

New Mexico Asthma Control Program

2015 Pilot Asthma Home Visiting Program with *Promotoras*

Evaluation Brief

December 2016

Purpose

To evaluate the development, implementation, and outcomes associated with a new asthma home visiting program serving client families from a Federally Qualified Health Center (FQHC) in the southeast region of New Mexico (NM), where asthma-related hospitalizations and emergency department (ED) visits have historically been higher than the NM state rate.

Background

Many factors can affect a patient's asthma, including environmental factors in the home. Home visiting has been shown to help patients with chronic disease manage their conditions and improve their health status and quality of life.¹ This program seeks to help families of children with poorly controlled, persistent asthma become better at managing their asthma so that they can live full, active lives.

The New Mexico Asthma Control Program (NMACP), part of the NM DOH Environmental Health Epidemiology Bureau (EHEB), partnered with the Southern Area Health Education Center (SoAHEC) and La Casa de Buena Salud (La Casa) to develop and implement this new program. SoAHEC provided training and La Casa (the FQHC) provided the team of *promotoras* and access to client families. In New Mexico, a largely rural majority-minority state with a substantial Hispanic population, health education and disease prevention programs often rely on community health workers (CHWs) and *promotoras* (i.e., lay health workers in Spanish-speaking communities).

This was the first NMACP intervention involving home visiting, although it drew on knowledge and partnerships developed during a Healthy Homes grant which was federally funded during 2011-2012.

In evaluating the home visiting program, the NMACP seeks to answer both process and outcome questions including:

- To what extent have clients' understanding of asthma triggers increased as a result of this program?
- To what extent have clients' behaviors re: care and cleaning of their homes been influenced by Healthy Homes principles shared during the program?
- In what ways has this program been useful to clients? In what ways could it be improved?
- To what extent has healthcare utilization among program participants changed when compared with a similar group of non-participants?

This brief presents results from the first, or pilot year, of the project. During this formative phase, NMACP staff sought to design and implement a home visiting program which included meaningful and timely input from contractors (primarily the *promotoras*) and their client families.

¹ See, for example, Crocker, DD et al. (2011). Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a community guide systematic review. *Am J Prev Med* 41 (2 Suppl 1): S5-S32.

Evaluation Design

For this pilot project, the NMACP evaluator outlined a multi-component evaluation designed to triangulate:

- Qualitative input from *promotoras* (group interview) and their clients (mail-in survey)
- Pre/post test scores from *promotora* training about Healthy Homes, with a focus on asthma trigger reduction
- Asthma Knowledge Survey pre/post test scores from home visiting clients (adult family members)
- Healthcare utilization data for home visiting clients (children) and a comparison group seen at the same FQHC

Data collection tools were based on validated tools available from Healthy Homes and other state home visiting programs, adapted for the NM client population. These included: pre/post tests for *promotora* training, pre/post tests (Asthma Knowledge Survey) for clients, home assessment forms, client satisfaction surveys, and follow-up call documentation. For copies of each of these, see appendix. Since all of the *promotoras* involved in this project were fluent in English as well as Spanish, following discussion with their manager, it was agreed to do their training and pre/post testing in English. All materials for clients were created in both Spanish and English, with the *promotora* providing each client with instruction and written materials in their preferred language.

Use of *promotoras*/CHWs in delivering asthma home visiting services is intended to ensure that asthma home-based services in NM are delivered in a culturally competent manner, by employing staff who are grounded in the communities they serve, either as a community member or someone with strong community ties and onsite experience. Staff providing home-based services often encounter challenges which are not primarily health-related. The evaluation design prioritizes feedback from the *promotoras*/CHWs as the “experts” on the clients and situations they encounter. Their voices are included at multiple levels, from their reflections on the training they receive to their suggestions about program design and materials.

Implementation

The original and revised timeline for each component of this intervention (*promotora* training, home visits, testing, etc.) and the evaluation elements associated with each can be seen in Figure 1. Year 1 of the grant started in September, for reference. The boxes with crosshatching indicate the planned dates for each element, the arrows indicate changes to the initial timeline. Green boxes show SoAHEC activities and deliverables, yellow and gold ones those for La Casa de Buena Salud, the FQHC.

Figure 1. Project Planning Timeline by Month Listing Activities and Evaluation Elements in Grant Year 1 (September 1, 2014 to August 31, 2015)

