Time out from summer for an important flu update

Time out from summer for a flu update

We interrupt your summer to bring you a Flu vaccine reminder and update.

Although flu (influenza) may be far from your minds, as we enter hot July, pediatricians are already ordering flu vaccines in preparation for Back to School. When the time comes, parents should add “schedule flu vaccine” to their back-to-school list as flu vaccines will arrive in offices as early as late August. Even immunizations given in August will last the entire winter season.

For fans of the nasal spray version of the flu vaccine—bad news. Turns out, data from the past 3 years shows the nasal spray is not nearly as effective as the injectable version. The American Academy of Pediatrics and the American Center

for Immunization Practices both recommend giving only the injectable version of flu prevention for protection against influenza.

Nonetheless, for the inconvenience of a pinch, the vaccine is still worthwhile. A total of 77 children died from flu in the US during the 2015-2016 flu season and many more children were hospitalized with flu related complications such as pneumonia and dehydration. Flu is highly contagious and spreads rapidly within households and schools, including daycare centers. People are contagious from flu one day prior to showing any symptoms of flu.

While most people who become sick with the flu survive, they will tell you it is a tough week. In addition to having a high fever that can last 5-7 days, a hacking cough, and runny nose, those stricken will tell you that every part of their bodies hurt. Even the movement of their eyes can hurt. In addition to the physical effects, our high school and college level patients are particularly distraught about the amount of schoolwork they miss while recovering from the flu.

An ounce of prevention is worth a pound of cure, which is why the flu vaccine is so terrific. There is no “cure” for the flu- you have to let your body fight it out. Unfortunately antiviral medications such as oseltamivir at best shorten the duration of flu symptoms by about one day. Flu vaccines work by jump starting your body’s natural immune system to produce disease fighting cells called antibodies. Vaccines are given yearly because flu virus strains often morph between flu seasons.

For more Two Peds In a Pod posts about flu and about vaccines in general: How to tell the difference between the common cold and the flu, Fact or Fiction: a flu vaccine quiz, Getting back to basics: how vaccines work.

OK, now back to your summer fun!

Julie Kardos, MD and Naline Lai, MD

Bring on the heat: Hot Tub Folliculitis

Note that the hot tub folliculitis rash is worse under the area of the swimming suit at the top of the thigh.

From the start, a family I know was suspicious of the hot tub sanitation at the resort where they recently stayed. As time went by, even though the water looked clear, the hot tub seemed less chlorinated, and the water more tepid. They dubbed the tub "the scuz tub." After their return, one of the kids broke out in the rash of hot tub folliculitis pictured above. You could say, they figured out just what the "scuz wuz".

Hot tub folliculitis is a skin rash caused by a bacteria called pseudomonas aeruginosa. The rash appears a day or two after soaking in a hot tub. A light pink bump appears around hair follicles (hence the name). As you can see in this photo, the rash is typically worse on areas of skin where bacteria was trapped under a swimming suit. The rash can cover all body surfaces, including the face, if your child dunked his head under water.

The rash can be slightly itchy but is not usually painful. No other symptoms develop such as fever or sore throat. The rash is not contagious, but often other people who swam in the same hot tub also break out.

Treatment is to wait it out. Typically by one to two weeks, provided your child does not go back into the hot tub, the rash resolves on its own. If your child feels very itchy, you can treat her with oral diphenhydramine (brand name Benedryl). Rarely, just like mosquito bites, the rash can become infected with other bacteria if your child scratches too much.

Pseudomonas thrives in warm wet places. In fact, it's the same bacteria that causes "swimmer's ear." Tight control of chlorine and acid content of the hot tub water limit the growth of the bacteria. Unfortunately, you cannot tell the pseudomonas content of water just by eyeing it.

May you bring back a better souvenir than this family did on your next vacation.

Julie Kardos, MD and Naline Lai, MD

Mom “nose” best: Happy Mother’s Day 2016

This Mother’s Day, we honor Dr. Kardos’s mom, who passed earlier this year.

Dr. Kardos and I had been planning a post on nasal congestion in kids, but because we couldn’t have said it any better, we share a poem that Dr. Kardos’s mom wrote on this topic.

–Drs. Lai and Kardos

Runny Noses

My grandsons seem always to have runny noses;

They drip from their noses and land on their toeses;

One kid especially, his name is Aaron,

Will hug you so tight that what’s runnin’ you’re sharin’.

Alex will wipe with the back of his hand;

His runs in the house, on the beach, on the sand.

Jacob is older and he’ll use a tissue,

So his runny nose is not much of an issue.

