# https://www.epa.gov/indoor-air-quality-iaq/text-version-indoor-air-quality-house-tour#main-content

EPA United States Environmental Protection Agency

## Text Version of the Indoor Air Quality House Tour –

Get a quick glimpse of some of the most important ways to protect the air in your home by touring the Indoor Air Quality (IAQ) House. Room-by-room, you'll learn about the key pollutants and how to address them.

Take the interactive house tour (SWF) or view the Text Version below.

### On this page:

Living Room - Bathroom - Bedroom - Kitchen - Basement

# Living Room

A living room is usually a well-used area of a home and may harbor indoor pollutants. It is important to ventilate properly, keep secondhand smoke outside of the house, and vacuum and dust regularly.

# Living Room

Learn more about Carbon Monoxide

# Bathroom

# Bedroom

### Pet Dander and Hair

Pets can trigger allergy and asthma attacks due to dander and hair. Keep them out of the sleeping areas, and away from upholstered furniture, carpets, and stuffed toys. Vacuum and clean carpets, rugs and furniture often.

Learn more about Pet Dander and Hair

### Secondhand Smoke

Secondhand smoke from cigarettes, cigars and other tobacco products can trigger asthma and other respiratory illnesses especially in children. To help protect children from secondhand smoke, do not smoke or allow others to smoke inside your home or car.

Learn more about Secondhand Smoke

### Carbon Monoxide

Fireplaces and leaking chimneys are sources of carbon monoxide. Ventilate rooms that have fireplaces, make certain the flue damper is operational and fully open when in use, and ensure the chimney is properly sealed.

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A bathroom is often the dampest area of a home. It is important to ventilate a bathroom during use and dry damp surfaces.

### Mold

Bathrooms are a common source of mold. Humidity from showers can cause moisture problems, which will lead to mold growth. Mold can cause allergic reactions, asthma and other respiratory ailments. Installing and using a ventilation fan will help to control moisture and inhibit mold growth.

Learn more about mold

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A bedroom often contains materials that collect dust. It is important to clean bedding and other fabrics, and vacuum regularly.

### Dust

Dust mites can trigger allergy and asthma attacks. Dust mites are everywhere especially on pillows, blankets, carpets, upholstered furniture and stuffed toys. Dust and vacuum your home regularly, wash bedding, and use allergen-proof mattress and pillow covers.
Learn more about dust mites.

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# Kitchen



A kitchen has appliances that may leak gases, and often contain chemicals for cleaning or removing pests. It is important to properly maintain and ventilate appliances, and safely store chemicals.

### Pesticides

Pesticides used to rid homes of rodents, termites, insects, and other pests, can irritate the eyes, nose, and throat; damage the central nervous system and kidneys; and increase the risk of cancer. Don't leave food out, and if you must use pesticides, ventilate during and after use and follow directions to limit exposure. Use non-chemical methods of pest control when possible.

Learn more about Pesticides.

### Volatile Organic Compounds (VOCs)

Common household cleaners, often placed under the kitchen sink, release Volatile Organic Compounds (VOCs), when used and stored. Store household products that contain chemicals according to manufacturers' instructions and keep all products away from children. Consider purchasing cleaners without VOCs.

Learn more about VOCs.

### **Carbon Monoxide**

To help prevent carbon monoxide exposure, make sure appliances such as gas stoves vent to the outside whenever possible and that all appliances are properly installed, used and maintained.

Learn more about Carbon Monoxide.

## **Basement**



A basement is a source of air leaks and moisture, and often contains various chemicals. It is important to ventilate, seal cracks and properly store all chemicals.

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### **Carbon Monoxide**

Combustion heating and cooling appliances such as heating, ventilation, and air conditioning units, gasoline-powered heaters, and other appliances are sources of carbon monoxide. Properly install, use and maintain fuel-burning appliances. Install carbon monoxide detectors in living spaces.

Learn more about Carbon Monoxide.

### Volatile Organic Compounds (VOCs)

Paints, resins, paint thinners and chemicals, and other products, will still release Volatile Organic Compounds (VOCs) even while stored properly. Make sure there is plenty of ventilation when painting, remodeling, or using other products that may release VOCs. Consider purchasing low and no VOC products.

