

Figure 1. Integrated Exposure Response (IER) functions for ischemic heart disease, cerebrovascular disease, lower respiratory infections, lung cancer and chronic obstructive pulmonary disease. Curves depict the central estimate of the IER (solid line) and their uncertainty (shaded area). Note the RR=1 for PM2.5 concentrations from 0 to 2.4 $\mu\text{g}/\text{m}^3$ (lower bound of the TMREL uncertainty distribution). Additional details in Appendix.

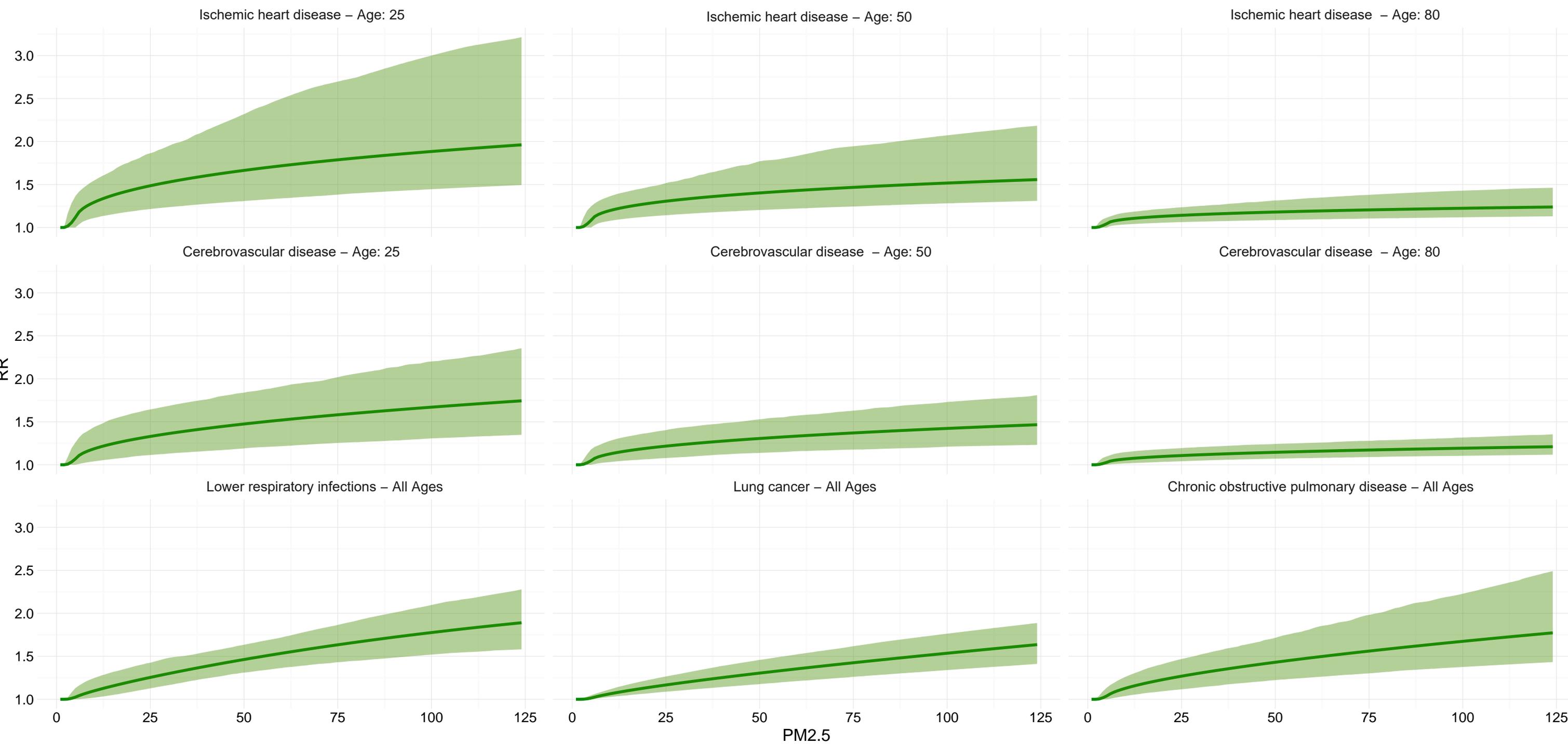


Figure 2. Global and country-specific trends in population-weighted PM2.5 levels (95% UI) for the world's ten most populous countries from 1990-2015.

