**NAVAJO EPA**

**Navajo Home Heating Survey**

**Instruction:**  *Hello my name is \_\_\_\_\_\_\_\_\_\_\_. Navajo EPA is conducting a survey to assess the home heating habits of the members of the Navajo community. Findings from this survey will help educate community members about the use of wood and coal burning stoves inside the home. We anticipate the survey will take approximately \_\_\_ minutes to complete. If you agree to participate, you will receive \_\_\_to compensate you for your time and participation. All responses will remain confidential. Thank you for taking time to participate in this effort.*

**I. Demographics**

1. Gender
* Male
* Female
1. In which age category do you fall?
* 18−24
* 25−34
* 35−44
* 45−54
* 55−64
* 65−74
* 75 and older
1. In which community do you currently reside?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Including yourself, how many people live in your household? [*Please list number of people for each audience and how long they are home during the day]*

\_\_\_Children [17 and under]

\_\_\_Adults [18 −34]

\_\_\_Adults [35−44]

\_\_\_Adults [45−64]

\_\_\_Elders [65 and older]

**II. Stove conditions/ wood and coal conditions/ burn frequencies [*Answer all that apply*]**

1. How many heating stoves do you have in your home, and where are they located?

Stoves [*List total number of stoves*] \_\_\_\_\_\_\_\_\_

Location(s) in home \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What primary type of stove are you using to heat your home?
* Wood burning, including pellet
* Coal burning
* Propane
* Electric
* Natural gas
* Portable fuel oil/ kerosene heating
* Other \_\_\_\_\_\_
* None
1. Do you have a secondary heating stove in your home?
* Yes [skip to next question]
* No [skip to question #9]
1. If so, which type is it? [*Check all that apply*]
* Wood burning
* Coal burning
* Propane
* Electric
* Natural gas
* Portable fuel oil/ kerosene heating
* Other \_\_\_\_\_
1. If you own a wood burning stove, which of the following is it?
* Fireplace
* Fireplace with wood stove insert
* Wood burning stove
* Outdoor wood boiler
* Pellet stove
* Homemade [*describe*] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. How old is your heating stove(s)?
* Less than 5 years old
* Less 6−10 years old
* More than 10 years old
* More than 20 years old
1. What type of fuel are you using in your wood or coal burning stove? [*Check all that apply*]
* Coal [*list type*] ­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Firewood [*list type*] ­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Both
* Wood pellets
* Other\_\_\_\_\_\_\_
1. If you have a wood or coal burning stove, where do you get your fuel?
* Coal
	+ Buy [list where] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Free [list where] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Wood \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Cut your own
* Buy [list where] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Free [list where] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Gathered debris
* Construction site
* Demolition site
* Recycled scraps
1. If you are cutting wood, are you getting a permit to cut wood from the U.S. Forest Service or Navajo Nation Forestry?
* Yes
* No (skip to question 17)
* Do not cut wood
1. In your area, are you allowed to harvest wood for heating purposes during the following seasons?
* Winter (December, January, February)
* Spring (March, April, May)
* Summer (June, July, August)
* Fall (September, October, November)
1. How many months do you store and dry your wood before burning it?
* \_\_\_\_ months
* Do not store or dry/burn immediately
1. Do you know the moisture count of the wood you use, and if so, what is it?
* \_\_\_\_ percent
* Do not know
1. How many cords of wood do you burn in a typical season? How many pounds of coal? [*If unsure, please give volume estimate, e.g., 1 pickup truckload. Note to interviewer: Show graphic “Estimating How Much Firewood You Use.”*]
* Coal

\_\_\_\_\_\_ lbs.

\_\_\_\_\_\_ tons

\_\_\_\_\_\_ other [list type] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Wood

\_\_\_\_\_\_ cords

\_\_\_\_\_\_ other [list type] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What type of fuel do you use to start your fire? [*Check all that apply*]
* Coal
* Small pieces of wood
* Newspaper
* Trash
* None, use gas or pellet
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. How long do you leave the stove door open when first starting your fire?
* Never
* Less than 2 mins
* 5−10 mins
* 10−15 mins
* Whole time the fire is burning
1. Does your stove have a chimney, and where is it located?
* Through the window
* Up the roof
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Do you have smoke residue in and around your stove? (The walls behind the stove or ceiling above may have discoloration due to soot releasing from it.)
* Yes
* No
1. Who in your family is primarily responsible for operating the wood or coal burning stove in your home? (Check all that apply)
* Self
* Spouse
* Other family member [list] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Child(ren)
1. What is the square footage of your home?

\_\_\_\_\_\_\_ Sq. ft.

\_\_\_\_\_\_\_Do not know [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Do you have an air filter in your home?
* Yes [skip to next question]
* No [skip to question #27]
1. Does use of the air filter help reduce smoke inside your home?
* Yes
* No

1. How would you rate the ventilation in your home, particularly near your stove? Is there a door or window close to it?
* Good
* Average
* Poor
* No ventilation
1. If so, do you use it when burning your wood or coal burning stove?
* Yes
* No

1. Does your home have any or all of the following devices? [*Check all that apply*]
* Smoke alarm
* Carbon monoxide detector
* Fire extinguisher
* None of these [skip to question #31]
1. Are these devices currently working?
* Yes
* No
1. During which months of the year do you use your wood or coal burning stove? [*Check all that apply*]
* January
* February
* March
* April
* May
* June
* July
* August
* September
* October
* November
* December
1. How often during these months do you burn?
* Every day
* During the day
* In the evenings
1. During your burn season, how many hours of the day do you burn?
* 0−2 hrs.
* 4−6 hrs.
* 6−12 hrs.
* 12−18 hrs.
* 18−24 hrs.
1. During the day, how much time do family members occupy the home?

