HEALTHY HOMES & HOME PERFORMANCE: MAKING THE HOMEOWNER CONNECTION

Peter Troast, Founder & CEO, Energy Circle

Better Buildings by Design Conference, Efficiency VT

February 6, 2020

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Twitter: @EnergyCircle

Facebook: Energy Circle

Volunteer/Pro Bono

Building Performance Association
Board Member

Webinar Series

2X/month; BPI & NATE CEU's

Energy Circle Sandbox

Marketing & Lead Generation Services for 350+ Better Building Contracting Businesses

HVAC, Home Performance, Solar, Insulation, Auditors/Raters, Builders, Remodelers

50 States, Canada
& Countless Climate Zones

An Inside View of Many Business Models and Their Success

Deep Dataset on What is Making the Phone Ring

Our Mantra: More Successful Contractors = More Retrofits

~4 Years of Healthy Home Marketing Experiments

What We'll Discuss

1. The State of the Healthy Homes Opportunity
2. Foundations of a Healthier Home Business Strategy
3. Communication Strategies for the Healthier Home Customer Journey

My Optimism is Growing

Digital Marketing Web Platform Lead Gen Results

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Healthy Homes & Home Performance: WE HAVE NO BUSINESS MODEL - Part 1

By Peter Troast | September 15, 2016

The nexus of healthy homes and home performance continues to be at the forefront of our industry's hope for the future. But, for all the cheery prognostication (including my own), serious effort by smart people, real progress on credentialing, and general optimism, we are failing to focus on the key issue: how is the "healthy home" concept a viable business model for the home performance industry?

With each passing day, I see signs that we are losing the market. When a magazine as mainstream as Vogue links poor indoor air quality with bad skin, you'd think we could take a victory lap. But the fix, according to that article, is simple: install a shiny Dyson Pure Cool Link -- a sexy fan/filtration device that solves all problems -- for a mere $499. No home upgrades needed.

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THE HEALTHY HOMES TREND

(this wave ever gonna break?)

The New York Times

Opinion

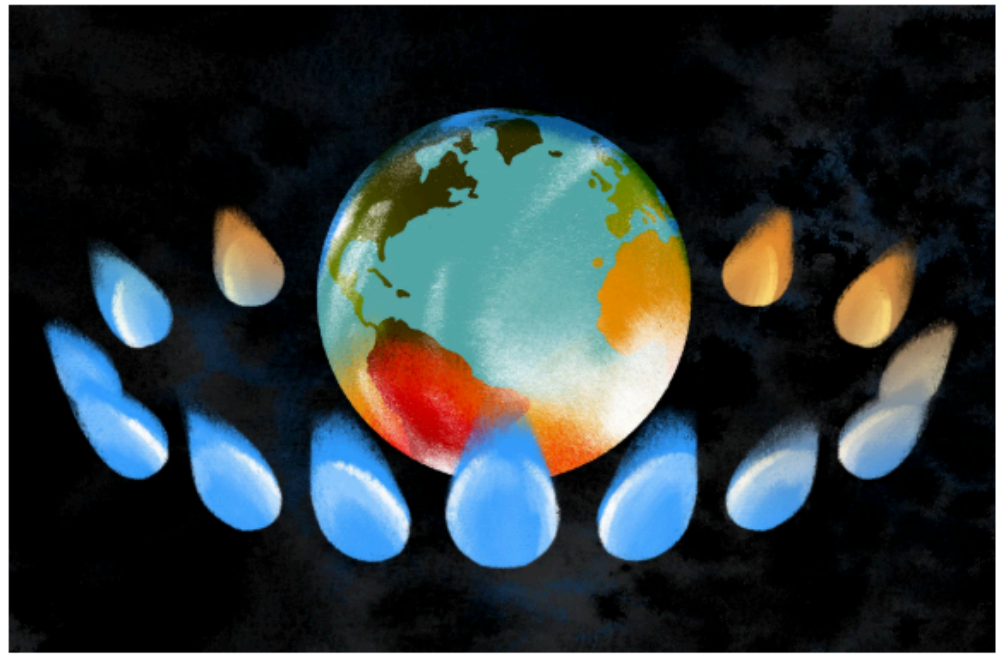
Your Gas Stove Is Bad for You and the Planet

To help solve the climate crisis, we need to electrify everything.

By Justin Gillis and Bruce Nilles

Mr. Gillis is a former New York Times environmental reporter and a contributing opinion writer.
Mr. Nilles is a managing director at Rocky Mountain Institute.

May 1, 2019



Angie Wang

OAKLAND, Calif. — We have some good news that sounds like bad news: Your gas stove has to go.

Elon Musk 
@elonmusk

 Follow

Filtering particulates from air makes a significant & measurable diff to health. Wd like to credit Larry Page with turning me on to this.

RETWEETS	LIKES
1,430	5,428

1:34 PM - 2 May 2016

  1.4K  5.4K 

BEAUTY > HEALTH & FITNESS

Is the Air in Your Home Affecting Your Health? How to Reduce Indoor Pollution

MAY 17, 2016 7:10 PM
by LAURA REGENSDORF

Photographed by Mario Testino, *Vogue*, February 2015

Pollution is increasingly—and rightfully—on people's minds lately, as seen in the host of new products addressing its negative effects on the skin and the troubling smog levels in cities like Beijing. But only recently did I start thinking more seriously about the air quality inside the home, after a pair of prolific chain-

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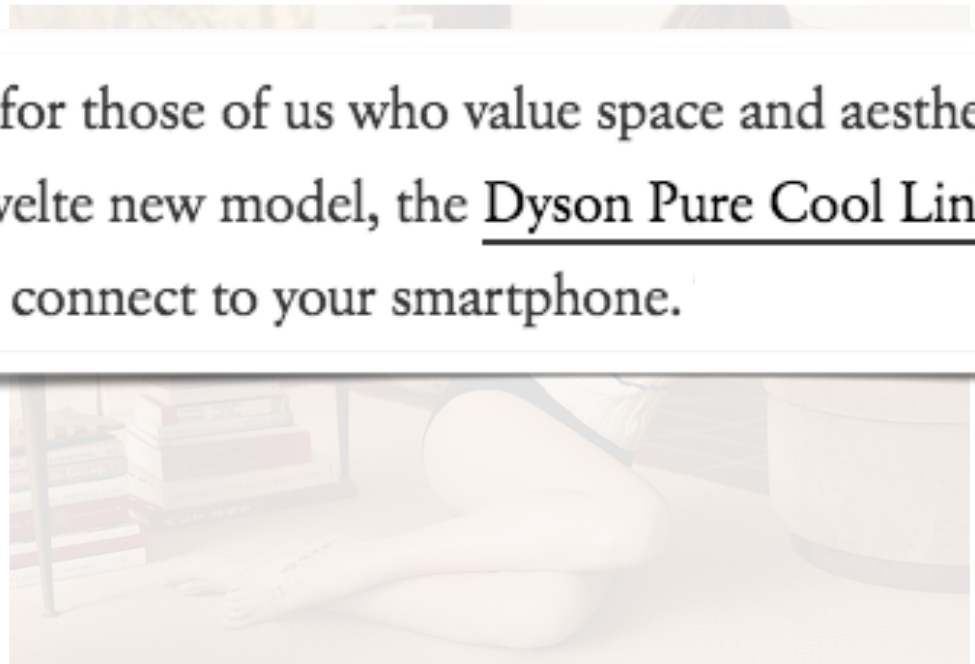
BUT WHO IS WINNING?

Is the Air in Your Home Affecting Your Health? How to Reduce Indoor Pollution

MAY 17, 2016 7:10 PM
by LAURA REGENSDORF



Photographed by Mario Testino, *Vogue*, February 2015

Fortunately for those of us who value space and aesthetics, Dyson has just unveiled a svelte new model, the Dyson Pure Cool Link, equipped with feedback sensors that connect to your smartphone.

Pollution is increasingly—and rightfully—on people's minds lately, as seen in the host of new products addressing its negative effects on the skin and the troubling smog levels in cities like Beijing. But only recently did I start thinking more seriously about the air quality inside the home, after a pair of prolific chain-

Elon Musk
@elonmusk

Follow

Filtering particulates from air makes a significant & measurable diff to health. Wd like to credit Larry Page with turning me on to this.

RETWEETS	LIKES
1,430	5,428

1:34 PM - 2 May 2016

1.4K 5.4K

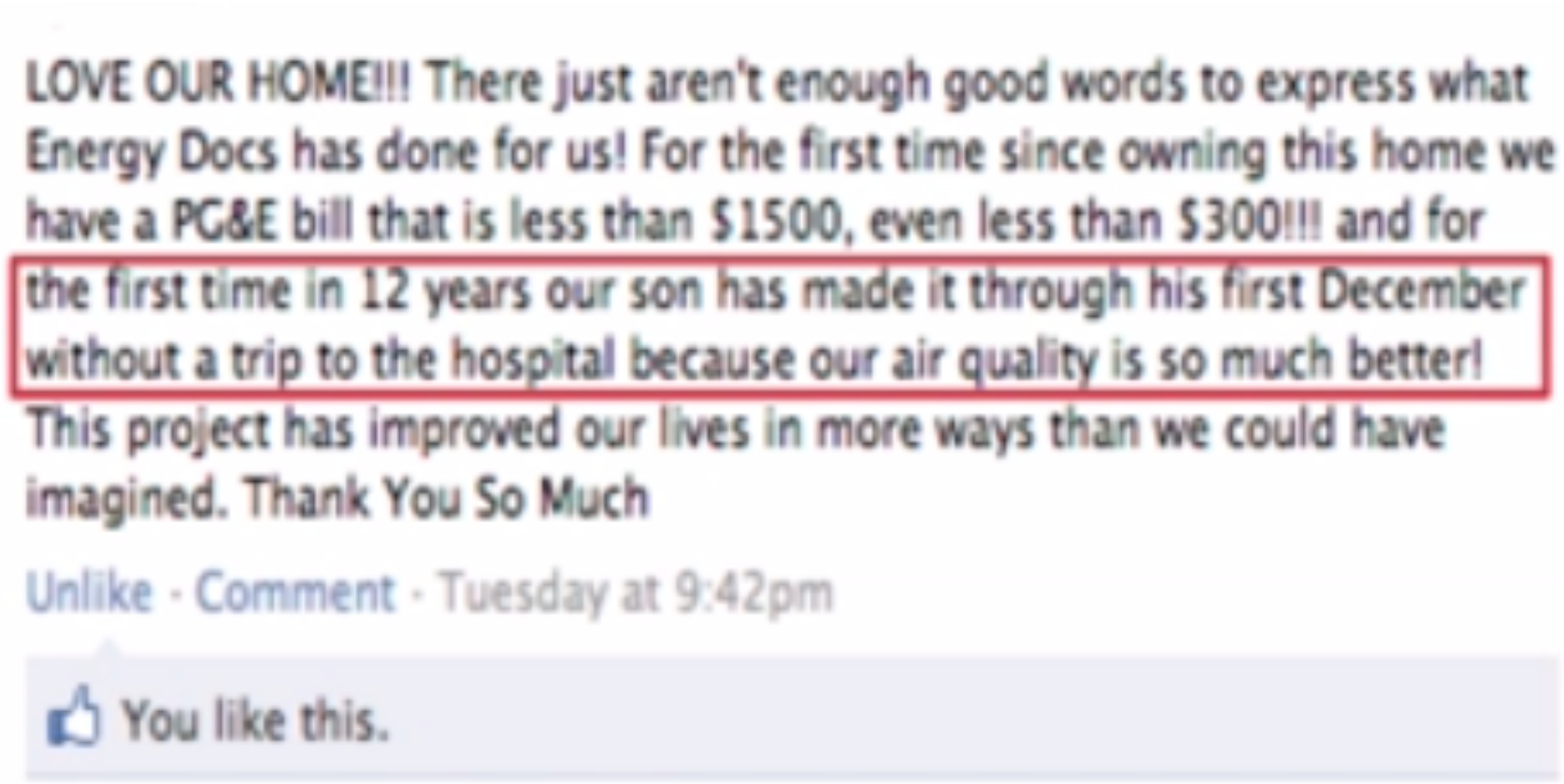
Reply to @elonmusk

Dyson @Dyson · May 2
@elonmusk We agree. That's why we've developed Pure Cool Link: dyson.com/air-treatment/… Automatically monitors, reacts and purifies via app.

6 21

$499

Came for Efficiency. Saved a Kid.


LOVE OUR HOME!!! There just aren't enough good words to express what Energy Docs has done for us! For the first time since owning this home we have a PG&E bill that is less than $1500, even less than $300!!! and for the first time in 12 years our son has made it through his first December without a trip to the hospital because our air quality is so much better! This project has improved our lives in more ways than we could have imagined. Thank You So Much

Unlike · Comment · Tuesday at 9:42pm

You like this.

The Chasm

The Lens I See Through

1

Our challenge = how to connect consumer demand for healthy homes with private market opportunities for home performance improvement

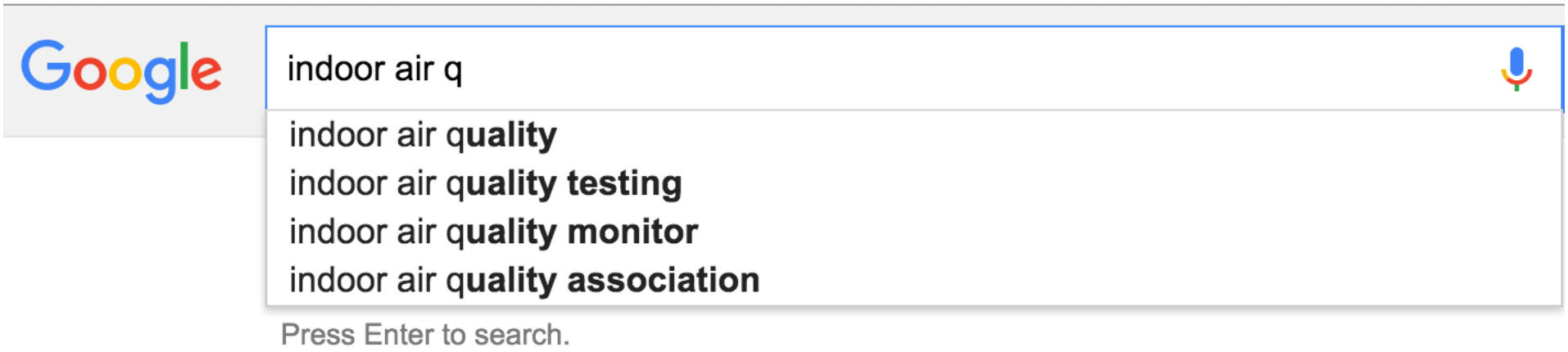
The Lens I See Through

1. *Our challenge = how to connect consumer demand for healthy homes with private market opportunities for home performance (new & retrofit)*

2. *Success = when quality performance contracting companies convert the growing demand for healthy homes to new homes and whole house jobs AT SCALE*


DATA

Learning from Mother Google

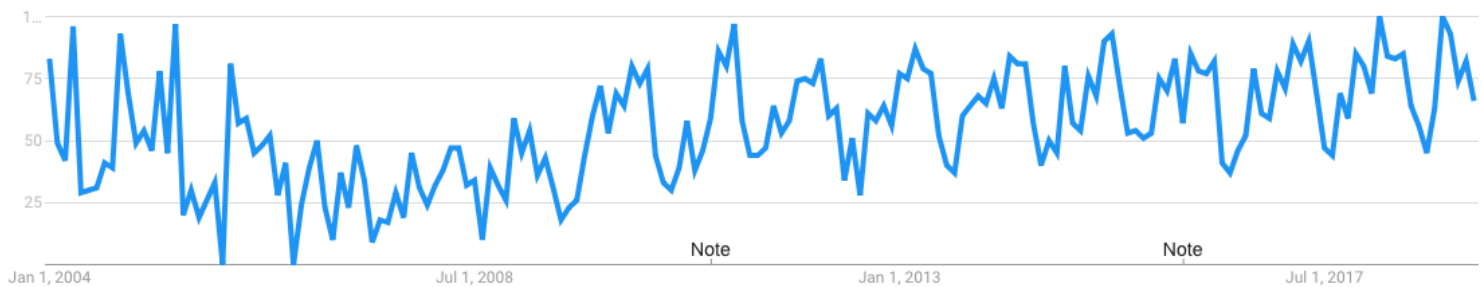


what causes asthma
Search term

+ Compare

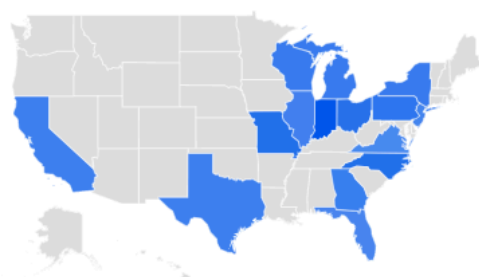
United States | 2004 - present | All categories | Web Search

