



Key Definitions in American Housing Survey Data Related to Healthy Homes

The American Housing Survey (AHS) is conducted by the Bureau of the Census for the Department of Housing and Urban Development (HUD). The results and details are available at <https://www.census.gov/programs-surveys/ahs/data.2015.html>. The AHS collects data on the Nation's housing, including apartments, single-family homes, mobile homes, vacant housing units, household characteristics, income, housing and neighborhood quality, housing costs, equipment and fuels, size of housing unit, and recent moves. National data are collected in odd numbered years, and data for a rotating small number of Metropolitan Statistical Areas (MSA) are collected currently about two years. The 2015 national sample covers an average of 118,000 occupied housing units. The AHS returns to the same housing units year after year to gather data; therefore, this survey is ideal for analyzing the flow of households through housing. The National Center for Healthy Housing (NCHH) selected 20 factors analyzed by the AHS to define a healthy home. The definitions of each of these factors as reported by the AHS are described below. Additionally, the AHS rating system for "severe" and "moderate" physical problems is described. For additional information on the definitions, see <https://www.census.gov/programs-surveys/ahs/>.

1. **Holes in floors.** Respondents were asked about holes in the interior floors of the unit. The holes may or may not go all the way through to a lower floor or to the exterior of the unit. The holes are only counted if large enough for someone to trip in.
2. **Open cracks or holes (interior).** Statistics are presented on open cracks or holes in the interior wall or ceilings of the housing unit. Included are cracks or holes that do not go all the way through to the next room or to the exterior of the housing unit. Hairline cracks or cracks that appear in the walls or ceilings but are not large enough to insert the edge of a dime into, are not counted. Very small holes caused by nails or other similar objects are also not counted.
3. **Broken plaster or peeling paint (interior).** The area of peeling paint or broken plaster must be on the inside walls or ceilings and at least one area of broken plaster or peeling paint must be larger than 8 inches by 11 inches.
- 4/5. **Signs of mice or rats.** The statistics on signs of mice or rats refer to respondents who reported seeing mice or rats or signs of mice or rats inside the house or building during the 3 months prior to interview or while the household was living in the unit if less than 3 months. Signs of mice or rats include droppings, holes in the wall, or ripped or torn food containers.
- 6/7. **Water leakage during last 12 months.** Data on water leakage are shown if the leakage occurred in the 12 months prior to the interview or while the household was living in the unit if less than 12 months. Housing units with water leakage are classified by whether the water leaked in from inside or outside the building and by the most common areas (roof, basement, walls, closed windows, or doors) or reasons (fixtures backed up or over-flowed or pipes leaked) of water leakage.
8. **Water supply stoppage.** "Water supply stoppage" means that the housing unit was completely without running water from its regular source. "Completely without running water" means that the water system servicing the unit supplied no water at all; that is, no equipment or facility using running water (kitchen or bathroom sinks, shower, bathtub, flush toilet, dishwasher, and other similar items) had water supplied to it, or all were inoperable. The reason could vary from a stoppage because of a flood or storm to

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a broken pipe, to a shutdown of the water system, to a failure to pay the bill, or other reasons. Data on water supply stoppage are shown if they occurred in the 3 months prior to the interview, or while the household was living in the unit if less than 3 months, and if the breakdown or failure lasted 6 consecutive hours or more.

9. **Flush toilet and flush toilet breakdowns.** A privy or chemical toilet is not considered a flush toilet. Flush toilets outside the unit were not counted. The statistics on breakdowns of flush toilets are shown for housing units with at least one flush toilet for the household's use only. The flush toilet may be completely unusable because of a faulty flushing mechanism, broken pipes, stopped up sewer pipe, lack of water supplied to the flush toilet, or some other reason. For households with more than one toilet, the question asked about times when all toilets were unusable.

10. **Sewer disposal breakdown.** The data on breakdowns in the sewage disposal are limited to housing units in which the means of sewage disposal was a public sewer, septic tank, or cesspool. Breakdowns refer to situations in which the system was completely unusable. Examples include the septic tank being pumped because it no longer perked, tank collapsed, tank exploded, sewer main broken, sewer treatment plant not operating as a result of electrical failure, or water service interruption. Data on breakdowns are shown if they occurred in the 3 months prior to the interview or while the household was living in the unit if less than 3 months, and if the breakdown lasted 6 consecutive hours or more.

11. **Plumbing facilities.** The category "With all plumbing facilities" consists of housing units that have hot and cold piped water as well as a flush toilet and a bathtub or shower. For units with less than two full bathrooms, the facilities are only counted if they are for the exclusive use of the occupants of the unit. Plumbing facilities need not be in the same room. Lacking some plumbing facilities or having no plumbing facilities for exclusive use means that the housing unit does not have all three specified plumbing facilities (hot and cold piped water, flush toilet, and bathtub or shower) inside the housing unit, or that the toilet or bathing facilities are also for the use of the occupants of other housing units. See also the definitions "Complete bathrooms," "Flush toilet and flush toilet breakdowns," and "Sewer disposal and sewage disposal breakdowns."

