



A Leading Pediatrician's Perspective on COVID-19 & Mold Health Effects - Jay Portnoy, MD

Dr Jay Portnoy is an allergist in the section of Allergy, Asthma & Immunology at Children's Mercy Hospital in Kansas City. He received his medical degree at the University of Missouri-Columbia School of Medicine, did his pediatric residency at Children's Mercy Hospital and his Allergy fellowship at the University of Michigan. He has published numerous articles in peerreviewed journals, was on the Joint Taskforce for Practice parameters and served as President of the American



College of Allergy, Asthma & Immunology. He served on numerous committees of the College and Academy as well as on the Allergy/Immunology RRC and the ABAI. Dr. Jay Portnoy, is engaged in valuable and important work that is making a difference in his patients' health and quality of life.

Nuggets mined from today's episode:

KC and COVID? - Hospitals in Kansas City, MO are at full COVID capacity; Children's Mercy is made available for other hospitals to offload young patients.

About the COVID vaccine - Dr. Portnoy has firsthand experience serving on a vaccine panel. First round of vaccine testing in humans is done on people 18 and older, because they are more robust. The first round of COVID vaccine testing was done on age 16 and older age group, because that is the standard in Europe. We don't know if the COVID vaccine will protect against an asymptomatic carrier state?

- The COVID vaccine will first be given to frontline healthcare workers, residents of nursing homes, nursing home staffs. Even though Jay treats children and works in an outpatient clinic he'll line up to receive the vaccine.
- The COVID vaccine is the first time a corona virus has been developed and uses a different technology. COVID is a messenger RNA virus and the vaccine is a messenger RNA vaccine. Work on developing a messenger RNA vaccine started years ago. RNA vaccines can be developed quickly. HIV is an RNA virus which converts RNA into DNA using reverse transcriptase ("An enzyme that catalyzes the formation of DNA from an RNA template in reverse transcription". Oxford Languages).

Dr. Portnoy has researched prior pandemics. What goes around comes around, history will repeat itself. The Spanish Flu started at Fort Riley Kansas. Soldiers drafted for WWI carried the virus to Europe first infecting allied troops from Britain and France and then infecting the Germans. The virus became more lethal. With thousands of sick soldiers stuck in trenches, the virus is what stopped WWI. After the Armistice, when American troops returned to the USA they carried the virus with them to their home cities and states. In 1918-1919 it was illegal in the US and in Germany to cover the epidemic in newspapers and radio for fear enemy nations would use the pandemic to their advantage. The flu is called the Spanish Flu because Spain didn't have a news blackout on publicizing it. In the USA, people resisted wearing masks, social distancing and eating and drinking out. There were 3 waves of Spanish Flu, with the third winter wave being the worst. Cities like St. Louis which shutdown fared better than cities such as Philadelphia which didn't. The Spanish flu was lethal, people who developed symptoms in the morning often succumbed the same day. Spanish Flu was found up until the virus burnt out in 1957. The Spanish Flu primarily effected adults. The 1957 pandemic had a fatality rate of .1%

H1N1 versus COVID? H1N1 was a virus that effected kids. Adults who were exposed to the Spanish Flu in 1957 had some resistance to H1N1. H1N1 didn't stop in the summer as was expected. By late fall there was a vaccine, some parents refused to have their children vaccinated.

Hemosiderosis?- Pulmonary Hemorrhage/Hemosiderosis Among Infants -- Cleveland, Ohio, 1993-1996 sparked interest in looking for possible association between the condition and black mold (*Stachybotrys chartarum*). Jay encounters hemosiderosis sporadically and doesn't necessarily look for a connection to mold.

National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health. Valuable info on what works and what doesn't. Asthma Management Guidelines. Here's a link.

The new 2020 Asthma Guideline Update From the National Asthma Education and Prevention Program are now available.

They are referred to as EPR-4. Here's a link.

The Global Initiative for Asthma (GINA) was established to increase awareness about asthma among health professionals, public health authorities and the community, and to improve prevention and management through a coordinated worldwide effort.

Cat Allergy Breakthrough- Jay was invited to Switzerland where he learned about a breakthrough in cat allergy control and prevention. Purina has developed a cat food that removes Fe I d 1 from cats. By injecting chicken hens with the allergen, chickens produce an IGY antibody that goes into their eggs. By harvesting the antibody and then adding it to cat food neutralizes the allergen after consumed. Dogs produce multiple allergens, including a male dog allergen.

