

The Making of...

healthyhomes.gov



Lessons Learned and Sneak Preview

Sandra Williams Hilfiker, CommunicateHealth

Xanthi Scrimgeour, CommunicateHealth

Nikki Walker, Centers for Disease Control and Prevention

Kitt Rodkey, U.S. Department of Housing and Urban Development

Site Contributors

- Sponsored By:
 - U.S. Department of Housing and Urban Development
 - Centers for Disease Control and Prevention
- Contributing Partners:
 - Environmental Protection Agency
 - National Institutes of Health
 - U.S. Department of Agriculture
 - U.S. Department of Energy
- Contract Support:
 - CommunicateHealth Inc.
 - Emergint Technologies Inc.

Warm Up

- Have you looked for health information online?
- What about healthy homes information?
- Have you ever had trouble finding what you were looking for?

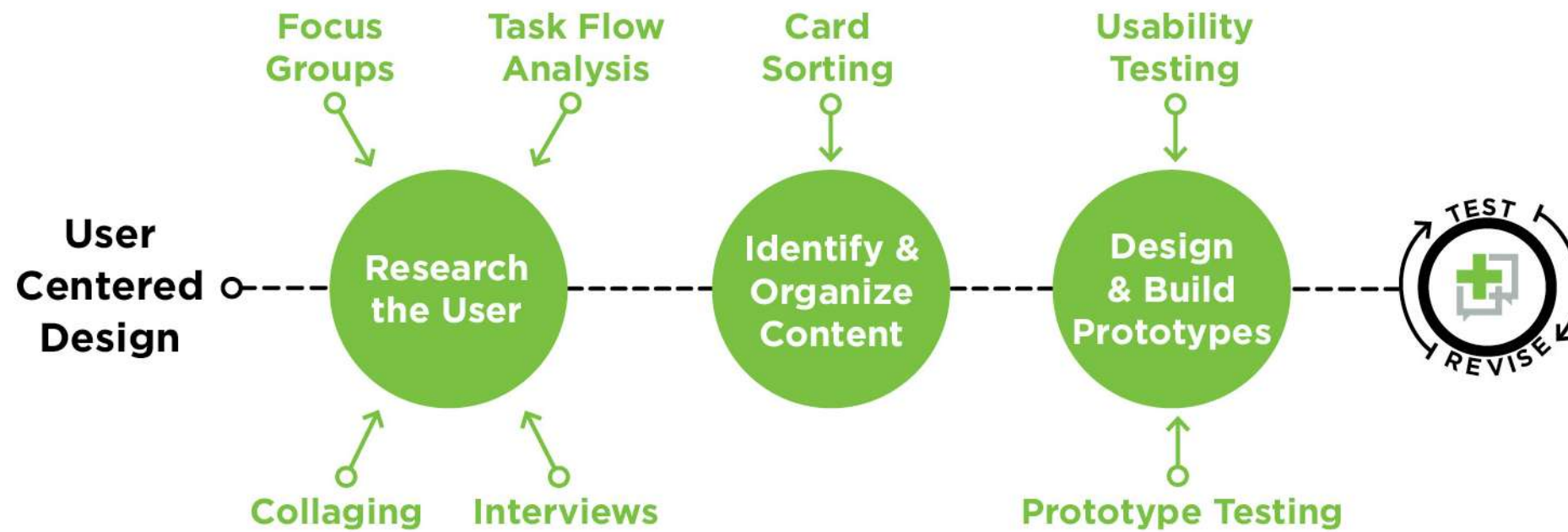
Vision

- Easy-to-use, one-stop-shop for actionable healthy homes information and tools
- User-centered, consumer-focused, and action-oriented
- Targeted to consumers: For launch -- middle to low-income parents

Goals

- Increase awareness of “Healthy Homes”
- Promote health literacy
- Focus on prevention
- Translate research into action
 - Incorporating health education & social marketing theory and best practices

User-Centered Design Process



ALL users benefit from improved readability and usability

Prototype Web site (designed to support users with limited literacy skills) as compared to original site

Time on Task (Mean)	Original Site	Prototype	Improvement
High literacy	14:19	5:05	+182%
Lower literacy	22:16	9:30	+134%
All users	17:50	6:45	+164%
Satisfaction (Mean)	Original Site	Prototype	Improvement
High literacy	3.73	4.58	+23%
Lower literacy	3.54	4.38	+24%
All users	3.67	4.51	+23%

High Literacy Users:
3x as fast with the revised site
93% success rate on revised site (compared to 68% with original)

Source: Summers, K., & Summers, M. (2005). Reading and navigational strategies of Web users with lower literacy skills.

Consumer Input

- Focus Groups: n=48
- Card Sort: n=16
- Prototype Testing: n=16
- Usability Testing: n=16 (2 tests of 8)

Partner/Organization Input

- Intermediary Interviews: 8 CDC & HUD grantees
- Discussions with Select Nonprofits: 5 organizations
- Healthy Homes Work Group: Quarterly meetings
- Review Board: Ongoing (quarterly meetings)
- 2011 National Healthy Homes Conference: Workshops & prototype testing at booth

Review Board

- First meeting held on March 3, 2011
- Co-chaired by CDC and HUD
- Individuals representing federal HH consumer Web content: HUD, CDC, EPA, DOE, USDA, NIH
- Contribute ideas to the site and review prototypes
- Help identify SMEs to review new content

Environmental Scan

Number of federal healthy homes Web pages for the public?