12. **Heating equipment breakdown.** Statistics are shown for housing units occupied by the householder during the winter prior to the interview and refer only to the main heating equipment. The data are classified by whether the housing unit was uncomfortably cold for 24 hours or more, the number of times equipment breakdowns occurred lasting 6 hours or more, and causes for the breakdowns. The heating equipment is broken down if it is not providing heat at its normal heating capacity through some fault in the equipment.

13. **Room heater without flue** refers to any room heater that burns kerosene, gas, or oil, and that does not connect to flue, vent, or chimney.

14. **Electric wiring.** A housing unit is classified as having exposed electric wiring if the unit has any wiring that is not enclosed, either in the walls or in metal or plastic coverings. Excluded are appliance cords, extension cords, chandelier cords, and telephone, antenna, or cable television wires.

15. **Electric wall outlets.** A housing unit is classified as having rooms without electric wall outlets if there is not at least one working electric wall outlet in each room of the unit. A working electric wall outlet is one that is in operating condition; that is, it can be used when needed. If a room does not have an electric wall outlet, an extension cord used in place of a wall outlet is not considered to be an electric wall outlet.

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16. **Lack of kitchen facilities.** Lacking a kitchen sink, refrigerator, or cooking equipment (stove, burners, or microwave oven) inside the structure for the exclusive use of the unit.

17. **Roofing problems.** A “sagging roof” is a critical defect indicating continuous neglect, or deep or serious damage to the structure. Only roofs with substantial sagging were included. “Missing roofing material” includes rotted, broken, loose or missing shingles, tiles, slate, shake, and tin, caused by extensive damage from fire, storm, or serious neglect. “Hole in roof” occurs when the missing roof materials expose the interior of the unit directly to weather. Holes caused by construction activity were not counted unless the construction had been abandoned.

18. **Exterior siding problems.** “Missing bricks, siding, or other outside wall material” applies to the exterior wall (including chimney) of the structure. Those defects may have been caused by storm, fire, flood, extensive neglect, vandalism, and so forth. Materials may include clapboard siding, shingles, boards, brick, concrete, and stucco. The missing materials do not necessarily expose the interior of the unit directly to weather. Missing materials resulting from construction activity were not counted unless construction had been abandoned. “Sloping outside walls” is a critical defect indicating continuous neglect or serious damage to the structure. Only walls with substantial sagging were included.

19. **Window problems.** “Boarded-up window” have been sealed off to protect against weather or entry and include windows and/or doors covered by board, brick, metal, or some other material. “Broken windows” indicated several broken or missing window panes. “Bars on windows” are to protect against unlawful entry. The condition of the windows has no bearing on this item. The bars can be vertical, horizontal, or a metal grating. Windows completely covered with metal sheeting are not included in this category.

20. **Foundation problems.** This category includes large cracks, holes, and rotted, loose, or missing foundation material.

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The American Housing Survey's Rating System for Severe and Moderate Physical Problems

Physical Problems	Severe (any one of 5 categories)	Moderate (any one of 5 categories but none severe)
Plumbing	Lacking hot or cold piped water or a flush toilet, or lacking both bathtub and shower, all inside the structure (and for the exclusive use of the unit, unless there are two or more full bathrooms).	On at least three occasions during the last 3 months, all the flush toilets were broken down at the same time for 6 hours or more.
Heating	<ol style="list-style-type: none"> 1. Having been uncomfortably cold last winter for 24 hours or more because the heating equipment broke down, and 2. It broke down at least three times last winter for 6 hours each time. 	Having unvented gas, oil, or kerosene heaters as the primary heating equipment.
Electric/Kitchen	<ol style="list-style-type: none"> 1. Electric Physical Problems 2. Having no electricity, or 3. All of the following three electric problems: <ul style="list-style-type: none"> — Exposed wiring, — A room with no working wall outlets, and — Three blown fuses or tripped circuit breakers in the last 90 days. 	Kitchen Physical Problems Lacking a: <ol style="list-style-type: none"> 1. Kitchen sink, 2. Refrigerator, or 3. Cooking equipment (stove, burners, or microwave oven) inside the structure for the exclusive use of the unit.
Hallways	<ol style="list-style-type: none"> 1. Having all of the following four problems in public areas: 2. No working light fixtures. 3. Loose or missing steps. 4. Loose or missing railings. 5. No working elevator. 	
Upkeep	<ol style="list-style-type: none"> 1. Having any five of the following six maintenance problems: 2. Water leaks from the outside, such as from the roof, basement, windows, or doors. 3. Leaks from inside structure such as pipes or plumbing fixtures. 4. Holes in the floors. 5. Holes or open cracks in the walls or ceilings. 6. More than 8 inches by 11 inches of peeling paint or broken plaster. 7. Signs of rats in the last 90 days. 	