



STRONG ENOUGH

**IAQ in the Age
of Covid 19:**

ARMING YOUR
BUSINESS TO
SUPPORT YOUR
CUSTOMERS IN
MAKING THE RIGHT
CHOICE



ABOUT US

Pearl Certification documents efficiency and solar installations to provide investment-grade documentation which helps the home appraise for more – with Pearl Contractor installations as the contributing factor! Pearl works with an elite group of contractors in HVAC, solar and home performance. Our national partners include the Department of Energy, ENERGY STAR®, National Association of Realtors, and the Appraisal Institute. Pearl Certified homes are appraising and selling for 5% more on average.



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ABOUT OUR SPONSOR

Energy Circle is a dynamic team of marketing and technology professionals of diverse backgrounds who work every day to find germane solutions to the challenges within the better building sector. Today, we support over 400 of the most successful home performance contractors, Solar installers, HVAC companies, sustainable architects and low-energy builders across all 50 US states.



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Peter Troast

Founder, CEO, Energy Circle

Peter is recognized as one

of the country's foremost authorities on marketing for home performance, HVAC, and other efficiency related contracting companies. He is a passionate advocate for the power of the whole house home performance business model, and is a popular and high-ranking speaker about marketing for contractors at ACI, RESNET, ACCA, BPI and EGIA conferences and events. In 2015, he received the Tony Woods Award for excellence in advancing the home performance industry, and is an influential contributor to thought leadership and market strategy in both the digital marketing and home performance worlds.



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What I'll Discuss

- 1 The State of the Healthy Homes/IAQ Opportunity before COVID-19
- 2 The Impact (so far) of COVID-19
- 3 Thoughts & Observations—Preparing for the Rebound



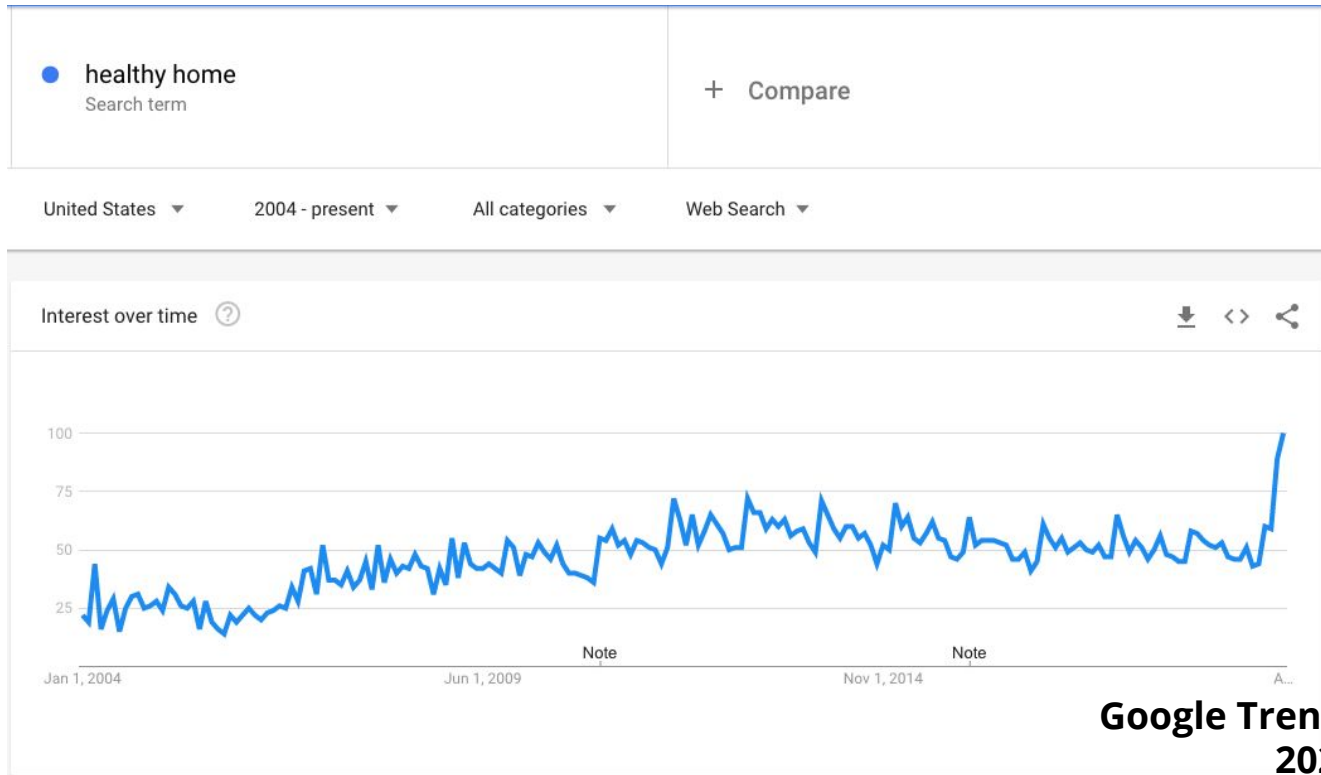
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THE HEALTHY HOMES/IAQ TREND

