ASTHMA & ALLERGY EDITION

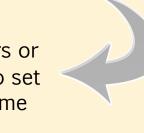
We work hard to increase awareness about issues that affect your health. We want to get information from our researchers to you and your friends, neighbors, and network. We encourage you to contact our Community Outreach Coordinator Brian to arrange for him to come talk to your small group.

It's as easy as 1-2-3



1. Call Brian at 313-577-5045

2. Brian answers or calls you back to set up a meeting time and place





3. Brian shows up with the information, resources, and lunch for you and your friends!



Partner Helps Detroiters Breathe Easier

Our Community Advisory Board member, Dell Stubblefield, has been hard at work to stop a concrete crushing company from claiming space in the 14000 block of Linwood in Detroit's HOPE Village neighborhood. She's not alone. Residents have mobilized to stop the potential air crushing concrete polluting recycling that would affect the air they breathe. Dell, who lives in HOPE Village, was a key player in organizing residents to speak against concrete crushing at the Detroit Board of Zoning Appeals. "We need to keep an eye out for things happening that are in neighborhoods and work together to protect against unhealthy uses," says Dell.

Detroit already has high asthma rates. According to the Michigan Department of Health and Human Services, Detroiters are hospitalized at

Asthma Hospitalization Rates by Locality,

All Residents, 2011-2013

42.8

40

30

24.1

26.4

10

MI Ingham Monroe Genesee Saginaw Wayne City of Detroit*

Source: MDHHS @ https://www.michigan.gov/

more than three times the rate of Michigan residents (see graph above).

The space where the concrete would be crushed is just around the corner from Focus: HOPE's Center for Children, across the street from a public park, one and a half blocks from a public library, and



CAB member Dell Stubblefield moderating a CURES event.

a few blocks from two elementary schools. The dust that results from the process can be harmful to the eyes and skin and can trigger allergy and asthma symptoms.

CURES Outreach Coordinator Brian Smith attended the community meetings to find out how he and our center could help. "I gathered data that I thought would support their appeals," said Brian. The environmental health data report included PM (particulate matter) concentrations, asthma rates, and ozone levels in the area. Brian also conducted an instructional session for residents before they went to the Detroit Board of Zoning Appeals to explain how the data could help their arguments.

The Board of Zoning Appeals denied the company's appeal of an earlier denial issued by the City of Detroit

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The CURES COEC (Community Outreach and Engagement Core) aims to increase dialogue about environmental health issues and facilitate communication between scientists and Detroiters.

Insight into the Science of Asthma & Allergies: National Viewpoints

CURES researcher Dr. Allen Rosenspire arranged a symposium last fall titled, "New Perspectives: Addressing the Asthma and Allergy Epidemics." Seven presenters from around the country had 15 minutes each to share their perspectives on asthma and allergy research and theories.

The first two speakers addressed the state of knowledge. Dennis Ownby, MD, of Georgia Region University said asthma is a phenomenon of the late 70s and early 80s, when the prevalence of allergies and asthma rose from 5% and 1% to about 30% and 8% respectively in the U.S. This happened in many developed countries around the world, which makes you wonder if something happened around this time to cause it. Dr. Ownby pointed out that risk

factors seem to be poverty, obesity, and being African American. Rates of asthma morbidity are three times higher in Detroit than other places.

Kathleen Slonager, RN, Executive Director of the Asthma and Allergy Foundation of America (see Spotlight below) discussed the burden of asthma which affects 75 million in the US and over 3 million Michigan. She shared best practices for managing asthma, including two doctor visits per year, use of anti-inflammatory medication (controller meds vs rescue inhalers). and identification of asthma triggers in the home. When these targets are patients feel better. achieved, There's an impressive return on investment, a whopping \$32 saved per \$1 invested, for in-home visits that help alleviate symptoms.

John Cambier, PhD, from the University of Colorado discussed the two-stage asthma development process that explains how exposure to triggers ignites communication between our cells generate wheezing and sneezing responses. He's looking at how chemicals play a role in our genes that result in these responses.



