Supporting Information

Respirable Particulate Constituents and Risk of Cause-specific Mortality in the Hong Kong Population

Shengzhi Sun[1,2], Wangnan Cao[3], Vivian C. Pun[4], Hong Qiu[1], Yang Ge[5], and Linwei Tian[1*]

[1]School of Public Health, The University of Hong Kong, Hong Kong SAR, China
[2]Department of Epidemiology, Brown University School of Public Health, Providence, RI 02912, USA
[3]Center for Evidence Synthesis in Health, School of Public Health, Brown University, Providence, RI 02912, USA
[4]Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong, Hong Kong SAR, China
[5]School of Public Health, Department of Epidemiology and Biostatistics, University of Georgia 30606, USA

[*]Corresponding author, linweit@hku.hk

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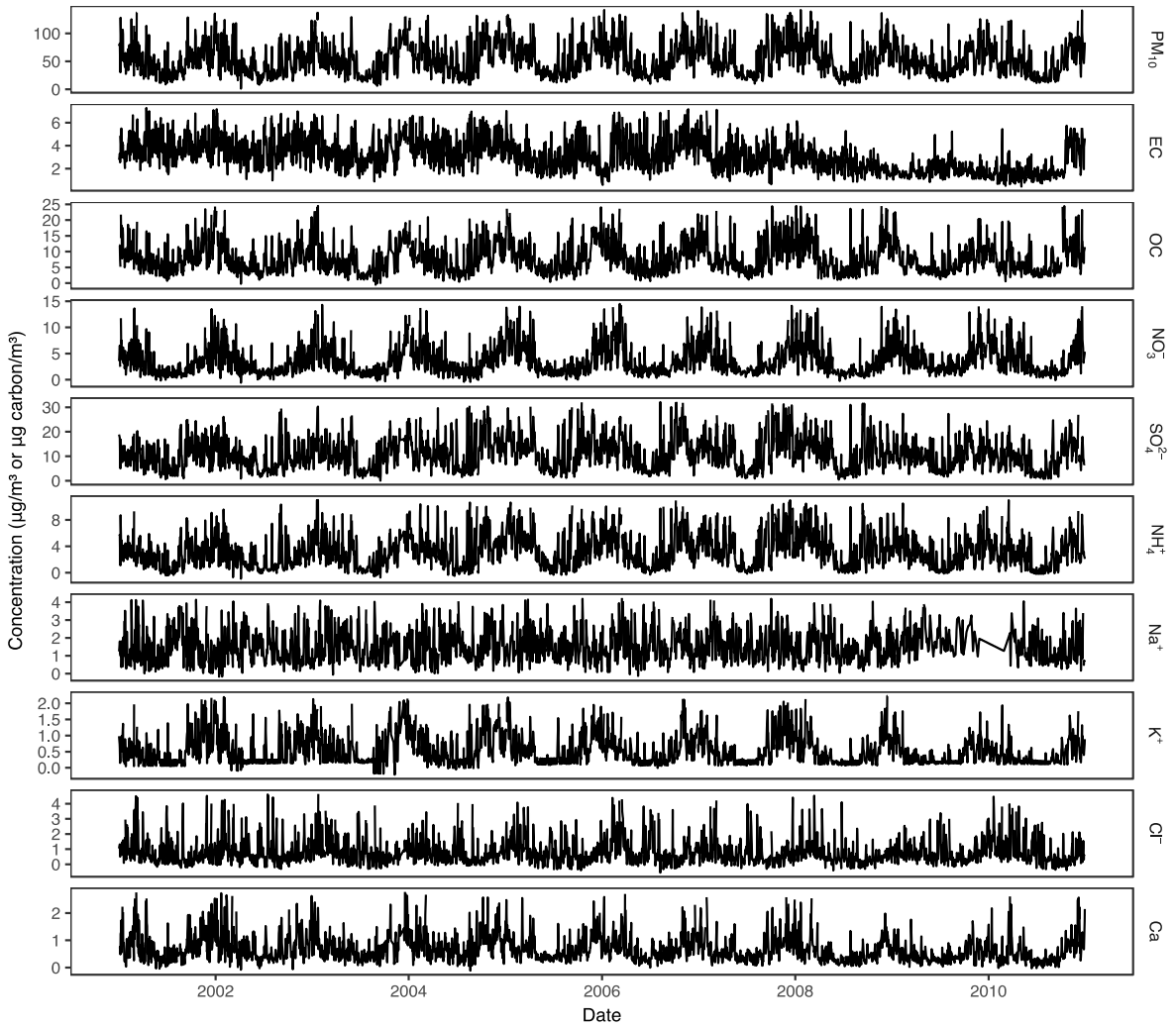
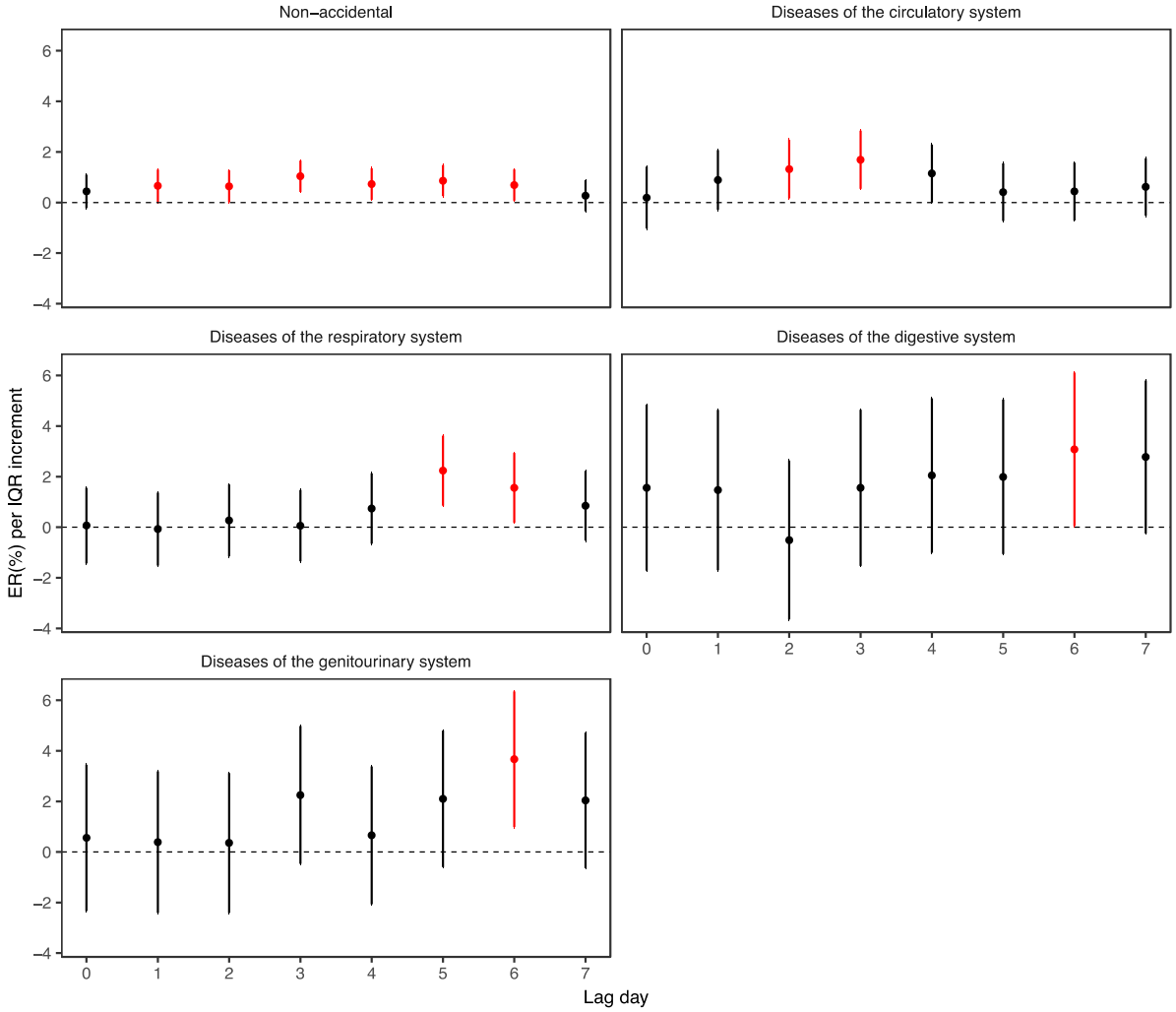
Figure S1. Time-series plots of PM_{10} mass and its constituents.