In case they have colds, I hand each one a sweater,

But wearing a sweater does not make things better.

Allergic to dust? That’s the answer I’m seeking;

But while I keep dusting, their noses keep leaking.

They eat well and sleep well and play hard all day

In spite of their dripping that won’t go away.

So I’ve come to conclude, and I’m happy to say

That the noses of kids prob’ly just come that way.

by Felice Kardos (1943-2016)

The best sunscreen: questions answered

An inadvertent sunburn tattoo

I was greatly relieved recently when my teen arrived back from a music department trip to Disney without a sunburn. I had pictured a bright red cherry tomato coming off the plane. For those of us stuck in the middle of an East Coast perpetual rain cloud, it's hard to believe that anyone outside of the South needs to worry about sunscreen. But soon enough, you will be scratching your head in a pharmacy aisle asking yourselves these questions:

What is SPF?

- SPF stands for Sun Protection Factor. SPF gives you an idea of how long it may take you to burn. SPF of 15 means you will take 15 times longer to burn without sunscreen. If you would burn after one minute in the sun, that's only 15 minutes of protection!
- The American Academy of Pediatrics recommends applying a minimum of SPF 15 to children, while the American Academy of Dermatology recommends a minimum of SPF 30. We both apply sunscreen with SPF 30 to our own kids (mom hint: the high SPF sunscreens tend to be watery).
- Apply all sunscreen liberally and often– at least every two hours. More important than the SPF is how often you reapply the sunscreen. All sunscreen will slide off of a sweaty, wet kid. Even if the label says "waterproof," reapply after swimming.
- Watch out for sunlight reflecting off water as well as sunburning on cool days. One pediatrician mom I know was aghast at seeing signs posted at her kid's school reminding parents to apply sun screen "because it will be in the 80's." Kids burn on 60 degree days too. Lower temperatures do not necessarily mean less UV light.

Why does the bottle of sunscreen say to "ask the doctor" about applying sunscreen to babies under 6 months of age?

- Sunscreens were not safety-tested in babies younger than 6 months of age, so the old advice was not to use sunscreen under this age. The latest American Academy of Pediatrics recommendation is that it is more prudent to avoid sunburn in this young age group than to worry about possible problems from sunscreen. While shade and clothing are the best defenses against sun damage, you can also use sunscreen on exposed body areas.
- Clothing helps to block out sunlight. In general, tighter weaves protect better than loose weaves. Expensive "sun-protective clothing" is not always

better– a study from 2014 suggests regular clothing may be as protective.
- Hats help prevent burns as well.
- Remember that babies burn more easily than older kids.

Which brand of sunscreen is best for babies and kids?

- Although clothing and shade block harmful rays the best, no one brand of sunscreen is better for children than another. We both tell our patients to apply a "test patch" the size of a quarter to an arm or leg of your baby and wait a few hours. If no rash appears, then use the sunscreen on whatever body parts you can't keep covered by clothing. Look for UVA and UVB protection. More expensive does not always mean "better" and SPF above 50, according to the American Academy of Dermatology, has not been proven to be more effective than 50.

What do we know about the ingredients in sunscreen such as oxybenzone? In the United States sunscreen ingredients are considered medications and are regulated by the FDA. Oxybenzone is one of the oldest broad-spectrum (UVA and UVB) sunscreens, and was approved by the FDA in 1978. Oxybenzone's main side effect is that it can cause allergic reactions of the skin. Recently, some people question whether oxybenzone can be a hormone disrupter and have questioned the use of oxybenzone. At this point, no hormonal disturbances have been clearly found in humans and the American Academy of Dermatology continues to support the use of oxybenzone.

Sunscreens made with zinc oxide and titanium dioxide (the white stuff on a lifeguard's nose) have not garnered any questions nor sparked any debate about safety. Interestingly, zinc oxide is not only an effective sunscreen but also you will recognize it as the main ingredient in many newborn diaper rash creams.

Any info about the popular sprays? For spray formulations of

any type of sunscreen, many doctors are concerned that any aerosolized oily substance will irritate the lungs and are looking into long term effects now. Avoid spraying sun screen near a child's head to avoid inhalation. Also with the spray, some dermatologists worry that people might not be as thorough when they apply a spray as when they apply a cream.

Can I use last year's sunscreen? Most sunscreens have expiration dates, as long as your bottle hasn't expired, then it should be effective. In general, sunscreens are designed to last about three years before they expire.

Remember when we used to call sunscreen lotion "suntan lotion," and when tolerating red, blistering shoulders was considered a small price to pay for a tan? Live and learn.