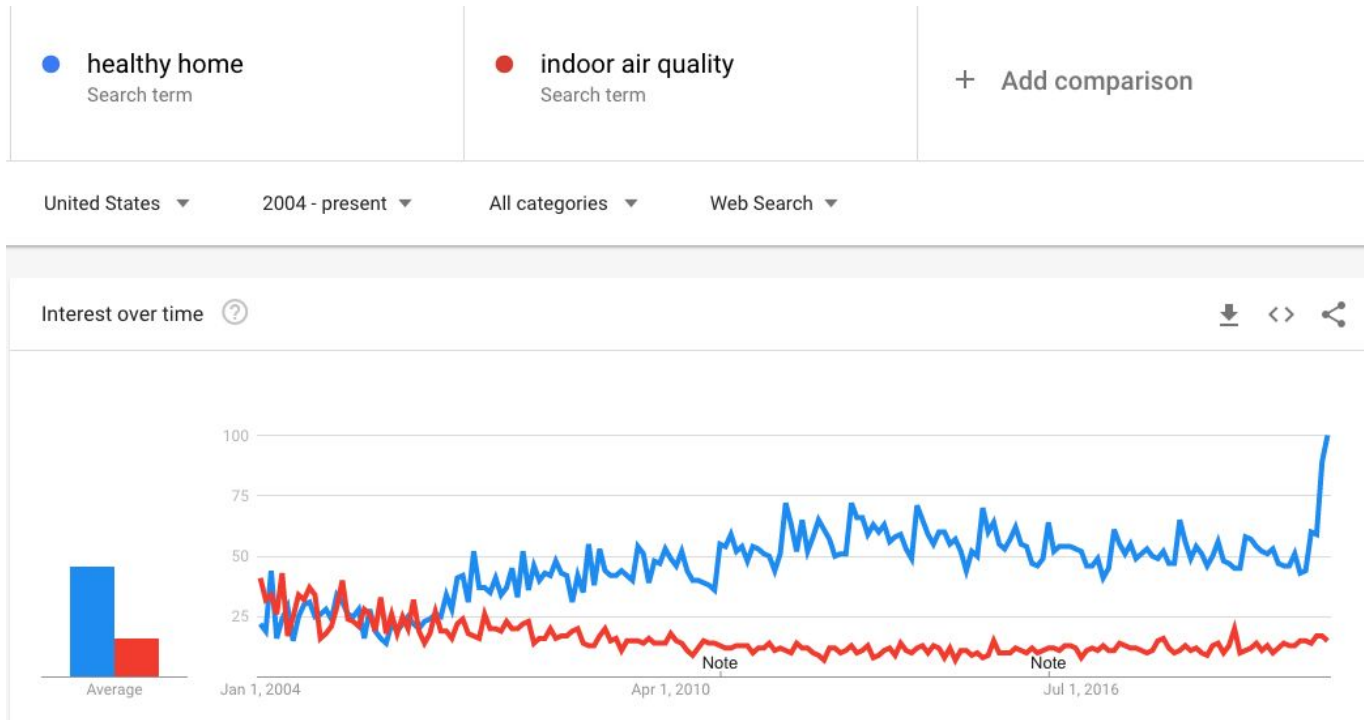
(this wave ever gonna break?)

