Air Quality Analytics

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Akraino 5G MEC Hackathon
Nov 18, 2019

Outline

Big Picture

Problem

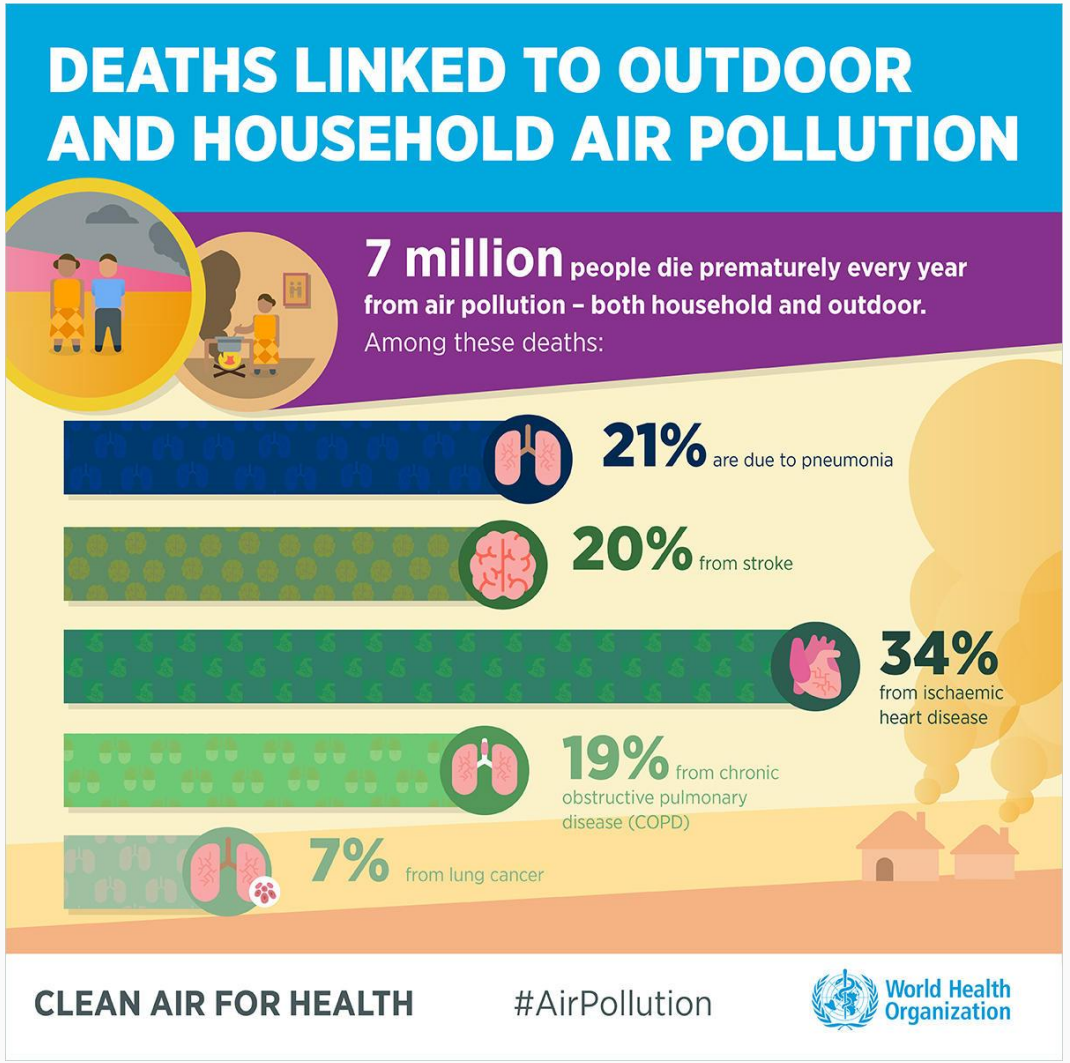
Challenge

Insight

Our Solution

Future Work

Big Picture


DEATHS LINKED TO OUTDOOR AND HOUSEHOLD AIR POLLUTION
7 million people die prematurely every year from air pollution – both household and outdoor.
Among these deaths:
21% are due to pneumonia
20% from stroke
34% from ischaemic heart disease
19% from chronic obstructive pulmonary disease (COPD)
7% from lung cancer
CLEAN AIR FOR HEALTH
#AirPollution
World Health Organization

Problem

Lack of awareness about air quality parameters

Limited interest in air quality patterns

Challenge

Air quality level not immediately perceived by people

Action to improve air quality reactive rather than preventive

Insight

Existing sensors can be used to leverage data to observe air quality patterns

Our Solution

Data from U.S. Environment Protection Agency

Graphical representation of air quality level across sites in 2 cities - San Diego and Los Angeles

Monitoring air quality as level of Carbon Monoxide in parts per million (ppm)

Total level of CO

Across all days of the week

Demo

https://micromec.org/hack/Paulpopking_5GHackathon/

Future Work

Similar analytics for other standard pollutants - Sulphur Dioxide, Nitrogen Oxides, Ozone

Scope for targeted city-specific solutions

Alert generation during anomalies and emergencies