

# Smoke Alarm Messaging

At-Home Intercept Interview Results

Prepared for Vision 20/20

July 2013



# THANK YOU

We'd like to thank First Alert for funding this round of research!



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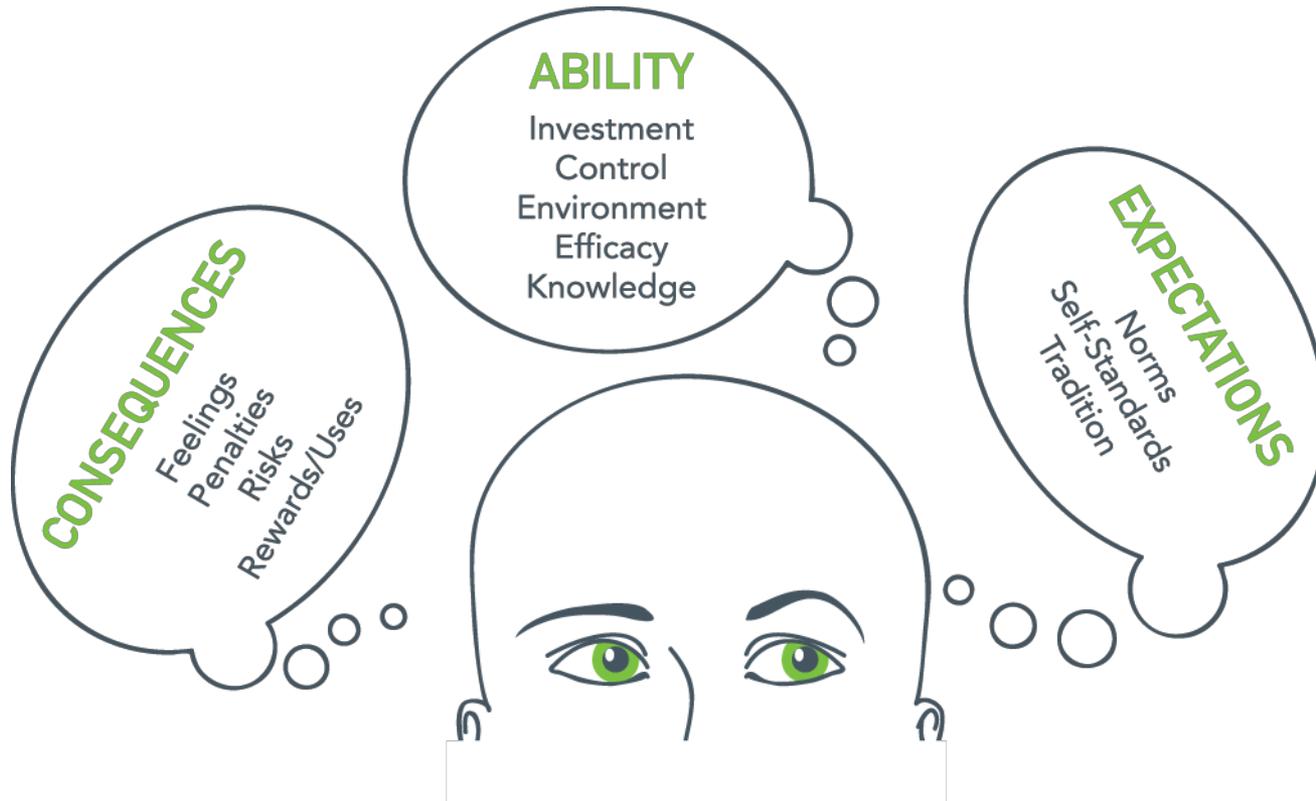
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# WHO WE ARE

## Education and awareness aren't enough.

Surrounding our decisions are other powerful factors like norms, efficacy, and emotion, which are often overlooked. Over the years, we have integrated behavioral science with real-world experience to create a methodology that examines behaviors against 12 common behavioral determinants .





# RESEARCH BASICS

GOALS, METHODOLOGY, SAMPLE BREAKDOWN

# RESEARCH GOALS

Previous research has established an overall message frame for home fire prevention – “Fire is Everyone’s Fight™” – along with effective messaging for kitchen fire safety – “Keep an Eye on What You Fry.”

Questions remained around what would make for the most effective **smoke alarm messaging**.

The goal of this study was to explore the behavioral determinants of smoke alarm installation and maintenance within the context of the home in order to uncover motivations to construct a compelling message for homeowners.