Rise of Healthy Home



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Healthy Home vs IAQ



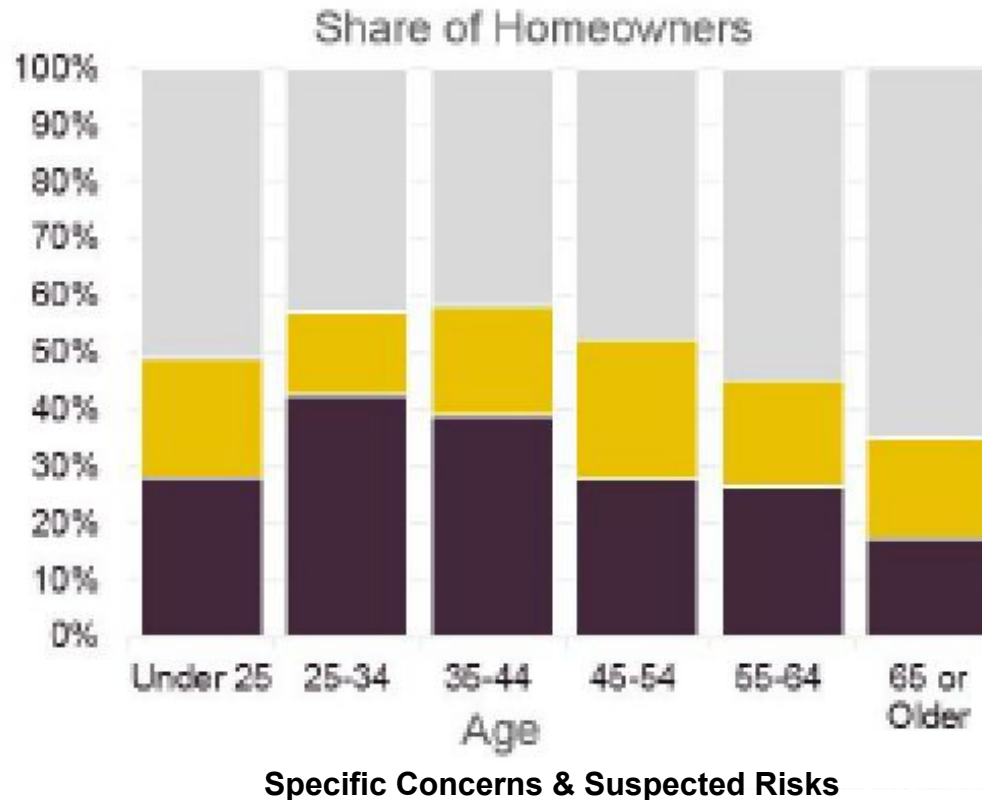
Google Trends, April 21, 2020



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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?



Note: Out of a sample of 1,751 homeowners and 718 renters.

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

Healthy Home Remodeling: Consumer Trends and Contractor Preparedness

Harvard Joint Center for
Housing Studies.
January 2019

Opinion

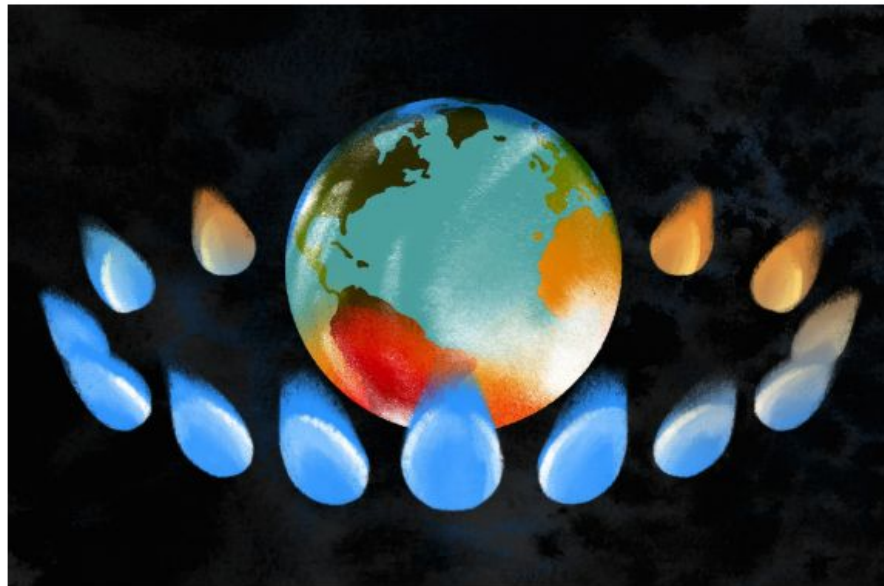
Your Gas Stove Is Bad for You and the Planet

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

1,430

LIKES

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

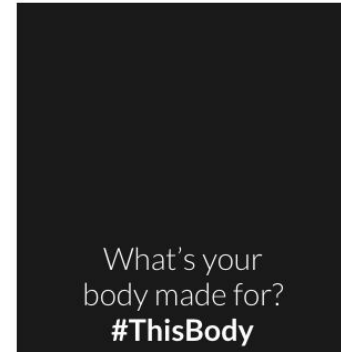


Pollution is increasingly—and rightfully—on people’s minds lately, as seen in the host of new products addressing its negative effects on the skin and the troubling smog levels in cities like Beijing. But only recently did I start thinking more seriously about the air quality inside the home, after a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



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BUT WHO IS WINNING?

