Air Quality and Community Health | Near-Ground Level Ozone Pollution | COVID-19 and Air Pollution

CLEAN STEM Flash

A Timely Climate and Energy E-Learning Series to Use and Share

August 7th, 2020

Topic: Air Pollution

Air pollution decreases air quality, which is impacted by and affects climate change. This month features a video on air quality and community health, a learning activity that has students study smog in a city, and a news article about the effects of COVID-19 lockdowns on air pollution.

CLEAN Resource Feature

Video: Air Quality and Community Health

This short video discusses ways that communities can prepare for air quality changes that will occur due to rising global temperatures.

Video length: 0:48 min
Audience: Middle School, High School, Informal, General Public

Browse CLEAN for more resources on Community Health.
CLEAN Resource Feature
Learning Activity: Near-Ground Level Ozone Pollution
This lab exercise, written by Omowumi Alabi, is designed to provide a basic understanding of a real-world scientific investigation. Learners are introduced to the concept of tropospheric ozone as an air pollutant due to human activities and burning of fossil fuels. It can be done remotely.

Audience: High School, Lower College

Take a look at some more CLEAN resources focused on Air Pollution.

This activity addresses tropospheric ozone and describes how it is produced through a chemical reaction of pollutants with sunlight. It draws the distinction between human-induced tropospheric ozone and natural stratospheric ozone. Students synthesize the exercise by developing a scientific report that includes an abstract, introduction, methods, results, discussion and references.

In the News: COVID-19 and Air Pollution
This article discusses the decrease of air pollution during the COVID-19 lockdowns across the US. It elaborates on how there was less of a decrease than originally indicated, likely due to trucks, refineries and petrochemical plants, and burning coal. This article expands on how the lockdowns were an accidental experiment that has given more information about specific cities and their sources of pollution.

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