# METHODOLOGY

- In April 2013, interviews were conducted with fire chiefs in Tallahassee, Fla. and Alexandria, Va. Interviews covered a number of topics related to smoke alarms and home fire safety, but the **primary purpose was to identify neighborhoods** that experts considered at **“high risk.”**
- Between June 16 and 20, **45 interviews were conducted in Tallahassee and 25 interviews conducted in Alexandria** among home-owners and renters.
- Interviews focused on residents’ behavior and perceptions related to smoke alarms and tested frameworks for potential interventions and messages.
- Tallahassee interviews were conducted in the Apalachee Ridge, Frenchtown and Westview neighborhoods\*. Alexandria interviews were conducted in the Seminary Hill and Lynhaven neighborhoods\*\*.

\*Specific streets include: Cochran, Pontiac, Millard, Hancock, Richmond, Nylic, Charlotte, Kenwood, Preston, Woodward, Dent, Dover, Delaware, Dade, Dewey, Dunn and Golden

\*\*Specific streets include: Hudson, Vermont, Utica, Ingram, Underwood and Wesmond



# SAMPLE BREAKDOWN

	Tallahassee (N=45)	Alexandria (N=25)		Tallahassee (N=45)	Alexandria (N=25)
Male	20	11	<1 yr in home	8	3
Female	25	14	1-3 yrs in home	15	6
18-24	7	--	3-5 yrs in home	6	4
25-34	6	12	5-10 yrs in home	2	1
35-45	5	3	10-20 yrs in home	7	5
46-55	8	3	20+ yrs in home	7	6
56-65	11	4	Children in home	14	8
65+	8	3	Seniors in home	7	1
White	7	15	Disabled in home	3	--
Black	37	7	Working alarms in home	38	22
Latino	--	3			
Other Race	1	2			





# CURRENT BEHAVIOR

OWNING, TESTING AND DISABLING SMOKE ALARMS

# OWNING A SMOKE ALARM

- Most participants had at least one smoke alarm, and most were confident their alarm worked.
  - However, several participants in Tallahassee who were asked to test their alarm discovered their alarm did not work.
- Of the few who openly said they did not have a working smoke alarm, the reasoning was surprisingly blasé. They mentioned that:
  - they simply never got around to replacing one they removed that wasn't working
  - there wasn't one installed when they moved in
  - there was a general perception that the risk of fire was rather low
- One respondent in Alexandria mentioned that her parents had lived at the residence for 20 years and yet they “never got around to it.”



# TESTING A SMOKE ALARM

- Most participants did not use the button to test their alarm. A few participants in Alexandria were not aware of the test button.
- A large number **relied on hearing the alarm go off occasionally** due to smoke from cooking to “tell” that their alarm was working.
- Only a few participants routinely pushed the button to test their alarm. Most claimed they had a regular schedule, but few could provide specifics.
  - Most routine testers were simply in the habit
  - Some participants used a calendar to remind them
  - A couple had landlords that either tested the alarms or required tenants do so as a condition of the lease
- Many participants did not test their alarm because it was out of reach, including many who were elderly or disabled.
- Reasons given for not testing smoke alarms included:
  - The risk of fire is low
  - Alarms are “out of sight, out of mind”
  - It’s just “not something you think of”



# DISABLING SMOKE ALARMS

- Although some participants said they had disabled a smoke alarm at one point or another, most claimed to have **reconnected it shortly thereafter**.
- The most frequent reason for disabling an alarm was the low-battery chirp.
  - When an alarm went off because of **cooking smoke, most participants opened a window and fanned the smoke away** from the alarm.
- A few complained about alarms going off due to misinterpretation of steam from the shower or other “screwy” activities.
  - About half who reported their alarm acting strange replaced it, the others simply removed or disabled it.
- The most frequent prompt for reconnecting an alarm was visual – either the disabled alarm or the cover was in plain sight or in the way of something else people needed.





# TESTING COMMUNICATION

POTENTIAL INTERVENTIONS AND MESSAGING

# INTERVENTIONS (1)

“Deputize your children as ‘fire inspectors’ to help ensure your home's safety. Follow along a checklist provided by the fire department with them to make home fire safety fun and easy.”

- This intervention resonated very strongly with a number of parents
- The effectiveness of the intervention is more questionable. Among other things, the chances for this intervention to work depend on:
  - the **age of the child**: 8 to 12 seemed about right.
  - the **personality type of the child**: one mother feared one child would be “too anal” and drive her crazy while the other would be too lazy.
- Several parents said this intervention would **provide helpful reminders** to the family while **teaching their children** about fire safety.