Naline Lai, MD and Julie Kardos

The best antihistamine for your kid



Lately, whenever I take my dog for her walk, she sneezes as soon as we get outside. I find it interesting that my vet says I can give her Claritin—the same dose that I take for my own seasonal allergies. Must be time to repost our allergy medicine post featuring Dr. Lai's poem.

—Drs. Kardos and Lai

The Quest for the Best (antihistamine)

Junior's nose is starting to twitch
His nose and his eyes are starting to itch.
As those boogies flow, you ask oh why, oh why can't he learn to blow?

It’s nice to finally see the sun
But the influx of pollen is no fun.
Up at night, he’s had no rest,
But which antihistamine is the best?

It’s a riddle with a straight forward answer. The best antihistamine, or “allergy medicine” is the one which works best for your child with the fewest side effects. Overall, I don’t find much of a difference between how well one antihistamine works versus another for my patients. However, I do find a big difference in side effects.

Oral antihistamines differ mostly by how long they last, how well they help the itchiness, and their side effect profile. During an allergic reaction, antihistamines block one of the agents responsible for producing swelling and secretions in your child’s body, called histamine. Prescription antihistamines are not necessarily “stronger.” In fact, at this point there are very few prescription antihistamines. Most of what you see over-the-counter was by prescription only just a few years ago. And unlike some medications, the recommended dosage over-the-counter is the same as what we used to give when we wrote prescriptions for them.

The oldest category, the first generation antihistamines work well at drying up nasal secretions and stopping itchiness but don’t tend to last as long and often make kids very sleepy. Diphendydramine (brand name Benadryl) is the best known medicine in this category. It lasts only about six hours and can make people so tired that it is the main ingredient for many over-the-counter adult sleep aids. Occasionally, kids become “hyper” and are unable to sleep after taking this medicine. Another first generation antihistamine is Clemastine (eg.brand name Tavist).

The newer second generation antihistamines cause less sedation and are conveniently dosed only once a day. Loratadine (eg. brand name Alavert, Claritin) is biochemically more removed

from diphenhydramine than Cetirizine (eg. brand Zyrtec) and runs a slightly less risk of sleepiness. However, Cetirizine tends to be a better at stopping itchiness.
Now over-the-counter, fexofenadine (eg brand name Allegra) is a third generation antihistamine. Theoretically, because a third generation antihistamine is chemically the farthest removed from a first generation antihistamine, it causes the least amount of sedation. The jury is still out.

If you find your child's allergies are breaking through oral antihistamines, discuss adding a different category of oral allergy medication, eye drops or nasal sprays with your pediatrician.
Because of decongestant side effects in children, avoid using an antihistamine and decongestant mix (often, first generation antihistamines such as brompheniramine are combined in this fashion).

Back to our antihistamine poem:

Too many choices, some make kids tired,
Paradoxically, some make them wired.
Maybe while watering flowers with a hose,
I'll just turn the nozzle and wash his nose.

Naline Lai, MD with Julie Kardos, MD

Updated from the original post April 10, 2011

Update on Lyme disease: Is it

bug-check season in your area of the United States?

The classic bullseye rash of Lyme

Our infectious disease colleagues warn us that this year, winter in the Northeast United States was not cold enough for long enough to kill off as many ticks as usual. Thus, we folks in Pennsylvania are in for a more burdensome Lyme disease season. We've already had children come to our office this spring with concerns of tick bites, so here's an update on Lyme disease:

Lyme disease is spread to people by blacklegged ticks. Take heart- even in areas where a high percentage of blacklegged

ticks carry the bacteria that causes Lyme disease, the risk of getting Lyme from any one infected tick is low. Niney-nine percent of the little critters DON'T carry Lyme disease… but there are an awful lot of ticks out there. Blacklegged ticks are tiny and easy to miss on ourselves and our kids. In the spring, the ticks are in a baby stage (nymph) and can be as small as a poppy seed or sesame seed. In order to spread disease, the tick has to be attached and feeding on human blood for more than 36 hours, and engorged.

In areas in the United States where Lyme disease is prevalent (New England and Mid-Atlantic states, upper Midwest states such as Minnesota and Wisconsin, and California), parents should be vigilant about searching their children's bodies daily for ticks and for the rash of early Lyme disease. Tick bites, and therefore the rash as well, especially like to show up on the head, in belt lines, groins, and armpits, but can occur anywhere. When my kids were young, I showered them daily in summer time not just to wash off pool water, sunscreen, and dirt, but also for the opportunity to check them for ticks and rashes. Now that they are older I call through the bathroom door periodically when they shower: "Remember to check for ticks!" Read our post on how to remove ticks from your kids.

