Legco 27 November 2006 Environmental Affairs Panel

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1. I understand that the Chief Executive has said that because Hong Kong life expectancy is one of the highest in the world, Hong Kong is therefore the most environmentally friendly place for executives. As a public health physician I am totally dismayed to hear such a naïve, misleading and fallacious statement from our Chief Executive. It is clear that the CE has been very badly advised on our current population health issues. It appears to show a serious misunderstanding of the complex determinants of health and survival.

2. First it is important to realise that overall population high life expectancy is driven by employment, and income and reflected in high GDP per capita, whereas poverty would have a negative effect. Whereas air pollution would be unlikely to reverse our overall life expectancy it would certainly slow the progression of gains in longevity. For a reversal of life expectancy trends there would have to be a complete breakdown of social structures, or war, famine and widespread fatal infectious disease; examples would include the turmoil and massive increase in alcohol consumption which followed the breakup of the Soviet Union, or the HIV/AIDS epidemic in Africa.

3. Our high life expectancy in Hong Kong is also attributable to

   - Our very low infant mortality rate (a tribute to the reproductive performance of Chinese mothers)
   - High quality maternal and child health services
   - The healthy migrant effect given the high proportion of older people who were mainland migrants. Migrants are fitter and generally better survivors.

   The Chief Executive should not confuse contemporary effects with cohort effects.

4. Hong Kong has the best data worldwide on the impact of pollution on survival and there is no question that air pollution causes premature deaths and shortens the lives of hundreds if not thousands in Hong Kong. The 1990 sulphur restriction in fuel was a very modest single intervention; we have demonstrated for the Government's benefit that it reduced age specific mortality rates, mainly from lung and heart diseases.

   But beneath the tip of the iceberg of deaths is a huge burden of ill health. In polluted environments many more people become sick for longer periods before the point at which they die. The Chief Executive should be aware that delays in cleaning up the air will cause large scale impairment to health-related quality of life, including illness days, hospital admissions and time off school and work. Pollution damages people with existing disease such as heart and lung problems and diabetes, and also otherwise healthy individuals both now and in their future health experience.

5. Merrill Lynch did not put a sell notice on property investment just because of reduction in life expectancy; I believe they were concerned about healthy life expectancy.

   The executives which the Chief Executive refers to will only be as good as their work force and the next generation of workers in Hong Kong. One of the questions Mr Tsang

should be asking is "What will be the impact on young people of growing up in dirty air?". The answer to that is unfortunately for many of them their lungs will fail to mature properly by the time they are about 18 years old. Poor lung growth in childhood is a major predictor of shortened life expectancy.

The impact of air pollution on population health, health care and community costs

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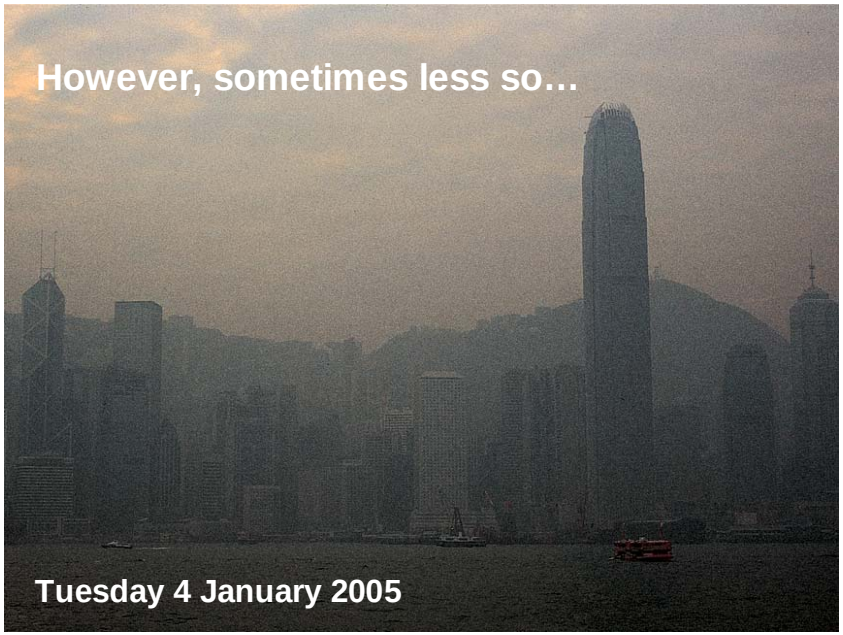
Air pollution: a major threat to the present and future health of Hong Kong



