


# Pollutants of Concern



# Air Pollutants Criteria

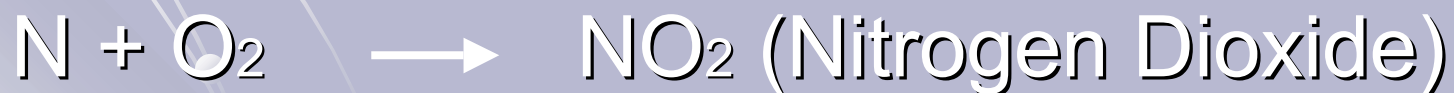
- Nitrogen Oxide
    - Sulfur Oxide
      - PM10
  - Volatile Organic Compounds
    - Carbon Monoxide
      - Ozone
- 

# Nitrogen Oxides



N (Nitrogen)

O (Oxygen)



# Nitrogen Oxide Sources



- Gasoline
  - Diesel Engines
  - Home Furnaces
- Electrical Power Plants
- Industrial Processes
  - Explosives
- Burning of Coal

# Nitrogen Oxide Effects

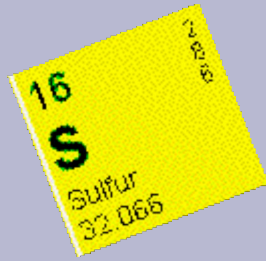
## Low Levels

- Irritation of eyes, nose and throat
- Shortness of breath, tiredness and nausea

## High Levels

- Respiratory Infection
- Lung Damage
- Bronchitis





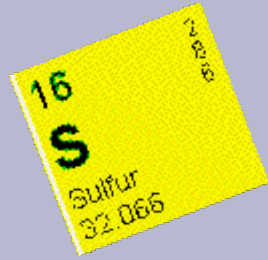
# Sulfur Oxides



S (Sulfur)

O (Oxygen)





# Sulfur Oxide Sources



- Combustion of fuel containing sulfur (mostly coal and oil)
  - Produced during metal smelting
    - Industrial Processes
    - Volcanic Eruptions

# Sulfur Oxide Effects

- Wheezing, chest tightness, and shortness of breath
- Respiratory Illness
- Alterations in the lungs' defenses



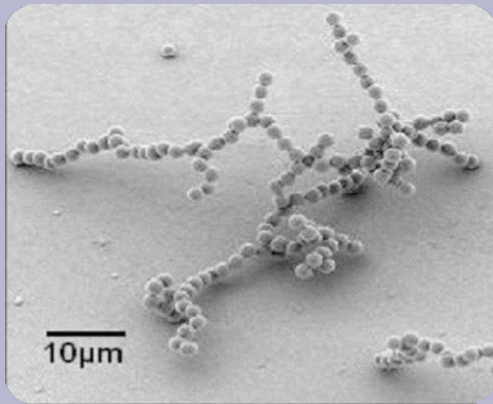


# PM10

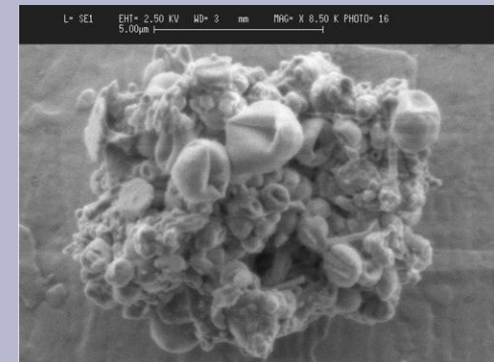
- Particulate matter (PM), Particulates, or Particle Pollution are general terms for solid or liquid particles found in the atmosphere.
- The number 10 refers to the particle size which is expressed as a measurement of diameter in micrometers (or microns).



