

ATMOSPHERIC POLLUTION: If you take care of air, you care for life

How is air polluted?

Due to the presence of substances mostly produced by transportation, industry, and other human activities

Major pollutants

Particulates (PM₁₀ and PM_{2.5}):
Wood/carbon burning, construction, and unpaved roads

Sulphur dioxide (SO₂):
Use of petroleum derived liquid fuels and volcanic eruptions

Ozone (O₃):
A product of OVC and NOx chemical reactions with sunlight

Organic volatile compounds (COV):
Gasoline and solvents use, LP gas leaks

Carbon monoxide (CO):
Vehicles combustion and agricultural burning

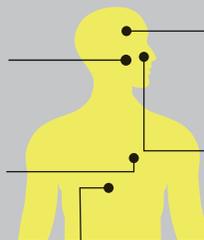
Nitrogen dioxide (NO₂):
Mostly produced by vehicles combustion

Produces problems for:

- Live beings
- Farming
- The environment

Nitrogen dioxide:
Causes airway infections

PM₁₀ and PM_{2.5}:
Respiratory and cardiovascular systems damage



Carbon monoxide:
Dizziness, headache. May be lethal

Sulphur dioxide:
Worsens respiratory illnesses (asthma)

Ozone: Lungs inflammation, liver damage

Advice to take care of air



Share your car



Check there are no gas leaks from water heaters, gas stoves, and gas tanks



Use the bicycle or public transportation



Use recycled and biodegradable products



Unplug unused equipment



No tires, garbage burning, and no fire building



Service your car and home appliances



Take care of green areas

Be informed

Sistema Nacional de Información de la Calidad del Aire
sinaica.inecc.gob.mx

Centro Nacional de Prevención de Desastres
www.gob.mx/cenapred

Source: Sistema Nacional de Información de la Calidad del Aire, SINAICA
Translation: Guadalupe Meléndez de Escalante



GOBIERNO DE MÉXICO

SEGURIDAD
SECRETARÍA DE SEGURIDAD Y PROTECCIÓN CIUDADANA

MEDIO AMBIENTE
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES



CNPC
COORDINACIÓN NACIONAL DE PROTECCIÓN CIVIL



CENAPRED
CENTRO NACIONAL DE PREVENCIÓN DE DESASTRES





Atmospheric pollutants and their danger

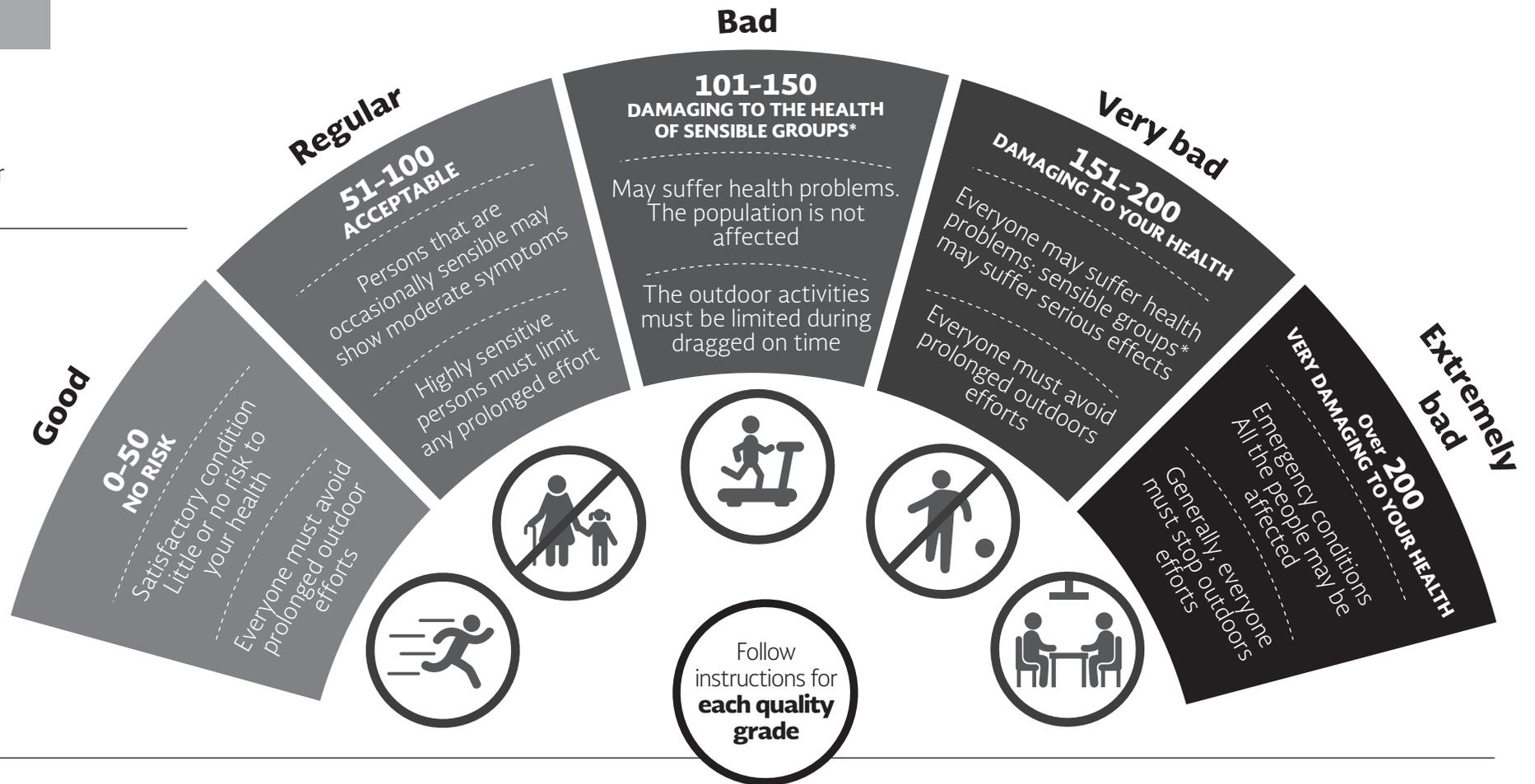
Take care of your and your family's health

Pollutants may cause illnesses and worsen diseases. If you have one, immediately visit your health center

Air quality index

It is used by environmental authorities to inform on the levels of pollution. Five grades of air quality have been defined

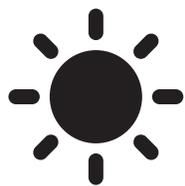
***Sensible groups:** children, senior citizens, anyone with intense physical activity, anyone suffering respiratory or cardiovascular diseases



Major high pollution season



All year long, except for the rainy season (June to September)



Ozone: from the second half of February through June



Ozone and aerosols: the dry and hot season



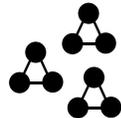
Suspended particulate: Winter



Pollution



UV light



Ozone

Ozone is derived from other pollutants (mostly OVC and NOx) when they react with UV light

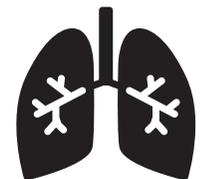
What are PM₁₀ and PM_{2.5}?



These are names given air suspended particulates with a diameter of under

10 or 2.5 microns**

mostly caused by combustion or other processes that produce vapors



Depending on their size, particulate may lodge in the trachea, bronchus or reach pulmonary alveoli

**Micron (μ) is one thousandth of a millimeter. A human hair has a diameter of 80 microns