (121-361)	334 (161-494)	442 (217-639)	587 (335-786)
Jiangxi	Nanchang	42	34	635 (402-817)	0 (0-0)	40 (18-58)	92 (42-135)	157 (76-235)	238 (114-358)	338 (159-506)	456 (222-668)	615 (368-811)
Jiangxi	Jian	42	34	608 (384-781)	0 (0-0)	39 (18-57)	89 (41-130)	151 (73-226)	228 (109-343)	323 (152-484)	435 (213-637)	588 (351-776)
Jiangxi	Yichun	42	35	689 (435-886)	1 (0-2)	47 (21-69)	104 (48-151)	173 (84-257)	259 (125-389)	366 (173-547)	492 (240-718)	664 (394-879)
Jiangxi	Fuzhou	36	30	456 (290-590)	0 (0-0)	1 (0-1)	43 (20-65)	95 (45-146)	160 (74-246)	241 (111-363)	334 (164-496)	454 (288-588)
Jiangxi	Xinyu	39	32	138 (87-178)	0 (0-0)	4 (2-6)	16 (7-24)	31 (15-48)	50 (23-76)	73 (34-110)	100 (49-148)	136 (84-177)
Jiangxi	Jingdezhen	42	34	201 (127-258)	0 (0-0)	13 (6-19)	29 (13-43)	50 (24-74)	75 (36-113)	107 (50-160)	144 (70-210)	194 (115-256)
Jiangxi	Pingxiang	52	43	260 (165-334)	20 (10-28)	35 (17-49)	53 (25-75)	75 (37-108)	102 (53-147)	137 (68-198)	178 (88-256)	229 (125-318)
Jiangxi	Ganzhou	39	32	1017 (643-1311)	0 (0-0)	36 (16-52)	124 (59-184)	234 (113-355)	371 (174-563)	539 (251-813)	738 (361-1089)	1001 (617-1305)
Jiangxi	Yingtian	39	32	137 (86-177)	0 (0-0)	5 (2-8)	17 (8-25)	32 (15-48)	50 (23-76)	73 (34-110)	99 (48-147)	135 (83-176)
Shandong	Dongying	67	38	736 (467-944)	17 (9-26)	50 (27-73)	91 (47-132)	143 (71-203)	212 (101-303)	307 (164-443)	439 (228-632)	611 (329-868)

Shandong	Linyi	81	46	3852 (2515-4880)	267 (158-390)	420 (242-608)	608 (340-875)	847 (449-1204)	1161 (591-1630)	1586 (850-2225)	2180 (1218-3086)	2968 (1607-4160)
Shandong	Weihai	38	21	802 (501-1042)	0 (0-0)	0 (0-0)	0 (0-0)	36 (15-53)	149 (69-230)	307 (140-476)	520 (241-791)	802 (501-1042)
Shandong	Dezhou	84	48	2157 (1415-2726)	164 (98-239)	248 (144-359)	351 (197-506)	482 (259-683)	653 (336-917)	884 (472-1237)	1207 (684-1704)	1639 (892-2295)
Shandong	Rizhao	51	29	918 (570-1191)	0 (0-0)	0 (0-0)	51 (24-73)	129 (58-187)	234 (108-344)	379 (190-562)	578 (278-857)	861 (491-1172)
Shandong	Zaozhuang	88	49	1459 (962-1843)	121 (73-176)	176 (104-256)	244 (140-352)	330 (180-469)	443 (231-623)	595 (319-830)	807 (464-1134)	1092 (601-1528)
Shandong	Taian	72	40	2030 (1301-2591)	83 (47-121)	170 (94-247)	277 (147-399)	415 (209-590)	597 (292-842)	845 (459-1197)	1191 (635-1697)	1644 (883-2317)
Shandong	Jinan	84	48	2640 (1732-3337)	201 (120-293)	303 (176-440)	430 (242-620)	590 (317-837)	799 (412-1123)	1082 (578-1514)	1477 (837-2086)	2005 (1091-2809)
Shandong	Jining	83	47	3118 (2042-3947)	229 (136-333)	351 (203-509)	501 (280-723)	692 (370-983)	942 (483-1322)	1281 (685-1792)	1753 (988-2480)	2383 (1294-3339)
Shandong	Zibo	75	42	1695 (1093-2158)	85 (49-124)	156 (87-227)	244 (132-350)	356 (182-508)	503 (249-709)	703 (382-990)	984 (532-1394)	1351 (727-1900)
Shandong	Binzhou	82	46	1438 (939-1822)	100 (59-146)	157 (90-227)	227 (127-327)	316 (168-450)	433 (220-609)	592 (317-830)	813 (455-1152)	1108 (600-1553)
Shandong	Weifang	74	42	3391 (2185-4320)	165 (95-240)	307 (172-448)	483 (260-694)	708 (361-1012)	1005 (497-1416)	1409 (767-1984)	1973 (1064-2798)	2712 (1459-3815)
Shandong	Yantai	41	23	2069 (1285-2687)	0 (0-0)	0 (0-0)	0 (0-0)	152 (64-226)	429 (201-650)	814 (379-1260)	1335 (622-2031)	2054 (1266-2687)
Shandong	Liaocheng	99	56	2340 (1570-2931)	244 (151-356)	327 (199-474)	427 (254-614)	554 (316-786)	717 (387-1001)	937 (503-1290)	1240 (742-1707)	1657 (945-2285)