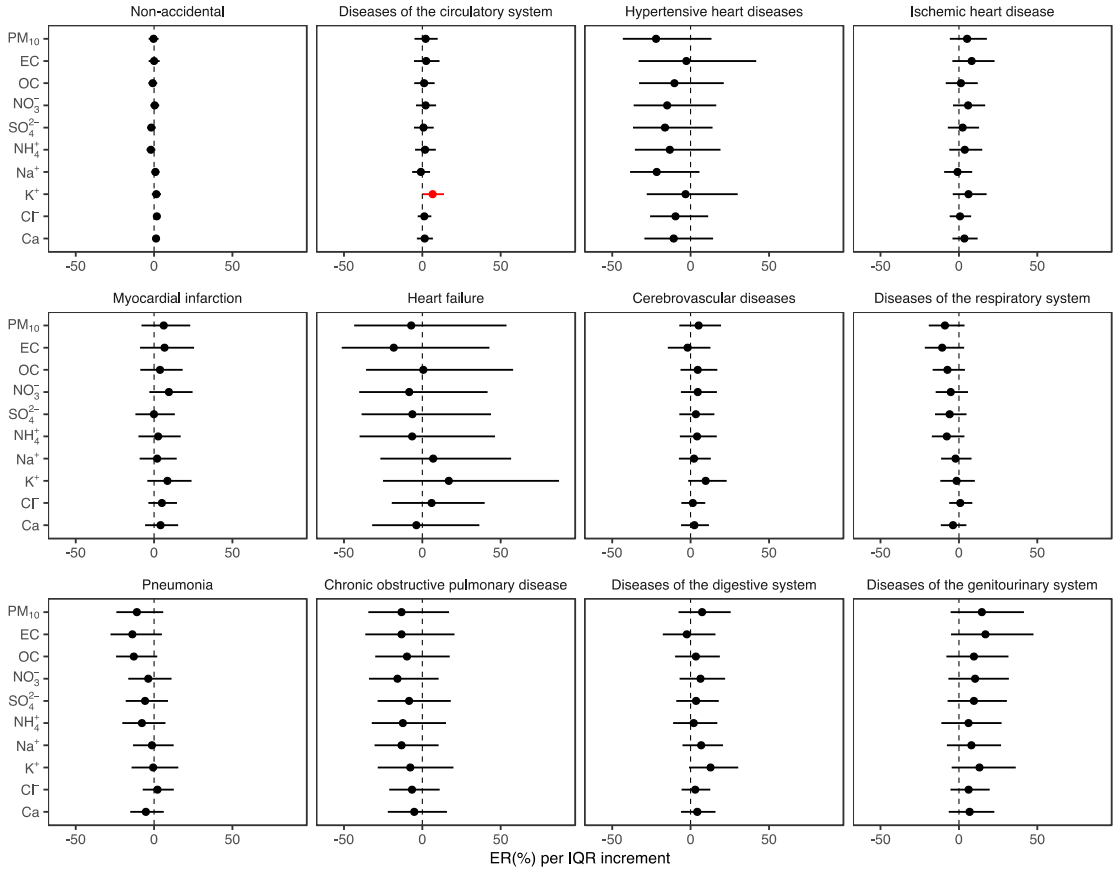
Abbreviations: IQR=interquartile range; EC=elemental carbon; OC=organic carbon; NO_3^-= nitrate; SO_4^{2-}= sulfate; NH_4^+=ammonium; Na^+=sodium ion; K^+=potassium ion; Cl^-=chloride ion.

Figure S2. Excess risk (%) of five broad causes of deaths associated with an interquartile range increase in respirable particulate matter total mass by lag days in Hong Kong, 2001-2010.



Models were adjusted for ambient temperature, relative humidity, long-term trend and seasonality, days of the week, public holidays, and influenza epidemics.

