

CARE ABOUT YOUR INDOOR AIR



RESOURCE GUIDE

ABOUT CARE ABOUT YOUR INDOOR AIR MONTH

CARE ABOUT YOUR INDOOR AIR MONTH, observed every February, is a campaign that is designed to raise awareness about indoor air quality and indoor air pollution.

Indoor air quality is important. According to the Environmental Protection Agency, Americans spend up to 90 percent of their time indoors, and indoor air can be up to 5 times MORE polluted than outdoor air. Poor indoor air quality is not only an environmental concern. It is a public health concern, too. Polluted indoor air can create or worsen a myriad of health concerns such as allergies, asthma and migraines. Some, more volatile indoor air pollutants – including lead, asbestos and carbon monoxide – can be especially harmful.

By raising awareness about indoor air quality and educating our Soldiers, Civilians and Families about steps to improve indoor air quality, we enhance our readiness and improve our quality of life in the United States Army Reserve.

COMMON SOURCES OF INDOOR AIR POLLUTION

CIGARETTE SMOKE

MOLD AND MILDEW

Naturally occurring fungi that thrive in humid conditions

FUEL BURNING APPLIANCES

Appliances such as stoves, water heaters, fireplaces and chimneys

PARTICULATES

Minuscule, airborne particles composed of biological and environmental solids such as pollen, pet dander and dust

FRIABLE ASBESTOS

Asbestos that can be reduced to a powder form with hand pressure, in a variety of products such as tile, mastic, insulation and sound-proof coating

NATURALLY OCCURRING GASES

Gases such as carbon dioxide; carbon monoxide, which originates from gas burning appliances and combustible fuels; and radon, which originates from naturally decaying uranium found in soil and water

HEAVY METALS

Elements such as lead, which may be present in paints, pipes and other construction materials (especially those manufactured prior to 1978) and mercury, which may be present in thermometers, light bulbs and paints

VOLATILE ORGANIC COMPOUNDS

Compounds such as formaldehyde, benzene, acetone and ethylene that off-gas from a variety of common sources such as adhesives, air fresheners, cleansers, dry cleaning chemicals, paints, pressed woods, pesticides and solvents



SIGNS OF INDOOR AIR POLLUTION

Your home or facility could have poor indoor air quality if you ...

... have experienced persistent headaches.

... have experienced a persistent sore throat.

... have noticed unusual or musty odors that have no clear source.

... have noticed an increase in mold and mildew, especially in humid areas.

... have noticed an increase in moisture condensation on or around windows or walls.

... have noticed that the air filters from your climate control system appear especially soiled.

... have experienced new or worsening symptoms of allergies, asthma or other respiratory issues.



PREVENTING AND RESOLVING INDOOR AIR POLLUTION

ELIMINATE POLLUTION SOURCES

- Eliminate smoking in your home.
- Wash linens such as sheets and towels regularly in hot water.
- Clean your home and office space regularly with biobased cleaners.
- Eliminate your use of synthetic air fresheners. Choose biobased air fresheners.
- Maintain your structure's relative humidity at 30 to 50 percent to inhibit the growth of mold and mildew.
- Use mats at your doors to collect potential pollutants from your shoes before they enter your home and facility.
- Choose a dry cleaner that uses safer chemicals in the cleaning process. Avoid cleaners that use perchloroethylene, a volatile organic compound that has been linked to a myriad of health concerns, from skin irritation to cancer.
- Test your home for radon, a naturally occurring but harmful gas. Learn more about radon testing for your home at www.epa.gov/radon.
- Eliminate your use of paraffin candles, which can release volatile organic compounds and heavy metals when burned. Choose candles with vegetable-based waxes and lead-free wicks.
- Repair any water leaks or water damage in your home promptly to inhibit the growth of mold and mildew. At your Army Reserve facility, report any water leaks or water damage to facility management.
- Reduce your use of chemicals. Choose GREENGUARD, Green Seal Certified, Safer Choice, Design for Environment and other products that are certified by reputable agencies such as the Environmental Protection Agency.
- If you believe that your home or facility contains lead-based paint (most common in structures erected prior to 1978) or asbestos (most common in structures erected prior to 1989), do not disturb these materials. Contact an abatement professional or your facility manager for assistance.