Environmental Scan Findings

- 1,664 Web Pages Inventoried
 - 1,100 Federal
 - Majority from EPA, NIH, CDC, HUD, & DOE
- Gaps in Content
 - Housing instability
 - Housing structure and design
 - Mental health
 - Accessibility
 - Falls, drowning, firearms

Environmental Scan Findings

- Gaps by Audience
 - Parents
 - Tweens & teenagers
 - Renters
- Gaps by type of Resource
 - Interactive tools
 - Tailored/personalized information
 - Clear action steps

Formative Research

Focus Groups

What's the first word that comes to mind
when you hear the phrase
'healthy homes'?

Focus Group Results

- A healthy home = clean and sanitized
- Health and safety are distinct concepts
- Want to know how actions are linked to health outcomes
- Want tailored information based on family members, renter vs. homeowner & type of house
- Want information on incentive programs

Focus Group Results

- Many skeptical of green products
- Time and cost are most significant barriers
- Want personalized and actionable information
- Want tips for involving their children and other family members
- Ability to share and rate contact

User Feedback

When I hear healthy homes, I think of diet and what to eat — I would not think of safety. I guess they go together, but it's not on my mind. I would expect to see things [on the site] about lifestyle too.



A good checklist for me to have -- it's nice to see it all in one spot, reminds me that I have done it, and it points out things I need to get done.



Stakeholder Feedback

What would you like to see on
healthyhomes.gov to meet the needs of
the public you serve?

Grantee Interview Results

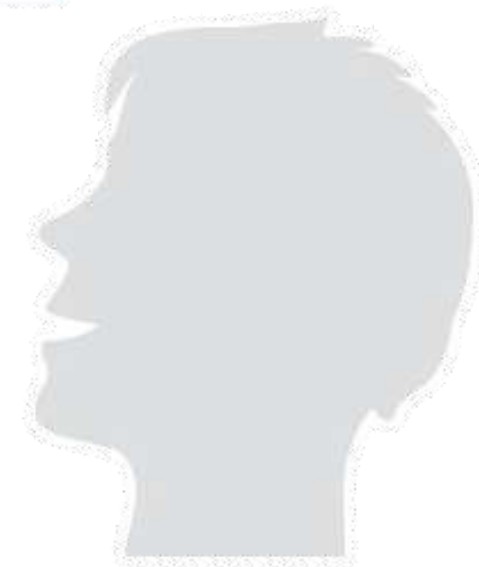
- Need for useful consumer information
- Want ways to collaborate with each other and with the government
- Consumers need help connecting the dots
- Need for action-oriented tools
- Observed barriers: lack of awareness, limited literacy, financial resources, landlord-tenant relationships

Collaborative Partner Interview Results

- Need for action oriented consumer focused site - one stop shop
- Concrete suggestions to help consumers connect the dots
- Distinguish between primary and secondary prevention
- Connect to existing resources and tools

Stakeholder Feedback

If you send me to a national Web site and give me information, that's fine, but that doesn't help me get the help I need. That's where it really has to be consumer-oriented, what can I get to help me right here, as opposed to over there?



Laura

Demographics:

- 28 years old
- Single mother of two (8 months and 4 years)
- Rents an **apartment** in the city
- **Healthy Home** = Happy, close-knit family



Primary information needs:

- Information on **renter rights** in her state
- Local **housing codes** and regulations
- Tips on talking to her **landlord**
- Safe ways to get rid of **pests**

Also interested in:

- Learning more about **green cleaning products** (cost-effectiveness, how to make your own)
- Tips on **childproofing**
- How to deal with **difficult neighbors** (trash, noise, smoking)

Somewhat tech savvy:

- Accesses the Web primarily through her cell phone, uses Google to find information

"I need to know what my rights are. I had an issue with a leak and I complained to my landlord, but it took almost 6 months for him to fix it."



Personas

Joe and Sara

Demographics:

- 33 years old
- Married with 1 dog and a baby on the way
- First time homeowners, a **townhouse** in the city
- **Healthy Home** = Eating well and being physically active



Primary information needs:

- A house **needs assessment** to find potential issues
- Changes that have the most **"bang for the buck"**
- Whether certain projects they want to take on are **easy to do yourself** or if they're best left to a professional

Also interested in:

- Learning about **environmental hazards** and testing for them (lead, radon, etc.)
- **Home safety** for protecting their investment (fire and flood safety)
- How to make their house **baby and pet-friendly**

"We feel like there's so much we need to know about taking care of a home. Where do we start? **How much do we have to spend?**"

Very tech savvy:

- Regularly use Internet, smart phones, and social networks



Will

Demographics:

- 43 years old
- A veteran, **married** to a smoker, has **2 kids (14 & 11)** — 1 with allergies and 1 with asthma
- Long-time owner of a **single-family, 2-level home** in a rural area
- **Healthy Home** = Clean home



Primary information needs:

- **How-to projects** to do around the house
- Finding **low-cost ways** to improve the house for health and safety
- **Outdoor home improvement** options—especially about the pool and yard

Also interested in:

- **Safety information** on tornadoes and floods
- Easy ways to prevent or reduce exposure to **secondhand smoke** for his children
- **Special resources** and programs to help veterans pay for or maintain a home

Somewhat tech savvy:

- Uses a **desktop computer at work** and sometimes at home, but doesn't have a lot of time to spend on the Internet



"I don't really trust a lot of the information out there, but if I need to fix something and my friends and neighbors haven't done it before, **I would go to a website to find out how to do it the right way.**"

Personas

Keira

Demographics:

- 36 years old
- **Community Health Worker**
- 7 years of experience
- **Healthy Home** = The 7 Principles of a Healthy Home, Grant topic areas (Lead, Asthma, Home Maintenance, etc.)

Primary information needs:

- **One-stop "shopping"** for resources, funding, and programs that can help her clients.
- Simple home-improvement **action steps** that she can teach people to do
- An **easy-to-use site** that she can tell her clients to visit and feel confident that the information they get will be accurate

Also interested in:

- **Networking** with other healthy homes professionals (sharing tools and best practices)
- Learning about **different cultural beliefs** about housing and practices that can increase hazards in the home
- How to talk about **"going green"** in a way that keeps her clients interested—most of them think green means more money and less effective

Very tech savvy:

- Regularly uses the **Internet and smart phone** for work

"The national Web sites are okay and give me information, but they don't help me give information to my clients. I really need a site that's consumer-oriented, **how can I help people change their behaviors?**"



User Feedback

Some participants struggled with reading some of the cards—showing a lack of familiarity with many of the topics. Topics participants struggled the most with were radon and asbestos. Many participants had never heard or seen the word “radon”.



Only one participant used the word “green” or “environmental hazards” in describing the relationship between topics. This participant was a realtor and most likely had more specialized knowledge.



Card Sort

What labels would you give for healthy home topic areas?

ACTIVITY

Card Sort Results

- Saw a distinction between safety concerns for everyone (like burns) and concerns more specific to children (like babyproofing or drowning)
- Saw a distinction between content focused on prevention and content focused on what to do if you have a problem
- Saw similarities in topics and content that the whole family could participate in (like prepare a fire escape plan)
- Created categories that weren't mutually exclusive
- Struggled categorizing topics like: Clutter, Food Safety, Making your Home Accessible, and Pet Safety

Card Sort Results

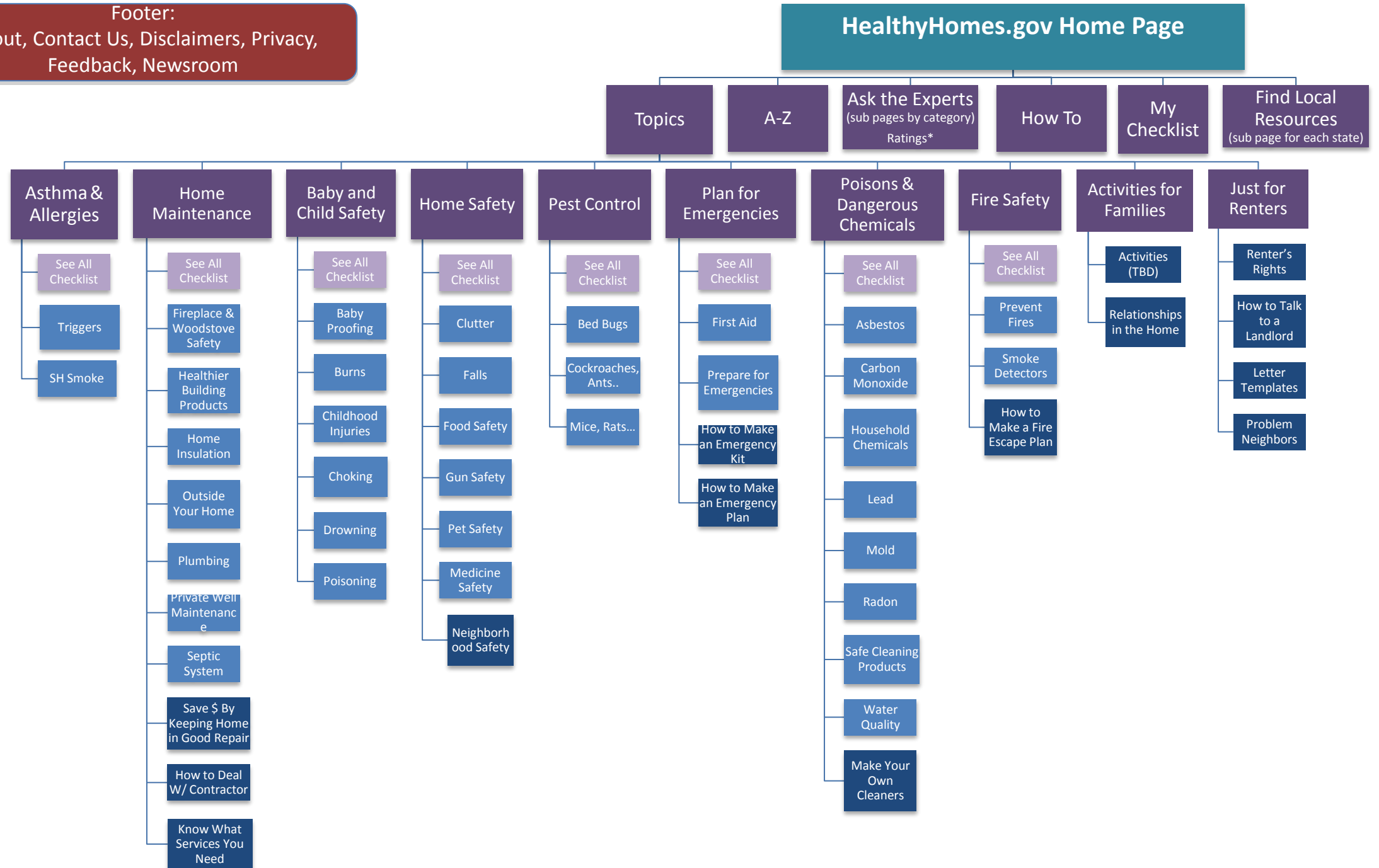
- Most frequently created categories:
 - Home maintenance
 - Home safety
 - Safety and children
 - Chemicals and Poisons
 - Fire
 - For renters
 - Emergencies

