The sun is shining and it finally feels like summer in Illinois. For ICAAP, summer means the close of our fiscal year and as we end another successful year, I wanted to take this opportunity to recap some of the amazing work that has taken place over the past year as we continue to advocate for children, families, and the clinicians who care for them.

ICAAP’s membership continues to increase and we are now close to 2000 pediatricians strong. Most importantly, we continue to pursue our mission to promote the right of all children to live happy, safe, and healthy lives and we do this while assessing and serving the needs of our members.

On Wednesday, April 5, 2017 30 ICAAP members visited Springfield to meet with legislators to discuss issues related to children’s health and health care access. Attendees included pediatricians, residents, medical students, and pediatric dentists from a number of hospitals, health systems, and private practices in Illinois. Topics of discussion included the importance and safety of immunizations as well as the importance of access to health care for all children and families. Members also spoke about current legislation including the sugar-sweetened beverage tax and the Happy Healthy Baby Act that would provide a diaper allowance to families living in deep poverty. 2017 Lobby Day was a great success and a record for Lobby Day attendance with over 30 advocates visiting the halls of the legislature. We look forward to even more members participating next year.

Please read below about some of our important Chapter initiatives:

**Child Development Initiatives**
Child Development Initiatives have included providing pediatrician and inter-professional education, resources, and technical assistance; working on policy, advocacy, and systems improvement issues; and connecting providers and families to community resources for education, treatment, and other services such as early intervention, home visiting, and trauma-informed care. The Child Development committees
(Committee on Child Development, Committee on Child Abuse and Neglect, and the recently revised Committee on Early Childhood Education) have taken on more intentional advocacy roles regarding mental health and legislative input and have reenergized emphasis on collaboration with other like-hearted and like-minded partners.

Committee on Child Abuse and Neglect
The Committee on Child Abuse and Neglect (COCAN) has been “revisioned” with a renewed focus on advocacy, and is now led by co-chairs Dr. Veena Ramaiah, University of Chicago, and Dr. Kathy Swafford, Southern Illinois University. COCAN serves as a forum to educate and inform pediatricians, other health care providers, educators, and community service providers who are concerned with issues relating to physical, sexual, and emotional abuse and neglect of children and adolescents. COCAN develops and advocates for appropriate policy recommendations, programs, and resources to enhance the physical, mental health, and well-being of children experiencing abuse and/or neglect and their families.

Recently, the committee considered the impact of pending legislation related to child abuse and neglect. A major concern has been the recent application of SASETA (Sexual Assault Survivors Emergency Treatment Act) legislation to children, which requires all acute (within seven days) sexual abuse cases to be seen in the emergency room. Although advocates were unsuccessful in getting the appropriate changes made in the current law, the committee continues to actively work with the legislature on this over the next several months as part of the 2018 legislative session, in the hopes of making important changes that will lessen the opportunities for re-victimizing children.

Obesity Prevention Initiatives
Obesity Prevention Initiatives spearheaded a web-based Maintenance of Certification Part IV quality improvement collaborative project in pediatric obesity in the spring. The web-based project, “Building Healthy Habits with Families in Your Practice – Addressing Obesity Prevention and Management” is still available and accepting participant registrants. ICAAP also offers seven CME webinars on obesity-related topics, including Understanding and Assessing Psychosocial Factors Associated with Childhood Obesity, on ICAAP’s learning management system. For more information see ICAAP’s educational course catalog on pages 25 and 26 of this newsletter. ICAAP members advocated for a state tax on sugary beverages to be incorporated into any state budget solution by visiting their state legislators and participated in the May 22nd Day of Action by calling or emailing their legislators.

Committee on Children with Chronic Illnesses and Disabilities
The Committee on Children with Chronic Illnesses and Disabilities (COCWCID) continues to inform and educate health care providers in Illinois about national AAP policy related to children and youth with chronic illnesses and disabilities. It provided educational opportunities for pediatricians and others about the needs of children with special needs and their families. Most recently, it collaborated with other organizations advocating for supports and services for people with disabilities and their families by spearheading the response effort to the Illinois Department of Healthcare and Family Services’ (IDHFS) request for proposals (RFP) issued on February 27, 2017, to rebid the majority of the state’s Medicaid managed care program contracts, consolidate multiple programs into a single streamlined program, and expand managed care statewide. Upon review of the RFP by pediatrician leaders in children’s health, ICAAP identified concerns related to the Managed Care Organizations’ (MCOs) abilities to provide care coordination for children with complex conditions that require specialized care, many of whom are currently being handled well by the University of Illinois at Chicago (UIC) Division of Specialized Care for Children (DSCC). The committee includes representation from primary care and subspecialty care and includes family partners. The co-chairs for 2014-2017 are Drs. Mary Keen and Larry Gray.

Immunizations Initiatives
We continue to lobby and work tirelessly as we advocate for pediatricians with regards to Immunization reimbursement in Illinois. ICAAP is sponsoring six Illinois Vaccine Summits in collaboration with the Illinois Department of Public Health (IDPH) to provide annual trainings for provider participation in the Vaccines for Children (VFC) program. The Illinois Vaccine Summit events are all-day, in-person education sessions that ICAAP staff coordinate in collaboration with a planning committee. The members of the planning committee include local pediatric and family private practices, AFIX local public health departments, other VFC providers, and pediatricians that are ICAAP members and IDPH representatives. Current topics of focus include vaccine requirements for school entry, 2017 Advisory Committee on Immunization Practices Updates, Illinois VFC storage and handling requirements, I-CARE, and vaccine hesitancy.

continued on page 3
Climate Change Workgroup

ICAAP has initiated a Climate Change Workgroup that has been meeting since February 2017 to develop a webinar series titled: "Preparing Pediatric Providers to Address Health Effects of Climate Change in Illinois." The goal of the series is to increase pediatricians’ knowledge about the impacts of climate change on children’s health, and how pediatricians can communicate about climate and health to patients and their parents/guardians. The live webinars were held in May and June of 2017 and will be available for free in August on ICAAP’s eLearning platform. Check ICAAP’s website to learn more. www.illinoisaap.org

Continuing Medical Education and Quality Improvement Planning Committee

ICAAP’s Continuing Medical Education (CME) and Quality Improvement (QI) Planning Committee oversees, monitors, and evaluates ICAAP’s educational activities to ensure quality and consistency in content development and provides oversight for ICAAP’s CME accreditation program. A critical function of the committee is to recommend new educational directions and/or initiatives for ICAAP. The directive of the committee is as follows:

• Provide guidance and feedback on CME and MOC QI programs, scientific content, and process issues.
• Identify areas of professional practice gaps and suggest educational programs to close those gaps.
• Help ensure that Illinois State Medical Society, Accreditation Council for Continuing Medical Education, and American Board of Pediatrics Maintenance of Certification guidelines and requirements are followed by all educational activities, planning committee members, and faculty.
• Develop and implement policies to support ICAAP’s CME accreditation program.
• Review and approve CME applications and supporting documents.
• Review evaluation data on ICAAP’s educational/QI program; use the information in planning future programs.

Current members include: Kimberly Glow, MD, MPH, FAAP, chair; Jerold Stirling, MD, FAAP, ICAAP QI Leader; Karen Judy, MD, FAAP; Wayne Franklin, MD, MPH, MMM, FAAP; and Joseph Hageman, MD, FAAP. ICAAP is seeking additional members to serve on this committee. If you are interested, please contact Kathy Sanabria at ksanabria@illinoisaap.com or 312-733-1026, ext 208.

Senate Health Care Bill Update & What it Means for Your Advocacy

On Tuesday, June 27, 2017 the U.S. Senate announced it would delay the vote on its health care legislation, the Better Care Reconciliation Act (BCRA), until after the Fourth of July recess.

The delayed vote was an important juncture, slowing down the Senate’s rush to the finish line, and your advocacy efforts made that possible. Every one of you who called or emailed your senators and other representatives, wrote your local newspapers, posted tweets and videos on social media, and spoke out against the bill and its cuts to Medicaid played a critical part in pushing back the vote.

So, what’s next? When will they vote on the bill? How can you continue to advocate in the most effective way possible?

Here’s what you need to know:

Now, it is more important than ever that we continue to voice our concerns over the bill, building on the strong advocacy foundation pediatricians have created in the past weeks.

• Post messages on social media using #KeepKidsCovered or even take a video of yourself explaining how the Senate health care bill would harm children and families. Examples are here.