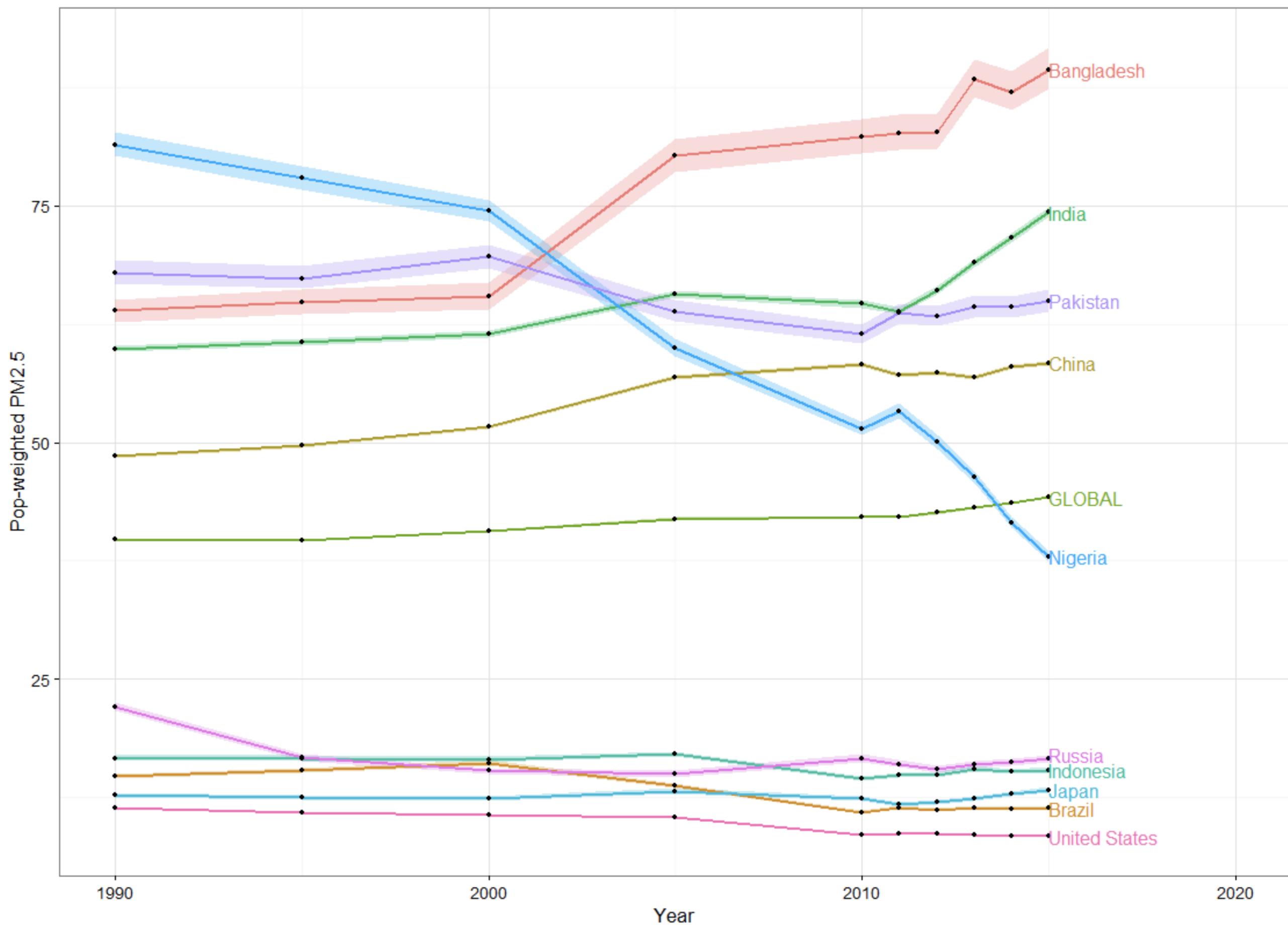
