Study: Birth Weights Rose When China Curbed Air Pollution



FILE - Cars travel on a road amid heavy haze in Beijing, Feb. 21, 2014. **Art Chimes**April 28, 2015 5:56 PM

Silence is the sound of response to protest https://www.youtube.com/watch?v=yq29SqOSCQo

ST. LOUIS-

In the summer of 2008, Chinese authorities took various steps to reduce air pollution as Beijing hosted the Olympic Games.

University of Rochester professor David Rich said that "in the years before and after the games, pollution levels were about twice as high as they were during the games, a third [higher] to twice as high. You go from a very heavily polluted city to an only moderately polluted city."

Rich said that temporary improvement in air pollution gave him and his colleagues the opportunity for what is called a natural experiment. Using records of tens of thousands of births, they compared the birth weights of babies born during the Olympic summer with those born at the same time the year before and the year after.

The most striking finding focused on air pollution exposure near the end of pregnancy.

"When your air pollution level increases during the eighth month of pregnancy, you saw a decrease in birth weight," Rich said. "And when your eighth month of pregnancy was during the Olympic games, when air pollution levels were lower, you saw an improvement in birth weight."

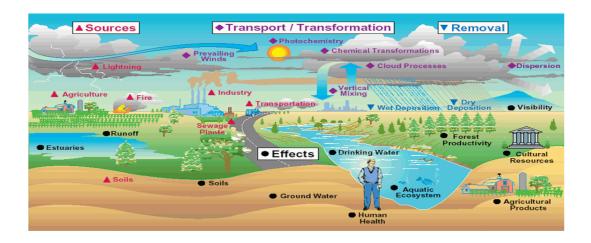
Low birth weight is considered an important marker of an infant's health. Low birth weight babies are more likely to have developmental problems as children, and may be at a higher risk for conditions such as heart disease in later life.

It's unclear why air pollution is related to low birth rate, especially when that exposure is in the eighth month of pregnancy. Rich said one theory is that the pollution causes inflammation in the mother, which limits nutrients reaching the fetus at a time it's developing rapidly.

Regardless of the mechanism, the researcher said, his study has an important public health message.

"Yes, this is a highly polluted city, and yes, the pollution levels came down drastically," Rich said. "But imagine what could happen if in fact we reduced these pollution levels on a more permanent basis."

<u>The study by Rich and his colleagues</u> is published in the journal Environmental Health Perspectives, which is supported by the U.S. National Institute of Environmental Health Sciences.





70 OF LUNG DAMAGING PARTICULATE MATTER IN CITIES - PPMID COMES FROM CARS, TRUCKS, BUSES, AND OTHER VEHICLES ON THE ROAD.

IN INDIA,
AUR POLLUTION IS
BELIEVED TO CAUSE
5.27.700 FATALITIES A YEAR

AILPIPE EMISSIONS ACCOUNT FOR

IN MAJOR CHINESE CITIES AROUND CITIES IS CLEARLY VISIBLE FROM SPACE

SOME 2 MILLION CARS IN MANILA NOW CAUSE 80% OF AIR POLLUTION THERE.

REDUCING DEATHS CAUSED BY AIR POLLUTION

AIR POLLUTION FROM CHINA HAS BEEN TRACKED TO THE CENTRAL VALLEY OF CALLFORNIA!

TERROUGH SOUP

THE GREAT SMOG OF 1952 IN CONDON KILLED AT ICAST

8,000 Horse

5,000

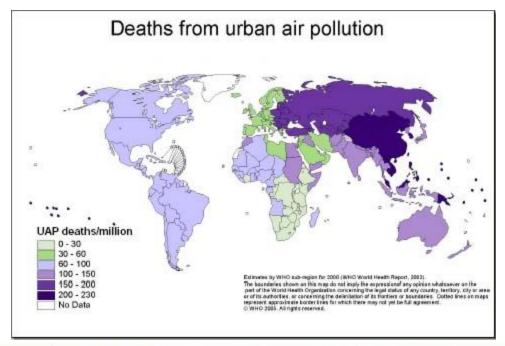
IN SOUTHERN CALIFORNIA ALONE.
5,000 ANNUAL PREMATURE DEATHS
ARE ATTRIBUTED TO POLLUTION FROM SMONT-MAUL DIESEL TRUCKS!

TURN AROUND!

