

Glossary

Active environmental sampling system: the use of an air sampling pump that pulls air at a known flow rate through a filter or other collection, which is then sent to a laboratory for analysis.

Active radon mitigation system: a system comprised of a vent pipe with a fan in it that runs from beneath the foundation slab up to above the roof where the radon gas is vented.

Allergen: proteins with the ability to trigger immune responses and cause allergic reactions in susceptible individuals. They are typically found adhered to very small particles, which can be airborne as well as present in settled household dust reservoirs.

Arc fault circuit interrupter (AFCI): a safety device designed for homes, which works by responding to early arcing and sparking conditions in wiring to prohibit or reduce the potential for electrical fires.

Asbestos: an incombustible, chemical-resistant, fibrous material form of pure magnesium silicate used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters.

Asthma: a complex condition that involves the interaction of many environmental agents, and genetic and other factors on different cells in the airway, which alters the function and expression of genes associated with immune responses. It is characterized by episodic airway obstruction caused by extensive narrowing of the bronchi and bronchioles. The narrowing is caused by spasm of smooth muscle, edema (swelling from fluid accumulation) of the mucosa, and the presence of mucus in the airway resulting from an immunologic reaction induced by allergies, irritants, infection, stress, and other factors in a genetically predisposed individual.

Attic: any story or floor of a building situated wholly or partly within the roof, and so designed, arranged, or built to be used for business, storage, or habitation.

Back drafting: the reversal of airflow due to negative pressure in chimneys, water heater exhaust vents and other devices, which results in dangerous combustion gasses being released into the living space.

Basement: the lowest story of a building, below the main floor and wholly or partially lower than the surface of the ground.

Blower Door: an instrument consisting of pressure gauges, a variable speed fan and temporary covering, mounted in a doorframe, used to pressurize and depressurize a house to measure air leakage.

Building: a fixed construction with walls, foundation, and roof, such as a house, factory, or garage.

Building Envelop: the roof, walls, doors, foundation, windows and other penetrations in the exterior of a building.

Building Performance Testing: a method of assessing how well building ventilation and other systems work.

Bulk container: any metal garbage, rubbish, or refuse container having a capacity of 2 cubic yards or greater and which is equipped with fittings for hydraulic or mechanical emptying, unloading, or removal.

Carbon monoxide: a poisonous odorless, colorless and tasteless gas that is a byproduct of the incomplete combustion of carbon-based fuels, such as natural or liquefied propane gas, kerosene, oil, gasoline, wood or coal, and is made of a single atom of carbon and one atom of oxygen, which can cause human health problems or be fatal if present in high concentrations.

Case management: the assessment of health and social service needs, development of an action plan, and ongoing referral and support.

Central heating system: a single system supplying heat to one or more dwelling unit(s) or more than one rooming unit.

Chimney: a vertical shaft, usually of reinforced concrete, or other approved noncombustible, heat-resisting material enclosing one or more flues, for the purpose of removing products of combustion from solid, liquid, or gaseous fuel.

"Cleveland Drop": a ventilation system first identified in a number of Cleveland, Ohio-area houses in which air is drawn from a moist basement instead of a tempered (heated or cooled) living area, potentially resulting in moisture and mold being dispersed throughout the house.

Condensation: moisture that is created when air that is sufficiently warm and moist comes into contact with a cold surface, forming water.

Community Development Corporation: a type of nonprofit entity characterized by its community based leadership and work primarily in housing production and/or job creation. Community Development Corporations are typically formed by residents, small business owners, faith-based congregations, and other local stakeholders to revitalize a low and/or moderate income community in order to produce affordable housing, create jobs for community residents, and provide a variety of social services within its target area.

Cost-of-Illness: a study that qualifies the public health burden created by an illness by including all medical, non-medical, and productivity costs associated with an adverse health outcome.

Cost analysis: a study that focuses on the costs of implementing an intervention, and may also document the costs saved as a result of the intervention (or the net costs after subtracting the total program costs from the cost of illnesses).

Cost-effectiveness analysis: an analysis that calculates the ratio of net costs per improvement in health associated with the intervention, which is used to assess the relative efficiency of two or more interventions.