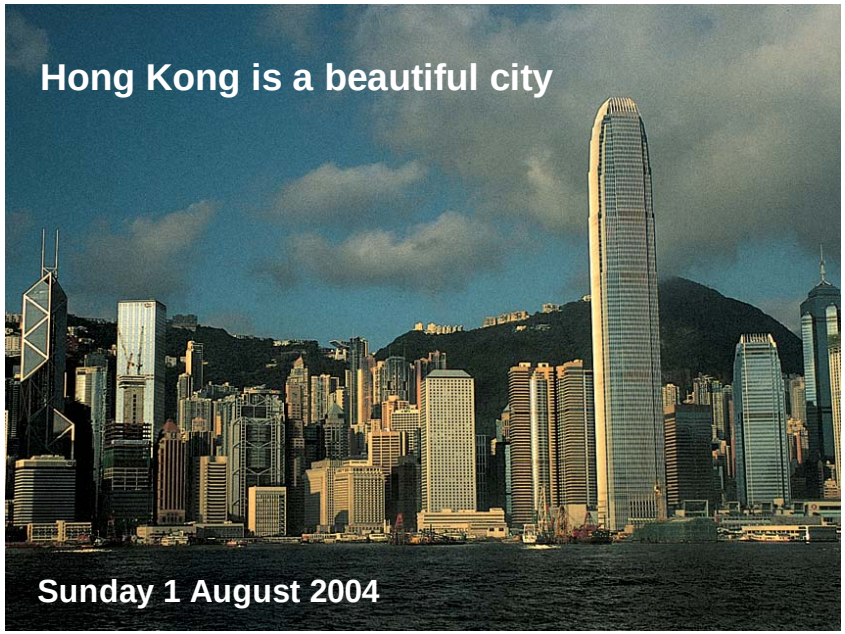
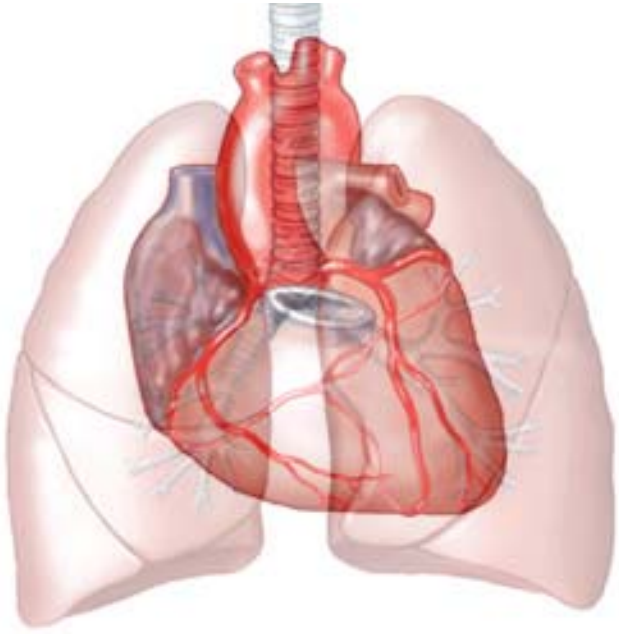


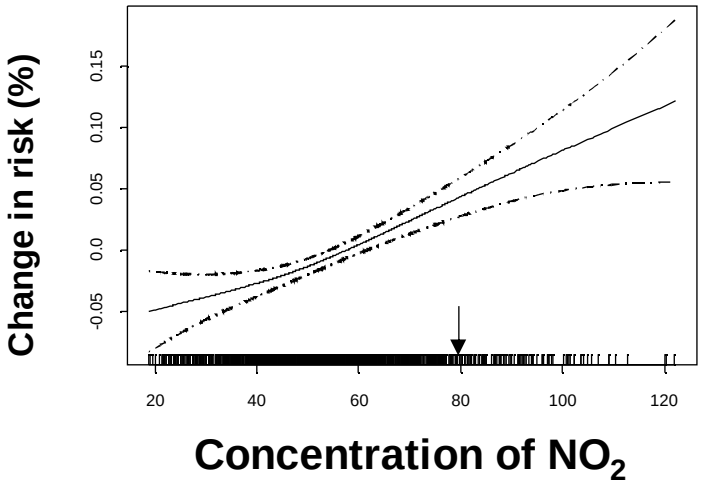
Photo: Edward Stokes; Hong Kong Conservation Photography Foundation

