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On March 10, 1876, after accidentally spilling battery acid, Alexander Graham Bell uttered the now famous words, "Mr. Watson, Come Here, I want to See You." It was during this first telephone call that telemedicine was simultaneously born. In 1879, the Lancet reported a physician using a telephone during the night to rule out croup by having the child cough into the phone. Since then, telephone care has been an integral part of practicing medicine, especially in pediatrics.

It has been estimated that 20% of daily clinical care and 80% of after hour care is delivered via telephone, and surveys have shown that there are on average 2500 daily and 1000 nightly calls per pediatrician per year. Many pediatric practices employ after hours nurse-staffed triage services that are rooted in standard evidence-based protocols.

As technology has advanced, so too has telemedicine; moving beyond audio only phone conversations, faxing, email, text messaging to now including real time video conferencing, store-and-forward technology and remote monitoring to diagnose and treat patients.

Clearly there are advantages to having the capability to remotely provide care:

- access to specialists in rural or underserved urban areas/school based clinics
- access to specialty care pre-transport to PICU/NICU
- care coordination for complex special needs patients
- primary care to specialist real time consultations
- patient access to primary care services for after hours triage and care
- mental and behavioral health care consultations and follow up
- medication management for asthma, ADHD, diabetes, etc.

Successful early adopters of telemedicine, such as children’s hospitals communicating with referring community hospitals and specialists communicating with outlying clinics and primary care pediatricians, are employing the cutting-edge technology and protocols as an adjunct to the high quality, evidence-based care they routinely deliver during face to face care.

Unfortunately, as this new technology grows and expands, so do the risks. The greatest of these risks being care fragmentation as a result of circumventing the medical home. Seemingly emphasizing market share over care quality, some adopters of this technology, including standalone organizations, retail-based clinics, insurance-sponsored and direct to patient telemedicine services, are promoting convenience care over comprehensive care directly to pediatric families.

The risk is compounded when accepted pediatrics standards of care and established evidence-based guidelines for diagnosing and treating patients are abandoned in the name of convenience. This type care could result in unnecessary antibiotic prescribing, delayed diagnosis or even jeopardizing the health and safety of children.

In some cases the transition to telemedicine has moved more rapidly than the legal statutes and regulations, standards set by medical boards and professional societies as well as insurance companies to pay for such services. In NJ, the statutes allow for telemedicine diagnosing and prescribing within the context of an established patient with standards the same as face to face care (state licensing, history, review of systems, diagnosis, record keeping, confidentiality). There is pending NJ legislation (S2729) to broaden this further, including defining a patient relationship within the context of a telemedicine relationship, and mandating payment for such services by insurance carriers and medicaid. The NJ Board of Medical Examiners takes the stance that the face to face care that is stressed and taught in medical schools is still the gold standard and that there needs to be an agreed upon balance between proposed telemedicine practices and standards of medical care.

AAP National has been tasked with establishing national guidelines and standards for integrating telehealth into the medical home as part of a recent top 10 Annual Leadership Forum resolution “Use of Telehealth to Extend the Pediatric Medical Home”. This should include who and when and how to use telemedicine as an extension of primary and specialty care. Consideration should be made to what tools are appropriate and safe, in what context, what documentation and follow up is needed as well as medico-legal considerations. As we advance this needs to be offered in training to established pediatricians in the form of webinars and workshops as well as integrated into the training of medical students and residents as they transition into the real world of practicing community based pediatric medicine.

So stay tuned, and don’t touch that dial as we move forward with technology without taking any steps backwards in the care we deliver.

Have a good summer.

Elliot Rubin, MD, FAAP
Executive Director's Column

Fran Gallagher, MEd
Executive Director, NJAAP

The Spring has been filled with NJAAP CME and MOC opportunities and a celebration of some of our Pediatric Champions. Some are featured in this publication, enjoy.

NJAAP is one of the nation’s most active Chapters. At a time when other organizations are experiencing declines in membership, NJAAP is growing. We are 1736 members strong! Why and How? The NJAAP team is focused on children’s health & VALUE-based membership. We ensure opportunities and benefits are relevant by listening and reacting to what our members tell us is important to them. This is how NJAAP has emerged to become the ‘go to’ source for pediatric health information in New Jersey. We provide advocacy, education, support and technical assistance for pediatricians, other pediatric providers, caregivers and organizational partners. Be sure to visit the member’s only section at www.AAPNJ.org to check out the benefits that most appeal to you and your practice.

I often hear that the healthcare needs of pediatric patients today are very different. Medical Home teams require a greater knowledge of resources, perhaps new skills in treatment (e.g. an increased understanding of health literacy challenges, telemedicine), payment for care coordination and ready access to specialists such as mental and oral health specialists. Ensuring the Chapter strives to provide you with the support and education necessary to meet these challenges is a high priority.

Examples of activities and efforts:
• There are increasing numbers of children being recruited into the life of sex and/or labor trafficking. A search of arrests made here in NJ is alarming - both in numbers and in nature. Learn more about the issue and how to identify red flags in a new 2-part webinar on Human Trafficking. This tool has been archived on our website for you to access at your convenience. Also, keep an eye out for information on an upcoming collaboration with Rutgers this Fall on a Human Trafficking conference.

NJAAP is a co-sponsor of this important event.
• Numerous survivors of sexual exploitation have disclosed their struggles with substance abuse, describing its role as a gateway-into the “life”. The CME article on page six provides a wealth of information and guidance on the emerging trends and preferred abuse substances that are giving rise to an increase in ED admissions and death rates of children related to opioid abuse.
• The Issue of “no time” resounds as a constant challenge to members. – To help address this challenge, NJAAP will be distributing a unique ‘Conference in a Journal’ that will empower you to earn 5 CME credits, all in the convenience of your office or home. The Pediatric Partnership Initiative Special Edition, which is rich in activities, tools and resources, will be mailed to all members this summer.
• Speaking of CME opportunities, two separate issues of New Jersey Pediatrics provide members with the two hours of CME on end of life care. More information on the articles and how to access them are list at the bottom of page five.
• A diverse cohort of 15 pediatric practices are presently participating in the 2015 Strengthening Pediatric Partnership (Child Abuse and Neglect Prevention) MOC Part IV Program.

To provide a comprehensive list all of the recent and future conferences, events and CME opportunities would exceed my allotted word count for this space. Never the less, I hope to have provided a sense of all that is happening at NJAAP. Remember, all members are encouraged to call or write to let us know how we may help you. Your feedback is golden. Together, we will continue to flourish and grow.

Wishing you and your families a safe, fun, and enjoyable summer – as I’m sure given the benefits of family time and parent involvement, you’re wishing the families in your care the same. Thanks for all you do!

Kind Regards,

Fran Gallagher, MEd

Editorial and Advertising Offices
3836 Quakerbridge Road
Suite 106
Hamilton, NJ 08619
Office: (609) 842 0014
Fax: (609) 842 0015
www.aapnj.org

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PCORE continues its focus and involvement with improving the early detection and management of children with mental health concerns.

The model being designed is based on a system developed in Massachusetts 15 years ago known as the collaborative mental health model. This model provides same-day support from a child psychiatrist to address the questions or concerns of primary care pediatric practices within that catchment area. The child psychiatrist provides a telephone consultation and, if necessary, agrees to see the child for an initial evaluation. The mental health hub for the region also has a care manager who is able to work with the pediatric primary care office to develop a care plan and to find necessary community resources.

The pediatric primary care doctor also has responsibilities. The practice must agree to use evidence-based screening tools. The options include Ages and Stages or the Survey of Wellbeing of Young Children (SWYC) for younger children and the Pediatric Symptom Checklist for older children and teens. After receiving training and support, pediatric practices will then begin providing some office management for basic mental health issues such as ADHD, depression and anxiety. This model, which has proven very successful, is now being employed in 20 states.

AAPNJ piloted a mental health project in Essex County in 2014, but funding was limited and it ran for too short a period of time to demonstrate any impact. However, based on the pilot information gleaned, the child psychiatrist for the project, Gary Rosenberg, working closely with Senator Robert Gordon, successfully secured a 1.2 million dollar allocation from the legislature to expand the model to four counties in New Jersey.

This current project began in May and covers Monmouth and Ocean counties in Central NJ and Camden and Burlington counties in Southern part of the state. AAPNJ will provide all of the administrative services to develop the MOC learning collaborative and office-based sessions for the project. The project is directed by Meridian Health in Monmouth and Ocean and Cooper Health in Camden and Burlington.

Another key feature of this pilot includes working closely with managed care to establish a seamless method for ensuring timely processing and payments to pediatric primary care offices for mental health assessment, treatment and care management. We have already begun working closely with the NJ Academy of Child Psychiatry to educate decision makers why this project needs to continue beyond 2016 and to be spread to additional sites.

### Did You Know? about the NJAAP License Renewal Benefit

The Fall 2013 CME Article: *The Integral Role for Pediatrics Palliative Care in Our Current Healthcare Environment*, expires on August 31, 2015. If you need CME hours on end of life care for license renewal, take advantage of this member benefit. Find the article online at [http://mazdigital.com/webreader/10906](http://mazdigital.com/webreader/10906)

An additional end of life care CME article can be found in the Winter 2014 issue. Find that online at [http://mazdigital.com/webreader/16527](http://mazdigital.com/webreader/16527)
Poisonings and intoxications remain a growing threat to children of all ages. This article details the new developments in toxicology that are impacting pediatric patients and also strives to help pediatricians develop a more comprehensive view of the trends, which in turn will enhance the level of anticipatory guidance being provided in the pediatric medical home.

In 2011, drug overdose emerged as the leading cause of unintentional death among children of all age groups throughout the United States. Among 15-24 year olds, it was the third leading cause of unintentional death, with opioid analgesics a likely source of this horrific outcome. Reasons for the adolescent substance abuse that too often contribute to unintentional death include: self-medication of undiagnosed mental or physical illness, experimentation, addiction, or suicide.

Important factors leading to the changes in epidemiology of substance abuse include:

- A real or perceived expectation for “stronger” pain control
- More common prescribing of opioid pain relievers for all age groups,
- Increased availability of these medications in the home,
- A subsequent shift in opioid availability and affordability causing heroin to emerge as a preferred drug of abuse in suburban communities.
- Emergence of novel psychoactive substances (NPS) that elude detection on standard clinical drug screens. Because the chemists continually are synthesizing new substances with new clinical effects just by minor substitutions on a chemical structure, delineation of a toxidrome and laboratory detection can be elusive.
- Liberalization of attitudes and increased visibility and access to medical and recreational marijuana. A recent study demonstrated an increase in ED visits in the Denver, Colorado, area for pediatric marijuana exposures. Many of these children had exploratory exposures to medical marijuana belonging to their parents or other adults in the household.
- Use of social media “challenges” that pressure adolescents to use substances in novel and harmful ways.

The 2014, Monitoring the Future study, conducted by the University of Michigan and funded by the National Institute of Drug Abuse, demonstrated an overall decline or no increase in adolescent ethanol abuse, cigarette smoking, use of illicit or prescription drugs, and dissociatives and newer drugs of abuse. There was an increase in non-tobacco nicotine use, such as from e-cigarettes and hookahs.