"I thought that Lyme is spread by deer ticks and deer are all over my yard." Nope, it's not just Bambi that the ticks love. Actually, there are two main types of blacklegged ticks, *Ioxdes Scapularis* and *Ioxdes Pacificus*, which both carry Lyme and feed not only on deer, but on small animals such as mice. (Fun fact: *Ioxdes Scapularis* is known as a deer tick or a bear tick.)

Most kids get the classic rash of Lyme disease at the site of a tick bite. The rash most commonly occurs by 1-2 weeks after the tick bite and is round, flat, and red or pink. It can have some central clearing. The rash typically does not itch or hurt. **The key is that the rash expands to more than 5 cm**, and can become quite large as seen in the above photo. This

finding is helpful because if you think you are seeing a rash of Lyme disease on your child, you can safely wait a few days before bringing your child to the pediatrician because the rash will continue to grow. The Lyme disease rash does not come and then fade in the same day, and the small (a few millimeters) red bump that forms at the tick site within a day of removing a tick is not the Lyme disease rash. Knowing that a rash has been enlarging over a few days helps us diagnose the disease. Some kids have fever, headache, or muscle aches at the same time that the rash appears.

If your child has primary Lyme disease (enlarging red round rash), the diagnosis is made by a doctor examining your child. Your child does not need blood work because it takes several weeks for a person's body to make antibodies to the disease, and blood work tests for antibodies against Lyme disease, not actual disease germs. In other words, the test can be negative (normal) when a child does in fact have early Lyme disease.

The second phase of Lyme disease occurs if it is not treated in the primary phase. It occurs about one month from the time of tick bite. Children develop a rash that looks like the primary rash but appears in multiple body sites all at once, not just at the site of the tick bite. Each circular lesion of rash looks like the primary rash but typically is smaller. Additional symptoms include fever, body aches, headaches, and fatigue without other viral symptoms such as sore throat, runny nose, and cough. Some kids get the fever but no rash. Some kids get one-sided facial weakness. This stage is called Early Disseminated disease and is treated similarly to the way that Early Lyme disease is treated- with a few weeks of antibiotics.

The treatment of early Lyme disease is straightforward. The child takes 2-3 weeks of an antibiotic that is known to treat Lyme disease effectively such as amoxicillin or doxycycline. Your pediatrician needs to see the rash to make the diagnosis. This treatment prevents later complications of the disease.

While the disease can progress if no treatment is undertaken, fortunately children do not get “chronic Lyme disease.” Once treatment is started, the rash fades over several days. Sometimes at the beginning of treatment the child experiences chills, aches, or fever for a day or two. This reaction is normal but you should contact your child’s doctor if it persists for longer.

Later stages of Lyme disease may be treated with the same oral antibiotic as for early Lyme but for 3-4 weeks instead of 2-3 weeks. The most common symptom of late stage Lyme disease is arthritis (red, swollen, mildly painful joint) of a large joint such as a knee, hip, or shoulder. Some kids just develop joint swelling without pain and the arthritis can come and go.

For some manifestations, IV antibiotics are used. The longest course of treatment is 4 weeks for any stage. Children do not develop “chronic Lyme” disease. If symptoms persist despite adequate treatment, sometimes one more course of antibiotics is prescribed, but if symptoms continue, the diagnosis should be questioned. No advantage is shown by longer treatments. Some adults have lingering symptoms of fatigue and aches years after treatment for Lyme disease. While the cause of the symptoms is not understood, we do know that prolonged courses of antibiotics do not affect symptoms.

For kids eight years old or older, if a blacklegged tick has been attached for well over 36 hours and is clearly engorged, and if you live in an area of high rates of Lyme disease-carrying ticks, your pediatrician may in some instances choose to prescribe a one time dose of the antibiotic doxycycline to prevent Lyme disease. The study that this strategy was based on and a few other criteria that are considered in this situation are described here.* Your pediatrician can discuss the pros and cons of this treatment.

Bug checks and insect repellent. Protect kids with DEET containing insect repellents. The Centers for Disease Control

recommends 10 to 30 percent DEET- higher percent stays on longer. Spray on clothing and exposed areas and do not apply to babies under two months of age. Grab your kids and preform daily bug checks- in particular look in crevices where ticks like to hide such as the groin, armpits, between the toes and check the hair. Be suspicious of random scabs. Dr. Lai once had a elementary school patient who had a blacklegged tick in the middle of his forehead. The mother noticed it at breakfast, tried to brush it off, thought it was a scab and sent the boy to school. Later that day the teacher called saying, “I think your son has a bug on his face.”