How Smog Affects Your Body

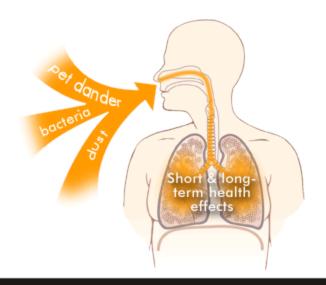
Every time you inhale, lungs take in irritating particles and gases. Large particles and gases irritate nose, throat, sinuses and can cause sore throat and coughing. Microscopic particles Fine particles and gases penetrate and damage air and gases irritate lung tissue and impair the immune sacs deep in the lungs.

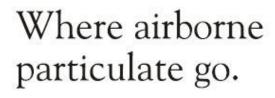
system cells that protect your lungs against infections.



Stage: Age:	Newborn 0-2 mos	Infant/Toddler 2 mos-2 yrs	Young Child 2–6 yrs	School-Age Child 6-12 yrs	Adolescent 12-18 yrs
Lung development:	Alveolar development				
development	Hig	h respiratory rate			
				Increas	sing lung volume
Air pollution risks:		Respiratory death			
				Chronic cou	gh and bronchitis
				Redu	ced lung function
				Wheezing an	d asthma attacks
		Respiratory symptoms and illnesses*		Respiratory-related	d school absences

^{*}Air pollution exposure has also been more recently linked to respiratory symptoms and illnesses in early life including cough, bronchitis, wheeze and ear infections





Particle Size Effect

5.5 - 9.2 microns Lodges in nose and throat

3.3 - 5.5 microns Main breathing passages

2.0 - 3.3 microns Small breathing passages

1.0 - 2.0 microns Bronchi

0.3 - 1.0 microns Air sacs

PM 10 refers to particulate matter that is less than 10 microns in size.





http://medicalexpose.org/



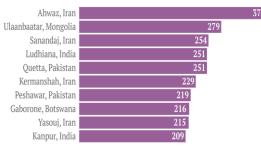
25 TIPS
How to keep your
Indoor Air
Quality Safe!



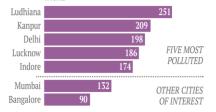
Cities with the worst outdoor air pollution

Pollution is defined as airborne particles less than 10 micrometers in diameter (PM10). Values shown are annual averages in micrograms per cubic meter of air.

Overall



India



China

150	Lanzhou				
141	Xining				
140	Urumqi				
123	Jinan				
121	Beijing				
81	Shanghai				
50	ong Kong				

European Union

Plovdiv, Bulgaria	70			
Sofia, Bulgaria	68			
Kraków, Poland	64			
Pleven, Bulgaria	57			
Thessaloniki, Greece	56			

Paris 38
London 29
Berlin 26

United States

Bakersfield, CA 38
Fresno, CA 35
Riverside, CA 28

Fairbanks, AK 27 – Also Hilo, HI, Modesto, CA, and Visalia, CA

Los Angeles 25
Chicago 22
New York 21

Ritchie King | Quartz | qz.com

Data: World Health Organization

25 Ways to Clean Your Indoor Air!

Filters:

- **1. Proper Filters:** Did you know that the air filter in your heating and cooling system can help create healthier indoor air by capturing airborne allergens such as pollen, mold spores, dust mite debris, smoke, pet dander and smog from the air passing through the filter. Sort of like vacuuming your air! (and you don't have to put much effort into the work it is doing! Bonus!)
 - Try out the Filtrete Odor Reduction Filter which has a unique two--sided design, with one side that captures large airborne particles and the second side that removes household odors. It is the most effective 1" odor--reduction filter at removing odors in the home—such as those from cooking, tobacco smoke, pets, mildew and cleaning chemicals—and is 65 times more effective* than other carbon filters {*Based on comparison of organic vapor capacity vs. other national retail furnace filter brands} It last up to three months for odor removal and particle capture for air passing through the filter. MSR Price: \$15.99 which is a great price! They can be purchased at Lowe's, Target, Walmart, Costco and your local hardware store. Find a location near you by visiting FindMyFiltreteFilter.com
- **2. New filters:** Change out your air filters regularly, the filter mentioned above lasts up to 3 months. But if you are a big remodeler like me consider changing it out a little more often during times of construction!
- **3. Other filters:** Don't forget your other filters! There are filters and screens around your home, for example air purifiers, dryer lint screens, vacuum cleaners, range hood screens, bathroom exhaust fan grilles, etc. Be sure to keep them clean or replace them as needed.