PREVENTING AND RESOLVING INDOOR AIR POLLUTION

IMPROVE VENTILATION

- Never operate a fuel burning appliance in an unventilated space.
- Ensure that fuel burning appliances are in proper operating condition, and ensure that they are vented properly.
- Use exhaust fans and dehumidifiers when engaging in activities that consume water, such as bathing or washing, to reduce humidity.
- Properly ventilate your home and office space when you are using materials such as adhesives, paints and other materials that could contain volatile organic compounds.
- Increase the amount of fresh air in your home by opening windows and doors when environmental conditions are favorable and when your heating, ventilating and air conditioning system is not in operation.

CLEAN THE AIR

- Change your climate control system's air filters regularly.
- Choose vacuums cleaners with high efficiency particulate air (HEPA) filters.
- Consider an air filtration system, especially if you are or someone in your home is sensitive to allergens and pollutants.
- Consider air filters with high Minimum Efficiency Reporting Values, or MERVs, which filter more allergens and pollutants, more efficiently. MERVs for common air filters usually range from 4 to 13. Learn more about MERVs [here](#).
- Consider house plants to clean your air. A study by the National Aeronautics and Space Administration found that certain varieties of plants can actually remove volatile organic compounds such as formaldehyde, benzene, carbon monoxide and trichloroethylene from the air. Some of these varieties include gerbera daisy, Chinese evergreen, Boston fern, orchid, philodendron, snake plant, English ivy, dracaena, spider plant, peace lily, weeping fig and chrysanthemum. Ensure that they are not overwatered to prevent the spread of mold and mildew.

SOURCES OF INFORMATION

Centers for Disease Control and Prevention
Occupational Safety and Health Administration
United States Environmental Protection Agency
National Aeronautics and Space Administration
American Society of Heating, Refrigerating and Air Conditioning Engineers



PROMOTING CARE ABOUT YOUR INDOOR AIR MONTH

Ideas to raise awareness about indoor air quality in your community ...

- Place educational materials about indoor air quality in your facilities and Army Reserve Centers. Educational materials "Indoor Air Quality Quick Facts," "Common Signs of Indoor Air Pollution" and "Preventing and Resolving Indoor Air Pollution" are included in this toolkit.
- Share indoor air quality materials and resources with your Installation, Readiness Division or Mission Support Command Public Affairs Office, and ask them to distribute materials to your community.
- Share indoor air quality information on social media, such as Facebook and Twitter. Sample social media posts are on page 7. Follow hashtags such as #IAQ, #IndoorAirQuality, #IndoorAir and #AirQuality. Retweet and share posts from other reputable agencies.
- Write an article on indoor air quality for your Installation, Readiness Division or Mission Support Command publications, and share it with your community newspapers.
- Host an information station at a high visibility facility. Discuss the importance of indoor air quality with Soldiers, Civilians and Families, and demonstrate the steps that individuals can take to improve indoor air quality in their homes and offices.
- Share any photographs and summaries of your indoor air quality events with your Public Affairs Office and with the Army Reserve Sustainability Programs. Contact Jonelle Kimbrough, jonelle.kimbrough.ctr@mail.mil, for assistance with planning and promoting your indoor air quality campaign.

INDOOR AIR QUALITY RESOURCES

The Environmental Protection Agency, Centers for Disease Control and Prevention and other environmental and public health agencies offer many resources on indoor air quality online. Select a resource to visit the website.

[Indoor Air Quality Association](#)

[World Health Organization Guide to Indoor Air Quality](#)

[Environmental Protection Agency's Guide to Indoor Air Quality](#)

[Centers for Disease Control and Prevention's Guide to Indoor Air Quality](#)

[Indoor Air Quality Safety and Health from the Occupational Safety and Health Administration](#)

[Indoor Air Quality Media Materials and Public Service Announcements from the Environmental Protection Agency](#)



CARE ABOUT YOUR INDOOR AIR MONTH

SAMPLE SOCIAL MEDIA POSTS

February is #CareAboutYourIndoorAirMonth. Americans spend up to 90 percent of their time indoors, but indoor air can be up to 5 times more polluted than outdoor air. Poor indoor air quality can create or worsen many health concerns such as allergies, asthma and migraines. Your health should be a priority. That's why we #CareAboutYourIndoorAir. #ClearTheAir #IAQ