### Learn more about VOCs.

### Mold

Basements can be damp. Install a properly sized dehumidifier to help keep your basement at an appropriate humidity level and reduce the potential for mold. It is important to dry water-damaged areas and items within 24-48 hours to prevent mold growth. Learn more about mold.

### Radon

Radon is the leading cause of lung cancer among non-smokers in the U.S. It is a naturally occurring radioactive gas that can enter a home through cracks and openings in floors and walls that are in contact with the ground. Testing your home is simple and inexpensive. Learn more about Radon.

**For Existing Homes:** Test for radon — testing is the only way to know if radon is in your home. Do-it-yourself test kits are convenient and accessible, or you may choose to have a professional test your home. If the test result indicates your radon level is too high, a qualified radon service professional can install a radon mitigation system.

Find a qualified radon service professional.

**For New Construction:** Radon-resistant new construction (RRNC) draws radon from the soil and vents it through a pipe to the roof, preventing its entry into the house. This technique uses common materials and building skills. RRNC costs less than retrofitting a similar radon reduction system after the house is finished. New home buyers should ask their build to include RRNC features. All new homes, even new RRNC ones, should be tested for radon.

Learn more about radon-resistant new construction.

Learn about the Indoor airPLUS program and the Construction Specifications, which includes radon.

# **Indoor Air and Coronavirus (COVID-19)**

# **Frequent Questions**

<u>Read Frequent Questions about Indoor Air and Coronavirus (COVID-19)</u>. Explore all EPA Frequent Questions related to Coronavirus (COVID-19).

COVID-19 is thought to spread mainly through close contact from person-to-person. However, some uncertainty remains about the relative importance of different routes of transmission of SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19). There is growing evidence that this virus can remain airborne for longer times and further distances than originally thought. In addition to close contact with infected people and contaminated surfaces, there is a possibility that spread of COVID-19 may also occur via airborne particles in indoor environments, in some circumstances beyond the 2 m (about 6 ft) range encouraged by social distancing recommendations. See <u>Science and Technical Resources related to Indoor Air and Coronavirus (COVID-19)</u> or <u>Indoor Air and COVID-19</u> Key References and Publications for technical information.

However, there are straightforward steps that can be taken to reduce potential airborne transmission of COVID-19 and the focus of this material is on those measures. The layout and design of a building, as well as occupancy and type of heating, ventilation, and air conditioning (HVAC) system, can all impact potential airborne spread of the virus. Although improvements to ventilation and air cleaning cannot on their own eliminate the risk of airborne transmission of the SARS-CoV-2 virus, EPA recommends precautions to reduce the potential for airborne transmission of the virus. These precautions include increasing ventilation with outdoor air and air filtration as part of a larger strategy that includes social distancing, wearing cloth face coverings or masks, <u>surface cleaning and disinfecting</u>, handwashing, and other precautions. By themselves, measures to reduce airborne exposure to the virus that causes COVID-19 are not enough since airborne transmission is not the only way exposure to SARS-CoV-2 could potentially occur.

All best practices recommended by the Centers for Disease Control and Prevention (CDC) should be followed.

How to Protect Yourself and Others Cleaning and Disinfecting Your Home Community, Work and School: Cleaning and Disinfecting Use of Cloth Face Coverings to Help Slow the Spread of COVID-19

# **Resources Related to Indoor Air and Coronavirus (COVID-19)**

Indoor Air in Homes and Coronavirus (COVID-19) Ventilation and Coronavirus (COVID-19) Air Cleaners, HVAC Filters and Coronavirus (COVID-19) Additional Measures to Address COVID-19 in Public Indoor Spaces COVID-19, Wildfires, and Indoor Air Quality Science and Technical Resources related to Indoor Air and Coronavirus (COVID-19)

Indoor Air and COVID-19 Key References and Publications

# **Information on Disinfectants**



On January 29, 2020, EPA activated its <u>Emerging Viral Pathogens Guidance for Antimicrobial Pesticides</u> in response to the coronavirus outbreak (COVID-19).

List N: List of Disinfectants for use Against Coronavirus (COVID-19)

Disinfectant Use and Coronavirus (COVID-19)

Frequent Questions about Disinfectants and Coronavirus

Joint Guidance from CDC and EPA on Cleaning and Disinfecting

Information for Registrants for Expediting Emerging Viral Pathogen Claim Submissions