Keep it out:

- **4. Please Remove Your Shoes.** Believe it or not your shoes and covered an a fine layer of chemicals, dirt, bacteria and mold. Those contaminates will settle onto your flooring, carpeting and rugs. Then As you walk around you can stir up these particles, causing you and your family to breathe them in.
- **5. Fresh air.** Opening a window isn't always the best choice. Be sure to check the air quality and pollen levels outside before opening the windows.
- **6. Cooking:** When you are using your stove top, be sure to turn on your outdoor venting fan to help moist, smoky or chemical laden air to leave the house.
- **7. Dry Cleaning:** Try to get your dry cleaning done with a few days to spare for them to air out at the dry cleaners! That way you can pick them up after they dried completely and have let let off most chemicals. There are also less toxic dry cleaning options, so be sure to do your research.

- **8. Attached Garage:** Be sure to open you garage door fully before stating your car. When you pull back into your garage, also be sure to leave the door open for a few minutes after turning the car off to allow fumes to escape. Otherwise overtime the carbon monoxide can enter your home.
- **9. Fireplaces:** Be sure your fireplace flue is inspected by a pro to be sure that it is working properly and keep those particles out of your indoor air.
- **10. Bathroom Fans:** When you shower or use hot water in your bathroom, be sure to use you bathroom fans to vent out all the steam and extra moisture in the bathroom air that can cause mold and mildew growth.
- 11. No Air Freshners! Homeowners often turn to products to help mask odors in the home but often times do not realize that they may also contribute to poor indoor air quality. According to the EPA air fresheners actually release VOC's into the air. Scented candles and incense may contain particulates, soot and chemicals. For a safer air freshener, dip cotton balls in a sweet smelling extract or essential oil and stash them around the house. (and don't forget the odor eliminating air filters like I mentioned above!)



Cleaning Tips:

12. Clean Ducts! Have your air ducts cleaned. Make sure the contractor is a member of the National Air Duct Cleaners Association (nadca.com) and uses not only

high velocity air but a whip that is fed through the ductwork to loosen up any debris stuck to the walls of the sheet-metal. A good resource for deciding when and why to clean you ducts is here.

- **13.** Vacuum Often. Ideally, you should be vacuuming twice a week. It is a great way to get rid of excess dust, dust mites, lead, mold, and pet dander. Use a vacuum cleaner that has a HEPA type filter, so that as you are cleaning you are not just spitting the dust back into the air. Consider changing bags and or cleaning out filters outside.
- **14. Beware of Cleaners.** Household cleaners, even "green" cleaners often contain cancer causing chemicals (check out <u>goodguide.com</u>). The best bet it to use TRULY nontoxic cleaners like baking soda, salt, lemon juice, essential oils and vinegar- check out this post <u>25 ways to clean with vinegar</u>.
- **15. Simplify**. You don't have to have harsh chemicals and antibacterial in the title to be able to clean something. Opt for a nice HOT bucket of water and a bit of dish soap. Scrub scrub!
- **16. Read Directions:** Ever wondered why that cleaner warns you to have proper ventilation? Well, the answer is easy, you shouldn't be breathing in those fumes! Be sure to read and follow directions on any cleaning or other product you use in your home.
- **17. Overspray!** When using any type of cleaner don't spray cleansers directly on the surface you're scrubbing. Avoid the chemicals being misted directly into the air. Try pouring the cleaner directly onto a rag or paper towel first and then wiping the surface. You can also try pre-wet wipes.
- **18. Say NO to Dusting!** Dry dusting that is. Don't just dust or mop with dry cloths, instead use a damp cloth. This way you can avoid breathing in all the dust the particles that are lifted into the air while you clean.
- **18.** Launder! Don't forget to launder your window coverings regularly. When it comes to draperies, dust from open windows and just regular dust can settle often. You should think of either laundering them according to the manufacturer directions OR at least vacuum them with the proper attachment.
- 19. Clean Sheets! Wash your bedding weekly. (130 degrees F to kill dust Mites)

20. Mattress: Vacuum you mattresses, couches and chairs quarterly at least.

Finishes:

- **21. VOC Free Paints** More and more paint lines have options for VOC low or free paints. (volatile organic compounds= bad) Wherever possible opt for these types of paint, the fewer fumy chemicals you bring into your home the better. Especially since off-gassing can continue for a long time.
- **22. Control Dust Mites!** Whenever possible, opt for hard surface flooring. Be sure to vacuum and or launder throw rugs often!