Interest over time



Interest by subregion

Subregion



1	Indiana	100
2	Missouri	80
3	North Carolina	79
4	Ohio	77
5	Pennsylvania	75

Showing 1-5 of 15 subregions

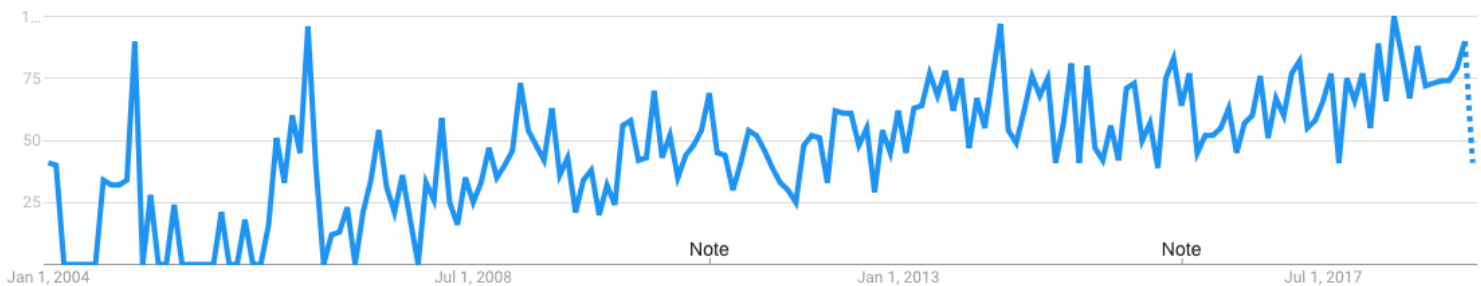
Google Trends, February 12, 2019

off gassing
Search term

+ Compare

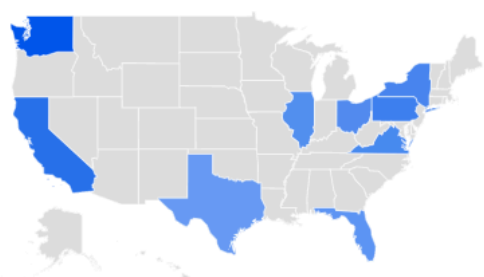
United States | 2004 - present | All categories | Web Search

Interest over time



Interest by subregion

Subregion



1	Washington	100
2	California	77
3	Pennsylvania	65
4	New York	60
5	Virginia	58

Showing 1-5 of 9 subregions

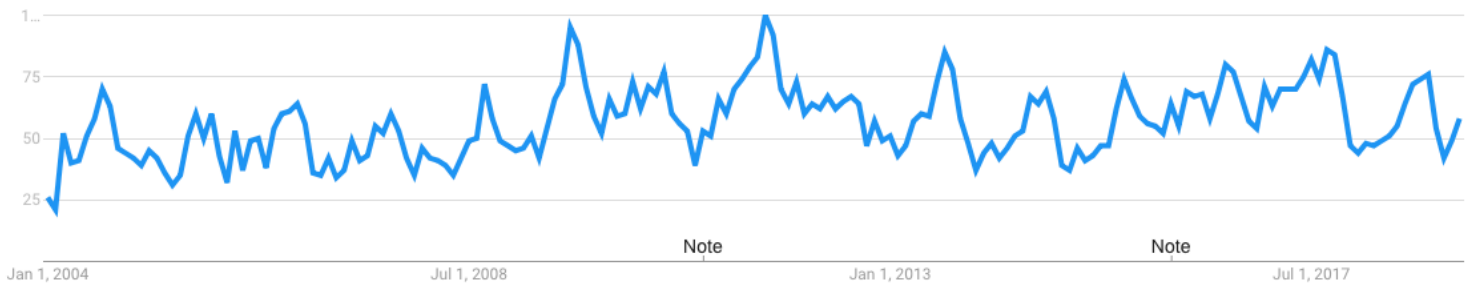
Google Trends, February 12, 2019

mold removal
Search term

+ Compare

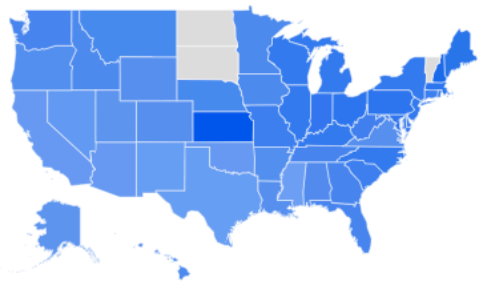
United States | 2004 - present | All categories | Web Search

Interest over time



Interest by subregion

Subregion



1	Kansas	100
2	New Hampshire	84
3	Maine	76
4	Pennsylvania	75
5	Massachusetts	73

Showing 1-5 of 48 subregions

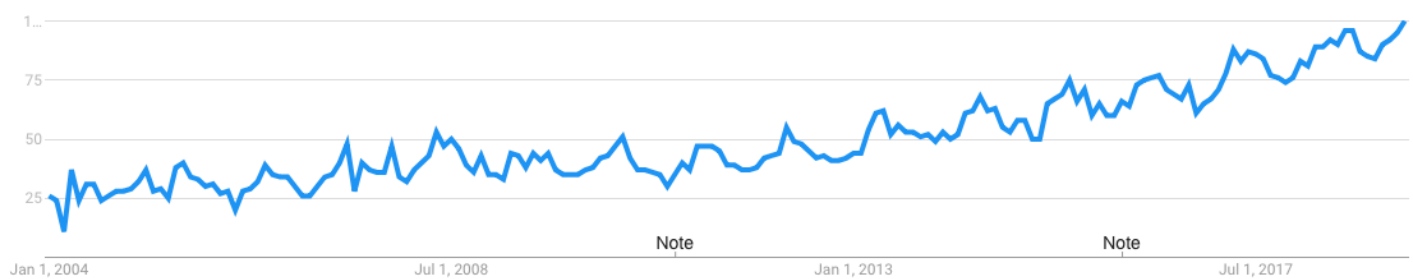
Google Trends, February 12, 2019

non toxic
Search term

+ Compare

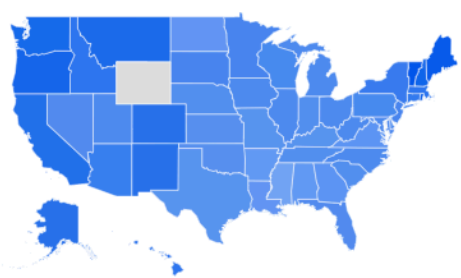
United States | 2004 - present | All categories | Web Search

Interest over time



Interest by subregion

Subregion



1	Vermont	100
2	Maine	96
3	New Hampshire	89
4	Oregon	88
5	Rhode Island	86

Showing 1-5 of 50 subregions

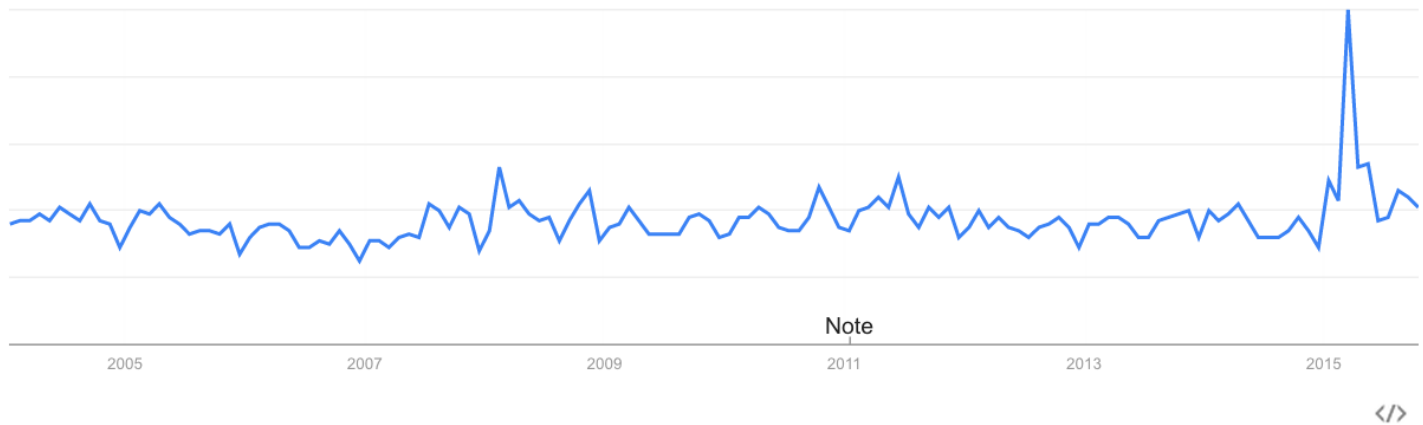
Google Trends, February 12, 2019

formaldehyde
Search term

+ Add term

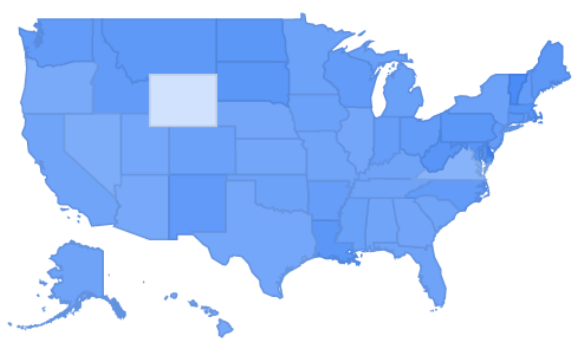
Interest over time

News headlines Forecast



Regional interest

Worldwide > United States



Subregion | Metro | City

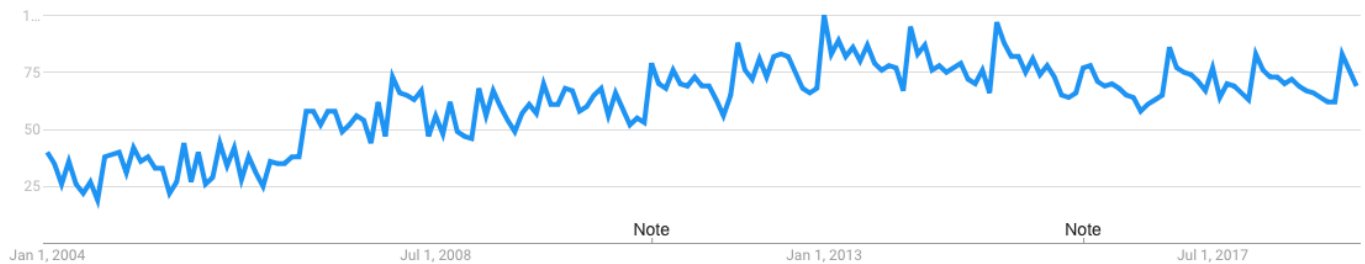
Delaware	100
Vermont	90
Massachusetts	82
West Virginia	81
Maryland	81
Pennsylvania	79

healthy home
Search term

+ Compare

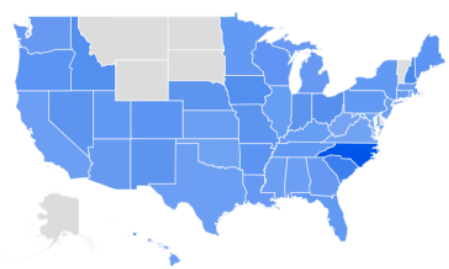
United States | 2004 - present | All categories | Web Search

