



SUPPORT HVACR TRADE INC.

Indoor Air Quality Guide

Simple ways to breathe easier in your own home,
all year long.

What's Inside

- Signs of poor indoor air quality
- Common sources of indoor pollutants
- Ways to improve your air, from easy to advanced
- A seasonal air quality checklist

A resource from Support HVACR Trade Inc.

A nonprofit turning youth curiosity into HVACR careers — one student,
one school, one community at a time.

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Why Indoor Air Quality Matters

Most people spend the majority of their time indoors, which means the air inside your home has a real effect on your comfort and wellbeing. Your HVAC system plays a big role in that air — filtering it, moving it, and controlling its humidity.

Common Indoor Air Pollutants

Dust & Pet Dander

Builds up in carpets, bedding, and air ducts over time.

Mold Spores

Grows in damp areas like bathrooms, basements, and around leaks.

Excess Humidity

Encourages mold growth and can make a home feel stuffy.

Pollen

Enters through open windows and doors, especially in spring and fall.

Volatile Organic Compounds (VOCs)

Released by paints, cleaning products, and new furniture.

Cooking & Combustion Byproducts

Released by gas stoves, fireplaces, and candles.

The Good News

Most indoor air quality issues can be improved with simple, consistent habits — you don't need to overhaul your whole home to breathe easier.

Your HVAC System's Role

Your HVAC system does three jobs that directly affect air quality: it filters the air as it circulates, controls humidity through heating and cooling, and moves fresh air through your ductwork. A well-maintained system does all three far more effectively than a neglected one.



Signs of Poor Indoor Air Quality

If you notice several of these, it may be time to take a closer look.

- ☐ Musty or stale odors that don't go away
- ☐ Visible dust buildup on furniture or vents shortly after cleaning
- ☐ More frequent allergy symptoms or headaches at home than elsewhere
- ☐ Condensation on windows or visible mold/mildew
- ☐ A home that feels stuffy even with the thermostat set correctly
- ☐ Family members waking up congested

Where to Check First

Bathrooms & Kitchens: Check for mold around tubs, sinks, and under-cabinet leaks.

Basements: Look for dampness, musty smells, or visible water stains.

Air Filter: A dirty filter can't trap dust and allergens effectively.

Air Ducts: Dust and debris can build up over years without cleaning.

Understanding Filter Ratings (MERV)

Filters are rated by MERV (Minimum Efficiency Reporting Value) — generally, higher numbers trap smaller particles. But higher isn't always better for every system; ask a technician which rating your specific HVAC system can handle.



Ways to Improve Your Air

Start simple, then consider bigger steps if you need more improvement.

EASY HABITS

Change your filter on schedule: A clean filter is the single easiest way to protect your air.

Vacuum and dust regularly: Use a vacuum with a good filter to reduce dust and dander.

Run exhaust fans: Use bathroom and kitchen fans to remove moisture and cooking byproducts.

Open windows when weather allows: Fresh air exchange helps dilute indoor pollutants.

NEXT STEPS

Upgrade to a higher-rated filter: Ask a technician which filter rating your system can handle.

Control humidity: A dehumidifier or humidifier can keep humidity in a healthy range.

Use a portable air purifier: Helpful for bedrooms or rooms with higher pollutant levels.

PROFESSIONAL OPTIONS

Professional duct cleaning: Removes built-up dust and debris from your ductwork.

Whole-home air purification system: Installed as part of your HVAC system for continuous filtering.

Indoor air quality testing: A technician can identify specific pollutants in your home.

A Quick Myth-Buster

Houseplants are lovely, but research suggests you'd need an unrealistic number of them in a room to meaningfully clean the air. A clean filter and good ventilation do far more of the real work.



Seasonal Air Quality Checklist

A few habits, spread across the year, go a long way.

SPRING

- ☐ Replace filter as pollen season ramps up
- ☐ Check for mold after winter dampness
- ☐ Air out the house on mild, low-pollen days

SUMMER

- ☐ Run the AC to help control humidity
- ☐ Use exhaust fans when cooking
- ☐ Keep windows closed during high pollen/pollution days

FALL

- ☐ Replace filter before heating season
- ☐ Check basement and attic for moisture
- ☐ Clean or replace humidifier filters/pads

WINTER

- ☐ Balance humidity — too dry or too damp both cause issues
- ☐ Ventilate briefly even in cold weather
- ☐ Watch for condensation on windows

Small Habits, Big Difference

None of these steps take long, but together they add up to noticeably fresher air.



Breathe Easier With a Little Help

If you've tried these steps and you're still noticing symptoms or odors, a professional inspection can help pinpoint the exact cause — and confirm your HVAC system is filtering and ventilating your home the way it should.

When to Call a Professional

- ☐ Persistent musty odors you can't trace to a source
- ☐ Visible mold growth anywhere in the home
- ☐ Family members with ongoing, unexplained respiratory symptoms
- ☐ It's been years since your ductwork was inspected or cleaned

Want More Homeowner Resources?

Visit our Resource Center at supporthvacrtrade.com for more guides, plus ways to support youth STEM and HVACR career programs in your community.

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Turning Curiosity Into Careers

About Support HVACR Trade Inc.

We're a workforce-development nonprofit that helps youth, schools, and communities discover HVACR through STEM learning, hands-on exploration, children's books, workshops, online courses, and career pathways.

Three Ways to Get Involved

Sponsor a Student

\$2,500 sponsors 100 students in HVACR STEM programming.

Host a Workshop

Bring a hands-on HVACR discovery session to your school or site.

Explore Our Books

Meet Tommy & Theo — our HVACR adventure series for kids 7-14.