Opioid Abuse

In 2001, the campaign, “Pain is the Fifth Vital Sign” was introduced to increase awareness and treatment of painful conditions. It is thought to have been influenced by a case series of 38 patients with chronic non-cancer pain (CNCP) published in 1986. The findings concluded there was little to no risk of addiction in those receiving opioids for CNCP. This led to widespread healthcare practices promoting improved pain evaluation and widespread use of opioids for both acute and chronic non cancer pain. It is important to note that a concomitant increase in drug overdose deaths paralleled this trend. ED visits for opioid abuse have also increased since the 1990s.

![Figure 1. Opioid prescription sales, opioid abuse treatment admission rates, and opioid death rates.](image)

Patients presenting to the ED with opioid misuse or abuse related problems can display:

- **Acute Overdose:** Respiratory depression, cardiac arrest, somnolence, signs of re-perfusion injury (e.g., anoxic injury to the brain, kidneys, heart, or liver), compartment syndrome or rhabdomyolysis. Not every opioid causes pinpoint pupils and this finding should not be used to rule in or rule out opioid intoxication.
- **Opioid Withdrawal:** Drug craving, piloerection, diarrhea, vomiting, hypertension and tachycardia, anxiety, and myalgias. Patients also may present requesting detoxification or rehabilitation placement. Generally, the supply of detoxification/addiction rehab beds greatly exceeds demand, especially in New Jersey. In a 2013 report, it was estimated that 22.7 million Americans age 12 or older needed substance abuse treatment (i.e., met the diagnostic criteria for Substance Abuse Disorder in the DSM-IV) and

continued on next page
2.5 million or 10.9% received specialty substance abuse treatment. In addition, uninsured or publicly insured patients faced significant barriers to access. The same study found that of those seeking treatment, 45.5% had no means of paying for treatment or were underinsured. Opioid abuse carries with it a high rate of recidivism. A study of substance users in long-term recovery indicates there is an average of 7.56 episodes of relapse and abstinence over a 5-year study period.

- Drug-Seeking Behavior: In patients presenting with a pain-related complaint, it may be difficult to differentiate between a legitimate complaint and one fabricated for the purpose of obtaining opioids for misuse or diversion. A patient may state that a prescription was stolen or lost, that a pain management or primary care physician is unavailable, that the pain is suddenly exacerbated, or there is a new injury causing pain. As physicians, we want patients to be comfortable, however, the benefits of treating pain must be balanced against the risks of overdose, diversion, and continued addiction.

- Opioid-Related Health Effects: Opioid abuse does not affect respiratory drive only. Chronic abusers may experience numerous health effects on multiple organ systems including gastrointestinal, endocrine, and sensory. Patients presenting with acute overdoses may display effects of acute hypoxia and reperfusion. Injection drug abuse is associated with infectious complications.

Prescription drug monitoring programs (PDMP) attempt to address opioid diversion issues by maintaining a database for controlled substance prescriptions written to an individual. As of January 2014, 46 states maintain a PDMP. Legislation regarding participation and usage varies by state. In a survey study of Medical Toxicologists, more than 25% of respondents did not regularly access their state’s PDMP when prescribing opioids. Barriers to optimal physician participation include access difficulties and ease/speed of use. Implementation of PDMP’s does not appear to affect opioid dispensing trends, but appears to decrease rates of opioid misuse and abuse.

Prescription opioids are attractive drugs of abuse for numerous reasons including: conveniently located in unsecured medicine cabinets, a misperceived safety profile, and lack of need for paraphernalia. In addition, substance abusers can avoid self-identification as “junkies” by using prescription opioids rather than illicit opioids. Oxycodone remains a frequently abused opioid for its quick “high” and the reasons stated previously. Oxycodone can be prescribed in immediate-release, extended-release (“OxyContin™”), and combination forms (Percocet™, Endocet™). Users circumvent the extended release properties of OxyContin™ by crushing the tablets, enabling very large doses to be delivered by snorting, ingestion, or intravenous (IV) injection.

**General Health Effects:**
- Constipation
- Amenorrhea
- Malnutrition
- Hearing loss
- Neonatal opioid dependence and withdrawal

**Hyoxia/Reperfusion:**
- Respiratory Depression
- Apnea
- Anoxic Brain Injury
- Rhabdomyolysis
- Compartment Syndrome
- Cardiogenic Shock
- Acute Renal Failure
- Shock Liver
- Metabolic (Lactic) Acidosis

**Injection Drug Use:**
- Skin and Soft-Tissue Infections
- Endocarditis
- HIV disease
- Hepatitis.

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Figure 2. Rates of emergency department (ED) visits for nonmedical use of selected opioid analgesics, by type --- United States, 2004–2008

Box 1. Consequences of Opioid Abuse

continued on page 8
Prescription opioid abuse has generally been associated with suburban and rural settings while heroin abuse is more readily linked to urban centers. However, that trend has shifted to a steadily increasing use of heroin in the suburban and rural settings, largely the result of the reduced availability and spiraling costs of prescription opioids—especially to an adolescent. Generally, heroin is less expensive than prescription opioids and given New Jersey’s proximity to New York City, Philadelphia, and ports of entry, it can be quickly distributed to communities. Ocean County NJ is an example of one community that has experienced a marked increase in heroin overdoses in just the past three years. One factor making heroin particularly lethal is that unlike prescription drugs, it has been contaminated with substances, such as alpha-methyl-fentanyl, that are extremely potent and induce unpredictable, severe and lethal results.

Efforts to combat opioid overdoses include enhanced education, medication counseling, legislation offering legal immunity to those calling emergency services for overdose patients, police/first responder administration of intranasal naloxone to overdose patients and use of the aforementioned prescription monitoring programs.

Opioid dependent patients in recovery may participate in programs that use opioid substitution therapy. These may include methadone or buprenorphine therapy. Methadone is an extremely potent opioid with a long duration of action. Patients on Methadone Maintenance Therapy receive daily medication from a federally supported clinic. The clinic also provides medication monitoring and counseling services. Clients who fulfill certain requirements, and demonstrate trustworthiness, may be sent home with weekend doses of methadone. Buprenorphine is a partial opioid agonist that is prescribed for either home management or in-office administration for opioid dependence. It may be co-formulated with naloxone (e.g., Suboxone®) to deter intravenous abuse. Naloxone has poor oral bioavailability and is essentially inactive when used as directed in buprenorphine co-formulations. Both methadone and buprenorphine have been associated with life-threatening opioid toxicity if taken by a young child. Adults in a household with young children should be counseled about safe medication storage practices. Your local Poison Center can provide formal educational materials on home medication safety.

Novel Psychoactive Substances

Novel Psychoactive Substances (NPS) include the synthetic cannabinoids and “designer” stimulants. In general, these substances are synthesized in laboratories and smuggled into the United States. Reports of exposures to these drugs increased in Europe in the mid 2000s and gained a foothold in the US soon afterwards. Their clinical syndromes and structures are unique, creating problems in legal recognition, diagnosis and laboratory detection. It should be noted that while these substances were not initially banned, they are now Schedule I and thereby banned in many states, including New Jersey.

For some time, synthetic cannabinoids and stimulants enjoyed a surge in popularity among adolescents due to:

• Ambiguous regulatory and legal status that contributed to the perception that the substances are legal.
• Comparison to drugs perceived as relatively innocuous such as MDMA (“Ecstasy”). Lack of detection on typical clinical drug screens.
• Marketed via channels that appear legitimate with packaging designed to evade regulatory authority.
• Promoted via social media and in popular music.

Synthetic cannabinoids generally contain substances such as the “JWH” and “HU” compounds, which were originally developed as research chemicals for the purpose of studying the function of the cannabinoid receptor. When packaged for sale as recreational substances, synthetic cannabinoids are applied to mixtures of generally innocuous plant material and packaged as “potpourri” or “herbal incense” and labeled as “not for human consumption”. This packaging and labeling is an ostensible effort to evade regulatory authority. However, these herbal incenses are not sold in settings generally associated with home decor; instead they are found in gas stations, smoke shops, or the internet. Brand names include “K2”, “Spice”, “Space”, or “Buddha” and come in different “flavors”. The content of substances in question may vary among brands and sometime among different packages of the same brand, making prediction of clinical effects difficult. The effects of synthetic cannabinoids appear to be a departure from usual THC intoxication, and may lead the user to seek medical attention. This is because THC acts as a partial agonist at the cannabinoid-1 (CB-1) receptor and synthetic cannabinoids are full agonists. Individuals may present with agitation, delirium, coma, or tachycardia. Seizures have been reported. Some case reports describe an association with supra ventricular tachycardia and acute kidney injury. Deaths have been reported. Clinical effects are listed in Box 2. Treatment generally is supportive. Because of their unique structure, synthetic cannabinoids do not trip usual hospital drug of abuse screening immunoassays and may require testing in a reference laboratory. However, patients generally recover without the need for specific antidotal treatment, and improve before any confirmatory tests return.

Newer hallucinogenic stimulants generally are characterized as synthetic cathinones, derivatives of the active component in the herbal stimulant “Khat”. These substances generally possess properties of central nervous system (CNS) stimulation and serotonergic agonism leading to hallucinations. The degree of stimulation or hallucinations depends on the type and size of substitutions on the central cathinone molecular core.

Box 2. Effects of Synthetic Cannabinoid Use.

- Coma
- Agitation
- Tachycardia
- Seizures
- Acute Kidney Injury
- Supraventricular Tachycardia
- Death
Dextromethorphan (DXM, Robo, Robo-tripping) is an antitussive. Phencyclidine (PCP) was originally developed as a synthetic hallucinogenic amphetamine derivative.

Box 3. Common agents and names of synthetic hallucinogenic amphetamine derivatives.

- MDPV (Methylenedioxyxypyrvalerone)
- Pyrovalerone
- Methylene
- Mephedrone
- Naphyrone
- Butylone

MDMA, the drug also known as “Ecstasy”, but may contain varying amounts of other psychogenic amines, or no MDMA at all.

Hallucinogenic stimulants generally are sold as powders and may be snorted, smoked, injected, or ingested. Patients using psychogenic amines may present with agitated delirium, hallucinations, tachycardia, hypertension, or hyperthermia. Psychogenic amines tend to have the property of feeling “moreish” causing a user to binge on the drug for several hours or days. One may present with insomnia or a persistent psychotic state after use of these substances. Similar to the synthetic cannabinoids, the psychogenic amines generally do not turn routine hospital drug screens positive and may require a reference lab for detection, with the caveat that the relatively short half life of these drugs may lead to a negative laboratory result in a patient with persistent psychotomimetic effects.

Similar to those with synthetic cannabinoid intoxications, patients presenting with psychogenic amine intoxication generally recover with supportive treatment: intravenous fluids, generous benzodiazepine sedation, and possibly antipsychotic medication. Hyperthermia in the setting of any suspected drug intoxication represents a medical emergency and must be treated aggressively with aggressive sedation and rapid cooling. Patients may require a work up and psychiatric evaluation for persistent drug-induced psychotic states when medically stable.