Interest over time



Interest by subregion

Subregion

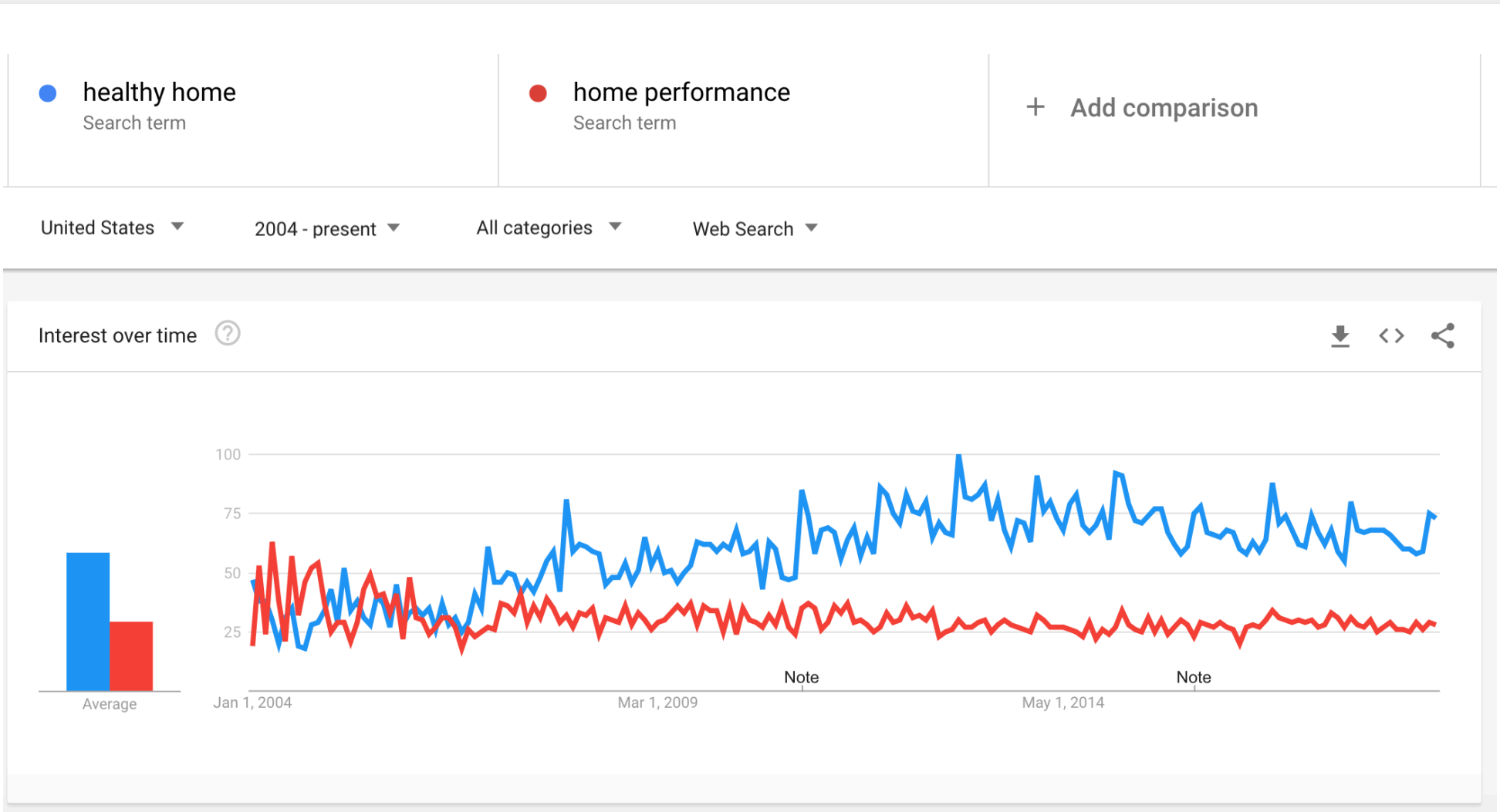


1	North Carolina	100
2	South Carolina	66
3	New Hampshire	58
4	Idaho	53
5	Iowa	52

Showing 1-5 of 44 subregions

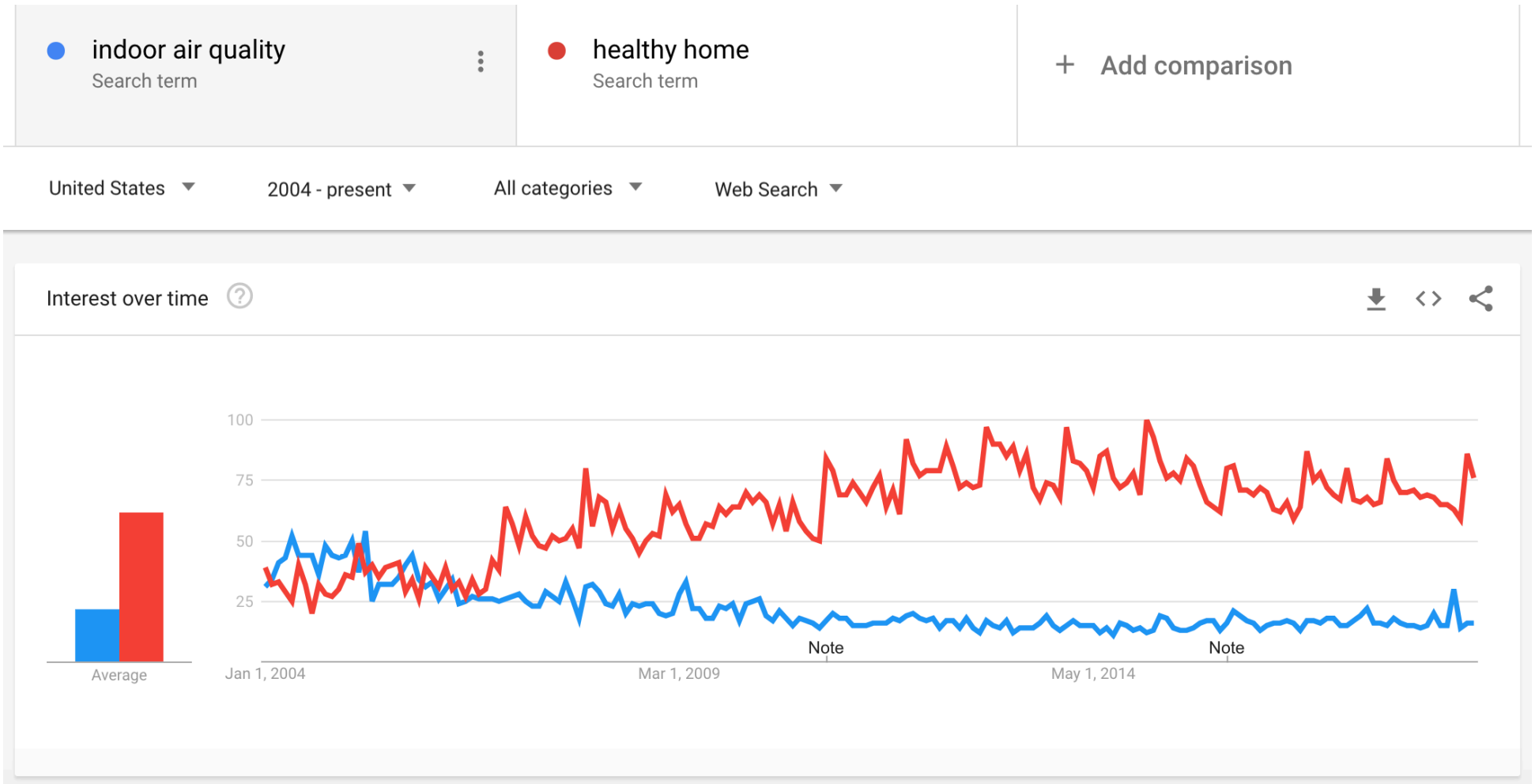
Google Trends, February 12, 2019

Healthy Home vs Home Performance



Google Trends, February 12, 2019

Healthy Home vs IAQ

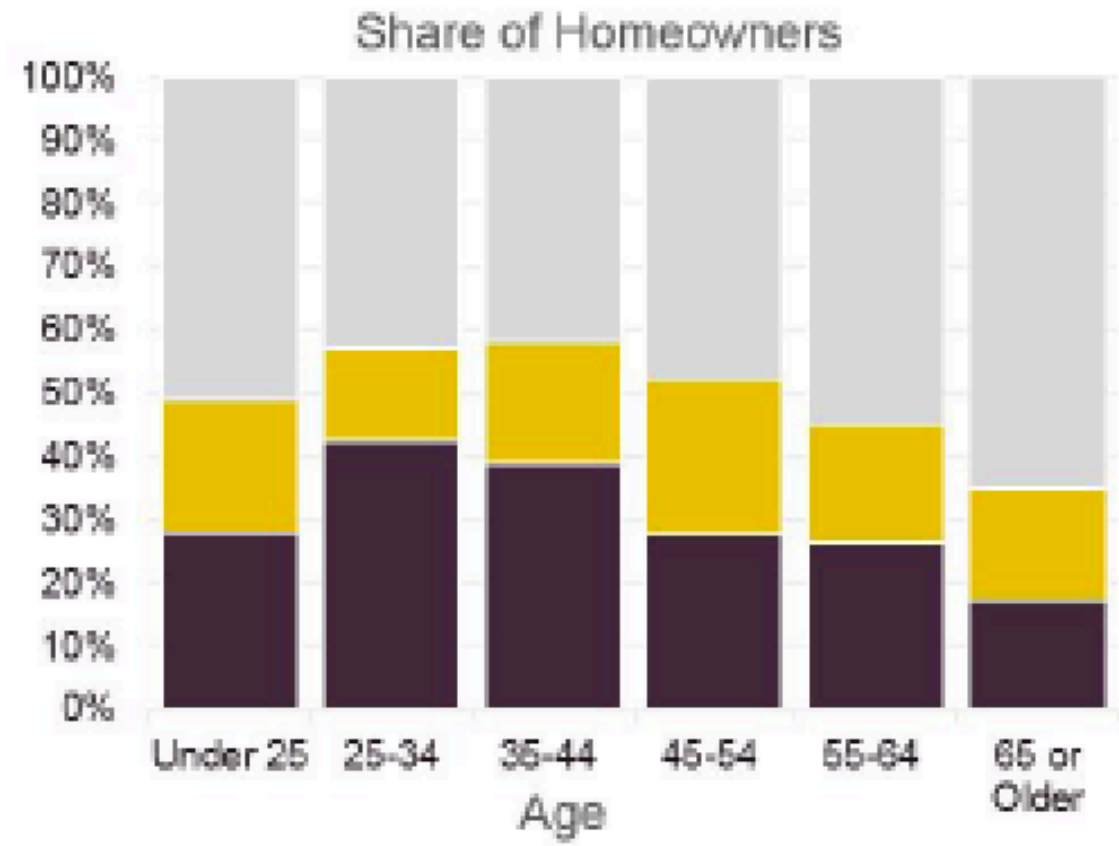


Google Trends, February 12, 2019

n = 2469
Summer 2018

FIGURE 3: HEALTHY HOUSING CONCERNS ARE HIGHEST IN EARLY-MIDDLE AGES, ESPECIALLY AMONG OWNERS

IN THE PAST FEW YEARS, HOW CONCERNED HAVE YOU BEEN ABOUT YOUR CURRENT HOME NEGATIVELY AFFECTING YOUR OR ANOTHER OCCUPANT'S HEALTH?

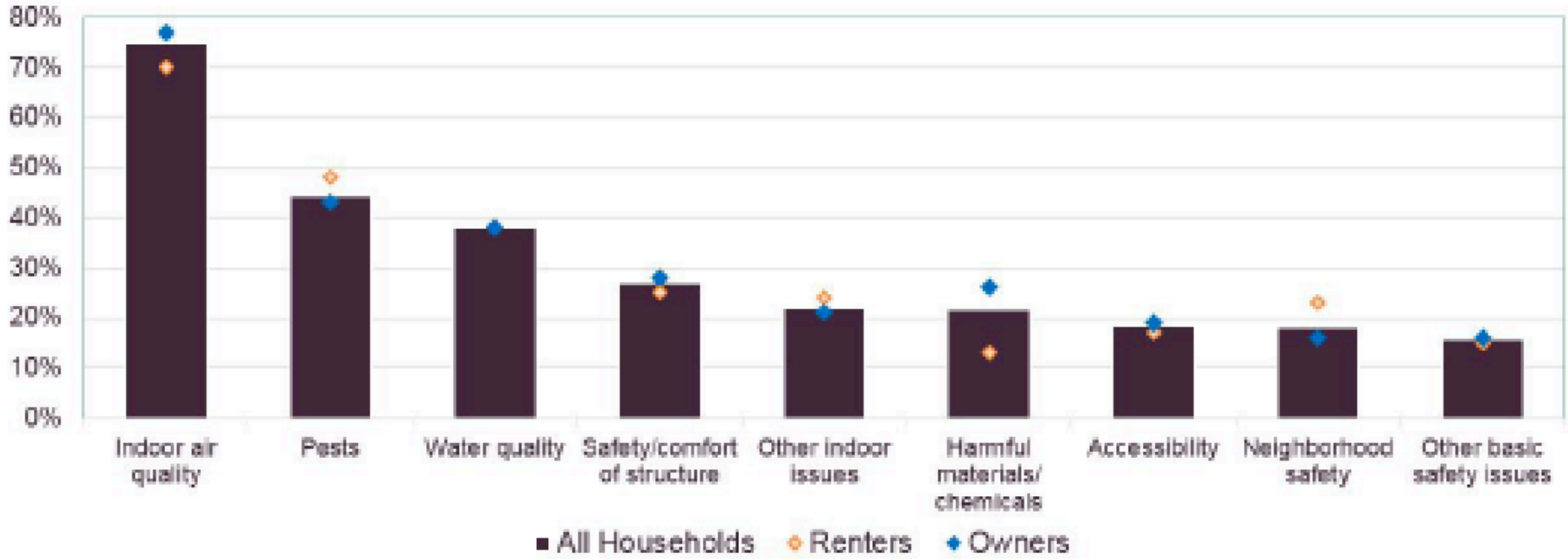


Specific Concerns & Suspected Risks

Note: Out of a sample of 1,751 homeowners and 718 renters.
Source: Farnsworth Group and Joint Center Healthy Homes Surveys, August 2018.

FIGURE 4: INDOOR AIR QUALITY, PESTS, AND WATER QUALITY ISSUES TOP LIST OF CONCERNS ABOUT THE IMPACT OF HOME ON HEALTH

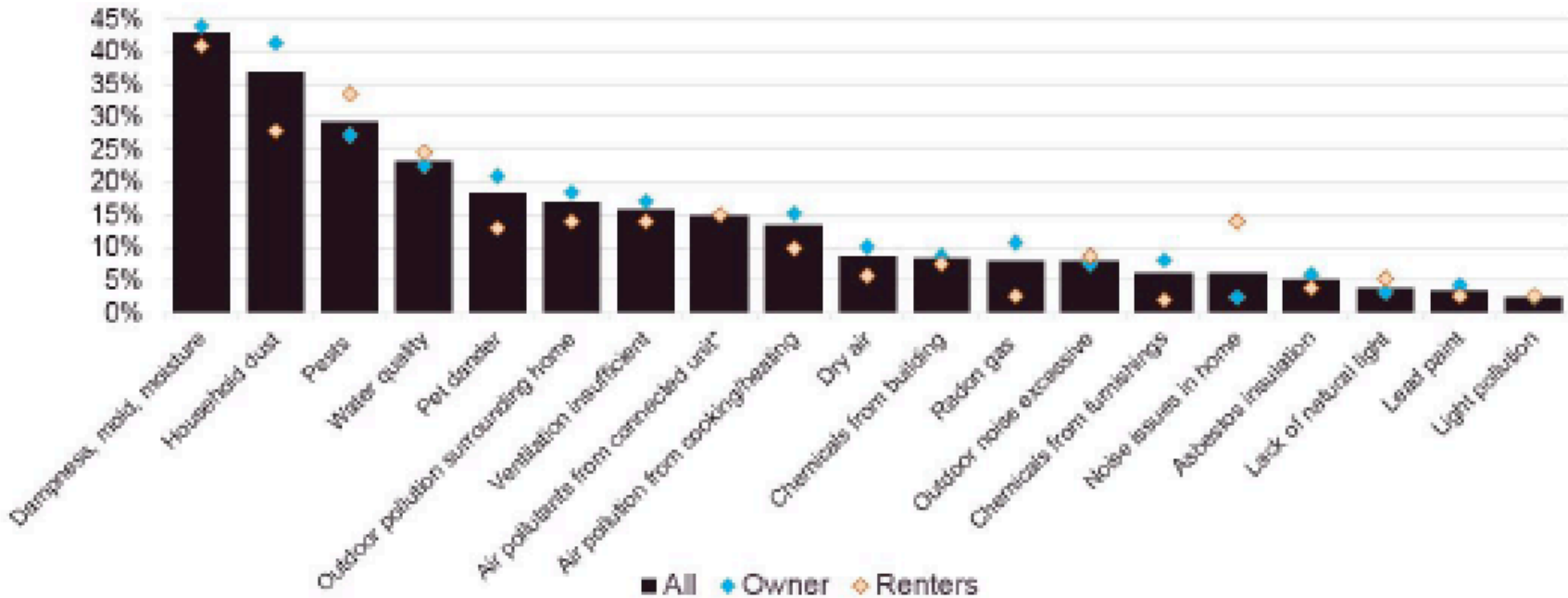
WHICH CATEGORY OR CATEGORIES BEST DESCRIBE YOUR CONCERN ABOUT THE IMPACT OF YOUR HOME ON YOUR HOUSEHOLD'S HEALTH?



Note: Out of a sample of 501 homeowners and 250 renters concerned about specific healthy housing issues.
Source: Farnsworth Group and Joint Center Healthy Homes Surveys, August 2018.

FIGURE 5: DAMPNESS/MOLD, HOUSEHOLD DUST, PESTS TOP LIST OF CONCERNS ABOUT INDOOR ENVIRONMENTAL QUALITY ISSUES

INDOOR ENVIRONMENTAL QUALITY ISSUES THAT GENERATED THE MOST CONCERN



Notes: Out of a sample of 493 homeowners and 266 renters concerned about indoor environmental quality issues (i.e., issues other than accessibility and basic physical safety). Households were asked, "Among the healthy home issues that concerned your household, please select up to three of them that generated the most concern." [*] denotes that the question was not asked of homeowners.

Source: Farnsworth Group and Joint Center Healthy Homes Surveys, August 2018.