Shandong	Laiwu	91	51	512 (339-646)	45 (27-66)	64 (38-94)	88 (51-126)	117 (65-167)	156 (82-220)	208 (111-287)	280 (163-391)	378 (210-526)
Shandong	Heshi	97	55	3326 (2224-4174)	333 (205-486)	452 (274-654)	598 (351-858)	781 (441-1109)	1019 (545-1422)	1338 (716-1843)	1781 (1066-2457)	2385 (1350-3302)
Shandong	Qingdao	52	29	2878 (1789-3735)	0 (0-0)	0 (0-0)	177 (84-254)	419 (188-605)	743 (343-1091)	1191 (600-1764)	1808 (874-2674)	2680 (1515-3663)
Henan	Sanmenxia	77	45	526 (325-672)	28 (15-43)	46 (23-68)	66 (33-99)	92 (43-135)	124 (56-180)	165 (73-234)	219 (109-309)	291 (152-415)
Henan	Xinyang	73	43	1420 (872-1818)	65 (34-99)	114 (57-170)	172 (83-256)	244 (112-358)	335 (147-480)	452 (198-644)	607 (309-864)	812 (411-1157)
Henan	Nanyang	70	41	2360 (1441-3027)	93 (47-140)	176 (87-264)	276 (131-410)	400 (183-586)	557 (240-792)	760 (334-1086)	1027 (522-1479)	1383 (686-1972)
Henan	Zhoukou	84	50	2163 (1360-2737)	149 (80-225)	214 (113-322)	293 (152-436)	388 (192-573)	508 (241-736)	660 (297-942)	858 (421-1204)	1123 (609-1586)
Henan	Shangqiu	76	45	1731 (1069-2212)	92 (48-139)	149 (76-224)	218 (108-325)	302 (142-443)	409 (184-592)	545 (240-775)	724 (362-1020)	964 (500-1372)
Henan	Anyang	85	50	1250 (786-1582)	86 (46-131)	124 (66-187)	169 (88-252)	224 (111-331)	293 (140-425)	381 (172-544)	495 (242-695)	648 (352-914)
Henan	Pingdingshan	91	53	1206 (767-1519)	95 (52-144)	129 (69-194)	170 (90-254)	219 (112-324)	281 (136-409)	359 (167-512)	460 (217-643)	594 (324-824)
Henan	Kaifeng	77	45	1103 (682-1408)	60 (31-92)	97 (50-145)	140 (69-209)	193 (91-283)	260 (117-377)	346 (152-491)	459 (229-648)	609 (318-866)
Henan	Xinxiang	97	57	1425 (914-1788)	122 (69-187)	161 (89-244)	206 (112-308)	261 (138-386)	329 (166-479)	415 (200-594)	525 (248-739)	671 (359-934)
Henan	Luoyang	75	44	1532 (944-1959)	77 (40-116)	128 (65-192)	190 (93-282)	266 (123-389)	362 (161-521)	485 (213-690)	647 (328-914)	863 (443-1232)
Henan	Jiyuan*	82	48	161 (101-205)	10 (5-15)	15 (8-23)	21 (10-32)	28 (14-42)	38 (17-55)	49 (22-70)	65 (32-92)	86 (46-122)

Henan	Luohe	81	48	608 (379-772)	38 (20-58)	57 (30-86)	80 (41-119)	108 (52-159)	143 (66-207)	188 (83-265)	246 (120-348)	324 (173-461)
Henan	Puyang	83	49	864 (541-1096)	57 (30-86)	83 (44-126)	115 (59-172)	154 (75-227)	203 (95-294)	265 (119-376)	347 (171-489)	455 (245-648)
Henan	Jiaozuo	91	53	870 (553-1096)	68 (37-103)	93 (50-140)	122 (65-183)	158 (81-233)	203 (98-295)	259 (120-370)	332 (157-465)	429 (235-596)
Henan	Xuchang	81	47	1028 (641-1307)	64 (34-97)	96 (50-145)	135 (68-201)	182 (88-268)	242 (112-350)	318 (141-449)	418 (204-590)	551 (294-782)
Henan	Zhengzhou	98	57	2159 (1387-2707)	188 (107-286)	246 (137-372)	314 (171-469)	397 (211-586)	498 (251-725)	626 (304-898)	791 (375-1114)	1009 (540-1405)
Henan	Zhumadian	77	45	1702 (1052-2174)	92 (48-139)	148 (76-222)	215 (106-321)	298 (140-436)	402 (181-583)	535 (236-760)	711 (356-1002)	945 (491-1345)
Henan	Hebi	74	43	365 (224-467)	17 (9-26)	29 (15-44)	44 (21-66)	63 (29-92)	86 (38-123)	116 (51-165)	155 (79-221)	208 (105-296)
Hubei	Shiyan	52	38	1070 (645-1377)	34 (16-49)	93 (40-131)	163 (68-231)	251 (109-360)	363 (173-521)	505 (239-739)	682 (313-991)	887 (436-1251)
Hubei	Xianning	54	40	806 (488-1037)	39 (18-55)	81 (36-114)	132 (56-186)	195 (85-278)	275 (132-394)	377 (183-547)	505 (236-730)	654 (321-918)
Hubei	Xiaogan	70	52	1718 (1070-2180)	180 (93-261)	254 (127-364)	344 (165-484)	454 (209-632)	591 (281-819)	766 (402-1069)	989 (511-1377)	1259 (628-1756)
Hubei	Yichang	73	53	1465 (917-1854)	163 (85-236)	224 (113-323)	298 (146-422)	389 (183-542)	503 (241-695)	647 (341-893)	831 (438-1149)	1055 (533-1469)
Hubei	Enshizhou	54	40	1073 (650-1381)	49 (23-70)	105 (47-149)	174 (74-245)	259 (113-369)	366 (177-525)	503 (243-731)	675 (314-975)	874 (428-1228)
Hubei	Wuhan	71	53	3515 (2195-4455)	380 (199-553)	530 (266-762)	710 (345-1005)	932 (434-1297)	1208 (580-1673)	1559 (823-2165)	2007 (1049-2787)	2552 (1283-3553)
Hubei	Jingzhou	72	53	2047 (1279-2593)	223 (117-324)	310 (155-446)	414 (202-586)	543 (253-756)	703 (338-973)	907 (480-1257)	1167 (611-1618)	1483 (746-2065)