Dissociatives

Dissociatives constitute a class of drugs with significant abuse potential. Their intended purpose is to “dissociate” the user from reality. When misused, individuals may sustain injury to themselves or others. Ketamine (K, Special K) has been used for decades for anesthesia induction and procedural sedation and may be diverted from medical or veterinary settings.

- Phencyclidine (PCP) was originally developed as a veterinary dissociative anesthetic but now is considered a Schedule I drug and no longer has clinical use. Considered to be a “dead” drug in the 1990s, it remains a popular agent of abuse in some communities. The classic PCP intoxicated individual displays signs of sympathetic excess (tachycardia, hypertension), extreme agitation and superhuman strength. Less severe intoxication may present with appearing “off”, inappropriate gigling and nystagmus.

- Dextromethorphan (DXM, Robo, Robo-tripping) is an ingredient in cough and cold preparations for its cough suppressant properties. It is the isomer of the synthetic opioid Levorphanol that possesses no analgesic properties and does not trigger usual opiate drug screens. When consumed in doses for abuse purposes, DXM acts as a dissociative and produces hallucinations, tachycardia, nystagmus, and psychosis. DXM is a popular drug of abuse due to its over-the-counter and innocuous appearance (it is formulated in cough preparations that are not thought of as substances of abuse). A hazard in the abuse of DXM is related to the other ingredients contained in cough and cold preparations such as anticholinergics, sympathomimetics, and acetaminophen that may confound the clinical picture or lead to other effects, such as hepatotoxicity. DXM also has serotonergic agonism properties that can lead to a drug interaction causing life-threatening Serotonin Syndrome when used by patients already taking antidepressants.

Medical Marijuana

In 1996, the state of California passed legislation allowing use of marijuana for medical purposes. To date, 21 states and the District of Columbia have followed suit. Four states (Alaska, Colorado, Oregon, and Washington) have also legalized recreational marijuana. Marijuana is promoted as a remedy for chronic pain, chemotherapy-related nausea, multiple sclerosis-related muscle spasm and lowering intraocular pressure in glaucoma. In New Jersey, legalization has been followed by a number of implementation challenges. To date, three medical marijuana dispensaries are operating. Patients must be under the care of a specially registered physician and have been diagnosed with one of several debilitating or terminal conditions. Adult and pediatric patients are eligible. Because marijuana is accessible in a wide variety of forms including edible products, young children are at risk of exploratory exposures. A retrospective study examined such exposures in Colorado after medical marijuana implementation found continued on page 10
that prior to legalization, no children under age 12 presented
to a single tertiary children’s ED for unintentional marijuana
exposure. Whereas after implementation, fourteen children
presented with this complaint. Children presented with lethargy,
somnolence, and respiratory insufficiency. Eight were admitted
to the hospital, two of these to the PICU. At least half of these
exposures were from edible marijuana products. In a study of
national Poison Center data from 2005 to 2011, states where
marijuana had been decriminalized or passed other marijuana
legislation, experienced an increase in calls to poison centers
for marijuana exposures in children under age 9. More severe
clinical effects were associated with a patient being from a
decriminalized state. Similar to situations involving opioid
substitution therapy, parents using medical marijuana should be
counseled on keeping their products out of sight and out of reach
of young children in their homes.

Fueled by changes to laws and easy internet availability, it
does appear that new substances will continue finding their way
to market. As such, it is important for clinicians to be aware of
the changes in order to provide effective anticipatory guidance
to patients and parents. Box 5 contains suggested questions for
engaging patients and their parents about these emerging drug
threats. These questions are intended to serve as starting points
for further screening and anticipatory guidance regarding child
safety in the home and adolescent substance abuse.

Adolescents:
1. Are you aware of anyone in your home using painkillers?
2. Do you or your friends ever use painkillers for recreation?
   (ie, getting high or escape)
3. Some people have turned to using heroin to get high, even
   if they are not injecting it. Do you know of anybody who
   does this? Is this something you have done?
4. Have you ever heard of fake weed, synthetic marijuana or
   bath salts? Do you or any of your friends ever use these
   substances?
5. Do you know of anybody who takes cough medicine to get
   high or escape?
6. Do you ever use cough medicine for reasons other than
   being sick?

Parents:
1. Are you aware of anyone in your home who uses painkillers
   or is being treated for opioid addiction? Is there anybody in
   your house who is on methadone, Suboxone, Subutex, or
   fentanyl patches?
2. Have you noticed any unusual packaging being discarded in
   your trash? Unusual amounts of cough medicine packaging?
3. Is anyone in your home being treated with medicinal
   marijuana?

Box 5. Questions to ask during patient visit.

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QUIZ: Toxicology Update: Evolving Trends in Substance Abuse

1. Drug overdose emerged as the leading cause of unintentional death among children of all age groups throughout the United States in:
   a. 2009
   b. 2010
   c. 2011
   d. 2012

2. The 2014 Monitoring the Future study, demonstrated an overall increase in adolescent ethanol abuse, cigarette smoking, use of illicit or prescription drugs, and newer drugs of abuse.
   a. True
   b. False

3. Symptoms of Acute Overdose include all of the following except:
   a. Respiratory depression
   b. Cardiac arrest
   c. Blurred vision
   d. Compartment syndrome or rhabdomyolysis

4. All opioids cause pinpoint pupils and this finding can be used to rule in opioid intoxication.
   a. True
   b. False

5. Prescription opioids are attractive drugs of abuse for which of the following reasons:
   a. Readily found in unsecured medicine cabinets,
   b. Misperceived safety profiles
   c. Lack of need for paraphernalia
   d. All the above

6. When packaged for recreational substances, synthetic cannabinoids are applied to innocuous plant material and packaged as potpourri or herbal incense and labeled “not for human consumption”.
   a. True
   b. False

7. In the study, An exploration of relapse patterns among former poly substance users, substance users in long-term recovery demonstrated an average of 7.56 episodes of relapse and abstinence over a:
   a. 3 year study period
   b. 5-year study period
   c. 7-year study period
   d. 10-year study period

8. When consumed in doses for abuse purposes, DXM acts as a dissociative and produces:
   a. Hallucinations
   b. Tachycardia
   c. Nystagmus, and psychosis
   d. All the above

9. Patients on Methadone Maintenance Therapy who fulfill certain requirements, and demonstrate trustworthiness, may be sent home with weekend doses of methadone.
   a. True
   b. False

10. A study of national Poison Center data from 2005 to 2011 showed states that had decriminalized marijuana or passed other marijuana legislation, experienced an increase in calls to poison centers for marijuana exposures in children under age 9.
    a. True
    b. False

CME Instructions

Read the CME-designated article and answer the Summer issue, quiz questions above. Print your name and phone number and mail or fax this form within six months from the date of issue to: NJAAP CME Quiz, 3836 Quakerbridge Road, Suite 106, Hamilton, NJ 08619 • Fax: 609.842.0015

NAME ___________________________ EMAIL ___________________________
PHONE ___________________________ NPI# ___________________________

Submitter must answer 8 of the 10 questions correctly to qualify for CME credit

Accreditation Statement:
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Medical Society of New Jersey through the joint providership of Atlantic Health System and the American Academy of Pediatrics, New Jersey Chapter. Atlantic Health System is accredited by the Medical Society of New Jersey to provide continuing medical education for physicians. Atlantic Health System designates this live activity for a maximum of 1.0 MA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
Impact of Religion-Based Childhood Vaccine Exemption Practice Among Kindergarteners in New Jersey by State Legislature District in 2013–2014

Pauline Thomas, MD, MPH
William Halperin, MD, MPH, DrPH
Nisha Jani, MPH
Drew Harris, DPM, MPH

Photo Caption L to R
Drew Harris, DPM, MPH
Glenn Fennelly, MD, MPH
Nisha Jani, MPH
William Halperin, MD, MPH, DrPH
Pauline Thomas, MD, MPH

The fact that the New Jersey state-wide religious exemption average is 1.8%, in line with the median for all states, obscures the fact that there are several pockets of high exemption rates.

Introduction:

Of the 110 California patients that acquired measles in association with a Disneyland outbreak in California during December 2014, one in four were intentionally unvaccinated because of personal beliefs.1 Minimizing nonmedical exemption rates for childhood vaccination is critical to prevent measles and other vaccine-preventable disease outbreaks in the United States. However, personal-belief exemption rates are increasing in many areas.

State governments determine nonmedical exemption policies for childhood vaccination (with the exception of Nevada where individual localities decide permission of exemptions).1 As of February 2015, all states, except Mississippi and West Virginia, and the District of Columbia have policies which allow for some form of nonmedical or religious exemptions for children entering kindergarten. Among the 46 states and DC that reported 2013–14 school vaccination coverage, the median percentage of kindergartners with an exemption was 1.8% (range = <0.1% in Mississippi to 7.1% in Oregon).2 Various investigators have categorized exemption process complexity level as easy, medium, or difficult depending on the overall time and effort required to obtain exemptions.3,4,5 States with simpler immunization exemption procedures have nonmedical exemption rates that are more than two-fold higher than states with more complex procedures.6,7

New Jersey Administrative Code 8:57-4 establishes the following minimum requirements for vaccination prior to admittance into kindergarten (number of doses): DTwP (4), Polio (3), Measles (2), Mumps (1), Rubella (1), and Varicella (1). These requirements apply to both public and private schools. An unimmunized child can attend a school in New Jersey if either a medical or religious exemption is declared or under a temporary provisional status while catching up on missing immunizations.

A licensed physician or nurse practitioner can write a medical exemption based on criteria established by the Advisory Council of Immunization Practice (ACIP) and the American Academy of Pediatrics (AAP). Annual renewals are not required; however, a specific period for the exemption to be in effect must be stated in the request.

NJ State law N.J.S.A. 26:1A – 9.1 stipulates a process to obtain a religious exemption that is considered relatively easy. The law provides an exemption from mandatory kindergarten immunization “if the parent or guardian of the pupil objects thereto in a written statement signed by the parent or guardian upon the grounds that the proposed immunization interferes with the free exercise of the pupil’s religious rights.” Prior to 2011, the regulations enforcing this statute granted religious exemptions when “[vaccination] conflicts with the pupil’s exercise of a bona fide religious tenet or practice.” N.J.A.C. 8:57-4.4 (pre-2011).8 In 2008, the NJ Department of Health acting on a legal opinion from the NJ Attorney General’s office issued a new policy for school and local public health officials: the professed religious statement or stated belief must be accepted and cannot be reviewed to assess if reasonable, acceptable, and/or bona fide. After a period of public comment, the department issued new regulations codifying this policy.9 [2 N.J.R. 1597(a) Vol. 42, Issue Date: July 19, 2010]

The number of exemptions sought on religious grounds among kindergartners in New Jersey has grown from 1,641 in academic year 2005–06 to 8,977 in academic year 2013–14, currently accounting for approximately 10% of children nationwide that have such exemptions. The fact that the New Jersey state-wide religious exemption average is 1.8%, in line with the median for all states, obscures the fact that there are several pockets of high exemption rates.

