Death of a music legend shines needed light on national crisis

The death of a favorite music icon is always unwelcome news, but the recent passing of Prince was particularly sad for a number of reasons. He was still quite young (he would have turned 58 on June 7) and one gets the sense that he had much more to contribute to the musical world. Also, his death apparently was not the result of illness but rather an overdose of a powerful opioid painkiller called fentanyl.

Here in Minnesota, the media coverage of Prince's death may continue a bit longer than elsewhere, but we know that eventually this entire episode will be relegated to history as our society moves on. When that happens, I hope we don't lose sight of the tragic pattern into which the death of Prince seems to fit all too clearly.

According to CDC, more than 14,000 people died from overdoses involving prescription opioids in 2014. Just recently, the Minnesota Department of Health released new data showing drug overdose deaths, including those involving unintentional deaths and suicides, jumped 11 percent in the state from 2014 to 2015. This increase followed a long-term trend of rising deaths in Minnesota due to drug overdoses. Importantly, more than half of Minnesota's 572 drug-related deaths in 2015 were related to prescription medications rather than illegal street drugs. The leading drug category associated with deaths? Opioid pain relievers, which claimed 216 lives.

Of course the impacts go far beyond death statistics. Many more people have had their lives turned upside down by addiction and its repercussions. Several years ago, I saw a good friend's life take a tragic turn after opioid medication was prescribed for pain management. One could make the argument that this problem has roots in a societal overreliance on pharmaceutical quick fixes and a culture that fails to properly value, promote and protect mental health, but that is a discussion for another time.

The death of Prince sparked a brief but important cultural conversation about the way we use and misuse painkillers in America. While it remains to be seen how much impact this attention has long term, it has been good to air out the legitimate concerns many people have about opioids and their role in treating pain. For those of us in public information and
States Join The Fight Against Prescription Opioid Abuse

By Brad Christensen

Many states have joined the national battle to reverse the long-term trend of rising opioid overdose deaths, caused largely by an enormous increase in the number of prescription pain relievers written during that time. Since 1999, the amount of prescription opioids sold in the U.S. annually has nearly tripled, while deaths from prescription opioids also have tripled. Seventy-eight Americans now die every day from an opioid overdose.

Seeking to turn the tide against this frightening trend, states have reached out to the public and healthcare professionals with a number of interesting campaigns.

Alabama, for example, has launched a “Smart and Safe” campaign involving 23 partners. Massachusetts has put forth many initiatives, including a recent partnership with dental schools. Pennsylvania’s top health official made a media appearance at a Walgreens pharmacy to promote the availability of the opioid overdose antidote naloxone. Ohio has kicked off a naloxone availability campaign and is advocating passage of opiate reform legislation. These are just a few of many recent examples of states stepping up to quell of overuse prescription pain killers and the deaths they cause.

Alabama’s “Smart and Safe” campaign is led by that state’s Medical Association

Number of Deaths from Prescription Opioid Pain Relievers in USA

![Bar chart showing the number of deaths from prescription opioid pain relievers in USA from 2001 to 2014.](chart_image)

Source: National Center for Health Statistics, CDC Wonder
President’s Message, continued from page 1

communications, the challenge now is to help our organizations and leaders leverage that energy and attention in order to make progress in the important work of saving people from the vicious cycle of pain, addiction and chemical dependency that tears down the lives of too many of our friends and family members.

In this edition of the NPHIC newsletter, you can read about some inspiring examples of people and organizations trying to reduce the toll opioids are taking on our communities and our loved ones. These efforts deserve our attention and praise, and we can build on this work as all of us in our own jurisdictions attempt to help people struggling with this 21st century epidemic.

Fight Against Opioid Abuse, continued from page 2

and includes the Alabama Department of Public Health, Business Council of Alabama, Lamar Advertising, and many health-related organizations and societies. This 30-second PSA relies on the popularity of college football in that state to drive home its message. It features Crimson Tide team physician Jimmy Robinson, MD, and Auburn Tigers team physician Mike Goodlett, MD. They say: “Our state has a legacy of outstanding football programs . . . Unfortunately, we’re also near the top of a more notorious list of abusers of prescription drugs. A new initiative – Smart and Safe – encourages smart and safe prescription use, storage and disposal of medications.”

In Massachusetts, a tough new opioid law went into effect on March 14. That law enables patients to direct pharmacies to dispense less than the fully prescribed quantity of an opioid. It also establishes a maximum seven-day supply on prescriptions for opioids when issued to an adult for the first time, and sets a maximum seven-day supply on all opioid prescriptions for minors.