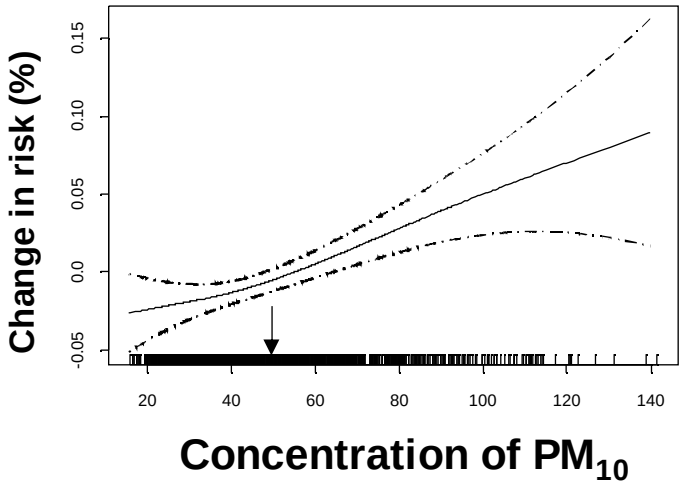
The heart and lungs are the most sensitive targets of pollutants



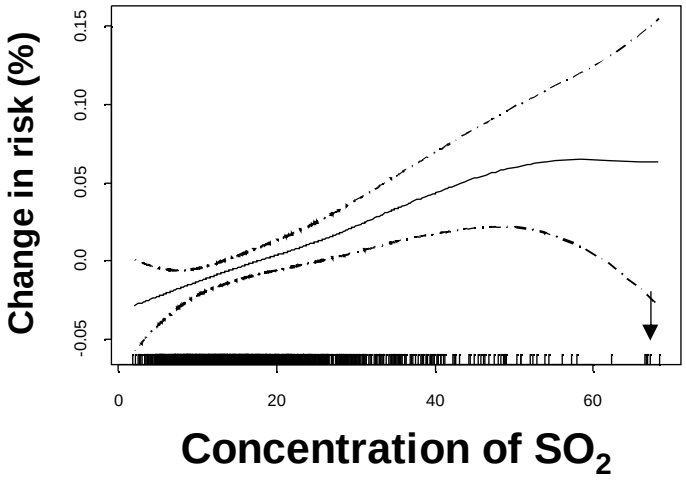
Pollutants cause inflammation and disease of the lungs, heart and blood vessel disease (heart attacks, strokes, bronchitis, pneumonia, COPD)

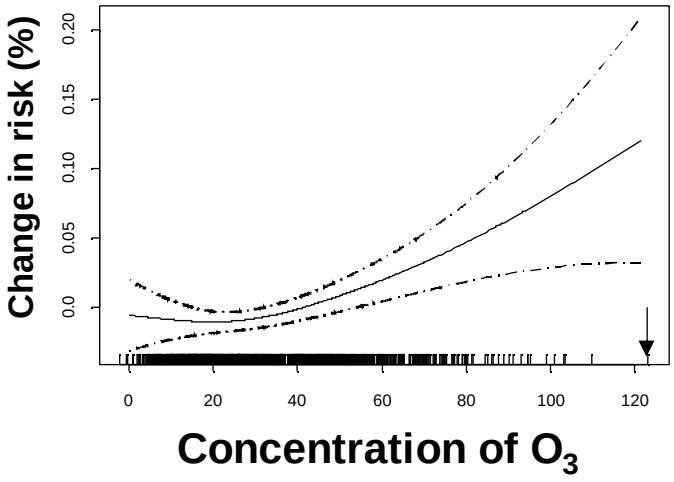
Air Quality Standards: do they protect health?
Respiratory Admissions to HA Hospitals