BEAUTY > HEALTH & FITNESS

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

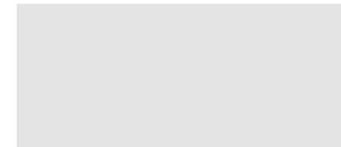
MAY 17, 2016 7:10 PM
by LAURA REGENSDORFVOGUE VIP
Introducing the first
members-only program
from Vogue

JOIN NOW

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.

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-





\$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.



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The Chasm

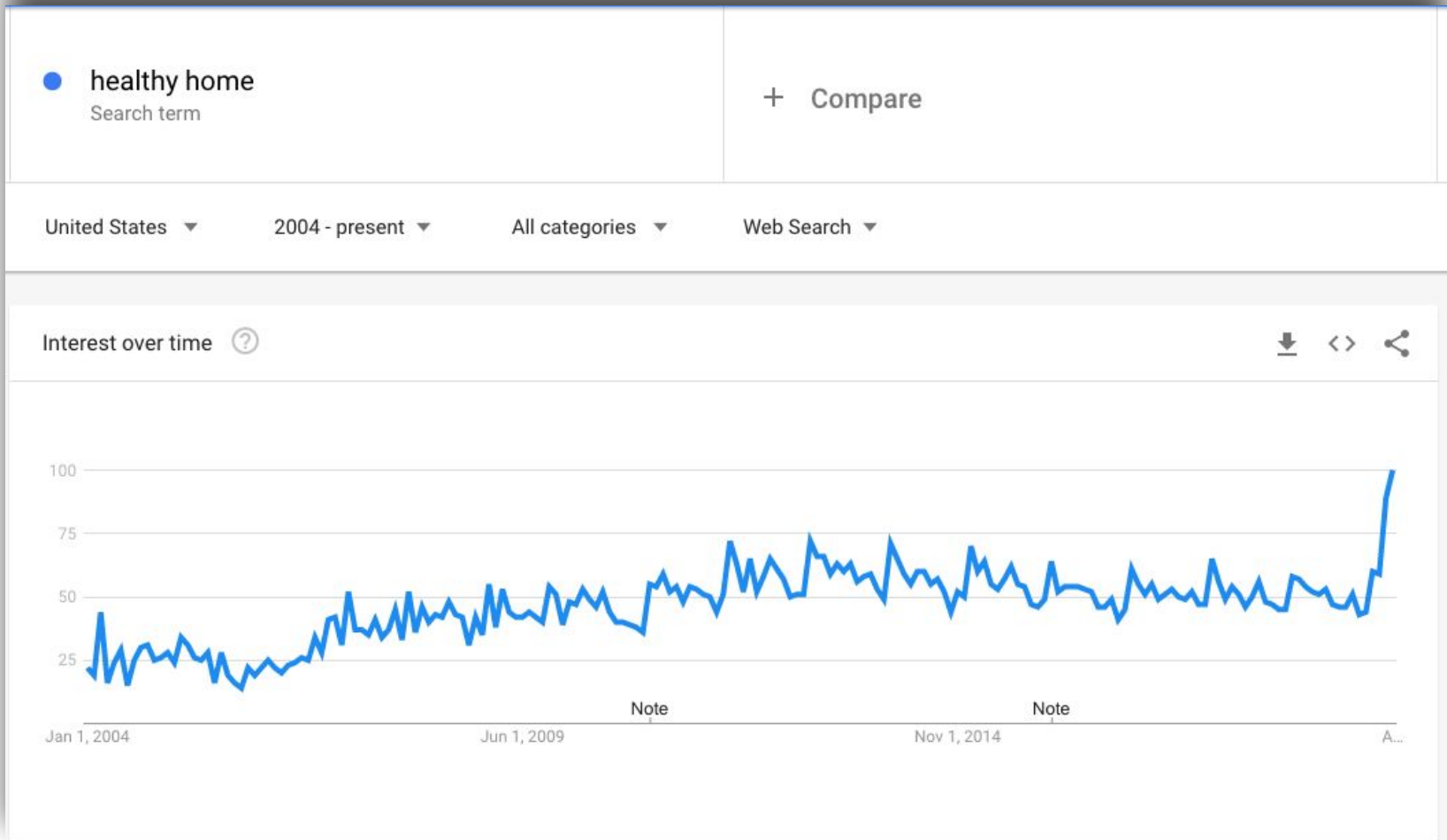


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HOMEOWNER MINDSET SINCE COVID-19