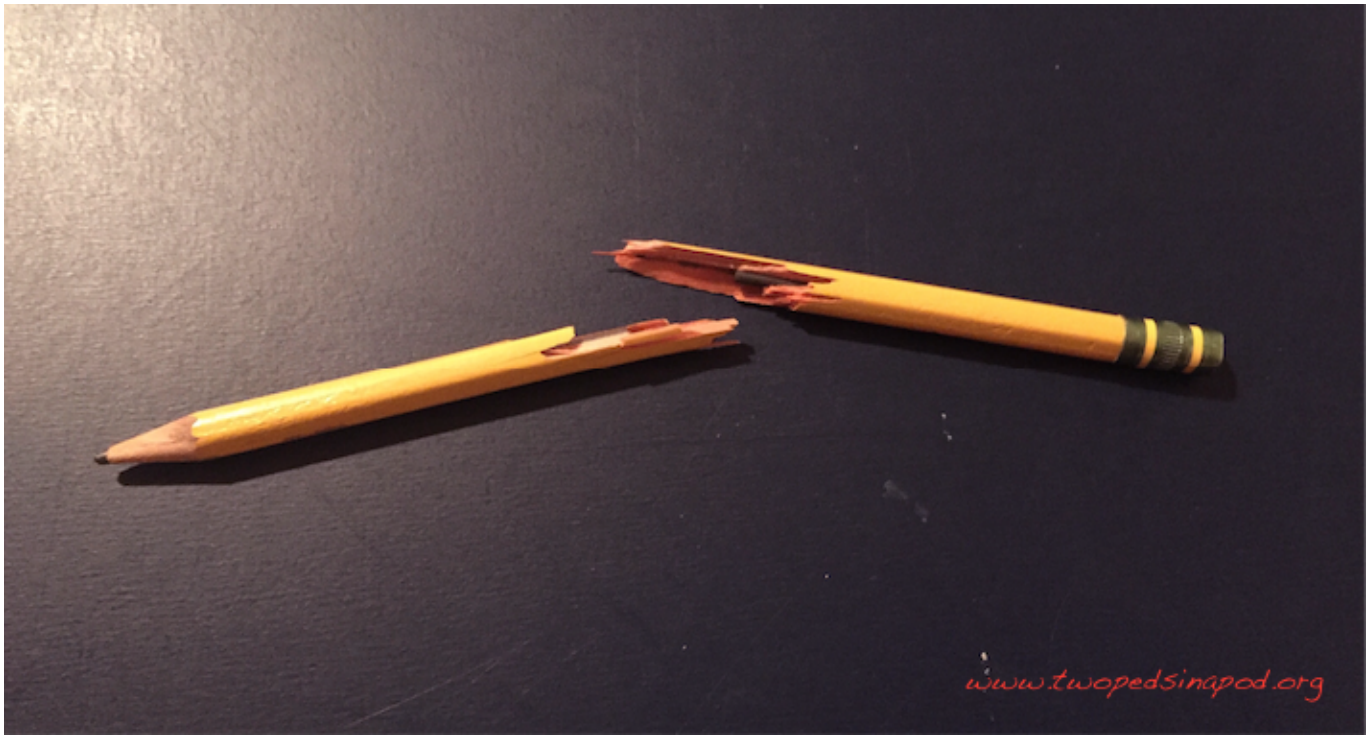
Misinformation about this disease abounds, and self proclaimed “Lyme disease experts” play into people’s fears. While pediatricians who practice in Lyme disease endemic areas are usually well versed in Lyme disease, if you feel that you need another opinion about your child’s Lyme disease, the “expert” that you could consult would be a pediatric infectious disease specialist.

For a more detailed discussion of Lyme disease, look to the Center for Disease Control website: www.cdc.gov.

Julie Kardos, MD and Naline Lai, MD

*link corrected 4/18/2016

Test anxiety: taking out the stress



Spelling test on Friday? Algebra unit test next week? SATs looming? Our guest blogger, child psychologist Dr. Jessica Collins, gives tips for calming test anxiety.

Test anxiety is a common source of stress for both students and parents. Despite your best efforts to help your child study more effectively, instructing your child how and what to study may actually increase their anxiety as your suggestions are likely to be based on your own study style preferences. Instead of offering your advice or opinion, we suggest you try some of the following:

Breathe. Help your child relax by practicing diaphragmatic breathing. Diaphragmatic breathing increases oxygen in the bloodstream. It is a way to interrupt the body's response to stress and promote a relaxation response instead. This strategy can be used before, after and *DURING* test taking!