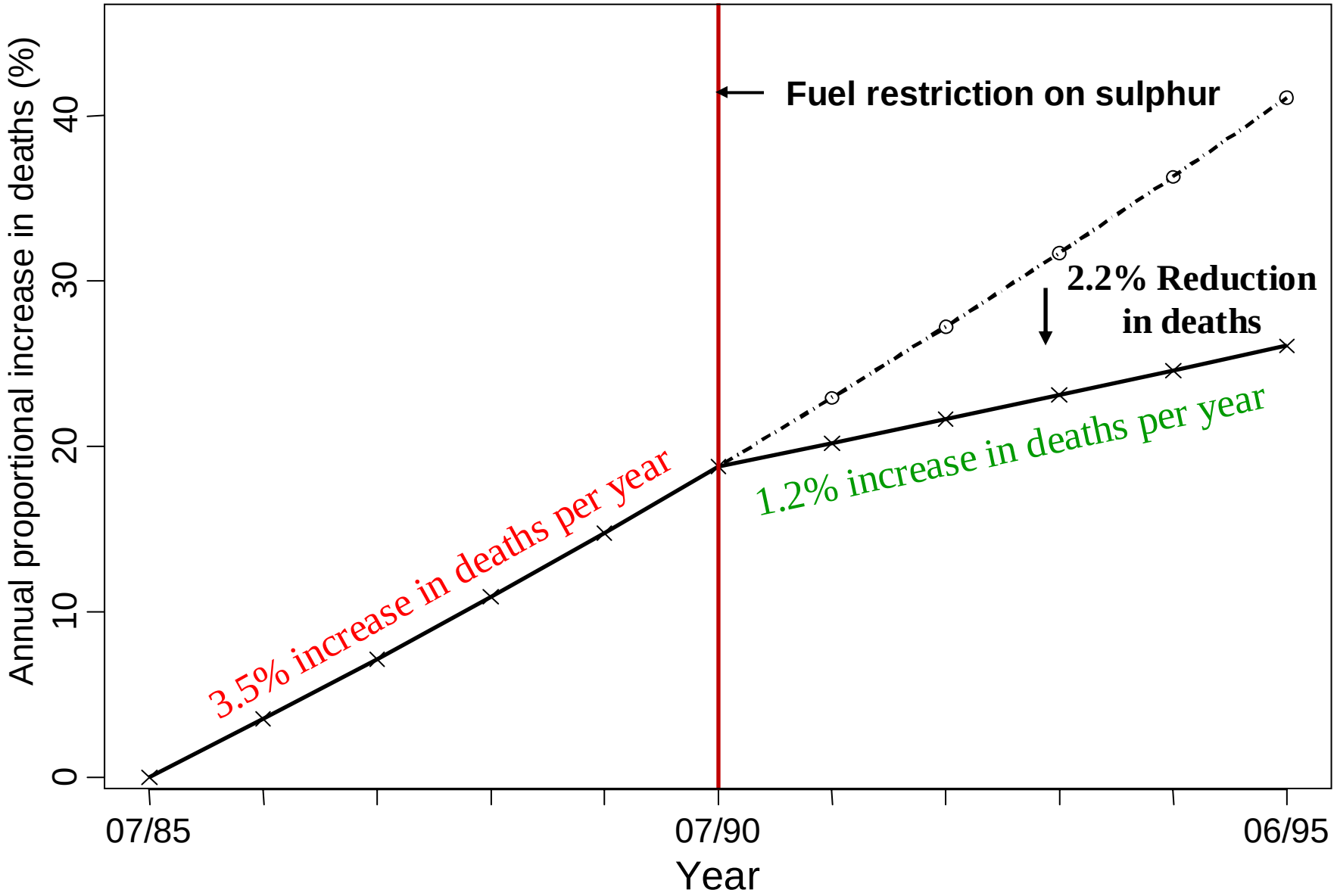


HK AQO

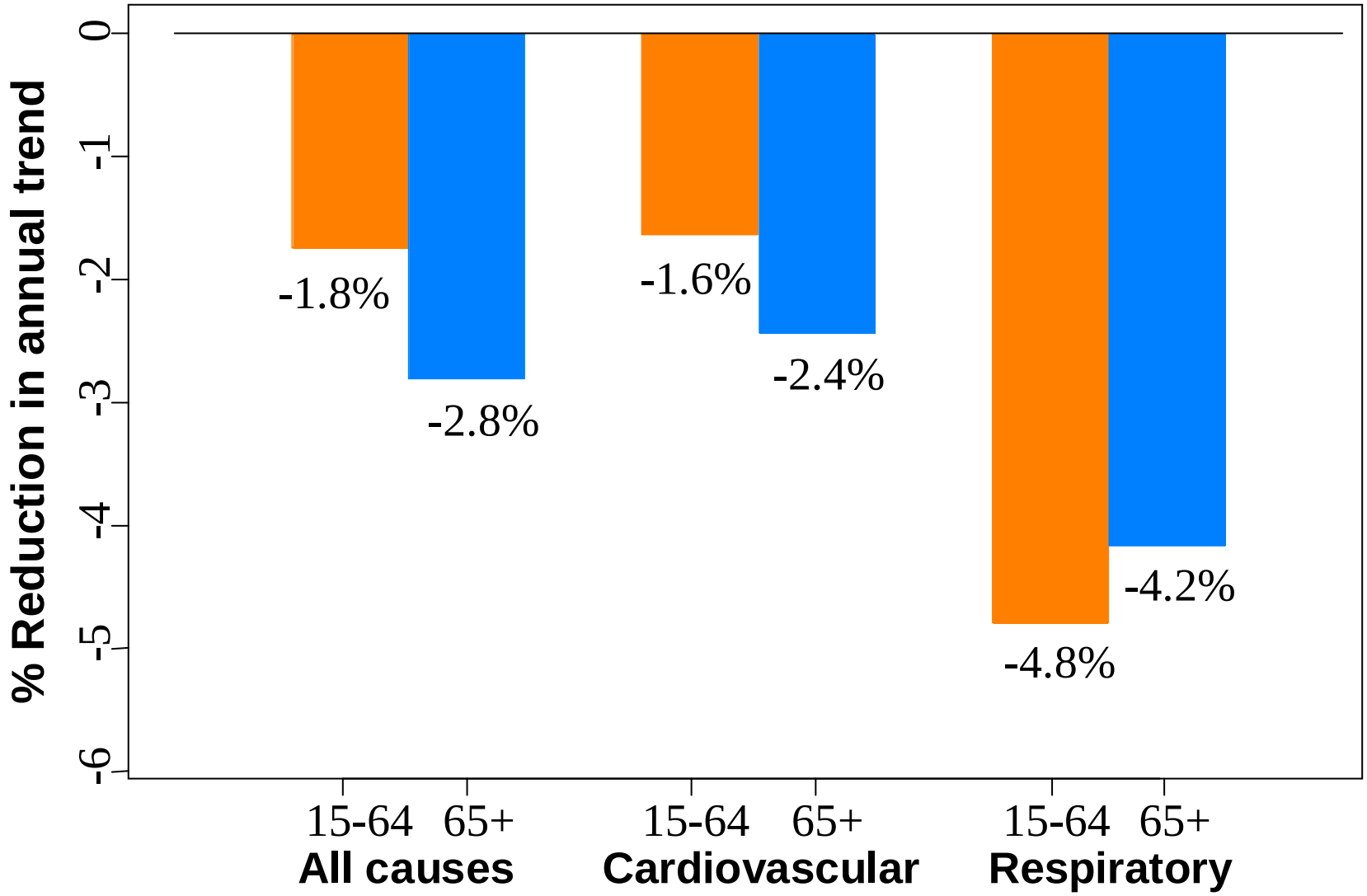




EFFECTS OF SULPHUR RESTRICTION: LONG TERM TRENDS IN DEATHS



Reductions in heart & lung disease deaths after sulphur restriction 1990



