# Occupant Survey

**Welcome to the 2015 California New Homes Survey!**

This survey is part of a research study on new homes in California. This research will help inform how new homes can provide adequate ventilation and good indoor air quality, while reducing air infiltration and energy use.

This survey takes about 15 minutes to complete. It asks questions about your home, household activities, and demographics. You can skip questions that you do not want to answer.

This research is being conducted by Lawrence Berkeley National Laboratory (LBNL) with funding from the California Energy Commission. Results will be used only for research on how to provide adequate ventilation and improve indoor air quality. In order to protect your privacy, the data will be encrypted and password protected.

Please return your completed survey in the envelope provided.

If you have questions about the research study, please contact:

[Name of LBNL PI and contact information provided]

Code number for home ­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_[[1]](#footnote-1) Date completed ­­­­­­\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_[[2]](#footnote-2)

Please answer to the best of your knowledge. You can skip any questions that you do not want answer.

1. **Home and Household Characteristics**
2. What year was your house built?

Year Built: ………………

1. What is the size (floor area) of your home?

Square Feet: ………………

1. What year did you move into this home?

Year Moved In: ……………….

1. Do you own or rent your home?

……. Own (If yes 🡪 5, skip otherwise)

……. Rent

……. Other

1. Are you the first owner of the property? Yes / No
2. How many people currently live in your home?

Number of People: ……………..

1. **Air Quality In and Around Your Home**
2. To what extent are you satisfied or dissatisfied with the indoor air quality in your home?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Very Dissatisfied |  |  |  | Neutral |  |  |  | Very Satisfied |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

1. How would you rate the outdoor air quality near where you live?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Very Poor |  |  |  | Neutral |  |  |  | Excellent |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

1. How would you rate your home in protecting you from outdoor air pollution?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Very Ineffective |  |  |  | Neutral |  |  |  | Very Effective |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

1. **Comfort Level in Your Home**
2. In winter, how often is the temperature in your home uncomfortable to any occupants because some room(s) are too hot or too cold?

|  | Never | Few times a year | Few times in a month | Few times a week | Every day |
| --- | --- | --- | --- | --- | --- |
| Too hot in some room(s). | ☐ | ☐ | ☐ | ☐ | ☐ |
| Too cold in some room(s). | ☐ | ☐ | ☐ | ☐ | ☐ |

1. In summer, how often is the temperature in your home uncomfortable to any occupants because some room(s) are too hot or too cold?

|  | Never | Few times a year | Few times a month | Few times a week | Every  day |
| --- | --- | --- | --- | --- | --- |
| Too hot in some room(s). | ☐ | ☐ | ☐ | ☐ | ☐ |
| Too cold in some room(s). | ☐ | ☐ | ☐ | ☐ | ☐ |

1. How often do the following conditions affect the comfort of occupants in your home?

|  | Never | Few times a year | Few times a month | Few times a week | Every day |
| --- | --- | --- | --- | --- | --- |
| Too much air movement. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Not enough air movement. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Indoor air is too dry. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Indoor air is too damp. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Indoor air has musty odor. | ☐ | ☐ | ☐ | ☐ | ☐ |

1. **Natural Gas Appliances and Mechanical Ventilation**
2. Which of the following heating appliances are used in your home? Select all that apply.

..….. Central gas furnace

……. Gas fireplace/ log set

….... Gas wall furnace

……. Freestanding gas heater

……. Central electric heating or heat-pump

……. Baseboard electric wall heater

……. Freestanding electric heater

……. Wood fireplace

……. Freestanding propane heater

……. Freestanding kerosene heater

……. Other. Please describe: ...………………………….

……. Don’t know

1. How often is the kitchen range hood or kitchen exhaust fan used when cooking with a cooktop?

……. Always (5 out of 5 times)

……. Most of the Time (4 out of 5 times)

……. Sometimes (2 to 3 out of 5 times)

……. Rarely (1 out of 5 times)

……. Never (0 out of 5 times)

……. Don’t know

1. If the kitchen range hood or kitchen exhaust fan is NOT always used, what are the reasons for not using it? Select all that apply.

……. Forget to turn it on

……. Not needed for what is being cooked

……. Too noisy

……. Doesn’t seem to remove cooking fumes or odors

……. Open window instead

……. Uses too much energy

……. Other. Please describe: ……………........................................

1. Was the operation of the mechanical ventilation system explained to you when you bought or moved into the home?

……. Yes

……. No

……. Don’t know

1. Do you feel you understand how to operate your mechanical ventilation system properly?

……. Yes

……. No

……. Not Sure

1. To what extent are you satisfied or dissatisfied with your mechanical ventilation system?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Very Dissatisfied |  |  |  | Neutral |  |  |  | Very Satisfied |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

1. If you are NOT very satisfied with your mechanical ventilation system, what are the reason(s) for dissatisfaction? Select all that apply.

……. Too noisy

……. Too drafty

……. Difficult to operate

……. Difficult to maintain

……. Uses too much energy

……. Brings in dust, odor, or air pollutants from outdoor

……. Not effective

……. Other. Please describe: ………………………………….