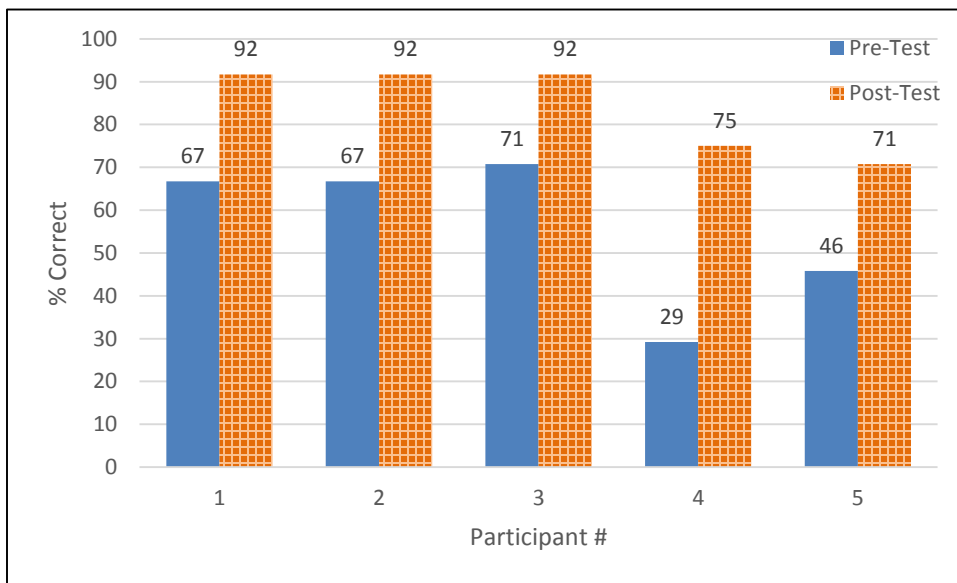
Program Activity	Evaluation Elements	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Develop training materials and pre/post tests for promotora training											
Identify promotoras to work with program											
Train promotoras for home visits	Pre/post test results										
Promotoras make 1st home visits to clients	Home Assessment form										
Administer client pre-tests	Client pre-test results										
Informal Promotora group interview	Feedback on program following initial visits										
Promotoras make 2nd home visits to clients	Home Assessment form										
Administer client post-	Client post-test results										
Assess client satisfaction, get feedback	Client mail-in survey										
Promotora follow-up calls to clients, 6 weeks after last visit	Call documentation forms										
Healthcare utilization data provided by FQHC	Compare program clients with other asthma patients										

Program start-up was delayed due to challenges around contracting and staffing. The education session for *promotoras* was subcontracted using a Healthy Homes-certified instructor on the staff at New Mexico State University. Healthcare utilization data were eventually received early in Year 2 of the CDC grant.

Promotora Training Outcomes

Five staff members from La Casa de Buena Salud participated in the day-long training on March 18, 2015 in Roswell, NM. Participants were asked to complete pre- and post-tests with 25 multiple choice questions as well as free response questions (one at the end of the pre-test, four following the post-test). Half of the questions were drawn from the Minnesota Reducing Environmental Triggers of Asthma (RETA) training and the remainder were created by the NMACP evaluator from the CHW Healthy Homes slide set which was used to develop the training. Twenty-four of the multiple choice questions were knowledge based. Question 25 asked how confident respondents felt about their knowledge and ability to work with clients on these topics.

Figure 2. Paired Pre- and Post-Test Scores by Participant²



Participants showed a substantial increase in knowledge of Health Home principles and asthma triggers (see Figure 2). The lowest score on the post-test (71%, or 17 out of 24 correct answers) equaled the highest score on the pre-test. Participants could skip questions if they were unsure of the right

answer. On the pre-test, participants skipped an average of 2.6 questions (range 0 to 7 skipped), while on the post-test, only one person skipped one question.³

Question 25 asked how confident participants felt that they could identify potential asthma triggers in homes and advise families on how to limit or eliminate them. Higher post-training levels of confidence were aligned with higher post-test scores.

² One *promotora* was unable to attend the training, and the team manager (P2) attended in her place. Participants 1 and 3 were the *promotoras* with the most experience, while 4 and 5 had the least experience at the start of the program.

³ The question was about the length of time pet dander remains in the home after a furry pet is gone. The trainer indicated (personal communication) that he had not spent enough time on this subject during the training, and this was the only question that all participants either skipped or missed on both the pre- and post-test.

Table 1. Promotora Confidence About Knowledge and Skills Before and After Training

Participant #	Pre-Training	Post-Training	Change	Post-Test Score
1	Very confident	Completely confident	+1	92%
2	Very confident	Very confident	No change	92%
3	Somewhat confident	Very confident	+1	92%
4	Not at all confident	Somewhat confident	+1	75%
5	Somewhat confident	Somewhat confident	No change	71%

Promotoras were also asked during the post-test about challenges they anticipated in working with clients on these topics, how the course helped prepare them to meet challenges, and what else they would like to learn more about. Responses are summarized in Table 2.

Table 2. Promotora Responses to Open-Ended Questions on the Post-Test

Challenges anticipated	Ways the training has helped	Topics to learn more about
Giving wrong information, or directing them toward the wrong steps	Explaining what to do	Triggers
[no response]	The course was not too full therefore had the opportunity to ask questions	Training was very thorough
Help[ing] the family understand that triggers and/or the problem that is making asthma getting worse	I kind of had an idea of asthma triggers but this course gave me very good information	I would like to learn more about everything.
Getting their buy in	Yes, know that we will have to be salespersons as we go out and visit with parents and asthma patients	[no response]
The families may not understand the importance of keeping a Healthy Home. Some may be compliant & willing to try it, but then on the other hand, change is difficult for some.	Extensive information to educate & inform these families about making a home healthy & safe for the sake of controlling the child's asthma.	All information will be useful.

Responses to the final post-test question (“Is there anything else you’d like to tell us about this course?”) about the quality of the trainer and training, were all positive (e.g., “very interesting & educational”). Because the training was subcontracted, the *promotoras* did not have additional chances to interact with the instructor following this initial session.

Group Interview with Promotoras

Following the first round of home visits and prior to the second set of visits, the NMACP program manager/epidemiologist and the evaluator traveled to Portales to meet with the *promotora* team to take part in discussions about how the program was going, and physically demonstrate the value placed by NMACP on the *promotoras'* input, as the “experts” on the clients and situations they were encountering during this pilot program.