# INTERVENTIONS (2)

**“Sign-up to protect your neighborhood by testing your neighbors alarm.”**

- A good portion of participants did not want anyone coming into their house or even knocking on their doors, because:
  - They did not trust their neighbors and worried about safety
  - They were embarrassed by the mess
  - They worried that official visitors would find and report code violations
- Many appreciated the community aspect of this intervention, but had reservations about it being feasible.
- A few participants who said they wouldn't allow others in their house did find the intervention valuable simply for the reminder to test their alarms.
- Among those who were open to visits, they preferred easily identifiable community groups, such as firefighters, boy scouts and church or civic groups.



# INTERVENTIONS (3)

“Once-a-year firefighters will drop reminders to inspect your alarm and change your batteries with door hangers.”

- Many participants were open to having a door hanger left at their house to remind them to test their alarms. A few called it a waste of money, and a couple mentioned that they may still ignore it.
- Some people liked idea of a phone call, but others said they would not be as effective, citing typical criticisms of phone outreach: no answers, annoyance and easy to ignore. A similar response was given for emails. Several (mostly younger) participants said they would like to receive a text message to remind them to test their alarms.
- On the whole, everybody agreed that **the physical nature of the door hanger** would be much **more likely to get their attention and inspire them** to act than calls, emails or texts.
- Dovetails nicely with current focus and emphasis of fire department outreach.



# MESSAGING (1)

“Want to know the best time to test your smoke alarm? Right now.”

- In Tallahassee, the “right now” message did not resonate at all.
- In Alexandria, this message resonated well for some, particularly young men.
  - It rated similarly to the “4 out of 5” message in Alexandria due primarily to its **direct and simple nature**.
  - It created immediacy for people and forced them to confront something they unintentionally put off.
- One issue with the immediacy, however, as a couple participants pointed out, is that you have to reach people at home. They won’t remember to check the alarm “right now” if they heard it an hour prior during the commute home, for instance.



# MESSAGING (2)

**“Four out of 5 homes in your area have working smoke alarms. Help us find the one that doesn't. We are all safer when everyone is safe.”**

- The “4 out of 5” message was a distant second to “live / love.”
- It resonated mostly with more educated residents or those who prided themselves on not being swayed by emotion.
- It also made a few realize not having a smoke alarm put the community, not just the homeowner, at risk.
  - A few in Alexandria were surprised by the statistic in both ways: some thinking that it wasn't as big a problem as they would have thought, others thinking it was much worse than they anticipated.



# MESSAGING (3)

“Where should you put working smoke alarms? One in or near the bedroom of [every person you want to live/everyone you love], plus at least one on each floor.”

- The "live/love" message resonated the most with participants, primarily because of the combination of
  - **“new” how-to information** (exactly where to put alarms and the idea that you needed more than one in a house) and
  - **emotion** (the live / love message, which “humanized” the risk by connecting having working smoke alarms to keeping loved ones safe while sleeping)
- For most who responded to this message, LIVE and LOVE were interchangeable. However, **those who disliked the phrase “people you want to LIVE” really disliked it. Conversely, those who enjoyed it thought it was incredibly effective.**
- The recommendation (every level, every bedroom) struck a number of people as overkill and unnecessary.
- Even when it wasn’t rated the highest in terms of memory or likability, this **message tended to make most people think differently about smoke alarms.**





# MOVING FORWARD

A FRAMEWORK FOR MESSAGE DEVELOPMENT

# MESSAGE FRAMEWORK

People know they should have an alarm and they know that home fires are rare. So our target behavior suffers from a lack of IMMEDIATE REWARDS and NEW INFORMATION. Installing or testing an alarm is an easy action to put off.

The most effective message we tested (live / love) offered an immediate reward (you can show you care) and new information (one alarm per bedroom) about how to act.

## RECOMMENDED MESSAGE RECIPE



To effectively influence smoke alarm-related behaviors, messages should focus on immediate rewards (versus long-term safety) and include new information people can use.

# INSTALLATION MESSAGE #1

Desired Behavior	Install alarms in every bedroom and every floor		
New Information	Immediate Reward	Message	Alternative Message
Alarms should be installed in every bedroom and on every floor	You can use smoke alarms as a way to show people you care about them.	Where should you put working smoke alarms? One in or near the bedroom of everyone you love, plus at least one on each floor.	Where should you put working smoke alarms? One in or near the bedroom of everyone you want to live, plus at least one on each floor.