1. **Occupancy and Indoor Activities**
2. On average, how many hours per day is your home occupied by at least one person, including day and night hours?

|  | Fewer than 8 hours per day | 8 to 12 hours per day | 12 to 16 hours per day | 16 to 20 hours per day | More than 20 hours per day |
| --- | --- | --- | --- | --- | --- |
| Weekday | ☐ | ☐ | ☐ | ☐ | ☐ |
| Weekend | ☐ | ☐ | ☐ | ☐ | ☐ |

1. On average, how many times per week is your cooktop and/or oven used for cooking, including boiling water?

|  | 0 time  per week | 1 to 2 times per week | 3 to 4 times per week | 5 to 6 times per week | 7 times  per week |
| --- | --- | --- | --- | --- | --- |
| Breakfast | ☐ | ☐ | ☐ | ☐ | ☐ |
| Lunch | ☐ | ☐ | ☐ | ☐ | ☐ |
| Dinner | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other cooking | ☐ | ☐ | ☐ | ☐ | ☐ |

1. On average, how many times per week do the following activities occur inside your home? Enter “0” if occurrence is less frequent than once a week.

Use shower (Times per week) …………………

Use bath or indoor Jacuzzi (Times per week) …………………

Use dishwasher (Times per week) …………………

Use washing machine (Loads per week) ………………..

Hang clothes to dry indoors (Loads per week) ………………..

1. **Window Opening**
2. On average, how many hours per day are your windows open?

|  | 0 hour per day | 1 to 2 hour per day | 2 to 8 hours per day | 8 to 16 hours per day | More than 16 hours per day |
| --- | --- | --- | --- | --- | --- |
| Summer | ☐ | ☐ | ☐ | ☐ | ☐ |
| Fall | ☐ | ☐ | ☐ | ☐ | ☐ |
| Winter | ☐ | ☐ | ☐ | ☐ | ☐ |
| Spring | ☐ | ☐ | ☐ | ☐ | ☐ |

1. **Indoor Activities**
2. On average, how often do the following activities occur inside your home?

|  | Never | Few times a year | Few times a month | Few times a week | Every day |
| --- | --- | --- | --- | --- | --- |
| Smoking | ☐ | ☐ | ☐ | ☐ | ☐ |
| Burn candle or incense | ☐ | ☐ | ☐ | ☐ | ☐ |
| Vacuuming | ☐ | ☐ | ☐ | ☐ | ☐ |
| Use cleaning agent for floor cleaning | ☐ | ☐ | ☐ | ☐ | ☐ |
| Use spray air freshener | ☐ | ☐ | ☐ | ☐ | ☐ |
| Use pesticide spray | ☐ | ☐ | ☐ | ☐ | ☐ |
| Use paints, glue, solvents (e.g., hobbies, home repairs) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Use humidifier | ☐ | ☐ | ☐ | ☐ | ☐ |
| Use dehumidifier | ☐ | ☐ | ☐ | ☐ | ☐ |

1. **Other Indoor Sources**
2. Are plug-in or stick air fresheners, or other scented decorations, used in your home?

……. Yes

……. No

……. Don’t know

1. Do occupants wear shoes in your home?

……. Yes

……. No

……. Don’t know

40. How many dogs, cats, or other furry pets are in the home?

Number of Pets: ………………

1. **Use of Air Cleaners**
2. Do you use a stand-alone (portable) air filter, air purifier, or air cleaner in the home?

……. Yes

……. No

……. Don’t know

1. Where is your stand-alone (portable) air filter, air purifier, or air cleaner located in your home? Select all that apply.

……. Master bedroom

……. Other bedroom(s)

……. Living room

……. Home office

……. Other. Please describe: ……………........................................

1. Has anyone in the household been diagnosed with asthma?

……. Yes

……. No

……. Don’t know

1. Has anyone in the household been diagnosed with allergies?

……. Yes

……. No

……. Don’t know

1. **Demographic Information**

The next questions will help us interpret the results of the survey. All responses will be kept confidential.

1. Please indicate the number of household member(s) in the following age categories.

Number of household member(s)

0 to 17 Years Old ……………………

18 to 65 Years old ……………………

Over 65 Years old ……………………

1. What is the highest education level of head of household?

…….. No schooling completed

…….. 1 to 8th grade

…….. 9th to 12th grade

…….. Completed high school (high school diploma, GED credential)

…….. Some college

…….. Associate’s degree

…….. College degree (Bachelor’s degree)

…….. Graduate degree (Master’s, Professional school, Doctorate degree)

1. Please indicate all races and/or ethnicities of people living in your household.

…….. American Indian, Alaska Native

…….. Asian or Pacific Islander

…….. Black, African American

…….. Hispanic/ Latino

…….. White, Caucasian

…….. Other, specify: ………………….

…….. Mixed race, specify: ………………….

1. What is the total income of all member(s) of your household combined?

…….. Less than $35,000

…….. $35,000 to $ 49,999

…….. $50,000 to $ 74,999

…….. $75,000 to $ 99,999

…….. $100,000 to $150,000

…….. Greater than $150,000

1. **End of Survey**

Thank you for filling out this survey! Your data is very valuable to our understanding of indoor air quality and mechanical ventilation in new California homes.

Please return your completed survey in the envelope provided.

If you have any questions about the survey, please contact: [LBNL contact provided]

1. Pre-filled for each home [↑](#footnote-ref-1)
2. Pre-filled for each home [↑](#footnote-ref-2)