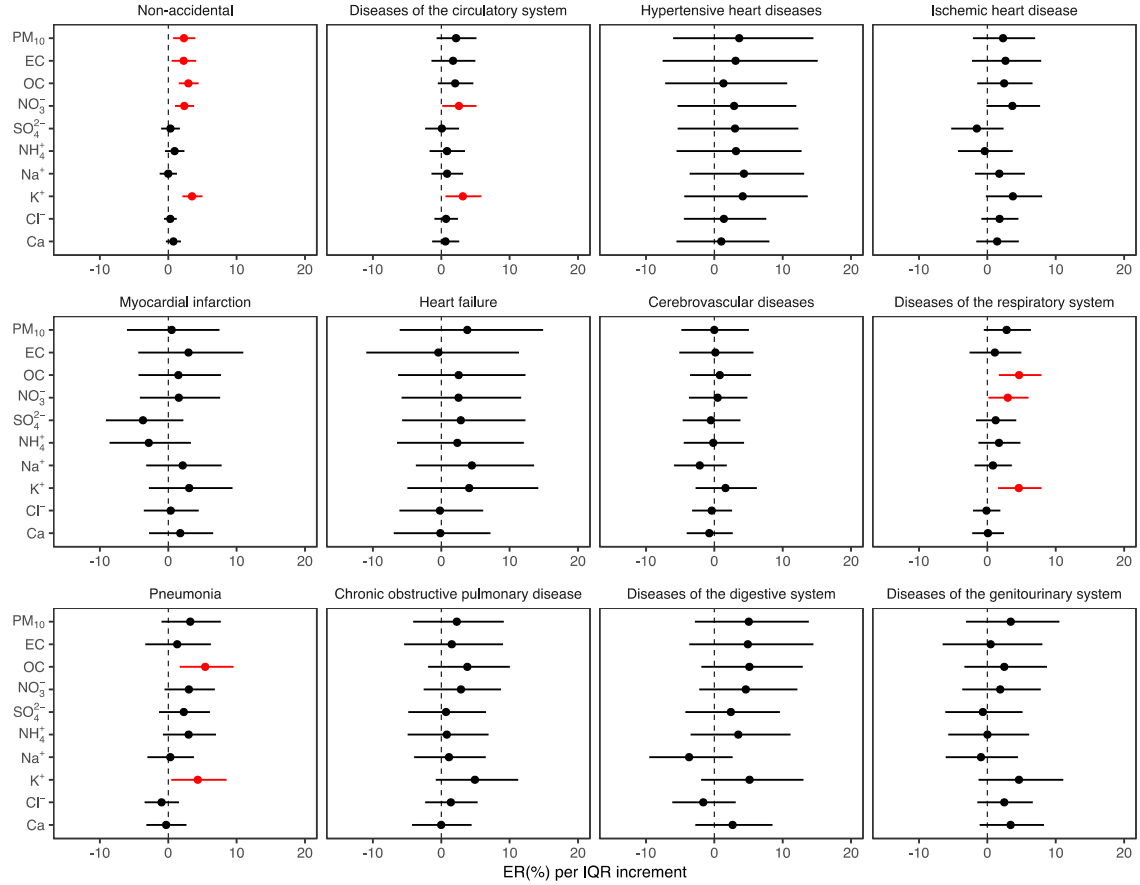
Figure S3. Cumulative excess risk (%) of cause-specific mortality associated with an interquartile range increase in respirable particulate constituents over lag_{0-7} days among people aged less than 65 years old in Hong Kong, 2001-2010.



Abbreviations: PM_{10}= respirable particulate matter; IQR=interquartile range; EC=elemental carbon; OC=organic carbon; NO_3^-= nitrate; SO_4^{2-}= sulfate; NH_4^+=ammonium; Na^+=sodium ion; K^+=potassium ion; Cl^-=chloride ion.

Models were adjusted for ambient temperature, relative humidity, long-term trend and seasonality, days of the week, public holidays, and influenza epidemics.

