# Los Angeles: Air Pollution & Health

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### **TYPES OF AIR POLLUTANTS**

#### ROADWAYS

Heavy metals from tires and braking, particulate matter (carbon)

#### Emissions

Polycyclic aromatic hydrocarbons, including carcinogens

INDUSTRIAL

LANDFILLS TOXIC WASTE

Emissions

INDOOR

Gas from stoves or heaters

Secondhand smoke

Dust

## **HISTORY OF AIR POLLUTION**

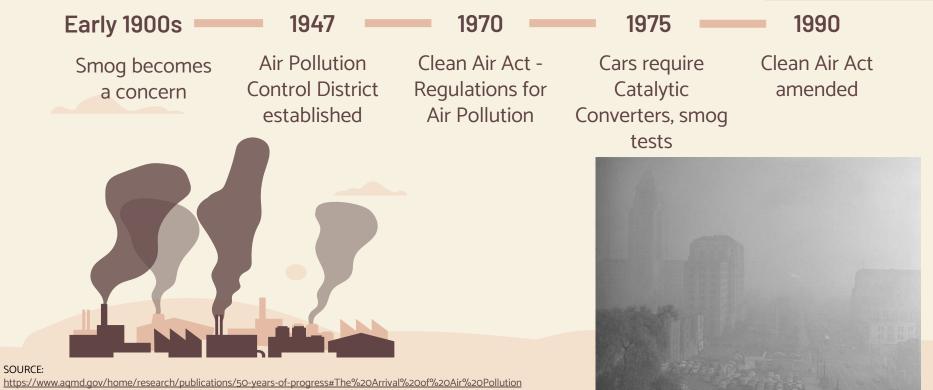
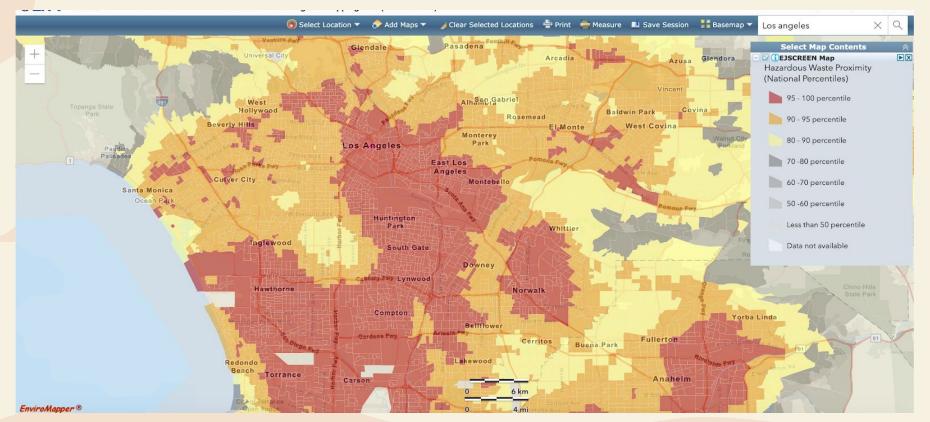


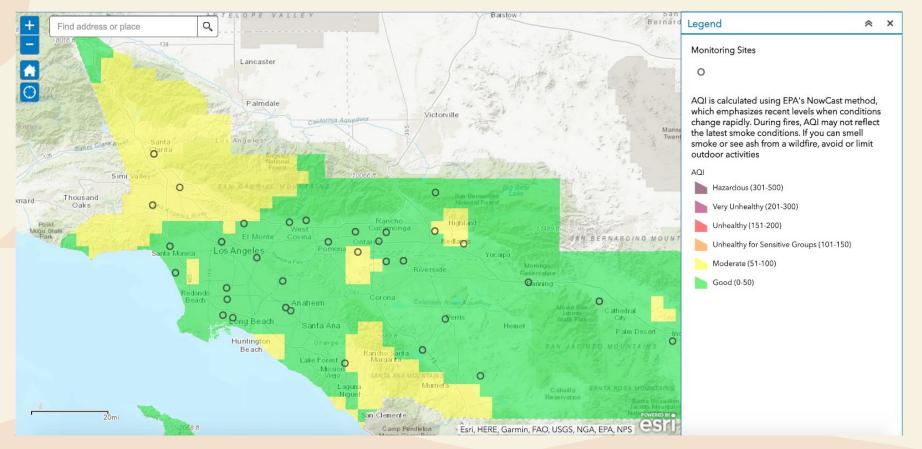
Image: https://waterandpower.org/museum/Smog\_in\_Early\_Los\_Angeles.html

### HAZARDOUS WASTE PROXIMITY



SOURCE: https://ejscreen.epa.gov/mapper/

### **CONDITIONS FOR INCREASED EXPOSURE: LOCATION**



## **IMPACTS ON HEALTH**

- Mental Health Depression
- Child Development
  - Low birth weight
  - Stunted lung development
- Cancer Lung cancer
- **Dementia** Alzheimer's
- Cardiovascular Disease Heart attack
- Respiratory Disease Asthma

SOURCE: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5122104/#:-:text=Air%20pollution%20is%20considered%20as,growth%2C%20and%20low%20birth%20weight.

### **HOW TO REDUCE EXPOSURE**

#### DRIVING

- Replace AC filters
- Close your windows & use air conditioning/ recirculate air

#### EXERCISE

- Don't exercise near major roads
- Check air quality
- Exercise indoors when air quality is bad

#### COOKING

• Proper ventilation in cooking area

#### CLEANING

- Clean all indoor surfaces
- Wipe screens on doors/windows
- Replace filter in AC unit

SOURCE: <a href="https://www.sciencedirect.com/science/article/abs/pii/S1352231020305446?via%3Dihub: https://www.mayoclinic.org/healthy-lifestyle/fitness/expert-answers/air-pollution-and-exercise/faq-20058563;<a href="https://www.arb.ca.gov/resources/documents/indoor-air-pollution-cooking#---text=Natural%20gas%20and%20propane%20stoves.toxic%20to%20people%20and%20pets.&text=Cooking%20can%20als%20generate%20unhealthy.ingredients%2C%20especially%20at%20high%20temperatures; https://www.health.harvard.edu/staying-healthy/easy-ways-you-can-improve-indoor-air-guality">https://www.health.harvard.edu/staying-healthy/easy-ways-you-can-improve-indoor-air-guality</a>

### HOW TO CHECK AIR QUALITY

#### WEBSITES

- AirNow.gov
- epa.gov/outdoor-air-quality-data

#### APPS

- Air Visual
- Sh\*\*t! I Smoke

#### AIR QUALITY MEASURED BY AIR QUALITY INDEX AND FAILS INTO 6 CATEGORIES

Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

### WHAT CAN BE DONE?

- ADVOCATE FOR AIR POLLUTION TO BE ADDRESSED IN YOUR COMMUNITY THROUGH POLICY
  - CONSTRUCT RESIDENCES FURTHER FROM ROADS
- ADDRESS MINORITY COMMUNITIES
  DISPROPORTIONATELY AFFECTED BY AIR POLLUTION
- SUPPORT FURTHER RESEARCH INTO THE SOURCES OF AIR POLLUTION AND HOW TO ADDRESS THEM

A GREAT RESOURCE: https://www.airnow.gov/

SOURCE: https://doi.org/10.1016/j.scs.2018.07.020

### **THANKS!**

Do you have any questions?

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