The proportion of children with religious-based vaccine exemptions in a particular local legislative district could inform a legislator’s decision to support or oppose changes in religious exemption laws at the state level and can provide data for local advocates for improved vaccination coverage. In this report, we present the frequency of religious exemptions among kindergartners in New Jersey by state legislative district.

Methods:

Data on the number of exemptions by school were obtained from the New Jersey Department of Health’s Annual Immunization Status Report pursuant to a request under New Jersey’s Open Public Records Act. All public and private schools are mandated to submit data on the immunization status of students for the following five cohorts: pre-kindergarten, kindergarten, grade 1, grade 6 and students transferring from...
Impact of Religion-Based Childhood Vaccine Exemption Practice Among Kindergarteners in New Jersey by State Legislature District in 2013–2014

out of state. Data collected includes the number of students enrolled, number meeting all immunization requirements, provisional admittance, and exemptions. In this study, we reviewed data on kindergartners enrolled for the 2013–2014 academic year, for the reporting period September 1, 2013 to December 31, 2013.

Geographic data analysis was conducted to access the locations in New Jersey with the highest proportion of kindergartners with religious-based vaccine exemptions. We evaluated 2,020 schools, including public and private schools with at least ten children enrolled in kindergarten. The rate of religious exemptions ranged from 0%–69% with a mean of 1.8.

We examined the data within individual state legislative districts. Figure 1 depicts a map of New Jersey divided by its forty state legislative districts, showing the percent of kindergartners with a religious-based vaccine exemption by district. The districts are categorized into four groups.

Figure 1

Figure 2 shows the percentage of schools with religious vaccine exemption rates above the state average of 1.8% by state legislative district. Each school was first geocoded and the vaccine exemption rates were calculated for each school. The state legislative districts were categorized based on the percentage of schools with exemption rates above the state mean.

Discussion:

Vaccination is one of the greatest public health achievements of the 20th century. The recent outbreaks of potentially lethal vaccine-preventable diseases in the U.S. are a reminder of the importance of proper and timely vaccination of all children. Although kindergarten vaccination coverage at the state level has remained high and exemption levels have remained stable for most states in the US in recent years, regions of high vaccination exemptions tend to cluster geographically increasing the risk for local school or community level vaccine-preventable disease outbreaks.10,11,12 Making state-mandated nonmedical immunization exemption procedures more restrictive correlates with reduced rates of religious or philosophical exemptions in a particular state.4 Mapping school vaccination coverage at the level of state legislative districts, as was done in the current study, could inform state legislators and local vaccine advocacy organizations about the potential vaccine-preventable disease risk in their district. One such vaccine advocacy organization is Rotary International. Since 1985 Rotary has contributed to the continued on page 14
Impact of Religion-Based Childhood Vaccine Exemption Practice
Among Kindergarteners in New Jersey by State Legislature District in 2013–2014 continued

Global Polio Eradication Initiative with fundraising of more than US$900 million, advocacy, and volunteer recruitment [http://nynjrotary.org/polio]. With 33,000 clubs globally, including several dozen in New Jersey, Rotary could potentially reach out to local politicians to advocate more restrictive nonmedical exemption laws.

This analysis included several limitations. Among them was that the source of the data presented was the New Jersey Department of Health’s Annual Immunization Status Report. This data is self-reported by individual schools and has not been fully validated. This analysis was limited to the 2013–2014 academic year. Mapping analysis across several years would enable us to assess local trends in religious vaccine exemptions among children in New Jersey.

Both the New Jersey Senate and Assembly Health Committees voted recently (3/9/15 and 3/15/15, respectively) to require more documentation by parents wishing to claim an exemption because of religious beliefs. The bills (S1147 and A1931) would stipulate that parents must obtain a notarized letter describing “the nature of the person’s religious tenet or practice that is implicated by the vaccination and how the administration of the vaccine would violate, contradict or otherwise be inconsistent with that tenet or practice” and that the tenet “is consistently held by the person.” The tenet cannot simply be “an expression of that person’s political, sociological, philosophical or moral views, or concerns related to the safety of efficacy of the vaccination.” Parents would also have to include in the statement that they “understand the risks and benefits of the vaccination to the student and the public health and acknowledge the student may be excluded from attendance” by the state health commissioner in the event of an outbreak of a communicable disease, according to the bill. Schools would be prohibited from allowing an exemption unless these new requirements are followed.13

Although there were more attempts by state legislatures to broaden exemptions than to tighten them in 2011–13, only bills tightening exemptions passed. In the wake of the Disneyland measles outbreak in California in late 2014, several recent state legislative votes including in Vermont have followed this trend of tightening exemptions.14 Similar legislation has cleared committees in California15 as well as in New Jersey. In order to be more effective, state-level mandates seeking to tighten nonmedical exemptions should require annual renewal of the exemption request and documentation that the requesting parents were counseled by qualified professionals on the risks of being unimmunized for the child and the community.5

References

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14 New Jersey Pediatrics Summer 2015 www.aapnj.org
Since the law guiding religious exemptions to immunizations became more permissive back in 2008, the number of exemptions has more than tripled. If you read the previous article “Impact of Religion-Based Childhood Vaccine Exemption Practice Among Kindergarteners in New Jersey by State Legislature District in 2013–2014”, you know this trend persists. Growing numbers of caregivers are abusing the current religious statute, which equates to nothing less than a mounting threat to public health.

Since April, NJAAP has spearheaded multiple efforts to balance the lopsided voice of the vociferous minority standing in opposition to bill S1147 clarifying the exemption; those efforts continue unabated. To date, over 1,450 letters of support—from caregivers and pediatricians—have been delivered to legislators in all 40 districts. Additionally, nearly 1,200 individuals have signed on the Change.Org petition calling for legislators to support passage of S1147. These too have been forwarded to the appropriate legislator.

Work remains.

1. Sign the Chapter’s Change.Org Petition here: http://chn.ge/1FuSiA8
2. Send or fax a letter to your legislator on your letterhead. Go to www.aapnj.org to download the letter template. You can find your representative’s name and address here: http://www.njleg.state.nj.us/districts/districtnumbers.asp
3. Find a letter template that caregivers can download and send here: www.aapnj.org

If you have already completed one of the above, thank you. If you have not, please act now. The window of opportunity is closing.

Sincerely,
The Executive Committee New Jersey Chapter, American Academy of Pediatrics
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The out-of-network legislation was introduced this month. Briefly, the bill would stipulate that at least 30 days prior to a medical procedure, health care facilities would be responsible for providing patients a written disclosure form regarding the in-network or out-of-network status of the services to be performed. The disclosure would have to include a thorough and clear description of the procedure as well as an estimate of all associated costs. In addition to that, patients must also be advised to further consult with their insurance carriers. The bill also would require insurance companies to update their websites at least every 20 days with lists of a Health care facilities that would be prohibited from billing patients for urgent or emergency out-of-network care in excess of any of the deductibles, copayments or coinsurance amounts that they would normally charge for in-network care. The bill would restrict health care facilities from billing the out-of-network patient’s insurance carrier in excess of the maximum payment for a given urgent or emergency service. That maximum payment, which would range from 75 percent to 250 percent of the median paid in-network cost for a particular service, would be set by an established Healthcare Price Index, to be maintained by an organization of the Department of Banking and Insurance’s choosing. The selected organization would be responsible for gathering and analyzing the health care data needed to form the health care price index, which will also be electronically published and made public.

If reimbursement for out-of-network costs cannot be agreed upon within a 30-day period following the initial billing, both the insurance carrier and the facility have the option of entering into a binding arbitration process that utilizes the range established by the HPI. The binding arbitration system established under the bill provides that the party requesting arbitration shall notify the other party that arbitration has been initiated and state its final offer before arbitration. In response to this notice, the non-requesting party shall inform the requesting party of its final offer before the arbitration occurs. Both final offers shall be within the payment range for the applicable service, as established by the organization, based on the organization’s review of the HPI. Arbitration shall be initiated by filing a request with the department. The arbitrators selected by the department shall be one or more entities that have experience in health care pricing. The arbitrator’s decision shall be one of the two amounts submitted by the parties as their final offers and shall be binding on both parties.

The bill also provides that it is a violation of the bill’s provisions if a health care provider, directly or indirectly related to a claim, knowingly waives, rebates, gives, pays, or offers to waive, rebate, give or pay all or part of the deductible, copayment, or coinsurance owed by a covered person pursuant to the terms of the covered person’s health benefits plan as an inducement for the covered person to seek health care services from that provider.

Assemblyman Schaer Chair of the Budget Committee and initial key player in the effort to resolve this issue expanded on that point by saying that studies have shown that legislation like this could save consumers over 14%. He also discussed his hope that the three major players in this system—health care professionals, health care facilities and health insurers would come to the table to make a better system.

Assemblyman Singleton said that he believes the bill will provide consumers access to additional information. He also said the bill is designed to address those who adopt a business model that is harmful to consumers.

Linda Schwimmer The president of the Health Care Quality Institute, a think tank primarily funded by insurance carriers, said that citizens in NJ have been caught in the crossfire between payers and providers and that everyday there are stories of people who “do all the right things” to ensure that they stay in-network only to be faced with stacks of bills by out-of-network providers. She said that there were only a “small group of providers” causing this problem but that we must fix the problem. She complimented the legislators for their courage and suggested that those in the room should show the same courage!

The bill tries to define a type of “baseball arbitration” on unresolved issues of payment between carriers and providers. Addressing that issue Assemblyman Singleton spoke about Illinois and their style arbitration. He said that by having baseball style arbitration both sides are more willing to negotiate out of fear that the arbiter will pick the other side’s offer.

In response to a question about providers saying that they go out-of-network because insurers “lowball,” Senator Vitale said that he has heard from some hospitals that they can only survive by going out-of-network but they must be fair in what they charge and that has been the problem. He also discussed the fact that the bill deals with the issue of providers who employ a strategy of waiving co-pays as a business model because in the end the cost of this practice gets passed on to everyone else.

Finally, in response to a question about timeline for passage and discussions with the Governor’s office, Assemblyman Singleton said that there have been “robust” discussions with legislative leaders and the Governor’s office but that it would be premature to comment on those discussions. As to a timeline, Assemblyman Coughlin said that the only established date is May 22nd when stakeholder meetings will take place. I attended the Stakeholders meeting and while brief allowed us to make statements regarding the problems of fee caps, payment for services, and the problem of unbalanced negotiated contracts with payers when they have an advantage such as is inherent in the proposed legislation.

As recent as this week the draft bill as introduced will see some significant language changes. AAP/NJ will be monitoring the progress of this bill and will be reporting its effect healthcare delivery.
A patient, or a patient’s family member, files a complaint against you with your state licensing board. You are called before a committee of the board to review the matter and answer questions about the care you rendered to that patient, but as you don’t believe the complaint is serious or well-founded you decide not to retain counsel and appear by yourself. Although you think you did well, and answered all the committee’s questions satisfactorily, the matter results in a formal complaint, seeking the suspension or revocation of your license to practice.