Using a Constructive/Solution Based interviewing approach, the evaluator drafted the following discussion prompts, which were shared with the *promotora* team in advance of the group interview:

- *Let's talk a little about a good day or a good home visit you've had since starting the project. What made it a good visit?*
- *Now, think about visits that didn't go as well. What were the challenges? What are things that can be improved?*
- *If you (either individually or as a group, like an advisory board) were put in charge of running a new asthma home visiting program in another community in New Mexico---what would you do?*

All *promotoras* participated in the discussion and offered several specific examples of both positive and challenging exchanges with client families and potential client families whom they contacted.

Challenges mentioned by the *promotoras* included potential participants who were only interested in medical care, not Healthy Homes, or only interested in Healthy Homes programming if it included money for them to make a home repair or renovation (ex. chimney). Other challenges included: family pets and children living in multiple homes where one adult is committed to improving the environment for the child with asthma, while others involved in the family/living situation are not.

Promotoras were able to connect some home owners with a local hardware store where they could get materials at cost (the store owner has asthma). However, this was limited.

Collectively, the *promotoras* had several suggestions for the NMACP about doing this kind of asthma home visiting program:

- Always have a *promotora* team: Colleagues are very important (support, skills, knowledge)
- Programs should provide product samples *promotoras* can try out before doing home visits⁴
- *Promotoras* should have something tangible they can offer clients at the first visit, like the Green Cleaning Kit
- Generally, this program needs to expand other kinds of resources they can offer clients
 - Ex. Carpet removal, weatherization
- Need to identify target group (clients) carefully
- Suggested edits to Visual Survey and Home Assessment documents
- Help develop a way to communicate with HCPs about the home visiting program besides word of mouth

Client Family Outcomes

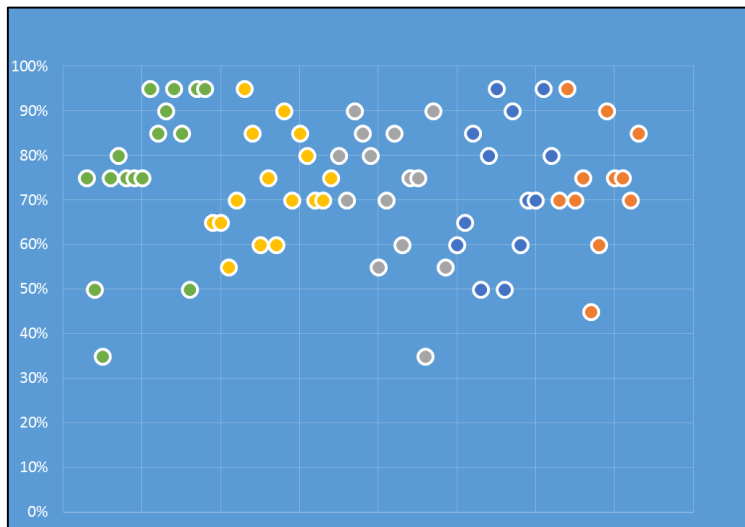
Client Knowledge Changes

Clients were administered a one-page test of asthma triggers and Healthy Homes principles related to asthma and air quality (see appendix). Figure 3 show the change in test scores from the beginning of the first home visit to the end of the second home visit. Overall, client test scores improved significantly

⁴ Many of the Green Cleaning techniques the *promotoras* learned about in training were new to some of them, so they appreciated the chance to practice what they would do before going out to clients' homes.

($p < 0.001$ using Related-Samples Wilcoxon Sign Rank Test); however, the gains were particularly strong for clients of the two most experienced promotoras (at the left of each chart in green and yellow). Five post-tests were not received by the NMACP, as not all families completed the program. It is unlikely that they would affect the overall results, since these clients collectively had above average pre-test scores (range 70-95%).

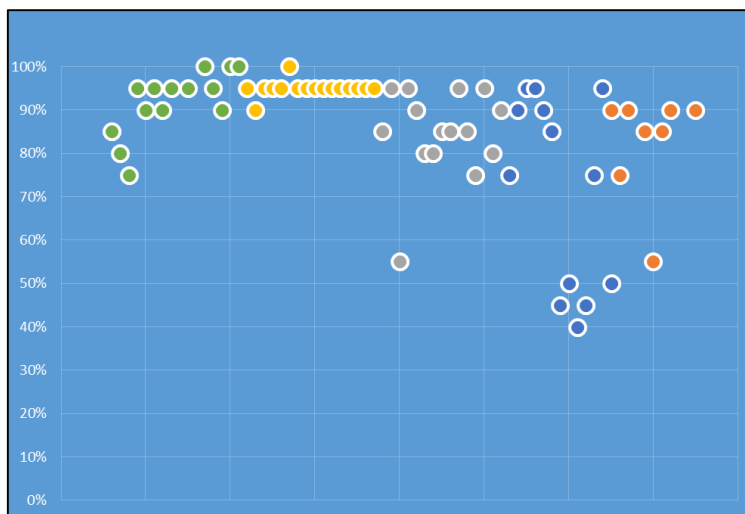
Figure 3. Client Pre- and Post-Test Scores (% Correct), Grouped by Promotora



The mean for the pre-test (N=71) was 74%, with a median of 75%. The mean for the post-test (N=66) was 86%, with a median of 90%.

Regarding the small cluster of low test scores on the post test, it appears some respondents may have reversed Y/N for the triggers section of the test. However, they did not appear to do so in the following section (3 got 10% for triggers, though their scores for the next section were 70-90%). There were some signs of completing the post-test in haste, and being uncertain about the correct answer.