• Share your story in the media. Instructions on how can be found in the AAP’s toolkit and pediatrician examples of op-eds and letters to the editor are included.

• Continue to call your senators and representatives, both at their DC offices and their in-state offices, as well as Governor Rauner urging them to oppose the bill and protect Medicaid. Thank legislators that are taking a stance against the BCRA. Talking points are in the toolkit.

• Encourage others in Illinois to join you. If you’ve already taken part in these efforts, please continue to stay engaged and encourage your fellow colleagues to take action.

• Share your feedback. ICAAP wants to hear from you about your advocacy efforts and any feedback you received. Email dorourke@illinoisaap.com with your name and what you did/heard.
If you want the key to the best medical liability coverage for your group, contact our professional underwriting staff at 800-782-4767, ext. 3350 or e-mail us at underwriting@ismie.com. Visit our website at www.ismie.com.
ICAAP celebrated another successful conference on Friday, April 28, 2017 at the Regency Conference Center in O’Fallon, IL. Over 100 participants (including physicians, allied health providers, community service providers, and more) came together to learn about social determinants of health and their impact on the children, families, and communities they serve.

Additionally, the conference promoted cross-sector collaboration, relationship building, and networking among multiple child-serving systems in order to more effectively merge participants’ traditional clinical skills with public health and a population-based approach to health. This collaboration is important for all who serve children and families, but is particularly crucial for providers in Central and Southern Illinois, where resources can be scarce and distances between the resources greater.


Finally, we would like to thank the ABC-D co-chairs, Russell J. Bonanno, MEd; Mary Dobbins, MD, FAAP; and Tracey Smith, DNP, PHCNS-BC as well as the other planning committee members Pankaj Chhangani, MD, FAAP; Christina Emmert, RDH, RP; Jennifer Heithaus, MD, FAAP; and Janice Moenster. ICAAP would also like to thank all of our speakers and exhibitors for supporting this conference. Thank you all, and we hope to see you all back next year.

SAVE THE DATE!

8th ANNUAL ABC Conference
(Autism, Behavior, and Complex Medical Needs)
Friday, November 17, 2017
MORAINE BUSINESS AND CONFERENCE CENTER
(Building M) 9000 W College Parkway
Palos Hills, IL 60465
Illinoisaap.org/conferences/abc
As part of the QI activities, Dr. Amy Christison, MD, FAAP, Assistant Professor of Pediatrics at the University of Illinois College of Medicine in Peoria and Medical Director of Healthy Kids U—a weight management program at Children’s Hospital of Illinois—trained physicians and other clinic providers in Brief Action Planning (BAP) to enhance communication with patients. BAP is an evidence-based communications tool to support patient behavior change and self-management and incorporates motivational interviewing concepts. Dr. Christison, a longstanding member of ICAAP’s Committee on Obesity that serves as an advisory group for the project, also assisted with the development of the evaluation plan’s clinical and patient measures. The project will evaluate changes at multiple levels: patient, clinic, health care provider, community organization/service, and the overall care coordination program through ongoing data reporting. Changes are documented in several different ways, including health care provider pre and post-intervention surveys, the community organization pre and post-surveys, the pre and post-patient Family Nutrition and Physical Activity Assessment, and the patient survey.

ICAAP has developed a unique model to improve health behaviors and patient outcomes for clinical and community integration, streamlining referral systems to and from clinic physicians to a specialized care coordinator and nonmedical community-based services that offer nutrition and physical activity programming for children with overweight or obesity. The bedrock of this pilot is the Community Partner Network ICAAP has convened for the project whose members are collaborating for the first time to offer an array of weight management, physical activity, and nutrition programs and resources, and have agreed to report on patient participation in programs.

Continuous quality improvement (QI) is a key component of the coordinated system of care. Therefore, ICAAP meets regularly with physician champions who lead the QI team at each clinic. Physician champions at the three clinics are: Heartland Health Centers–Devon, Jay Mayefsky, MD, MPH; Erie Family Health Center–Division Street, Nicole Yanez-Zamora, MD; and Erie Family Health Center–Evanston/Skokie, Rebecca Lapat, MD. Quality improvement goals are to increase referrals to Promoting Health, documentation of nutrition and physical activity counseling, and obesity-specific follow-up visits.

As part of the QI activities, Dr. Amy Christison, MD, FAAP, Assistant Professor of Pediatrics at the University of Illinois College of Medicine in Peoria and Medical Director of Healthy Kids U—a weight management program at Children’s Hospital of Illinois—trained physicians and other clinic providers in Brief Action Planning (BAP) to enhance communication with patients. BAP is an evidence-based communications tool to support patient behavior change and self-management and incorporates motivational interviewing concepts. Dr. Christison, a longstanding member of ICAAP’s Committee on Obesity that serves as an advisory group for the project, also assisted with the development of the evaluation plan’s clinical and patient measures. The project will evaluate changes at multiple levels: patient, clinic, health care provider, community organization/service, and the overall care coordination program through ongoing data reporting. Changes are documented in several different ways, including health care provider pre and post-intervention surveys, the community organization pre and post-surveys, the pre and post-patient Family Nutrition and Physical Activity Assessment, and the patient survey.

An important component of this project, and the most complicated to develop and coordinate across provider systems, is the technological piece. While the FQHCs all share the same electronic health records system (EHRs), linking external databases from various entities to communicate and migrate data seamlessly is extraordinarily challenging.
ICAAP has incorporated a readiness to change screening into this project in order to assess patient readiness to engage in nutrition or physical activity behavior change and for referral to the Promoting Health care coordination program. A “Readiness to Change” ruler has been built directly into the clinics’ EHRS (Centricity). Given a response by the patient of seven or above out of ten, and a documented entry by the physician on the radio button scale, the option to refer the patient to Promoting Health is generated. The assessment also includes patient education tools in EHRS available for providers to distribute: Healthy Choices in Eating, Healthy Eating Habits, and My Pyramid for Kids.

Once the referral is submitted, the Promoting Health care coordinator accesses it through a cloud-based data warehouse. The care coordinator then contacts the family and consents them to the research portion of the project, develops a care plan, and refers them to one of the community programs (see box “Community Partner Network”). Finally, community partners follow up with a communication to the care coordinator and the care coordinator communicates patient status to the primary care physician. The “Readiness to Change” question and the patient education tools are features that will remain within Centricity beyond the duration of Promoting Health.

Behavioral health consultants, who are members of the QI team at Heartland Health Centers – Devon (Heartland), have emerged as a valuable intermediary between busy pediatricians, scheduling staff, and the Promoting Health pilot project. As a result, Heartland is strengthening its internal resources and processes for pediatric obesity care. Heartland is in the process of integrating into the workflow a warm handoff from physicians to the behavioral health consultants when a patient is referred by a clinic physician to Promoting Health. The warm handoff significantly increases the chance that the patient will then be scheduled at the time of that physician visit for clinic nutrition education and behavioral counseling visits. Additionally, Grecia Rodriguez, ICAAP’s care coordinator, consults with them on a biweekly basis to communicate participant needs and receive updates about patients in the program. This partnership will facilitate project sustainability as the consultants are becoming familiar with local community resources in the clinic’s service area.

As an unexpected and exciting outcome of Promoting Health, ProActive Kids—a childhood obesity program focusing on body image, self-esteem and weight loss—will collaborate with Harmony Health Plan of Illinois, Inc., a subsidiary of WellCare Health Plans, Inc., to offer its services for the first time to West Town and Humboldt Park neighborhoods. ProActive Kids will now serve as a community weight management referral resource for pediatric patients from Erie Community Health Center–Division, West Town, and Humboldt Park.

ICAAP would like to acknowledge Helen Binns, MD, MPH, FAAP and Adolfo Ariza, MD from the Stanley Manne Children’s Research Institute at Ann & Robert H. Lurie Children’s Hospital of Chicago for their work initiating and leading the first Promoting Health project, which laid the foundation for the Coordinated Systems of Care Project. Other major contributors are Drs. Karen Walker and Kamala Ghaey, leaders of the ICAAP Committee on Obesity. This project is funded by a grant from the Otho S.A. Sprague Memorial Institute, the WellCare Innovation Institute, and Telligen Community Initiative.
Teenagers: Sleep Patterns and School Performance

BY MARLENE TYPALDOS, MD AND DANIEL G. GLAZE, MD, FAASM

Introduction
Sleep patterns in teenagers have been extensively studied and have revealed considerable variations between school nights and non-school nights. Total sleep time tends to be less on school nights when compared with non-school nights. Bedtime and wake times appear to be influenced by external factors such as school start times and changes during puberty to later sleep onset time resulting in a diminished total sleep time and possible resultant daytime sleepiness.