Hubei	Jingmen	72	53	1035 (647-1310)	113 (59-165)	157 (79-226)	210 (102-297)	275 (128-382)	355 (170-491)	458 (242-633)	588 (309-815)	748 (377-1041)
Hubei	Xiangyang	77	56	2017 (1271-2543)	241 (129-351)	323 (167-466)	421 (209-597)	540 (259-755)	689 (330-950)	878 (466-1200)	1119 (606-1547)	1416 (726-1959)
Hubei	Ezhou	70	52	374 (233-475)	39 (20-57)	55 (27-80)	75 (36-106)	99 (45-137)	129 (61-178)	166 (87-232)	215 (111-299)	274 (137-382)
Hubei	Suizhou	67	49	760 (471-966)	73 (37-106)	107 (52-153)	148 (69-208)	199 (90-277)	262 (125-362)	342 (177-481)	445 (224-626)	568 (280-794)
Hubei	Huanggang	60	44	2093 (1281-2678)	154 (75-221)	255 (120-362)	378 (169-532)	530 (232-743)	721 (342-1020)	964 (485-1365)	1272 (614-1800)	1634 (797-2290)
Hubei	Huangshi	68	50	860 (533-1090)	85 (43-124)	123 (61-176)	169 (80-239)	225 (103-315)	296 (140-410)	385 (201-541)	500 (254-698)	637 (315-890)
Hunan	Loude	51	38	671 (424-870)	25 (12-35)	64 (30-91)	111 (51-160)	171 (80-250)	247 (125-363)	343 (167-508)	462 (226-676)	625 (356-850)
Hunan	Yueyang	52	40	984 (624-1276)	47 (24-67)	103 (50-147)	171 (80-245)	257 (123-373)	365 (185-533)	503 (248-742)	674 (332-981)	904 (510-1239)
Hunan	Changde	49	37	1001 (633-1299)	27 (13-39)	87 (41-125)	160 (73-230)	250 (118-365)	365 (183-540)	513 (248-761)	694 (339-1013)	943 (544-1273)
Hunan	Zhangjiajie	49	37	257 (162-333)	6 (2-8)	21 (10-30)	40 (18-58)	63 (30-93)	93 (46-138)	131 (63-195)	178 (87-260)	243 (140-327)
Hunan	Huaihua	50	38	837 (529-1086)	28 (14-40)	77 (36-111)	137 (63-197)	212 (100-310)	307 (155-453)	429 (208-634)	578 (283-845)	782 (447-1062)
Hunan	Zhuzhou	55	42	706 (448-914)	44 (22-63)	83 (41-118)	131 (62-187)	189 (90-271)	264 (136-381)	360 (181-527)	479 (237-695)	634 (349-877)
Hunan	Yongzhou	52	39	929 (588-1204)	43 (21-61)	96 (46-137)	161 (75-230)	241 (115-351)	344 (175-503)	475 (234-701)	637 (313-928)	855 (483-1171)
Hunan	Xiangtan	58	44	701 (446-905)	54 (28-77)	92 (46-130)	137 (66-195)	193 (93-275)	264 (138-381)	356 (183-518)	469 (234-681)	610 (331-855)

Hunan	Xiangxizhou	42	32	416 (261-538)	0 (0-0)	14 (6-21)	48 (21-70)	90 (43-135)	144 (69-218)	212 (99-322)	295 (143-441)	409 (249-538)
Hunan	Yiyang	47	35	739 (467-959)	7 (3-10)	53 (24-76)	108 (49-158)	178 (85-260)	266 (132-396)	379 (180-568)	517 (251-754)	708 (416-945)
Hunan	Hengyang	55	42	1308 (831-1692)	82 (41-116)	154 (76-219)	242 (114-346)	351 (168-502)	490 (253-706)	667 (336-976)	887 (439-1288)	1174 (648-1626)
Hunan	Shaoyang	55	42	1295 (822-1675)	80 (40-114)	152 (75-216)	239 (113-342)	347 (166-496)	484 (250-699)	660 (332-966)	878 (435-1275)	1163 (641-1610)
Hunan	Chenzhou	44	34	766 (483-991)	0 (0-0)	40 (18-58)	100 (44-147)	175 (83-258)	270 (132-405)	392 (184-591)	540 (262-793)	745 (448-982)
Hunan	Changsha	61	46	1343 (858-1729)	122 (64-175)	191 (99-270)	275 (136-389)	379 (185-539)	510 (268-730)	678 (355-976)	888 (448-1285)	1143 (617-1613)
Guangdong	Dongguan	36	31	2841 (1796-3672)	0 (0-0)	70 (31-104)	336 (158-516)	663 (311-1018)	1069 (489-1656)	1561 (717-2381)	2135 (1063-3172)	2841 (1796-3672)
Guangdong	Zhongshan	31	27	993 (636-1299)	0 (0-0)	0 (0-0)	58 (27-90)	186 (85-291)	345 (154-536)	536 (244-831)	761 (386-1119)	993 (636-1299)
Guangdong	Yunfu	30	26	725 (468-955)	0 (0-0)	0 (0-0)	22 (10-35)	120 (54-189)	242 (107-376)	388 (177-604)	559 (287-819)	725 (468-955)
Guangdong	Foshan	38	33	2582 (1626-3336)	0 (0-0)	140 (62-206)	369 (170-555)	650 (310-1000)	1000 (464-1537)	1425 (658-2148)	1920 (948-2857)	2566 (1608-3329)
Guangdong	Anzhou	37	32	4493 (2835-5804)	0 (0-0)	195 (86-288)	602 (280-912)	1102 (523-1693)	1723 (795-2657)	2478 (1142-3762)	3355 (1662-4988)	4481 (2829-5793)
Guangdong	Huizhou	27	23	1299 (857-1723)	0 (0-0)	0 (0-0)	0 (0-0)	144 (63-227)	385 (169-609)	674 (309-1105)	1020 (540-1493)	1299 (857-1723)
Guangdong	Jieyang	37	32	2055 (1297-2660)	0 (0-0)	70 (31-104)	259 (121-396)	492 (232-757)	781 (358-1207)	1132 (520-1722)	1539 (764-2292)	2053 (1296-2660)
Guangdong	Meizhou	33	29	1396 (893-1809)	0 (0-0)	0 (0-0)	117 (54-182)	289 (133-	503 (226-	760 (347-	1061 (535-	1396 (893-