Dust mites- Acaracides are substances poisonous to mites and ticks. Acaracides aren't recommended for control and prevention of dust mites. Dust mite fecal pellets are 5 microns in size and heavy and tend to accumulate deep down in carpet fibers. Dust mites have learned to avoid acaricides. Dust mites are made of water and shrivel up and die when RH is <25%. Encasing of mattresses and pillows is recommended, tightly woven fabric encasements are recommended over plastic when are uncomfortable. Hot water isn't needed to kill dust mites. Warm water laundering drowns dust mites and prevents scald injuries. It's important to remember that these are just part of a multi-faceted approach to managing dust mite allergen that includes routine vacuuming and managing relative humidity in the home

As is mentioned elsewhere, Jay was the lead for their development of the Clinical Practice Guidelines for Environmental Assessment of different allergens. Here's a link to all of them

Asthma control and prevention pioneers! Dr. Jay Portnoy's group at Children's Mercy are pioneers in controlling and prevention of childhood asthma through their healthy home environmental assessments and advice service. Due to COVID restrictions, the assessments are now done virtually. Occupants virtually take consultant on a tour of the home. If sampling is needed, then arrangements will be made to come to the home following a strict protocol. Kevin Kennedy who works with Jay is working with a research group to develop predictive models using community-wide exterior housing conditions to map the locations of problem housing stock. The Kansas City Health CORE team has surveyed and rated tens of thousands of homes in the KC metro area. The exterior surveys were repeated periodically in the urban core to monitor visual changes. The data is geo-coded by individual home. Preliminary analysis indicates there is a relationship between certain health impacts in children and both the condition of the exterior of a home and proximity to certain community risks like pollutions sources (e.g. factories, roads). They are working to see how this impacts exposure to these factors inside the home.

Tips for IEPs in preparation of environmental assessment reports:

- Use a standardized format
- Include date, photos, provide background information
- A scope of recommended actions to reduce environmental exposure risks along with a list of what has and has not been done
- Room by room evaluation, color coded: Good green, Caution yellow and Problem red, recommendations ranked in order of importance
- Analytical results demarcated to assist understanding by the clients, along with information about how any analytical work was performed
- References used to inform what recommendations are made.
- Allergists are ready to work with IEPs.
- Work needs to be done to obtain payment and reimbursement, some work can be coded under miscellaneous codes.
- Suggests obtaining prior authorization criteria
- IEPs should not comment on health issues, only on the environmental conditions and how to improve the conditions to

- reduce environmental hazards. Use general statements like "above threshold recommended by health authorities".
- Health Plans will pay for asthma related home environmental assessments and interventions.

Other comments:

- Jay is a past president of the American Academy of Allergy, Asthma & Immunology. www.aaaai.com The Academy has created 6 papers of Practice Parameters. Viral infections are far more important than mold. Viral infections trigger asthma.
- "Building dampness and mold raised the risk of a variety of respiratory and asthma-related health outcomes by 30 to 50 percent."
 "Of the 21.8 million people reported to have asthma in the U.S., approximately 4.6 million cases are estimated to be attributable to dampness and mold exposure in the home."
 www.truthaboutmold.info > statistics
- Mold interventions and mitigation removes other things (dust mites, bacteria, etc.).
- Urine tests for mold mycotoxins are a scam. FDA has allowances for naturally occurring mycotoxins in foods. Jay tested his own urine for mycotoxins and found them even though he feels fine.
- **ERMI** score? ERMI stands for Environmental Relative Mold Index. The ERMI test was developed by scientists at the EPA. An ERMI test is a standardized objective test used to quantify the indoor mold burden on a building. Jay opines ERMI may be useful as a predictor, as some people with high scores don't experience problems.
- Concrete and mold? Concrete is dense (high thermal mass) and porous. Moisture liquid and vapor can pass through concrete.
 Concrete is often cool and subject to condensation. Carpet atop concrete slab may be perpetually damp.

Z-Man signing off

<u>Jay M. Portnoy, MD – Chief, Section AA&I Children's Mercy KC Air Date: 10-7-2011| Episode: 222</u>

<u>J. David Miller PhD – JACI (Journal of Allergy and Clinical Immunology)</u> <u>Mold Issue Air Date: 9-2-2016| Episode: 429</u>

Trivia

What is the origin of the term pediatrics?

Answer:

Pediatrics is derived from the two Greek words, pais meaning child and iatros meaning doctor and healer.

Answered by Don Weekes.