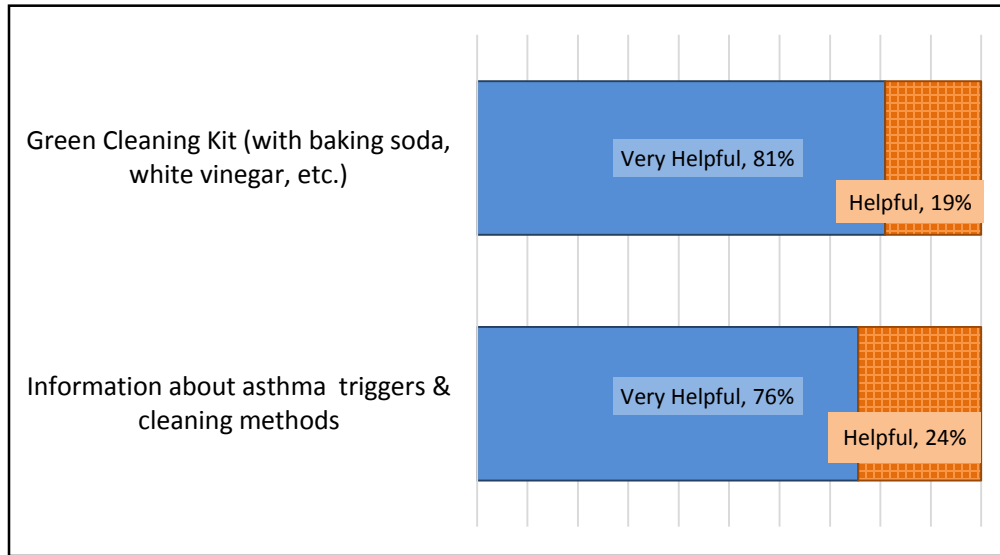
The two post-test questions most often missed were “Leaky plumbing and standing water attract pests” and “Pests like cockroaches don’t make any difference to a person with asthma.” Test materials, including the wording on these items will be revised for future programs.



Client Views about Program Implementation and Value

During their second (final) home visit by their *promotora*, each client family was provided with a brief survey document in English or Spanish (see appendix) and a postage-paid envelope to mail their survey back to the evaluator at the NMACP. From May through September, 43 surveys were received (59% participation), although one survey document was blank. It is worth noting that the participation rate was very high for a mail-in survey with no incentives attached, which suggests client families were motivated to participate by their experiences with their *promotoras*.

Figure 3. Clients Rate Helpfulness of Education and Green Cleaning Kit



Although the probability of responder bias must be taken into account, the client responses were strongly positive. All respondents reported that they enjoyed working with their *promotora* (100%) and intended to

keep using the information and practices shared with them during the program (100%). All of the clients who responded to the survey indicated that the information they received, and especially the Green Cleaning Kit, were helpful or very helpful.⁵

Twenty-five clients (60% of survey respondents, and 38% of all client families participating) included a response to the final free-response question, which invited them to share anything else they wanted to tell NMACP about their experience. Following are excerpts from the responses received, marked (T) if translated from Spanish. Words in [brackets] have been added for clarity.

- Thank you for having these services. Because I was a person who had a lot of fragrances, cleaned my floors with a lot of Clorox, used a lot of softeners that did a lot of harm to my daughter, and I didn't know. It would be good if everyone that receives this information would follow the instructions, it would do so much good to their children. (T)
- The advice is very helpful, there are so many chemicals you use in your house, for cleaning. (T)
- There was things I didn't know about that was triggering my kids asthma. Thank you for this program y'all have created.

In addition, there were many brief positive comments (variations on "Gracias!" and "I learned a lot"), and some clients specifically thanked their *promotora* by name.

One client expressed understandable frustration at the limitations of the program and what it could provide for its clients, particularly renters:

⁵ No survey respondents chose the options not helpful, not at all helpful, or "I'm not sure."

- I think if we get into this program [we want] to help our child. Why can't we get the stuff fixed, like mold, holes, & etc, if we only rent? Everyone who wants to get their houses better for their children if we are asking for the help. I think the program [should] offer to offer that to the client's family.

Note that the limited resources *promotoras* could offer their clients for home remediation, mentioned above, were a concern shared by the *promotora* team during their group interview.

Client Family Responses to Follow-Up Calls

The *promotoras* successfully completed follow-up calls with 63 client families (95%) approximately one month after the end of the home visits, and three were lost to follow-up. Clients were asked “Did you make any changes in the ways you clean and maintain your home?” A majority (58 out of 63, 92%) self-reported making changes in their cleaning practices, with 14 clients (22%) reporting a major change.

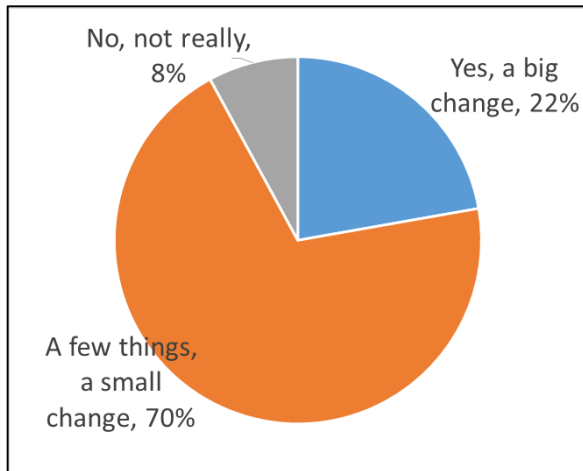


Figure 4. Level of Cleaning Changes Reported After Program Completion

Among families who reported continuing to use Green Cleaning practices around their home after their final *promotora* visit (59 out of 63, 94%), the things most often mentioned were the simplest items (vinegar and baking soda) and the areas within the home they most often mentioned were bathrooms, kitchens, and children’s bedrooms. One participant noted how helpful the advice and materials received during the program were when their family relocated to a new home.