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A LITTLE BIT OF FIRST PARTY DATA

(caution: still limited sample sizes)

Healthy Home Terms "Potential"

Volume

how often searched for

Opportunity

estimated click-through rate

Difficulty

of ranking ahead of competition

=

Potential

combined metrics; sweet spot

Healthy Home Terms "Potential"

Volume

how often searched for

Opportunity

estimated click-through rate

Difficulty

of ranking ahead of competition

=

Potential

combined metrics; sweet spot

mold testing	75
air quality testing	70
home air quality test	66
indoor air quality	63
air quality test	58
blower door test	57
indoor air pollution	54
healthy home	54
volatile organic	53
vocs	52
indoor pollution	47
indoor air pollutants	45
healthy home tips	40
contaminants/	31
home air health	25
allergies & asthma	20

Top 25 (based on Click Through Rates)

indoor air quality standards
the best humidity level for home
air quality inspector
air quality inspection
what is the best level of humidity in a home
how to test indoor air quality
what is the best humidity level for your home
normal humidity levels in a home
home humidity levels chart
measuring air quality
what causes moisture in a house
what is a good humidity level in a home
how to get rid of dust in home
symptoms of mold in home
what is good humidity level for home
what is the optimum humidity level for a home
air quality check
indoor air quality company
how to find mold in your home
home air quality testing
what is the best humidity level for home
ideal humidity level for home

Top 25 (based on Click Through Rates)

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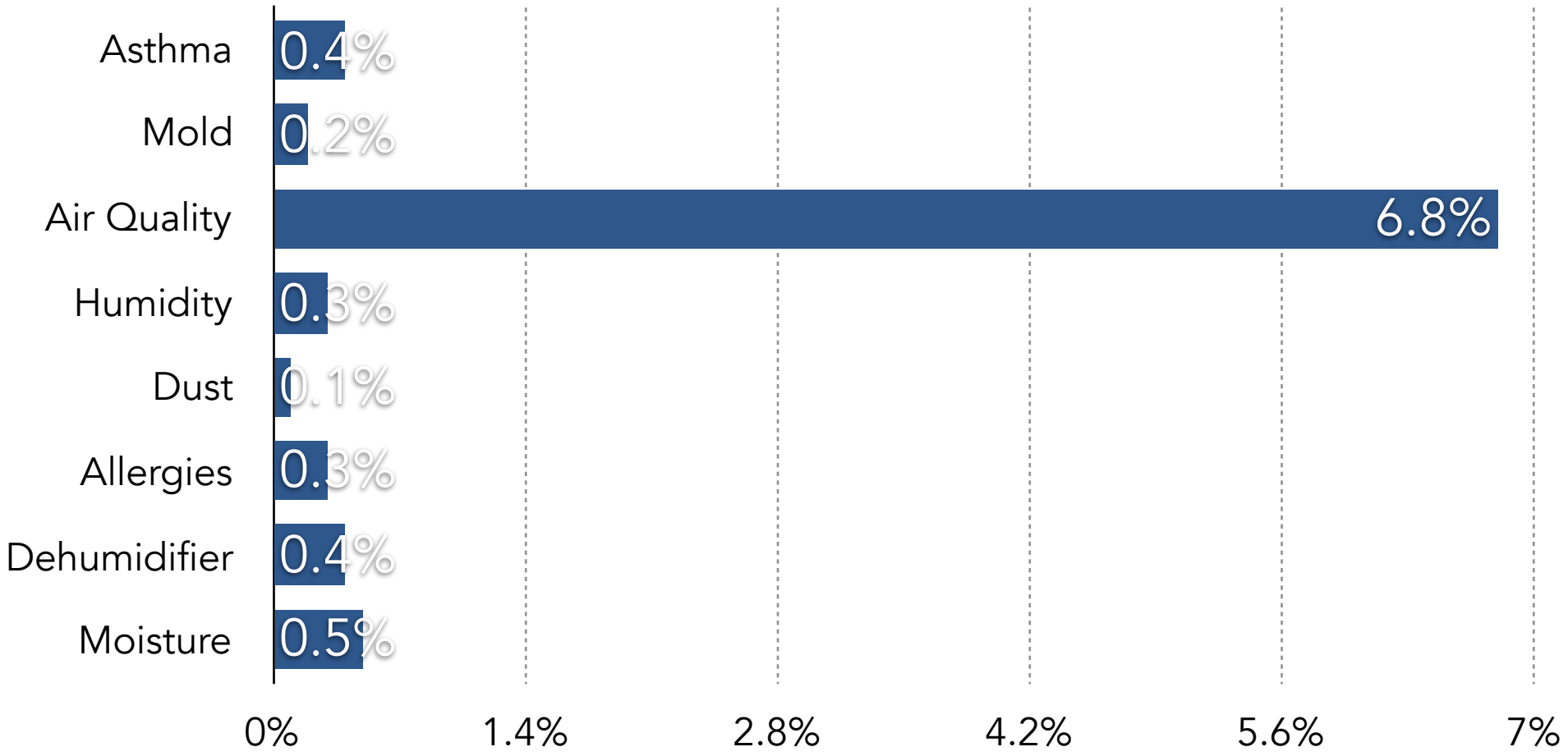
Conversion Rates (to Leads)



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1

NOBODY

CONNECTS HEALTH ISSUES WITH THEIR HOME ENVIRONMENT

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2

EVERYBODY

WANTS TO FIRST START WITH A TEST

The Chasm

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FOUNDATIONS OF A HEALTHIER HOME BUSINESS & MARKETING STRATEGY

Pathway to Meaningful Business

1 DIAGNOSTIC PROCESS

- Standard Energy Audit + IAQ
- Air Visual PRO or other Monitoring Device?

Pathway to Meaningful Business

1 DIAGNOSTIC PROCESS

- Standard Energy Audit + IAQ
- Air Visual PRO or other Monitoring Device?

2 MEASURES WITH BUSINESS VALUE

- Envelope Control (air leakage)
- Whole House Ventilation
- Crawlspace Encapsulation
- Duct cleaning and sealing
- Moisture Control
- Equipment Replacement

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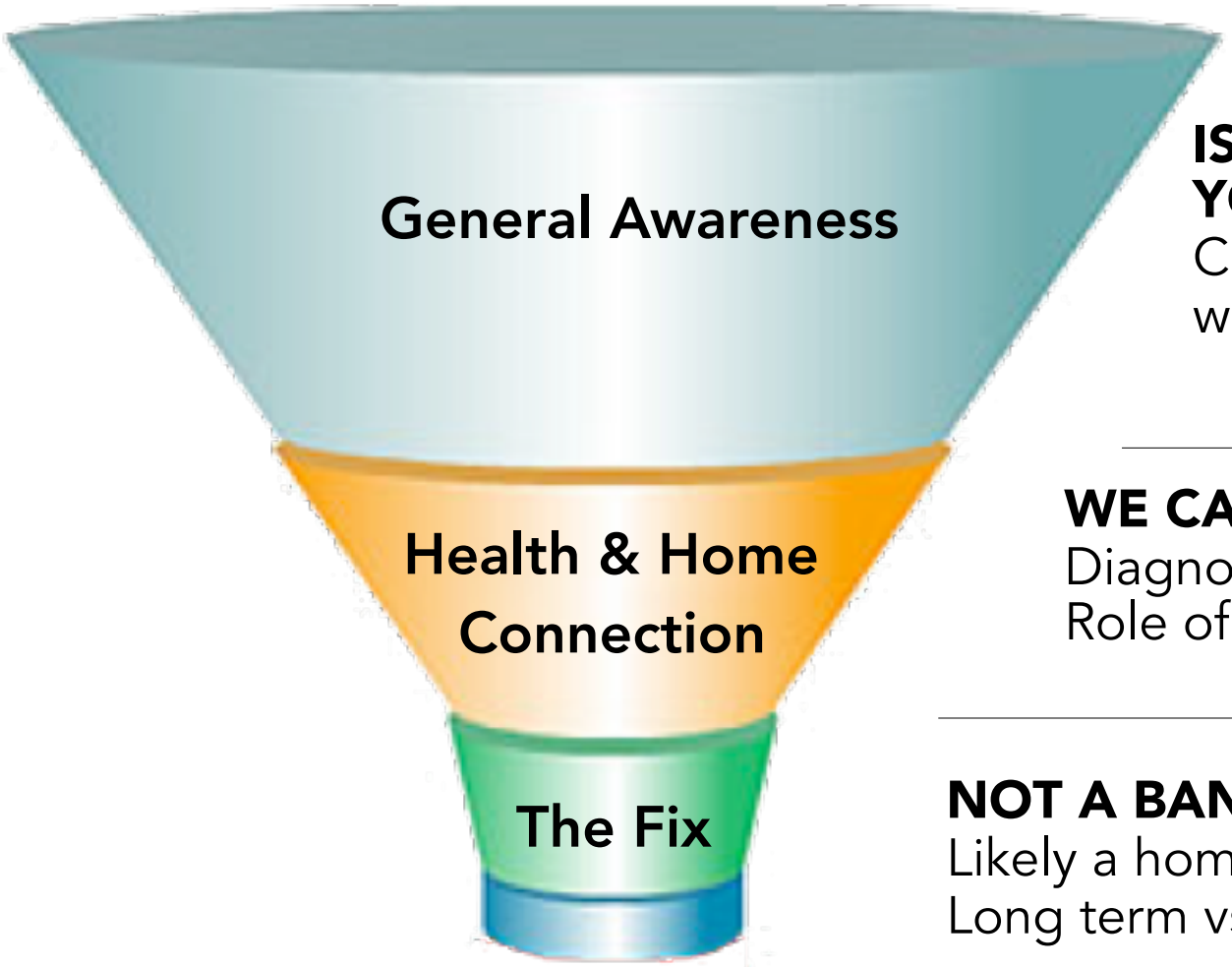
THE HEALTHIER HOME CUSTOMER JOURNEY

Healthier Homes Customer Journey



IS YOUR HOUSE MAKING YOU SICK?
Connecting Health Concerns with the Home Environment

WE CAN ANSWER THAT QUESTION
Diagnostic Process
Role of the Building

NOT A BANDAID SOLUTION
Likely a home improvement job
Long term vs short term fix

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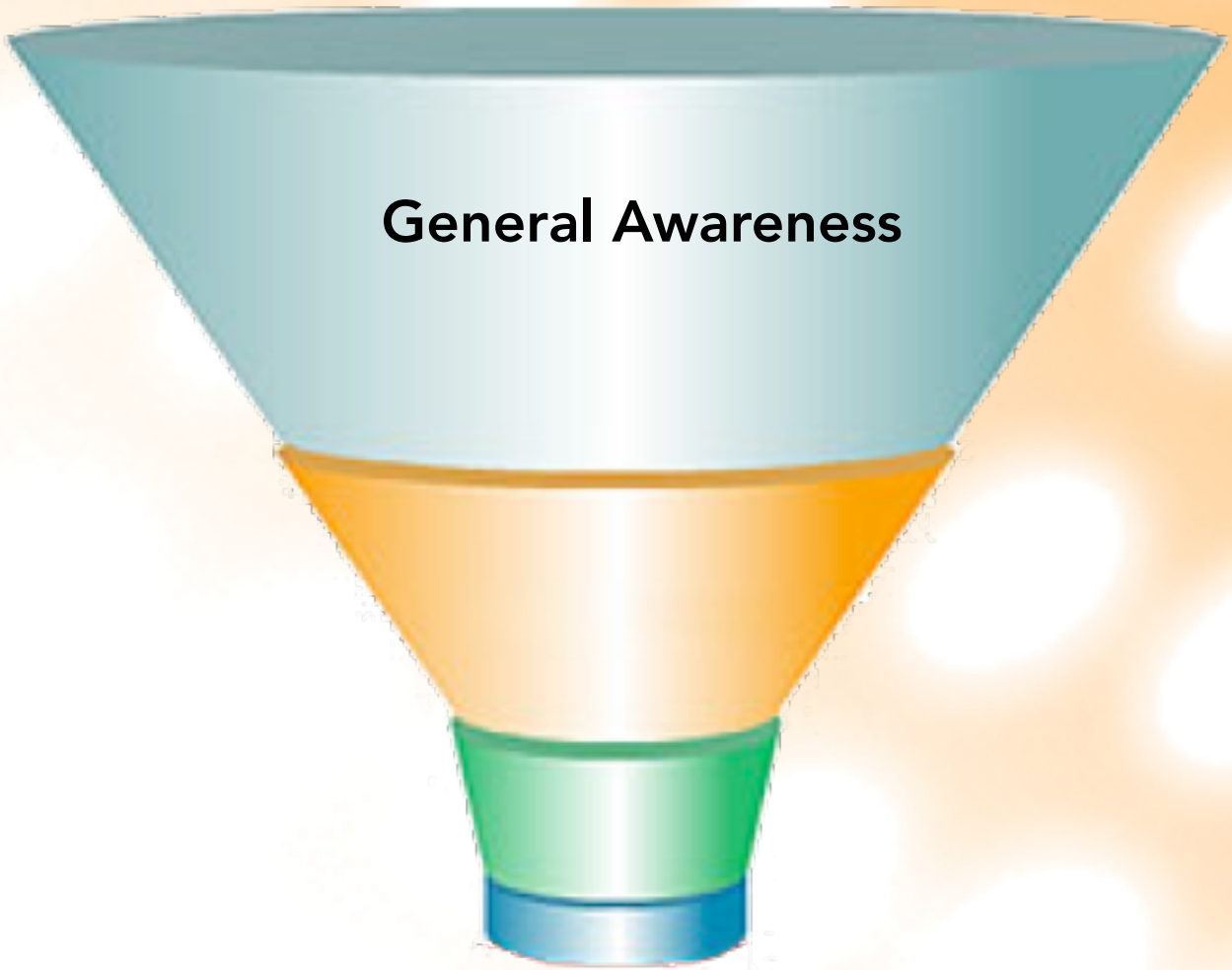

Claim your $250 off per zone, up to $1000, on a brand new Mitsubishi Electric Heat Pump System!

Healthy Home
Energy & Consulting, Inc.

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Home

ENERGY AUDITS | INSULATION & AIR SEALING | INDOOR AIR QUALITY | HEATING & COOLING | WINDOWS & DOORS | SOLAR POWER

Take back the indoor air quality of your home!

Is your home's air healthy?

GET STARTED!

Ready to reduce your home's energy consumption?

Sign up for a no-cost home energy assessment!914-810-6251

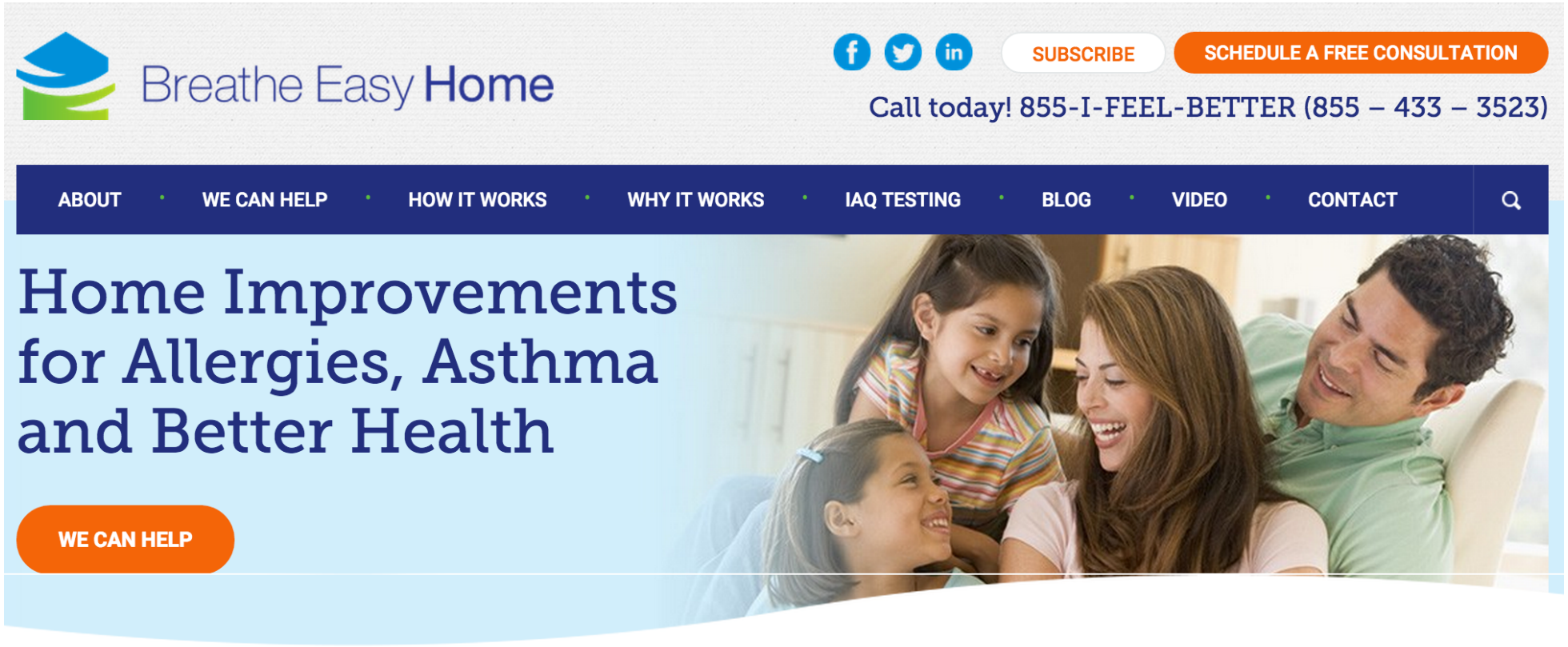
Name * Phone * Email *

LEARN MORE

I'm not a robot reCAPTCHA Privacy - Terms

ps://www.gethealthyhome.com

Fully Committed Master Brand



The Ultimate Indoor Air Quality System

Breathe Easy Home's Indoor Air Quality System removes allergy and asthma triggers, and other irritants and pollutants, from your home's indoor environment. We make structural improvements that are more effective than store-bought air purifiers, filter upgrades, HEPA vacuums, or bedding wraps. You'll feel better with healthier air.

