

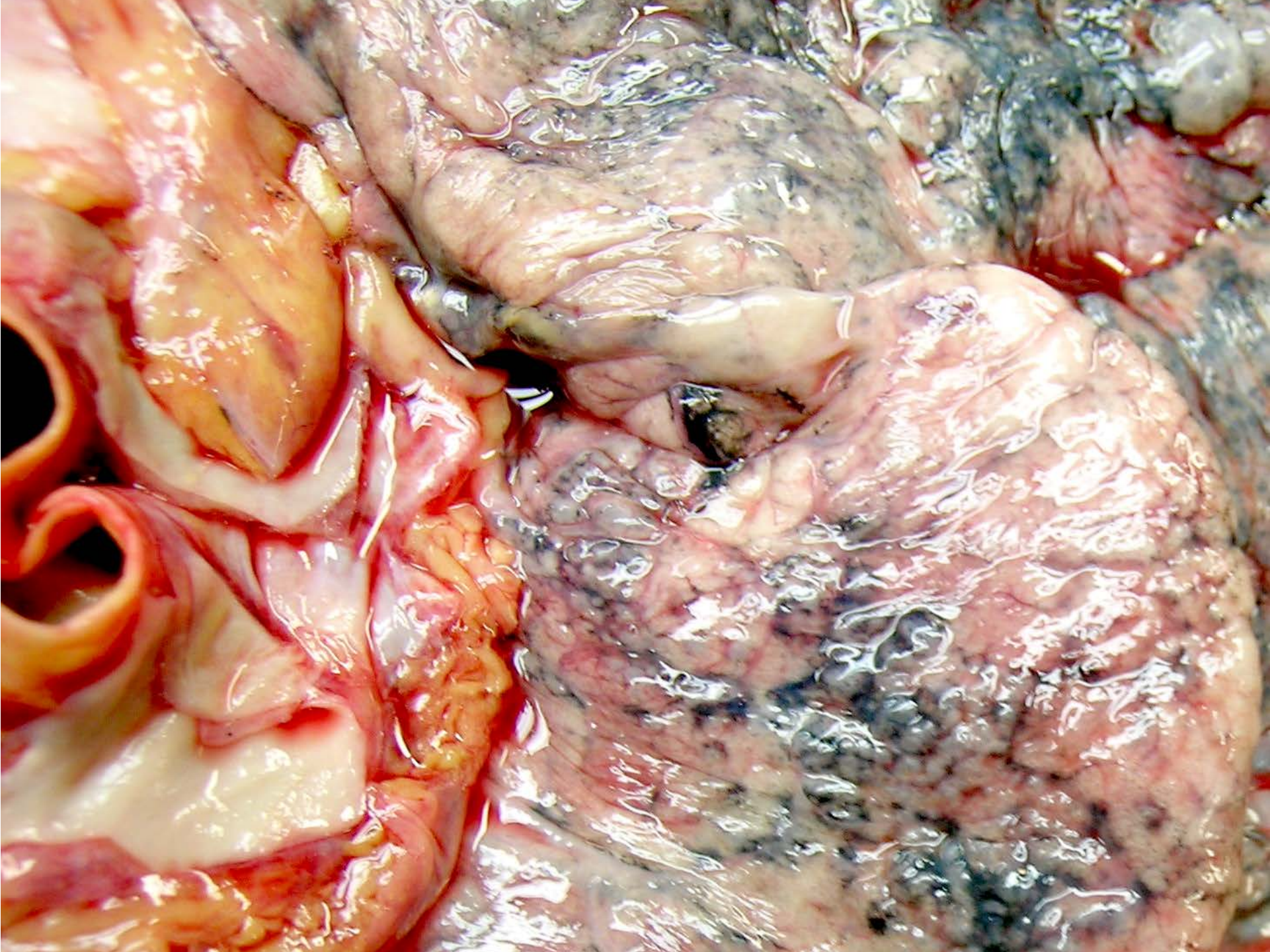
# Health Effects of Urban Air Pollution: An autopsy based approach