What is a normal sleep pattern?
Sleep is classified into two types: NREM (non-rapid eye movement) sleep and REM (rapid eye movement) sleep. Cycling through all of the sleep stages for an adequate amount of time is essential to achieving a good night’s sleep for adequate functioning the next day. These sleep stages are defined by distinct polysomnographic features of electroencephalographic (EEG) patterns, eye movements and muscle tone.

NREM sleep is characterized by distinct EEG patterns including sleep spindles, K complexes and slow wave (delta) activity. The respiratory and cardiovascular parameters are relatively regular. In contrast, REM sleep is characterized by asynchronized cortical activity with a high brain metabolic rate, dreaming, lack of normal thermoregulation, and irregular respiratory and cardiac rhythms. The hallmark features of REM sleep include absence of skeletal muscle tone with the exception of the diaphragm, middle ear muscles, erectile muscles, and episodic bursts of extraocular muscles.

Why is sleep important?
There are many theories concerning the need for sleep. However, what we know has primarily evolved from research studies conducted in animals and humans examining the impact of sleep deprivation on the physiological and neurobehavioral systems. During sleep, important body functions and brain activity occur to create new pathways for learning and memory. Insufficient sleep alters activity in some parts of the brain that may interfere with the ability of making decisions, maintaining alertness, solving problems, controlling emotions and behavior, and coping with change.

What is considered an appropriate sleep duration for teenagers?
The American Academy of Sleep Medicine recommends that school-aged adolescents (14 to 17 years) should obtain at least 8 to 10 hours of sleep per night. However, on average the amount of sleep that teenagers actually achieve is about 7 hours, particularly on school nights. The amount of sleep varies by grade, with teenagers tending to get less sleep as they get older. Thus, teenagers are constantly coping with “sleep debt” during the school year. The amount of sleep reported by adolescents varies across countries and regions; but overall patterns of later sleep time and diminished sleep across adolescence are reported by most investigators. If this sleep debt is cumulative, subjective and objective evidence of increased daytime sleepiness are likely to appear.

This is of particular concern because chronic sleep deprivation, also known as sleep loss, insufficient or deficient sleep, can lead to a myriad of health deficits. Disrupted sleep-wake cycles and sleep restriction contribute to significant negative effects on the renal, cardiovascular, thermoregulatory, digestive, and endocrine systems. For example, sleep loss can contribute to insulin resistance and the development of metabolic abnormalities, obesity, and diabetes mellitus.

Furthermore, inadequate sleep has also been associated with mental health disorders and safety deficits. Sleep deprived teenagers have less interest to participate in physical activities or sports. They are more likely to be depressed, anxious, irritable, defiant, and impulsive than teenagers who achieve optimal sleep durations. They are at increased risk for suicidal ideation, substance use, as well as motor vehicle accidents related to drowsy driving.

Sleep restriction has been linked to cognitive and behavioral problems that adversely impact academic performance and functioning. For example, teenagers who are chronically sleep deprived have worse academic performance. Teenagers achieving inadequate amounts of sleep have increased absenteeism and tardiness, decreased ability to learn and retain material, and diminished ability to actively participate in the classroom and perform decision-making tasks.
How does puberty alter the sleep-wake cycle?

There are changes in the biological clock or circadian rhythms of teenagers. At about the time of puberty onset, most teenagers begin to experience a sleep-wake “phase delay” (later sleep onset time and later wake up time), manifest as a shift of sleepiness up to 2 hours later relative to bedtimes and wake times from earlier childhood. The onset of sleep is triggered by the release and accumulation of melatonin, a natural brain hormone. Toward dawn, melatonin shuts off, cortisol increases and also core body temperature rises, signaling the individual to wake up. Two biological changes in sleep regulation are thought to occur during puberty. First, there is a delayed timing of nocturnal melatonin secretion that parallels a shift in circadian phase preference. Therefore, teenagers have a biological tendency to fall asleep later in the evening and to wake up later in the morning. Second, sleep drive is altered across adolescence. Even those teenagers who have experienced sleep deprivation (and therefore accumulated a sleep debt) tend to feel more alert in the evening, thus making it more difficult to go to bed at a time that parents consider a reasonable hour. There is a further “mismatch” in that early school start times for teens do not allow them to achieve their biological need for adequate sleep for optimal daytime functioning.

Are there other factors that contribute to sleep deprivation in adolescents?

There are other reasons why teenagers do not get enough sleep. For example, caffeine consumption is increasing among adolescents to fight against daytime sleepiness, resulting from sleep deprivation. More worrisome is the increasing consumption of energy drinks and “super caffeinated” products like caffeine pills, energy drinks, and gum to promote alertness. Daytime and evening caffeine consumption may further disrupt nighttime sleep. The ability to achieve an appropriate sleep onset time and adequate amounts of sleep may be further impaired by after-school activities (part-time work), socializing and electronic devices.

Erratic sleep schedules, primarily during non-school nights, in an attempt to compensate for the lack of sleep during school nights, may initially seem to be a good idea, but can make sleep schedules worse. For example, if a teenager sleeps in till noon on Sunday morning, then they may be too alert to sleep at their usual bedtime Sunday night. Later school start times, even as little as 30 minutes later have been associated with improved academic performance and reduced vehicle accidents among teens.

What sleep disorders should be evaluated in a sleepy adolescent?

Among adolescents and teenagers, common sleep problems include sleep disordered breathing, insomnia, and hypersomnia. They may also experience other sleep disorders such as restless leg syndrome and parasomnias such as sleepwalking. Sleep problems occur very frequently in this age group. It is important that all adolescents and teenagers be screened for sleep problems including questions regarding nighttime sleep, daytime sleepiness, and snoring.

How to get a good night’s sleep?

According to leading sleep researchers, there are techniques that may be implemented in order to decrease common sleep problems. These include: keep a regular sleep-wake schedule that allows for a developmentally appropriate amount of sleep; avoid caffeine beverages four to six hours before bed and minimize daytime use; avoid alcohol and heavy meals before sleep; practice regular exercise; minimize noise, light and excessive hot or cold temperatures during sleep; establish a regular bed time and go to bed at the same time each night; and early morning bright light exposure to promote an earlier bedtime/sleep time.

REFERENCES


This article was developed through the National Healthy Sleep Awareness Project (NHSAP), a joint effort of the Centers for Disease Control and Prevention (CDC), American Academy of Sleep Medicine (AASM) and the Sleep Research Society (SRS). Visit www.sleeppedducation.org for more information. This article was supported by the cooperative agreement number 1U50DP004930-01 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC. This article was developed in 2016 and is reprinted in its original format at the request of the NHSAP.

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ICAAP Members Visit Springfield for 2017 Lobby Day

On Wednesday, April 5, 2017 30 ICAAP members visited Springfield to meet with legislators to discuss issues related to children’s health and health care access. Attendees included pediatricians, residents, medical students, and pediatric dentists from a number of hospitals, health systems, and private practices in Illinois. Topics of discussion included the importance and safety of immunizations as well as the importance of access to health care for all children and families. Members also spoke about current legislation including the sugar-sweetened beverage tax and the Happy Healthy Baby Act that would provide a diaper allowance to families living in deep poverty. 2017 Lobby Day was a great success and a record for Lobby Day attendance with over 30 advocates visiting the halls of the legislature. ICAAP thanks everyone that attended and we look forward to even more members participating next year.

Senator John Mulroe (far left) met with 2017 Lobby Day attendees to discuss immunizations and other children’s health topics. (Pictured from left: Melissa Pavelack, DO, pediatric resident; Eddie Pont (seated), MD, pediatrician at DuPage Medical Group; Sean McDermott, ICAAP lobbyist; Evan Galup, DO, pediatric resident at Advocate Lutheran General; Alejandro Clavier, MD, pediatrician at Vida Pediatrics; and Rasmeet Chhabra, medical student at Windsor University School of Medicine.

ICAAP Thanks ...