Masthead:
Get Email Updates

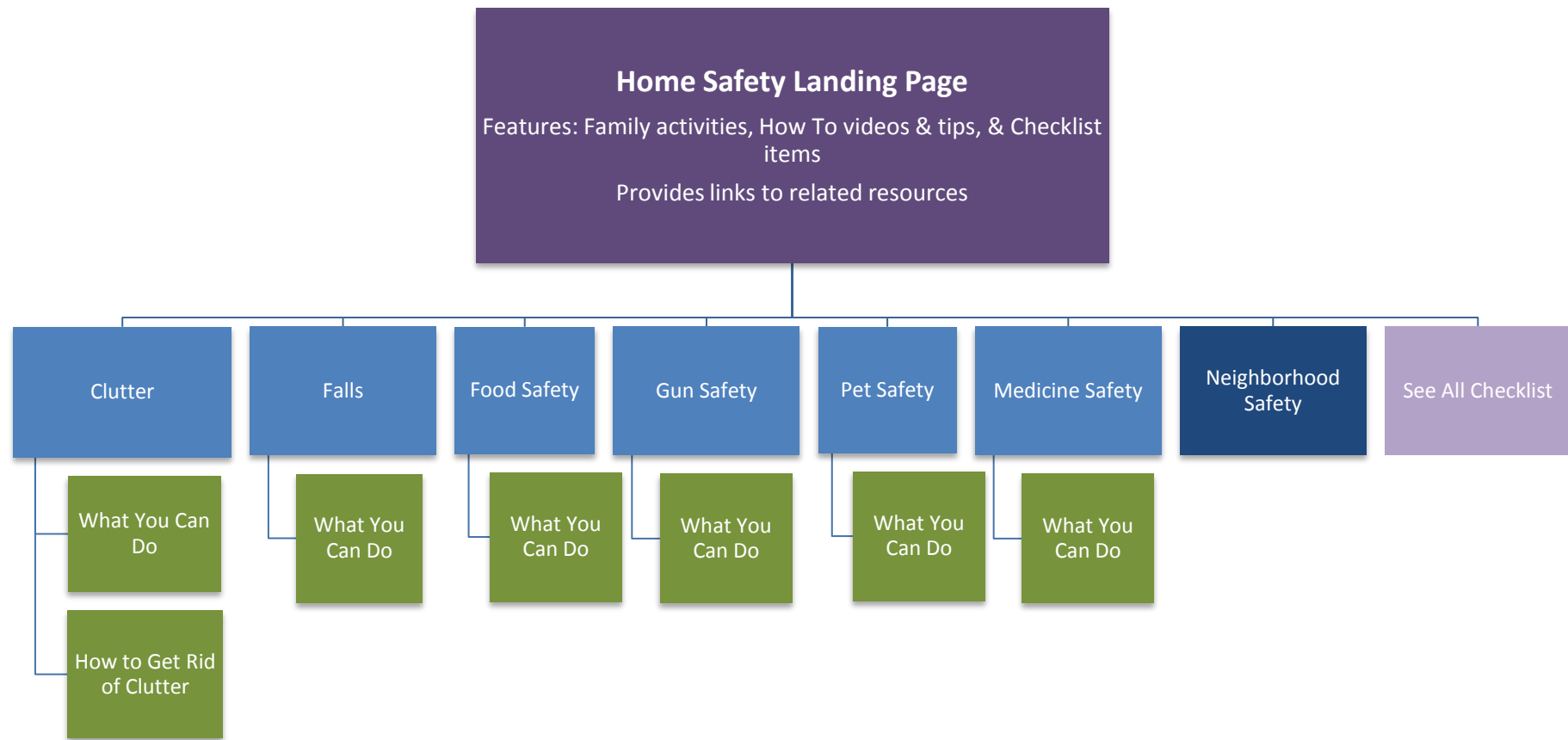
Connect Bar:
Facebook*, Twitter*, Mobile Site, Blog,
Share*