\_\_\_Children [17 and under]

\_\_\_Adults [18 −34]

\_\_\_Adults [35−44]

\_\_\_Adults [45−64]

\_\_\_Elders [65 and older]

1. What do you do to clean the stove?
* Clean out the ashes
* Vacuum in/around it
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. How often do you clean the ashes from your stove?
* Cleaned after each use
* Once a week
* Once a month
* Once or twice a year
* Once a year
* Never cleaned it
1. How do you collect and dispose of the ashes you clean from your stove?
* Store in metal container then dispose in landfill
* Store in outdoor pile
* Use in garden or landscaping
* Other [describe]\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. What do you do to maintain the stove?
* Have it checked regularly by professional contractor
* Do it yourself
* Do not maintain
1. What type of maintenance do you do to your stove?
* Clean the chimney
* Repair cracks
* Replace chimney
* Maintain the stove stand
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. How often are the heating stoves in your home maintained?
* After each use
* Once a week
* Once a month
* Once or twice a year
* Once a year
* Never
1. Have you had problems with your heating stove within the last 6 months?
* Yes [skip to next question]
* No [skip to question #43]
1. If so, what type of problem you have had with it?
* Excessive smoke
* Difficulty starting fire
* Not enough heat
* Door does not close properly
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Have you noticed any cracks or gaps in your heating stove?
* Yes [skip to next question]
* No [skip to question #45]
1. If so, how do you fix them?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Do you see or smell smoke in your home when heating with wood or coal, If so how often?
* Yes, but only in the first few minutes when starting the fire
* Yes, all the time
* Sometimes
* Infrequently
* Never
1. Do you anticipate acquiring a new or different type of heating stove within the next 2 years?
* Yes
* No
* Do not know
1. Would you buy or trade in your current wood or coal burning stove for a more efficient stove if you were to receive a financial incentive paid to you by the tribal government or federal government?
* Yes
* No
1. If you knew that to buy and install a new wood or coal burning stove would cost around $3000, how much of an incentive would it take for you to replace your current stove with a new one?
* No incentive needed
* $500−$1000
* $1001−$1500
* $1501−$2000
* $2001−$2500
* $2501−$3000
* Government pays: $\_\_\_\_\_, you pay $\_\_\_\_\_
* Other\_\_\_\_\_\_

**III. Health information**

1. When you look for health information, where do you go? [*Check all that apply*]
* Traditional healer/”medicine man”
* Books
* Brochures, pamphlets
* Organizations
* Navajo Division of Health
* Indian Health Service
* Family
* Friend/Co worker
* Health care provider
* Internet
* Library
* Magazine
* Newspaper
* Telephone
* TV
* Chapter House
* Community Health Representative (CHR)
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Do not look or go anywhere

**IV. General awareness**

1. Have you heard about any health issues associated with using a wood or coal burning stove inside the home?
* Yes [skip to next question]
* No [skip to question #52]
1. If so, what have you heard?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If not, would you want to know more about how use of wood and coal burning stoves inside the home can cause health issues?
* Yes
* No

**V. Current health condition of family household**

1. Do you or anyone in your family smoke or use tobacco products, including ceremonial use?
* Yes [skip to the next question]
* No [skip to question #56]
1. Does this person smoke indoors or outdoors?
* Indoors
* Outdoors
1. How often does this person smoke?

\_\_\_ Three times or more per day

\_\_\_ Once a day

\_\_\_ A few times per week

\_\_\_ A few times per month

1. Do you or any family member in your household suffer from chronic respiratory illnesses or conditions, such as: [*Check all the apply*]
* Allergies, runny nose, watery eyes
* Angina (chest pain or discomfort)
* Asthma
* Chronic bronchitis
* Chronic obstructive pulmonary disease (COPD)
* Congestive heart failure
* Emphysema
* Heart disease
* Lung cancer
* Sleep Apnea Syndrome
* None (skip to question #59)
1. Who in your family suffers from any one of these illnesses or conditions? *[Check all that apply]*
* Children
* Adults
* Elders
1. Who is the primary care provider for these illnesses or conditions?
* Indian Health Service unit
* Traditional healer/”medicine man”
* Private doctor
* Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Do you or any family member have diabetes?
* Yes [skip to next question]
* No [skip to question #61]
1. Who in your family has diabetes? *[Check all that apply]*
* Children
* Adults
* Elders

**VI. Health information preference**

1. If Navajo Nation EPA wanted to inform members of your community about the risk associated with the use of wood and coal burning stoves inside the home, what would be the best way to get this information to you?
* Health care provider
* Community organization
* Navajo Nation Division of Health
* Community Health Representative
* Indian Health Service
* Family member
* Radio
* TV
* Newspaper
* Mail
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. What type of health messages would you find appealing?
* Personal stories
* Facts sheets
* Public service announcement (radio, print ad such as poster)
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Who would be a trusted source to get this health information out to your community?
* Community leader/spokesperson
* Doctor/health care professional
* Community elders
* Other [list] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**VII. Additional demographics**

1. What is the highest level of education you have completed?
* Never attended school
* Grade school
* Less than high school graduate/some high school
* High school graduate or completed GED
* Some college or technical school
* Received 4-year college degree (Bachelor’s degree)
* Advanced degree (post graduate degree)
1. What is your occupation?
* Employed full time
* Employed part time
* Unemployed
* Homemaker
* Student
* Retired
* Disabled
* Other [describe] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Prefer not to respond
1. What is your annual household income?

\_\_\_\_ $0 – 1,000

\_\_\_\_ $1,000 – $3,000

\_\_\_\_ $3,000 – 6,000

\_\_\_\_ $6,000 – $9,000

\_\_\_\_ $9,000 – $12,000

\_\_\_\_ $12,000 – $15,000

\_\_\_ $15,000+