Anonymous Donor (teen pregnancy)
Autism Speaks (autism)
Centers for Disease Control and Prevention (immunization)
Chicago Department of Public Health (immunization)
Chicago Mercantile Exchange Foundation (math literacy)
Illinois Department of Healthcare and Family Services (obesity)
Illinois Department of Public Health (immunization)
Illinois Network of Child Care Resource and Referral Agencies (child care quality)
Illinois Public Health Institute (obesity)
Otho S. A. Sprague Memorial Institute (obesity)
Telligen Community Initiative (obesity)
WellCare Innovation Institute (obesity)
Recap: 2017 ICAAP Annual Educational Conference

The 2017 ICAAP Annual Educational Conference took place on Friday, March 3, 2017 in Lisle. As a courtesy to those who were not able to attend, here is a brief recap of the Annual Conference’s highlights. The conference was attended by over 100 physicians, allied health professionals, residents, and medical students from all over Illinois.

Conference Highlights

The 3rd Annual H. Garry Gardner Memorial Lecture opened the conference. Dr. David J. Schonfeld, developmental-behavioral pediatrician and Director of the National Center for School Crisis and Bereavement at the University of Southern California Suzanne Dworak-Peck School of Social Work, delivered the keynote lecture on Supporting Children in Times of Crisis. The presentation discussed how pediatricians can support their patients following a traumatic event as well as the importance of self-care for physicians.

The conference also featured a poster session in which residents, physicians, and allied health professionals presented their research and case studies to attendees. There were a total of 25 posters presented from work done at a number of Illinois hospitals, including John H. Stroger, Jr. Hospital of Cook County, Southern Illinois University School of Medicine, University of Illinois at Chicago, Rush University Medical Center, Loyola University Medical Center, and Ann & Robert H. Lurie Children’s Hospital of Chicago. The winning poster was Screening for Toxic Stress During Well-Child Visits: The Addressing Social Key (ASK) Questions for Health Study authored by Dr. Kavitha Selvaraj from Lurie Children’s Hospital.

The luncheon featured Dr. Lisa Simons from the Gender & Sex Development Program at Ann & Robert H. Lurie Children’s Hospital discussing how pediatricians can provide affirming and inclusive practices of care for LGBTQ patients.

Also at the luncheon, ICAAP President Dr. Alison Tothy presented a brief overview of ICAAP’s many programs, including those addressing child development, immunizations, trauma, literacy, immunizations, obesity prevention, and more, and thanked the hundreds of volunteers and staff that make them happen.

Additionally, there were multiple breakout sessions on topics including How to Incorporate Environmental Health Into Your Primary Care Practice; Sexual Health and Youth; Assessment and Treatment of Eating Disorders: Empowering Physicians to be Part of the Treatment Team; and Principles in Behavioral Management: Implications for Effective Discipline.

The 2017 Annual Conference was a great success and ICAAP thanks the planning committee, attendees, speakers, and exhibitors for participating.
Please see Brief Summary of full Prescribing Information, including Boxed WARNING, for additional Important Safety Information.

INDICATION
XOLAIR® (omalizumab) IS INDICATED FOR patients 6 years of age and older with moderate to severe persistent asthma who have a positive skin test or in vitro reactivity to a perennial aeroallergen and whose symptoms are inadequately controlled with inhaled corticosteroids.

XOLAIR has been shown to decrease the incidence of asthma exacerbations in these patients.

Limitations of Use
• XOLAIR is not indicated for treatment of other allergic conditions.
• XOLAIR is not indicated for the relief of acute bronchospasm or status asthmaticus.

IMPORTANT SAFETY INFORMATION

WARNING: Anaphylaxis
Anaphylaxis presenting as bronchospasm, hypotension, syncope, urticaria, and/or angioedema of the throat or tongue, has been reported to occur after administration of XOLAIR. Anaphylaxis has occurred as early as after the first dose of XOLAIR, but also has occurred beyond 1 year after beginning regularly administered treatment. Because of the risk of anaphylaxis, observe patients closely for an appropriate period of time after XOLAIR administration. Health care providers administering XOLAIR should be prepared to manage anaphylaxis that can be life-threatening. Inform patients of the signs and symptoms of anaphylaxis and instruct them to seek immediate medical care should symptoms occur.

CONTRAINDICATIONS
The use of XOLAIR is contraindicated in patients with a severe hypersensitivity reaction to XOLAIR or to any ingredient of XOLAIR.

WARNINGS AND PRECAUTIONS

Anaphylaxis
Anaphylaxis has been reported to occur after administration of XOLAIR in asthma premarketing clinical trials and in postmarketing spontaneous reports. The frequency of anaphylaxis attributed to XOLAIR use was estimated to be 0.1% and at least 0.2% (based on an estimated exposure of about 57,300 patients from June 2003 through December 2006), respectively.

A case-control study showed that among XOLAIR users, patients with a history of anaphylaxis to foods, medications, or other causes were at increased risk of anaphylaxis associated with XOLAIR, compared to those with no prior history of anaphylaxis.

Observe patients closely for an appropriate period of time after administration of XOLAIR, taking into account the time to onset of anaphylaxis seen in premarketing clinical trials and postmarketing spontaneous reports. Anaphylaxis occurred with the first dose of XOLAIR in 2 patients and with the fourth dose in 1 patient; the time to onset of anaphylaxis was 90 minutes after administration in 2 patients and 2 hours after administration in 1 patient. Discontinue XOLAIR in patients who experience a severe hypersensitivity reaction.

Malignancy
Malignant neoplasms were observed in 20 of 4127 (0.5%) XOLAIR-treated patients compared with 5 of 2236 (0.2%) control patients in clinical studies of adults and adolescents (≥12 years of age) with asthma and other allergic disorders. The observed malignancies in XOLAIR-treated patients were a variety of types, with breast, non-melanoma skin, prostate, melanoma, and parotid occurring more than once, and five other types occurring once each. The majority of patients were observed for less than 1 year. The impact of longer exposure to XOLAIR or use in patients at higher risk for malignancy (eg, elderly, current smokers) is not known.

A subsequent 5-year observational study of 5007 XOLAIR-treated and 2829 non-XOLAIR-treated adolescent and adult patients with moderate to severe persistent asthma and a positive skin test reaction or in vitro reactivity to a perennial aeroallergen found that the incidence rates of primary malignancies (per 1000 patient years) were similar in both groups (12.3 vs 13.0, respectively). Study limitations which include the observational study design, the bias introduced by allowing enrollment of patients previously exposed to XOLAIR (88%), enrollment of patients (56%) while a history of cancer or a premalignant condition were study exclusion criteria, and the high study discontinuation rate (44%) preclude definitively ruling out a malignancy risk with XOLAIR.

Please see Table 3 of the full Prescribing Information for pediatric dosing information.

NOW APPROVED
for appropriate allergic asthma patients aged 6 to <12 years

For more information, visit XOLAIR.com
Increasing Human Papillomavirus Vaccine Coverage by Strengthening Adolescent AFIX (Assessment, Feedback, Incentives and Information eXchange) Activities

BY MARIELLE FRICCHIONE, MD, MEDICAL DIRECTOR, IMMUNIZATION PROGRAM, CHICAGO DEPARTMENT OF PUBLIC HEALTH (CDPH); MARCIA LEVIN, MPH, CDPH IMMUNIZATION PROGRAM DIRECTOR; AND KATHY SANABRIA, MBA, ICAAP ASSOCIATE EXECUTIVE DIRECTOR

ICAAP is joining forces with the Chicago Department of Public Health (CDPH) to support the City of Chicago’s Increasing Human Papillomavirus (HPV) Vaccine Coverage by Strengthening Adolescent AFIX Activities in response to a Request for Proposals (RFP). Funding to support the CDPH RFP is from the Centers for Disease Control and Prevention (CDC) through the Prevention and Public Health Fund (PPHF). This grant includes an 18-month examination period beginning March 1, 2017 until September 30, 2018.

HPV vaccine prevents several forms of cancer. Persistently low coverage levels expose many adolescents to HPV disease and HPV-associated cancers.

Background

The CDPH Immunization Program’s mission is to work in partnership with the community to use the best public health practices for the prevention of unnecessary morbidity and associated mortality attributed to vaccine-preventable diseases (VPDs). The CDPH Immunization Program has a history of working with a wide variety of community partners to enhance immunization coverage through improved immunization delivery services, public and private healthcare professional education, and community outreach. HPV vaccine prevents several forms of cancer. Persistently low coverage levels expose many Chicago adolescents to HPV disease and HPV-associated cancers. Chicago has a large African American and Hispanic population and the increased rate of HPV-associated cancers among this population combined with low HPV vaccination coverage levels among Chicago adolescents could result in increasing disparities in cervical cancer. Increasing HPV vaccine coverage levels among Chicago adolescents is a top priority for the CDPH Immunization Program.

