

Protecting Yourself from Unhealthy Air

- ◆ Check daily air pollution forecasts in your area.
- ◆ Avoid prolong physical activities during activity or prolonged exertion outdoors. When air pollutants and dust levels are high, also avoid activities that add to the problem, such as driving or using your fireplace.
- ◆ Walk, bike, or carpool to work.
- ◆ Don't burn trash in a burn barrel, which is among the major sources of particle pollution (soot) in



Mold growing on fallen leaves

Keep Pollutions Out

- ◆ Keep humidity levels under 50 percent. Use a dehumidifier or air conditioner, as needed. Clean equipment regularly so they don't become a source of pollution themselves.
- ◆ Fix all leaks and drips in the home. Standing water and high humidity encourage the growth of mold and other pollutants.
- ◆ Don't use scented candles or fragrances to hide odors. Figure out what is causing the odor, then clean that up and ventilate to add fresh air.
- ◆ Use cleaning, household and hobby products that are less toxic. Don't store hazardous chemicals in your home

Kaw Nation EPA

Preserve, Protect, and Improve

698 Grandview Drive
Drawer 50
Kaw City, OK 74641
Phone: 580-269-1203

Climate Change and Human Health

Adverse Health Effects of Outdoor and Indoor Air Quality



Kaw Nation EPA Office
With Support From
National Indian Health Board

Climate Change and Air Quality

Changes in the climate affect air quality through three pathways: outdoor air pollution, aeroallergens, and indoor air pollution. Changes in climate, particularly rising temperature, cloudiness, wind patterns, and humidity, altered precipitation patterns, and increasing concentration of atmospheric carbon dioxide contribute to influencing the levels of pollutants and aeroallergens outside and inside homes.

At the same time, climate changes in meteorology can also increase the number and severity of naturally occurring such as wildfires, wind-blown dust, and emissions from agriculture practices and vegetation increasing emissions of particulate matter (PM) and resulting in adverse health outcomes.



Agriculture activity during a drought increases emissions of PM.



Wildfire with wind gusts of 40 mph transmitted emissions of PM for hundreds of miles

Adverse Health Effects

- ◆ Wildfires are a major source of PM in Oklahoma, because winds carry PM_{2.5} and ozone precursor gases. Air pollution from wildfires can affect people even far downwind from the fire location. Smoke exposure increases respiratory and cardiovascular hospitalizations, emergency room visits and medication for asthma, bronchitis, chest pain, and other ailments.
- ◆ Agriculture dust is another source that create poor air quality in Oklahoma, especially during droughts. As fine particles, dust can have a direct adverse effect on human and animal health. Dust may contain pesticides, pollen, fungi, and other irritants to the lungs and eyes of humans. During high winds,

dust can travel a long distance causing a wide variety of health problems, especially in children, the elderly, and people with preexisting respiratory or cardiovascular disease. Dust also contributes to skin problems and irritation of the eyes. Dust may stimulate asthma.

- ◆ Outside humidity is the most biggest contributor to indoor dampness on a yearly basis. Increased indoor dampness and humidity, will in turn increase indoor mold, dust mites, bacteria, and other bio-contamination indoors, which could causes an increases in adverse health effects related to dampness and mold, such as asthma exacerbation, respiratory infections and other serious health problems, especially in children, the elderly, and people with preexisting respiratory or cardiovascular disease.



Toxic dangers of indoor air dampness due to excessive dampness and humidity.