Then in May, Massachusetts announced a first-in-the-nation set of dental education core competencies for the prevention and management of prescription drug misuse. That effort, supported by the state’s three dental schools and the Massachusetts Dental Society, will require that state’s undergraduate and advanced graduate dental students to receive “enhanced training in primary, secondary and tertiary prevention strategies regarding prescription drug misuse,” according to this news release. The action mirrors an initiative announced last November with the state’s Medical Society for enhanced training of medical students for the prevention of prescription drug misuse. The actions are among the more than 60 recommendations in the Governor’s Opioid Working Group’s Action Plan. That plan calls for requirements for “all practitioners to receive training about addiction and safe-prescribing practices.”

In Pennsylvania, Physician General Rachel Levine recently toured a pharmacy at Walgreens’ flagship store in Philadelphia to note that she has signed a standing order that serves as a prescription for all Pennsylvanians to access naloxone at their local pharmacies. Pennsylvania State Police also have been equipped with naloxone for use in overdose emergencies.

The “Keystone State” has not limited its activities to naloxone. Most recently — starting June 24 — all opioid prescriptions have been required to be reported to the Pennsylvania Prescription Drug Monitoring Program within 72 hours of being dispensed. Additionally, Secretary of Health Karen Murphy joined senior health officials from three other states (Alaska, Rhode Island and Vermont) and heads of many professional organizations to sign this petition. The petition

Continued on page 4
Imagine “The Big One” has hit the Pacific Northwest, where an earthquake and subsequent tsunami devastate the coastal communities of Washington and Oregon. That’s the extremely complex disaster scenario, called Cascadia Rising, exercised recently by U.S. military and federal, state, tribal, and local partners from Washington, Oregon, and Idaho.

The purpose of the Cascadia Rising 2016 exercise was to test the abilities of joint disaster operations and participation of Emergency Operation Centers (EOCs) and Joint Information Systems—at all levels in response to such a catastrophe. The four-day exercise was based on the premise that a 9.0 magnitude earthquake hit just 95 miles off the Oregon Coast, completely rupturing the 700-mile Cascadia Subduction Zone fault line, and triggering an ensuing tsunami. It provided officials at all levels—civilian, public health, counties, metropolitan areas, and the military—the opportunity to work together responding to such a disaster. Nearly 20,000 participants took part in the readiness drill.

The projected area of impact from such a Level-1 catastrophic event would encompass 140,000 square miles within Oregon, Washington, and British Columbia, Canada. With more than eight million people living and working within this area, it is estimated that more than 10,000 deaths and 30,000 injuries would result. Devastation would be widespread, with many roads, bridges, houses, and buildings severely damaged or destroyed. Phone and

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**Fight Against Opioid Abuse, continued from page 3**

urges the federal government to remove from hospital-patient surveys questions relating to how well a person’s pain was controlled and whether hospital staff did “everything they could to help you with your pain.” Petitioners believe the questions have the unintended consequence of encouraging aggressive opioid use in hospitalized patients and upon discharge. “As health professionals we have a duty to relieve pain and suffering, but these existing pain management rules are ultimately causing harm to patients and fueling an addiction epidemic,” says Dr. Murphy.

In Ohio, a bill to limit high-volume opiate prescriptions has passed the state Senate and now is moving through the House. Based on recommendations of the Governor Kasich’s Cabinet Opiate Action Team, S.B. 319 would put a 90-day cap on the total days’ supply for any opiate prescription, and it would invalidate any opiate prescription that isn’t filled shortly after it was written. It also would increase state Board of Pharmacy oversight of healthcare providers who distribute opiates to patients from their offices. Additionally, pharmacy technicians would undergo registration by the Pharmacy Board. Only pharmacists are registered currently, but investigations have found that pharmacy technicians are responsible for more than a third of all drug thefts. An editorial backing the bill is here.

The Governor’s Opiate Action Team also offers these initiatives covering prescribing guidelines, K-12 resources, avoiding overdose deaths, treatment and recovery, and much more. The state also launched a public awareness campaign in May to promote the life-saving drug naloxone in 15 counties that account for 80% of Ohio’s fentanyl-related overdose deaths. Fentanyl, in its prescription form, is estimated to be at least 30 times more potent than heroin. The number of fentanyl-related overdose deaths in Ohio jumped from 84 in 2013 to 503 in 2014. The awareness campaign includes two billboards, a radio spot, and mobile and digital ads.
Zone earthquake and tsunami happen,” says Idaho Homeland Security Chief Brad Richy.

