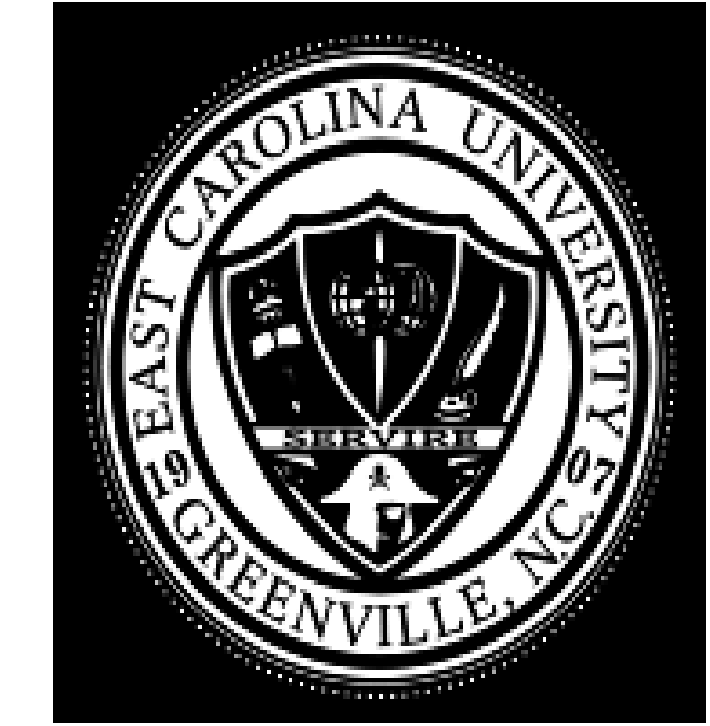


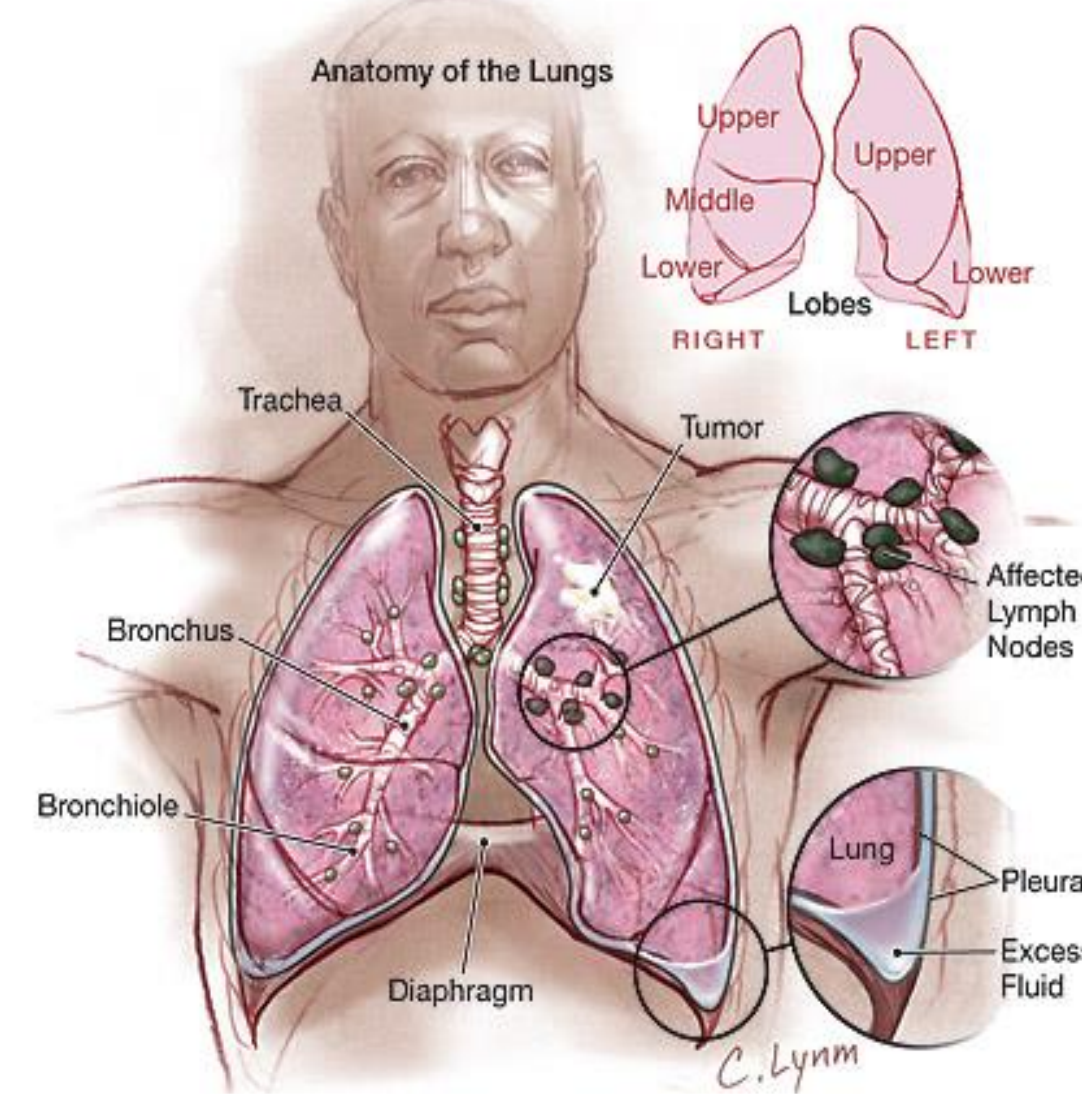