# PM10 Sources

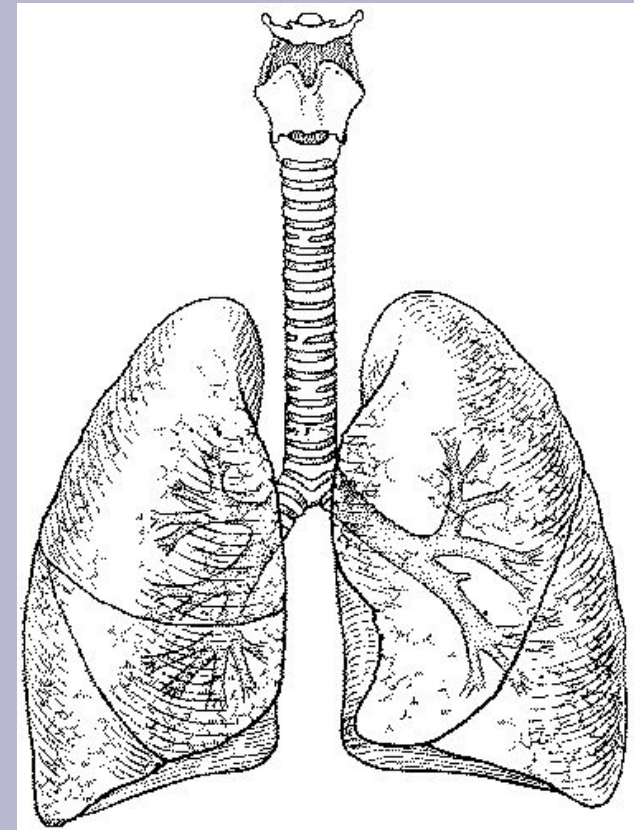


- Dust
- Cigarette Smoke
- Lawn Mowing
- Fires

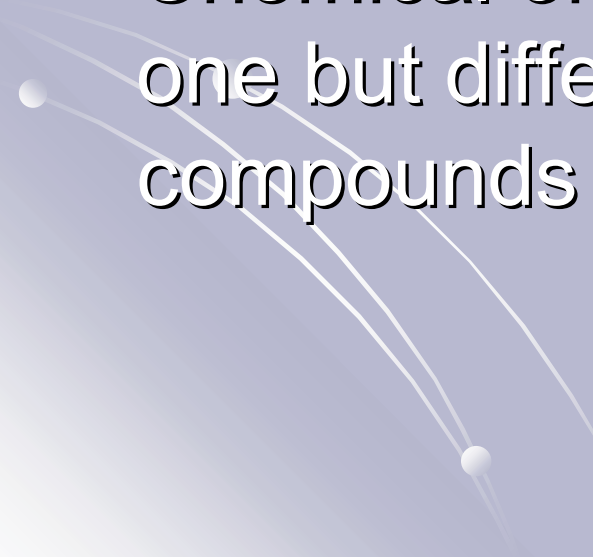


# PM10 Effects

- Aggravated Asthma
- Chronic Bronchitis
- Reduced Lung Function
- Irregular Heartbeat
- Heart Attacks
- Visual Impairment



# Volatile Organic Compounds

- Organic chemical compound
  - Volatile and has the ability to vapor into atmosphere
  - Chemical organic compounds are not only one but different ones formed from various compounds
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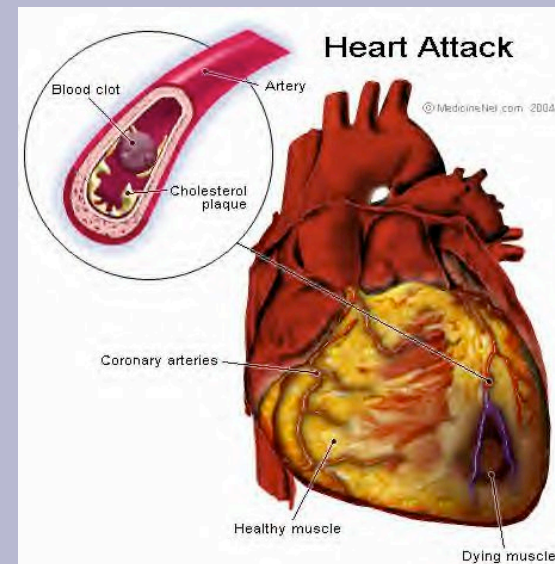
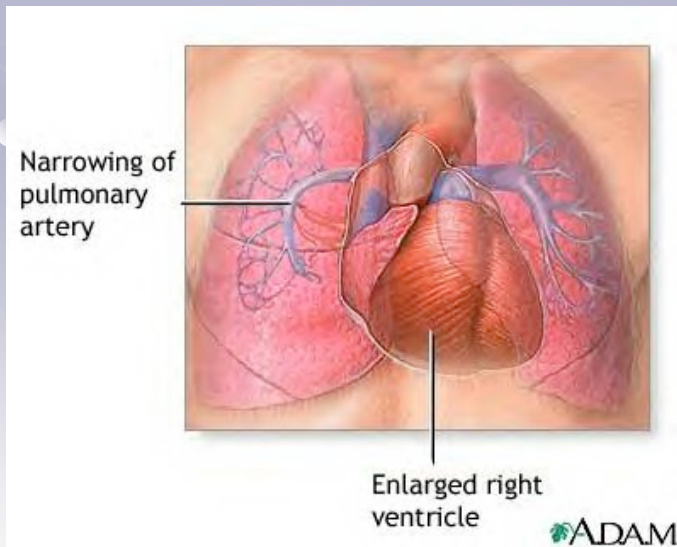
# Volatile Organic Compounds Sources