As the case progresses, the prosecution offers you what seems to be a “good deal”—if you consent to a letter of reprimand being issued against you, the case will be over and you will no longer have to worry about having your license suspended or revoked. In comparison with a loss of license, a reprimand sounds like a great deal—the proverbial “slap on the wrist.” However, do not be so quick to jump on that offer, as it can be just as detrimental to your career as license suspension or revocation.

You are familiar, of course, with the “National Practitioner Data Bank,” and how the reported settlement of a medical malpractice action can have severe detrimental effects upon a physician’s career. The same can be said for a seemingly “lenient” action against your license by a state licensing authority. While such a result leaves your license to practice in place, its collateral effects can have permanent, devastating effects upon your career.

If your practice is of the nature requiring hospital privileges, hospital medical staffs nevertheless view a reprimand as an “adverse” licensure action. A reprimand will, therefore, usually result in a loss or suspension of hospital privileges. If you have privileges at more than one hospital, the loss of privileges at one institution quite often leads to other hospitals following suit. If your practice depends upon maintaining hospital privileges, such a result would effectively end your practice, even though your license is still intact.

Do you participate in managed care plans, or treat Medicare or Medicaid patients? Again, these entities also consider a reprimand from a licensing authority to be an adverse licensure action. Reprimands can, and often do, result in a physician’s removal from managed care plans and debarment from Medicare, Medicaid and other government-run health programs. If your patient base is covered by medical insurance of one form or another, a reprimand will most likely result in your removal from all such programs, and will therefore result in the loss of most, if not all, of those covered patients.
Estimates report that unintentional injury each year results in the death of more than 12,000 children in the United States between the ages of 0 - 19 years old, accounting for more than 36% of all pediatric fatalities. Add to that the over 8 million non-fatal injuries each year and the need for emphasizing injury prevention with parents, patients and families becomes abundantly clear.

Two major literature reviews have demonstrated the effectiveness of injury prevention with regard to education, change in behavior, reduction of injury and decrease in healthcare cost when addressed by a pediatrician. So, throughout the upcoming summer months be sure to review the following safety tips with your patients and caregivers.

SUN

Babies under 6 months:
- Avoid sun exposure, and dress infants in lightweight long pants, long-sleeved shirts, and brimmed hats that shade the neck. However, when adequate clothing and shade are not available, parents should apply a minimal amount of sunscreen with at least a 15 SPF to small areas, such as the infant’s face. Suggest applying a cool compresses when sunburn occurs.

All Other Children:
- The first, and best, line of defense against harmful ultraviolet radiation (UVR) exposure is covering up. Recommend hats with a 3" brim or a facing forward bill, sunglasses that provide 97%-100% protection against both UVA and UVB rays, and clothing with a tight weave.
- Stay in the shade whenever possible, and limit sun exposure during the peak intensity hours between 10 a.m. and 4 p.m.
- On both sunny and cloudy days use a sunscreen with an SPF 15 or greater that protects against UVA and UVB rays.
- Apply enough sunscreen -- about one ounce per sitting for a young adult and re-apply every two hours, or after swimming or sweating.
- Use extra caution near water and sand as they reflect UV rays and may result in a faster sunburn.

POOL SAFETY
- Never leave children alone in or near the pool or spa, even for a moment.
- Whenever infants or toddlers are in or around water, an adult – preferably one who knows how to swim and perform CPR – should be within arm’s length, providing “touch supervision.”
- Install a fence at least 4 feet high all four sides of the pool. The fence should not have openings or protrusions that a young child could use to get over, under, or through.
- Make sure pool gates open out from the pool, and self-close and self-latch at a height children can’t reach. Consider alarms on the gate to alert when someone opens the gate. Consider surface wave or underwater alarms as an added layer of protection.
- Avoid inflatable swimming aids such as “floaties.” They are not a substitute for approved life vests and can give children and parents a false sense of security.
- Children ages 1 to 4 may be at a lower risk of drowning if they have had some formal swimming instruction. However, there is no evidence that swimming lessons or water survival skills courses can prevent drowning in babies younger than 1 year of age.
- The decision to enroll a 1- to 4-year-old child in swimming lessons should be made by the parent and based on the child’s developmental readiness, but swim programs should never be seen as “drown proofing” a child of any age.
- Remind parents to ask their pool operator if their pool or spa’s drains are compliant with the Pool and Spa Safety Act. See PoolSafely.gov for more information on the Virginia Graeme Baker Pool and Spa Safety Act.
- Large, inflatable, above-ground pools have become increasingly popular for backyard use. Children may fall in if they lean against the soft side of an inflatable pool. Although such pools are often exempt from local pool fencing requirements, it is essential that they be surrounded by an appropriate fence just as a permanent pool would be so that children cannot gain unsupervised access.

BICYCLES
- When purchasing a helmet, look for a label or sticker that says the helmet meets the CPSC safety standard.
- A helmet should be worn so that it is level on the head and covers the forehead, not tipped forward or backwards. The strap should be securely fastened with about 2 fingers able to fit between chin and strap. The helmet should be snug on the head, but not overly tight. Skin should move with the helmet when moved side to side. If needed, the helmet’s sizing pads can help improve the fit.
- Parents should not force a child to ride a 2-wheeled bike without training wheels until he or she is ready. Parents and pediatricians should consider the child’s coordination and desire to learn to ride. Stick with coaster (foot) brakes until children are older and more experienced for hand brakes. Consider a balance bike with no pedals for young children to learn riding skills.
- Parents should be reminded to take the child with them to shop for the bike, so that he or she can try it out. Buy a bike that is the right size, not one that the child has to “grow into.” Oversized bikes are especially dangerous.

continued on next page
SAFELY USING REPELLENTS

Dos:
• Read the label and follow all directions and precautions.
• Only apply insect repellents on the outside of clothing and on exposed skin. **Note:** Permethrin-containing products should not be applied to skin.
• Spray repellents in open areas to avoid breathing them in.
• Use just enough repellent to cover the child’s clothing and exposed skin. Using more doesn’t make the repellent more effective. Avoid reapplying unless needed.
• Help apply insect repellent on young children. Supervise older children when using these products.
• Wash children’s skin with soap and water to remove any repellent when they return indoors, and wash their clothing before they wear it again.

Don’ts:
• Never apply insect repellent to children younger than 2 months.
• Never spray insect repellent directly onto the face. Instead, spray a little on hands first and then rub it onto a child’s face. Avoid the eyes and mouth.
• Do not spray insect repellent on cuts, wounds, or irritated skin.
• Do not use products that combine DEET with sunscreen. The DEET may make the sun protection factor (SPF) less effective.

Reactions to insect repellents
If a parent reports a patient is having a reaction to an insect repellent, instruct the caretaker to stop using the product and wash the child’s skin with soap and water. Parent should then call Poison Help at 1-800-222-1222. Patients should be seen in the office and instructed to take the repellent container with them.

**Note:** The following types of products are not effective repellents:
• Wristbands soaked in chemical repellents
• Garlic or vitamin B1 taken by mouth
• Ultrasonic devices that give off sound waves designed to keep insects away
• Bird or bat houses
• Backyard bug zappers (insects may actually be attracted to yard)

### Repellents

<table>
<thead>
<tr>
<th>What’s Available</th>
<th>How Well It Works</th>
<th>How Long it Protects</th>
<th>Special Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical repellents with DEET (N,N-diethyl-3-methylbenzamide)</td>
<td>Considered the best defense against biting insects.</td>
<td>About 2 to 5 hours depending on the concentration of DEET in the product.</td>
<td>Caution should be used when applying DEET to children.</td>
</tr>
<tr>
<td>Picaridin</td>
<td>In April 2005 the Centers for Disease Control and Prevention (CDC) recommended other repellents that may work as well as DEET: repellents with picaridin and repellents with oil of lemon eucalyptus or 2% soybean oil. Currently these products have a duration of action that is comparable to that of about 10% DEET.</td>
<td>About 3 to 8 hours depending on the concentration.</td>
<td>Although these products are considered safe when used as recommended, long-term follow-up studies are not available. Also, more studies need to be done to see how well they repel ticks. Allergic reactions are rare, but can occur when using repellents made from essential oils.</td>
</tr>
<tr>
<td>Repellents made from essential oils found in plants such as citronella, cedar, eucalyptus, and soybean</td>
<td>Usually less than 2 hours.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical repellents with permethrin</td>
<td>These repellents kill ticks on contact.</td>
<td>When applied to clothing, it lasts even after several washings.</td>
<td>Should only be applied to clothing, not directly to skin. May be applied to outdoor equipment such as sleeping bags or tents.</td>
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</tbody>
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### References
CASE REPORT

A two year old female was brought via EMS to the emergency room status post a near drowning episode requiring CPR. The patient was at a local pool with her family when she was found floating face down in the pool for an unknown period of time. She had been playing with cousins and the family speculated that she jumped in unwitnessed. She was pulled from the pool by a lifeguard and appeared to be hypoxic and without a pulse. Rescue breaths were given and 3 minutes of CPR was performed with successful resuscitation. Immediately after resuscitation, the patient vomited a large amount of water with some food. Patient was arousable, with appropriate response, as per EMS en route. She was brought to the emergency room, evaluated and placed in the pediatric ICU for observation.

On arrival to the Pediatric ICU, the patient was well appearing, playful, and in no distress. Vital signs were within normal limits, including an O₂ saturation of 98% on room air. Her lungs were clear to auscultation throughout and the rest of the physical exam was benign. Laboratory data was significant for sodium 130 mEq/L, potassium 6.8 mEq/L (grossly hemolyzed), and a normal white blood cell count. An initial chest x-ray showed no evidence of an acute process and an electrocardiogram was negative.

She was initially made NPO and given a prophylactic weight-based dose of Lasix. A repeat chest x-ray eight hours status post her near drowning episode showed mild perihilar airspace opacity. Patient remained stable and was able to tolerate PO without issue. A chest x-ray sixteen hours out from the event showed no evidence of opacity. Labs were trended throughout admission and normalized as well, so patient was stable for discharge 24 hours after her near-drowning episode.

DISCUSSION

Drowning remains the second most common cause of unintentional death in children under the age of 19 in the United States. With summer fast approaching, it becomes vital to review water safety with families to avoid life-threatening situations involving pools or open waters, as well as bathtubs, buckets, and toilets. In addition, the in-patient physician must be knowledgeable about both the initial presentation and the resultant sequelae of a drowning or near-drowning episode. Outcomes are variable and prevention is the best medicine to lower the number of drowning-related morbidity and mortality.