Healthcare utilization

Limited healthcare utilization data were provided by La Casa in October 2015. These were in the form of data abstracts for 66 program participants and 399 non-participants. Although all patients had been diagnosed with asthma, it is probable not all of them met the definition of persistent asthma. Data elements included patient age in years, with number of ED visits and hospitalizations. Hospitalization and ED visit counts were divided by pre/post program for participants, but for non-participants, all ED visits were combined, without reference to when the ED visits occurred. Consequently, an analysis comparing ED visits between participants and non-participants could not be performed. If the program is continued, a better method to track participants’ and non-participants’ utilization of the ED will be required if outcome measures are to be evaluated.

Discussion and Recommendations

Both quantitative and qualitative data are essential to understanding the strengths and weaknesses in the initial implementation of this pilot program. Evidence shows that the *promotoras* and their clients

valued the program, demonstrated knowledge gains, and made pertinent suggestions for improvement (access to resources).

In addition to access to housing resources, some areas identified for improvement included: revising some documentation; better timing, as contract delays led to a late start and compressed timeline, especially for the final follow-up calls; and amount of time/support provided by the instructor (as *promotora* training was subcontracted, he was only available to the *promotoras* for a brief time, which both he and the *promotoras* regretted). Other challenges faced during this pilot year were staff turnover at one partner organization and the availability of the ED data received.

While the *promotoras* and other staff who participated in the training made clear gains in their knowledge of Healthy Homes principles and asthma triggers, the concerns expressed by some about their ability to effectively work with client families and their depth of knowledge need to be addressed in future trainings. While three out of the five participants felt more confident afterwards, it is not necessarily surprising that a single day of training did not make every participant feel “Very confident” or better.

Recommendations for NMACP Staff

- Annually review and revise documentation based on *promotora* input to increase usefulness and ease of reporting
- Partners employ a mentorship model to partner highly effective *promotoras* with less experienced ones
- Extend training timeframe and help scope out resources [housing and other] to support all *promotoras*
- Ensure that the data parameters requested are understood and can actually be provided

In addition to the evaluation elements included in this pilot phase, future evaluations could explore the best ways to replicate similar programs elsewhere in NM.

Conclusion

The NMACP and its partners successfully delivered a pilot asthma home visiting program which helped *promotoras* empower families in the southeastern region of the state to improve their understanding of asthma triggers and make changes to their household cleaning practices. *Promotoras* worked with their clients to demonstrate and suggest ways of cleaning and maintaining living spaces which have been shown to improve environmental conditions and assist in asthma control for children with asthma. Client feedback indicated that many families both appreciated and continued to use the knowledge and materials they gained through participating in this program following their final visit with their *promotora*.

Key to the pilot’s success were the quality of initial Healthy Homes training, and the social work background of the *promotoras* engaged in delivering home-based services, as well as their fluency in

Spanish. The program evaluation's success in collecting a variety of data was made possible by having evaluation elements included in contract deliverables with partners. Going forward, the NMACP intends to build on this successful pilot program to include asthma self-management education as well as Healthy Homes principles and asthma trigger reduction.

Appendix of Program Documents

Healthy Homes: Focus on Asthma and Environmental Triggers [Pre-Test]

Please complete this preliminary questionnaire about your knowledge of environmental triggers for asthma and Healthy Homes principles. You'll be asked about these again at the end of the training.

If you aren't at all sure which is the right answer during this pre-test, you can skip the question (don't mark any answer).

Your anonymous responses will help us evaluate this program and plan for future events. Thank you for your help!

Section A. Instructions: Please select the correct answer by circling the letter immediately to the left.

1. Which of the following items is NOT one of the 7 Healthy Homes Principles?
 - a. Keep it dry
 - b. Keep it clean
 - c. Keep it pest-free
 - d. Keep it airtight
 - e. Keep it safe
2. Dust mites are a common environmental trigger of asthma. In which room in the house are dust mites most likely to be a problem?
 - a. Kitchen
 - b. Bathroom
 - c. Basement
 - d. Bedroom
3. Which of the following is NOT recommended for dust mite control?
 - a. Washing bedding in hot water
 - b. Using mattress and pillow encasements
 - c. Dusting every day with a dry feather duster
 - d. Keeping humidity low
 - e. Removing drapes, carpeting, and upholstered items from sleeping areas

4. What can renters/owners and landlords do to prevent moisture build-up inside homes and the health problems associated with it?
 - a. Use ventilation fans
 - b. Make sure downspouts take rainwater away from the home
 - c. Repair any leaks in the structure or plumbing
 - d. Clean up mold
 - e. All of the above
5. You are looking at the baseboards in the bedroom and notice black, greasy speckles. This is an indication of which environmental trigger of asthma?
 - a. Dust mites
 - b. Cockroaches
 - c. Mice
 - d. Rats
6. Why are air fresheners a potential cause of health-related problems in homes where someone with asthma lives?
 - a. They cover up bad odors, but they don't address the problem causing the bad odors
 - b. They run out too quickly and are expensive
 - c. The scents and chemicals used in them may trigger an asthma attack
 - d. Both a and c
 - e. All of the above
7. Which 3 items listed below, when all together, make up the "Pest Triangle" (conditions conducive to pests)?
 - a. Food-Water-Garbage
 - b. Earth-Air-Water
 - c. Food-Water-Nest/Hide
 - d. Dark-Damp-Nest/Hide