Possible tag line that takes advantage of this reward:

- **Where there's love, there are smoke alarms.**



# Where do you put your smoke alarms?



In the bedroom of  
everyone you love  
(and at least one on every floor).

*Where there's love, there are smoke alarms*

*RANDOM FIRE DEPARTMENT  
Fire is Everyone's Fight™  
someurl.com*



# INSTALLATION MESSAGE #2

<b>Desired Behavior</b>	Install alarms in every bedroom and every floor	
<b>New Information</b>	<b>Immediate Reward</b>	<b>Message</b>
Most people have working smoke alarms	Being part of the norm	Four out of 5 home have a working smoke alarm. Can you help us find the fifth one?

Possible tag lines that take advantage of this reward:

- **Because everyone deserves to live.**
- **Because Fire is Everyone's Fight™.**



# TESTING MESSAGE

Desired Behavior	Pushing the testing button on your alarm every month		
New Information	Immediate Reward	Possible Message #1	Possible Message #2
Smoke alarms can stop working without you knowing	You can use smoke alarms as a way to show people you care about them.	If you could push a button to save her/his life, would you?	Keep every smoke alarm working for your family.

Possible tag lines that take advantage of this reward:

- **Where there is love, there are smoke alarms.**
- **Trust your family. Test your alarms.**



# REPLACEMENT MESSAGE

<b>Desired Behavior</b>	Look for the manufacturer's date; replace if the date is 8-10 years old		
<b>New Information</b>	<b>Immediate Reward</b>	<b>Message</b>	<b>Alternative Message</b>
Alarms that are more than 10 years old may not work	You can use smoke alarms as a way to show people you care about them.	Is your alarm too old for your kids?	The best home improvements are about more than your home.

Possible tag lines that take advantage of this reward:

- **Where there is love, there are smoke alarms.**



# USING THE FORMULA ELSEWHERE

Desired Behavior		
New Information	Immediate Reward	Message
<b>[IS THERE NEW INFORMATION TO SHARE?]</b>	You can use smoke alarms as a way to show people you care about them.	<b>[?]</b>

Desired Behavior		
New Information	Immediate Reward	Message
<b>[IS THERE NEW INFORMATION TO SHARE?]</b>	You can use smoke alarms as a way to show people you care about them.	<b>[?]</b>



 **NEXT STEPS**

# NEXT STEPS

We have a clear understanding of how people think about smoke alarms and the risk of home fires – that they don't really think about either. We also now have a better understanding of the type of approach that will force them to think differently.

**The next step is creative development**, using the existing framework and research to:

- Develop Creative
  - build messages
  - identify tag lines
- Pilot/Evaluate Interventions
  - improve outreach programs
  - develop outreach kits

These kits would include collateral reflecting revised messaging and intervention methods. An example of what might be included is this mock door-hanger to the right.





# APPENDIX

INSTRUMENTS

## Vision 20/20 Fire Department Expert Interview Guide

### **Interview Objectives:**

- Discuss most important consumer behaviors and attitudes related to alarms
- Discuss what's been effective in the past—both outreach and message content
- Explore what resources would help fire departments the most
- Identify high-risk areas for in-home interviews

### **INTRODUCTION (4 MIN)**

Hello, as you heard when we set up this interview, we're talking with fire prevention experts like you to help the Vision 20-20 project develop better communication vehicles and outreach activities related to smoke alarms. This follows a similar effort we did with stove top cooking safety and is also part of a larger national effort connected to the theme--Fire is Everyone's Fight.

We're talking to you because we'd like to get your opinions about how people perceive smoke alarms and how to talk to people about smoke alarms. This interview should take about 30 minutes and will be followed by in-home interviews with VA/FL residents.

1. So I can understand your perspective, can you briefly tell me what your role is with the Department and how long you've been in fire prevention?