Footer:
About, Contact Us, Disclaimers, Privacy,
Feedback, Newsroom

Site Map



Site Map



Home Safety Related Topics:

- Burns
- Carbon Monoxide
- First Aid
- Smoke Detectors

'Neighbor Nudge'

What the most interesting thing you've learned about consumers need's and healthy homes information?

Design and Features

Home Page

Categories created through the card sorting exercise. Formative research indicated the need for special sections for families and renters

healthyhomes.gov
Good health starts at home.

Get E-mail Updates | Text Size ⊖ ⊕ MY CHECKLIST (0)

Search Go

Health Topics Open Menu + A to Z Ask the Experts How-To

Welcome to HealthyHomes

Your one-stop-shop for improving your family's health by making simple changes in your home.

[Learn More](#)

Stay Safe and Healthy at Home

Answer these 5 questions to create your personal checklist

1) Do you own or rent your home?

Own Rent [Next](#)

Tip of the Day

Make sure your smoke alarms are working. Push the test button once a month to check.

[Learn More](#)

Find Local Resources

Choose Your State

Connect with healthyhomes.gov: [Facebook](#) | [Twitter](#) | [Mobile](#) | [Our Blog](#) | [+ Share](#)

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This is an official U.S. Government website sponsored by the U.S. Department of Housing and Urban Development and the U.S. Department of Health and Human Services.

- ### Health Topics Open Menu +
- Home Maintenance
 - Poisons & Dangerous Chemicals
 - Baby & Child Safety
 - Home Safety
 - Asthma & Allergies
 - Plan for Emergencies
 - Fire Safety
 - Pest Control
- [Activities For Families](#)
[Just For Renters](#)

Focus group and card sort participants were interested in getting to How-To content (tips and video) quickly

Focus Group participants asked for local contacts

Based on the feedback that consumers wanted information that is personalized and actionable