Common indoor air pollutants include particulates such as pollen, pet dander and dust. Clean your home and office space regularly to reduce these pollutants and #CareAboutYourIndoorAir. #ClearTheAir #IAQ

Mold and mildew are indoor air pollutants. Maintain the relative humidity in your home and facility at 30 to 50 percent to inhibit mold and mildew growth and #CareAboutYourIndoorAir. #ClearTheAir #IAQ

Volatile organic compounds, or VOCs, are released when materials such as paints, adhesives and solvents emit gases into the air. Choose environmentally sound products to #CareAboutYourIndoorAir. Certifications such as GREENGUARD, Green Seal, Safer Choice and Design for Environment indicate more sustainable choices. (No federal endorsement is intended.) #ClearTheAir #IAQ

Want to #CareAboutYourIndoorAir? Reduce your use of chemicals! Use biobased cleaners instead of chemical based cleaners, and breathe easy! #ClearTheAir #IAQ

Cigarette smoke is a major source of indoor air pollution, which can worsen ailments such as allergies and asthma. Eliminate smoking in your home to #CareAboutYourIndoorAir. #ClearTheAir #IAQ

#ClearTheAir. Change your climate control system's filters regularly, and choose filters that are designed to eliminate allergens such as pollen, pet dander, dust and smoke. #CareAboutYourIndoorAirMonth #IAQ

The Minimum Efficiency Reporting Value, or MERV, rating on an air filter indicates its ability to trap polluting particles and remove them from the air. Common air filters usually have MERV ratings of 4 to 13. Filters with higher MERV ratings reduce indoor air pollution more effectively. #CareAboutYourIndoorAir #ClearTheAir #IAQ

Fuel-burning appliances and fireplaces can create indoor air pollution and release harmful gases such as carbon monoxide into the air. Ensure that fuel-burning appliances and fireplaces are in proper operating condition and that they are vented properly. #CareAboutYourIndoorAir #IAQ

Did you know? A study by @NASA determined that certain house plants can actually remove gaseous pollutants such as formaldehyde and benzene from the air. These plants include peace lily, Chinese evergreen, gerbera daisy, orchid, Boston fern, English ivy, spider plant, dracaena, philodendron, weeping fig, snake plant and chrysanthemum. #CareAboutYourIndoorAir #CleanTheAir #IAQ

Suggested tags include @USArmy Reserve, @SustainableUSAR and your Installation, Readiness Division or Mission Support Command tag.