Cost-benefit analysis: an analysis that compares the costs and consequences of intervention strategies.

Data analysis plan: a written plan that enables a program to stay on track by identifying critical data elements that evaluators plan to study and report, and how they plan to justify conclusions.

Data collection plan: a written plan that provides direction to staff or program partners responsible for collecting information need to evaluate the program.

Detector Tubes: a glass tube containing a solid chemical that changes color when air containing a contaminate is drawn through the tube, also called a length-of-stain tube.

Dilapidated: in a state of disrepair or ruin and no longer adequate for the purpose or use for which it was originally intended.

Dormitory: a building or a group of rooms in a building used for institutional living and sleeping purposes by four or more persons.

Dosimeter: a device that measures and indicates the amount of chemical, energy, noise, x-rays or radioactivity, which is usually worn by a person to measure dose.

Drain Trap: a U-, S- or J-shaped pipe located below or within a plumbing fixture, normally containing water to prevent gases from entering through the pipe.

Dwelling: any enclosed space wholly or partly used or intended to be used for living, sleeping, cooking, and eating. (Temporary housing, as hereinafter defined, shall not be classified as a dwelling.) Industrialized housing and modular construction that conform to nationally accepted industry standards and are used or intended for use for living, sleeping, cooking, and eating purposes shall be classified as dwellings.

Dwelling unit: a room or group of rooms located within a dwelling forming a single habitable unit with facilities used or intended to be used by a single family for living, sleeping, cooking, and eating.

Egress: arrangements and openings to assure a safe means of exit from buildings.

Electrochemical sensor: a type of chemical detector with a fuel cell designed to produce a current that is precisely related to the amount of chemical in the atmosphere, such as carbon monoxide.

Elevated blood lead level: excessive absorption of lead in a confirmed concentration in whole blood, usually measured in micrograms per deciliter or micrograms per liter. Such levels can trigger responses to reduce or eliminate exposure and are often established by the U.S. Centers for Disease Control and Prevention and/or local jurisdictions.

Energy Star: a joint program of U.S. EPA and the U.S. Department of Energy designed to help save money and protect the environment through energy efficient products and practices.

Enterprise Green Community Standards: a program developed by Enterprise Community Partners, which incorporates an integrated design process in low-income housing to facilitate sustainable, energy conservation, health and other green features.

Environmental Justice: the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Extermination: the control and elimination of insects, rodents, or other pests by eliminating their harborage places; by removing or making inaccessible materials that may serve as their food; by poisoning, spraying, fumigating, trapping, or any other recognized and legal pest elimination methods approved by the local or state authority having such administrative authority. Extermination is one of the components of integrated pest management.

Fair market value: a price at which both buyers and sellers will do business.

Family: one or more individuals living together and sharing common living, sleeping, cooking, and eating facilities (See also Household).

Flashing: thin continuous pieces of sheet metal or other impervious material installed to prevent water from leaking into a structure through an angle or joint.

Flush toilet: a toilet bowl that can be flushed with water supplied under pressure and that is equipped with a water-sealed trap above the floor level.

Garbage: animal and vegetable waste resulting from handling, preparation, cooking, serving, and non-consumption of food.

General dilution ventilation: a system that moves larger volumes of air (compared to local exhaust ventilation) and operates by diluting contaminants with uncontaminated air.

Grade: the finished ground level adjacent to a required window.

Ground fault circuit interrupter (GFCI): a home safety device that will turn off power to an affected electrical circuit when any disruption in current is sensed as a result of the grounding of an electrical appliance.

Guest: an individual who shares a dwelling unit in a non-permanent status.

Habitable room: a room or enclosed floor space used or intended to be used for living, sleeping, cooking or eating purposes, excluding bathrooms, laundries, furnace rooms, pantries, kitchenettes and utility rooms of less than 50 square feet of floor space, foyers, or communicating corridors, stairways, closets, storage spaces, workshops, and hobby and recreation areas.

Habitable space: space in a structure for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces, and similar areas are not considered habitable spaces.

Harborage: those areas where pests are able to take shelter.