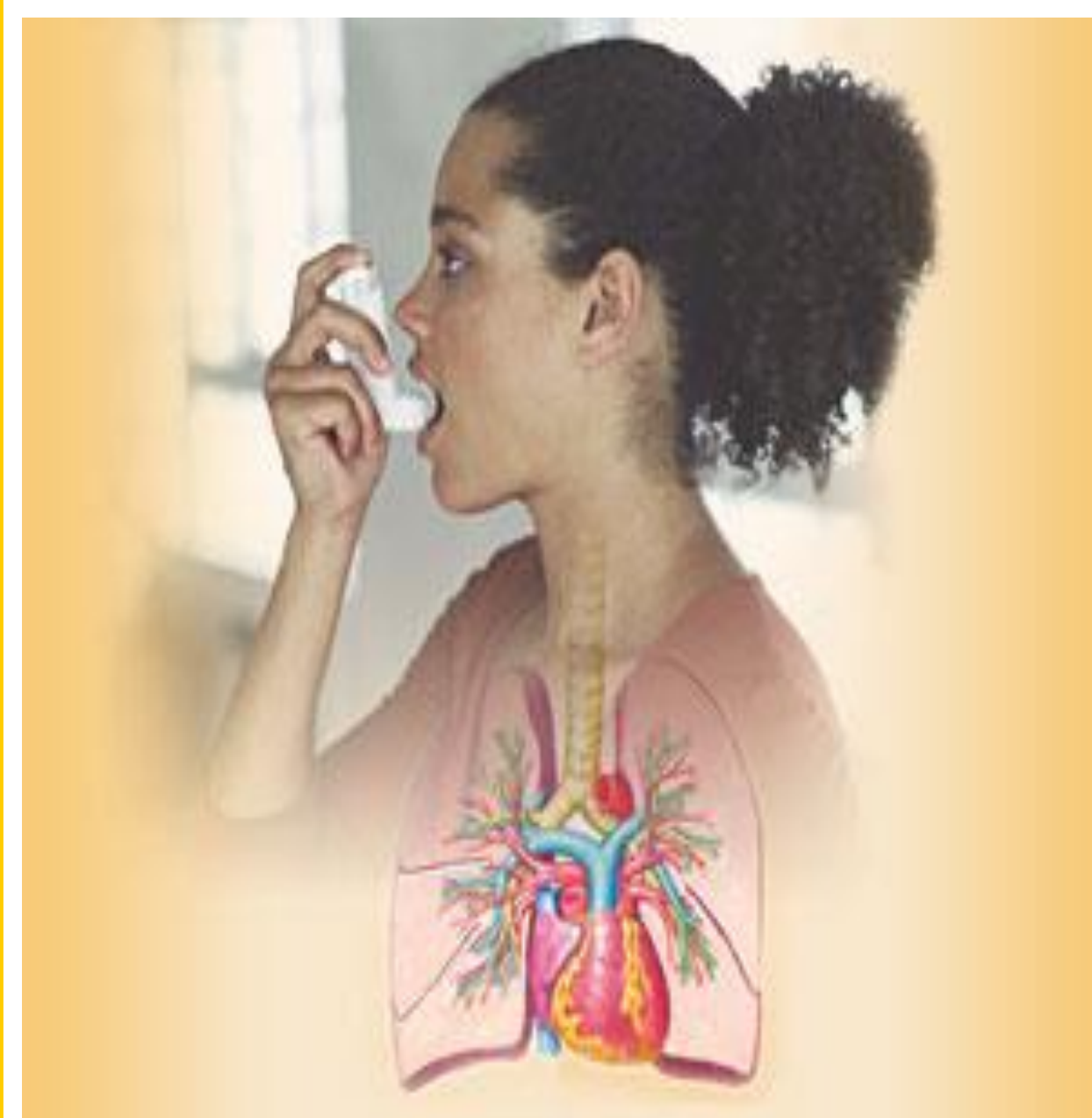
Environmental Health: Air Quality