INDOOR AIR QUALITY QUICK FACTS

WE SPEND

90

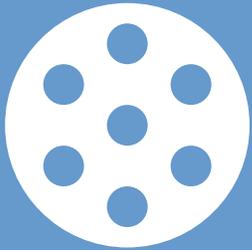
PERCENT OF OUR TIME INDOORS

INDOOR AIR IS UP TO

5

TIMES MORE POLLUTED THAN OUTDOOR AIR

COMMON INDOOR AIR POLLUTANTS AND SOURCES



BIOLOGICAL
PARTICULATES

Pollen · Pet Dander



CIGARETTE
SMOKE



NATURALLY
OCCURRING GASES

Carbon Monoxide · Radon

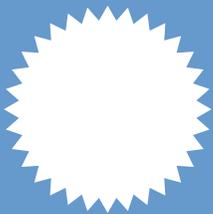


VOLATILE ORGANIC
COMPOUNDS

Paints · Solvents · Adhesives



FRIABLE
ASBESTOS



MOLD AND
MILDEW



DUST
PARTICLES



FUEL-BURNING
APPLIANCES

Gas Water Heaters · Stoves



HEAVY
METALS

Lead · Mercury



CHEMICAL
PESTICIDES

STEPS TO PREVENT OR RESOLVE INDOOR AIR POLLUTION

ELIMINATE SOURCES



IMPROVE VENTILATION



CLEAN THE AIR





PREVENTING AND RESOLVING INDOOR AIR POLLUTION

ELIMINATE SOURCES

- Eliminate smoking in your home.
- Clean your home and office space regularly with biobased cleaners.
- Wash linens regularly in hot water to eliminate particulate pollutants.
- Eliminate your use of synthetic air fresheners.
- Choose candles with vegetable-based waxes instead of petroleum-based waxes. Ensure that wicks are lead-free.
- Repair any water leaks or water damage in your home promptly, and report water leaks in your Army Reserve Center to facility management to prevent the growth of mold and mildew.
- Maintain your structure's relative humidity at 30 to 50 percent to prevent the growth of mold and mildew.
- Reduce your use of chemicals, and choose products with no or low volatile organic compounds (VOCs). GREENGUARD, Green Seal, Safer Choice and Design for Environment certifications indicate safer choices.
- Test your home for radon, a colorless and odorless but dangerous gas that occurs when uranium decays naturally in soil and water. Visit epa.gov/radon for details.
- If you believe that your home or facility contains lead-based paint (more common in structures erected before 1978) or asbestos (more common in structures erected before 1989), do not disturb or remove it! Contact an abatement professional for your home or your facility manager for assistance.

IMPROVE VENTILATION

- Properly ventilate your home and office space when you are using materials such as adhesives, paints and other materials that could contain volatile organic compounds.
- Never operate a fuel burning appliance in an unventilated space.
- Ensure that fuel burning appliances are in proper operating condition, and ensure that they are vented properly.
- If you have a fireplace in your home, hire a professional to inspect and clean your chimney annually.
- Use exhaust fans and dehumidifiers when engaging in activities that consume water, such as bathing and washing, to reduce humidity.
- Increase the amount of fresh air in your home by opening windows and doors when environmental conditions are favorable and when your climate control system is not in operation.

Visit the Environmental Protection Agency's Indoor Air Quality Guide at www.epa.gov/indoor-air-quality-iaq

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#IAQ #ClearTheAir #CareAboutYourIndoorAir

CLEAN THE AIR

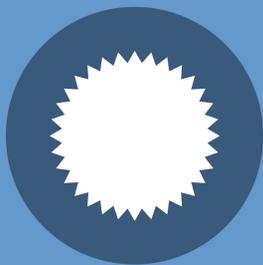
- Change your climate control system's air filters regularly.
- Choose vacuum cleaners with high efficiency particulate air (HEPA) filters that can eliminate particulate pollutants such as pollen, dust and pet dander.
- Consider an air filtration system, especially if you are or someone in your home is sensitive to allergens and pollutants.
- Consider HVAC air filters with high Minimum Efficiency Reporting Value, or MERV, ratings. Filters with higher MERV ratings filter more allergens and pollutants, more effectively. MERV ratings for common household air filters usually range from 4 to 13.
- Consider house plants to clean your air. A study by the National Aeronautics and Space Administration found that certain varieties of house plants can actually remove volatile organic compounds such as formaldehyde, benzene and carbon monoxide from the air. Some of these varieties include gerbera daisy, Chinese evergreen, Boston fern, orchid, spider plant, philodendron, snake plant, English ivy, dracaena, spider plant, chrysanthemum and weeping fig.
- Install a carbon monoxide detector to alert you of high concentrations of CO.



COMMON SIGNS OF INDOOR AIR POLLUTION

COMMON ENVIRONMENTAL SIGNS

- Soiled air filters
- An increase in incidences of mold and mildew
- Uneven air temperatures in your home or facility
- Unusual or musty odors that have no clear source
- Higher utility bills, usually caused by inefficient ventilation
- An increase in the relative humidity in your home or facility
- An increase in the presence of dust in the air and on surfaces
- An increase in condensation on or around windows and doors



COMMON HEALTH SIGNS

- Nausea ^
- Dizziness ^
- Eye irritation
- Skin irritation
- Persistent headache ^
- Persistent sore throat
- New or worsening allergies
- Sudden and extreme fatigue ^
- New or worsening respiratory concerns, such as asthma

^ If you experience all of these symptoms at once, move to fresh air immediately. They could indicate the presence of carbon monoxide, a colorless and odorless but dangerous gas, in your home.



Visit the Environmental Protection Agency's Indoor Air Quality Guide at www.epa.gov/indoor-air-quality-iaq

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#IAQ #ClearTheAir



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sustainableusar.com

[#GoGreenUSAR](https://twitter.com/SustainableUSAR)



ARMY RESERVE SUSTAINABILITY PROGRAMS