In 2013–2014, the CDPH Immunization Program was awarded PPHF funds to increase vaccine coverage rates among adolescents. During this project, the CDPH Immunization Program conducted 80 adolescent AFIX visits along with peer faculty, and coordinated 39 provider education activities focusing on HPV disease and vaccination. While conducting adolescent AFIX visits, the CDPH Immunization Program utilized report cards and clinician-to-clinician mentorship. Results from these visits indicate that 53/80 (66%) of providers experienced a reduction in missed opportunities for the third HPV dose. By the conclusion of 2016, 77/80 (96%) of providers had a coverage level increase for the third dose of HPV between the first and second assessment (approximately one year).

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For the current project, ICAAP will assist the CDPH with facilitating a quality improvement (QI) process known as AFIX (Assessment, Feedback, Incentives and Information eXchange) with healthcare providers serving children and adolescents throughout the City of Chicago. ICAAP will recruit a faculty of peers from its membership and other provider groups to co-lead adolescent focused AFIX visits to increase HPV vaccine coverage levels among participating clinics, train identified faculty, coordinate the scheduling of AFIX visits and web-based follow-up meetings, compensate peer faculty, and distribute continuing medical education (CME) credits to healthcare providers participating in this project. In addition, ICAAP and CDPH will create a webinar series for Medical Assistants (MAs) to increase knowledge of HPV disease and vaccination including understanding of the adolescent immunization schedule, talking with parents about their child’s immunization needs, and the importance of a strong HPV vaccine recommendation.

**Current HPV AFIX Activities**

ICAAP’s responsibilities for this project include to:

1. Designate staff to act as the primary contact for coordination of required activities.

2. Identify and recruit approximately 15 peer faculty to co-facilitate AFIX visits and mentor provider staff through the process by conducting at least two follow-up contacts using an electronic or web-based meeting platform.

3. Designate a lead physician peer-educator to oversee faculty and attend a mandatory out-of-state CDC training in 2018.

4. Coordinate scheduling of peer faculty to attend AFIX visits and lead follow up meetings.

5. Assist in the creation of a MA webinar training series intended to increase knowledge of HPV disease and vaccination including understanding of the adolescent immunization schedule, talking with parents about their child’s immunization needs, and the importance of a strong recommendation for the HPV vaccine.

6. Coordinate, obtain and distribute CME credits for clinical and unlicensed professionals (MAs) participating in the AFIX process and webinars.

7. Apply for and administer Maintenance of Certification Part 4 credit for physician participants in phase II of the effort.


9. Assist with project evaluation.

**CDPH’s responsibilities for this project include to:**

1. Identify 100 Vaccines for Children (VFC) enrolled providers to participate in the AFIX QI process.

2. Manage the selected subcontractor organization to maximize outcomes.

3. Assist with the overall scheduling and prioritization of provider visits and follow-up contacts.

4. Generate the immunization coverage reports.

5. Co-lead AFIX visits with peer faculty.

6. Provide supportive provider educational materials.

7. Lead the evaluation of overall project.

**Performance Measures**

In order to ensure the project runs smoothly and is on track for time, scope, cost, and quality, ICAAP will collect and report data to CDPH monthly on the following project activities: number of initial AFIX visits scheduled and completed, number of professional members participating in AFIX visit, number of AFIX follow-up meetings scheduled and completed, and number of faculty active during project. In addition, ICAAP will participate in CDPH-sponsored evaluation and quality assurance activities.

ICAAP’s immunizations team is excited to have the opportunity to work collaboratively with the CDPH in support of increasing HPV vaccination coverage levels across Chicago. As of June 2017, ICAAP has successfully recruited clinician faculty to serve as coaches for the 100 participating CDPH VFC Program clinics selected to participate in this project. Data will be collected on HPV immunization coverage levels and results will be shared with CDPH, ICAAP members, and others in 2019.
Climate Change and Health: Risk Awareness Can Improve Patient Care

BY JULIA L. SANABRIA, MS AND LESLIE A. DURAM, MA, PHD

Although climate change is a global concern, people in cities may feel its effects more severely. As climate change continues to impact cities, or settlements with high population density and built infrastructure, it is crucial that public health officials are aware of risks to human health and are able to anticipate the health-related consequences of climate change. Cities are currently home to over half of the world’s population, with more than six billion people expected to be residing in cities by 2050.1, 2 Cities are the source of over 70% of global greenhouse gas emissions, which are the most recognized contributor of anthropogenic climate change.3, 4 In addition, cities consume between 60% – 80% of the world’s natural resources.4, 5 Physical manifestations of climate change are already affecting most cities, including Chicago, which increases the urgency of the situation. In fact, climate change is expected to intensify a number of existing health problems in cities.

Climate change will directly increase risks to health from injuries and mortality during extreme weather events. Risk of illness in the aftermath of these untoward weather events is also increased. Water-borne diseases are likely to be more prevalent after flooding events or periods of intense rainfall.3 Food-borne diseases will increase due to foods being exposed to higher temperatures that cause bacterial growth. Increased mortality is expected in urban areas from more intense and more frequent heat waves.6

Climate change will also increase risks to health indirectly and more discretely via respiratory illnesses from poor air quality. Higher temperatures and local weather changes such as wind patterns will create unfavorable conditions for health. For example, if high atmospheric pressure occurs over an area, pollutants will be concentrated close to the ground. Dust, allergens, water vapor, mold, soot, and other particulate matter and gases will build in the atmosphere during these times, often with the influence of heat and ultraviolet radiation.7 Allergies in particular, become more problematic with changes in temperature. According to an article from National Geographic, “Warming temperatures in some areas, like the northern United States, extend the periods during which plants release pollen. The combined effect of warming temperatures and more CO2 means that the amount of pollen in the air has been increasing and will continue to increase as climate change worsens.”8 Allergist Leonard Bielory, MD, from the American College of Allergy, Asthma, and Immunology (ACAAI), says that pollen counts are expected to more than double by 2040 and recommends allergy sufferers begin treating their allergies with over-the-counter or prescribed medications two weeks before symptoms usually start.9 To help patients manage symptoms from allergies, asthma, or other respiratory illnesses, health care providers should report information on heat index to their patients and educate them to monitor pollen and mold counts.

The spread of infectious diseases, such as West Nile Virus (WNV) and Lyme, is already increasing from regional climate change.10-12 For example, the Chicago Tribune reported on August 4, 2016, that the North Shore Mosquito Abatement District observed an increase in the number of WNV-carrying mosquitoes. This increased the risk of contracting the disease from “low” to “moderate.”11 Such manifestations of climate change would be expected to increase due to shifting temperature and precipitation patterns.

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One of the most significant manifestations of climate change is heat. Cities already tend to be hotter than their surrounding suburbs and rural areas. This is due to the “urban heat island,” which is a warming effect surrounding urbanized areas due to all of the concrete. Compounding the problem is the fact that increased humidity makes hot days feel even hotter. Hot days, particularly those that reach over 90°F, are associated with poor air quality from increased ozone pollution levels. Climate experts say that increases in ground-level ozone, a toxic gas that causes respiratory health problems and is linked to human combustion of fossil fuels, is in the top five global health impacts expected from climate change. According to Chicago Climate Action Plan, “Since 1980, Chicago’s average temperature has increased approximately 2.6 degrees Fahrenheit.” This added warming from the urban heat island effect makes cities and their residents even more vulnerable to climate change, subjecting them to intensified, longer, and more frequent
heat waves and exacerbating heat-related illnesses and mortality.\textsuperscript{3,14}

Those most at risk include children, seniors, people in poverty, and those with pre-existing health conditions. Because children are a population at increased risk, they must be a focus in public health education regarding climate change. Pediatricians are trusted by parents and patients to provide up-to-date and accurate information on health care. In the future, this must include education on ways to keep healthy in a changing climate.

As climate change continues to impact cities, it is increasingly important for physicians and all members of the healthcare system to be aware of variations in risk factors among different demographic groups. Healthcare officials will need to anticipate new challenges in order to be able to meet the changing health demands of these populations and provide their communities with the tools and knowledge for prevention of heat-related illnesses and deaths. For example, understanding the relationships between climate and pollen levels, migration patterns of disease carrying animals, heat and humidity impacts, or natural hazards and disease outbreak patterns could greatly impact a patient’s quality of life.