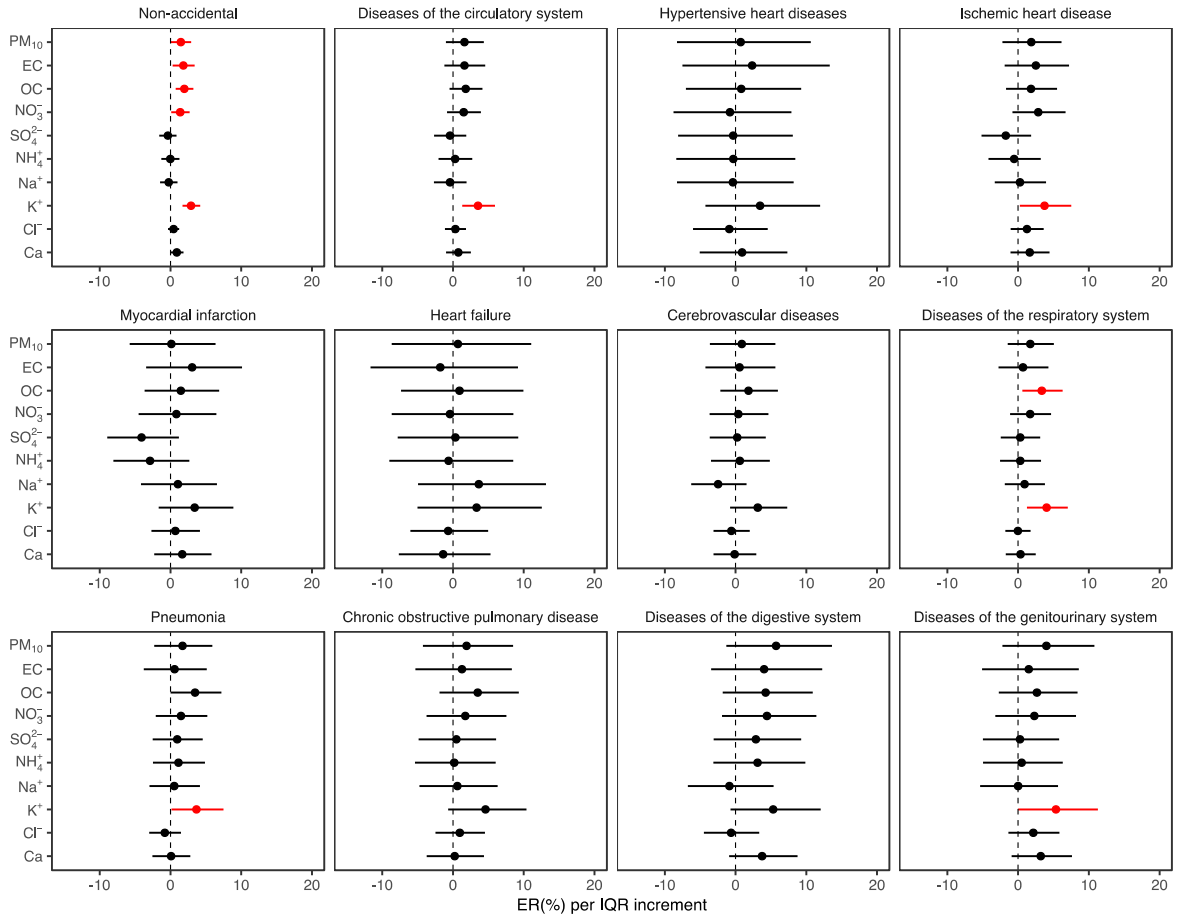
Figure S4. Cumulative excess risk (%) of cause-specific mortality associated with an interquartile range increase in respirable particulate constituents over lag_{0-7} days among people aged 65 years and older in Hong Kong, 2001-2010.



Abbreviations: PM_{10}= respirable particulate matter; IQR=interquartile range; EC=elemental carbon; OC=organic carbon; NO_3^-= nitrate; SO_4^{2-}= sulfate; NH_4^+=ammonium; Na^+=sodium ion; K^+=potassium ion; Cl^-=chloride ion.

Models were adjusted for ambient temperature, relative humidity, long-term trend and seasonality, days of the week, public holidays, and influenza epidemics.