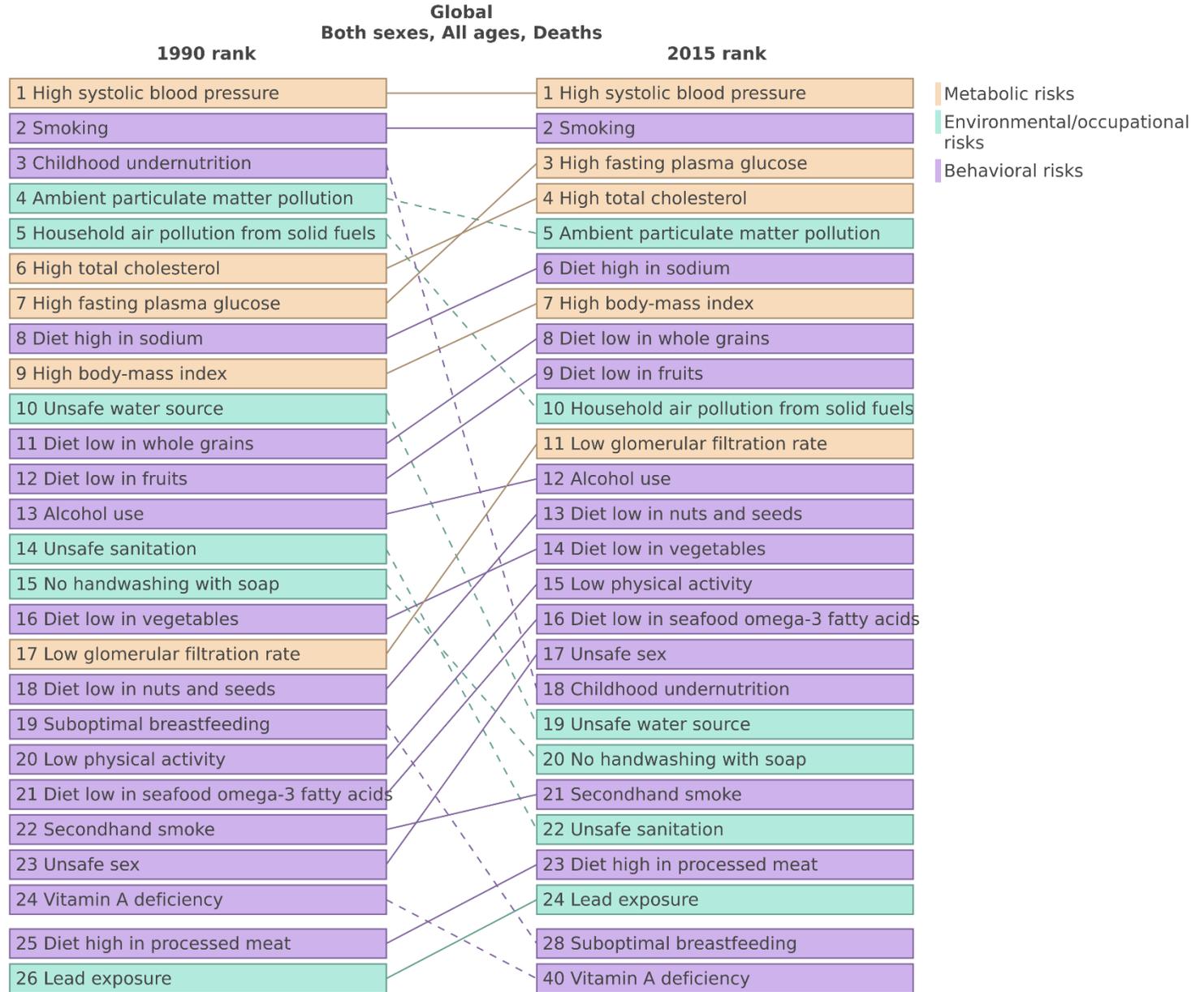