### **MOST IMPORTANT BEHAVIORS AND ATTITUDES (12 MIN)**

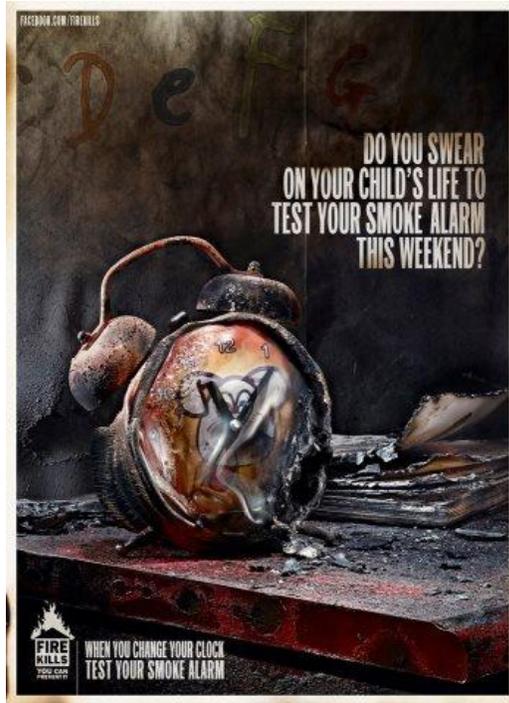
2. There are obviously a number of behavioral issues that come into play regarding smoke alarms—from proper installation to testing/maintenance to not disconnecting them. Thinking about the people around here who are most likely to die or be injured in a fire at home, those considered the highest-risk, what would you say is the **most important action** related to smoke alarms that would make a meaningful difference if more people did it?
  - a. Why is this the most important? Anything else?



- b. Why don't more people do this now? Do you have any ideas on what might motivate them to do it?
  - c. What tools or resources would be helpful to your fire department in encouraging people to do this? Why?
  - d. What don't you need? Why?
3. It seems like some people may not fully appreciate the value of smoke alarms. We know they disconnect them when they become a nuisance, and some people simply don't think they're that important.
- a. Why do you think some people feel this way about alarms? Is there a particular audience where you see this kind of attitude more often?
  - b. Is there any fundamental information about alarms that you think some people don't know? What do you tell people who think alarms are not important?
  - c. What do people who value alarms know that that people who think alarms are not important do not?
4. As we mentioned, we'll be talking directly with VA/FL residents as part of this project. Is there anything in particular you think we should ask? Is there anything particularly you would like to know?

<b>PAST INTERVENTIONS (7 MIN)</b>
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5. Could you tell me about some interventions you've either done or know about related to this issue that you thought worked well? This can be direct outreach or communications distributed in the community.
- a. What was the effort? Who did it?
  - b. Why do you think it worked well? What kind of impact did it have?
  - c. Thinking just about messages and communications, what are the most influential things for consumers to hear about alarms?
  - d. Do things like this work in your opinion? Why or why not? SHOW POSTER OR EMAIL AHEAD OF TIME IF INTERVIEW IS BY PHONE



6. What kind of things have you seen that you thought did not work? What about it was not helpful, in your opinion?

### **HIGH RISK LOCATIONS (5 MIN)**

7. As I mentioned earlier, this is the first phase of our research. In the next phase we will be going around to at-risk areas of the community to conduct interviews and test materials. We're defining at-risk areas as those neighborhoods with the highest percentage of homes missing smoke alarms or homes with inadequate smoke alarm maintenance and testing. We have three days to conduct interviews.
  - a. What neighborhoods do you think we should focus on? What streets in particular?
  - b. Are these neighborhoods predominantly English-speaking? (While it would be ideal to be able to interview in high-risk areas regardless of language, we unfortunately won't be able to do so.)
  - c. We recognize the need for flexibility in our timing of these interviews, but what times of day do you think we'd have the most success?
  - d. How do you think we are likely to be received? Why?
  - e. Are there any other specifics or pointers you can provide about reaching out to these groups in order to encourage participation?

## **CONCLUSION (2 MIN)**

8. We've reached the end of our interview.
  - a. Before we wrap things up, are there any additional things you'd like to mention that we should keep in mind as we go about this research?
  - b. Do you have any questions for me?

That's the end of our session. Thanks and we very much appreciate your participation.

## Intercept Interview Script

Good morning/afternoon/evening.

My name is \_\_\_\_\_ and I am talking to people about fire safety. This is a research project. I am not selling anything and will not be asking you to buy anything. I would like to ask you some questions about fire safety and get your honest opinions on some advertising materials. Would you be willing to answer a few questions? It takes 15 minutes and I can offer you a \$10 gift card for your time.

The first couple questions are just for statistical purposes so we can combine your household with others like it.

### **HOME DESCRIPTION**

1. How long have you lived here?
2. Do you own or rent?
3. How many smoke alarms do you have in your home [if answer is zero, skip to Q4]?
  - a. Where are they?
  - b. Is there one on each floor of your home?
  - c. What about in a basement or attic?
4. [IF NONE at Q4] Why don't you own a smoke alarm? [PROBE for whether they removed the alarm and didn't replace it, if it was never there or any other reason]
5. Do any children under 18 live with you? What ages?
6. Do any older adults or persons with disabilities live with you?