'Connect Bar' provides links to social network features on every page

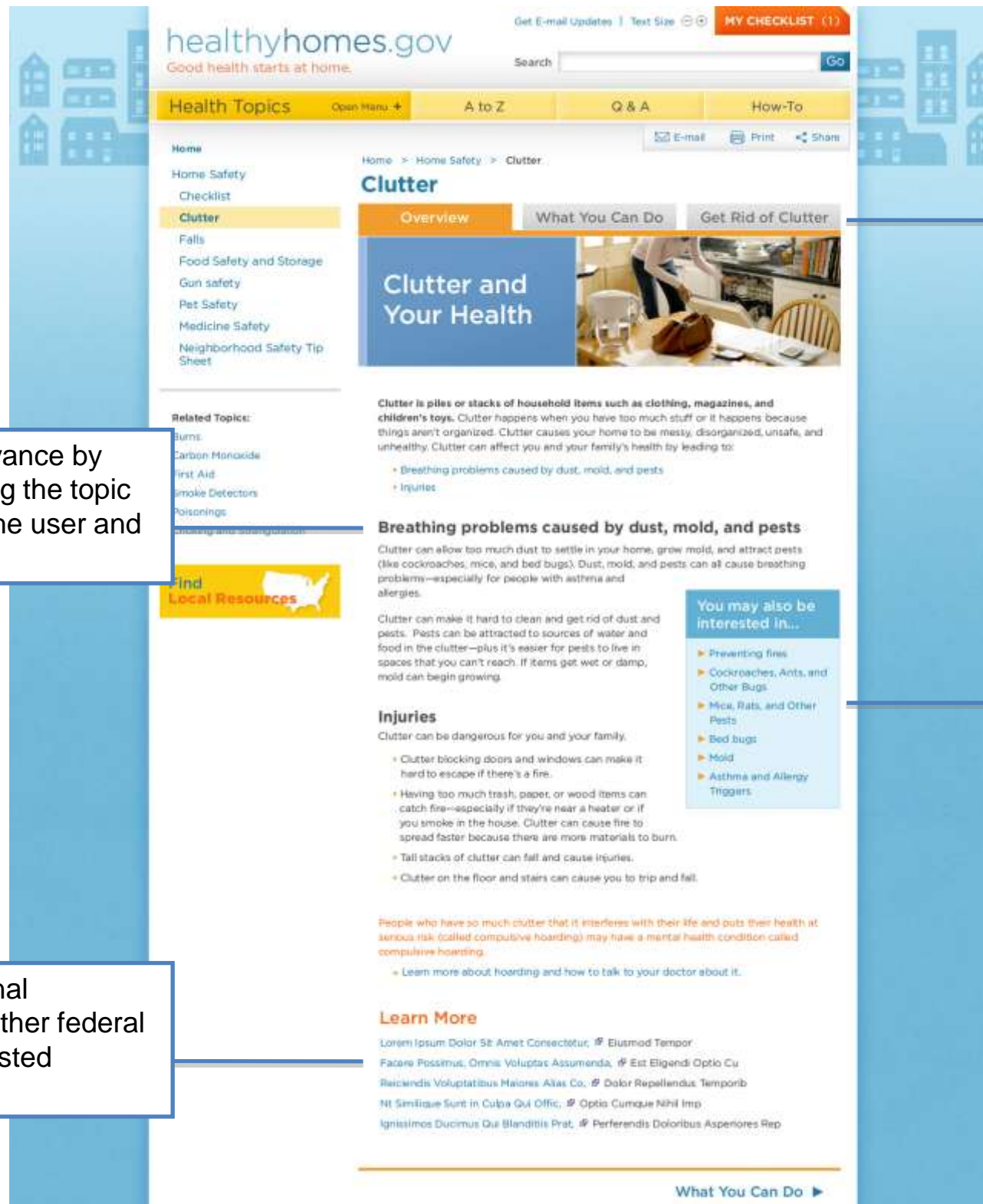
Category Landing Page

Left navigation for moving between topics within a category

Quick links to topics participants found related in the card sort study

The screenshot shows the 'healthyhomes.gov' website with the 'Baby and Child Safety' category selected. The page layout includes a top navigation bar with 'Health Topics', 'A to Z', 'Ask the Experts', and 'How-To'. A left sidebar contains a 'Baby and Child Safety' menu with sub-items like 'Checklist', 'Baby Proofing', and 'Childhood Injuries'. Below this is a 'Related Topics' section with links to 'Burns', 'Household Chemicals', 'Clutter', 'Lead', 'Homemade Cleaners', and 'Medicine Safety'. The main content area features a large banner for 'Stay Safe This Summer' with a photo of a child in a pool and a 'Learn More' button. Below the banner is a 'Baby and Child Safety Checklist' with two items: 'Put the poison control number (1-800-222-1222) on or near