Epidemiology

In 2002, the CDC reported that 34% of all drowning victims across the US were under the age of 19. Males, African-Americans, children < 4 years of age, and children from lower socioeconomic families are at the highest risk for drowning. In 2000, lifetime costs of drowning were estimated to be over $5 billion with about half of that being spent on children aged 14 and under. The mechanisms of drowning-related accidents differ in the various pediatric age groups. Children younger than one year most often drown in toilets, bathtubs, or buckets and usually as a result of inadequate supervision. Children aged 1 to 4 drown in their personal in-ground home pool. On the other hand, adolescents drown in rivers, lakes, and canals and most of these cases are related to alcohol or drug use. As expected, it is most common to see these cases on weekends and during the summer months. Other risk factors consist of a lack of barriers around swimming pools, inadequate adult supervision, lack of a personal floatation device, use of a personal watercraft by children, and certain medical conditions including seizures, mental retardation, and underlying cardiac arrhythmias.

Pathophysiology and Clinical Features

The underlying pathophysiology that leads to the death of these children is generally related to the initial pulmonary injury leading to numerous systemic effects. 80–90% of deaths are found to be secondary to “wet drowning” where fluid or other debris is found in the lungs as compared to the 10–20% that die secondary to “dry drowning” or laryngospasm that persists after the patient loses consciousness. Secondary drowning occurs in 5% of cases and is the basis for hospital observation of near-drowning patients. This is the development of pulmonary edema usually within the first 12 hours after the episode, though it can be seen up to several days later. End organ damage can be seen secondary to hypoxia in up to 10% of near drowning survivors. This includes permanent brain damage, cardiac dysrhythmias, cardiac dysfunctions, acute tubular necrosis, and disseminated intravascular coagulation. As seen in our patient, it is common to see a relative dilutional hyponatremia and has been noted in up to 15% of near-drowning victims.

Treatment and Outcome

It is vital to begin resuscitation as quickly as possible, even initiating rescue breaths while the victim is still in the water, if possible. Extrinsic compressions for removal of water from the lungs is no longer recommended, as initiating early resuscitation has the best outcomes. Hospital management is based on severity of symptoms, including ventilator support as needed. The determining factor for neurologic outcome is the duration and severity of the primary insult.

Prevention

Pediatricians are in a unique position to educate their families appropriately and prevent as many of these tragedies as possible. Water safety issues present at different ages with different
situations. Pediatricians should be familiar with these so as to address them appropriately. The main issues that require in-depth discussions with parents encompass proper supervision protocols including not placing reliance on bath seats, emptying all buckets promptly, protective four sided, self-latching fencing around pools, both in-ground and above ground, and proper use of personal floatation devices. During adolescent visits, the pediatrician must address and explain the dangers of alcohol and drug use, especially with teens involved in a water sports activity. The AAP recommends that those swimming in natural bodies of water should swim in designated swim areas monitored by lifeguards. It also recommends that parents have basic CPR training so that they can initiate this even before medical personnel arrive on the scene. It must be stressed that swim lessons and advanced abilities do not replace the need for constant adult supervision.

Policies and prevention programs have had an impact in decreasing the number of drowning victims annually. It is the responsibility of the pediatrician to educate families about these policies and the importance of following them. To achieve optimal outcomes, it is vital to initiate the appropriate management quickly. The most recent survey of members of the AAP found that most pediatricians do not feel comfortable providing information about drowning prevention to their patients. Prevention is the key in preventing these unnecessary deaths and should be made a priority in all practices.

Acknowledgements

The author would like to acknowledge Dr. Srividya Naganathan for her help with this article.

References

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At MDAdvantage®, our mission is to be a haven of safety, stability and strength for New Jersey healthcare. We advocate for physicians and actively support the practice of medicine in New Jersey. We have earned a reputation for integrity, responsiveness and decisive management, and stand prepared to assist healthcare providers in facing the challenges associated with today’s changing healthcare environment.
Left undetected and untreated, pre-lingual hearing loss in infants can negatively impact speech and language acquisition, cognition and academic achievement, as well as social and emotional development. For this reason, hearing loss is often considered a neurodevelopmental emergency. However, these negative implications can be significantly diminished and potentially eliminated through early identification and intervention. Because of this, the National Institutes of Health’s (NIH) Consensus Development Conference on Early Identification of Hearing Loss (1993) concluded that all infants should be screened for hearing impairment prior to hospital discharge.

It is crucial to understand that early identification is not sufficient in and of itself. Follow up, confirmation of diagnosis, family education and support and referral for amplification and intervention services are all essential components for improving outcomes.

The choice of communication modality and types of amplification and services falls to the family. Information and support is essential to assist them in making time-sensitive and educated decisions. When parents are educated and empowered with timely, comprehensive and unbiased information, they are better able to make informed choices for their child and family. There has been a paradigm shift in communication and education choices made over the past decades due to the programmatic alternatives now available to families. In 1995, 40% of families with a child with hearing loss chose a listening and spoken language (LSL) outcome. In 2005, 85% of families chose an LSL outcome and the 2012 data from a variety of early intervention programs across the United States shows a shift upwards of 90–95%. This is not surprising considering that 95% of children born with hearing loss are born to hearing parents.

Advancements in early diagnostics for Universal Newborn Hearing Screening and innovative hearing aid and cochlear implant technologies are providing access to critical auditory brain centers during a vital time of maximum neuroplasticity. Stimulation of the auditory brain centers are accessed significantly earlier when infants are identified and amplified earlier. When sound is inaccessible, the brain reorganizes itself to glean input from alternate senses and this cross-modal reorganization reduces the capacity for auditory neural skill development. Early amplification and intervention results in stimulation of the brain during its organizational phase, whereby fostering greater auditory capacity. In order for auditory pathways to mature, acoustic stimulation must occur early and often because normal maturation of central auditory pathways is a precondition for the typical development of speech and language skills.

Findings by Yoshinaga-Itano et al. demonstrate that significantly better language scores were associated with early enrollment in intervention. High levels of family involvement were also correlated with positive language outcomes. The results suggest that success is achieved when early identification is paired with early intervention that actively involves families. (http://www.ncbi.nlm.nih.gov/pubmed/10969127)

Despite the promise of positive outcomes, many children are still not achieving their potential. Data in New Jersey has shown that even with the universal newborn screening, many families are not seeking out the services available to them early enough in their journey. When dealing with the shock of the diagnosis, they often wait to see signs of the hearing loss or for deficits to emerge. By the time the child demonstrates delay, crucial time has been lost. Referrals to the early intervention system can be made by a variety of sources including pediatricians. Making a referral is quick and simple. You can call the New Jersey Early Intervention System (NJEIS) referral line and leave a message. This will insure that the family is contacted and offered information, support and potential services. If you refer, the family is under no obligation to participate. In NJ, a child with hearing loss is presumptively eligible for services and does not have to demonstrate deficits nor meet eligibility criteria. Evaluations and case management are free. If the pediatrician makes the referral, it can advance the process towards a successful outcome. The NJEIS referral number is 888-653-4463.
Unusual Toddler Intracranial Head Injury

Melissa Ann Eppinger, BA
Thomas J. Sernas, MS, PA-C
Catherine Anne Mazzaola, MD
Goryeb Children’s Hospital
Morristown Medical Center; Morristown, New Jersey

Abstract

Children, especially during the first years of life, are susceptible to injury. Numerous articles report a high incidence of emergency department visits involving head trauma. However, head injuries involving intracranial foreign objects that penetrate through the skull are uncommon. The authors describe an 18-month-old patient that sustained a penetrating head injury with an intracranial foreign object following a fall. The baby underwent a craniotomy for a non-depressed skull fracture with cortical and cerebral laceration to remove a metallic nail attached to a piece of wood. The patient reportedly had no neurological and functional deficits, and was discharged home on post-operative day 4 following 48 hours of intravenous (IV) clindamycin and meropenem.

Introduction

Pediatric head injuries, whether incidental or non-incidental, can cause temporary or permanent brain damage. Each year, many children are rushed to the emergency department following this type of injury. Sustained head trauma typically follows motor-vehicle or work-related accidents involving falls, combative fights or construction equipment. Out of all of the head traumas reported, penetrating head injuries account for only a small percentage. Nevertheless, head injuries that penetrate through the skull are serious, and can cause primary or secondary damage to the brain. Children are more susceptible to being negatively impacted following a head injury. The bones of a child’s skull are malleable and not as rigid when compared to an adults’ bones. Therefore, the mechanism of injury should be well understood in order for clinicians to best implement a treatment plan, including a neuroradiology evaluation, a thorough assessment of body functions and the prevention of infection and further injury.

We report this unique case of a penetrating head injury with an intracranial foreign object sustained by a pediatric patient following a fall.

Case Report

An 18-month-old male presented to the emergency department after falling onto a piece of wood with a finishing nail protruding (Figures 1 D-E). The patient’s vital signs were stable. His heart rate was 146/min, respirations were 126/min, and blood pressure was 150/96 when he was crying. No loss of consciousness, fevers or seizures were reported. On neurologic examination, the patient’s face was symmetric, and pupils were round and reactive to light and accommodation.

An emergency Computed Tomography (CT) scan of the head was performed. Imaging revealed the nail, several centimeters in diameter, penetrating through the calvarium into the right parietal lobe (Figures 1 A-B). The nail extended approximately 2 centimeters into the brain parenchyma. No loose bone or metal fragments were identified. However, a significant amount of streak artifact was noted in the right parietal region and therefore, subtle hemorrhages were difficult to exclude. At that point, the risks and benefits of surgery were explained to the family, and an informed consent for surgery was obtained. The baby was taken to the operating room for further evaluation of the nail, piece of wood, and debridement of the brain. The baby underwent a craniotomy to elevate the open, non-depressed skull fracture with cortical and cerebral laceration to remove the foreign object, followed by dural and contusion repair (Figure 1 F). No vascular complications were noted. The bone was placed back in good position and secured in place with Synthes X shaped fasteners. No intraoperative complications were reported.

A post-operative CT scan was performed several hours following the surgery (Figure 1 C). There was no hemorrhage, ischemic changes, mass effect, midline shift, hydrocephalus or foreign bodies identified. For the exception of the craniotomy surgical site, the skull base and calvarium remained grossly intact.

Post-operatively, the baby was neurologically and clinically well. He followed commands and verbalized appropriately according to his age group. The foreign body did not impact the child’s motor or sensory function. He was able to ambulate, and use both upper and lower extremities as well as prior with no deficits. Interestingly, his head injury sustained on the right side had no impact on the child’s ability to move his left hand, as his right hand was stabilized with an intravenous board on admission. The baby was discharged from the hospital on post-operative day 4 following 48 hours of IV clindamycin and meropenem. The parents were instructed to follow-up with neurosurgery for post-operative care.

