## A Tale of Weatherization and Healthy Homes

Anna Lopez (Grandma) lives in a single family house in a mostly rural area. Her 8 year old granddaughter, Maria, who is nicknamed Red, visits her as much as possible.



Sometime after a contractor insulates the attic to make the house more energy efficient and the water stain appears on the attic ceiling, both Grandma and Red find that they are coughing a bit. Grandma complains to her doctor about the coughing and her doctor suggests that she is suffering from seasonal allergies that can be treated with overthe-counter allergy medicine.



After the contractor air seals the attic to fix the moisture that is condensing underneath the roof, Grandma notices the condensation in the window and "suspect mold" spots on the walls near the window. A few

weeks after the "mold like substance" begins to grow, Red visits. Grandma and Red spend most of the day indoors baking cookies, but stop when Red starts to cough and wheeze. Red says she's having a hard time breathing.

Grandma takes Red to the Emergency Room and meets Red's mom there. The doctor examines Red and asks about her symptoms,

including if they have occurred any other times, whether there was anything that seemed to trigger them, and whether Red is allergic to anything. Grandma and Red's mom tell the doctor that other than a coughing spell at



Grandma's house one time, they haven't noticed any other symptoms and are not sure what may have triggered the episodes. Red's mom says she doesn't think Red is allergic to anything but she's never had her tested.

The doctor refers Red to an asthma and allergy specialist to be tested – and suggests that Grandma have her house evaluated to see if there are any environmental triggers that might be causing Red to react. Grandma thinks that is an excellent idea and when she goes home, she googles "healthy home evaluator" to find someone to evaluate her house. Her search comes up with Jacob



Grim, a BPI certified Healthy Home Evaluator.

After talking with Grandma on the phone about the work that's been done on her house and Red's symptoms, Mr. Grim hypothesizes that there may be environmental triggers for asthma and allergies in Grandma's house. Soon after, Mr. Grim comes to visit Grandma's house and sits down with her to ask her about her concerns. She tells him more about the problems she's having with the contractor making her home energy efficient and also mentions the health problems that Red has been having.

Keep it Ventilated	Yes	No	Not Applic.	Is What issues were observed?	this a Healt	h/Safety Chronic		Take Action
Working supply vent Supply vent open								
Supply vent unobstructed If return vent present - working								
Return vent(s) unobstructed Exhaust fan present/operational If windows present-operational				Airflow Check: Pass	Fail			
				*Note airflow readings #	dentified:			
eep it Clean Excessive visible dust	Yes	No	NA	What issues were observed?		Chronic	Acute	TA?
Is any carpeting/upholstery present								
Any cloth window coverings present Any furry/feathered pets in room								
Observed clutter Observed trash/debris on surfaces								
					# Identified:			

After a thorough visual evaluation of her house, Mr. Grim reports to Grandma that the suspect

mold he's found in her living room is a possible hazard. He explains, according to the EPA, asthma and allergies can be triggered by a variety of indoor environmental hazards, including mold. Grandma notes that Red is going to an asthma and allergy specialist to be tested. Mr. Grim agrees with that as a good step to take, but he also recommends addressing the ventilation problem that is contributing to the moisture and potential mold problem that Grandma is having. He and Grandma talk to the contractor who has been working on her house and ask the contractor to install a fan in her kitchen that vents to the outdoors. As a knowledgeable Healthy Homes Evaluator, Mr. Grim knows that he has to make sure that there is adequate make up air for the kitchen or the stove in her house won't draft properly. He also asks the contractor to install an outside air supply directly to the stove. After the installation, Mr. Grim conducts testing to make sure that the ventilation meets ASHRAE standard 62.2.

The spots were tested and verified to be mold. The HHE also suggests that Grandma contact a professional mold remediation specialist to come in and clean up the mold. Grandma agrees, and checks out several possible companies. She talks to past customers and makes sure that the company's technicians are certified/licensed Mold Removal Specialists. She choose the company who provides her with an affordable quote and the company comes in and cleans up all of the mold. The company tests Grandma's house to confirm that the mold is gone. Then the moisture issues are also corrected .

And Grandma and Red lived happily ever after ....