								449)	783)	1173)	1566)	1809)
Guangdong	Shantou	33	28	1759 (1127-2280)	0 (0-0)	0 (0-0)	137 (63-212)	356 (163-554)	628 (282-980)	957 (437-1476)	1340 (676-1972)	1759 (1127-2280)
Guangdong	Shanwei	27	24	841 (553-1116)	0 (0-0)	0 (0-0)	0 (0-0)	101 (45-160)	255 (112-403)	439 (201-715)	659 (346-960)	841 (553-1116)
Guangdong	Jiangmen	34	29	1480 (944-1915)	0 (0-0)	0 (0-0)	136 (63-210)	315 (146-489)	538 (243-838)	808 (370-1237)	1123 (564-1656)	1480 (944-1915)
Guangdong	Heyuan	34	29	985 (627-1273)	0 (0-0)	0 (0-0)	92 (43-142)	211 (97-327)	359 (162-558)	538 (246-823)	746 (375-1101)	985 (627-1273)
Guangdong	Shenzhen	29	25	3146 (2037-4136)	0 (0-0)	0 (0-0)	69 (32-108)	500 (225-788)	1035 (459-1615)	1677 (765-2631)	2434 (1253-3557)	3146 (2037-4136)
Guangdong	Qingyuan	33	29	1219 (780-1580)	0 (0-0)	0 (0-0)	103 (48-160)	253 (117-394)	439 (198-685)	664 (303-1024)	926 (467-1368)	1219 (780-1580)
Guangdong	Zhanjiang	27	23	1965 (1299-2611)	0 (0-0)	0 (0-0)	0 (0-0)	210 (92-332)	578 (254-917)	1017 (467-1674)	1545 (820-2266)	1965 (1299-2611)
Guangdong	Chaozhou	38	33	960 (604-1240)	0 (0-0)	53 (23-79)	138 (63-208)	242 (116-373)	372 (172-572)	530 (245-799)	713 (352-1061)	953 (596-1238)
Guangdong	Zhuhai	31	27	495 (317-648)	0 (0-0)	0 (0-0)	28 (13-43)	92 (42-144)	171 (76-266)	267 (121-414)	379 (192-558)	495 (317-648)
Guangdong	Zhaoqing	28	24	1145 (749-1512)	0 (0-0)	0 (0-0)	0 (0-0)	153 (68-242)	357 (157-562)	602 (275-969)	893 (466-1299)	1145 (749-1512)
Guangdong	Maoming	31	27	1835 (1178-2402)	0 (0-0)	0 (0-0)	95 (44-148)	335 (152-524)	632 (282-982)	989 (451-1534)	1409 (716-2070)	1835 (1178-2402)
Guangdong	Yangjiang	32	28	785 (502-1018)	0 (0-0)	0 (0-0)	57 (26-89)	156 (71-243)	278 (125-434)	426 (194-660)	599 (302-880)	785 (502-1018)
Guangdong	Shaoguan	32	28	918 (588-1190)	0 (0-0)	0 (0-0)	68 (32-106)	183 (84-286)	326 (146-	499 (227-	700 (353-	918 (588-1190)

									508)	770)	1029)	
Guangxi	Beihai	31	24	214 (139-279)	0 (0-0)	0 (0-0)	0 (0-0)	23 (10-35)	55 (24-86)	95 (42-147)	142 (67-214)	205 (126-276)
Guangxi	Nanning	41	32	1102 (699-1417)	0 (0-0)	35 (16-50)	118 (54-171)	220 (103-324)	346 (167-521)	503 (236-756)	693 (326-1027)	920 (476-1305)
Guangxi	Chongzuo	39	30	320 (203-412)	0 (0-0)	3 (1-4)	28 (13-41)	59 (28-89)	98 (46-149)	146 (67-221)	204 (95-303)	275 (145-384)
Guangxi	Laibin	42	33	351 (223-451)	0 (0-0)	14 (6-20)	40 (18-58)	72 (34-105)	111 (54-167)	160 (75-240)	220 (103-325)	290 (149-415)
Guangxi	Liuzhou	49	38	675 (426-868)	22 (11-30)	58 (28-83)	102 (48-146)	156 (75-225)	222 (112-321)	304 (151-446)	406 (195-593)	524 (265-749)
Guangxi	Guilin	49	37	847 (534-1091)	23 (12-33)	70 (34-99)	126 (59-180)	194 (92-280)	278 (140-403)	383 (189-563)	511 (246-750)	662 (336-947)
Guangxi	Wuzhou	35	27	431 (276-557)	0 (0-0)	0 (0-0)	17 (8-26)	64 (30-98)	122 (56-188)	195 (88-297)	281 (132-422)	396 (224-537)
Guangxi	Hechi	41	31	553 (351-711)	0 (0-0)	14 (6-20)	56 (26-82)	108 (51-161)	172 (83-261)	252 (118-380)	349 (164-517)	465 (242-656)
Guangxi	Yulin	39	30	875 (556-1127)	0 (0-0)	4 (1-6)	74 (33-109)	160 (77-242)	267 (126-405)	400 (184-606)	559 (262-836)	758 (405-1056)
Guangxi	Baise	44	34	590 (374-758)	0 (0-0)	31 (14-44)	73 (33-106)	125 (59-182)	189 (93-282)	269 (128-402)	366 (173-540)	480 (246-691)
Guangxi	Guigang	41	31	674 (428-867)	0 (0-0)	16 (7-23)	68 (31-99)	131 (62-195)	210 (101-318)	308 (143-464)	426 (200-632)	568 (296-800)
Guangxi	Hezhou	39	30	312 (198-402)	0 (0-0)	1 (0-2)	26 (12-39)	57 (27-86)	95 (45-144)	142 (65-216)	199 (93-297)	270 (144-376)
Guangxi	Qinzhou	36	28	472 (301-609)	0 (0-0)	0 (0-0)	27 (12-41)	77 (36-117)	138 (64-211)	215 (97-326)	305 (143-458)	426 (235-581)
Guangxi	Fangchenggang	31	24	120 (78-156)	0 (0-0)	0 (0-0)	0 (0-0)	12 (5-19)	30 (13-48)	53 (23-82)	79 (37-120)	115 (71-155)
Hainan	Sanya	17	16	62 (45-82)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7 (3-14)	28 (14-47)	56 (37-76)	62 (45-82)
Hainan	Haikou	21	20	233 (159-314)	0 (0-0)	0 (0-0)	0 (0-0)	4 (2-8)	60 (25-111)	122 (56-215)	201 (117-294)	233 (159-314)
Chongqing	Chongqing	55	45	8888 (5665-11180)	807 (457-1083)	1308 (727-1760)	1904 (1017-2574)	2624 (1389-3563)	3508 (1940-4835)	4605 (2470-6419)	5929 (3105-8201)	7479 (4115-10063)