Acquiring knowledge on the interconnected effects of climate change and health will empower physicians to proactively inform patients about new health concerns. Physicians must be able to understand the current and future conditions of climate change in order to anticipate their patients’ needs and properly treat and diagnose them. Physicians will also need to relay this information to their patients and families so that the entire community can adapt and build resiliency to climate change. Adapting healthcare practices to climate change and associated health risks will improve the level of patient care, and save lives.

REFERENCES


CONTACT INFORMATION

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Greening Your Practice

BY MELISSA PAVELACK, DO, PEDIATRIC RESIDENT

Pediatricians are there to help when increasing ozone levels result in asthma attacks or when floods cause mold overgrowth and allergy symptoms. The healthcare community is uniquely positioned as both a contributor to greenhouse gas (GHG) emissions, and as a healer to many suffering from GHG health effects. Buildings are the leading cause of GHG production in the United States. According to Chung and Meltzer the healthcare sector, contributing 8% of total US GHGs, is a key group that can reduce GHGs.1 Greening your medical practice will reduce your contribution to GHG emissions while increasing your contribution to patient health outcomes.

There is a huge range of definitions for what “green” means, as there are varying interpretations of “sustainability” as well. Businesses used to think of sustainability with a financial perspective, but in 1987 the United Nations defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”2 It is widely accepted that current global rates of energy and resource usage are not sustainable without disrupting the stability of the earth in the near future. Changing the way health professionals interact with energy and resources so that future generations can live in a healthy world is the goal of this article. We will use the term “green” to mean those actions focused on reaching the common goal of environmentally-sustainable and health-focused medical practices. The desired outcome is a renewable ecosystem where no resource (fish, groundwater, etc.) is used faster than it can regenerate and no waste stream emits faster than the system can absorb, recycle, or render it harmless.

Green purchasing is often cost-saving and leads to noticeable improvements in employee health (e.g., reduced skin irritation or increased surgical tool durability)

This article will discuss strategies to green your practice that are “low-hanging fruit,” investments that may require upfront capital, and long-term changes towards sustainability. It should be noted that there are many approaches to creating a green practice and thus the article will end with recommendations on a variety of next steps to greening your practice. Notably, Practice Greenhealth, a global organization focused on making healthcare a leader in environmental health, provides extensive materials.3 Although not covered in this article, the quantitative data and evidence for many of these recommendations are available through the referenced websites.

There are a number of affordable, easy changes that can be made to a medical practice to promote a healthier ecosystem and reduce the carbon footprint. First, myriad technology and equipment upgrades are available that reduce energy/water usage and waste production. Switching to compact fluorescent bulbs has become very affordable and saves $30-45/bulb compared to incandescent lights.4 Light emitting diodes (LEDs) initially require more investment, but have the largest return on investment when considering lifetime and energy bill savings. Installing recycling bins, joining a composting program (as cheap as $10/month with pickup), and installing proper pharmaceutical disposal instructions reduce significant amounts of waste to landfills and waterways. Providing dishes, cups, and easy sink access makes it easier to do without disposable cups and bottled water. Purchasing cleaning chemicals, from hand sanitizers to cleaning products, that are certified with the following labels (Green Seal™, EcoLogo™, or Environmental Choice™), reduce toxins both in the environment and in the bodies of employees and patients. Green purchasing is often cost-saving and leads to noticeable improvements in employee health (e.g., reduced skin irritation or increased surgical tool durability), all of which encourage employee engagement in greening your practice.

Updating operating procedures can reduce energy usage and improve daily operations. Including the rationale and methods behind greening your practice in employee training not only increases understanding of the benefits but empowers employees’ to become a crucial component. Turning machines and lights off at night, setting thermostats to a recommended 74°F in summer and 68°F in winter, and turning water heater temperatures down or even off can reduce energy usage. Posting signs forbidding flushing pharmaceuticals and writing into the office purchasing policy to prioritize recycled/reusable goods such as printer paper, business cards and refillable printer cartridges redirect linear waste streams to sustainable ones. Promotional signage and bus maps, incentives such as carpooling clubs among employees, and installing bike racks helps encourage public and shared transportation. Replacing the trash bins in rooms with smaller medical trash bins reduces waste. Lastly, diet is
an extremely effective means of reducing GHGs. According to the EPA, agriculture alone is responsible for 9% of US GHGs. Encourage a plant-based diet through dietary recommendations, such as Harvard’s Healthy Eating Plate and increase your community’s awareness of the health and environmental benefits of meat reduction, namely reducing saturated fats and methane/GHG contributions.

Next, consider water and energy efficiency investments that typically pay back within a few years. An energy audit with the local utility company and constructing a green power plan can guide these investments. The plan will likely include switching to efficient technology/appliances (e.g., tankless or solar water heaters) and opting into a renewable energy plan through the utility company. Various incentives and rebates are available in Illinois. Many utility companies offer assistance in renewable energy sourcing and help fund renewable projects through energy and greenhouse gas credits. Additionally, a water audit often determines where water is being wasted and recommends water saving technology like dual-flush toilets or aerated faucets. Local organizations, such as Elevate Energy, which assist in limiting new material off-gassing (e.g., rubber flooring), increasing efficiency (e.g., double-paned windows) and installing electric vehicle outlets, can provide technical assistance in renovations and installations.

Becoming an integral part of the food system is an investment with less obvious but no less important rewards. Investing in a garden for its ability to grow food, healing quality, and hands-on space for patients provides both clean, healthy food and improved air quality. Forming a relationship with local farmers markets and farmers increases investments in local economies and awareness of local food options. It may also result in the medical practice becoming a drop off site for community-sponsored agriculture (CSA) food baskets or a donation point for food unsold after the market. Although these suggestions initially take time, energy, and capital, they provide built-in opportunities for patients outside of physician face-time to encourage healthy lifestyles.

This article would not be complete without noting some of the societal and behavioral changes that lead to long-term sustainability. The promotion of initiatives and policies informed by a triple bottom line of people, planet, and profit is occurring across the world through organizations such as the United National Global Compact and commitments to corporate social responsibility. Such initiatives may be as simple as increasing bike lanes or reducing packaging waste, or as expansive as writing policy on fossil fuel divestment strategies. Healthcare organizations fit within this changing economy, especially with their large purchasing power in the food and chemical industry and previously-discussed ability to reduce energy/water usage and waste. As with recommending healthy behavior changes to patients, sustainability recommendations often seem daunting, excessive, or out of reach. Starting small such as ‘meatless Mondays’ often exposes the feasibility of these changes and helps build excitement over these beneficial changes.

In conclusion, greening your practice can include a few simple changes or an intense look into the lifecycle of the many systems influenced by health care. Providing educational materials, implementing operational policies, increasing energy efficiency, investing in less toxic materials, and reducing the burden from waste streams all have one common goal: to reduce the harm that healthcare unintentionally has on the people it serves.

For more information please visit: PracticeGreenhealth.org, noharm.org, Mygreendoctor.org, citizensutilityboard.org, Chicagopsr.org, and braceillinois.uic.edu. Special thanks to Dr. Ted Shieh, Elena Grossman from Building Resilience Against Climate Effects at the UIC School of Public Health, Dr. Susan Buchanan of the Great Lakes Center for Children’s Environmental Health at the UIC School of Public Health, and Dr. Sarah Lovinger, Executive Director of Physicians for Social Responsibility, Chicago Chapter.

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ICAAP is making available two free CME-approved one-hour enduring webinars for physicians, health care providers, and those interested in the effects of climate change on their patients' health. These will be available on ICAAP’s eLearning platform by August 2017. Go to https://icaap.remote-learner.net and create an account. Then you can access the webinars.

Presenters: Samuel Dorevitch, MD, MPH, and Elena Grossman, MPH with the Building Resilience Against Climate Effects (BRACE) Project, University of Illinois at Chicago, Environmental and Occupational Health Sciences, School of Public Health.

Webinar 1*
Preparing Pediatric Providers to Address Health Effects of Climate Change: Heat-Related Illness, Asthma, and Allergies focuses on climate change’s impact on air quality, respiratory health, and heat-related illnesses.