Lassiter, A., Lloyd, J.
EHST 2110 Group Project



Importance of Air Quality

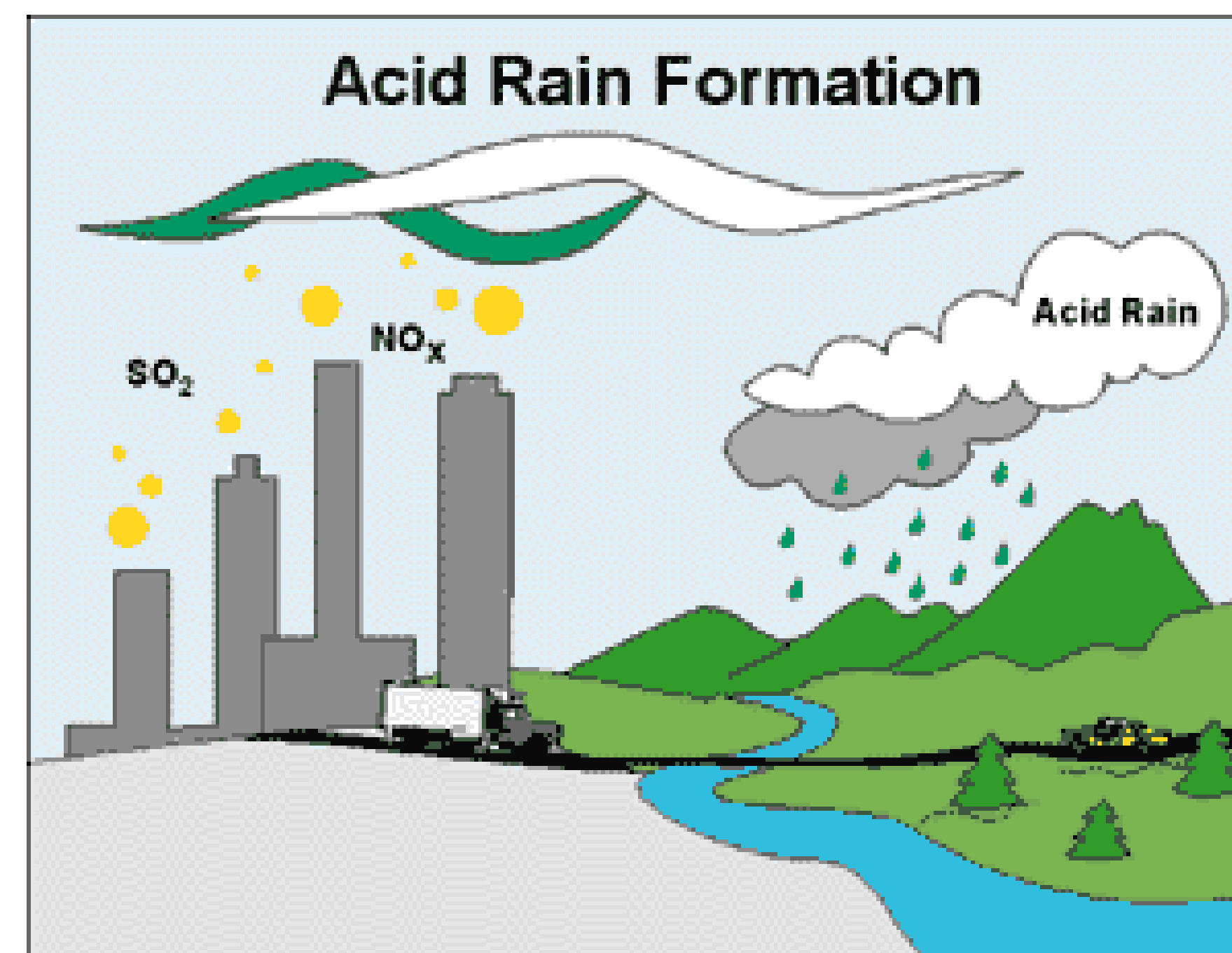
- 2-3% of all deaths in the U.S. each year are attributed to air pollution-induced respiratory or cardiovascular disease.
- Lung cancer, respiratory disease, and heart ailments linked to poor air quality



