

Name:

Date:

Class:

Environmental Justice StoryMap #2: Air Quality and Health

Complete the following questions as you explore the [Environmental Justice StoryMap #2 Air Quality & Health](https://storymaps.arcgis.com/stories/336a42de964d4c7f8fff41126890c825) StoryMap #2 Link: <https://storymaps.arcgis.com/stories/336a42de964d4c7f8fff41126890c825>

Think About It: Watch the [video](#) and think about what you observe:

1. How many people die a year from the effects of air pollution?
2. How does air pollution get from the air around us to inside our bodies?
3. Can engineers help reduce air pollution to save lives?

Check for Understanding #1:

4. Of the top 10 causes of premature death, what is the ranking for ambient (outdoor) air pollution?
5. Which groups of people in a community are at most risk of the harmful effects of air pollution?

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Check for Understanding #2:

6. Describe how outdoor PM air pollution gets inside the human body?

7. What organs are affected by PM air pollution?

Check for Understanding #3:

8. Which Air Quality Index (AQI) colors represent healthy air? Unhealthy air?

9. If the AQI rating is 125, what action should you take to stay safe?

Check for Understanding #4:

10. Which areas in the country currently have good air quality now?

11. Which areas in the country currently have poor air quality now?

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Check for Understanding #5:

12. Compare and contrast any patterns that you observe between areas the **locations with probable higher respiratory health risks** (part A) and the locations where communities, including low income and people of color, have **likely higher asthma rates** (part B) in relation to demographics.

Discussion: Engineering Connections

13. Describe the relationships between particulate matter pollution, public health, and, environmental justice in your own words.
14. Do you think our current transportation system helps or hurts public health and the environment overall? Why?
15. What are your thoughts on engineering advances like electric vehicles (EVs) and alternative energy to transform our transportation system to help reduce particulate matter pollution and improve air quality and environmental justice for all?