8. What is the smallest size hole a mouse is able to fit through?
 - a. Golf Ball
 - b. Quarter
 - c. Nickel
 - d. Pencil
9. Which of the following pest-control products are the safer options for combatting pests?
 - a. Gels and dusts
 - b. Sprays
 - c. Bug bombs and foggers
 - d. Glueboards and snap traps
 - e. Both a and d
10. Integrated pest management (IPM) recommends which of the following steps should be taken before using pesticides?
 - a. Seal cracks and openings that allow pests to enter the home
 - b. Promptly clean food and drink spills
 - c. Eliminate sources of food and water as a preventive action
 - d. Determine the level of infestation
 - e. All of the above
11. Proper ventilation can reduce health hazards from
 - a. Carbon monoxide and formaldehyde
 - b. Tobacco smoke and particulate matter
 - c. Fires and burns
 - d. Both a and b
 - e. All of the above
12. Under normal circumstances, concentrations of pollutants inside homes are often found to be
 - a. Ten to twenty times as high as outdoors
 - b. Two to five times as high as outdoors
 - c. Equal to levels outdoors
 - d. Less than levels outdoors
 - e.

13. After a furry pet is removed from a home how long does the pet dander remain?
- Less than 1 week
 - Several weeks
 - 6 months
 - More than 1 year
14. What are Volatile Organic Compounds (VOCs)?
- Chemicals that easily evaporate at room temperature
 - Gases released from common products like carpets, adhesives, paints, & varnishes
 - An effective means of pest control
 - Both a and b
 - Both a and c
15. Why are VOCs a health hazard?
- They can irritate eyes, nose, and throat
 - They can cause headaches, nausea, and loss of coordination
 - They can cause liver, kidney, and brain damage and affect child development
 - Some can cause cancers
 - All of the above
16. You noticed that mold is growing inside the cabinet below the bathroom sink. What is the first step you should take to eliminate the mold?
- Clean up the mold using a solution of hot water and bleach
 - Clean up mold using hot, soapy water
 - Paint over mold with anti-fungal paint
 - Clean up the mold using hot, soapy water followed by a bleach solution
17. Approximately how much of their time do young children spend in homes every day?
- About 20% of their time
 - Almost 50% of their time
 - About 70% of their time
 - Almost 100% of their time

18. What steps can be taken to minimize exposure to secondhand smoke?
- Smoke in a separate room
 - Smoke in the garage
 - Smoke outdoors
 - Both b and c
19. What steps can be taken to minimize house dust?
- Have family members and guests take off their shoes when they enter
 - Place a mat outside each door and a carpet pad inside it
 - Regular sweeping
 - Both a and b
20. What action can be recommended to reduce respiratory exposure to chemicals in cleaning products?
- Pour cleaning product directly onto a paper towel or cloth
 - Spray cleaning product directly onto surface to be cleaned and wipe immediately
 - Wear gloves
 - Use air fresheners to minimize chemical odors
21. Why is household clutter a potential *health* problem?
- People can't find what they're looking for and get frustrated
 - It collects dust and makes cleaning harder
 - It gives pests a place to hide
 - It looks messy
 - Both b and c
22. What areas in a home need good (working) exhaust ventilation?
- Bathrooms and kitchens
 - Utility-type rooms (containing clothes dryers, furnaces, hot water heaters)
 - Bedrooms and hallways
 - Both a and b
 - All of the above

23. If a person with asthma is sensitive to outdoor air pollution, what steps can they take on poor air quality days to minimize their exposure?
- Lower intensity level of physical activity
 - Sign up to receive Air Quality Alerts
 - Stay indoors during parts of day when air quality is at its worst
 - All of the above
24. What is the first thing you should take note of as you walk into a home?
- Presence of any pets
 - Odor
 - General cleanliness
 - Wall-to-wall carpeting
25. How confident do you feel that you can identify potential asthma triggers in homes and advise families on how to limit or eliminate them?
- Completely confident
 - Very confident
 - Somewhat confident
 - Not at all confident

Section B. [Free response] What are you most interested in learning about Healthy Homes and asthma?

Healthy Homes: Focus on Asthma and Environmental Triggers [Post-Test]

Please complete this follow-up questionnaire about your knowledge of environmental triggers for asthma and Healthy Homes principles after today's training.

Your anonymous responses will help us evaluate this program and plan for future events. Thank you for your help!

Section A. Instructions: Please select the correct answer by circling the letter immediately to the left.

[All questions in Section A. were identical to those in the pre-test]

Section B. [free response]

1. What are some of the challenges that you anticipate in working with asthma patients and their families on Healthy Homes principles and environmental asthma triggers?
2. How has this course helped you prepare to meet these challenges?
3. What topics from this training would you like to learn more about?
4. Is there anything else you'd like to let us know about this training session?

Asthma Knowledge Survey for Home Visiting Patients and Families

Promotora Initials _____

HH# _____

Initial Survey

Final Survey

Please mark your answers with a check . Thank you!

1. For each of the following, indicate whether you think it can cause ("trigger") an asthma attack:

	YES	NO	I'M NOT SURE
Tobacco smoke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concrete, tile, or linoleum flooring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Animal dander from furry animals (like dogs and cats)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cockroaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Snakes or reptiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mold and mildew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoke from a fire, fire pit, or fireplace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleaning chemicals with strong odors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dust mites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pollen from plants and trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Are the following statements true or not?