Health officer: the legally designated health authority of the jurisdiction or that person's authorized representative.

Healthy Home Rating System (HHRS): a visual assessment tool adapted from the British Housing Health and Safety Rating System (HHSRS) to examine 29 hazards, or categories of hazards, to determine the risks to occupants' health and safety. An assessment using the HHRS is made based on the condition of the whole dwelling.

Heating device: all furnaces, unit heaters, cooking and heating stoves and ranges, and other similar devices.

Household: one or more individuals living together in a single dwelling unit and sharing common living, sleeping, cooking, and eating facilities (see also Family).

Housing Health and Safety Rating System (HHSRS): a visual assessment tool developed in Great Britain that uses home assessment data to quantitatively rank home health. Users of this tool base their conclusions on the condition of the whole dwelling after carrying out an in-depth visual inspection and then using a formula to calculate a numerical score, to allow comparison of both the major and minor health and safety hazards.

Immunoassay: a laboratory technique that makes use of the specific binding between the antigen associated with an allergen and its homologous antibody in order to identify and qualify a substance in a sample.

Infestation: the presence within or around a dwelling of any insects, rodents, or other pests.

Integrated pest management: a coordinated approach to managing roaches, rodents, mosquitoes, and other pests that combines inspection, monitoring, treatment and evaluation, with special emphasis on the decreased use of toxic agents.

Kitchen: any room used for the storage and preparation of foods and containing the following equipment: sink or other device for dishwashing, stove or other device for cooking, refrigerator or other device for cold storage of food, cabinets or shelves for storage of equipment and utensils, and counter or table for food preparation.

Kitchenette: a small kitchen or an alcove containing cooking facilities.

Lead-based paint: any paint or coating with lead content equal to or greater than 1 milligram per square centimeter, or 0.5% by weight, pursuant to Title X of the Housing and Community Development Act of 1992.

Lead-based paint hazard: a condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health. Lead-based paint hazards include deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

LEED: a green building certification system developed by the U.S. Green Building Council and launched in 2000, which provides third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics, including energy savings, water efficiency, carbon dioxide emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. LEED is the acronym for Leadership in Energy and Environmental Design.

Local exhaust ventilation: a system designed to move a relatively small amount of air (compared to general dilution ventilation) containing a contaminant at the point it is generated before it can enter the indoor air at large.

Logic model: a visual method of describing the relationships among program elements, which can (1) identify short-term, intermediate, and long-term outcomes; (2) link expected outcomes to a program's intended activities and inputs; and (3) establish program boundaries to prevent "mission creep." Elements of a logic model include resources or inputs, activities, outputs, and outcomes and impact.

Mildew: a non-technical name commonly used to refer to any fungus that is growing on fabrics, window sills or bathroom tiles.

Moisture meter: a device that measures water content in building materials through gauging changes in electrical resistance/capacitance.

Mold: a non-technical name that commonly refers to any fungus that is growing in the indoor environment or on housing exteriors. Molds are characterized by a visible vegetative body, or colony, composed of a network of threadlike filaments, which infiltrate the mold's food or habitat. Mold colonies may appear cottony, velvety, granular or leathery, and may be white, gray, black, brown, yellow, greenish or other colors. They can live off many materials found in homes, such as wood, cellulose in the paper backing on drywall, insulation, wallpaper, glues used to bond carpet to its backing, and everyday dust and dirt.

Multi-Family Housing: any dwelling containing four or more individual dwelling units (this definition may vary by jurisdiction).

Mycotoxin: a toxic metabolite, such as a volatile organic compound, that can be a health hazard to humans, birds and mammals upon exposure (i.e., ingestion, dermal contact or inhalation).

Occupant: any individual that is living, sleeping, cooking, or eating in or having possession of a dwelling unit or a rooming unit; except that in dwelling units a guest shall not be considered an occupant.

Outcome evaluation: an evaluation that focuses on the degree to which any changes are attributable to a program's services or interventions.

Owner: any person who alone, jointly, or severally with others (a) shall have legal title to any premises, dwelling, or dwelling unit, with or without accompanying actual possession thereof, or (b) shall have charge, care or control of any premises, dwelling, or dwelling unit, as owner or agent of the owner, or as executor, administrator, trustee, or guardian of the estate of the owner.