Figure 3. Leading level 3 global risk factors for deaths (A) and DALYs (b) for both sexes combined, 1990 and 2015. Risks are connected by arrows between time periods. Behavioral risk factors are shown in purple, environmental risks in green, and metabolic risks in orange. DALYs=disability-adjusted life-years.

(A) Deaths

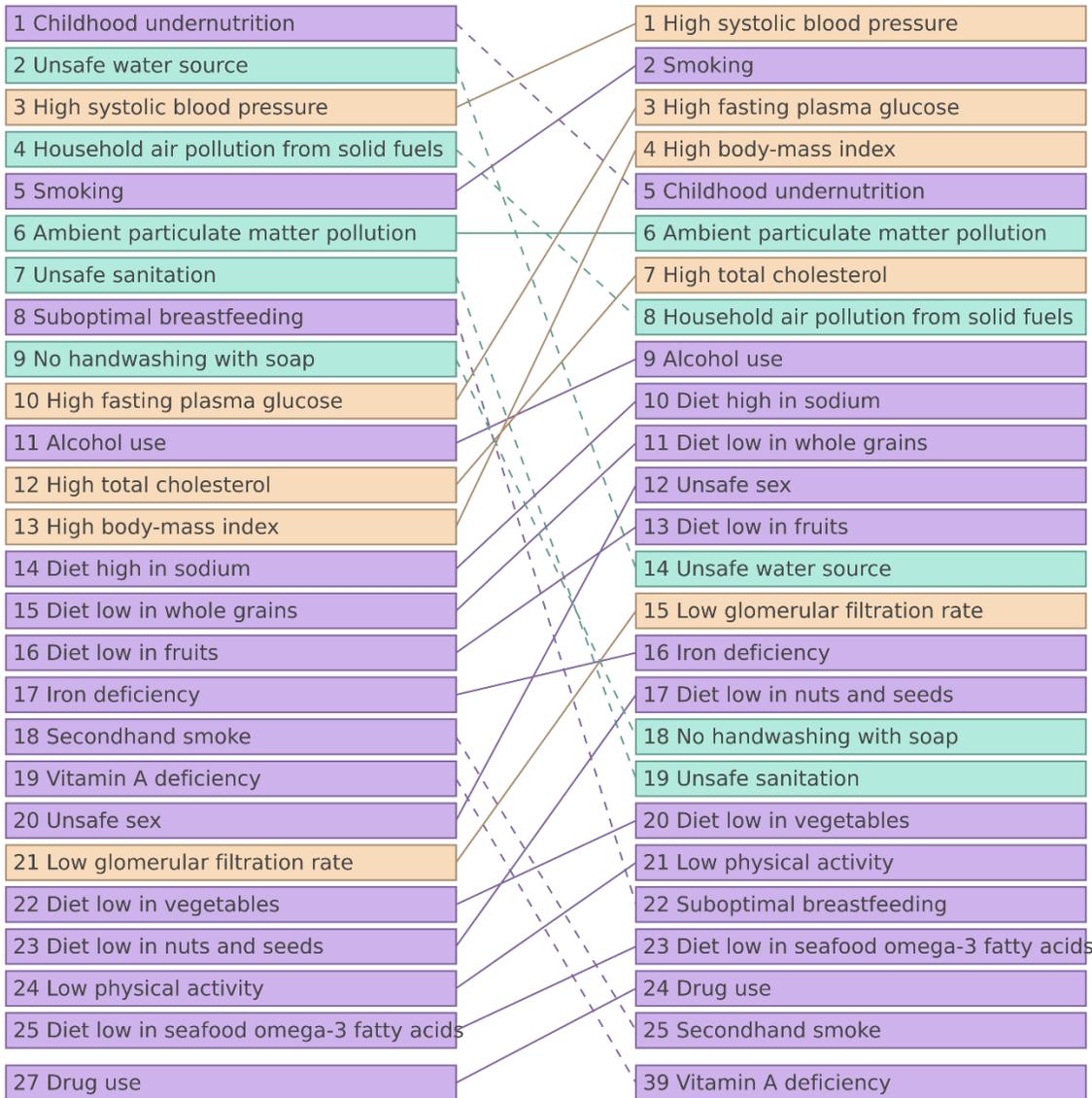


(B) DALYs

**Global
Both sexes, All ages, DALYs**

1990 rank

2015 rank



- █ Metabolic risks
- █ Environmental/occupational risks
- █ Behavioral risks

Figure 4. Global deaths by cause attributable to ambient PM2.5 from 1990 to 2015.

