

Air Pollution and Respiratory Health

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Description



The effects of air pollution on respiratory health and efforts made to reduce air pollution.

Locations included: Delhi, Beijing, San Francisco, Sydney, and Fairbanks.

Focused on efforts being made to reduce air pollution.

Relevance



We are the cause of air pollution.

Air pollution affects the health of the global community, everyone.

Rural areas are also affected.

Most significantly impacts people in highly populated cities (54% of global pop. and rising[1])



Beijing, China



4,000 people per day are killed by respiratory problems caused by air pollution.^[8]

Uses a more liberal standard than much of the world.

Set a goal to be smog free by 2030.^[7]

Canned air^[9]

<https://www.youtube.com/watch?v=S27ycsxUtRM>



Sydney, Australia



Relatively low pollution levels compared U.S. or Europe.

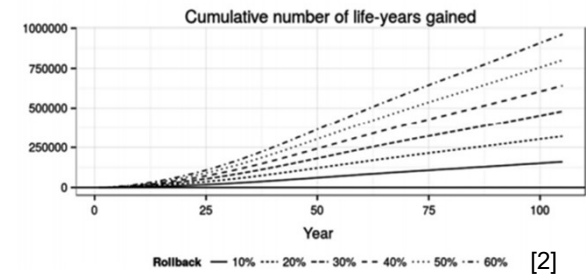
Environment Research Journal^[2] (Using BenMAP-CE software and data from 2007) - A team determined that:

630 respiratory and cardiovascular hospital admissions and 430 premature deaths were attributable to air pollution in 2007.

And reducing pollution exposure by 10% would:

Result in about 650 fewer premature deaths and about 700 fewer respiratory and cardiovascular hospital visits over 10 years.

As well as add 3500 life-years overall.



Delhi, India



A study done in Delhi researched the effects of air pollution levels on respiratory related illnesses and deaths

Recorded levels of 6 pollutants: SO_2 , NO_2 , CO , O_3 , SPM , and RSPM

Compared daily levels with number of visits the respiratory wing of the Safdarjung Hospital

As pollutant levels rose, the number of hospital visits rose (shows increased risk to respiratory health; Consistent across age groups)

“65% and a 19% increase in admissions associated with the rise in SO_2 and SPM levels initially but later, the increase in admission was observed to be related to NO_2 (10%) and SPM (28%)”^[3]

Fairbanks, Alaska



Fifth most polluted city in the United States.

Little to no regulations on air pollution.

Burn wood to heat their homes and businesses.^[4]

State regulators are v



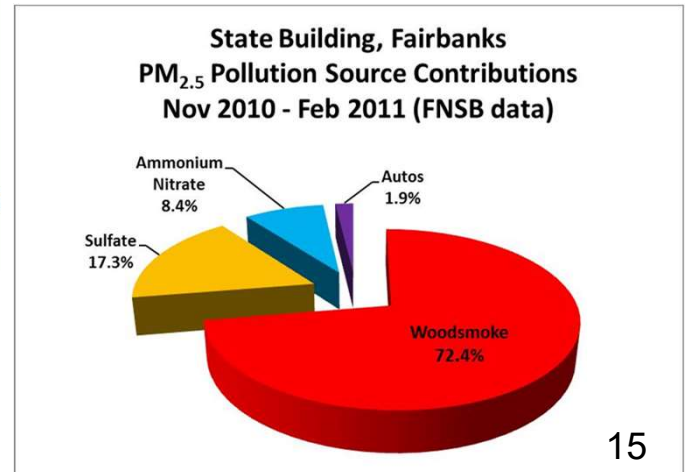
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Future

Legislation needs exploration

Ambitious goals

EPA to cut methane emissions from the oil and gas sector by 40% to 45% by 2025.^[5]

No smog in Beijing in 2030.^[6]

Development of renewable energy sources to replace fossil fuels:

Solar Roadways

Windmills

Summary

People die from respiratory related illnesses caused by air pollution every day.

Air pollution levels are on the rise, most significantly in urban areas.

Many areas of the world violate WHO standards for air pollution.

Air Pollution affects the health of the global community.

Not enough people are actively resisting air pollution.

Picture Sources

1. https://upload.wikimedia.org/wikipedia/commons/2/2b/Aab_Pasadena_Highway_Los_Angeles.jpg
2. https://en.wikipedia.org/wiki/Air_pollution
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- [6]"Mission: Impossible? Can China's Vision of a Smog-free Beijing by 2030 Really Come True?" *South China Morning Post*. N.p., n.d. Web. 25 Oct. 2016.
- [7]"Mission: Impossible? Can China's Vision of a Smog-free Beijing by 2030 Really Come True?" *South China Morning Post*. N.p., n.d. Web. 25 Oct. 2016.