every home telephone...' and 'Keep matches and lighters out of a child's reach.' The 'Video and Slideshows' section contains two video thumbnails: 'Keep Swim Time Germ Free' and 'Keeping Children Safe from Drowning in a Flood'. At the bottom, a 'For More Information' section lists various resources and organizations.

Topic Page



Establishes relevance by clearly connecting the topic to the health of the user and their family

Tabs chunk information to help users easily digest the topic and to separate Prevention and Remediation tips

Suggest related topics to help users 'connect the dots'

Provides additional resources from other federal agencies and trusted partners

Checklist Tool

healthyhomes.gov
Good health starts at home.

Get E-mail Updates | Text Size MY CHECKLIST (0)


Search

Health Topics A to Z Q & A How-To

Home Home > Create Your Healthy Homes Checklist

Create Your Healthy Homes Checklist

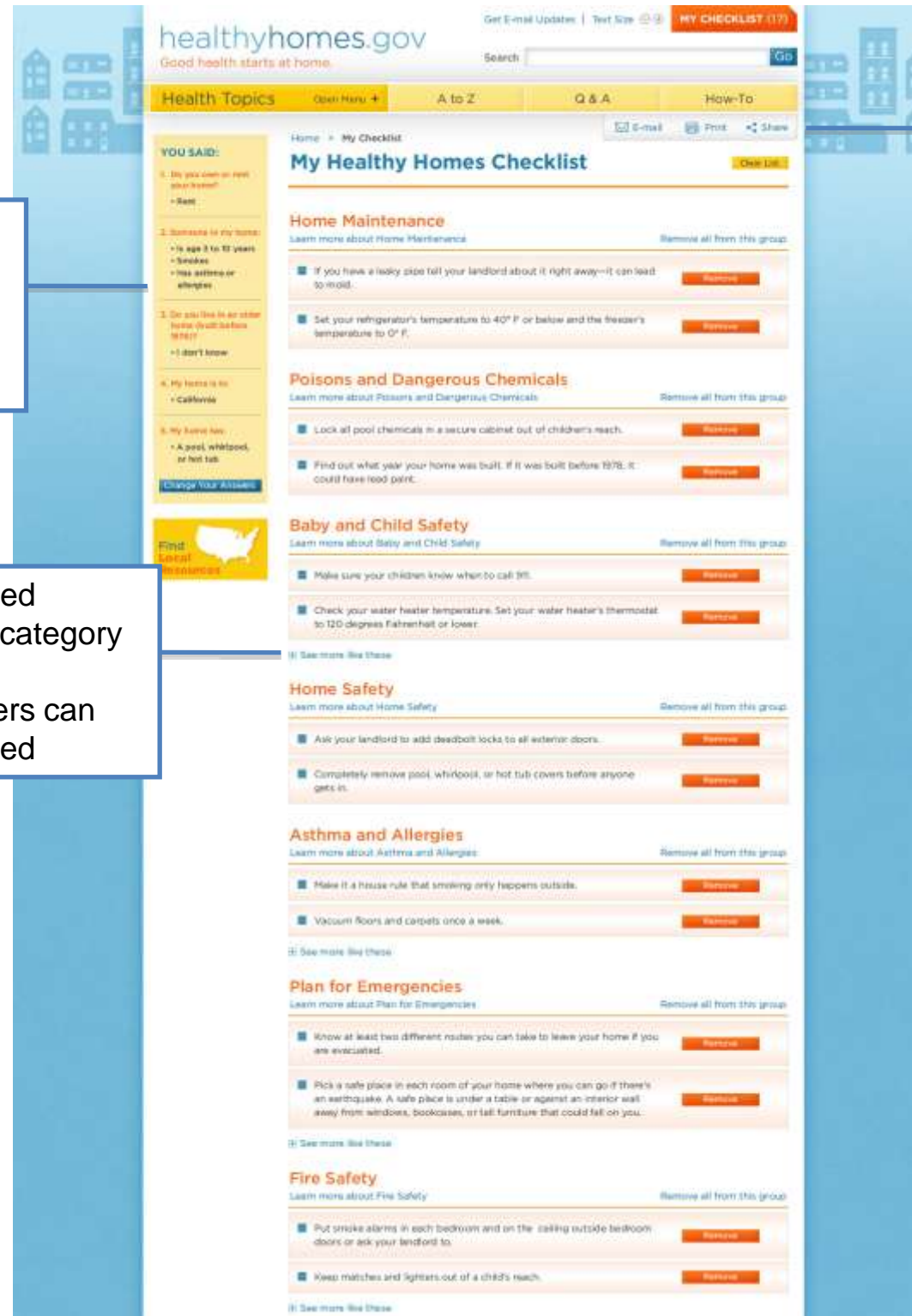
Answer these five (5) questions to create your personal checklist.