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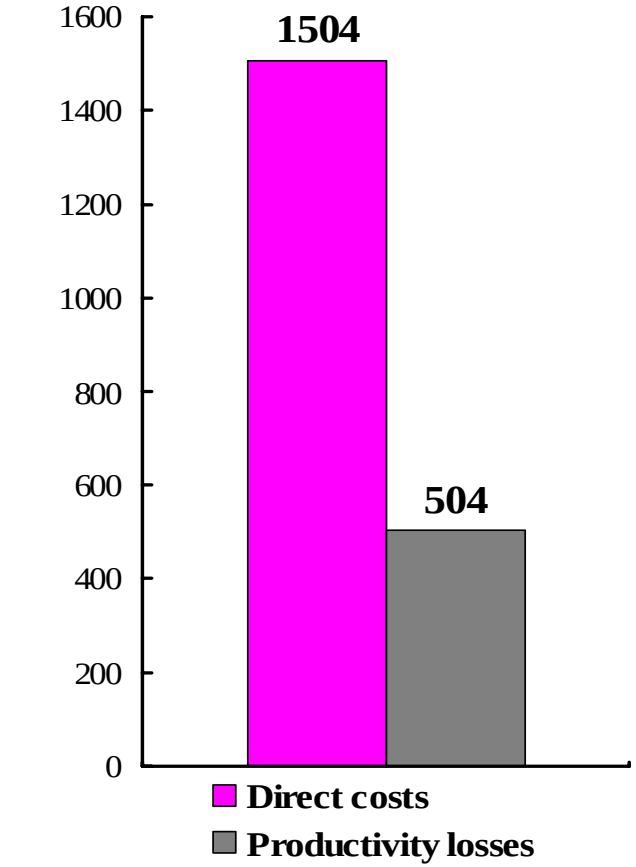
Annual $ Value of air quality improvement

Direct health costs & productivity loss avoided

Total: HK$2008M



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Intangible costs for pain & suffering

Total: HK$19172M