Scarsdale, NY 10583 info@teamhhb.com (914) 723-0200

NEW! Latest Videos Just Uploaded

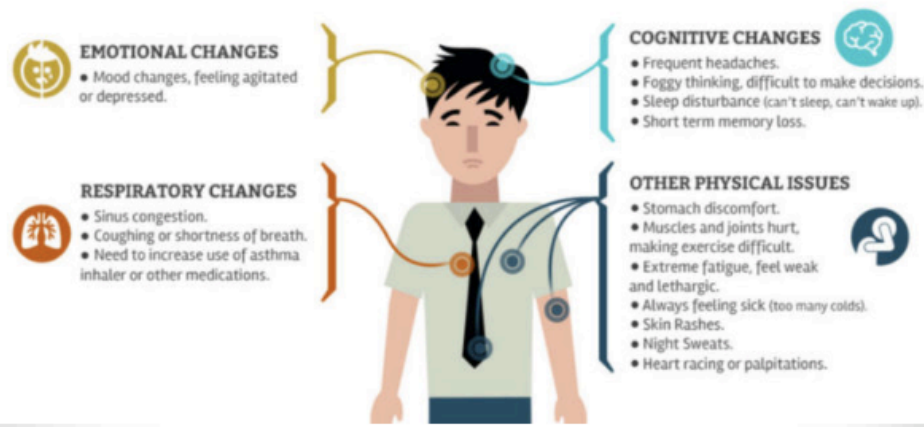
HEALTHY HOME BUILDERS

Fear is Good Marketing

HAYWARD SCORE

Health Symptoms

The symptoms most commonly reported by those affected by a "sick house" are many and varied, depending on the sensitivity of the person and the severity of the issues in the home. These are only a few of the more common symptoms.



Is Your House Making You Sick?

Posted on March 30, 2017 by Dana Sundblad

The symptoms most commonly reported by those affected by a "sick house" are many and varied, depending on the sensitivity of the person and the severity of the issues in the home. Common symptoms usually fall into a few broad categories:

- Respiratory Symptoms – congestion, aggravated asthma or allergies, sinus infections
- Cognitive Issues – foggy thinking, sleep disturbance, frequent headaches
- Emotional Changes – feeling agitated or depressed
- Physical Symptoms – stomach discomfort, muscle aches, fatigue, rashes, sore throat

IMPROVE YOUR HOME'S INDOOR AIR QUALITY & AVOID ALLERGIES

Did you know that about half of all allergies are triggered by poor indoor air quality? Reduce allergy and asthma symptoms by improving your home's IAQ.

WHAT'S CAUSING ALLERGIES IN YOUR HOME?

MOLD
Mold spores can cause allergic reactions, worsen asthma symptoms and bring about a variety of respiratory problems.

VOC's
Volatile organic compounds from cleaning products, furniture, floors and candles can cause skin, eye and throat irritation.

DUST MITES
Around 20 million people in the U.S. have a dust mite allergy, which causes many unpleasant symptoms.

PETS
About 15% of Americans are allergic to dogs or cats. Pet dander can linger throughout your home and ducts.

WHAT CAN YOU DO TO IMPROVE YOUR HOME'S INDOOR AIR QUALITY?

1. VENT EXCESS MOISTURE
Air sealing and insulation can both help to reduce moisture infiltration.

2. REDUCE HUMIDITY LEVELS
Avoid potential mold growth by keeping your home's humidity levels between 30-50%

3. CLEAN OFTEN
Wash your bedding and vacuum your carpets on a regular basis to reduce buildup of dust/debris.

4. CUT BACK ON CHEMICALS
Make sure to clean using natural products to avoid introducing dangerous VOCs into your home's air.

5. MAINTAIN YOUR HVAC UNITS
Clean or replace your systems' air filters regularly, and have them serviced at least once a year.

6. AIR SEAL
Air sealing can prevent moisture and other outside pollutants from entering your home.

7. INSULATE
Prevent excess humidity to keep your home healthy and comfortable.

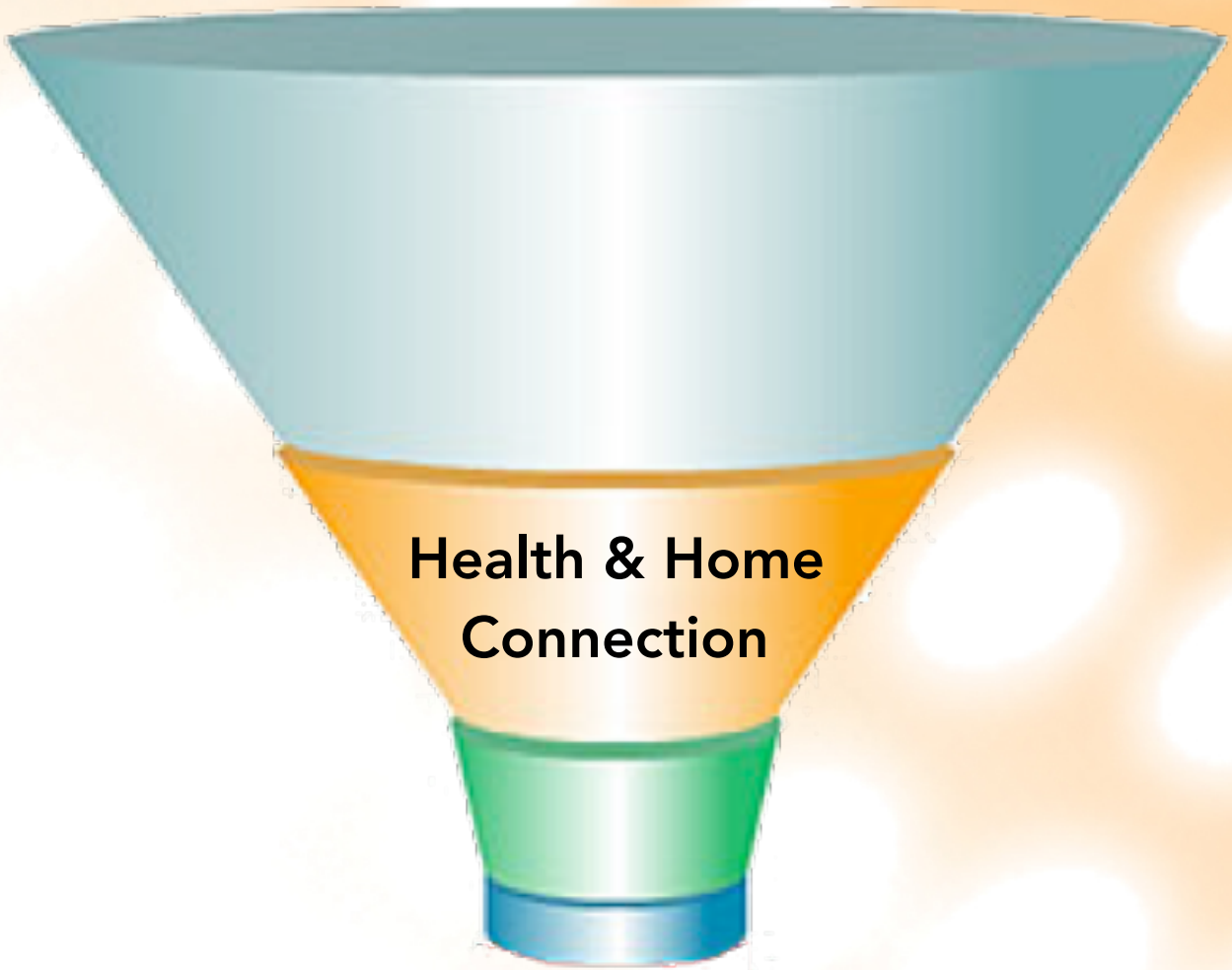
Start breathing healthy air and avoid allergies with help from Energy Smart Home Improvement. Contact us to schedule a consultation for your home today.

ENERGY SMART Home Improvement

(717) 258-6574

paenergysmart.com

energy circle



Embrace Healthy Homes Principles

- **Minimize indoor emissions.**
- **Keep it dry.**
- **Ventilate well.**
- **Protect against outdoor pollution.**

William W Nazaroff, PhD
Daniel Tellep Distinguished Professor of Engineering
University of California, Berkeley
Editor, Indoor Air

Hayward Healthy Homes

- **Continuous Fresh Air.**
- **Properly Seal & Insulate.**
- **Minimize Toxic Materials.**
- **Cleanable Surfaces.**

Bill Hayward
Hayward Healthy Homes
Hayward Lumber Company
Carmel, CA

Joe Lstiburek, PhD.

- Dry
- Pest free
- Clean
- Toxic chemical free
- Well ventilated
- Comfortable
- Combustion by-product free

Joe Lstiburek, PhD.
Building Science Corporation
Read This Before You Design, Build or Renovate
Building America Program, 2005

Healthy Home Checklist

Efficiency Vermont

For customers who wish to augment energy efficiency with intentional choices that target a healthy living environment, the following list highlights actions inspired by the LEED, Indoor airPLUS, Passive House, and Living Building Challenge programs. This is a **self-verification** checklist and does not represent Efficiency Vermont endorsement or requirements.

		Strategy	Purpose
Mechanical systems	☐	**Enhanced kitchen ventilation** Min. 35cfm continuous exhaust from kitchen area*, PLUS either: 1. ENERGY STAR or equivalent (min. 2.8 cfm/W; max 2.0 sones) range hood vented to outside, 100 cfm min; dedicated makeup air required and interlocked with range hood controls. 2. ENERGY STAR or equivalent (min. 2.8 cfm/W; max 2.0 sones) recirculating range hood with grease/charcoal filter *Note: Recommend kitchen intake min. 6' from cooktop and MERV 7 or washable mesh filter for trapping grease	Proper kitchen ventilation reduces levels of particulates and chemicals that can linger in the kitchen and reach the rest of the home
	☐	**No combustion equipment in home** Includes heating equipment, dryers, and cooking appliances	Omits avoidable sources of carbon monoxide and other combustion pollutants
	☐	**Clean ductwork** Any ductwork (heating, cooling, and/or ventilation) is sealed and protected during construction	Reduces contaminants that can get trapped in these areas and then get introduced to your home later
	☐	**Pre-occupancy flush-out** Clean/replace all HVAC filters after construction and final cleanup, then perform min. 48 hour flush-out with outdoor air while all interior doors are open and HVAC fans on high (optional: additional interior fans during flush, and replace filters after flush)	Flushes contaminants including moisture, particulates, and off-gassing, related to construction and finishes
	☐	**Fresh air and filtration** High efficiency energy recovery ventilation continuously supplies air to living room and each bedroom, with outdoor air filtration to MERV 13 or higher filter level	Continually supplies fresh air to the home, directed to exactly where you want it; filters reduce contaminants
	☐	**Monitor air quality** Inexpensive devices exist that measure carbon dioxide, particulates, volatile organic compounds, and/or humidity	Can help you "fine tune" the home and identify any problems that exist or later arise
Structure and design	☐	**Continuous insulation on exterior walls** Adequate thickness to prevent condensation at sheathing (typ. 40% or more of R-value outboard of sheathing)	Increases thermal comfort (warmer surface), reduces likelihood of moisture damage within walls
	☐	**No attached garage** Breezeway separation is acceptable	Omits source of carbon monoxide and other pollutants from automobiles and stored chemicals
	☐	**Drain or sump pump** installed or roughed-in For basements and crawl spaces; not applicable for slab on grade homes	Lowers risk of mold/moisture problems that can affect durability and air quality
	☐	**Radon-resistant features** installed with rough-in for active fan if needed in future	Lowers risk of exposure to harmful soil gases
	☐	**No site-mixed or site-manufactured polyurethane insulation materials** Limited exceptions, e.g. band joists, sealing penetrations	Omits source of chemical exposure within the home
	☐	**Minimum universal design features for safety, accessibility, and adaptability** • At least one no-step entry (and/or design for future ramp) • Kitchen, full bathroom, and bedroom on main floor • 36" doors to entry/listed rooms • Min. 32" clear width halls • Lever-style hardware on doors (no knobs) • Pull-style hardware on cabinetry (no knobs) • Rocker-style electrical switches	Simple low- or no-cost actions make the home safer for children, elderly, and disabled residents or visitors

(Continued on reverse side)

		Strategy	Purpose
Finishes	☐	**Paints and finishes** ultra-low emitting • Zero-VOC, Declare† listed, or meet a third-party standard identified by Indoor airPLUS‡ • No wallpaper made from vinyl	Reduces exposure to chemicals that may be harmful to installers or occupants, by touching or breathing (due to off-gassing over time)
	☐	**Flooring** aligned with healthy home principles • Hard-surface flooring in all rooms (no carpet) • Flooring meets Floorscore§ or Declare† requirements • No flooring made from vinyl	Reduces habitat for dust, mites, and allergens; Limits exposure to chemicals, including those that off-gas over time
	☐	**Cabinets and countertops in kitchens and bathrooms** aligned with healthy home principles • Solid material construction (e.g. metal, glass, solid wood), or any composite meets a third-party standard identified by Indoor airPLUS‡	Reduces exposure to chemicals that may be harmful to installers or occupants, by touching or breathing (due to off-gassing over time)

† https://living-future.org/declare/
‡ https://www.epa.gov/indoorairplus
§ https://www.scsglobalservices.com/services/floorscore

Notes

Connect with us on social media

Call us at **888-921-5990** or visit **www.efficiencyvermont.com**

Efficiency Vermont

EV-2137-1019-FICX

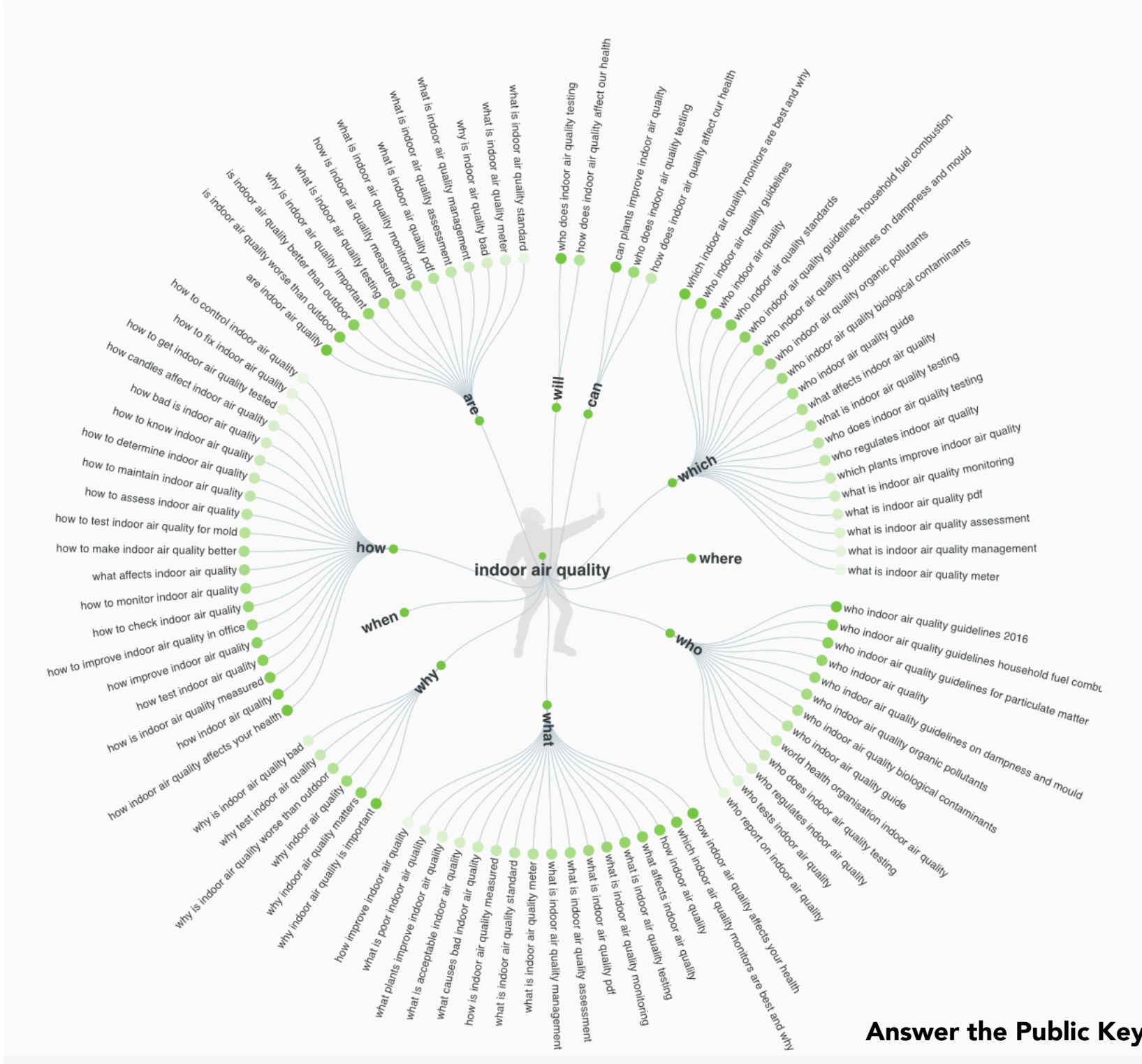
WELL BUILDING STANDARD® FEATURES MATRIX

This table shows which features are Preconditions and Optimizations for the different typologies of the standard for commercial and institutional offices. Refer to the tables in the beginning of each concept for details about the applicability of specific parts.