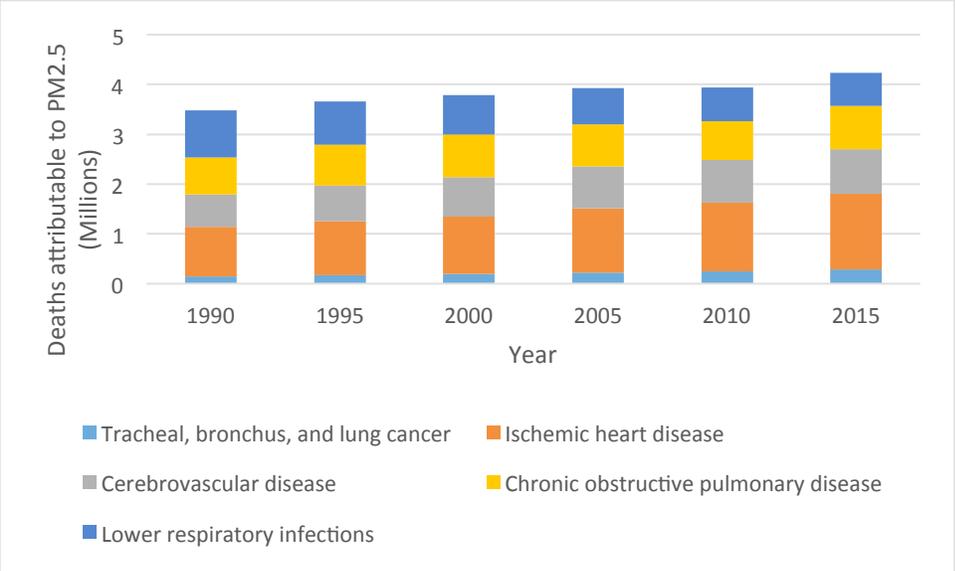
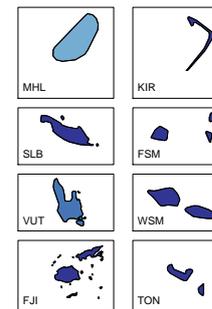
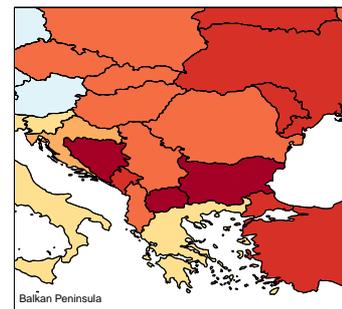
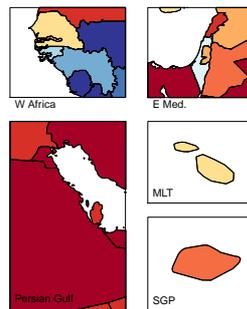
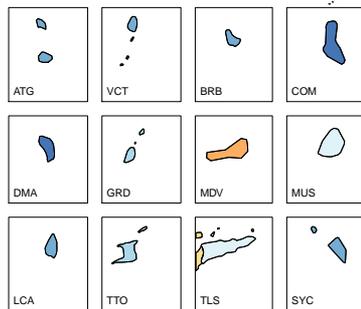
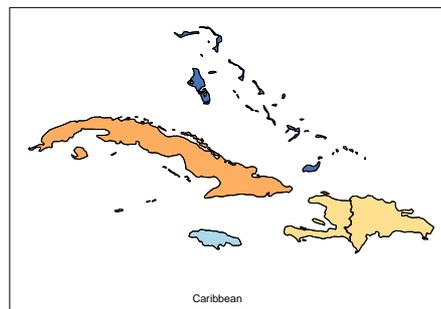
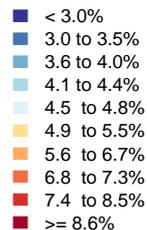
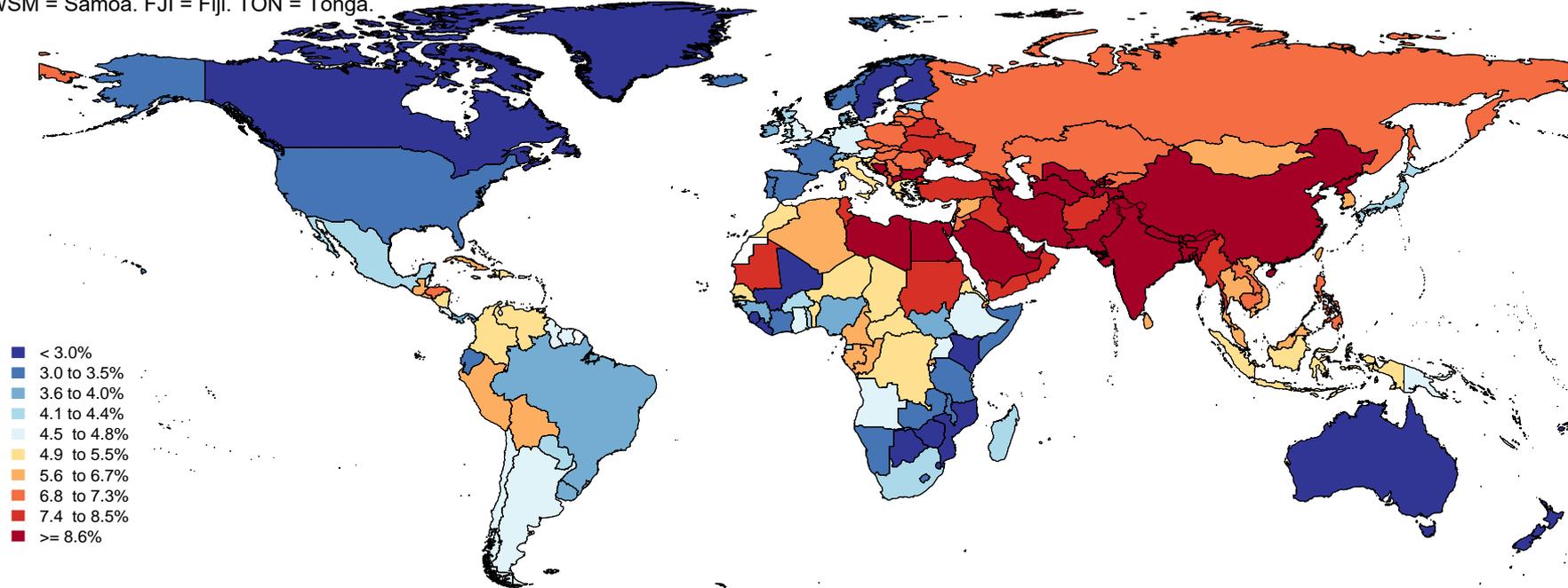