(a little data)



Google Trends, 2004 to present

Taken April 21, 2020

Air Purification Searches Exploding

RISING	
air purifier for viruses	Breakout
best air purifier for viruses	Breakout
modify air purifier	Breakout
rainbow vacuum	Breakout
air purifier mask	650%
ultraviolet air purifier	450%
air purifier necklace	350%
air doctor purifier	350%
winix true hepa air purifier	300%
personal air purifier	250%
air genie air purifier	250%
reme halo air purifier	200%
levoit air purifier filter	200%
ion air purifier	190%
honeywell true hepa air purifier	180%
smart air purifier	170%
hepa filter air purifier	140%
air purifier costco	140%
uv air purifier	140%
levoit air purifier reviews	140%
whole home air purifier	140%
uv light air purifier	140%
iwave air purifier	130%
true hepa air purifier	120%
homedics air purifier	120%

Google Trends
Last 30 Days

Taken April 20,
2020

Cleaning & Disinfecting Exploding

RISING	
covid 19 cleaning	Breakout
epa cleaning products	Breakout
clorox disinfecting wipes bleach free cleaning wipes	Breakout
electrostatic cleaning	Breakout
coronavirus cleaning	3450%
cleaning groceries coronavirus	3400%
disinfecting wipes	3150%
disinfectant wipes	3000%
what cleaning products kill coronavirus	2850%
blueland cleaning kit	2050%
microban cleaner	1850%
spring cleaning checklist	1400%
disinfectant spray	1350%
cleaning supplies online	1350%
cleaning n95 mask	1150%
clorox wipes	1100%
lysol wipes	950%
cdc cleaning guidelines	750%
disinfectant cleaner	750%
bleach cleaning solution	650%
bleach to water for cleaning	550%
409 multi surface cleaner	450%
peroxide multi surface cleaner and disinfectant	400%
bleach solution for cleaning	400%

Google Trends
Last 30 Days

Taken April 20,
2020

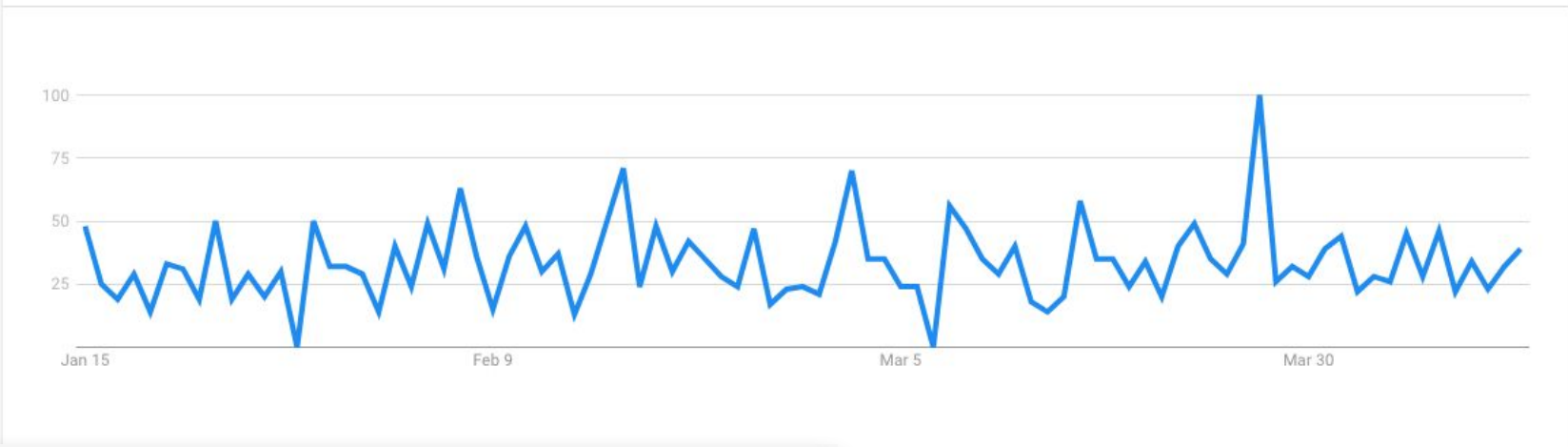
● Indoor air quality
Search term

+ Compare

United States ▼ Past 90 days ▼ All categories ▼ Web Search ▼

Interest over time ?