Sichuan	Leshan	57	43	653 (413-818)	47 (27-63)	81 (45-108)	121 (66-162)	170 (89-229)	229 (123-311)	303 (164-416)	394 (206-540)	501 (263-675)
Sichuan	Neijiang	64	49	783 (502-970)	79 (48-107)	116 (67-156)	160 (90-214)	213 (117-283)	276 (151-370)	356 (203-476)	454 (248-616)	572 (306-765)
Sichuan	Liangshanzhou	25	19	557 (364-740)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	101 (45-155)	236 (107-391)	392 (199-601)	557 (364-740)
Sichuan	Nanchong	60	45	1293 (824-1611)	110 (64-148)	175 (99-234)	251 (139-336)	343 (184-460)	455 (245-612)	595 (330-810)	768 (409-1046)	972 (513-1308)
Sichuan	Yibin	59	45	920 (586-1147)	78 (46-105)	124 (70-166)	179 (99-239)	244 (131-327)	324 (174-436)	423 (235-577)	547 (291-745)	692 (365-931)
Sichuan	Bazhong	37	28	536 (338-691)	0 (0-0)	0 (0-0)	35 (16-50)	93 (46-136)	164 (80-245)	253 (120-375)	359 (174-516)	494 (277-661)
Sichuan	Anyuan	22	17	269 (181-359)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	28 (12-46)	104 (48-183)	191 (102-291)	269 (181-359)
Sichuan	Anan	44	34	577 (362-738)	0 (0-0)	30 (15-41)	74 (36-102)	127 (63-178)	192 (99-275)	274 (136-394)	373 (183-529)	489 (259-664)
Sichuan	Deyang	54	41	717 (453-903)	44 (24-58)	82 (45-110)	128 (69-171)	183 (95-248)	250 (134-342)	335 (179-465)	438 (226-604)	560 (294-756)
Sichuan	Chengdou	64	48	2967 (1902-3679)	300 (180-404)	441 (255-588)	607 (341-809)	806 (445-1072)	1049 (573-1403)	1349 (771-1808)	1724 (942-2341)	2170 (1160-2903)
Sichuan	Panzhihua	31	24	178 (113-231)	0 (0-0)	0 (0-0)	0 (0-0)	19 (9-30)	47 (22-72)	82 (38-122)	122 (59-178)	173 (106-229)
Sichuan	Luzhou	61	47	879 (562-1093)	82 (48-110)	125 (71-166)	175 (98-233)	236 (128-314)	310 (169-416)	402 (226-544)	517 (278-705)	652 (346-877)
Sichuan	Ganzizhou	17	13	86 (62-113)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	21 (10-37)	63 (39-86)	86 (62-113)
Sichuan	Meishan	63	48	622 (399-772)	62 (37-84)	92 (53-122)	127 (71-169)	169 (93-224)	220 (120-294)	283 (161-379)	362 (197-492)	456 (243-610)
Sichuan	Mianyang	47	36	858 (538-1096)	12 (6-16)	63 (33-86)	125 (63-171)	200 (100-	292 (154-	406 (206-	546 (271-769)	708 (373-963)

								276)	413)	577)		
Sichuan	Zigong	76	58	603 (395-741)	82 (52-112)	107 (66-144)	136 (81-181)	170 (99-224)	212 (122-278)	263 (153-345)	327 (193-428)	405 (229-535)
Sichuan	Ziyang	42	32	643 (404-821)	0 (0-0)	21 (11-29)	72 (35-100)	134 (67-190)	210 (106-305)	306 (150-443)	420 (205-601)	556 (296-752)
Sichuan	Dazhou	61	46	1135 (725-1412)	102 (60-138)	158 (90-211)	224 (125-298)	304 (164-405)	400 (217-537)	520 (291-704)	670 (359-913)	846 (449-1137)
Sichuan	Suining	51	39	625 (394-793)	24 (13-33)	60 (32-81)	102 (53-138)	153 (78-210)	216 (115-300)	294 (153-413)	390 (198-546)	502 (263-682)
Sichuan	Abazhou	13	10	52 (37-70)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2 (1-4)	39 (26-53)	52 (37-70)
Sichuan	Yaan	37	28	244 (154-315)	0 (0-0)	0 (0-0)	15 (7-21)	41 (20-61)	74 (36-111)	115 (54-171)	164 (79-236)	226 (128-302)
Guizhou	Liupanshui	42	31	462 (272-599)	0 (0-0)	8 (3-11)	47 (19-67)	96 (41-141)	160 (71-242)	242 (103-363)	339 (147-489)	454 (251-592)
Guizhou	Anshun	29	21	293 (177-394)	0 (0-0)	0 (0-0)	0 (0-0)	15 (6-24)	71 (28-113)	142 (56-227)	224 (100-338)	293 (177-394)
Guizhou	Bijiediqu*	31	23	873 (527-1162)	0 (0-0)	0 (0-0)	0 (0-0)	76 (32-121)	234 (95-370)	434 (174-674)	666 (295-988)	873 (527-1162)
Guizhou	Guiyang	36	26	641 (380-839)	0 (0-0)	0 (0-0)	23 (9-34)	101 (43-154)	201 (86-313)	330 (136-500)	481 (210-702)	641 (380-839)
Guizhou	Zunyi	42	31	992 (585-1287)	0 (0-0)	17 (7-24)	101 (40-145)	207 (88-303)	344 (154-519)	520 (222-780)	729 (317-1052)	976 (540-1273)
Guizhou	Tongrendiqu	28	20	379 (232-514)	0 (0-0)	0 (0-0)	0 (0-0)	8 (3-12)	84 (33-132)	180 (71-291)	291 (132-446)	379 (232-514)
Guizhou	Qiandongnanzhou	30	22	450 (272-604)	0 (0-0)	0 (0-0)	0 (0-0)	28 (12-45)	113 (45-179)	221 (88-347)	344 (153-515)	450 (272-604)
Guizhou	Qiannanzhou	21	15	297 (199-405)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7 (2-13)	111 (46-214)	231 (120-353)	297 (199-405)
Guizhou	Qianxinanzhou	19	14	240 (165-325)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	82 (34-159)	188 (101-283)	240 (165-325)
Yunnan	Lincang	28	21	208 (137-273)	0 (0-0)	0 (0-0)	0 (0-0)	7 (3-12)	42 (18-65)	84 (37-131)	133 (63-204)	199 (122-269)