Figure 5. Percent of deaths attributable to PM2.5 for all ages and both sexes combined in 2015. ATG = Antigua and Barbuda. VCT = Saint Vincent and the Grenadines. BRB = Barbados. COM = Comoros. DMA = Dominica. GRD = Grenada. MDV = Maldives. MUS = Mauritius. LCA = Saint Lucia. TTO = Trinidad and Tobago. SYC = Seychelles. MLT = Malta. SGP = Singapore. MHL = Marshall Islands. KIR = Kiribati. SLB = Solomon Islands. FSM = Federated States of Micronesia. VUT = Vanuatu. WSM = Samoa. FJI = Fiji. TON = Tonga.



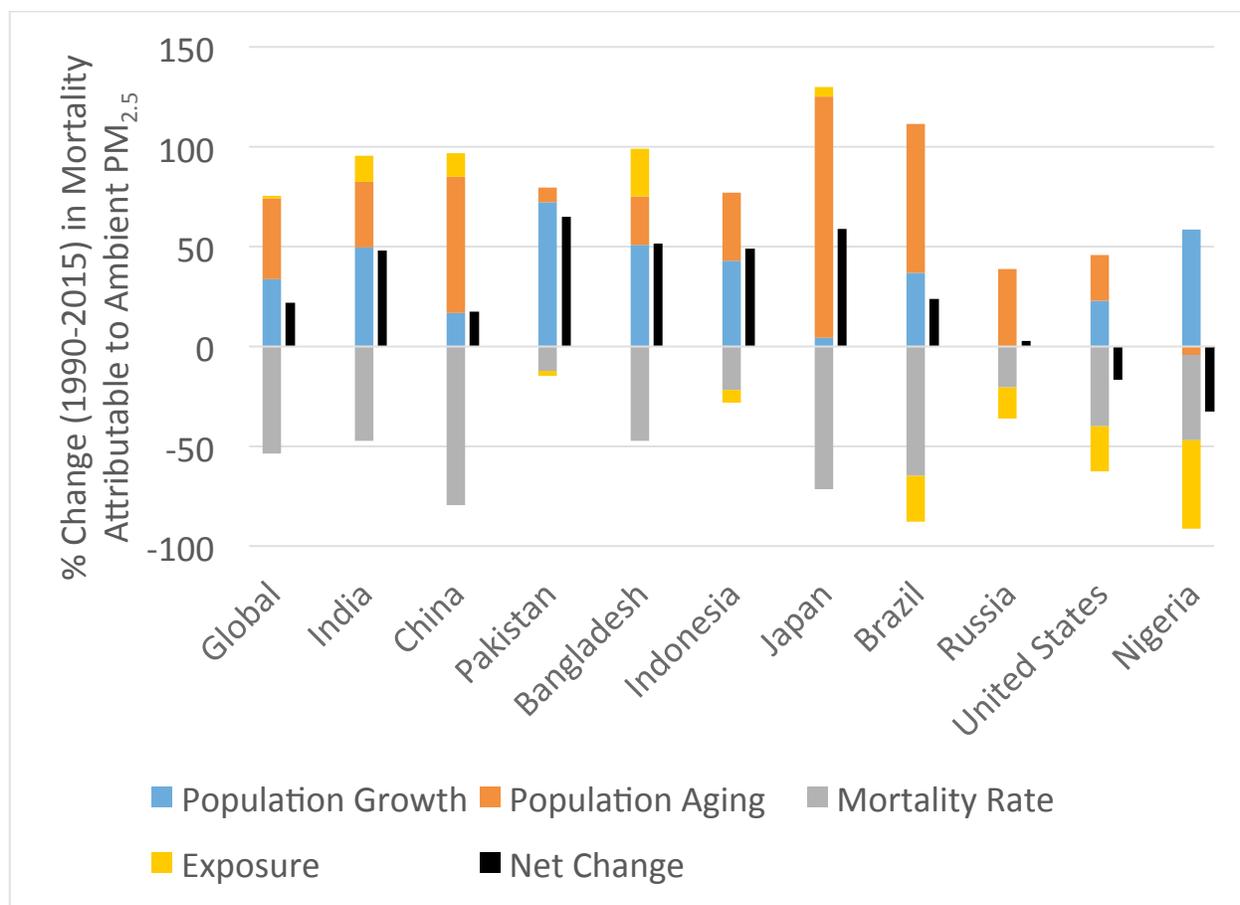
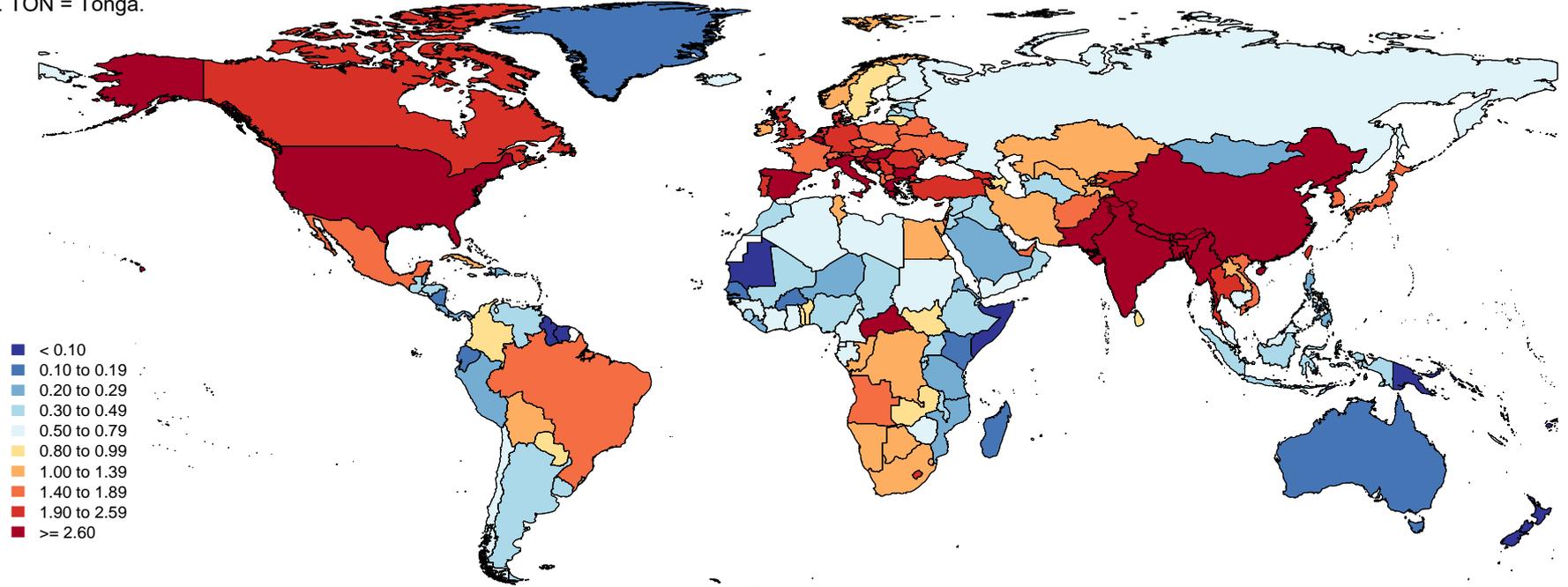