Learning Objectives: At the conclusion of this educational activity, participants will be able to:
1. Summarize the impacts of a warming climate on respiratory health
2. Apply principles of climate change communications in explaining to patients and their parents the connection between climate and heat-related illness and respiratory health
3. Identify sources of reliable heat and air quality data in the Midwest
4. Describe the various types of heat stress illnesses, their diagnosis, treatment, and prevention, including guidelines for outdoor physical activity during extreme heat

1. Summarize the impacts of climate change on vector-borne diseases and extreme weather events
2. Identify sources of reliable precipitation and vector-borne disease data related to climate change in the Midwest
3. Describe the health impacts of floods
4. Describe the mental health consequences of extreme weather events
5. Apply principles of climate change communications in explaining to patients and their parents the connection between climate change, flooding, vector-borne diseases, and mental health

*The Illinois Chapter, American Academy of Pediatrics designates this enduring activity for a maximum of 1 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

For questions contact Elsie Divinagracia at edivinagracia@illinoisaap.com.
Update on Lead Exposure: Drinking Water

BY SUSAN BUCHANAN, MD, MPH

Blood Lead Levels Have Decreased, But….

The dramatic decrease in blood lead levels among children in the United States over the past several decades is certainly a great public health achievement. With the phase out of lead in gasoline and indoor paint in the 1970s, blood lead levels have decreased from a mean of 14.8ug/dL in the mid-1970s to less than 1ug/dL today.1,2 But our lead problem is not solved. As laboratory technology has advanced toward lead detection limits < 1ug/dL, our ability to analyze subtle neurocognitive changes in populations of children has increased. The National Toxicology Program, a division of the National Institute of Environmental Health Sciences, stated in 2012 that at mean blood lead levels < 5ug/dL, there is sufficient evidence for attention-related problems, greater incidence of problem behaviors, and decreased cognitive performance.3 In Illinois, 5.4% of children tested in high-risk ZIP codes had blood lead levels (BLLs) ≥5 µg/dL compared to 2.3% in low-risk zip codes.4 Many pediatricians and public health experts emphasize that we will not win the battle against lead poisoning until all children have lead levels less than 5ug/dL or even lower. In other words, there is no safe level of blood lead.

Is Tap Water a Significant Source of Lead?

Even though lead paint and soil lead in old houses and urban settings are still considered the primary contributors to blood lead, other sources such as leaded plumbing and imported items such as toys and home remedies probably contribute a larger proportion of total blood lead today than in past decades. The US Environmental Protection Agency (EPA) estimates that drinking water can contribute 20% or more to total lead exposure.5 Among infants consuming formula prepared with tap water, the proportion can be 40-60%.5 The disaster in Flint, Michigan in 2015 and 2016—in which actions by the city of Flint water management resulted in very high lead levels in the water—called more attention to drinking water as a potential source of lead exposure. In general, drinking water that travels through leaded pipes, pipes with lead solder, and brass fixtures with lead alloy will contain some lead. However, most municipalities add anti-corrosion chemicals to the water supply which prevents the old pipes from leaching the lead. Unfortunately, if anti-corrosion levels are too low, or if the buildup of lead particulate on old pipes is disturbed by construction, renovation, or excavation projects around the home, tap water lead levels can temporarily rise.6

In homes with lead plumbing, lead levels are higher in warm water and in water that has been standing in the pipes for several hours. Some municipalities maintain records of the residences with lead service lines, but many do not. Local ordinances have sometimes required the use of non-lead plumbing but the range of years when these were instituted varies greatly. Therefore, it is often not possible to determine if a home built before the 1990s contains lead plumbing.6 Actions to prevent lead exposure from tap water include running the cold water for 1-3 minutes after it has been standing for over 6 hours and avoiding the consumption of warm or hot water from the tap. Testing the tap water for lead can be performed by the local municipality or private contractors, but must conform to strict protocols to be reliable. Filters can be used to remove lead. The website of the National Sanitation Foundation provides a list of filter types and brands that remove lead.7

Screening Children for Lead Exposure

According to Illinois law, physicians are required to test all children between 6 months and 7 years of age for lead if they reside in a high-risk area. Children residing in low-risk areas must be evaluated for screening. A map and listing of the high-risk zip codes in Illinois can be found in the Illinois Lead Program 2015 Annual Surveillance Report listed below. The IDPH lead website offers a Childhood Lead Risk

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**Pediatric Environmental Health Specialty Units (PEHSUs)**

Pediatric Environmental Health Specialty Units (PEHSUs) are funded by the US EPA and the Agency for Toxic Substance and Disease Registry (ATSDR) to provide outreach, education, and consultation to healthcare providers and concerned parents and communities about children’s environmental exposures. The PEHSU for federal Region 5 is the Great Lakes Center for Children’s Environmental Health at the University of Illinois at Chicago School of Public Health. Please call us for any questions about potential environmental exposures or environmental health concerns. Our hotline number is 1-866-967-7337. Our website is [http://publichealth.uic.edu/great-lakes/childrens-health](http://publichealth.uic.edu/great-lakes/childrens-health). The national PEHSU network website can be found at [http://www.pehsu.net](http://www.pehsu.net). This site contains multiple resources including factsheets, e-learning modules, and webinars.

**REFERENCES AND RESOURCES**

5. “Basic Information about Lead in Drinking Water.” US Environmental Protection Agency. [https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water](https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water)

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Nature - A Natural Place to Play

BY JULIE VANDERVORT – FOREST PRESERVE DISTRICT OF COOK COUNTY

Many parents, early childhood practitioners, and medical professionals would agree that play is vital to the overall wellbeing of children. Play is considered a right of every child, a “best practices” principle in the field of early childhood education, and important for family bonding.1-3

Play can occur indoors or outdoors, each with its own affordances. Outdoor play, however, offers something completely unique, especially when it occurs in nature.

Jumping in puddles, building shelters and forts out of tree limbs, climbing on rocks, and making mud pies are forms of play enjoyed outdoors. Collectively, these fall into a category of play known as “nature play.” In its purest form, nature play can be described as playing in nature while playing with nature. Generations ago, this type of play was common for children, but as Richard Louv pointed out in his book, Last Child in the Woods, children’s play has become far removed from nature.4

Nature is always dynamic, making it ideal for captivating the attention and curiosity of a young child. New possibilities for play and discovery emerge year-round. Quite evident in the Midwest, change in nature occurs seasonally as the earth makes its year-long journey around the sun. Weather patterns change with each season and as a result animal and plant communities react to those changes. During a typical year flowers bloom and fade, rain or snow fall; wind may blow, leaves change color from green to vibrant hues of orange, red, or yellow, and animals live their lives in search of food, water, mates, or shelter. Such common events as day changing into night bring on new and exciting opportunities to discover the stars, wonder about the moon, discover the magic of shadows, or marvel at the sunrise or sunset.

Nature, whether it is found in backyards or in more wild surroundings, provides boundless opportunities for play that support the growing and developing child. Loose natural materials such as pine cones, sticks, acorns, leaves, and pieces of bark are known as “loose parts” in nature play. Loose parts offer open-ended play and robust sensory experiences that support cognitive development.5 Concepts of bigger or smaller, over or under, or colors and shapes can be explored and tested with loose parts. Fine motor and gross motor development can occur as a result of picking blades of grass, collecting acorns, scooping soil, climbing through a hollow log, or walking on uneven ground. Social and emotional skills can be developed and practiced through collaborative play by the sharing of loose parts, taking turns walking on a log, caring for plants, or observing wildlife in a caring manner by gently holding worms or ants. Dramatic play in natural settings can transform a child into a butterfly, fairy, or bird. A fort made of sticks becomes a castle, a den, or a nest.

In addition, playing in nature offers children physical and mental health benefits. Obesity has become a national health concern, especially for children. According to research, free play can improve children’s cognitive, emotional, social, and physical wellbeing. To get children to become more active, some researchers suggest that physical activity can be increased and better achieved if it is perceived as play with a focus on attention, affiliation, and affect.6

Nature has been shown to have positive effects on reducing the symptoms of Attention Deficit Hyperactivity Disorder (ADHD) and to improve concentration in children diagnosed with ADHD. According to a study conducted by Frances E. Kuo, PhD and Andrea Faber Taylor, PhD, time spent in natural or green outdoor spaces such as parks and backyards were effective in reducing the symptoms of ADHD in children.7 In another study, Kuo and Faber Taylor found that children with ADHD were better able to concentrate after a walk in a natural setting rather than in a more urban or residential area.8 In a separate study on rural children, nature was found to reduce stress and improve a child’s sense of worth.9 This research suggests that the more a child is exposed to nature, the better the effect nature has on reducing stress.

