Smog

What Is Smog?

The term "smog" describes a mixture of emissions--including emissions from industry pollutants, cars and other vehicles, open burning, and incinerators--under specific climate conditions.

In the **United States**, the first smog is usually noticed in the **summer**.

In **London**, England, smog is often more noticeable in the **winter** months.

- **Summer smog**: is sometimes also known as "photochemical smog." This type of smog is caused when sunlight mixes with chemicals in the atmosphere called hydrocarbons and nitrogen oxides. Summer smog contains pollutants such as a colorless, odorless gas called ozone.

Winter smog: Winter smog are formed when a thin layer of the atmosphere near the earth becomes cooler than that above it – this is known as temperature inversion. When this happens pollutants are trapped at ground level until there is a change in the weather.

Because of the effects of ozone on your lungs, smog exposure may lead to several different types of short-term health problems:

1-Coughing and throat/chest irritation: **High levels of ozone** . can irritate your respiratory system. Generally, these types of mild symptoms only last for a few hours after you've been exposed to smog. However, ozone can continue to harm your lungs even after symptoms disappaear.

2-Worsening asthma symptoms: If you suffer from asthma, . being exposed to high levels of ozone from smog can trigger asthma attacks.

3-Difficulty breathing and lung damage: .
Because of ozone's effect on lung function, smog can make it feel difficult to breathe deeply, especially during exercise. Research has shown that ozone exposure can also damage the lining of your lungs.

It's important to note that smog affects • everyone differently, and some groups are especially at risk. Children, seniors, and people with asthma need to be especially careful on smoggy days.

How Can I Protect Myself from Smog?

- The EPA notes that the majority of people only need to be concerned about smog when ozone exposure reaches sufficiently high levels. In order to protect yourself and your family, you need to stay informed about the ozone levels in your area. If you are vacationing, you should check on the ozone levels wherever you are traveling.

Health ahead hint

Take Precautions :Don't take chances with smog on days when air quality is low. The best approach is to spend less time outdoors, and replace vigorous activities, like running or biking, with gentler options, such as walking. It can also help to schedule your outside activities for the early morning or evening, since ozone levels are usually lower at those times. These simple steps can help protect you and your family on smoggy days, whether you live in a major city or you're just passing through.

Ozone

Ozone: A gas consist of three oxygen atoms ,it can be found in two places ;

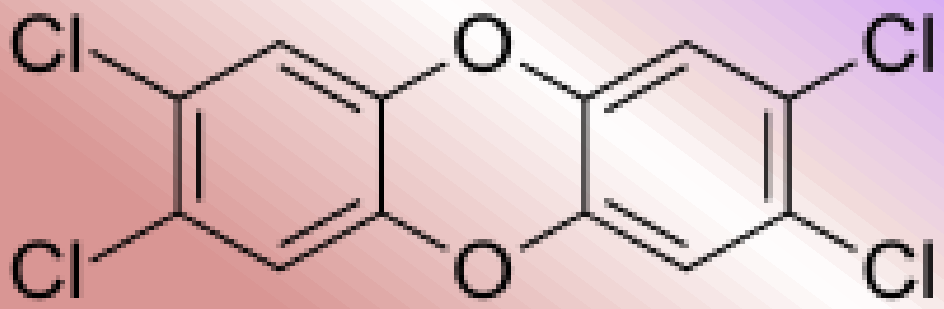
the first place is near the ground in terposepher layer which case harmful to human, plants, and animals ,

while ozone in the second place make a layer as UV radiations scavenger to protect ground atmosphere from radiations.

- Though **ozone** can be good when it is found in the upper atmosphere, it can be harmful when it occurs at near ground level. Ozone formed in the Earth's lower atmosphere can lead to smog, and can affect your health when you breathe it.

Ozone depletes

Ozone depletes: **chemicals can destroy the ozone in the atmosphere. These chemicals include chlorofluorohydrocarbons, halogens, and other compounds that include chlorine or bromine.** There have also been some unusual releases of **polychlorinated dibenzodioxins**, commonly called *dioxins* for simplicity, such as **TCDD**(2,3,7,8-Tetrachlorodibenzodioxin).



Two simple precautions can help protect you when ozone levels are high:

1-Limit your outdoor activities as ozone levels rise to unhealthy levels. The EPA notes that elevated ozone levels increase your chances of being affected by smog the longer you stay outside.

2-Keep your activities gentler on smoggy days. The more vigorous your activity level, the greater your chances of experiencing respiratory problems.

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