Paulo Saldiva

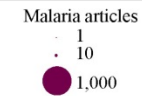
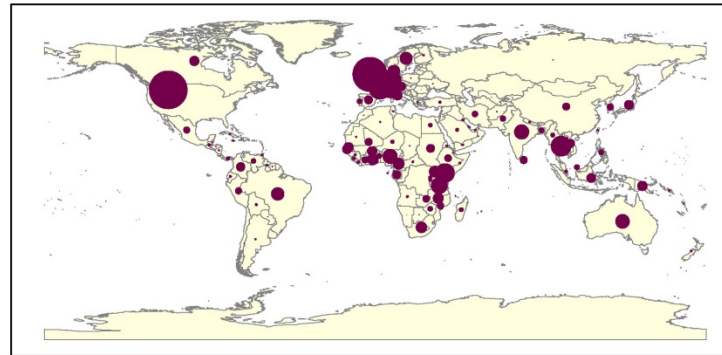
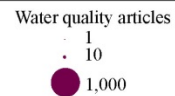
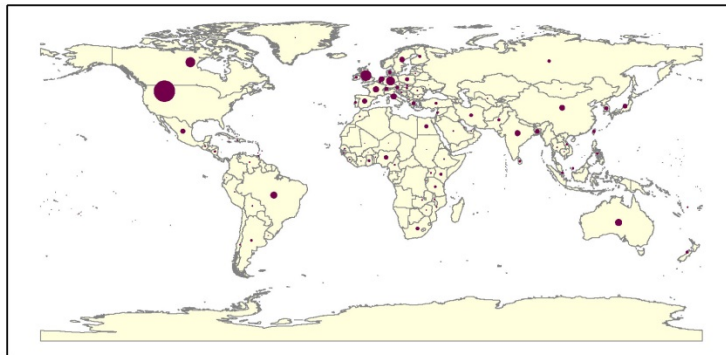
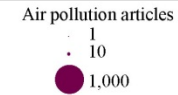
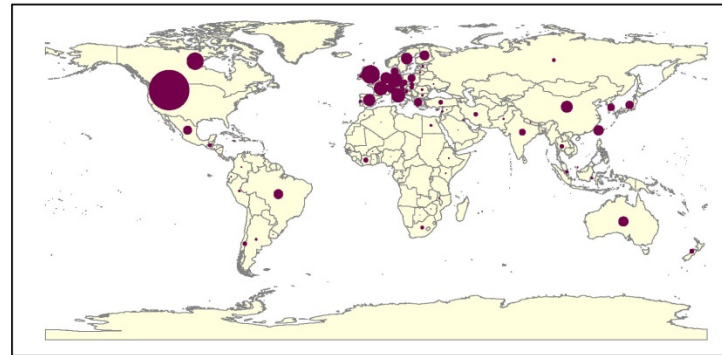
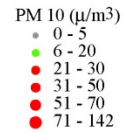
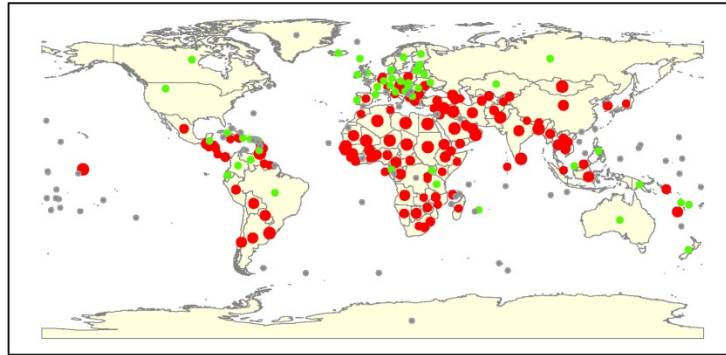
Faculty of Medicine