### **EFFICACY**

7. Do you know if all the smoke alarms in your home work?
8. [IF YES at Q7] How do you know they're working?  
[IF NO at Q7] How could you find out if they're working?
9. What does/would that tell you?
10. How often do/should you do that?
  - a. Why not more often?
11. Could you find the closest alarm that you can reach on your own, one that isn't connecting to a larger alarm system, and press the button now? Tell me what happens.
12. What does that tell you? [PROBE FOR EVERYTHING THE ALARM SOUND TELLS YOU; PROBE WHETHER THEY'VE EVER TESTED USING THE BUTTON BEFORE]

## **REWARDS**

13. How do/did you feel right after you test/ tested your alarm [today]?
  - a. Why?

## **NORMS**

14. Do most people in your neighborhood test their alarm more or less often than you do?
15. Do most of your family members and close friends outside of your home test their alarm more or less often than you do?
16. Why don't others do it more often?

## **BATTERIES**

17. Have you ever changed the batteries in all your smoke alarms?
  - a. [IF YES] What reminded you to do that?
  - b. [IF NO] Have you ever changed the batteries in any of your smoke alarms?
    - i. Why or why not?

## **DISABLE**

18. Which of the alarms in your home have you ever disabled, for instance removing the alarm entirely, disconnecting it or removing the batteries?
  - a. Why did you do that?
  - b. How long did the alarm stay disabled?
  - c. What (if anything) prompted you to reconnect it?

## **NEW ALARMS**

19. How old is your oldest smoke alarm?
20. Have you ever replaced any smoke alarms in your home?
  - a. Why or why not?
21. Do you think that smoke alarms need to be replaced?
  - a. [IF YES] How often?

## **INTERVENTION TEST**

22. I'm going to read you three things the fire department might do to get you to test your smoke alarms regularly and keep them in good order.
- A. Deputize [INSERT "your children" IF HAVE KIDS, INSERT "The Girl Scouts" IF NOT] as "fire inspectors" to help ensure your home's safety. Follow along a checklist provided by the fire department with them to make home fire safety fun and easy.
  - B. Once-a-year firefighters will drop reminders to inspect your alarm and change your batteries with door hangers.
  - C. Sign-up to protect your neighborhood by testing your neighbors alarm.
23. Do any of these sound like something that might get you to test your smoke alarms more often?
- a. Why?
24. What might make this better?
- a. PROBE Concept A on other children's groups, such as the Girl/Boy Scouts, Boys and Girls Club, Youth Groups, Student Groups
  - b. PROBE Concept B on actual door-to-door interaction and automated phone calls or call center calls from firefighters
  - c. PROBE Concept C on other voluntary neighborhood inspectors, such as churches, neighborhood watches/associations
25. Do you have another idea the fire department might try?
- a. What is it?

## **MESSAGE TEST**

26. Now I'm going to read you three messages about smoke alarms.
- A. Where should you put working smoke alarms? One in or near the bedroom of every person you want to live, plus at least one on each floor.
  - B. Four out of 5 homes in your area have working smoke alarms. Help us find the one that doesn't. We are all safer when everyone is safe.
  - C. Want to know the best time to test your smoke alarm? Right now.
  - D. Where should you put working smoke alarms? One in or near the bedroom of everyone you love, plus at least one on each floor.

27. Which of these do you remember the most?
- a. Why?
28. Which of these stands out in your mind the most?
- a. Why?
29. Which of these would get you to think about smoke alarms differently?
- a. Why?

## **DEMOGRAPHICS**

These last couple of questions are strictly for analysis purposes and to ensure that we talk to a variety of people.

30. Can you please tell me your age?
31. To help us hear from a variety of people, please tell us, do you consider yourself Hispanic or Latino?
32. Which of the following best describes your race?
- a. African American/Black
  - b. Caucasian/White
  - c. Asian American
  - d. Native American
  - e. Native Hawaiian or other Pacific Islander
  - f. Other. Specify:
  - g. Refused
33. Were you born in the United States?
- a. [IF NO] Where were you born?
  - b. [IF NO] How long have you lived in the US?

Thank you so much for your time. [PAY STIPEND]

34. Gender [DO NOT READ]    Male    Female