For occupied spaces to obtain WELL Certification, all Preconditions are required for the Silver level and completion of Optimizations allow projects to receive higher award levels. For Core and Shell projects to achieve WELL Compliance, all Preconditions are required, as well as at least one Optimization from every concept.

COMPLIANCE / CERTIFICATION		PRECONDITION / PRECONDITION	OPTIMIZATION / OPTIMIZATION	Core and Shell	New and Existing Interiors	New and Existing Buildings
Air						
01	Air quality standards	P		P	P	P
02	Smoking ban	P		P	P	P
03	Ventilation effectiveness	P		P	P	P
04	VOC reduction	P		P	P	P
05	Air filtration	P		P	P	P
06	Microbe and mold control	P		P	P	P
07	Construction pollution management	P		P	P	P
08	Healthy entrance	P		O	P	P
09	Cleaning protocol			P	P	P
10	Pesticide management	P			P	P
11	Fundamental material safety	P		P	P	P
12	Moisture management	P			P	P
13	Air flush			O	O	O
14	Air infiltration management		O	O	O	O
15	Increased ventilation		O	O	O	O
16	Humidity control			O	O	O
17	Direct source ventilation		O	O	O	O
18	Air quality monitoring and feedback			O	O	O
19	Operable windows		O	O	O	O
20	Outdoor air systems		O	O	O	O
21	Displacement ventilation			O	O	O
22	Pest control			O	O	O
23	Advanced air purification		O	O	O	O
24	Combustion minimization		O	O	O	O
25	Toxic material reduction			O	O	O
26	Enhanced material safety			O	O	O
27	Antimicrobial activity for surfaces			O	O	O
28	Cleanable environment			O	O	O
29	Cleaning equipment			O	O	O
Water						

COMPLIANCE	PRECONDITION	OPTIMIZATION	Core and Shell	New and Existing Interiors	New and Existing Buildings
CERTIFICATION	PRECONDITION	OPTIMIZATION			
Nourishment					
38	Fruits and vegetables			P	P
39	Processed foods		P	P	P
40	Food allergies		P	P	P
41	Hand washing			P	P
42	Food contamination			P	P
43	ficial ingredients		O	P	P
44	Nutritional information		O	P	P
45	Food advertising		O	P	P
46	Safe food preparation materials			O	O
47	Serving sizes			O	O
48	Special diets			O	O
49	Responsible food production			O	O
50	Food storage			O	O
51	Food production		O	O	O
52	Mindful eating		O	O	O
Light					
53	Visual lighting design			P	P
54	Circadian lighting design			P	P
55	Electric light glare control		P	P	P
56	Solar glare control		O	P	P
57	Low-glare workstation design			O	O
58	Color quality			O	O
59	Surface design			O	O
60	Automated shading and dimming controls			O	O
61	Right to light		O	O	O
62	Daylight modeling		O	O	O
63	Daylighting fenestration		O	O	O
Fitness					
64	Interior fitness circulation		P	O	P
65	Activity incentive programs			P	P
66	Structured fitness opportunities			O	O
67	Exterior active design		O	O	O
68	Physical activity spaces		O	O	O
69	Active transportation support		O	O	O
70	Fitness equipment		O	O	O
71	Active furnishings			O	O
Comfort					
72	ADA accessible design standards		P	P	P
73	Ergonomics: visual and physical			P	P
74	Exterior noise intrusion		P	O	P
75	Internally generated noise		O	P	P
76	Thermal comfort		P	P	P
77	Olfactory comfort			O	O
78	Reverberation time			O	O
79	Sound masking			O	O
80	Sound reducing surfaces			O	O
81	Sound barriers			O	O
82	Individual thermal control			O	O
83	Radiant thermal comfort		O	O	O

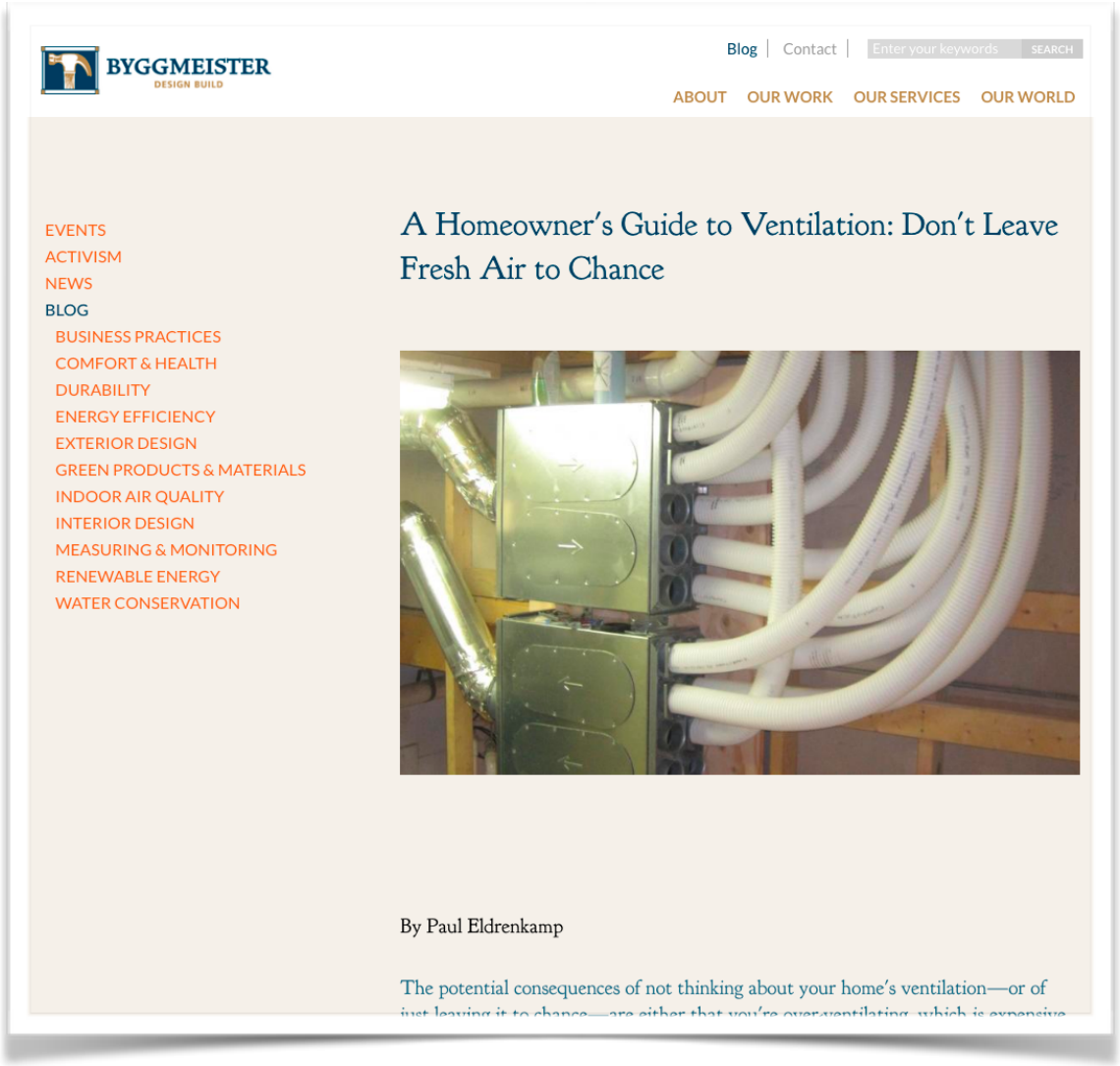


Answer the Public Keyword Tool

Relevant Content & Messaging

- **Healthy home topics**
  The indoor environment
  Healthy Home & IAQ
  Energy Costs & Clean Air
  Comfort
  Reliability/Resiliency
  Lighting
  Acoustics

- **Specific services**
- **Expertise**
- **FRESHNESS!**

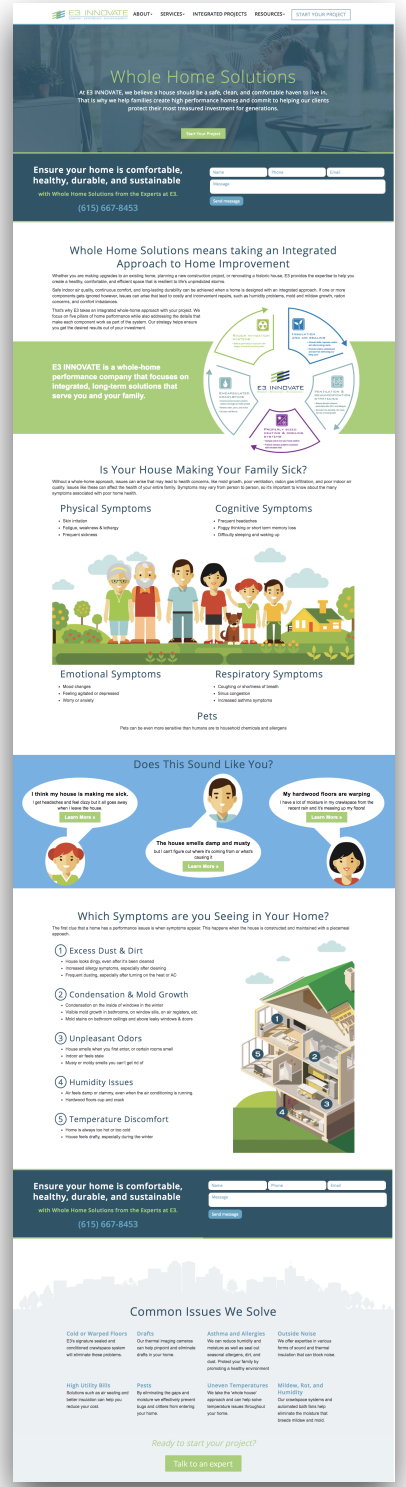


Content That Connects Health & Home

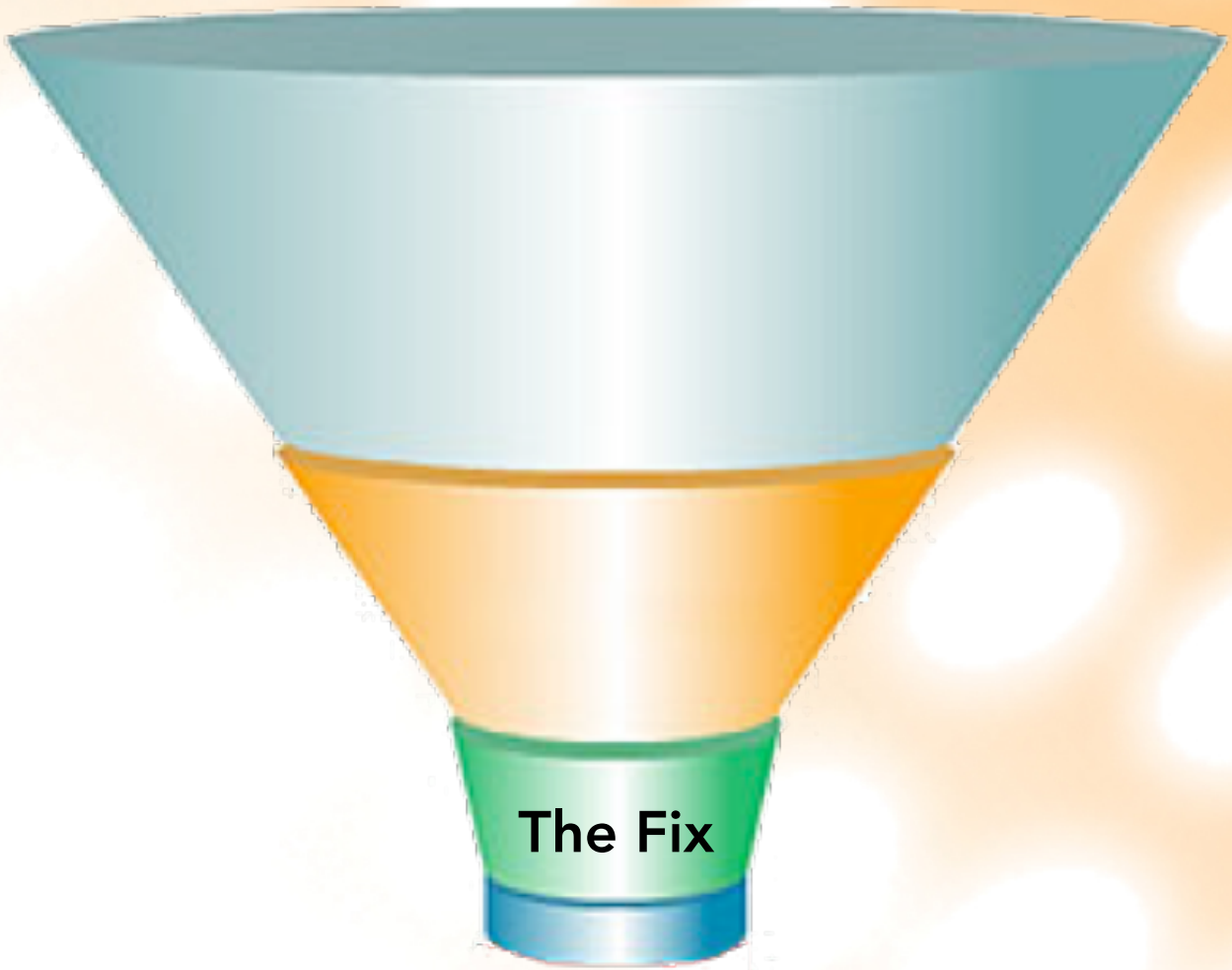
- The Effects of Mold
- Your House, Your Kids and Asthma
- Low Levels of Carbon Monoxide--Are You Safe?
- The Air in Your House--Where's it Come From?
- Is Your House Making You Sick?
- Pests in Your Walls--Not Just an Annoyance
- Choosing Healthy Materials for Your Home

Getting Found = Having Content

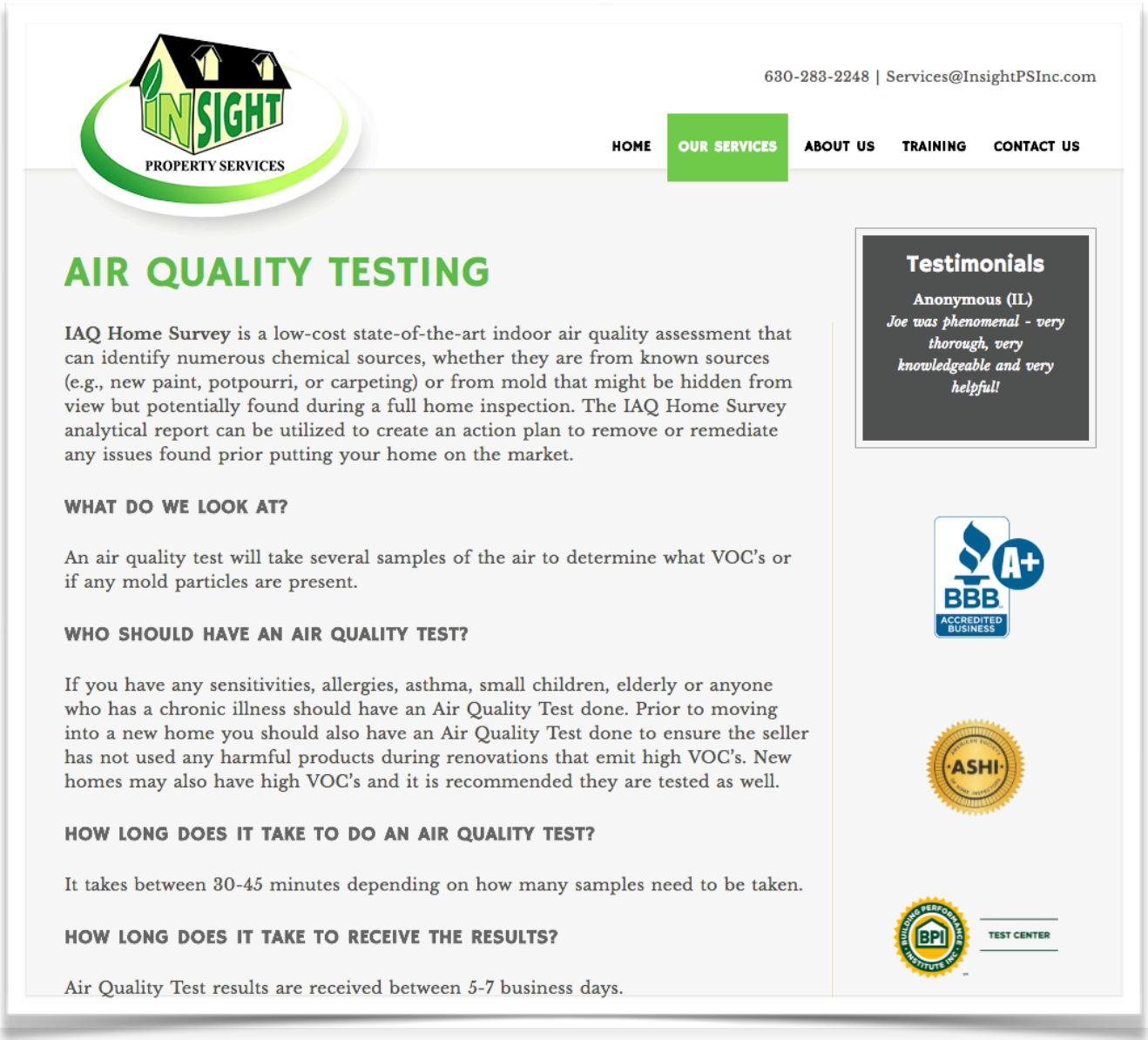
Long From Storytelling: Advanced Landing Pages



energy circle



First: Explain Your Diagnostic Approach



INSIGHT PROPERTY SERVICES

630-283-2248 | Services@InsightPSInc.com

HOME | OUR SERVICES | ABOUT US | TRAINING | CONTACT US

AIR QUALITY TESTING

IAQ Home Survey is a low-cost state-of-the-art indoor air quality assessment that can identify numerous chemical sources, whether they are from known sources (e.g., new paint, potpourri, or carpeting) or from mold that might be hidden from view but potentially found during a full home inspection. The IAQ Home Survey analytical report can be utilized to create an action plan to remove or remediate any issues found prior putting your home on the market.

