

EPA Air Conditioners and the Ozone Layer



Before you turn on the air conditioner in your home and car this year, stop and think about the last time they were serviced. Leaky systems release refrigerants into the air. These refrigerants are known to destroy the ozone layer—our planet's protection against harmful rays from the sun. Careless service practices also contribute to this problem.

The United States and over 100 other countries are fighting to protect the ozone layer. Proper maintenance and seasonal checkups of your air-conditioning equipment will contribute to this global effort.

FRONT COVER

The New Clean Air Act

The Clean Air Act of 1990 contains many measures to protect the ozone layer. Most important, the law requires an end to the production of chemicals that deplete the ozone layer. CFCs will not be produced after 1995. HCFCs can replace CFCs in some air-conditioning systems and may be produced until 2030.

In addition, the Clean Air Act bans the release of CFC and HCFC refrigerants during the service, maintenance, and disposal of air conditioners (and all other equipment that contains these refrigerants). Individuals who work on such equipment must follow EPA regulations for ozone-safe service practices, including the recovery and recycling of refrigerant. Vigorous refrigerant conservation will reduce emissions of these harmful chemicals.

For More Information

To learn more about ozone depletion and what you can do, call EPA's Stratospheric Ozone Information Hotline. This public service is open Monday through Friday, 10:00 a.m. to 4:00 p.m. (Eastern), except on federal holidays.

800 296-1996

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BACK COVER

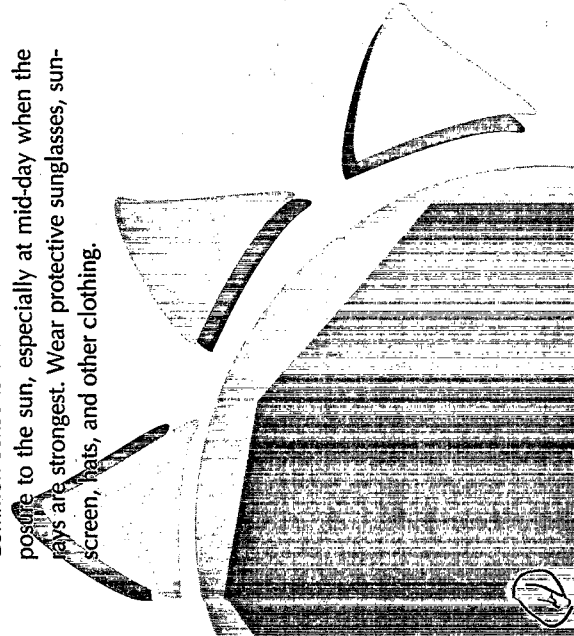
The Chilling Facts

Most car air conditioners today use chlorofluorocarbons (CFCs) as a cooling agent, while hydrochlorofluorocarbons (HCFCs) are used in most home units. When allowed to escape, these chemicals gradually drift some 30 miles above Earth to the stratospheric ozone layer—a layer of gas that screens us from the sun's powerful ultraviolet (UV-B) radiation. Once there, CFCs and HCFCs destroy ozone. Because they remain active much longer than HCFCs, CFCs do more damage.

The ozone layer is being eroded over Antarctica, as well as over North America, Europe, and other populated areas. A thinner ozone layer allows more UV-B radiation to reach Earth, affecting human, animal, and plant life in many ways. Scientists around the world agree that increased UV-B radiation will cause a rise in cases of skin cancer and cataracts. Also, damage to important crops and to marine ecosystems could reduce our food supplies.

Protect Your Health

Common sense is the best defense. Avoid overexposure to the sun, especially at mid-day when the rays are strongest. Wear protective sunglasses, sunscreen, hats, and other clothing.



What you can do to protect the ozone layer

✓ Car Air Conditioners

■ **Have your car air-conditioning system properly serviced.** Only certified technicians using approved recovery or recycling equipment may work on car air conditioners. Ask your service company if its technicians and equipment meet EPA requirements before agreeing to service.

■ **Check for leaks.** Have leaks repaired before more refrigerant is added. Some states may require this by law!

■ **Ask about retrofitting.** Many of today's car air-conditioning systems will soon be able to use an alternative refrigerant that does not destroy ozone.

✓ Old Refrigerators & Other Appliances

■ **Dispose of appliances responsibly.** CFC or HCFC refrigerant must be removed from an appliance before it is discarded. The public works or solid waste department in your town or a home appliance dealer can help. Ask about home appliance recycling or CFC-recovery programs.

■ **Help start a refrigerant recovery and recycling program in your area.** Contact EPA's Stratospheric Ozone Information Hotline to hear about innovative steps some communities have already taken. The number is 800 296-1996.

✓ Home Air Conditioners

■ **Ensure that refrigerant is recovered.** The intentional release or "venting" of refrigerant during service, maintenance, and disposal is prohibited. Used refrigerant can be recycled. Before agreeing to service, ask whether the technician will use refrigerant-recovery equipment if the refrigerant needs to be removed. Also, ask if the technician is or plans to become certified by an EPA-approved organization. After the job has been completed, ask if the equipment was used.

■ **Repair leaks.** Ask the service technician to locate and repair leaks before refilling (or "recharging") your system with more refrigerant.

✓ Violation Reports

■ **Call the Hotline.** If you suspect or witness unlawful refrigerant releases, you can file a report easily and anonymously by calling the Stratospheric Ozone Information Hotline at 800 296-1996.

✓ Other Actions

■ **Become active in your community.** Speak with your neighbors and friends about ozone depletion and their air conditioners.

■ **Be an informed consumer.** Look for labels identifying products manufactured with or containing ozone-depleting substances. Consider alternatives, where available, that do not damage the ozone layer.