“With years of planning behind it, Cascadia Rising was an incredibly complex and inclusive exercise involving thousands of responders from all three states, including military, state and local officials,” says Tom Shanahan, Region 10 NPHIC board member from Idaho. “I was amazed how quickly and seamlessly all the different agencies and responders integrated for a coordinated response at every level. We definitely identified areas we can improve, but overall, it was very reassuring to see the expertise and determination of everyone who participated.”

Although all 14 response core-capabilities were tested, six primary core-capabilities comprised the overarching objectives for the exercise. They encompassed operational public information and warning, public health and medical services, mass-care services, situational assessment, operational coordination, and critical transportation.

Lacerations, broken bones, hypothermia, and biological contamination were a few of the challenges faced by the Oregon National Guard’s team of explosives and enhanced-response experts. “This was an excellent opportunity to put our skills to use and work with multiple partners,” says the team’s commander, Lt. Col. Mike Moffit.

Washington and Oregon concentrated on life-saving and life-sustaining response operations, including hazardous materials response, while Idaho prepared for 40,000 evacuees. “While Idaho is not inside the expected physical impact area, we are testing our ability to support our neighbors should a Cascadia Subduction Zone earthquake and tsunami happen,” says Idaho Homeland Security Chief Brad Richy.

The last major earthquake and tsunami that struck the Cascadia Subduction Zone fault line was in 1700. Scientific data indicate that an earthquake with a similar magnitude to the one involved in the exercise occurs along this fault every 200 to 500 years. Since disasters disregard state boundaries, the exercise paid dividends from the insight gained in testing plans, working together, and sharing resources to be better prepared for whatever the future holds.
Hawaii Battles Rat Lungworm Outbreak

By John Silcox, CCPH

When mainlanders think of Hawaii, they often think of beautiful blue waters, hula dancers, destination weddings, Pearl Harbor or pineapples.

Few of us – including public health professionals – have ever heard of, let alone associate, this island paradise with rat lungworm. Yet, Hawaii has become the epicenter of an outbreak of this potentially debilitating disease caused by a parasite.

Rat Lungworm, *angiostrongylus cantonensis*, is carried by rats and transferred to humans by slugs, snails and flatworms. First, infected rodents pass it in their feces. Snails, slugs and other animals eat the feces and get infected. Certain animals such as freshwater shrimp, crabs and frogs, also can become infected with larvae of the parasite, although not as likely.

Humans become infected when they intentionally or unknowingly ingest raw or undercooked slugs or snails (or parts of them) or food contaminated by the slugs or their slime. It is not passed from person to person.

In humans, the parasite travels through the bloodstream to the brain where it can wreak havoc on the central nervous system.

For some people, it is only a mild flu-like illness and they recover within a few weeks; in others the symptoms can be much more severe and long-lasting. Patients sometimes suffer from debilitating nerve pain, hallucinations, vision problems and short-term memory loss, even two or three years later. Some cases have resulted in permanent disability, coma and even death.

Even for a seasoned disease investigator like Marlena Dixon, the outbreak has been something of a conundrum. “It’s definitely kept me on my toes,” says Dixon, an epidemiological specialist with the Hawaii Department of Health.

The disease was first discovered in China in the 1930s, but has since been found in other parts of Asia, Australia, the Caribbean, and even the southern United States. While the parasite has existed in Hawaii for years, cases started to rise about a decade ago with the introduction of an invasive species of semi-slug (*parmarion martensi*), native to Southeast Asia.

Hawaii’s tropical climate has allowed the parasite to proliferate at an alarming rate in the slug population. In the Hawaii Island district, where Dixon works, the semi-slug is very numerous and nearly 73 percent of specimens are found to be infectious.

Since 2007, when tracking began, there have been 55 human cases—including six so far this year. Dixon investigates nearly all of the cases, which involves interviewing the patient and performing an environmental assessment to determine the source.

In truth, most people don’t know how they got it.

One of the biggest mysteries, in fact, is why the bulk of the cases are from the Big Island, particularly the east side. “We just don’t know,” Dixon says.

Until science can answer some of these questions, personal diligence is the key to prevention and early diagnosis and treatment is important in recovery, she says.

But diagnosing the disease can be tricky, in part because most physicians are not familiar with it and there is not a readily available blood test, Dixon says.

The way it is commonly diagnosed is through the testing of spinal fluid. Only those ill enough to visit an emergency room are likely to submit to testing. So there are many cases that are never identified.

continued on page 7
For now, Hawaiians are being warned not to eat raw or undercooked snails or slugs (and handle them with gloves) and to thoroughly inspect and wash fruits and vegetables, especially if eaten raw. But even that advice is not without some risk; the slugs are known to get into compost bins, and trash cans, crawl under tarps and weed cloths, and even into water systems and catchment tanks.