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In the Forest Preserves of Cook County, nature play is recognized and embraced as an important part of visitor experience. The Forest Preserves manages nearly 70,000 acres of open public space and provides nature play opportunities for children and their families. Within the Department of Conservation and Experiential Programming, Crabtree Nature Center (Barrington), Little Red Schoolhouse Nature Center (Willow Springs), Trailside Museum (River Forest), River Trail Nature Center (Northbrook) and Camp Shabbona Woods (Calumet City) all have nature play areas for children to explore and engage in discovery. In addition to the existing nature play areas, visitors can find “pop up” nature play experiences at special events throughout the Forest Preserves year round.

The Forest Preserves is so vastly invested in nature play that it intends to increase access to nature play for all people of Cook County. Currently, the Forest Preserves is developing a nature play master plan and policy to guide the creation of additional nature play areas in the Forest Preserves for years to come. Robin Moore, Director of the Natural Learning Initiative, College of Design at North Carolina State University, is part of the team that will develop and create the plan to bring nature play to additional sites in the Forest Preserves that include additional campgrounds and picnic groves.

Nature is an inviting place to play. Make playing in nature part of your plans this summer. For more information about the Forest Preserves of Cook County, visit http://fpdcc.com.

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ICAAP ANNUAL EDUCATIONAL CONFERENCE

FRIDAY, FEBRUARY 23, 2018 | NORTHERN ILLINOIS UNIVERSITY NAPERVILLE
ICAAP eLearning Course Catalog: July 2017

ICAAP is pleased to provide the following web-based CME-approved educational offerings. Some activities are approved for MOC Part 2 and 4 credits.

To register for ICAAP’s eLearning platform, visit https://icaap.remote-learner.net/ and create an account. Then visit the Course Catalog where you can access all of the educational trainings ICAAP offers. For questions, contact Elsie Divinagracia, MPH edivinagracia@illinoisaap.com

Asthma Management Part 2 Activity:

Diagnosis and Management of Pediatric Asthma Care: Knowledge Assessment and Learning
This Continuing Medical Education (CME) and Maintenance of Certification (MOC) Part 2 activity improves the diagnosis, management, and delivery of high quality asthma care within the medical home. This initiative appeals to state and national pediatric primary care providers that have high rates of asthma seen in their patient populations. The self-assessments, trainings, and resources provided address 1) asthma epidemiology, pathophysiology, and natural history (including allergen triggers and asthma predictive index); 2) asthma diagnosis and classification; and 3) best practices for asthma treatment based on the National Heart, Lung, and Blood Institute Guidelines for the Diagnosis and Management of Asthma. The activity also focuses on asthma-related content covered in the American Board of Pediatrics (ABP) board certification exam.

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Describes the importance of incorporating family feedback into practice in order to improve care of patients.
1 AMA PRA Category 1 Credits™, Free

Obesity Prevention Training Modules:

Connecting Patients to Community Resources
Provides learners with information regarding how to link practices to community resources and how to assess and counsel patients and their families on improving their access to resources related to pediatric obesity.
1.25 AMA PRA Category 1 Credits™, Free

Evaluation and Management of Hyperlipidemia in Children
Presents the rationale for screening and treatment for lipid disorders in children. Three case studies are discussed to illustrate objectives.
1.25 AMA PRA Category 1 Credits™, Free

Evaluation and Management of Hypertension in Children
Helps physicians identify, assess, and document screening for hypertension. Assists pediatricians to deliver messages to counsel patients/families about how hypertension impacts child health, including referrals and access to resources.
1.25 AMA PRA Category 1 Credits™, Free

Nutrition for Obesity Prevention and Treatment
Includes practical applications to improve providers’ ability to effectively assess and counsel about nutrition. Improves the competency, skills, and professional performance of pediatric healthcare professionals by 1) increasing their knowledge of nutrition as it relates to childhood obesity, and 2) improving their ability to effectively assess and counsel patients and their families about nutrition, identify and address common barriers to nutrition counseling, and use and access tools and guidelines on nutrition.
2.75 AMA PRA Category 1 Credits™, Free

Physical Activity Guidelines and Counseling for Children and Adolescents
Provides learners with practical information regarding physical activity as it relates to pediatric overweight/obesity and common barriers, along with strategies to counsel patients and their families on improving overall health through physical activity.
1.25 AMA PRA Category 1 Credits™, Free

Screening for Psychosocial Stressors in Children with Overweight and Obesity
Outlines the relationship between psychosocial stressors and childhood obesity. Discusses AAP’s call for universal screening of depression in adolescents as well as targeted screening of toxic stress in at-risk populations.
1.25 AMA PRA Category 1 Credits™, Free

Understanding and Assessing Psychosocial Factors Associated with Childhood Obesity
Discusses mental health issues/disorders as they relate to pediatric overweight/obesity. Topics covered include the role of the family and health care provider, reducing weight stigmatization, psychopathology, psychosocial screening, and psychotropic medications. Coding tips are provided.
1.25 AMA PRA Category 1 Credits™, Free

continued on page 26
Building Healthy Habits with Families in Your Practice Trainings and MOC Part 4 Activity

Through this web-based improvement activity, pediatricians in primary practice will improve frequency of performing assessment of weight status, healthy lifestyle counseling, and clinical care actions based on identification of overweight/obesity. Improvements in care will be achieved through benchmarking and implementation of changes in practice. Participants are guided by CME in patient counseling and linking patients to community resources.

20 MOC Part 4 Points approved by ABP

Tools to Empower Adolescent Moms and Child Development Training Modules:

Developmental Screening and Referral

Covers major concepts related to developmental delay, surveillance, screening, and referral. It describes the benefits of early identification and intervention and highlights validated screening tools to screen infants and toddlers for developmental delays. Participants will learn about efficient office procedures for screening and referral, as well as ways to engage parents/caregivers.

1.25 AMA PRA Category 1 Credits™, Free

Identifying Perinatal Maternal Depression During the Well-Child Visit

Covers major concepts related to maternal depression and its impact on children and families. It describes risk and protective factors relating to maternal depression and highlights professional expectations as part of the Perinatal Mental Health Disorders Prevention and Treatment Act. Participants will learn about efficient office procedures for screening and referral, as well as ways to engage families.

1.25 AMA PRA Category 1 Credits™, Free

Intimate Partner Violence (IPV) and Its Effects on Children

Covers major concepts related to intimate partner violence (IPV) and its impact on children and families. It describes symptoms to look for and techniques for implementing surveillance and anticipatory guidance for IPV as part of well-child visits. Participants will learn about communications and practice strategies, as well as identifying available resources to help children and families.

1.25 AMA PRA Category 1 Credits™, Free

Social, Emotional, and Autism Concerns

Covers major concepts related to social-emotional development and behaviors, and autism spectrum disorders. It describes signs and red flags to look for, and tools for screening as part of well-child visits. Participants will learn about efficient office procedures for screening and referrals, as well as ways to engage families.

1.25 AMA PRA Category 1 Credits™, Free

Incorporating Bright Futures into Primary Care Practice

Covers major concepts for incorporating Bright Futures well-child guidelines into every day practice.

1.25 AMA PRA Category 1 Credits™, Free

Transitioning Youth to Adult Health Care Courses

Transitioning Youth to Adult Health Care for Internists and Family Physicians

This course targets primary care providers in an adult health care setting, to provide pediatric primary care medical homes with the information, tools, and resources to help patients and their families make a smooth transition to adult health care, and to help practices measure and improve transition care and planning.

10 AMA PRA Category 1 Credits™

$350 members; $450 nonmembers

Transitioning Youth to Adult Health Care for Pediatric Providers Training and MOC Part 4 Activity

The goals of the Transitioning Youth to Adult Health Care Pediatric Course Updated are to equip pediatric primary care medical homes with the information, tools, and resources to help patients and their families make a smooth transition to adult health care, and to help practices measure and improve transition care and planning.

15.00 AMA PRA Category 1 Credits™

25 MOC Part 4 Points approved by ABP

$275 members; $300 nonmembers

Note: Free offerings are currently or were developed with support from grant funding and are sustained on ICAAP’s LMS per arrangements with funders. These offerings provide added value to members and their clinic staff.

For more information about course offerings, please contact Elsie Divinagracia, MPH, Manager, CME edavinagracia@illinoisaap.com

The Illinois Chapter, American Academy of Pediatrics designates each enduring material for the number of AMA PRA Category 1 Credits™ listed above. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

20 MOC Part 4 Points approved by ABP

$275 members; $300 nonmembers

The Illinois Chapter, American Academy of Pediatrics is accredited by the Illinois State Medical Society (ISMS) to provide continuing medical education for physicians.
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