	YES, TRUE	NO, NOT TRUE	I'M NOT SURE
Vacuuming or wet mopping at home at least once a week can help prevent asthma attacks in a child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting rid of food sources and breeding places is important to controlling and preventing pests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using a kitchen exhaust fan or keeping a kitchen or bathroom window slightly open will remove moisture from the air	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A water leak in the home can result in mold or mildew growing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leaky plumbing and standing water attract pests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mold and mildew growing indoors can make asthma worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Covering a child's pillow and mattress with an airtight cover can make asthma worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pests like cockroaches don't make any difference to a person with asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The stronger a cleaning product is (like full-strength bleach) the better it is to clean your house and prevent asthma attacks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In addition to taking the right medication, there are other things children and their families can do to prevent asthma attacks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

New Mexico Healthy Homes for Healthy Children – Visual Home Assessment

Resident:								Conducted By:
Address:								Date:
Phone:								Unique ID:
Home Health and Safety Hazards Checklist								Comments:
	Exterior	Entry	Living Room	Dining Room	Kitchen	Halls/ Stairs	Education	
Lead Hazards: dust chipping/flaking-paint	1. Walls, Ceilings, Floors							
	Area	1a. Large $\geq 2\text{ft}^2$ Medium $< 2\text{ft}^2$						
Lead Hazards: dust chipping/flaking-paint	2. Windows, Doors							
	Area	2. Large $\geq 2\text{ft}^2$ Medium $< 2\text{ft}^2$						
Structural Hazards	3. Bulging/buckling/Sagging or alignment							
	4. Large $> (8'' \times 11'')$							
	Holes:	Medium $\leq (8'' \times 11'')$						
		Small $< (8'' \times 1/2'')$						
Electrical Hazards	5. Exposed wiring, missing electrical cover							
	6. Child tamper-resistant outlet covers							
	7. Ext. cords under carpet, across door way, overloaded							
	8. Extension cord cracked or frayed							
Moisture, Mold and Mildew	9. Stains/ damage							
	9a. Large $> 4\text{ft}^2$ Small $< 4\text{ft}^2$							
	10. Mold							
	10a. Large $\geq 4\text{ft}^2$ Small $< 4\text{ft}^2$							
	11. Condensation on windows/doors/walls							
	12. Leaks							
Pests	13. Evidence of roaches							
	14. Evidence of rodents							
	15. Other pest: _____							
	16. Food, Water, Shelter							
17. Clutter, Sanitation, Garbage								

18. <u>C</u> arpeting, asbestos tile								
19. <u>O</u> ther:								

Home Health and Safety Hazards Checklist		Master bedroom	Bedroom 2	Bedroom 3	Utility room	Bath 1	Bath 2	Other:	Education	Comments:
Lead Hazards: dust chipping-flacking-paint	1. Walls, Ceilings, Floors									
	Area 1a. <u>L</u> arge $\geq 2ft^2$ <u>M</u> edium $< 2ft^2$									
Lead Hazards: dust chipping-flacking-paint	2. Windows, Doors									
	Area 2. <u>L</u> arge $\geq 2ft^2$ <u>M</u> edium $< 2ft^2$									
Structural Hazards	3. Bulging/buckling/Sagging or alignment									
	Holes:	4. <u>L</u> arge $> (8'' \times 11'')$								
		<u>M</u> edium $\leq (8'' \times 11'')$								
<u>S</u> mall $< (8'' \times 1/2'')$										
Electrical Hazards	5. Exposed wiring, missing electrical cover									
	6. Child tamper-resistant outlet covers									
	7. Ext. cords under carpet, across door way, overloaded									
	8. Extension cord cracked or frayed									
Moisture, Mold and Mildew	9. H2O Stains/ damage									
	9a. <u>L</u> arge $> 4ft^2$ <u>S</u> mall $< 4ft^2$									
	10. Mold									
	10a. <u>L</u> arge $> 4ft^2$ <u>S</u> mall $< 4ft^2$									
	11. Condensation on windows/doors/walls									
	12. Leaks									
Pests	13. Evidence of roaches									
	14. Evidence of rodents									
	15. Other pest:									
	16. <u>F</u> ood, <u>W</u> ater, <u>S</u> helter									

17. Clutter, Sanitation, Garbage								
18. Carpeting, asbestos tile								
19. Other:								
20. Other								

Home Health and Safety Hazards:			
Ventilation	21. Kitchen:	<input type="checkbox"/> Exhaust fan not working or does not exhaust to outside <input type="checkbox"/> Exhaust fan working	
	21a. Is the exhaust fan used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know		
	22. Bathroom:	<input type="checkbox"/> Exhaust fan not working or no fan or window present <input type="checkbox"/> Exhaust fan working	
	22a. Is the exhaust fan used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know		
23. Clothes dryer	<input type="checkbox"/> Exhaust does not vent to the outside <input type="checkbox"/> Exhaust vents to the outside		
Stairs	24. Railings: 3+ steps	<input type="checkbox"/> Missing or only on one side <input type="checkbox"/> Broken or insecure <input type="checkbox"/> Railing on both sides appear to be secure	
	25. Steps: Condition	<input type="checkbox"/> One or more broken or missing <input type="checkbox"/> Not broken or missing <input type="checkbox"/> Does not apply: No steps	
	26. Step Covering:	<input type="checkbox"/> No covering on stairs <input type="checkbox"/> Covering on stairs is not firmly attached/poor condition <input type="checkbox"/> Coverings on stairs is firmly attached and is in good condition	
	27. Stair Gates:	<input type="checkbox"/> Not present at top or bottom of stairs or not secured to wall <input type="checkbox"/> Gate secured to wall at top or bottom but not both <input type="checkbox"/> Gate secured at top and bottom of stairs	
	28. Lighting:	<input type="checkbox"/> Light present at top and bottom of stairs <input type="checkbox"/> Light not present at top or bottom of stairs	
Windows	29. Condition:	<input type="checkbox"/> One or more windows missing <input type="checkbox"/> One or more windows cracked or broke <input type="checkbox"/> One or more windows cannot be opened <input type="checkbox"/> All windows intact and can be opened	
	30. Blind cords:	<input type="checkbox"/> Yes (window cords looped or tied together) <input type="checkbox"/> No (window cords not looped or tied together)	
	31. Window Guards: > 2nd floor	<input type="checkbox"/> Missing or not operational <input type="checkbox"/> Present and operational	
	32. Do all windows have screens?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Slips, Trips and Falls	33. Does bathroom/shower have non-slip surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	34. Do small area rugs stay put when pushed with foot?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	35. Are passageways free from clutter?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Heating / cooling	36. Are there unvented combustion appliances? <input type="checkbox"/> No <input type="checkbox"/> Yes →	36a. If Yes what kind? <input type="checkbox"/> Fuel-fired space heaters <input type="checkbox"/> Charcoal <input type="checkbox"/> Gas clothes dryer <input type="checkbox"/> Gas logs	