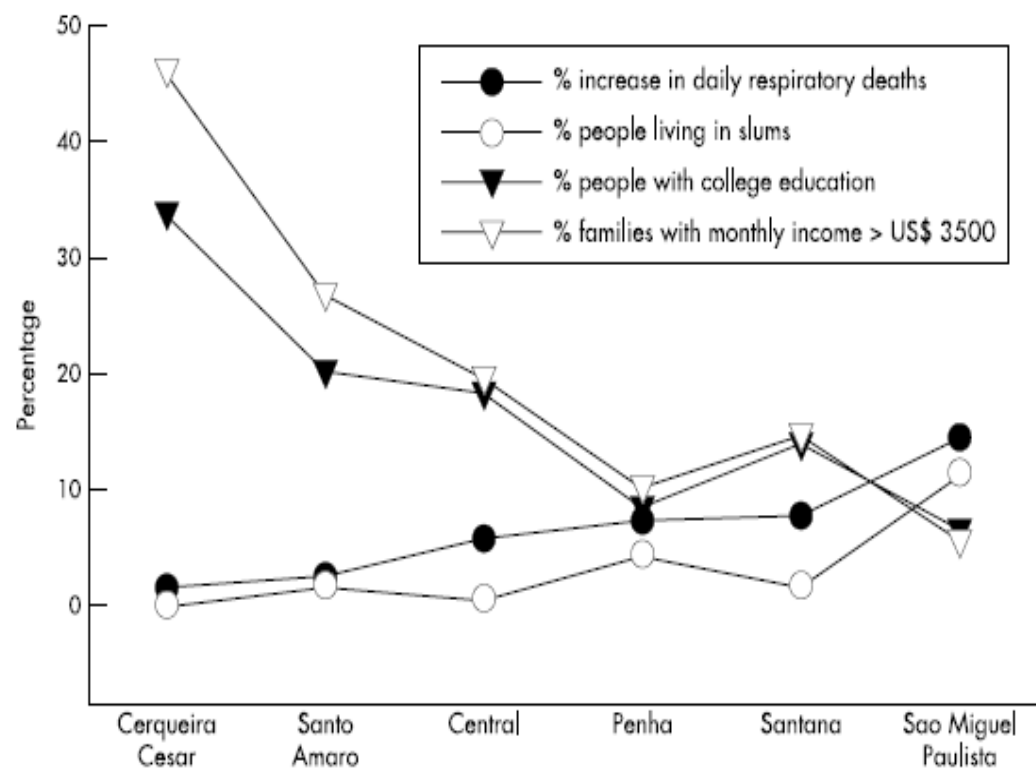
University of São Paulo





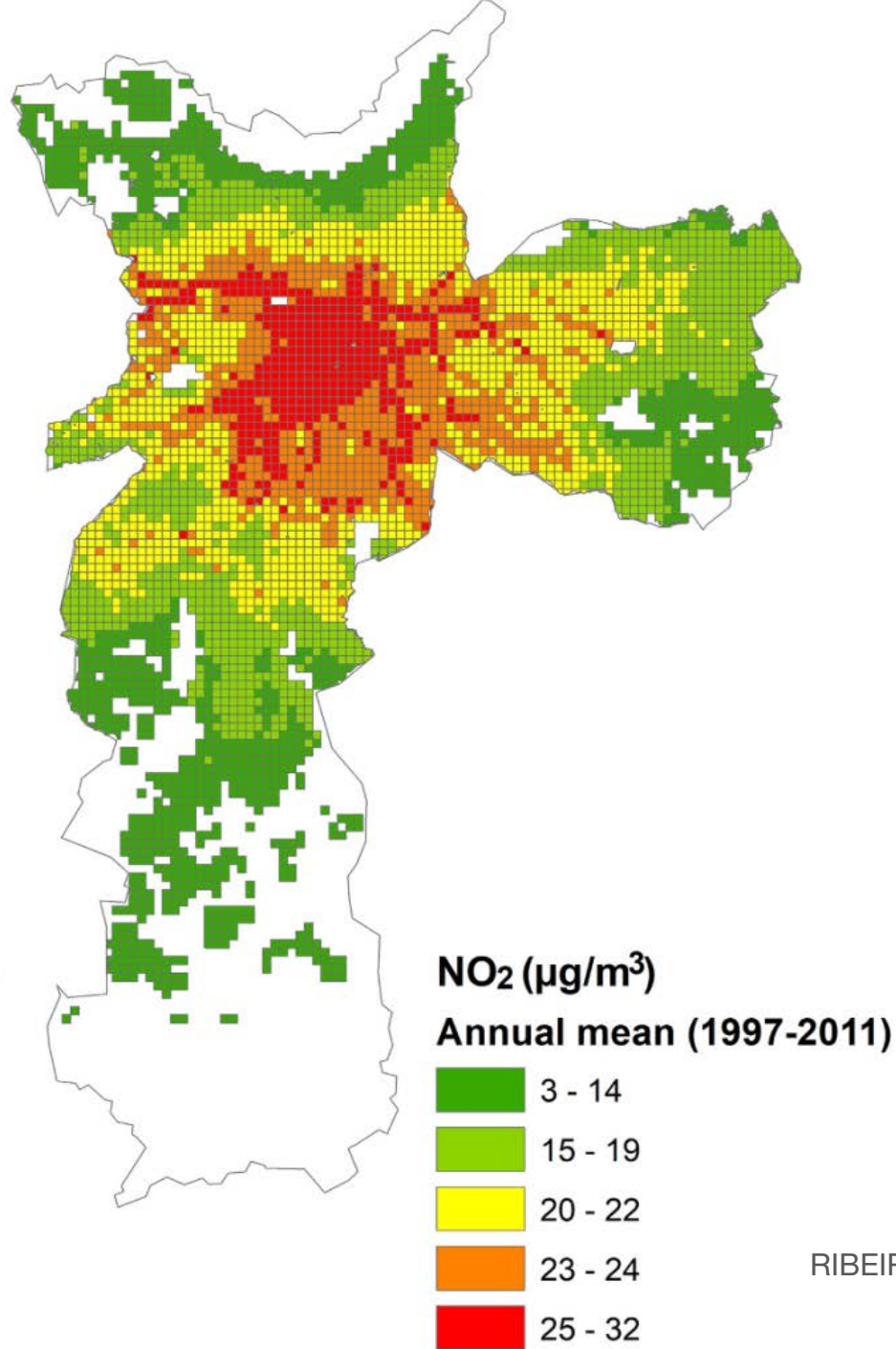
# Background



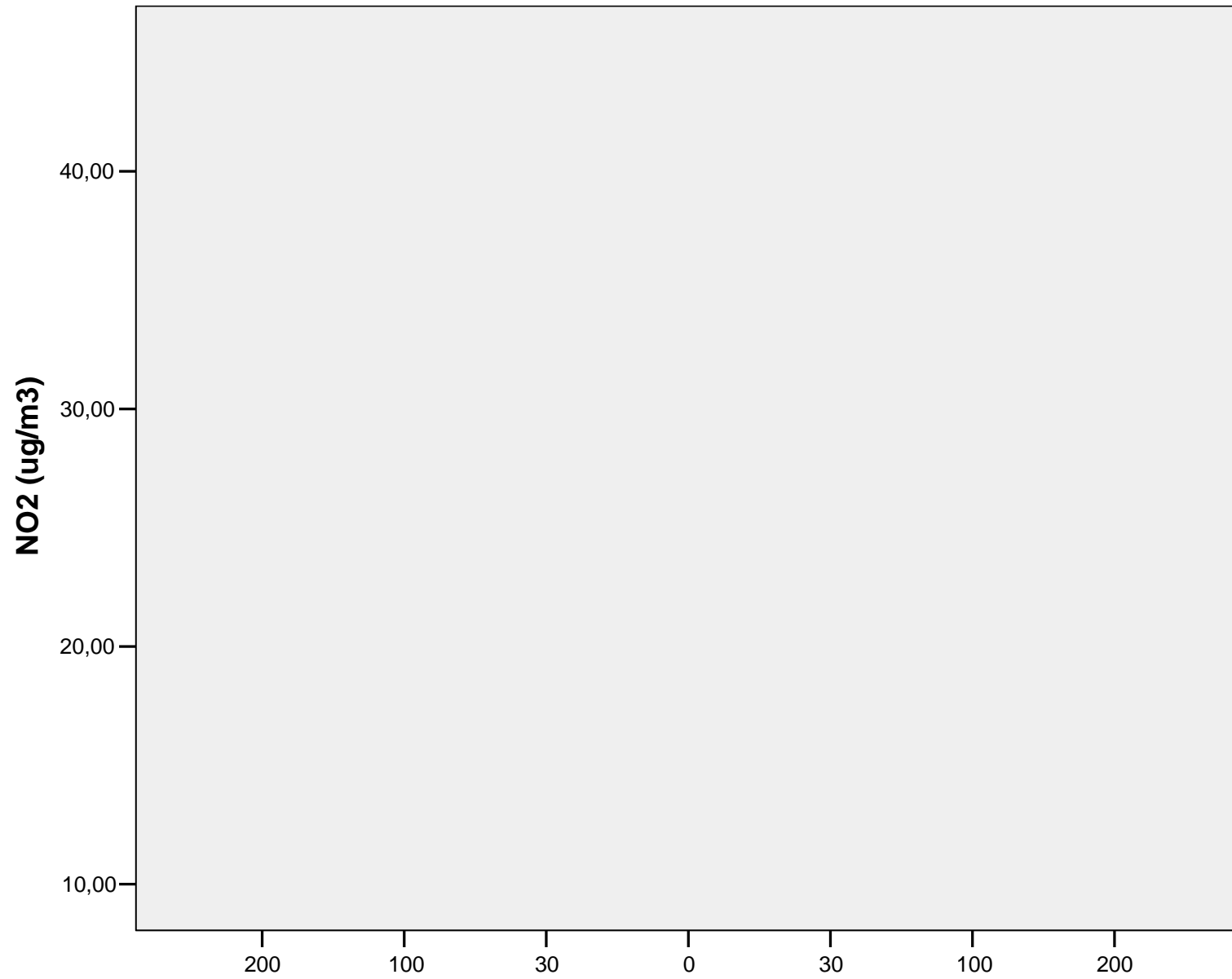


**Figure 3** Percentage increase in daily respiratory deaths attributable to a  $10 \mu\text{g}/\text{m}^3$  increase in three day moving average of  $\text{PM}_{10}$  and socioeconomic indicators in each region of the study.

Spatial distribution of nitrogen  
dioxide in São Paulo  
*(according to Ribeiro et al., 2019)*

