

Air Pollution & Air Quality Index

Chapter 21.4

Air Quality Index (AQI)

- **AQI** - Reports *daily* air *quality*
- Indicates level of *air pollution*
- Identifies potential *health effects*



AQI Air Quality Index		
Index Values (Conc. Range)	Air Quality Descriptors	Cautionary Statements for Ozone
0 – 50 (0-60 ppb)	Good	No health impacts are expected when air quality is in this range.
51 – 100 (61-75 ppb)	Moderate	Unusually sensitive people should consider limiting prolonged outdoor exertion
101 – 150 (76-104 ppb)	Unhealthy for Sensitive Groups	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion
151 – 200 (105-115 ppb)	Unhealthy	Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children should limit prolonged outdoor exertion.
201 – 300 (116-374 ppb)	Very Unhealthy	Active children and adults, and people with respiratory disease, such as asthma, should limit all outdoor exertion; everyone else, especially children, should limit outdoor exertion.

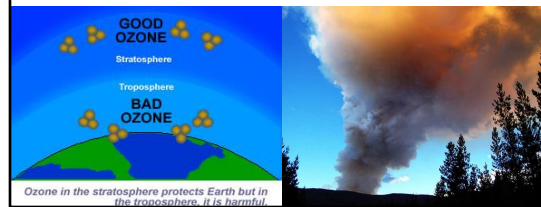
Air Quality

- **Environmental Protection Agency (EPA):**
- Calculates **AQI** for major pollutants regulated by **Clean Air Act**



Air Quality

- **Ground-level ozone** & airborne **particles** pose **greatest** pollutant threat to **health**



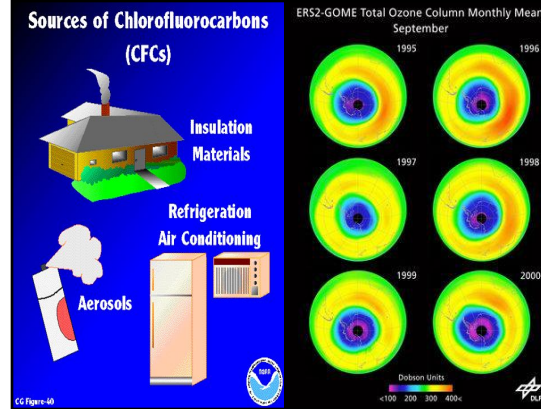
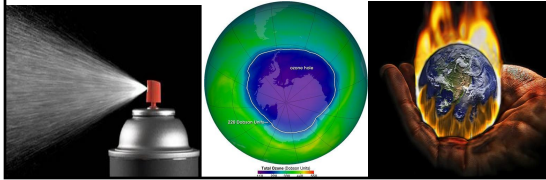
Ground Level Ozone

- **Ozone in the troposphere that we breathe**
- **Created when certain GHG are affected by SUNLIGHT to create secondary pollutants**
- **Who's impacted?**
 - people with lung disease
 - infants
 - older adults



Chlorofluorocarbons (CFCs)

- **Non-toxic** & **non-flammable** chemicals
- Major cause of **ozone depletion**
- Created by **HUMANS** (synthetic)



What's at Risk?

- Sensitive **ECOSYSTEMS**
 - Forests, parks, wildlife refuges, wilderness areas



Ozone injury to yellow-popular

Ozone injury to milkweed

USFS