Since a slug can be as small as a centimeter in length, it requires visually inspecting produce like a head of lettuce, leaf by leaf and running it under a constant stream of water.

A small piece of slug can contain a thousand parasites, and even after the slug dies the parasites can survive.

The University of Hawaii Sea Grant College in Maui is recommending the use of catchment filters, or switching from rainwater to municipal water sources for cooking and preparing foods.

While the annual case numbers might seem relatively low (less than 6 per year), there is fear that the disease could spread to livestock or affect the food supply in other ways. Already there have been reports of horses becoming infected, and there is concern that cattle could be next.

Survivors of the disease have been some of her strongest advocates, Dixon says, but getting the rest of the population to pay attention has not been as easy.

Partnering with the College of Pharmacy at the University of Hawaii at Hilo, the Health Department has put on public forums and conducted research into treating the disease. Dixon herself has given many interviews, written articles, met with farmers’ markets and food establishment operators, posted fliers in remote areas, and answered many phone calls.

Doctors and medical centers are starting to recognize it as a serious issue, and the Governor’s Office recently convened a multidisciplinary task force to address the problem.

“Establishing a joint task force with local experts in the medical field and leaders in government will produce a set of best practices that will be used to target rat lungworm disease not only on Hawaii Island, but on a statewide scale as well,” said Will Okabe, East Hawaii Liaison to the Office of the Governor, in a prepared statement.

“There is no specific treatment yet identified for this disease, so finding the best way to prevent its spread and educate the public is crucial.”

Dixon is hopeful that this meeting of the minds will lead to greater awareness and stronger scientific research that might make rat lungworm a thing of the past.

Or at least get people back to thinking of those sandy beaches.
Looking For Zika Communication Resources?

By Brad Christensen

A repository of state, territorial and national Zika virus communication resources has been created and is now available at www.nphic.org, in the Members area. The repository contains links to all state and territorial Zika webpages, as well as resources from the CDC.

Need ideas for a radio spot? Check out Florida’s Zika mosquito radio PSAs, for example. Or take a gander at Texas’s Zika Communications Toolkit, which offers radio and TV PSAs, plus much more. Mississippi offers great advice for departing and returning travelers. So does Georgia, with banners at Atlanta Hartsfield-Jackson Airport.

New Jersey has developed a “community education toolkit for health educators.” Alabama offers a “Skeeter Beaters” coloring book that urges children to join the “Zika virus Swat Team.” Delaware has a nice flier aimed at pregnant women. Arizona’s webpage includes information about “The Great Arizona Mosquito Hunt.” These are just a few examples of resources from state health departments. So, whatever you’re looking for, from news releases and FAQs to posters and brochures, it’s there in the repository.

Multiple CDC resources are available, too, grouped for specific audiences — general, pregnant women, and healthcare providers. CDC’s offerings include video resources, fact sheets, posters, infographics, and much more. Click here and you’ll be directed to NPHIC’s Zika communications repository.

The repository isn’t the only recent Zika item of interest to public health communicators. Other developments include:

- CDC issuance of a Draft Interim Zika Response Plan. The plan specifies CDC and state response actions for the first locally acquired cases of Zika infection in the continental U.S. and Hawaii. It outlines scenarios for defining and communicating a “Zika Transmission Area.” A section on communication, which begins on page 28 of the document, contains a table of communication activities by risk category. It notes that “agency notifications, community outreach, and media outreach efforts should be handled by state partner staff; any activities initiated by CDC should be approved by state and local personnel.” It adds: “State and local authorities should identify in advance local spokespersons and subject matter experts who will be responsible for public communication.” Other sections cover such areas as Zika CERC deployments, surveillance, vector control, pregnancy and birth defects; and blood safety and availability.

- The challenges of communicating about the Zika virus were discussed in this article in PR Week. Several health officials are quoted, including NPHIC Vice President Carrie Williams, director of media relations for the Texas Department of State Health Services. The article details the overall strategies and methods in Texas, such as dedication to transparency, foresight and consistency, and the use of news media, social media, a special Zika website, Spanish translations, partnerships, etc.

- Updated Aedes mosquito maps from the CDC show the estimated range of the potential Zika virus carriers in the U.S. The maps depict areas where Aedes aegypti and Aedes albopictus mosquitoes are located or have been previously found. Aedes aegypti mosquitoes are the predominant carrier of Zika, Dengue and Chikungunya viruses. The maps, however, do not show how many mosquitoes are in each state or region, and they offer no indication whether mosquitoes in these areas are or will become infected with the viruses.

continued on page 9
You can build your own Zika prevention kit courtesy of the CDC. The kit’s materials include a bed net, insect repellent, permethrin spray, standing water treatment tabs and condoms. The materials are listed in English, Spanish, Chinese, Samoan, Marshallese, Fijian, Korean, Tagalog, and Tongan.