Speakers from CURES outreach event on asthma and allergies, Christine Cole Johnson, James Blessman, and Kathleen Slonager



Community Partner Spotlight

Asthma & Allergy Foundation of America

We are grateful for our partners and want to connect our readers to them. Our Community Advisory Board member, Kathleen Slonager (pictured above right), was a speaker at our most recent event focused on asthma and allergies. We wanted to learn how her organization, the Asthma and Allergy Foundation of America Michigan Chapter (AAFA-MI), is working to improve health.

What does the Asthma & Allergy Foundation do?

The mission of the AAFA-MI is to improve the quality of life for individuals and communities affected by asthma and allergic diseases through education, training, advocacy, medical management, and environmental greening.

We inspired thousands across Michigan to improve their asthma and allergy management through our many programs including: *Wee Breathers*™ (for home visiting educators & child care centers), *Asthma Management & Education* (for nurses, doctors and respiratory therapists), and community health fairs, schools events and workplace programs. AAFA-MI is proud to have reached over 7,000 people last year, with our programs and services.

Why are asthma and allergies such a big concern?

Asthma and allergies (including food) are the nation's most <u>common</u> and one of the most <u>costly</u> chronic diseases. These diseases affect more than 75 million Americans, more than diabetes, cancer, heart disease, stroke, Alzheimer's and Parkinson's *combined!* Asthma accounts for over 2 million annual emergency department visits.

Michigan has close to a million people with asthma; about 25% of these are just kids! It's a big reason children miss school, go to the emergency room, or are hospitalized. Total annual costs for asthma in Michigan exceed \$395 million – much of this is associated with out-of-control asthma. Racial disparities in prevalence rates exist among children in the poorest families, and asthma is far more common among African-American children than white children. There are many reasons why this is the case, including: access to health care, genetics, environments, and knowledge of asthma control.

We do know that lack of quality asthma education can lead to worse control of symptoms, which can cause poor quality of life, hospitalizations, and even death. Now more than ever, better control is needed.

How can people learn more about your organization and access the resources you mentioned?

Call 888.444.0333 or click —





Larry Lemke, PhD, of Wayne State shared University international research examining quality air samples, hospitalizations, and ER visits, for asthma in Metro Detroit and across the border in Canada. He's trying to find out if there is a relationship between pollutants and asthma by comparing the two areas and what the differences are. He looked at 21 chemicals occurring in places and found that pollutants in the air are related to hospital visits and that Detroiters go to the hospital for asthma at three times the rate of Canadians. The chemicals didn't explain everything. Dr. Lemke thinks other factors besides the identified air pollutants are playing a role in what is affecting the hospitalizations and the higher rates of asthma and allergies.

Jack Harkema, PhD, from Michigan State University shared his work on whether ozone, a gas, affects asthma. In studies with rats he found that ozone triggered asthmatic responses. Dr. Harkema advises avoiding ozone which is highest on hot mid-sunny days that may lead to an asthma-like syndrome.

The last two presenters talked about the hygiene-hypothesis explaining that allergy and asthma issues stem from living in too clean an environment. The use of disinfectants from dishwashers, anti-bacterial soap, and other practices doesn't allow for the development of a healthy microbiome (the good bacteria on and in us) or ability to build up a healthy immune system.

Christine Cole-Johnson PhD, MPH of the Henry Ford Health System gave a historical account of the hygienehypothesis that was initiated by the fact that children raised on farms and exposed to farm animals had less challenges with asthma. Her own interesting research supports this. She found that children exposed to dogs have lower asthma rates.

Lastly, Nicholas Lukacs, PhD, from the University of Michigan talked about his research on the ingestion of dog dust in rat's stomachs. When rats were exposed to the dog dust and exposed to an allergen, their asthmatic responses were lessened.

What did we learn at the asthma and allergy symposium? Maybe children's yearning for a puppy is biological. We'll wait for science to confirm before advising. In the meantime, we're assured that some really smart people are making progress unraveling the mysteries of our bodies. We will continue to benefit from their genius, and pass the information along to you.

Know Your Triggers



Pollen is worst during spring and fall. Keep your windows shut, play inside, and shower before going to bed to help.