Relax. When you are feeling anxious or stressed, one of the ways your body responds is with muscle tension. Progressive Muscle Relaxation (PMR) is a strategy that helps relieve that tension by completing a series of exercises in which you tense your muscles as you breathe in and relax them as you breathe out. PMR can also be used, anytime and anywhere!*

Promote Organization. Before your child begins to study, ensure that he/she has all of the necessary materials (i.e., pens, highlighters, note cards, books). Help your child group his/her study information into categories or test subjects. Organizing information before your child begins to study will allow him/her to spend more time with his/her nose in the books and less time searching for missing papers.

Break It Down. Work backward and help your child identify smaller content areas, within a test subject that he/she can focus on, one at a time. This will help your child feel less overwhelmed and make studying more manageable.

Encourage Time Management. Once your child has organized and identified the test content areas, help your child create a study schedule. Make sure to start studying early. Information is more easily remembered when it is studied for shorter periods of time over a longer time period rather than spending hours cramming for 1 or 2 days. Also, make sure to schedule in study breaks.

State-Dependent Learning. As much as possible, the environment in which your child studies should mimic the test environment. Help your child find a quiet place to study in your home or at the library. Have him/her sit at a desk or table instead of lying on his/her bed. Limit distractions including background noise or music. Use a timer and offer periodic breaks if your child's testing environment will be doing the same.

Remember the Bigger Picture. Children who experience test anxiety may easily forget how much the test grade counts

towards a final grade. Help your child put the test into perspective by highlighting their successes in other areas and how those achievements are linked to future goals. For tests which are used to help determine a child's future academic placement (e.g., SATs, ACTs, AP exams, etc.), make a list of ALL the other criteria (i.e., letters of recommendation, grades, extracurricular activities) that are also incorporated into applications. The longer the list, the easier it will be for your child to see his/her test score as one factor, out of many, that are used in this decision making process.

It is very common for students to become nervous or anxious when they must take quizzes and tests. By developing effective study skills and engaging in routine practice of relaxation exercises, many child are able conquer test-anxiety.

Jessica Collins, Psy. D.

Dr. Jessica Collins is a licensed PA psychologist. She earned her degree from La Salle University. She completed both her internship and fellowship at the Kennedy Krieger Institute and Johns Hopkins School of Medicine in Baltimore, MD, where she specialized in Pediatric Psychology.

- NOTE: original link to a script to Progressive Muscle Relaxation script is broken, here is one your Two Peds found.

Digging out splinters

It’s a sure sign of spring. Recently a mom showed me a splinter in her child’s finger (pictured above) from running about outside and falling on wood chips.

If a splinter is very tiny (too small to grab with tweezers,) seems near the skin surface, and does not cause much discomfort, simply soak the splinter in warm soapy water several times a day for a few days. Fifteen minutes, twice a day for four days, works for most splinters. Our bodies in general dislike foreign invaders and try to evict them. Water will help draw out splinters by loosening up the skin holding

the splinter. This method works well particularly for multiple hair-like splinters such as the ones obtained from sliding down an obstacle course rope. Oil-based salves such as butter will not help pull out splinters. However, an over-the-counter hydrocortisone cream will help calm irritation and a benzocaine-based cream (for kids over 2 years of age) will help with pain relief.

If the splinter is “grab-able”, gently wash the area with soap and water and pat dry. Don’t soak an area with a “grab-able” wooden splinter for too long because the wood will soften and break apart. Next, wash your own hands and clean a pair of tweezers with rubbing alcohol. Then, grab hold of the splinter and with the tweezers pull smoothly. Take care to avoid breaking the splinter before it comes out.

If the splinter breaks or if you cannot easily grab the end because it does not protrude from the skin, you can sterilize a sewing needle by first boiling it for one minute and then cleaning with rubbing alcohol. With the needle, pick away at the skin area directly above the splinter. Use a magnifying glass if you have to, make sure you have good lighting, and for those middle-age parents like us, grab those reading glasses. Be careful not to go too deep, you will cause bleeding which makes visualization impossible. Continue to separate the skin until you can gently nudge the splinter out with the needle or grab it with your tweezers.

Since any break in the skin is a potential source of infection, after you remove the splinter, wash the wound well with soap and water. Flush the area with running water to remove any dirt that remains in the wound. See our post on wound care for further details on how to prevent infection. If the splinter is particularly dirty or deep, make sure your child’s tetanus shot is up to date. Also, watch for signs of infection over the next few days: redness, pain at the site, or thick discharge from the wound are all reasons to take your child to his doctor for evaluation.