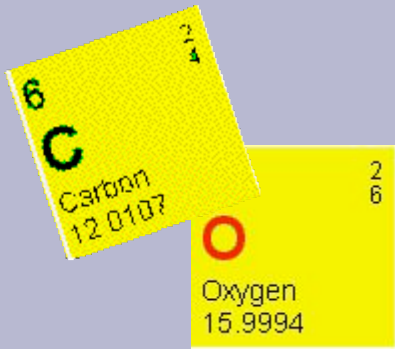
- Paint Stripper
- Wood preservatives
- Aerosols
- Plastics
- Cleaning Fluids
- Fuel



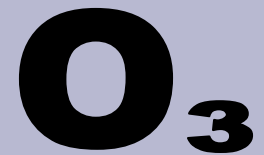
# Causes

- Symptoms of pulmonary diseases
  - Increase rate of heart attacks
  - Sick building syndrome



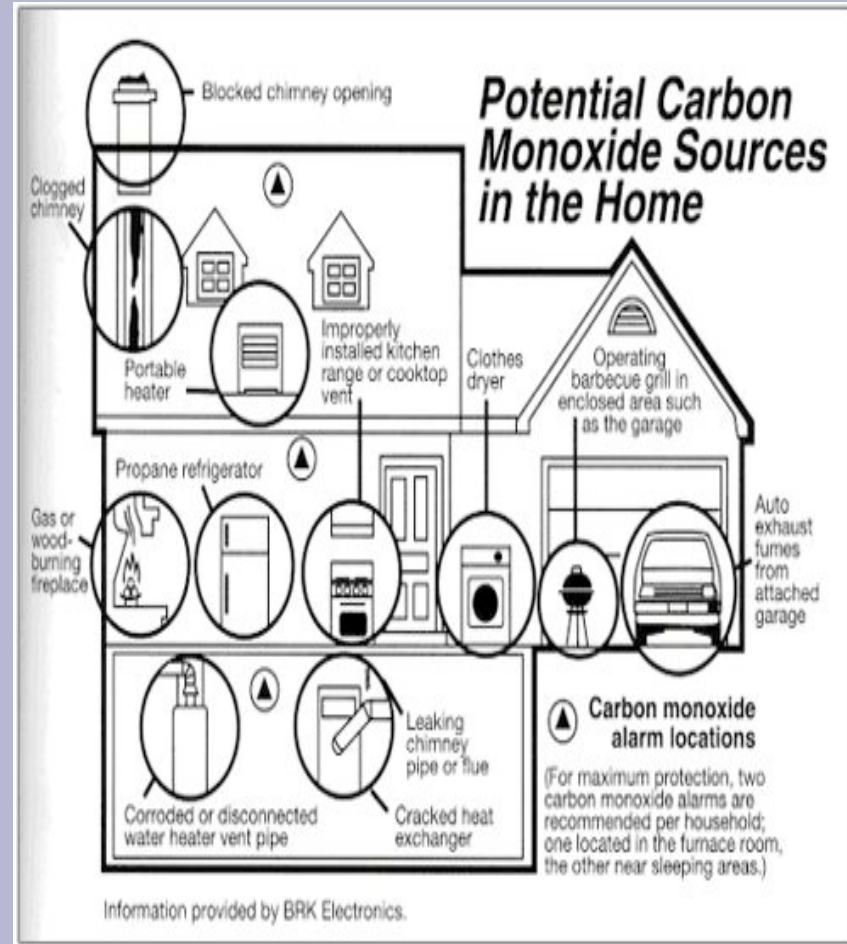


# Carbon Monoxide and our Ozone Layer



# Sources of CO

- Automobiles
- Corporations
- Cigarette smoke
- Household items



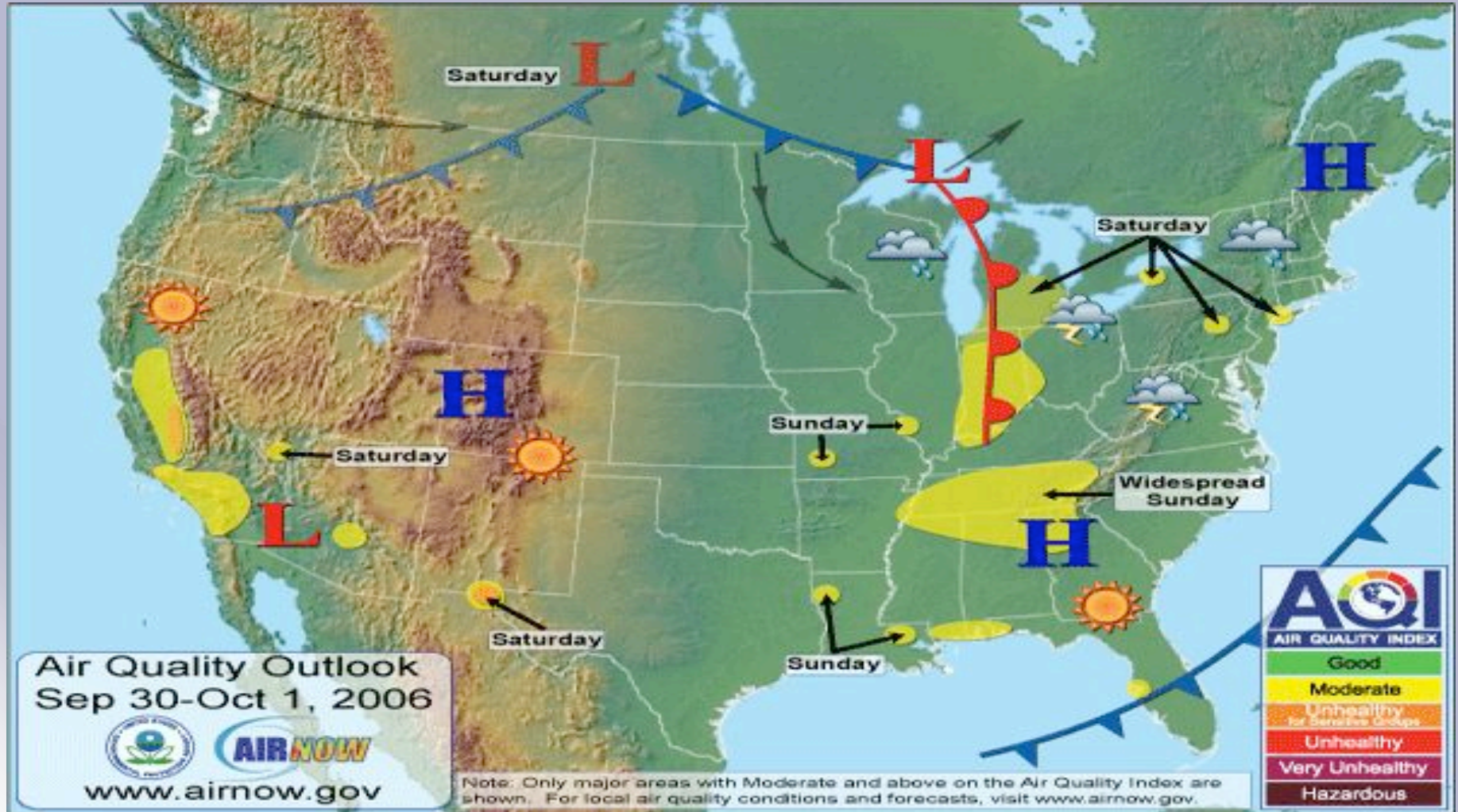


# Ozone Layer Depletion

- CO & CFCs
- UV Rays
- Global Warming



# Hitting at Home



Any Questions?