Discussion

Children, especially during the first years of life, are susceptible to injury. We caution all parents and caretakers to take the time to properly “baby proof” their residence. Head injuries in pediatrics are common, however, penetrating traumas are not. Various articles report penetrating head wounds involving rods, nails, and knife blades. Although our patient sustained a head injury, the location, track and size of the foreign object was quite fortunate. The nail could have hit a major blood vessel in the head, resulting in intracranial hemorrhage and subsequent, permanent brain damage. The absence of a vascular complication led to a more favorable prognosis for our patient. Therefore, an emergency CT scan and foreign object removal was critical in order for no neurological or functional deficits to arise. Sustained head injuries early in life can negatively impact children from meeting developmental and academic milestones. Hence, the post-operative neurological and clinical evaluations of the child, which reported no speech, vision or movement issues, were fortunate.

continued on next page
Penetrating head trauma can include complications such as infection, seizures, and cerebrospinal fluid (CSF) leaks. Domingo et al. describe in a study of 54 patients with low-velocity penetrating head traumas, 43% of patients suffered a septic complication that required surgery plus antibiotics. Hagan et al. reports that in a study of 68 patients with penetrating brain injuries, 35 patients with loose bone and/or metal fragments developed an infection and 12 patients had a resultant CSF leak. Fortunately for our patient, no loose metal or bone fragments were identified. However, the type of wound injury was a concern for the neurosurgical team. The nail attached to the wood penetrated into the parietal lobe and left a “puncture” wound. A contaminated nail could have created a track that may have introduced bacteria into the healthy brain tissue, making our patient more susceptible to infection. Wound “wash out” to follow the nail track was crucial in order for our patient to not develop an infection. Following management and treatment protocol, our patient did not develop intraoperative or postoperative infections.

Conclusion

Penetrating head wounds are uncommon, but serious injuries may lead to temporary or permanent brain damage. The 18-month-old patient, post-craniotomy and intracranial foreign object removal, suffered no neurological or functional deficits. The emergency department, neuroradiology, and neurosurgical team worked together to prevent further injury and infection leading to the patient’s fortunate prognosis.

References

Pregnancy is supposed to be one of the most exciting times in your life, but being pregnant while in residency can present some unique challenges. Simple things like scheduling check-ups, ultrasounds, and routine testing become complex when coupled with a resident’s busy schedule. The outside world’s advice on resting during your first trimester, dealing with morning sickness, and taking time off before the baby comes serves as frustrating reminders that your life is different from most other people.

“You are not on your feet all day, are you?” “How many weeks will you take off before you deliver?” “You really need to take it easy and get some rest.” Before pregnancy, the outside world’s lack of understanding of residency life was familiar and routine. During pregnancy, however, its lack of familiarity and understanding of the job became apparent, and increasingly frustrating. Projections of judgment and feelings of jealousy became the new norm. Uninvited questions and concerns resulted in my own self-doubt, feeling as if I was working too hard, pushing myself too far, and standing on my feet too long. The innocent inquiries, which felt like masked accusations, made me feel as though my work was harmful to my baby, and that I wasn’t providing the safest, most nurturing environment for him to grow. I felt envious of mothers who could sit at their desk with their feet up, free to decorate their newborn’s nursery with the click of a mouse. Quickly, I realized that people who are not closely connected with the demands of a medical career just don’t get it—and that is okay.

Equally surprising was how difficult interactions with other doctors, including my own, became. Despite losing 20 pounds secondary to severe morning sickness, my doctor told me that “it couldn’t have been that bad because you didn’t end up in the hospital”. She was a resident once too, and I thought that she would understand how reluctant I was to ask for help not only because of my residency program’s expectations of me, but also those I set for myself. While my colleagues were incredibly excited when they learned I was expecting my first child and empathetic towards my situation, their idea of support was offering a bolus and some ginger ale. After a syncopal event secondary to dehydration, I was allowed to rest before my 4pm call.

Whether it is internal or external, the guilt of being a resident during pregnancy can be overwhelming. After all, pregnancy is a voluntary condition and therefore, I had to accept the consequences. Each time I was late, cancelled, or changed a doctor’s appointment because of my scheduling demands, guilt ensued. When I neglected to exercise or eat the healthiest I could, I felt guilty and worried that I was hurting my baby. Oddly, I felt most guilty about letting my responsibilities fall to somebody else.

As if this weren’t enough, I also had to accept a lack of control that was unfamiliar to me in my role as a doctor. It is extraordinarily difficult to be vulnerable in front of a group of people who often rely on your strength in similar situations. For example, when my doctor confirmed that my baby was breech at 36 weeks, I scheduled a version in hopes that he would turn. When obtaining consent, my doctor simply stated, “You’re a doctor so you know this stuff.” But today, I am a patient and not a doctor. I still need to be counseled on my decisions and comforted when things go awry.

There are benefits as well: office staff who will squeeze you in for a visit on your post-call days; nurses who save you the best rooms when the unit is full; doctors you already trust and have a good working relationship with (and who make sure you have your epidural the moment you walk through the door!). All of these are unique plusses to our situation that do come in handy. And as pediatricians, we adore children—that is why we chose this profession. It will be a privilege to welcome my baby into a work environment filled with people who love smiling at, talking about and interacting with children as much as I do.

The end of the story is a good one, because all of this is just a reflection of support and concern. Deep down, I understand that the people who surround me are all trying equally as hard to navigate this situation, during pregnancy, residency, and beyond—and for that I will always be grateful.

As a Resident, you are registered as a member in NJAAP. Visit the Member’s Only area at www.aapnj.org and click the “For Residents” tab to explore all the opportunities for getting involved.
IS IT YOUR HOME?

Allergic reactions, asthma attacks and worse may be caused by conditions in your home. Mold or toxins could be making your child sick. Improperly used, cleaning products and pesticides can do more harm than bugs.

Keep your family safe. Make yours a HEALTHY HOME.

Keep it Dry
Stop water from entering your home through leaks in the roof, bad plumbing or poor drainage. Reduce moisture to prevent mold.

Keep it Clean
Control the source of dust and toxins, create smooth and cleanable surfaces, reduce clutter, and use wet-cleaning methods.

Keep it Well-Ventilated
Ventilate bathrooms and kitchens with fans and open windows to supply fresh air and reduce the concentration of toxins and cleaning chemicals.

Keep it Safe
Properly label and store poisons out of the reach of children. Secure rugs and keep children’s play areas free of hard or sharp surfaces. Install smoke and carbon monoxide detectors.

Keep it Pest-Free
All pests need food, water and shelter. Seal all cracks and openings where pests might get in. Store food in tightly-sealed containers. To control pests, use sticky-traps, closed bait containers, and the least toxic pesticides such as boric acid powder.

Keep it Contaminant-Free
Reducing hazardous household chemical use is one way to prevent allergies, skin rashes and asthma attacks. To help prevent lead poisoning fix peeling paint and use wet cleaning methods to clean up.

Keep it Well-Maintained
Inspect, clean and repair your home often. Take care of minor repairs and problems before they become large headaches.

Healthy Homes is a program of Southern New Jersey Perinatal Cooperative with funding from the New Jersey Department of Health and Senior Services.

snjpc.org 2012
As a physician, you know that disease prevention is important. When it comes to cancer, we can’t always prevent the cancer, so we often focus on screening or early detection to save lives.

There is a do-it-yourself test that you can ‘prescribe’ to your patients to screen for the leading cause of lung cancer in non-smokers and the second leading cause of lung cancer overall. It doesn’t require unpleasant prep, there are no backless gowns involved and it can significantly reduce patients’ exposure to radiation. The U.S. Surgeon General, the U.S. Environmental Protection Agency (EPA) and the World Health Organization all recommend that every home be tested for radon.

Radon is a radioactive gas that comes from the decay of uranium found in nearly all soils and rock. Radon has a half-life of 3.8 days and decays with release of an alpha particle, as do many of its short-lived decay products. Alpha particles are not an external hazard, but can do significant damage when their energy is released in the lungs. Radon is estimated to cause about 21,000 lung cancer deaths per year. It is the second leading cause of lung cancer in smokers and the leading cause of lung cancer in non-smokers. Yet an estimated 88% of Americans don’t know that radon is the second leading cause of lung cancer.

Testing for radon is simple. Patients can purchase a detector at the local hardware store, online or by phone. A list of NJ certified firms that sell directly can be found at www.njradon.org. The only preparations necessary are to keep the home’s door and windows closed except for normal entry and exit for 12 hours before and during the 2–7 day test period. Put the kit in the lowest livable level of the home according to the instructions and then seal it up and mail it back to the laboratory.

Radon levels in air are measured in picoCuries per liter (pCi/l). The US Surgeon General, EPA and New Jersey use a guidance level of 4 pCi/l for action to reduce radon levels. Since radon is a carcinogen, there is NO safe level and mitigation should be considered between 2 and 4 pCi/l. If a home does need to be fixed or mitigated, the NJ Department of Environmental Protection certifies radon mitigation firms.
They also certify radon testers, if your patients prefer someone to perform the test for them or to test during real estate transactions.

Radon mitigation is usually done by drilling into the foundation and routing a pipe to the outside or through the roof with a fan at the end. This directly vents the radon plus it depressurizes the area under the slab to prevent more radon getting into the home. Sealing some areas also helps to make the sub-slab suction systems more efficient. Once radon entry into the home is stopped, what’s left in the home quickly decays away and levels remain low.

**Resources:**
- [http://www.epa.gov/radon/](http://www.epa.gov/radon/) — information about radon
- [www.njrador.org](http://www.njrador.org) — NJ specific information about radon including lists of certified testers and mitigators
- **Breathing Easier: An Informational Radon Video for Physicians**
  - 12 & 20 minute videos geared for physicians – includes radiation and radon basics
  - [https://www.youtube.com/watch?v=Fuzl3Nb_ah0&feature=youtu.be](https://www.youtube.com/watch?v=Fuzl3Nb_ah0&feature=youtu.be)
- **NYSDOH Public Health Live**
  - *Prescription for Radon* — originally aired September 19, 2013
  - 1 hour conversation about radon and radon outreach
  - [http://www.albany.edu/sph/cphce/phl_0913.shtml](http://www.albany.edu/sph/cphce/phl_0913.shtml)
- **Are You Breathing Radon?** 3 minute video — great for all audiences
  - [Huntsman Cancer Institute](https://www.youtube.com/watch?v=TOcFmv58v04)

**Reference:**

As a Pediatrician, you can help to reduce your patients’ exposure to radon:

- “Prescribe” a radon test.
- Encourage schools to test for radon
- Support State and local Health Department efforts on radon outreach
- Support your County Cancer Coalition’s efforts on radon
- Spread the word about radon within the medical community.

**For free Healthy Home resources and to access the newest webinar, visit the NJAAP website here:**
MILK’S PROTEIN AT BREAKFAST HELPS YOU WIN THE DAY

PROTEIN AT BREAKFAST

BREAKFAST IS THE MEAL AMERICANS ARE LEAST LIKELY TO SEEK OUT PROTEIN, BUT MAY BE THE MOST IMPORTANT

Almost two thirds (57%) of Americans say they’re trying to get more protein in their diet.

Expert recommend including 20-30 grams of protein at each meal.

On average, adults get about 10-12g of protein at breakfast.

Spreading out your protein throughout the day can optimize how your body uses it— and that means making sure you include enough protein at breakfast.

Milk is a delicious, easy and affordable way to get high-quality protein in the morning.

Why Milk’s Protein

Not all protein sources are created equal. Milk protein is a high-quality protein.