Some splinters are just too difficult for parents to remove. If you are not comfortable removing it yourself of if your child can’t stay still for the extraction procedure, head over to your child’s doctor for removal.

Now you can add “surgeon” to your growing list of parental hats.

Julie Kardos, MD with Naline Lai, MD

Before the Zika virus: A look back at Rubella and microcephaly

photo credit: Laikipia Pixabay.com

The Zika virus in the news these days reminds us of another microcephaly-causing virus which scourged our world in the not-so-distant past. In the years right before the Two Peds doctors were born (late 1960s), the virus Rubella routinely swept through the United States and the rest of the world. The airborne germ Rubella, just like the mosquito-spread Zika virus, caused most people just a mild illness that they usually never even knew that they had. After they were sick, they became immune to the virus. But when pregnant women contracted Rubella early in pregnancy, their unborn children sometimes ended up with microcephaly.

Microcephaly is a condition where a small, underdeveloped, or abnormal brain leads to a small head at birth. Many children with microcephaly have significant mental disabilities.

So what happened to Rubella? It's the R in the MMR vaccine. We give this vaccine to all children, first at 12-15 months, and again at 4-6 years of age. We vaccinate girls to protect their unborn fetuses when they are pregnant, and we also vaccinate boys. Although boys will not become pregnant, they can contract the disease and spread it to others who are pregnant. It is standard practice for obstetricians to test all of their pregnant patients for immunity to Rubella. If a woman is not immune, she is given the MMR vaccine after delivery to prevent coming down with Rubella during future pregnancies.

Because of the success of this safe vaccine, it is extremely rare to have child born with Congenital Rubella Syndrome and its accompanying problems. The syndrome not only included the mental impairments associated with microcephaly but also was associated with blood disorders, heart defects, deafness, visual impairment, developmental delay, and seizures. In the United States where the vaccine rates are high enough, no cases have been reported since 2004. In the rest of the world, cases still occur in countries with limited access to vaccines against Rubella. Approximately 100,000 cases of Rubella worldwide per year still occur according to the Centers for Disease Control.

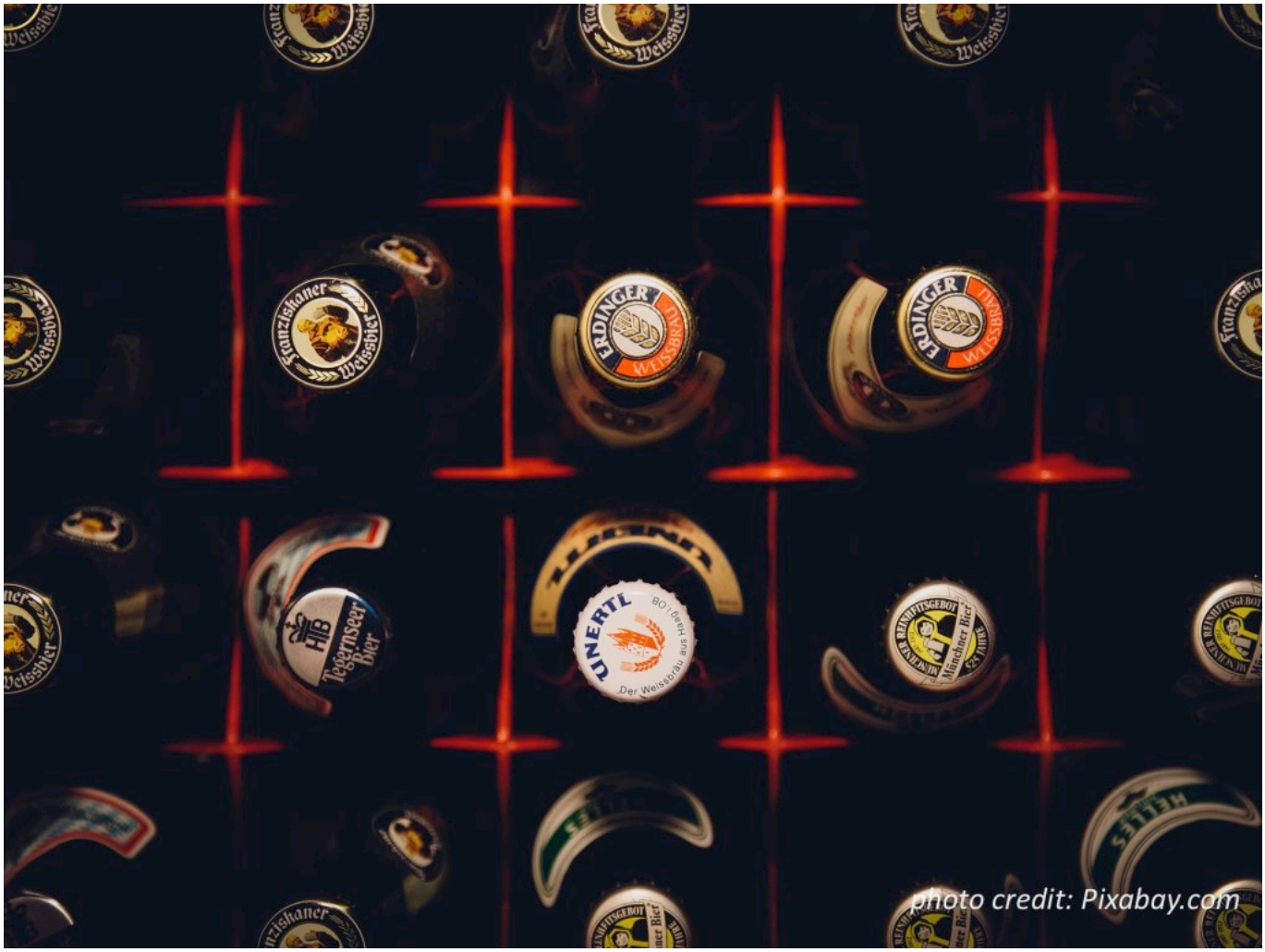
Scientists are working on a vaccine against the Zika virus because, as is often the case, preventing a disease is often easier, less costly, and more successful than attempting to cure it. For a basic explanation of how vaccines work, please see our prior post on this topic. Trials for a vaccine for Zika may begin as early as summer 2017.