Figure 6. Contribution of changes in Population Growth, Population Aging, Age-Standardized Rates of Mortality (ischemic heart disease, cerebrovascular disease, lung cancer, lower respiratory infections, and chronic obstructive pulmonary disease) unrelated to ambient air pollution, and Exposure (colored stacked bars) to changes in mortality attributable to ambient PM_{2.5} (black bars) for the ten most populous countries and globally.

Figure 7a. Deaths per 100,000 attributable to ozone in 2015 for all ages and both sexes combined. ATG = Antigua and Barbuda. VCT = Saint Vincent and the Grenadines. BRB = Barbados. COM = Comoros. DMA = Dominica. GRD = Grenada. MDV = Maldives. MUS = Mauritius. LCA = Saint Lucia. TTO = Trinidad and Tobago. SYC = Seychelles. MLT = Malta. SGP = Singapore. MHL = Marshall Islands. KIR = Kiribati. SLB = Solomon Islands. FSM = Federated States of Micronesia. VUT = Vanuatu. WSM = Samoa. FJI = Fiji. TON = Tonga.



- < 0.10
- 0.10 to 0.19
- 0.20 to 0.29
- 0.30 to 0.49
- 0.50 to 0.79
- 0.80 to 0.99
- 1.00 to 1.39
- 1.40 to 1.89
- 1.90 to 2.59
- >= 2.60