WHAT DO WE LOOK AT?

An air quality test will take several samples of the air to determine what VOC's or if any mold particles are present.

WHO SHOULD HAVE AN AIR QUALITY TEST?

If you have any sensitivities, allergies, asthma, small children, elderly or anyone who has a chronic illness should have an Air Quality Test done. Prior to moving into a new home you should also have an Air Quality Test done to ensure the seller has not used any harmful products during renovations that emit high VOC's. New homes may also have high VOC's and it is recommended they are tested as well.

HOW LONG DOES IT TAKE TO DO AN AIR QUALITY TEST?

It takes between 30-45 minutes depending on how many samples need to be taken.

HOW LONG DOES IT TAKE TO RECEIVE THE RESULTS?

Air Quality Test results are received between 5-7 business days.

Testimonials

Anonymous (IL)
Joe was phenomenal - very thorough, very knowledgeable and very helpful!

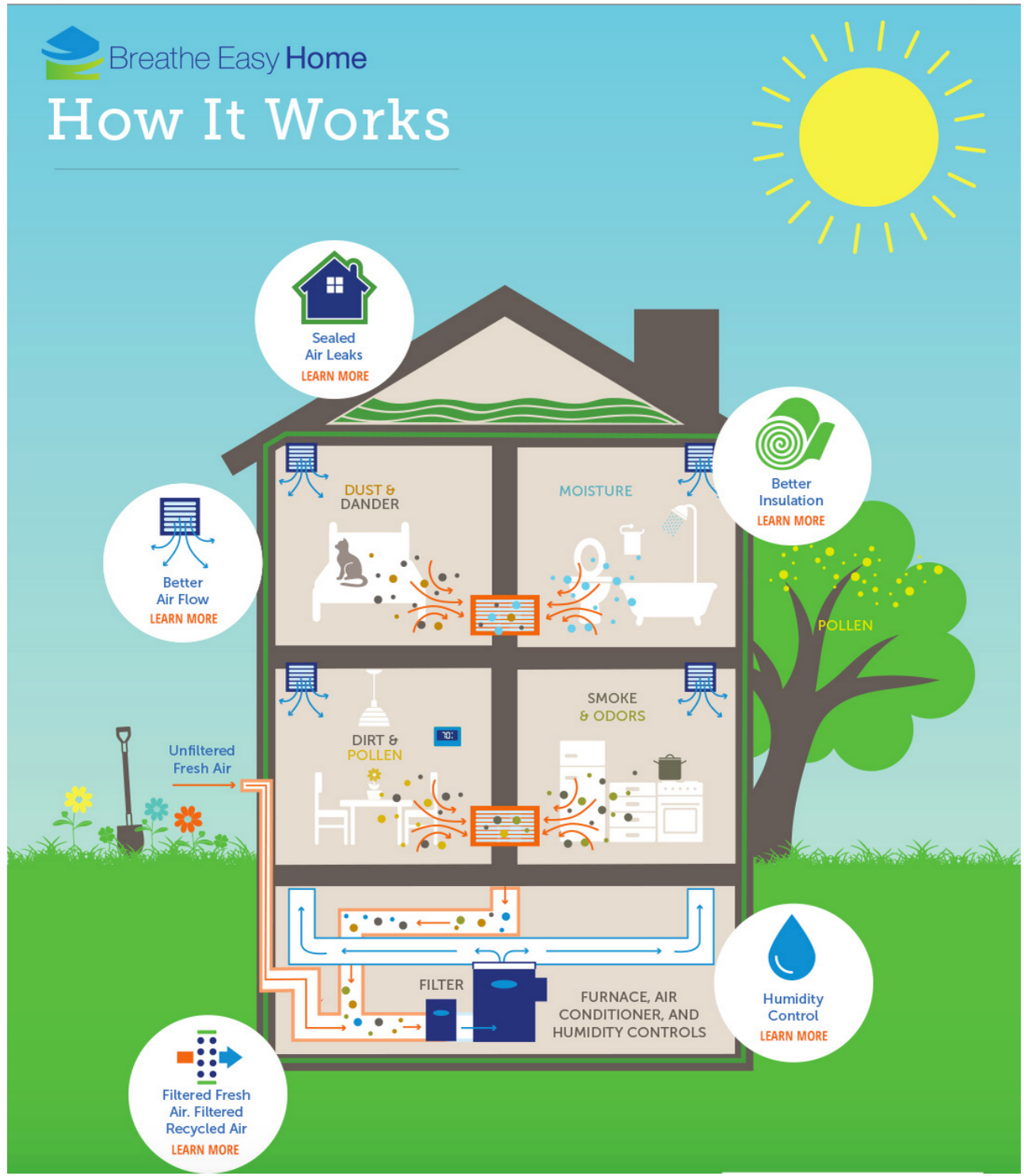
BBB A+ ACCREDITED BUSINESS

ASHI

BPI BUILDING PERFORMANCE INSTITUTE INC. TEST CENTER

Communicate Your Services

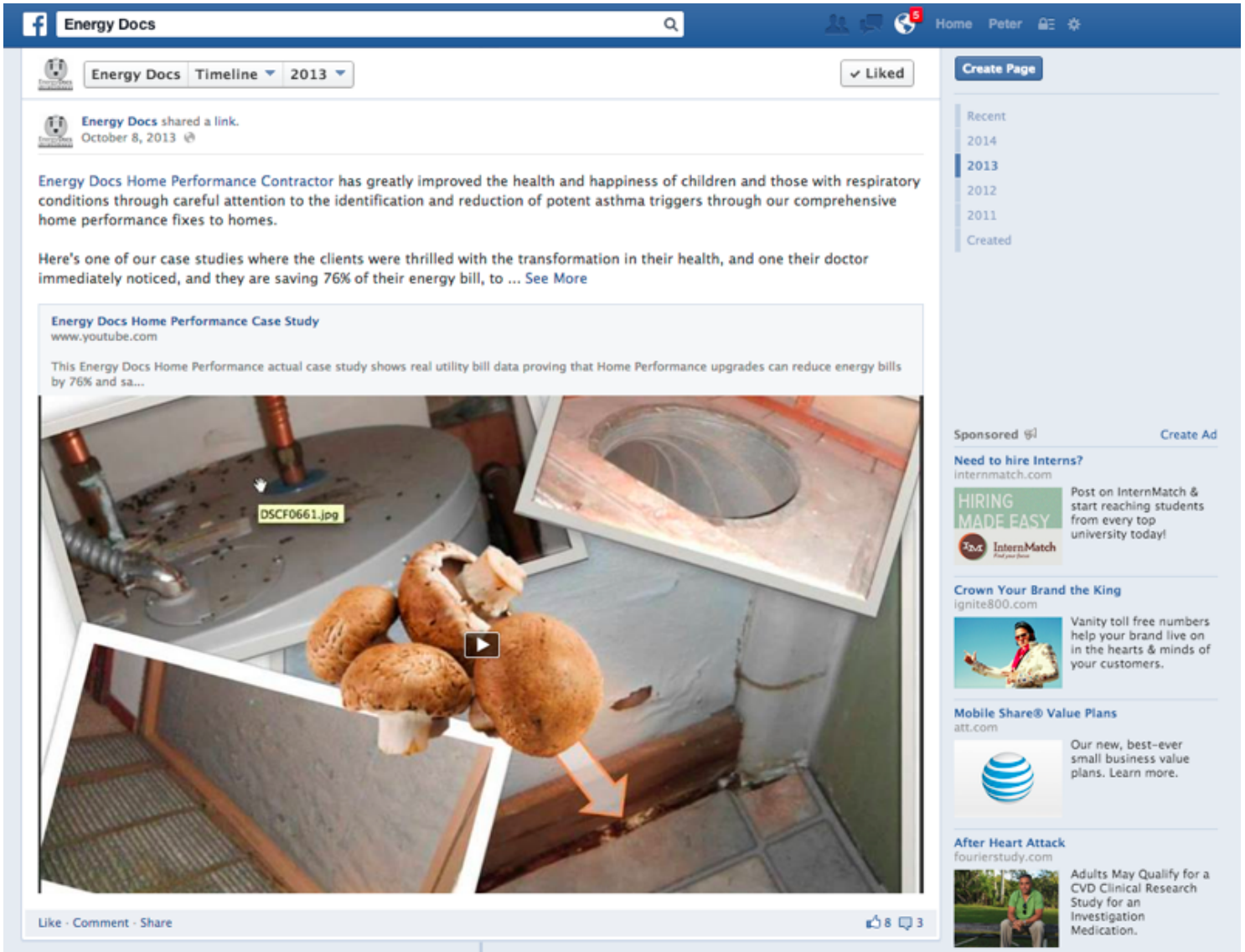
- **Envelope Control (air leakage)**
- **Whole House Ventilation**
- **Crawlspace Encapsulation**
- **Duct cleaning and sealing**
- **Moisture Control**
- **Equipment Replacement**


Breathe Easy Home
How It Works
Sealed
Air Leaks
LEARN MORE
Better
Insulation
LEARN MORE
Better
Air Flow
LEARN MORE
DUST &
DANDER
MOISTURE
POLLEN
SMOKE
& ODORS
DIRT &
POLLEN
Unfiltered
Fresh Air
FILTER
FURNACE, AIR
CONDITIONER, AND
HUMIDITY CONTROLS
Humidity
Control
LEARN MORE
Filtered Fresh
Air. Filtered
Recycled Air
LEARN MORE

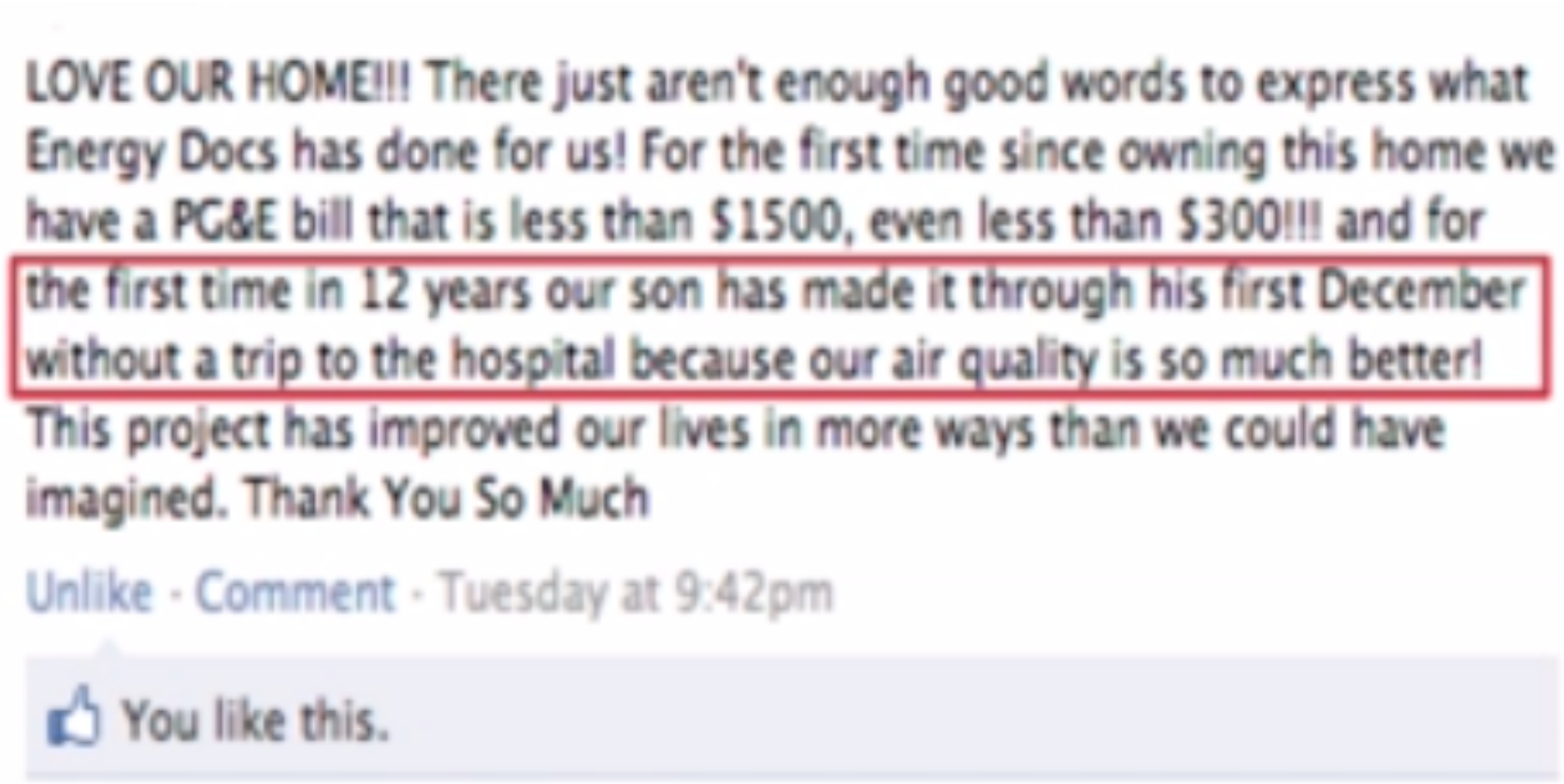
Use Case Studies

- **Measures We Implemented**
- **Voice of the Client**

Social Media for Storytelling & Emotion



Voice of the Customer: Priceless


LOVE OUR HOME!!! There just aren't enough good words to express what Energy Docs has done for us! For the first time since owning this home we have a PG&E bill that is less than $1500, even less than $300!!! and for the first time in 12 years our son has made it through his first December without a trip to the hospital because our air quality is so much better! This project has improved our lives in more ways than we could have imagined. Thank You So Much

Unlike · Comment · Tuesday at 9:42pm

You like this.