- 1 Do you own or rent your home?**
 - Rent
 - Own
- 2 Someone in my home...**
(Check all that apply)
 - Is age 0 to 2 years
 - Is age 3 to 10 years
 - Is age 11 to 17 years
 - Is over age 65
 - Smokes
 - Has asthma or allergies
- 3 Do you live in an older home?**
(Built before 1978)
 - Yes
 - No
 - I don't know
- 4 My home is in...**
(Click on map) 
- 5 My home has...**
(Check all that apply)
 - A pool, whirlpool or hottub
 - A fireplace or wood stove
 - I don't know

Assessment is quick and easy. Will provide users with personalized checklist suggestions

Acts like a shopping cart where users can manage checklist items while browsing the site

Checklist Tool

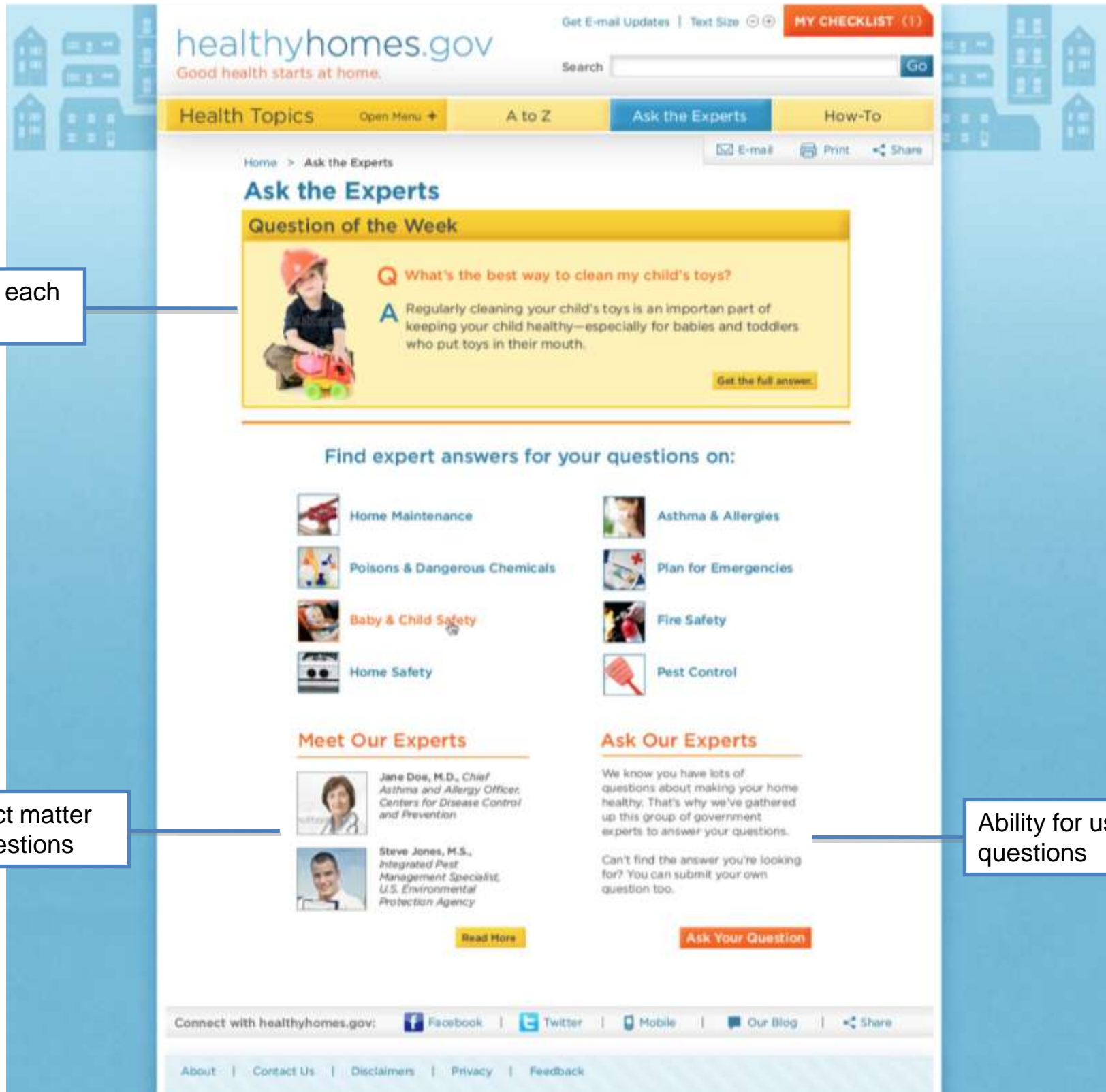


Reminds users of their answers to the assessment to help make the connection between their answers and checklist items

Provides 2 suggested checklist items per category so it's not too overwhelming—users can see more if interested

Can easily email, print, or share to social networks

Ask the Experts



User question featured each week

Government subject matter experts answer questions

Ability for users to ask questions

Ask the Experts

The screenshot shows the 'Ask the Experts' section on the healthyhomes.gov website. The page is titled 'Baby & Child Safety' and features two detailed answers to user questions. The first answer, 'Q: What's the best way to clean my child's toys?', is provided by John Doe, M.D., Chief Pediatric Advisor at the Centers for Disease Control and Prevention. It includes a list of cleaning instructions for plastic, wooden, and fabric toys, along with an average rating of 4.5 stars from 10 reviews. The second answer, 'Q: Where can I buy electrical socket covers?', is also by John Doe, M.D., and includes a link to 'Learn how to babyproof your home'. Below these are five collapsed questions with expandable arrows: 'Q: How can I keep my child from undoing her seatbelt?', 'Q: When can I start leaving my child home alone?', 'Q: How do I pick out a safe swing set for my family?', 'Q: When is it ok to start teaching my child to cook on the stove?', and 'Q: Where can I learn first aid and CPR for babies?'. At the bottom, there is a link to 'Ask Your Question'.

Users can rate the usefulness of answers

Answers can be easily expanded and collapsed for quick scanning

Locator

The image shows a screenshot of the **healthyhomes.gov** website. At the top, the logo and tagline "Good health starts at home." are visible. Navigation links include "Health Topics", "A to Z", "Q & A", and "How-To". A search bar and a "MY CHECKLIST (0)" button are also present.

The main content area is titled "Healthy Homes Resources in Colorado". It features a "Statewide Healthy Homes Contact" section with the following information:

- Colorado Department of Health and Environment** (Add to Checklist)
- 4300 Cherry Creek Drive South
- Denver, CO 80246-1530
- Program Contact: Jane Mitchell
- Phone: 303-692-2644
- Fax: 303-782-0904
- Email: jane.mitchell@state.co.us
- http://www.cdph.state.co.us/dc/lead/index.html

Below this, there are sections for "State Health Department", "Weatherization Assistance Program (WAP)", "Attorney General's Office", and "Local Programs".

On the left side, there is a map titled "Choose your State or Territory" with a "Close Map" button. The map shows the United States with states color-coded. A legend includes Alaska (AK), Hawaii (HI), Puerto Rico, and US Virgin Islands. A "Pacific Basin" label is also present. The version number "v1.2" is visible at the bottom of the map area.

A text box on the left side of the map area contains the text: "Participants in formative research asked for local information and contacts".

At the bottom of the website screenshot, there are links for "About", "Contact Us", "Disclaimers", "Privacy", and "Feedback".

Key Features

- Share
- My HealthyHomes Checklist
- Ask the Experts
- User Ratings
- Videos
- Email Updates
- Mobile-Friendly
- 'You May Be Interested In'
- Local Resources
- Blog
- Content Syndication
- Consumer Feedback

Next Steps

- Feedback sessions with NHHC participants
- Prototype testing with consumers—July
- Content development and subject matter review—Ongoing
- Collect existing resources for the site (video, pictures, activities for kids)—What do you have to share?
- Usability Testing (2 rounds)—September and December/January
- Projected Launch: **Spring 2012**

Long Term Plans

- Section for grantees
- Section for industry
- More multi-media (e.g. videos, testimonials, and slide shows)
- More local resources (e.g. community-level contacts, certified contractors, renters rights)
- More resources and activities for parents and children
- Curricula for teachers and childcare professionals

Discussion