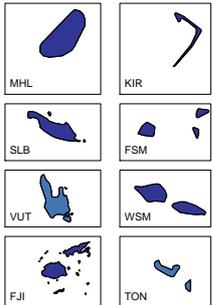
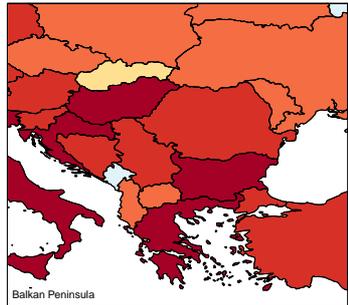
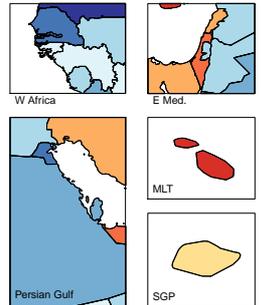
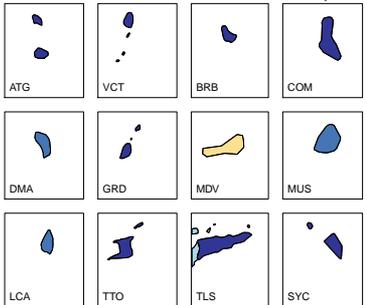
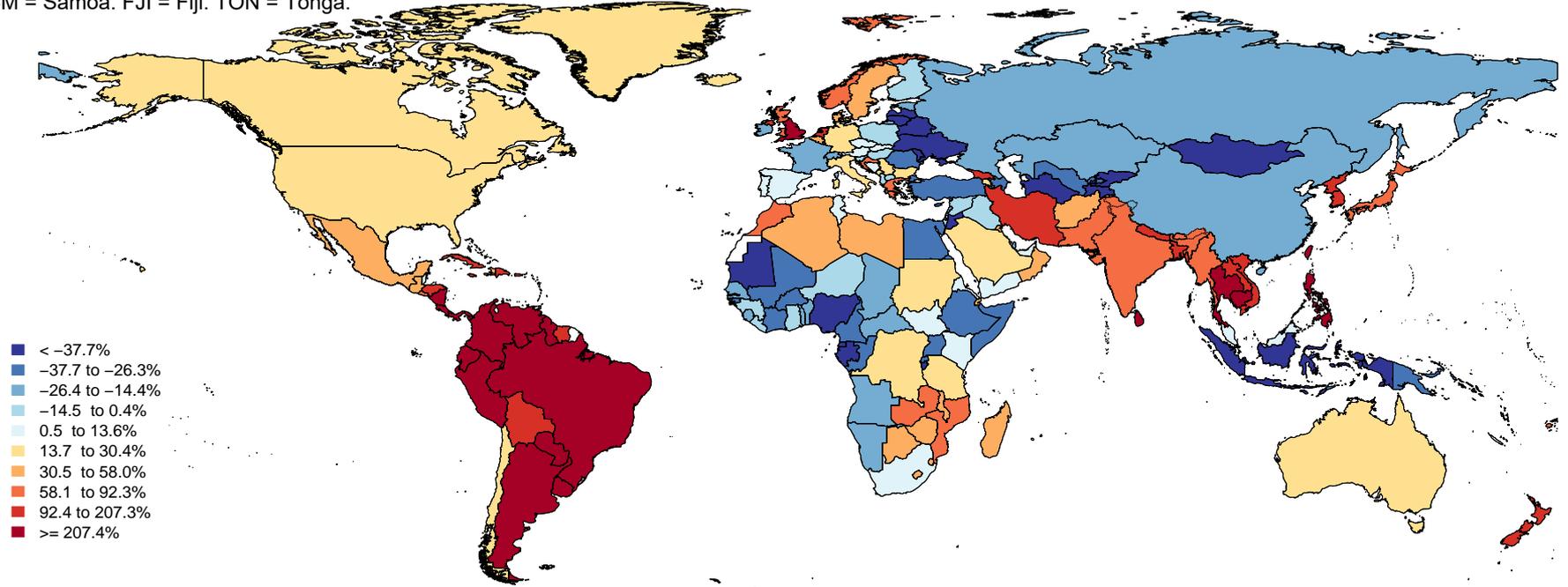


Figure 7b. Percent change in deaths per 100,000 attributable to ozone from 1990 to 2015 for all-ages and both sexes. ATG = Antigua and Barbuda. VCT = Saint Vincent and the Grenadines. BRB = Barbados. COM = Comoros. DMA = Dominica. GRD = Grenada. MDV = Maldives. MUS = Mauritius. LCA = Saint Lucia. TTO = Trinidad and Tobago. SYC = Seychelles. MLT = Malta. SGP = Singapore. MHL = Marshall Islands. KIR = Kiribati. SLB = Solomon Islands. FSM = Federated States of Micronesia. VUT = Vanuatu. WSM = Samoa. FJI = Fiji. TON = Tonga.



- < -37.7%
- -37.7 to -26.3%
- -26.4 to -14.4%
- -14.5 to 0.4%
- 0.5 to 13.6%
- 13.7 to 30.4%
- 30.5 to 58.0%
- 58.1 to 92.3%
- 92.4 to 207.3%
- >= 207.4%