Benefits of Protein

Healthy weight

Build muscle

Protein = healthy full

Protein is the building block for your body from muscles to hair, bones to teeth, your body needs protein to be strong and healthy.

Protein at breakfast can help power you through the morning, so you can win the day.

IFIC Food and Health Survey 2012, 2013.
What We Eat in America, NHANES, 2001-2002.
New Jersey School Breakfast Participation Soars

Stacey Jackson, MS, RDN, CDN
Nutrition Specialist
American Dairy Association and Dairy Council, Inc.

New Jersey has the highest increase in the nation for school breakfast participation. The state moved up in rank to 28th nationally, from previous rankings of 37th last year and 46th in 2012, for student participation in this critical child nutrition program. This is a positive and important step, because a healthy breakfast helps students focus in class, score higher on standardized tests, and avoid trips to the school nurse. In addition, with each school breakfast, children receive one-fourth of the Recommended Daily Value of protein, calcium, iron, and vitamins A and C. Beginning the school day with nutritious foods including dairy, whole grains, and fruits enables their ability to concentrate and learn.

Food Research and Action Center reports New Jersey’s participation rate jumped nearly 13 percent from school years 2012–2013 to 2013–2014. This trumps the average national increase of about three percent. A state-wide implementation of Breakfast After the Bell programs has helped change the way schools serve breakfast, allowing students to eat breakfast during the first few minutes of the school day rather than before school. This approach, typically done in the classroom, significantly boosts participation by giving all kids a chance at a nutritious start to the school day.

For more benefits of eating school breakfast, visit www.BreakfastEveryDay.org or contact American Dairy Association and Dairy Council’s registered dietitian, Stacey Jackson, at 914-615-9286 or email sjackson@adadc.com.

New Jersey Chapter creates Online Education Resources for CCHD Screening

According to the CDC, congenital heart defects (CHD) are the most common type of birth defect in the United States. CHD affects nearly 1% of—or about 40,000—births per year of which 25% are critical congenital heart defects (CCHD) requiring surgery or intervention in the first year of life. Source: http://www.cdc.gov/nccdphp/heartdefects/data.html

The New Jersey AAP in partnership with the New Jersey Department of Health has created valuable educational resources related to screening and management of CCHD. Four lectures from “Keeping the Beat: Pediatric Cardiac Screening and Management of Congenital Heart Disease” conference held on March 24, 2015 were filmed and are available for viewing at www.njaap.org. The videos feature experts in Prenatal Diagnosis of CCHD, CCHD screening with Pulse Oximetry, Cardiac Concerns in Newborns and Cardiac Repair. A web based nursing program entitled “Newborn Screening for Critical Congenital Heart Defects (CCHD) Using Pulse Oximetry” was recently released and is available at no cost on the New Jersey Learning Management Network (NJLNM) https://njlnm.rutgers.edu/. Users must create a free online account in the NJLNM to take the course. This program is approved for 1.75 nursing contact hours by the Southern New Jersey Perinatal Cooperative, an approved provider of continuing nursing education by the New Jersey State Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation. Provider Number P106-11/12-15.

Evaluation of CCHD Screening in the Neonatal Intensive Care Unit

Subsequent to the Secretary’s Advisory Committee on Heritable Diseases in Newborns and Children’s recommendation to add screening for critical congenital heart defects (CCHD) to the Recommended Uniform Screening Panel, legislation to screen all births has been proposed or passed in numerous states. Given mandates in many states to screen all births, numerous questions have been raised regarding implementation of screening in the Neonatal Intensive Care Unit (NICU). Four years of systematic surveillance data collected by the New Jersey Department of Health (NJ DOH) indicate that more than half of the failed screens reported to their Birth Defects Registry were in the NICU at the time of the screen. A number of states have implemented CCHD screening in the NICU employing specific exclusion criteria such as a previous echocardiogram or a prenatal diagnosis of congenital heart disease (CHD). Nevertheless, there are no population-based data to support the use of exclusion criteria or the most appropriate timing for CCHD screening using pulse oximetry within the NICU population.

The New Jersey Department of Health (NJDOH) in conjunction with the New Jersey Chapter, American Academy of Pediatrics (NJAAP) is leading a multi-state collaborative evaluation of CCHD screening practices in the NICU. This evaluation is examining potential exclusion criteria including prenatal diagnosis of CHD or echocardiogram prior to screening as well as timing and burden of screening in the NICU. Participants include 21 Level II, III, or IV NICUs in five states (NJ, NY, MN, CA, and IL) using either the Kemper et al, 2011 or NJ recommended screening algorithm. Data collection began in February, 2015 and is anticipated to continue through August, 2015 yielding an estimated total sample size of approximately 5,000 infants. For more information, contact the Principal Investigators-Kim Van Naarden Braun, PhD: kbn5@cdc.gov, kim.vannaarden@doh.state.nj.us and Regina Gravel, MSN, RN, BC, APN-C: rgrazal@aapnj.org, Regina.gravel@doh.state.nj.us.
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SPOTLIGHT
ON CHILDREN
Although health literacy is the single largest barrier to access to care, there are other systemic challenges confronting families of children with behavioral or developmental disabilities. This piece will examine those obstacles and what is being done to address them.

**Barriers to children's mental health access**

Systemic issues facing families of children with behavioral health concerns include:

- Sometimes there is an overly strict misinterpretation of HIPAA (Health Insurance Portability and Accountability Act) regarding patient privacy rights in mental health. Although there is minor consent to certain treatment (e.g. substance abuse), even in those instances minors can consent to release of information to designated family members.

- Families mistakenly believe that they have to give up parental rights to access services such as a placement by making their child “a ward of the state.”

- There is a shortage of pediatric in-patient beds in mental health facilities.

- Children with a dual diagnosis (mental health/developmental disability) face additional challenges as the mental health field may be inexperienced in disability, yet developmental disability services may not have knowledge of mental health.

**Access for children with developmental delays or disabilities**

Barriers to care for parents of children with developmental concerns include:

- Long wait lists for developmental evaluations, often averaging 6–9 months, which also affects the timeline for early intervention. Research indicates the efficacy of early intervention from birth to age 3, and further delays result in poorer health and developmental outcomes.

- Early intervention now has a family cost share causing some families to opt-out of services. Low income families (up to 300% of the Federal Poverty level) do not have to pay for services on the sliding fee scale, but some moderate income families can’t afford services, while high income families may hesitate to disclose their financial information required for eligibility. Some parents may then opt to get services privately, despite the fact that their child will then not benefit from the systemic approach of early intervention. Other families may forego services altogether.

- Research indicates that there are delays or misdiagnosis for some underserved populations. For example, minority children with autism are diagnosed on average 1-1/2 years after their peers (source: Kennedy Krieger.) African-American children in particular may be misdiagnosed with intellectual or emotional disabilities rather than Autism Spectrum Disorders. This results in health disparities and worse outcomes for certain children.

- The inappropriate use of restraints, seclusion, and aversive interventions especially affects children with developmental disabilities. Research has indicated that this is not only ineffective, but experienced as trauma. In addition, parents believe in error that they must consent to this in certain placements, including schools.

**Transition from pediatric to adult care**

Moving from child to adult care is particularly difficult for children with developmental disabilities. Barriers include:

- There is a lack of providers, especially specialists, with an understanding of disability issues.

- There needs to be more collaboration between pediatric and adult providers rather than a “hand off.” This is essential for children with medical complexity.

- There are coding issues for providers such as being able to bill for care coordination, or simultaneously for pediatric/adult care during transition.

There are a variety of systemic issues facing parents of children who have behavioral or developmental concerns, but continuous progress is being made to address these barriers. We are also fortunate in NJ to have a Department of Children and Families (DCF) housing the NJ Children’s System of Care (see Resource below.) Currently, DCF has a pilot for children with a dual diagnosis, and is responsible for 3 of the children’s waivers that are part of NJ’s Comprehensive Medicaid Waiver, (Intellectual Disability/Developmental Disability-Mental Illness pilot, Autism Spectrum Disorder pilot, and Severe Emotional Disturbance component), as well as the behavioral health home pilot for children.

**Resource:**

NJ Children’s System of Care (mental health or developmental disabilities)
http://www.performcarenj.org/
24 hour hotline including crisis stabilization 1-(877)-652-7624

Lauren Agoratus M.A. Counseling is the parent of a youth with multiple disabilities and is the NJ Coordinator of Family Voices, the national network that “works to keep families at the center of children’s health care.” She also serves as the Central/Southern Coordinator for the NJ Family-to-Family Health Information Center (F2HHIC). In NJ, Family Voices and F2HHIC are housed at the Statewide Parent Advocacy Network (SPAN), www.spanadvocacy.org.
CATCH CORNER

A program of the American Academy of Pediatrics

CATCH
Community Access to Child Health

Thank you for your interest in community pediatrics. The CATCH grant applications this cycle has been extremely competitive—a total of 10 out of 84 planning/implementation applications and 14 out of 50 resident grant applications received funding this cycle, however we still encourage all to apply or reapply if not accepted this time. There are also some new and exciting things going on with CATCH:

1. Child Poverty and Early Brain and Child Development Grant Opportunities

The CATCH Program has partnered with the AAP Friends of Children Fund to support up to 18 planning, implementation, and resident grants for pediatricians and residents to conduct community-based projects that address child poverty or promote early brain and child development, two strategic priorities of the AAP. These grants are part of the general call for proposals and therefore must follow the same application and reporting procedures and meet the same eligibility and selection criteria. To be considered for these funds, applicants must describe in the application how their project will address poverty or early brain and child development.

2. New Requirement on Increasing Immunization Services

Every applicant, whatever the topic, must describe how they will ensure assessment of immunization and referral, as needed. This question was added to the grant application, beginning with the current cycle. “The administration of properly timed vaccinations is an essential component in ensuring the health of children. All CATCH projects provide an opportunity to address immunizations. Please describe how your project will address immunizations among your target population. Maximum 300 words”

The next Call for Proposals is posted at http://www2.aap.org/catch

The CATCH program staff is also available to provide you with assistance. Please direct your inquiries to Dana Bennett-Tejes, CATCH Technical Assistance Coordinator, at dtejes@aap.org Additional resources to assist you with grant writing are posted at our Community Pediatrics website http://www2.aap.org/commpeds

Grant applications for the current cycle are due July 31, 2015; applicants will be notified of the results November 15, or sooner. Rising Fellows may apply as pediatricians for a $10,000 planning or implementation grant.

As your New Jersey Chapter CATCH Facilitators, we are available to assist you with proposal development. Please contact us with any questions.

Dr. Paul Schwartzberg
pschwartzberg@meridianhealth.com
Dr. Naveen Mehrotra
nmehrotra67@gmail.com

NJAAP Announces Opening of the NCQA Patient-Centered Medical Home Recognition “Warm Line.”

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Call the Warm Line anytime at (609) 842-0014 for technical assistance with:
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- Eligibility and readiness assessment
- PCMH and 2014 Standards and Guidelines questions
- Document review
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