Download, Code, Share icons



Related queries ?

Top ▼ Download, Code, Share icons

- | | | | |
|---|----------------------------|-----|----------------------------------|
| 1 | indoor air quality testing | 100 | <div style="width: 100%;"></div> |
| 2 | indoor air quality monitor | 71 | <div style="width: 71%;"></div> |

Google Trends, Jan 15 to present

Taken April 20, 2020

Observations & General Thoughts

- For Now, People Are Primarily Focused on Immediate Health & Safety
Virus-related air purification, cleaning.
- Time At Home + Health Concerns = Opportunity
More open to hearing and learning about healthier homes
Many saying that work from home trend will accelerate
- We Continue to Face a Very Large Knowledge Gap
But people are more ripe than ever for the home → health message
- Things are Fluid and Constantly Changing
Expect the current focus of homeowners to evolve
- Prime Opportunity to Establish Authority & Trust
Be the healthy home expert



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STAY
HOME
STAY
HEALTHY

STAY HOME
STAY HEALTHY
CREATE A
HEALTHY
HOME

QUESTIONS?

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Nathan Kahre

Business Development,
EnergyLogic

Nathan brings his experience working for a home

builder to EnergyLogic. Nathan works with builders of all sizes to help find areas for improvement and opportunities to grow closer to the idea that all homes can be efficient, healthy, and local. Time spent working for a builder has helped Nathan understand what is important to builders and what information they need to get the job done. He has presented on building science, renewable energy, and home builder quality assurance throughout the country including sessions at RESNET, EEBA, and IBS.



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COVID-19 & JUNK SCIENCE

- People are fearful and looking at all options
- Some products are being misrepresented
- Be a source of facts and calm to your clients



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FIRST STEP IS
ALWAYS TO FOLLOW
CDC GUIDELINES!

SOME COMMON MYTHS

- Ozone and Other Reactive Compound Generators
- Ultraviolet Lights In HVAC System or In Home
- Duct Cleaning



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OZONE GENERATORS

- Ozone will kill viruses.
- Not recommended by EPA or CDC
- Same mechanism that kills viruses also has a detrimental effect on human cells.

<https://www.epa.gov/coronavirus/will-ozone-generator-protect-me-and-my-family-covid-19>

<https://www.epa.gov/coronavirus/why-arent-ozone-generators-uv-lights-or-air-purifiers-list-n-can-i-use-them-kill-covid>



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ULTRAVIOLET LIGHTS (UVC)

- UVC is a proven method of sterilization
- Light disrupts the genetic code of the virus.
- Causes a sunburn in seconds
- Not recommended by W.H.O.

<https://www.bbc.com/future/article/20200327-can-you-kill-coronavirus-with-uv-light>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters>



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DUCT CLEANING

- Contested treatment in improving IAQ.
- Best when used after major events
 - Fire, flood, pests, etc.
- Currently being monitored by FCC as potential scam

<https://www.fcc.gov/covid-scams>

<https://www.epa.gov/indoor-air-quality-iaq/should-you-have-air-ducts-your-home-cleaned>



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PROVEN SOLUTIONS

- Ventilation
- Air Filtration
- Control Relative Humidity
- Regular Cleaning



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VENTILATION

- Follow ASHRAE 62.2 Guidelines
- Reduced chances of aerosol transmission.
- Will not protect against close contact or transmission through droplets.
- Recommended by CDC

<https://www.nature.com/articles/s41598-019-38825-y>

<https://www.cdc.gov/coronavirus/2019-ncov/downloads/workplace-school-and-home-guidance.pdf>



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AIR FILTRATION

- Can reduce particulates that would carry viable virus strains.
- MERV 13 or Higher will capture viruses.
- Will not protect against close contact or transmission through droplets.

<https://www.ashrae.org/technical-resources/filtration-disinfection#uvc>



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CONTROL RH

- Air Below 40% RH Leads To:
 - Increased survival rate of pathogens.
 - Reduces Healthy Immune System Function
 - Possibly increases transmission or airborne viruses.

<https://www.ashrae.org/technical-resources/healthcare#maintainrh>



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Additional Resources

- [ASHRAE Residential Guidelines](#)
- [CDC Home Preparation Plans](#)
- [EPA Coronavirus Homepage](#)



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QUESTIONS?

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