But if we look at history, Rubella was once a dreaded virus too. Now, with the widespread use of a vaccine, although still dreaded, the rates of Rubella have dropped dramatically. Zika

hopefully will not be far behind.

Naline Lai, MD and Julie Kardos, MD

Binge drinking and college students update: what parents need to know



As your kids apply to college or return home from college for winter break, we urge you to keep in mind an alarming, yet

typical scenario which involves binge drinking that student health physicians encounter on a too-frequent basis—Drs. Kardos and Lai.

A 19 year old young man comes in to the Student Health Center very concerned because he had woken up that morning in an apartment in bed with a woman he did not know. He had been out with friends drinking at a bar (a frequent occurrence), vaguely recalls meeting a woman, but had so much to drink that he cannot even recall leaving the bar, let alone what happened afterward. His greatest concern is that he has no idea if he used a condom (he left before she woke up), and thus could have been exposed to HIV and other sexually transmitted infections.

Ironically, this student is worried about exposure to sexually transmitted diseases but not about the root of his problem: binge drinking. In other words, he is worried about sexually transmitted diseases but not about his drinking which caused his potential exposure to dangerous diseases.

Here is what Dr. David Turnoff, a career student health doctor since 2000 (and friend of Dr. Kardos) wants parents of college students to know about binge drinking in college students:

Although alcohol use is often considered a rite of passage for college students, it is also one of the major health risks for this age group. Alcohol-related health problems can present in a variety of ways and do not have to involve any signs of dependency. Among college-aged students, the most common manifestation of alcohol abuse comes from the consequences of binge drinking.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) reports the following **sobering** statistics regarding health risks directly attributed to alcohol use among college students between the ages of 18 and 24. These statistics* also serve as an important reminder that a person does not have to

be drinking to be adversely affected by alcohol abuse.

-1,825 college student deaths from alcohol-related unintentional injuries (including motor vehicle accidents)

-599,000 unintentional student injuries

-696,000 cases of student-on-student assault

-7,000 cases of sexual assault or date rape

-400,000 students having unprotected sex and more than 100,000 students too intoxicated to remember if sex was consensual.

The first 6 weeks of the first semester of college is an important predictor of first year academic performance and is an important window period to monitor for any significant changes in a new student's behavior and lifestyle habits. Parents can help by being aware of these issues and by being open to speaking with their children about the potential risks of alcohol use both before and during the college experience. A simple rule of thumb for parents is to **stay involved,** while still allowing their children the space necessary for learning, exploring, and maturing into adulthood.

If your child begins to exhibit unusual behavior, such as lower grades, mood changes, or a new unwillingness to talk to you, this behavior should prompt you to find out more.

Additional information is available at http://www.collegedrinkingprevention.gov/.

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*worse since Dr. Dave’s original post in 2010