Yunnan	Lijiang	15	11	54 (40-72)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7 (3-11)	37 (23-50)	54 (40-72)
Yunnan	Baoshan	38	28	264 (169-341)	0 (0-0)	0 (0-0)	16 (7-24)	42 (20-63)	74 (36-110)	113 (53-168)	160 (75-236)	216 (111-304)
Yunnan	Dalizhou	29	22	304 (200-398)	0 (0-0)	0 (0-0)	0 (0-0)	17 (8-26)	65 (29-101)	124 (55-191)	194 (92-295)	287 (172-388)
Yunnan	Dehongzhou	31	23	111 (72-145)	0 (0-0)	0 (0-0)	0 (0-0)	9 (4-14)	26 (12-40)	46 (20-71)	70 (33-106)	102 (58-139)
Yunnan	Nujiangzhou	22	16	36 (25-48)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2 (1-4)	12 (5-22)	24 (12-37)	36 (25-48)
Yunnan	Wenshanzhou	37	27	364 (233-469)	0 (0-0)	0 (0-0)	18 (8-27)	55 (26-81)	100 (47-149)	155 (72-233)	222 (103-328)	302 (158-423)
Yunnan	Kunming	28	21	558 (368-731)	0 (0-0)	0 (0-0)	0 (0-0)	25 (12-40)	116 (52-179)	226 (100-352)	356 (169-545)	531 (324-717)
Yunnan	Zhaotong	33	25	507 (327-657)	0 (0-0)	0 (0-0)	4 (1-6)	60 (28-90)	129 (60-197)	214 (97-324)	316 (147-469)	447 (241-614)
Yunnan	Puer	26	19	206 (137-270)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	35 (15-55)	80 (35-129)	132 (64-205)	201 (129-270)
Yunnan	Qujing	30	22	528 (346-685)	0 (0-0)	0 (0-0)	0 (0-0)	37 (17-58)	118 (53-182)	218 (97-332)	335 (158-508)	492 (289-663)
Yunnan	Chuxiongzhou	22	17	190 (130-251)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	18 (7-29)	67 (30-116)	123 (63-192)	190 (130-251)
Yunnan	Yuxi	23	18	171 (116-227)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	21 (9-35)	63 (28-108)	111 (56-174)	171 (114-226)
Yunnan	Honghezhou	35	27	457 (292-590)	0 (0-0)	0 (0-0)	17 (8-26)	64 (31-96)	123 (58-185)	195 (90-294)	281 (130-415)	386 (204-536)
Yunnan	Xishuangbannazhou*	28	21	96 (64-127)	0 (0-0)	0 (0-0)	0 (0-0)	3 (1-5)	19 (8-30)	39 (17-61)	62 (29-95)	92 (57-125)
Yunnan	Diqingzhou	16	12	19 (14-24)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3 (1-5)	12 (7-17)	19 (14-24)
Tibet	Shannandiqu	16	8	11 (7-15)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5 (2-9)	11 (7-15)
Tibet	Lasa	24	12	31 (17-46)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4 (1-8)	16 (5-31)	30 (15-45)
Tibet	Rikazediqu	21	10	33 (20-47)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1 (0-3)	16 (6-33)	33 (19-47)
Tibet	Changdudiqu	18	9	27 (17-37)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	13 (5-25)	27 (17-37)
Tibet	Linzhidiqu	9	4	2 (0-4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2 (0-4)
Tibet	Naqudiqu	52	26	42 (21-55)	0 (0-0)	0 (0-0)	0 (0-1)	3 (0-5)	6 (1-10)	11 (3-18)	18 (7-28)	28 (10-41)
Tibet	Alidiqu	17	8	3 (2-4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1 (0-2)	3 (2-4)
Shaanxi	Xianyang	59	30	1220 (739-1592)	0 (0-0)	9 (4-14)	67 (29-100)	140 (59-203)	235 (93-344)	362 (159-	535 (259-790)	770 (355-1142)

										533)		
Shaanxi	Shangluo	42	22	511 (307-670)	0 (0-0)	0 (0-0)	0 (0-0)	21 (7-31)	75 (30-113)	148 (65-231)	249 (106-385)	378 (169-570)
Shaanxi	Ankang	51	26	621 (374-815)	0 (0-0)	0 (0-0)	12 (5-18)	55 (21-81)	110 (42-164)	185 (81-277)	288 (131-434)	423 (189-632)
Shaanxi	Baoji	57	30	918 (555-1198)	0 (0-0)	1 (0-1)	45 (19-67)	102 (42-148)	175 (69-256)	273 (118-401)	407 (194-603)	588 (269-871)
Shaanxi	Yanan	44	23	486 (292-639)	0 (0-0)	0 (0-0)	0 (0-0)	25 (9-38)	75 (30-113)	142 (63-220)	235 (101-363)	354 (158-533)
Shaanxi	Yanglingshifanqu*	52	27	47 (28-62)	0 (0-0)	0 (0-0)	1 (0-1)	4 (1-6)	8 (3-12)	14 (6-21)	22 (10-33)	32 (14-48)
Shaanxi	Yulin	35	18	663 (402-870)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	64 (26-102)	179 (75-284)	335 (138-526)	532 (252-789)
Shaanxi	Hanzhong	55	29	834 (503-1090)	0 (0-0)	0 (0-0)	35 (15-52)	88 (36-129)	157 (61-229)	248 (107-369)	374 (177-556)	543 (247-807)
Shaanxi	Weinan	58	30	1315 (796-1717)	0 (0-0)	8 (4-13)	71 (31-106)	150 (63-218)	253 (100-370)	390 (171-576)	578 (279-854)	833 (383-1234)
Shaanxi	Xian	57	30	2092 (1265-2731)	0 (0-0)	3 (1-4)	104 (45-154)	232 (96-338)	399 (157-585)	622 (269-915)	927 (443-1374)	1340 (613-1985)
Shaanxi	Tongchuan	56	29	204 (123-267)	0 (0-0)	0 (0-0)	9 (4-13)	22 (9-32)	38 (15-56)	60 (26-90)	91 (43-135)	132 (60-196)
Gansu	Linxiashou	51	26	352 (223-450)	0 (0-0)	0 (0-0)	5 (2-6)	27 (14-37)	54 (28-75)	89 (45-126)	134 (70-192)	194 (97-276)
Gansu	Lanzhou	49	25	642 (408-824)	0 (0-0)	0 (0-0)	2 (1-2)	44 (23-61)	96 (49-133)	162 (82-231)	249 (128-358)	364 (178-521)
Gansu	Jiayuguan	31	15	31 (20-41)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-1)	6 (2-9)	13 (6-20)	22 (11-33)
Gansu	Tianshui	36	18	494 (317-641)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	41 (19-61)	113 (54-170)	209 (96-313)	329 (155-488)
Gansu	Dingxi	42	21	443 (281-573)	0 (0-0)	0 (0-0)	0 (0-0)	11 (5-15)	53 (25-76)	108 (53-160)	181 (87-268)	275 (130-399)
Gansu	Pingliang	51	26	373 (237-477)	0 (0-0)	0 (0-0)	5 (2-6)	28 (15-39)	57 (30-80)	95 (48-133)	143 (74-204)	207 (103-294)
Gansu	Qingyang	37	18	336 (215-436)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	28 (13-42)	77 (37-116)	142 (65-213)	223 (105-331)
Gansu	Zhangye	44	22	202 (128-261)	0 (0-0)	0 (0-0)	0 (0-0)	8 (4-11)	26 (13-37)	50 (25-72)	81 (40-119)	122 (58-176)
Gansu	Wuwei	42	21	297 (188-385)	0 (0-0)	0 (0-0)	0 (0-0)	6 (3-9)	35 (17-51)	72 (35-107)	121 (58-180)	185 (87-268)