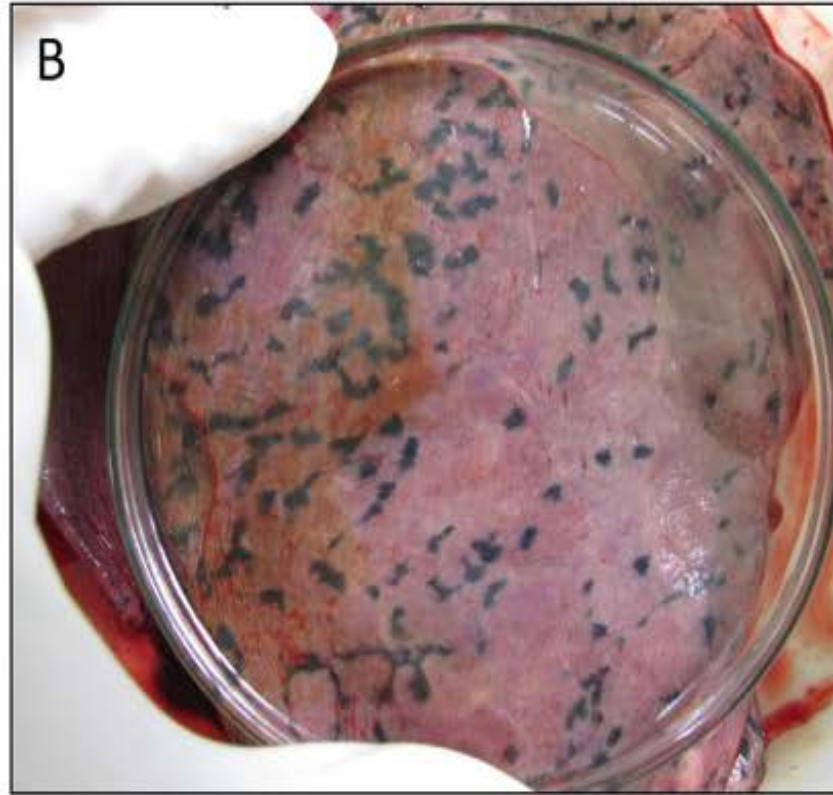
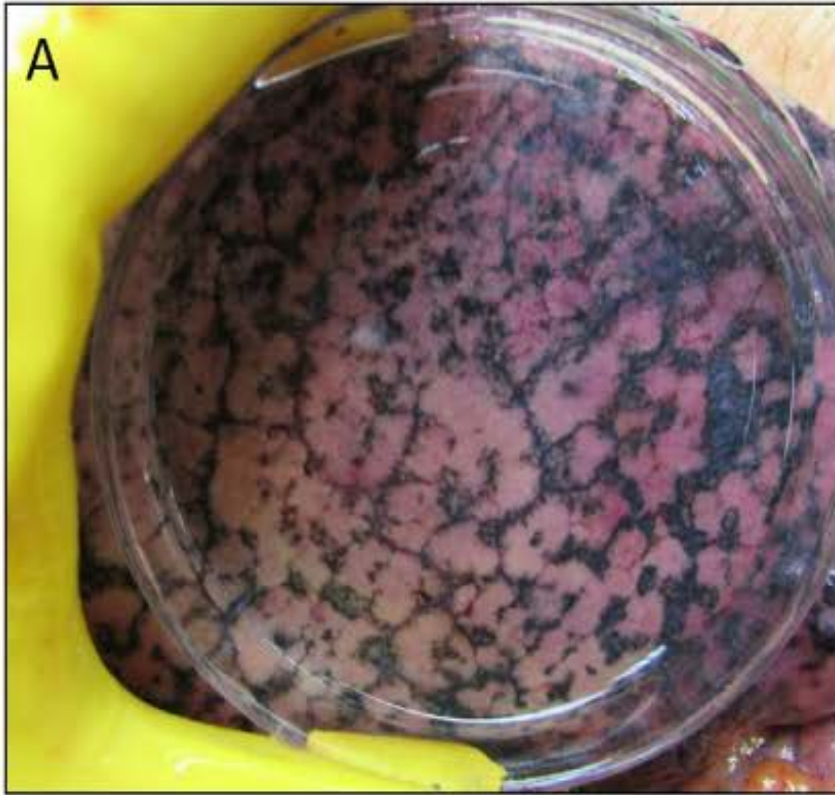


RIBEIRO et al. Incidence and mortality for respiratory cancer  
and traffic-related air pollution in São Paulo, Brazil.  
**Environmental Research** 170:243-251, 2019