Environmental Effects

Acid Deposition

- Commonly referred to as “acid rain”
- Precipitation measuring less than 5.0 pH is considered acidic
- NO_x mixes with H_2O to form nitric acid
- SO_2 mixes with H_2O to form sulfuric acid
- Acid deposition reduces crop yields
- Acid deposition corrodes statues
- Acid deposition reduces tree growth
- Acid deposition can cause death of aquatic organisms



Improving Air Quality

Clean Air Act Amendments of 1970

- Referred to as the Clean Air Act
- Provided the first comprehensive program for attacking air pollution on an effective nationwide basis
- 1965 = first automobile emissions standards



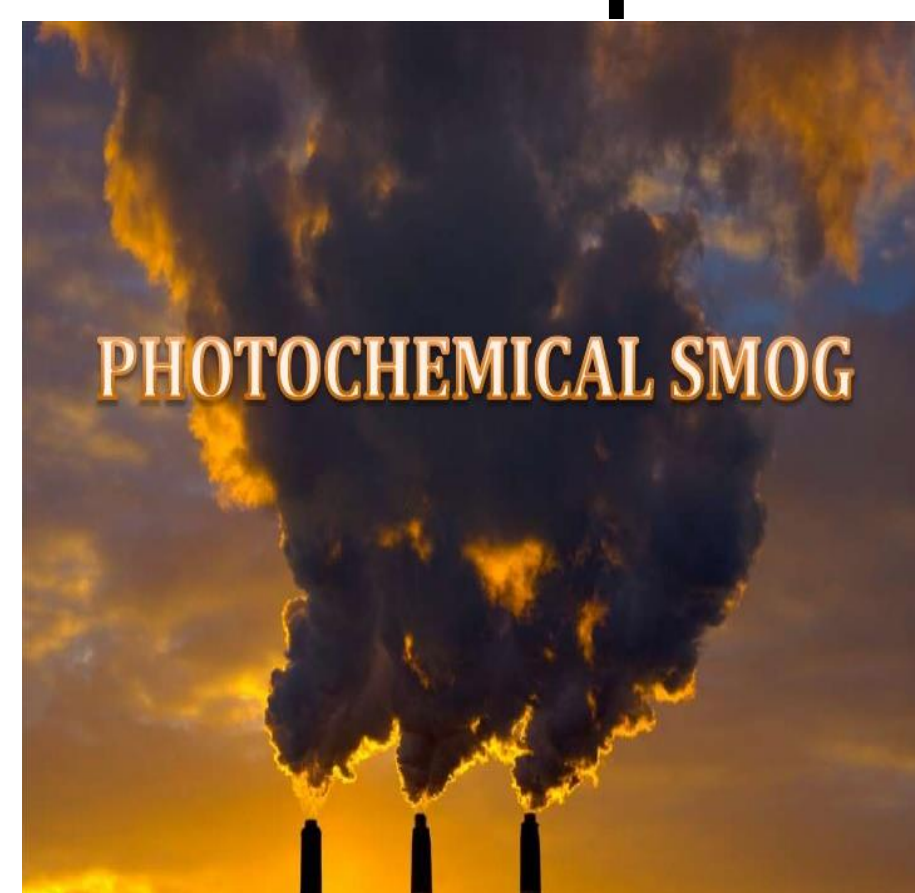
Vehicle exhaust emissions

- 1967 = the comprehensive Air Quality Act established regional approaches for establishing and enforcing air quality standards
- Unleaded gasoline greatly improved air quality
- More efficient automobiles improved air quality

Criteria Air Pollutants

Six of the most common air pollutants

- Particulate matter
- Sulfur Dioxide
- Carbon Monoxide
- Nitrogen Oxides
- Ozone
- Lead