Customer Journey Example: Facebook

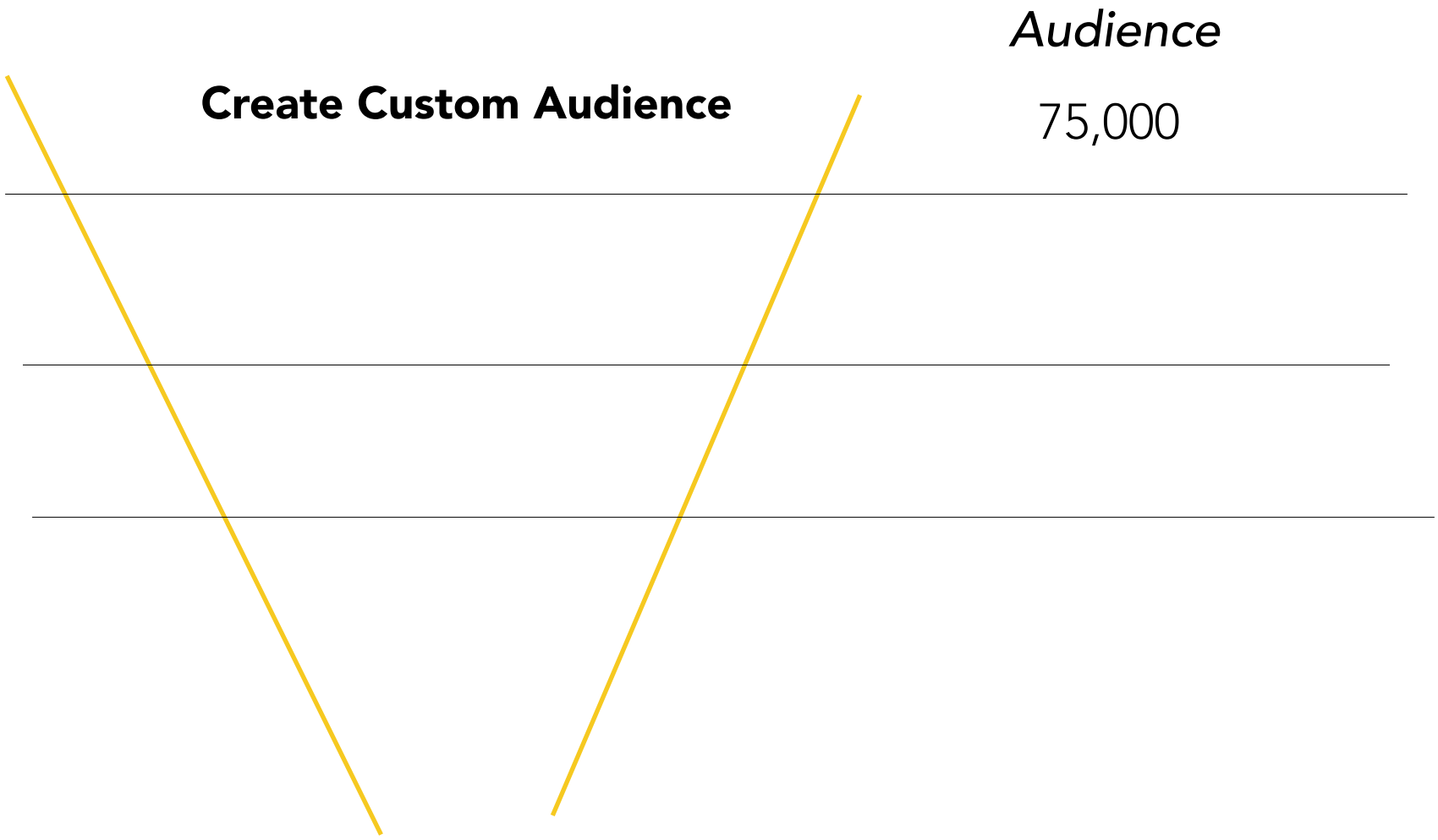
Don't forget this important spring cleaning task!
https://goo.gl/qzZaHM

Add a Healthy Home Evaluation to Your Spring Cleaning List

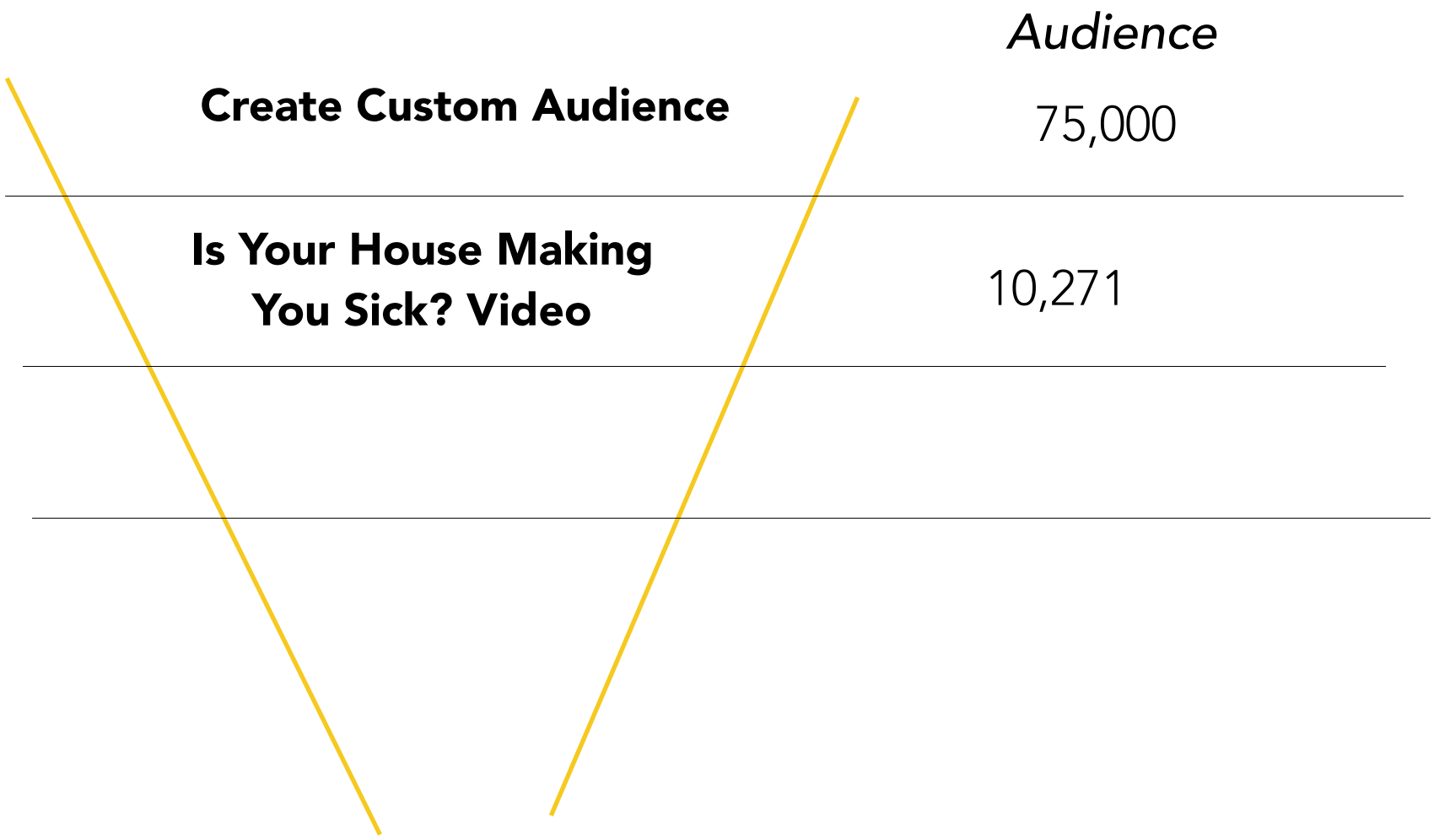
With the weather finally warming up and the days getting longer, you're probably itching to tackle some projects around the house. Maybe you've caught the...

Learn More

Facebook Custom Audiences



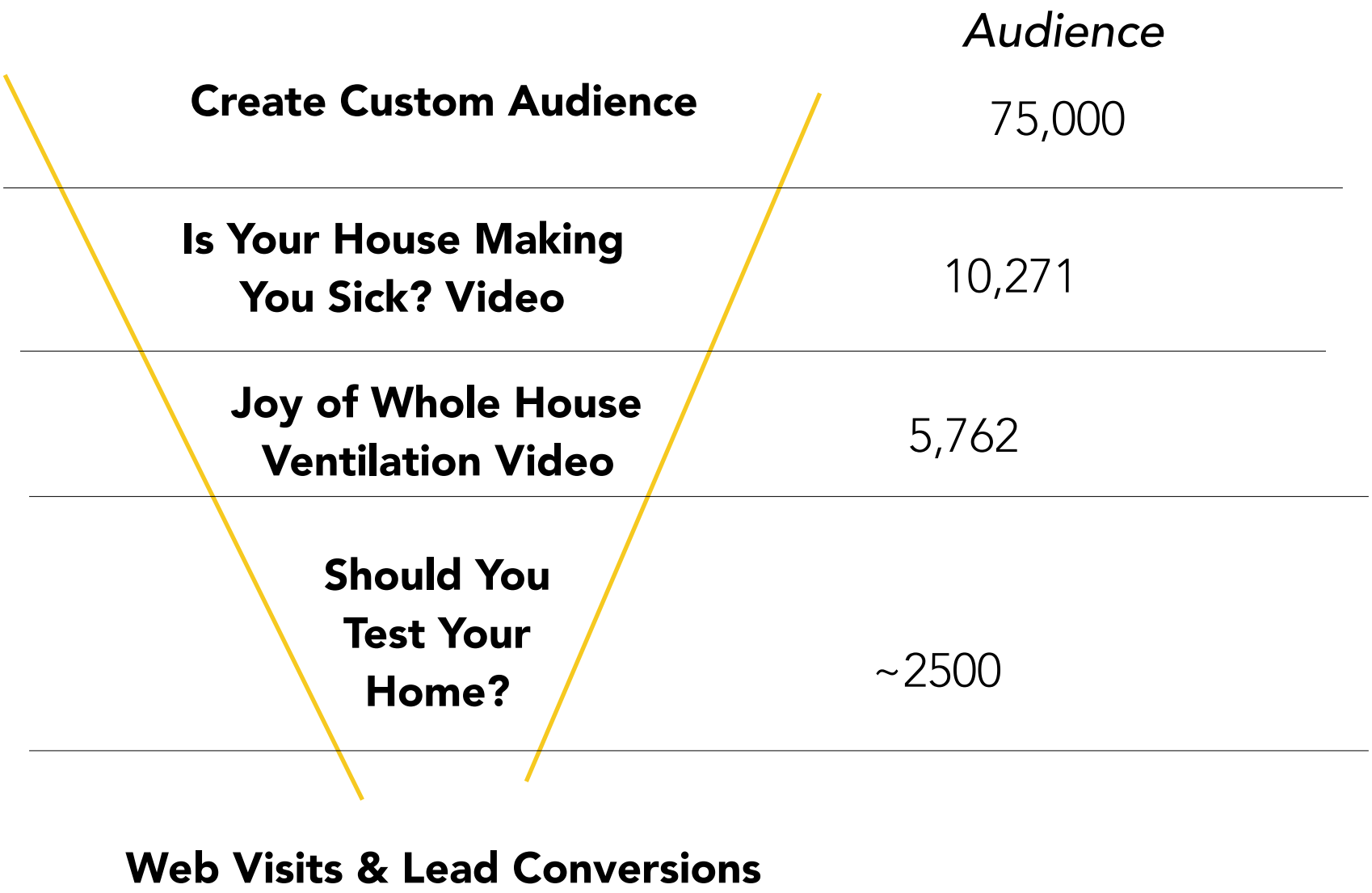
Facebook Custom Audiences



Facebook Custom Audiences

	Audience
Create Custom Audience	75,000
Is Your House Making You Sick? Video	10,271
Joy of Whole House Ventilation Video	5,762

Facebook Custom Audiences



Healthy Homes Vision and Goals

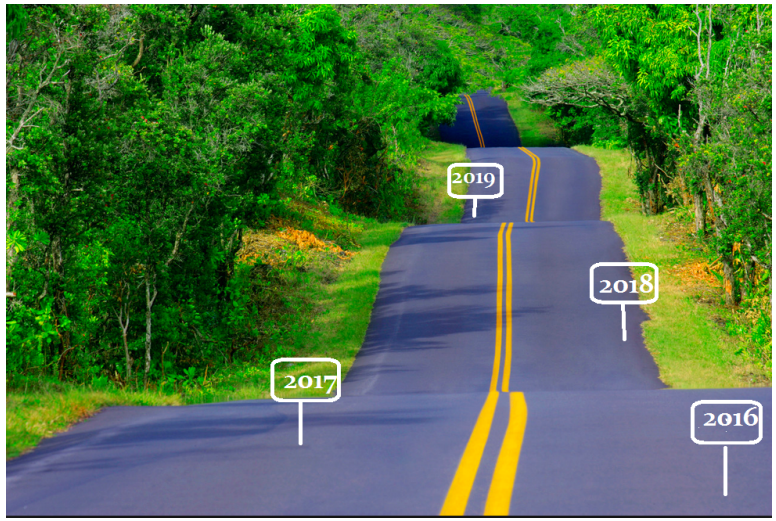
Through efficiency, Vermont homes are safe, affordable, comfortable, durable and resilient resulting in an improvement in population health and a reduction in greenhouse gases.

Goal 1: Provide **cost-effective services** that **improve health outcomes while reducing energy burden**.

Goal 2: **Increase impact through** strong, mutually beneficial healthy-home **partnerships**.

Goal 3: Be a **credible and valued partner** in the health/energy nexus.

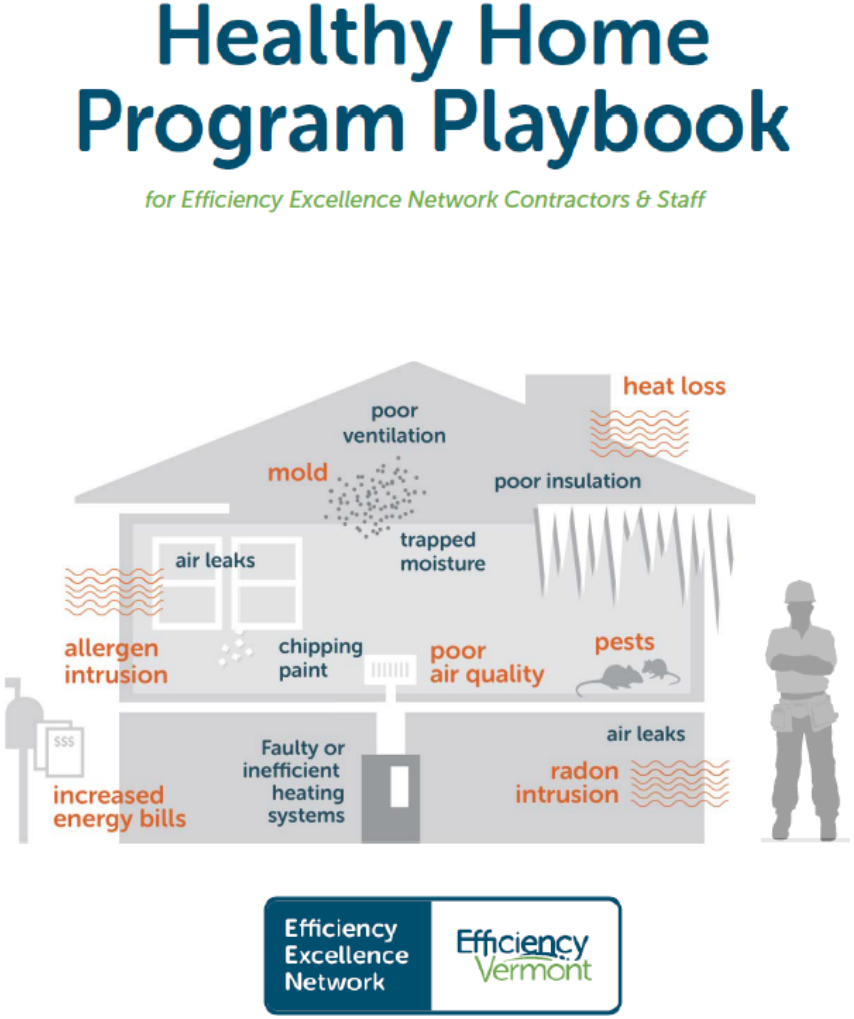
Goal 4: Create a **clear strategy** for healthy, affordable homes.



Efficiency Vermont

Healthy Home Offerings

1. Residential New Construction Healthy Home Checklist
2. Healthy Home Energy Assessments and Home Energy Loans
3. Indoor Air Quality Monitor Loans
4. Healthy Home Contractor Network
   - Rental equipment
5. Four Hospital Pilots



Efficiency Vermont

QUESTIONS?

Peter Troast

peter@energycircle.com