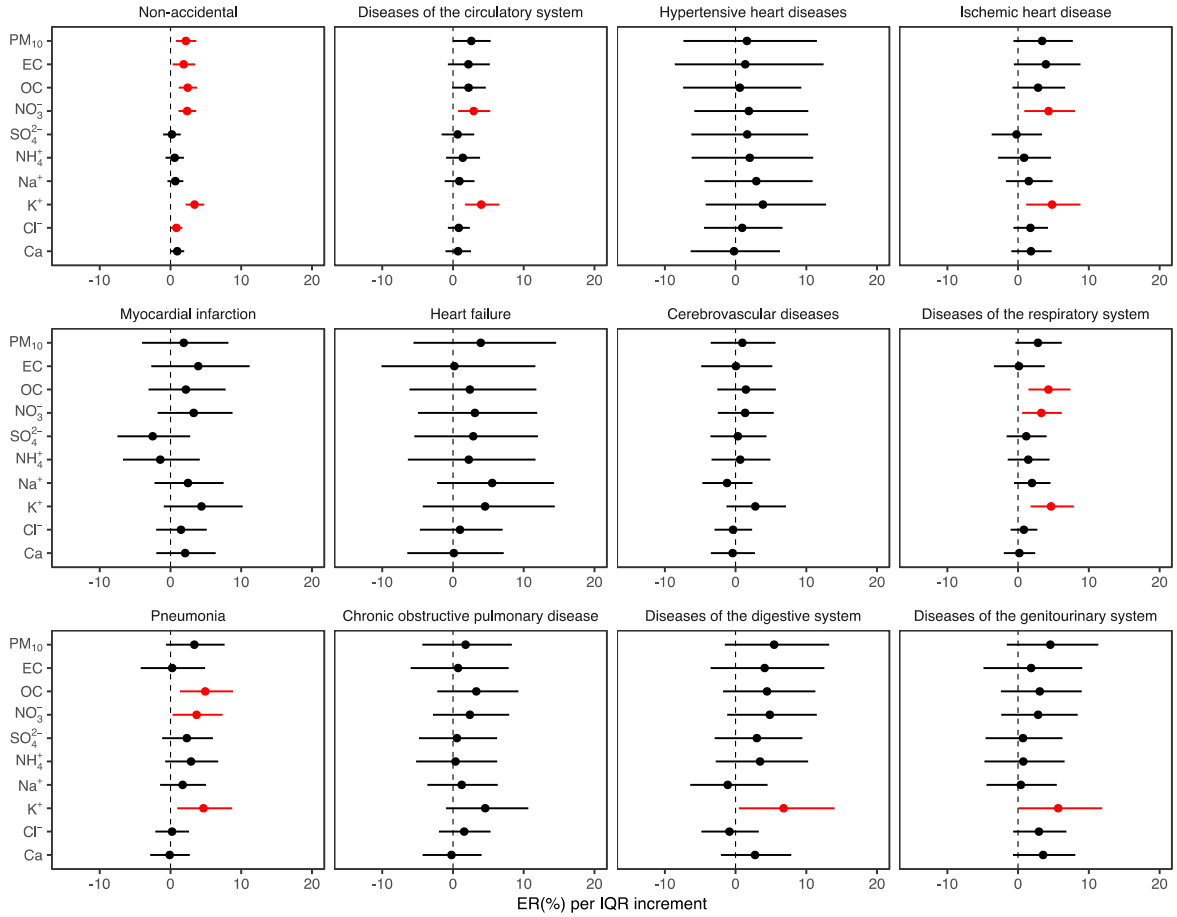
Figure S5. Cumulative excess risk (%) of causes-specific mortality associated with an interquartile range increase in respirable particulate constituents over lag_{0-7} days with missing data replaced by previous day measurement values in Hong Kong, 2001-2010.



Abbreviations: PM_{10}= respirable particulate matter; IQR=interquartile range; EC=elemental carbon; OC=organic carbon; NO_3^-= nitrate; SO_4^{2-}= sulfate; NH_4^+=ammonium; Na^+=sodium ion; K^+=potassium ion; Cl^-=chloride ion.

Models were adjusted for ambient temperature, relative humidity, long-term trend and seasonality, days of the week, public holidays, and influenza epidemics.