Gansu	Gannanzhou	39	19	108 (69-139)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10 (5-15)	25 (12-38)	45 (21-67)	70 (32-102)
Gansu	Baiyin	43	22	285 (180-368)	0 (0-0)	0 (0-0)	0 (0-0)	10 (5-14)	36 (17-52)	70 (35-102)	115 (56-170)	174 (82-252)
Gansu	Jiuquan	47	24	190 (120-245)	0 (0-0)	0 (0-0)	0 (0-0)	10 (5-14)	27 (13-37)	47 (24-68)	75 (37-109)	111 (53-159)
Gansu	Jinchang	38	19	71 (45-92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6 (3-9)	16 (8-25)	30 (14-45)	47 (22-69)
Gansu	Longnan	34	17	375 (241-487)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	24 (11-36)	82 (39-125)	160 (72-241)	257 (122-380)
Qinghai	Guoluzhou	43	20	45 (28-58)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-1)	6 (2-9)	13 (6-20)	24 (11-37)	40 (21-56)
Qinghai	Haidongdiqu	59	28	400 (256-516)	0 (0-0)	0 (0-0)	16 (9-23)	44 (23-62)	81 (40-115)	133 (66-189)	208 (107-299)	311 (159-445)
Qinghai	Haibeizhou	40	19	65 (41-84)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7 (3-10)	19 (9-29)	36 (16-54)	61 (34-82)
Qinghai	Hainanzhou	43	20	110 (69-141)	0 (0-0)	0 (0-0)	0 (0-0)	1 (0-1)	14 (6-21)	33 (16-49)	60 (28-90)	99 (53-136)
Qinghai	Haixizhou	38	18	115 (72-148)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11 (4-16)	32 (15-49)	63 (28-95)	109 (63-146)
Qinghai	Yushuzhou	20	9	54 (38-71)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	26 (12-44)	54 (38-71)
Qinghai	Xining	49	23	587 (371-759)	0 (0-0)	0 (0-0)	0 (0-0)	36 (17-51)	99 (46-142)	188 (93-273)	316 (153-467)	492 (253-700)
Qinghai	Huangnanzhou	52	25	70 (44-90)	0 (0-0)	0 (0-0)	0 (0-0)	5 (2-7)	12 (6-18)	22 (11-32)	37 (18-54)	57 (29-81)
Ningxia	Zhongwei	43	23	300 (193-393)	0 (0-0)	0 (0-0)	0 (0-0)	20 (9-29)	55 (25-84)	104 (50-162)	172 (81-263)	272 (151-383)
Ningxia	Wuzhong	50	27	380 (245-503)	0 (0-0)	0 (0-0)	13 (6-19)	43 (20-64)	82 (39-124)	137 (69-207)	213 (103-323)	314 (165-458)
Ningxia	Guyuan	39	21	327 (211-428)	0 (0-0)	0 (0-0)	0 (0-0)	11 (5-16)	52 (24-81)	110 (51-173)	189 (88-292)	308 (181-419)
Ningxia	Shizuishan	52	28	220 (141-291)	0 (0-0)	0 (0-0)	10 (5-14)	27 (12-40)	49 (23-73)	79 (40-120)	122 (60-185)	178 (93-261)
Ningxia	Yinchuan	49	26	587 (378-776)	0 (0-0)	0 (0-0)	14 (7-21)	61 (28-91)	124 (58-186)	211 (106-321)	330 (159-502)	493 (261-717)
Xinjiang	Wulumuqi	68	34	1106 (726-1437)	0 (0-0)	36 (21-53)	84 (48-122)	142 (78-206)	216 (115-309)	312 (159-453)	440 (237-640)	616 (330-895)
Xinjiang	Yilizhou*	43	21	736 (478-959)	0 (0-0)	0 (0-0)	0 (0-0)	20 (9-29)	95 (43-142)	196 (96-301)	334 (158-516)	518 (251-788)
Xinjiang	Kezilesuzhou*	43	21	155 (101-203)	0 (0-0)	0 (0-0)	0 (0-0)	4 (1-6)	20 (9-30)	41 (20-63)	70 (33-109)	109 (53-166)
Xinjiang	Kelamayi	31	16	97 (64-127)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3 (1-5)	21 (9-34)	46 (20-73)	80 (43-116)
Xinjiang	Boertalazhou*	43	21	131 (85-171)	0 (0-0)	0 (0-0)	0 (0-0)	3 (1-5)	17 (7-25)	35 (17-53)	59 (28-92)	92 (45-140)