Passive environmental sampling system: a system that relies on the contaminant being absorbed onto special collection media via diffusion or another sampling system that does not use pumps.

Passive radon mitigation system: a system that is comprised of a pipe that runs from beneath the foundation slab up through the house to above the roof where the radon gas vents and does not incorporate the use of an exhaust fan. A passive system can be turned into an active one with the installation of an exhaust fan.

Pesticide: a substance or mixture of substances used to control pests, such as insects, rodents, weeds, fungi or bacteria.

Plumbing: all of the following supplied facilities and equipment: gas pipes, gas burning equipment, water pipes, garbage disposal units, waste pipes, toilets, sinks, installed dishwashers, bathtubs, shower baths, installed clothes washing machines, catch basins, drains, vents, and similarly supplied fixtures, and the installation thereof, together with all connections to water, sewer, or gas lines.

Privacy: the existence of conditions which will permit an individual or individuals to carry out an activity commenced without interruption or interference, either by sight or sound by unwanted individuals.

Process evaluation: an evaluation that measures program reach, activities and services, and documented program operations.

Radon: an odorless, colorless radioactive gas that is a decay product of uranium that moves through fractures and porous substrates in the foundations of buildings and can collect in high concentrations in certain areas. Radon may also enter a house through water systems in communities where groundwater is the main water supply, most commonly in small public systems and private wells (i.e., closed systems that do not allow radon to escape).

Rat harborage: any conditions or place where rats can live, nest or seek shelter.

Rat proofing: a form of construction that will prevent the entry or exit of rats to or from a given space or building, or from gaining access to food, water, or harborage. It consists of the closing and keeping closed of every opening in foundations, basements, cellars, exterior and interior walls, ground or first floors, roofs, sidewalk gratings, sidewalk openings, and other places that may be reached and entered by rats by climbing, burrowing, or other methods, by the use of materials impervious to rat gnawing and other methods approved by the appropriate authority.

Rat slab: a thin concrete slab poured over a durable vapor retarder, such as 6 mil or thicker polyethylene plastic, which covers the entire bare earth floors in a basement or crawl space to prevent rodents from burrowing through and entering the space.

Refuse: leftover and discarded organic and non-organic solids (except body wastes), including garbage, rubbish, ashes, and dead animals.

Refuse container: a watertight container that is constructed of metal, or other durable material impervious to rodents, which is capable of being serviced without creating unsanitary conditions.

Rubbish: non-putrescible solid wastes (excluding ashes) consisting of either: (a) combustible wastes such as paper, cardboard, plastic containers, yard clippings and wood; or (b) noncombustible wastes such as cans, glass, and crockery.

Space heater: a self-contained heating appliance of either the convection type or the radiant type and intended primarily to heat only a limited space or area such as one room or two adjoining rooms.

Sphincter: a circular or structural muscle that maintains control over a natural body part and relaxes to permit release of waste material. Rodents release elongated droppings due to sphincter action, while cockroaches release spherical droppings because they have no sphincter.

Systems theory: the concept proposed to promote the dynamic interrelationship of activities designed to accomplish a unified system.

Temporary housing: any tent, trailer, mobile home, or other structure used for human shelter that is designed to be transportable and which is not attached to the ground, to another structure, or to any utility system on the same premises for more than 30 consecutive days.

Thermography: a method of identifying moisture problems behind walls and other building cavities by using a special camera that photographs infrared spectra.

Toxic substance: any chemical product applied on the surface of or incorporated into any structural or decorative material, or any other chemical, biologic, or physical agent in the home environment or its surroundings, which constitutes a potential or actual hazard to human health at acute or chronic exposure levels.

Vapor Retarder: any material, usually plastic or foil, which resists diffusion of water through building materials. (Also called a vapor barrier.)

Volatile organic compounds: a class of carbon-containing chemicals that become gases at room temperature and, when inhaled, can produce a variety of adverse health effects.