Keep your furry friends out of your bedroom and wash your hands and face after touching animals.



Breathe through your nose to warm the air going into your lungs when you're exercising or playing. If it's cold, cover your mouth with a scarf. Talk to a doctor about quick-relief medicine to help with symptoms.



Smokers should always smoke outside. Smoke from any source can make allergies and asthma worse including from cigarettes, pipes, fireplaces, incense, and wood burning stoves.

DETROITERS BREATHE EASIER FROM

Buildings, Safety, Engineering and Environmental Department. The company has appealed the denial to circuit court. Concrete crushing requires approval under the zoning ordinance in an M-4 industrial zone.

What is a concrete crusher? A concrete crusher is an effective way to break down cement debris to recycle the materials to avoid going to landfills. It does have a positive impact on the environment, if it's placed in an area where fugitive dust won't affect people. Concrete crushers and recycling equipment should be located at a safe distance from residents, homes, and schools.

Concrete crushing and recycling can be hazardous to your health, and with Detroit's already high asthma rate, is a serious concern. The airborne dust from crushing cement can irritate allergy symptoms and increase asthma attacks.

Community Outreach & Engagement Team



NEW BEGINNINGS - Outreach Coordinator **Brian Smith** was recently accepted to the Master of Urban Planning program at WSU. Brian said, "I'm looking forward to merging my professional and academic experience to see how together they can help improve the place that I live, work, and play." He is also a Captain in the Army National Guard and a DJ on the weekend.

TALKING HEALTH - Carrie Leach, MPA, is a doctoral candidate focusing on, "Communicating information about health. I get excited to use communication theories to develop materials that resonate with people." Carrie is a research associate at the Institute of Gerontology at WSU and manages evaluation and communications for the CURES community outreach and engagement core.





TRANSLATING SCIENCE – No doubt, there is exciting research happening at our Center. James Blessman, MD, is passionate about getting that information in the hands of those who need it. He plans to create 5-minute videos to translate complex research findings so they're accessible to everyone. This approach will make the information available much faster than through the networks of friends and family or from healthcare providers.

GROWING LEADERSHIP – The CURES outreach and engagement team continues to expand. In 2015, James Blessman (above left) joined the leadership team. Nick Schroeck, JD, joined the team as co-director in 2016 to increase our collective knowledge on environmental law issues and help build our advocacy capacity. He is the director of the WSU Transnational Environmental Law Clinic and has extensive experience addressing air and water pollution and working with environmental justice communities. COEC Co-Director Peter Lichtenberg, PhD, was pleased to have Melissa Sargent continue her role as Community Advisory Board co-chair for a second year. Melissa is an educator at the Ecology Center and has helped plan, organize, and moderate major outreach events. The team is excited to welcome Guy Williams, CEO and Founder of Detroiters Working for Environmental Justice (DWEJ). Guy brings extensive knowledge and expertise in environmental issues and advocacy.





Schroeck

Lichtenberg





Sargent

nt Williams

QUESTION CORNER

Q Is using bleach in dishwater a concern because bleach kills bacteria?

A Bleach is an asthmagen, which means it can cause asthma, not just trigger an asthma attack in someone who already has the disease. Avoid products with strong fumes. Soap and water is all you need to wash your hands and dishes.

Q Can you develop asthma/allergies at any age?

A Yes! Research shows that workers who are exposed to bleach can develop new asthma from exposure to bleach over time.

Q What are the health effects of living near the incinerator?

A This is a hard question to answer, so we'll be working on this. Certainly the pollutants that come from the stacks can be bad for your respiratory health. For detailed information about the incinerator visit www.zerowaste detroit.org/our-work/detroit-incinerator





Q How can I prevent mold?

A Mold is bad for allergies and asthma. There are plenty of things you can do to keep mold from developing into a problem in your home:

- Use an exhaust fan or open a window in the bathroom when showering.
- If you notice a leak in your house, fix it quickly.
- Remove carpet from your bathroom or other areas that are damp often.
- Clean your sinks and bathtub or shower monthly.