Smoker

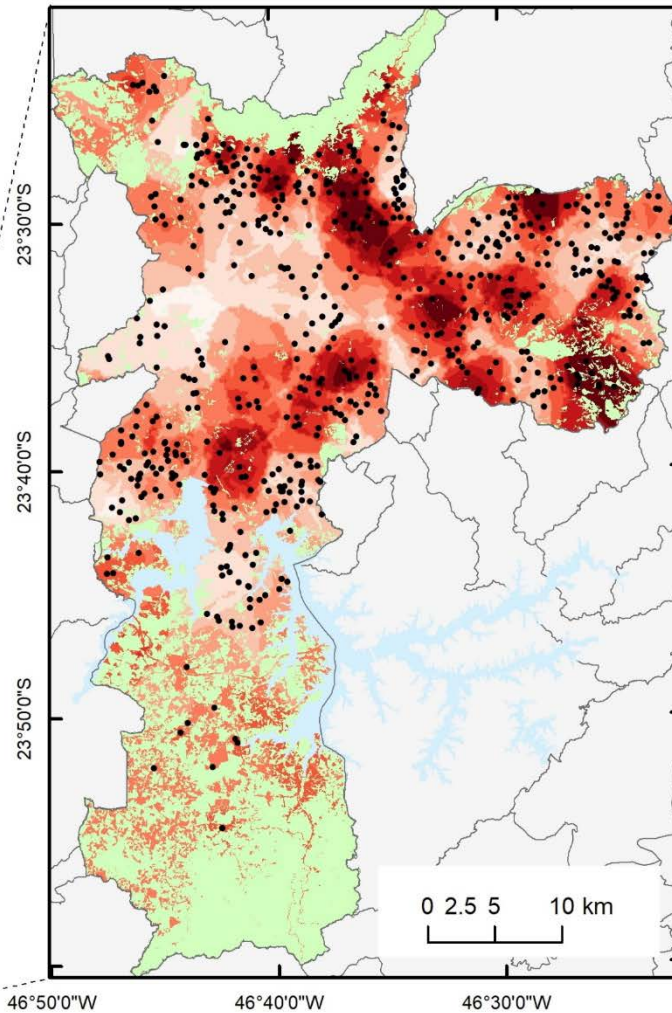
Non-smoker



FA = 0.48

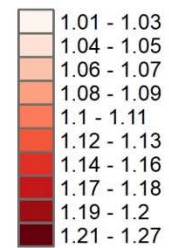
FA = 0.19

**Fig. 4.** Macroscopic view of anthracosis. Representative lung images from upper lobe with areas of black carbon deposition in the pleural surface. A) smoker (50 pack years), 65-y old, one daily hour spent in traffic; B) non-smoker, 63-y old, four daily hours spent in traffic. Both individuals were male and Sao Paulo dweller for 50 years. FA: fraction of anthracosis.



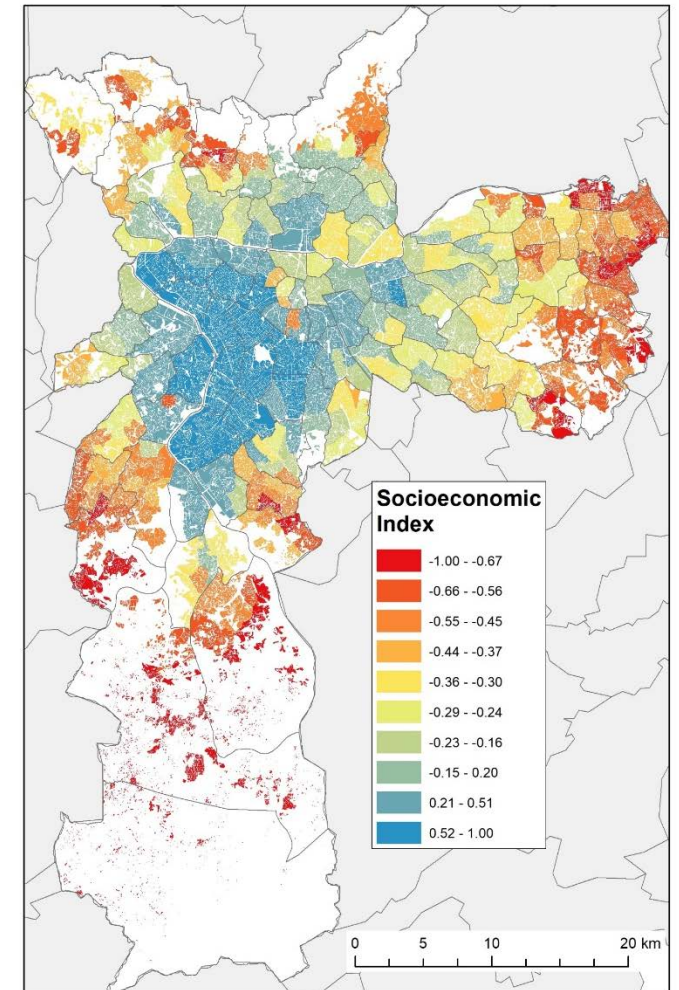
• autopsied cases

### Anthrachosis (Odds ratio)

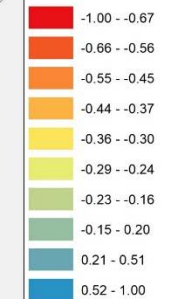


reservoirs  
green areas

Projected Coordinate System  
SIRGAS 2000 UTM,  
Zone 23 South



### Socioeconomic Index



BARROZO, L. V.; ANDRÉ, C. D. S.; RODRIGUES, G. P.; CABRAL-MIRANDA, W. Development of a new socioeconomic index for health research in Brazil: first approach. In: 14th International Conference on Urban Health: the New Urban Agenda and Sustainable Development Goals, Coimbra. **Anais...** Coimbra: 2017.