Hazardous Air Pollutants

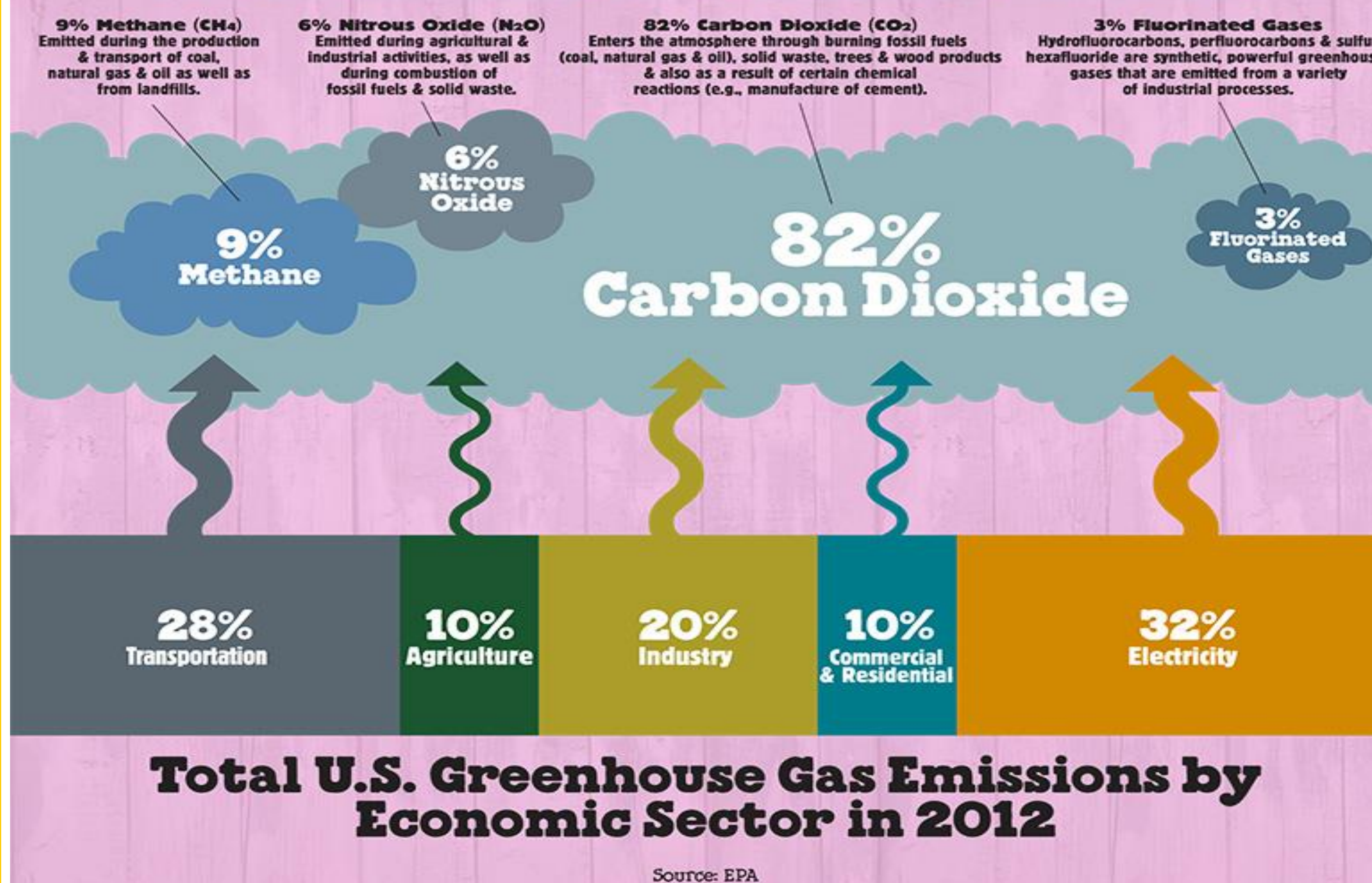
Less common, more deadly

- Asbestos
- Beryllium
- Benzene
- Vinyl Chloride
- Arsenic
- Mercury
- Radionuclides
- Cove Oven Emissions



Greenhouse Gases

U.S. Greenhouse Gas Pollution Includes:



Greenhouse gases warm the atmosphere, causing various environmental issues



- Research regarding more environmentally friendly fuel sources for automobiles such as electric and hydrogen power will help improve air quality
- Governmental incentives and subsidies have been provided to offset the research and development costs