Abbreviations and Acronyms

ADA	Americans with Disabilities Act	CPR	cardiopulmonary resuscitation
AFCI	arc fault circuit interrupter	CPSC	Consumer Product Safety Commission
AHHS	American Healthy Homes Survey	CSREES	U.S. Department of Agriculture's Cooperative State Research, Education, and Extension Service
ALA	American Lung Association		
AMI	area median income	DDT	dichlorodiphenyltrichlorethane
ANSI	American National Standards Institute	DOE	U.S. Department of Energy
APHA	American Public Health Association	EBL	elevated blood lead level
AFCI	arc fault circuit interrupter	ELISA	Enzyme-linked immunosorbent assay
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers	EPA	U.S. Environmental Protection Agency
		ETS	environmental tobacco smoke
ASME	American Society of Mechanical Engineers	FEMA	Federal Emergency Management Agency
ASSE	American Society of Structural Engineers	FHA	Federal Housing Administration
		GFCI	ground fault circuit interrupter
ASTM	American Society for Testing Materials	HEPA	high-efficiency particulate air
ATSDR	Agency for Toxic Substances and Disease Registry	HHRS	Healthy Home Rating Systems
BTU	British thermal unit	HHS	U.S. Department of Health and Human Services
CAA	community action agencies		
CARE	U.S. Environmental Protection Agency's Community Action for a Renewed Environment program	HHSRS	Housing Health and Safety Rating System
		HIPAA	Health Insurance Portability and Accountability Act
CBO	community-based organization	HMO	health maintenance organization
CBR	community-based participatory research	HQS	Housing Quality Standards
CDBG	Community Development Block Grant	HSC	Home Safety Council
CDC	U.S. Centers for Disease Control and Prevention	HUD	U.S. Department of Housing and Urban Development
CFR	Code of Federal Regulations	HVAC	heating, ventilating and air conditioning
CHW	community health worker	IAQ	indoor air quality
CLPPP	Childhood Lead Poisoning Prevention Program	ICC	International Code Council
CO	carbon monoxide	IPM	integrated pest management
CO2	carbon dioxide	IPMC	International Property Maintenance Code

IRB	Institutional Review Board	OSHA	U.S. Occupational Safety and Health Administration
ISO	International Standard Organization	pCi/L	picoCuries per liter
kg	kilogram	PACE-EH	Protocols for Assessing Community Excellence in Environmental Health
LEAP	U.S. Department of Housing and Urban Development's Lead Elimination Action Program	PMP	pest management professional
LEED	Leadership in Energy and Environmental Design	ppm	parts per million
MARIATM	Multiplex Array for Indoor Allergens	psi	pound per square inch
MERV	Minimum Energy Rating Value	PVC	polyvinyl chloride
NACCHO	National Association of County and City Health Officers	PW	potable water
NCEH	National Center for Environmental Health, part of CDC	QA	quality assurance
NCHH	National Center for Healthy Housing	QAP	quality assurance plan
NCI	National Cancer Institute	QC	quality control
NCIPC	National Center for Injury Prevention and Control	SDWA	Safe Drinking Water Act
NHANES	National Health and Nutrition Examination Survey	SEER	seasonal energy efficiency ratio
NIA	National Institute on Aging	T&P	temperature-pressure
NICHD	National Institute of Child Health and Development	TSP	tri-sodium phosphate
NIEHS	National Institute of Environmental Health Sciences	UF	urea-formaldehyde
NIST	National Institute of Standards and Technology	UL	Underwriters Laboratories
NLLAP	National Lead Laboratory Accreditation Program	USCB	U.S. Census Bureau
NOx	Oxides of nitrogen	USDA	U.S. Department of Agriculture
NSF	National Science Foundation	USFA	U.S. Fire Administration
NSLAH	National Survey of Lead and Allergens in Housing	USGS	U.S. Geological Survey
OHHLHC	U.S. Department of Housing and Urban Development's Office of Healthy Homes and Lead Hazard Control	VA	U.S. Veteran's Affairs
		VOC	volatile organic compound
		WAP	Weatherization Assistance Program
		WHO	World Health Organization
		XRF	X-ray fluorescence
		µg/dl	micrograms per deciliter