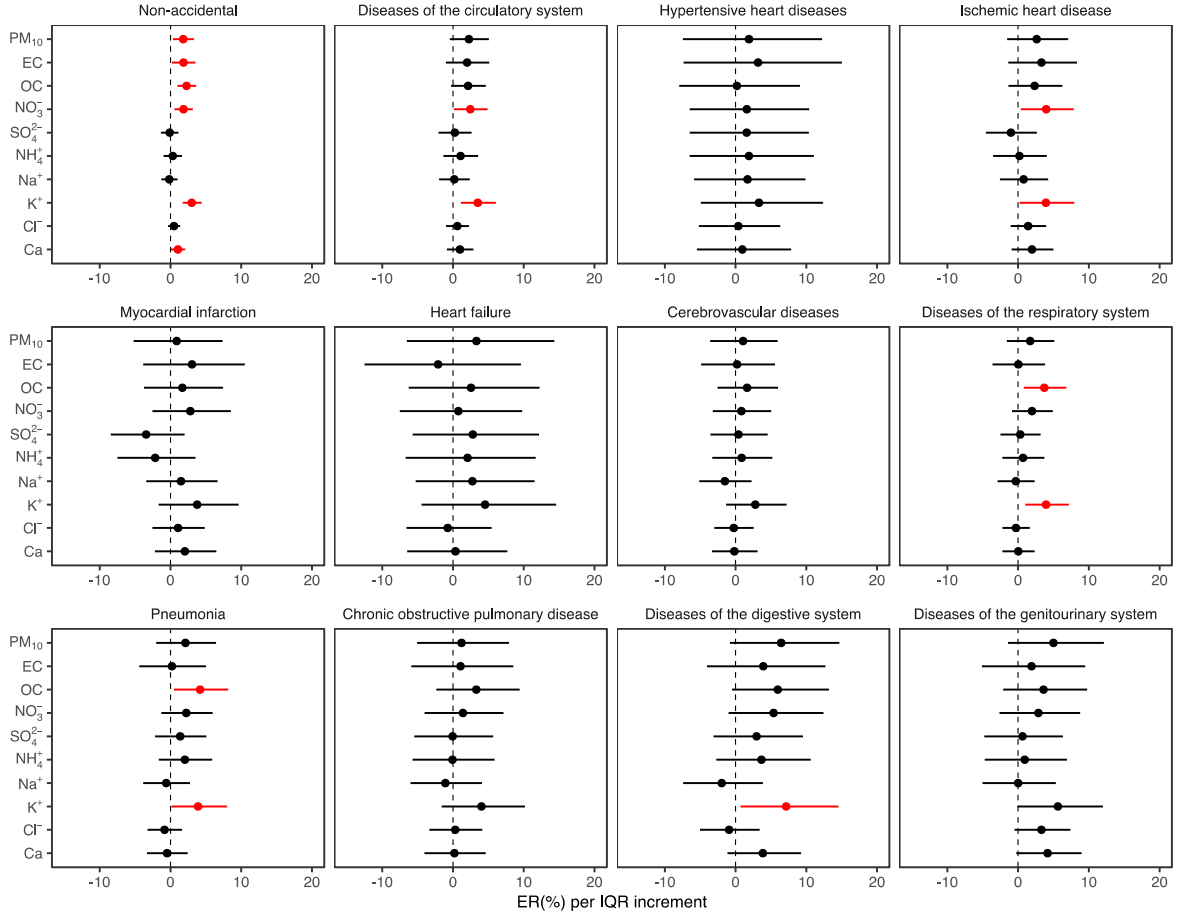
Figure S6. Cumulative excess risk (%) of causes-specific mortality associated with an interquartile range increase in respirable particulate constituents over lag_{0-7} days using 7 degrees of freedom per year to control for seasonal and long-term trend in the regression models in Hong Kong, 2001-2010.



Abbreviations: PM_{10}= respirable particulate matter; IQR=interquartile range; EC=elemental carbon; OC=organic carbon; NO_3^-= nitrate; SO_4^{2-}= sulfate; NH_4^+=ammonium; Na^+=sodium ion; K^+=potassium ion; Cl^-=chloride ion.

Models were adjusted for ambient temperature, relative humidity, long-term trend and seasonality, days of the week, public holidays, and influenza epidemics.

Figure S7. Cumulative excess risk (%) of causes-specific mortality associated with an interquartile range increase in respirable particulate constituents over lag_{0-7} days using 9 degrees of freedom per year to control for seasonal and long-term trend in the regression models in Hong Kong, 2001-2010.



Abbreviations: PM_{10}= respirable particulate matter; IQR=interquartile range; EC=elemental carbon; OC=organic carbon; NO_3^-= nitrate; SO_4^{2-}= sulfate; NH_4^+=ammonium; Na^+=sodium ion; K^+=potassium ion; Cl^-=chloride ion.

Models were adjusted for ambient temperature, relative humidity, long-term trend and seasonality, days of the week, public holidays, and influenza epidemics.