Xinjiang	Tulufandiqu	68	34	221 (145-287)	0 (0-0)	7 (4-10)	17 (9-24)	28 (15-41)	43 (23-62)	62 (32-90)	88 (47-128)	123 (66-179)
Xinjiang	Hetiandiqu	92	46	781 (527-998)	42 (26-61)	64 (40-94)	91 (56-132)	122 (74-176)	161 (96-231)	210 (119-300)	273 (151-384)	359 (209-508)
Xinjiang	Hamidiqu	40	20	163 (106-212)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	18 (8-27)	42 (20-65)	75 (35-116)	119 (58-179)
Xinjiang	Kashidiqu	115	58	1634 (1135-2057)	139 (93-199)	178 (118-255)	223 (146-321)	276 (177-396)	339 (214-483)	417 (261-587)	516 (312-725)	645 (376-899)
Xinjiang	Dachengdiqu	22	11	232 (166-303)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	20 (8-34)	105 (49-180)	229 (160-302)
Xinjiang	Bayinguolengzhou*	43	21	379 (246-494)	0 (0-0)	0 (0-0)	0 (0-0)	10 (4-15)	49 (22-73)	100 (49-155)	172 (81-266)	267 (129-406)
Xinjiang	Changjizhou	41	20	417 (271-543)	0 (0-0)	0 (0-0)	0 (0-0)	7 (3-10)	50 (23-76)	109 (53-168)	190 (89-295)	298 (145-452)
Xinjiang	Akesudiqu	76	38	873 (578-1131)	19 (11-27)	48 (28-69)	82 (48-119)	123 (71-179)	175 (96-252)	242 (128-344)	331 (179-477)	453 (255-655)
Xinjiang	Aletaidiqu	11	6	53 (35-74)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10 (7-15)	53 (35-74)

* There are nine small cities without PM_{2.5} monitoring station. They are Bayinguohengzhou in Xinjiang, Bijiediqu in Guizhou, Boertalazhou in Xinjiang, Chaohu in Anhui, Jiyuan in Henan, Kezilesuzhou in Xinjiang, Xishuangbannazhou in Yunnan, Yanglingshifanqu in Shanxi and Yilizhou in Xinjiang, with a total urban adult population of 2 million (0.8% of the sum of the 339 cities) and 3409 (95%CI: 2129, 4448) total premature mortalities attributable to total PM_{2.5} exposures (0.88% (95%CI: 0.87%, 0.89%) of the sum of the 339 cities). For each of those nine cities, we took the annual mean outdoor concentration of the specific province (rural areas excluded) where that city belongs as its outdoor PM_{2.5} concentration.

147 **Table S8. Summary of PM_{2.5} infiltration factors (F_{inf}), indoor PM_{2.5} concentrations, total exposure concentrations and total outdoor PM_{2.5}-related mortalities, as well**
148 **as avoidable mortalities (95% CI) for various “reduction scenarios” across urban China based on different values of the province-specific population-average F_{inf}**
149 **within the range of 0.40 to 0.95.**

Scenarios		Baseline	50% F_{inf}	75% F_{inf}	125% F_{inf}	150% F_{inf}
Infiltration factor		Mean: 0.65 Range: 0.48 - 0.94	Mean: 0.40 Range: 0.40 - 0.47	Mean: 0.50 Range: 0.40 - 0.71	Mean: 0.80 Range: 0.60 - 0.95	Mean: 0.87 Range: 0.71 - 0.95
Indoor PM_{2.5} concentration: µg/m³ (no indoor guideline)		Mean: 32 Range: 5 - 59	Mean: 20 Range: 4 - 46	Mean: 24 Range: 4 - 46	Mean: 39 Range: 6 - 73	Mean: 43 Range: 7 - 88
Total exposure concentration: µg/m³ (no indoor guideline)		Mean: 34 Range: 5 - 68	Mean: 24 Range: 5 - 57	Mean: 28 Range: 5 - 57	Mean: 41 Range: 6 - 80	Mean: 44 Range: 7 - 92
$\Delta Mort^*$ (Mortalities attributed to total exposures)		389000 (245000-501000)	389000 (245000-501000)	389000 (245000-501000)	389000 (245000-501000)	389000 (245000-501000)
$\Delta Mort_{avoidable}^*$ from meeting different annual mean indoor PM_{2.5} standard /guideline	35 µg/m³ (ASHB guideline)	14000 (8000-20000)	1000 (0-1000)	2000 (1000-2000)	32000 (16000-45000)	42000 (21000-60000)
	30 µg/m³	25000 (13000-36000)	2000 (1000-3000)	6000 (4000-9000)	48000 (24000-68000)	60000 (29000-86000)
	25 µg/m³	43000 (22000-62000)	7000 (4000-10000)	16000 (9000-24000)	71000 (35000-102000)	86000 (41000-123000)
	20 µg/m³	71000 (34000-102000)	18000 (10000-26000)	35000 (18000-50000)	103000 (50000-149000)	120000 (58000-173000)
	15 µg/m³	110000 (53000-159000)	42000 (21000-60000)	67000 (33000-97000)	145000 (70000-211000)	163000 (81000-237000)
	10 µg/m³ (WHO guideline)	162000 (79000-237000)	86000 (41000-124000)	117000 (56000-170000)	197000 (98000-288000)	215000 (107000-315000)
	5 µg/m³	230000 (116000-333000)	157000 (77000-230000)	187000 (92000-274000)	263000 (134000-377000)	279000 (143000-399000)
	0 µg/m³ (Mortalities attributed to indoor exposures)	316000 (176000-435000)	261000 (135000-373000)	284000 (152000-399000)	339000 (194000-459000)	351000 (204000-471000)

150 *Mortality-related results are rounded to thousands.

Definition of urban areas

Urban areas here include urban areas in a city with districts and a city without districts.

Urban areas in a city with districts refers to:

(1) If the population density of the municipal district is 1,500 persons/km² or more, the urban area shall be the administrative area of the district;

(2) If the population density of the municipal district is less than 1,500 persons/km², the urban area shall be the resident of the people's government of the municipal district and the other district offices of the district;

(3) If the construction of the urban area of the government of the aforementioned municipal district has been extended to some areas of the surrounding towns (townships), and the urban area should also include all administrative areas of the towns (townships).

The other areas in a city with districts are divided according to the towns and villages specified in this regulation.

Urban areas in a city without districts refers to:

(1) The resident of the municipal government and other subdistrict offices under the municipality;

(2) If the construction of the urban area of the municipal government has been extended to some areas of the surrounding towns (townships), and the urban area should also include all administrative areas of the towns (townships).

Other areas in a city with districts are divided into towns and villages according to these regulations.