Plants and Pets:

- 23. Pet Dander! This is a tough one and SO personal, I know I couldn't handle it, but try to prevent animal dander. Most doctors suggest that people allergic to animal dander not keep household pets with feathers or fur. OUCH! If you are having problems with pet allergies you need to clean the air, walls and moldings and it may take some time. If you can have your pet live at a friend's or family member's house for 2 months and clean the house thoroughly to see if your symptoms improve. When they return see how your body responds. If you decide to keep the pet there are a few things you can do to help yourself. Ban them from any bedrooms, and be sure to keep the doors closed.
- **24. Plant it!** There are several great plants that can help your air to be cleaned of toxins. One caveat to adding plants is that you have to be SURE to control the water and not create a mold or mildew problem!!! Also if you have children or pets, be sure to know what plants are poisonous before bringing them into your home. Great air filtering plants include
 - Orchids: may seem like a hard to plant to care for, but they actually thrive on neglect. Don't kill them with kindness (too much water and sunlight). They filter: xylene, a pollutant found in many glues and paints. Orchids respire and give off oxygen at night so they're great for the bedroom! And they just look so good in decor which is win/win!
 - <u>Palms:</u> hardy, exotic looking and easy to grow, palms filter formaldehyde, benzene and carbon monoxide
 - <u>Philodendrons</u> need very little attention! They filter xylene, a toxin found in glues and leathers.

- Aloe Vera Aloe is mostly know for medical uses like relieving burns, but why not a two-fer! Easy to keep alive, and sculptural looking! Aloe filters formaldahyde!
- 19 other great plants a few other options, rubber plant, Janet Craig dracaena

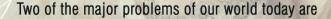
Safety Warnings:

25. Lethal Fumes: Beware of <u>lethal fumes</u> and be sure to have adequate alarms for these types of gases, carbon monoxide, radon and second hand smoke. Be sure to install a carbon monoxide detector and have a radon test preformed in your home, and please do not smoke indoors or allow friends to.





THE ANGEL MUST TEMPT THE
SMALL PETTY GREEDY MINDS
TO RELEASE THEIR FALSE
BELIEFS, RELEASE THEIR
AVARICE, RELEASE THEIR
ANGER. EAT OF THE FRUIT OF
KNOWLEDGE AND SEE THAT
WE ALL SHARE AIR



- 1. Excess green house gases (like Carbon Dioxide, Methane, and Synthetic compounds) the deep ground Petroleum makes excess pollution, and a lack of good available oxygen. Cows and farm animals take in Oxygen and produce excess Methane and Carbon Dioxide
- 2. Bad diet and life style of excess meat, synthetics foods and medicines, dextrose sugar, cooked oil trans fatty acids, lack of vegetables, tobacco, stress, lack of exercise and lack of good air (as the oxygen level decreases) all producing excess DEGENERATIVE DISEASE.

These problems have a simple quick solution from the Angel. The switch to increase plants and thus a more farming society and economy is the answer. Plants take in Carbon Dioxide and give off oxygen. Eating more vegetables drastically reduces degenerative disease. We can easily now use bio fuels and bio mass to produce a much cleaner gasoline from plants.

This would quickly solve many problems, But this would effect the greed of Big Sugar, Big Oil, Big Pharmaceuticals, and others. Greed and delusion of false beliefs stop us from Healing the Planet and Ourselves.

THE ANGEL CAN LEAD US TO
RETURN TO
THE GARDEN OF EDEN
FOR A THOUSAND YEARS

PEOPLE COMPLAIN ABOUT CHANGING
FOOD INTAKE BECAUSE OF ADDICTION
AND HABIT. BAD FOODS CAN BE
ADDICTIVE. WHEN PEOPLE ARE GIVEN
MORE HEALTHY DIETS THEY
COMPLAIN AT FIRST. THEN THEY START
TO ACCLIMATE, THEN THEY LIKE BEING
MORE HEALTHY AND HAVING MORE
ENERGY, THEN THEY CANNOT
IMAGINE EATING THE OLD
UNHEALTHY FOODS AND FINALLY
THEY DISLIKE THE OLD UNHEALTHY
SLOW POISON FOODS.

YOU JUST NEED TO START EATING HEALTHY FOR YOUR HEALTH AND THE HEALTH OF THE PLANET.

BREAK THE ADDICTION TO SLOW POISON FOODS