37.	Smoke Alarm: <input type="checkbox"/> Not operational (at least one smoke alarm tested did not work as designed) <input type="checkbox"/> No Smoke alarm present <input type="checkbox"/> Operational (all smoke alarms work as designed)	
38	CO Alarm: <input type="checkbox"/> Not operational (at least one smoke alarm tested did not work as designed) <input type="checkbox"/> No smoke alarm present <input type="checkbox"/> Operational (all CO alarms worked as designed)	
39.	Are chemical, pesticides, cleaning supplies or medication stored within easy reach of children? <input type="checkbox"/> No <input type="checkbox"/> Yes	
40.	Hot water temperature: <input type="checkbox"/> $\geq 120^{\circ}\text{F}$ <input type="checkbox"/> No hot water <input type="checkbox"/> $< 120^{\circ}\text{F}$	
41.	Do you smell a musty odor anywhere in the home? <input type="checkbox"/> Yes Where _____ <input type="checkbox"/> No <input type="checkbox"/>	
42.	Do you see possible Lead Soil contamination? <input type="checkbox"/> Yes where? _____ <input type="checkbox"/> No <input type="checkbox"/>	

Home Health and Safety Hazards:	
43. Other issues identified:	

44. Other issues identified:	

45. Other issues identified:	

Notes:

Promotora Home Visit Evaluation

Participant Initials: _____ Visit Dates: _____

Name of Promotora: _____

Thank you for participating in this Asthma Home Visiting Program. We hope it was helpful to you and your family. We would like to ask you a few questions – how you felt about the program, what you thought about the promotora’s work, and what you might do with the information and materials you received. Your answers will help us improve our home visits and reach other families.

QUESTIONS FOR YOU

1. **What did you think of the visits you had with your Promotora which talked about asthma triggers and Healthy Homes?** (check one box for each statement to show if you agree or disagree)

	Yes, I agree	No, I disagree
I liked working with the Promotora		
I felt that the visits took too long		
I liked the information I was given		
I felt that visiting all the rooms in the home (the inspection for asthma triggers) invaded our privacy		
I liked the items I was given (the Green Cleaning Kit)		
I felt that the information didn’t apply to me and my family		
I would like to learn more about managing asthma		

2. **How helpful was the information about asthma triggers and cleaning methods that you received from your Promotora?** (Please circle or mark your answer)

1-Not at all helpful 2-Not helpful 3- I’m not sure 4-Helpful 5-Very helpful

3. How helpful was the Green Cleaning Kit (with baking soda, white vinegar, sponges and other items) you got from your Promotora?

1-Not at all helpful 2-Not helpful 3- I'm not sure 4-Helpful 5-Very helpful

4. Since you started learning about asthma triggers and working with your Promotora, how often has your child (or children) had asthma symptoms like coughing and wheezing, or needing to use their inhaler?

- a. More often
- b. Less often
- c. About the same amount
- d. No asthma symptoms since the first visit

5. Do you think you will continue to use the information and household practices the Promotora talked to you about?

- e. Yes
- f. No

6. Is there anything else you would like to tell us about your Asthma Home Visits?

Please mail your answers to the New Mexico Asthma Control Program in the stamped envelope.

Thank you for your time!

Follow-Up Call

Participant Initials: _____ Call Date: _____

Name of Promotora: _____

Introduce yourself, see if the family member you worked with is available. Remind them briefly about the program visits you made, and that this is a short follow-up call to see how they've been doing since the last visit.

QUESTIONS

1) How have [name of child/family member]'s asthma symptoms been during the past month? *[refer to healthcare provider if asthma symptoms have been bad]*

2) After participating in this program, did you make any change in the ways you clean and maintain your home?

- a. Yes, a big change
- b. A few things, a small change
- c. No, not really

3) a. Are you still using any of the Green Cleaning items from your kit, or using some Green Cleaning principles when you clean your home? (Yes or No)

3b. If yes, which ones?

3c. Where in your home (for example, your child's bedroom, kitchen, bathroom) do you use them?

4) Is there anything that you think would make this program more useful to you and your child with asthma?

Thank them again for participating and let them know that although this is the final piece of the Asthma home visiting program with a Healthy Homes/trigger reduction focus, more asthma-related programs are planned.

