

Name \_\_\_\_\_

## What Happens When the Ozone Layer Is Damaged?



The ozone layer is a thin layer of gas high in Earth's atmosphere. It acts like a giant, invisible shield, protecting life on our planet from the sun's harmful ultraviolet (UV) rays. Without the ozone layer, too many UV rays would reach Earth's surface, causing serious problems for humans, animals, and plants.

### Humans

When the ozone layer is damaged, people are exposed to more UV radiation. This can lead to sunburns, skin cancer, and eye problems like cataracts. Children are especially at risk because they spend more time outside. Even with sunscreen and sunglasses, extra UV rays can still be dangerous. Doctors and scientists have warned that without the ozone layer, it would be harder and less safe for people to enjoy time outdoors.

### Animals

Animals, especially those that live in water, are also harmed by extra UV rays. Tiny ocean creatures called plankton are some of the first to be affected. Plankton are the base of the ocean food chain. If plankton are harmed, many other sea animals—like fish, whales, and seals—can also suffer. Land animals with little hair or thin skin, like frogs or pigs, may also get burned or become sick from too much UV exposure.

### Plants

Plants need sunlight to grow, but too much UV radiation can damage their leaves, slow their growth, and make them weaker. Some food crops, like wheat and corn, may not grow as well if the ozone layer continues to be damaged. That means there could be less food for both people and animals in the future.

### Hope for the Future

The good news is that countries around the world have worked together to ban harmful chemicals, like CFCs, that destroy the ozone layer. Thanks to global teamwork and science, the ozone layer is slowly healing. Still, it's important to understand how this invisible shield protects all life—and why we must continue to take care of it.