The Association of State and Territorial Health Officials has published Top Questions on Zika: Simple Answers. The document provides soundbite-style messages on more than 30 frequently asked questions related to Zika prevention and response activities. It is revised periodically, and the most recent updates include questions related to sexual transmission, federal response plans, and screening guidance.

Pregnant?
Warning: Zika can cause microcephaly and other severe brain defects.
There is no vaccine to prevent Zika virus infection.

Protect yourself from mosquito bites:
- Use insect repellent when outside.
- Wear long-sleeved shirts and long pants.
- Use mosquito-proof your home.
- Wear protective clothes.
- Use screens on windows and doors.

Mosquito-proof your home:
- Use screens on windows and doors.
- Use air conditioning when available.
- Keep mosquitoes from laying eggs.

For more information:

Keep mosquitoes away!
- Sometimes mosquitoes make people sick.
- Wear long sleeves and pants and socks.
- Wear bug spray.
- Don’t let these bad bugs bite you.

These countries are far away, but the same kind of mosquitoes live in Georgia.
Open Invitation To Become A Mosquito Sleuth

By Polly Carver-Kimm

A mosquito tracking project that began in 2014 is getting renewed attention due to the threat posed by the Zika virus. The Invasive Mosquito Project began as an initiative to pair high school teachers and students with mosquito-control and public-health professionals.

“People have to be part of the solution and this helps put the ‘public’ back in Public Health,” says Lee Cohnstaedt of the Invasive Mosquito Project team. “Also, this project was really driven by the high school students and a very skillful Masters student that work in the Cohnstaedt lab at the USDA. All but one has since graduated and are in college, but we still want to promote STEM education and this is the best way to introduce kids to science that is relevant to them. It works because students and teachers love the project. We hope the longevity of the project allows students to look at long-term change using data past classes collected.” (STEM is an acronym for Science, Technology, Engineering and Math.)

Invasive Mosquito Project monitoring generally consists of trapping mosquitoes and determining the types of species present. Only a few mosquito species are able to transmit specific pathogens; therefore, transmission is possible only if a vector-competent mosquito species is present. Using mosquito monitoring, scientists can identify the species composition and determine the risk of disease transmission in an area. The more mosquitoes trapped and counted, the better the chance of detecting a vector-competent species in a region.

Participants place cups containing water-submerged germination paper and labeled with the collection location, collector’s name and date of placement around their homes. The cups are monitored daily to check for water evaporation or spillage. After a week or two, the germination paper and water are checked for eggs. Eggs that are discovered are examined, allowed to hatch, and then the resulting mosquitoes are placed in a freezer. The dead adult mosquitoes are then shipped off to the USDA for analysis.

Although the project’s focus began with and remains on students, it has expanded to encourage everyone to participate. Cohnstaedt calls them “citizen scientists” and a lot of us are apparently interested in becoming one. “The response has been incredible. Lots of people have e-mailed us and are interested in participating,” says Cohnstaedt. “They range in age from 10 years old with their parents to 89-year-old retired couples. We hope schools are picking it up for their fall curriculum and, based on the number of queries, it appears both middle school and high school groups are doing the project.” He adds that participants are welcomed from around the world.

Though Zika-transmitting Aedes albopictus and Aedes aegypti are getting a lot of attention, Cohnstaedt says the project certainly isn’t limited to those species. He says all mosquitoes that are pests and possible vectors of humans and animals are being mapped.

Cohnstaedt adds that all project participants are urged to remember safety first: “Wear long sleeves and repellents when mosquitoes are around. Also, don’t leave the cups out too long or they start to breed mosquitoes!”

For more information about the Invasive Mosquito Project, visit www.citizenscience.us. To learn how to participate, e-mail invasive.mosquito.project@gmail.com.
Michigan Fights Big Jump In Chickenpox Cases

By Kimberley Conrad Junius, CCPH

The Michigan Department of Health and Human Services (MDHHS) issued a press release on May 11 alerting the public that by the end of April, there were 57 percent more chickenpox cases statewide than at the same time last year. Then, that April count of 239 jumped to 331 by June 25.

“We don’t know if it’s a significant change, but it’s not the direction we want to be headed,” says Joel Blostein, an epidemiologist focusing on vaccine-preventable diseases at MDHHS. “The overall trend is higher compared to previous years when we saw an overall decline.”

Blostein and his colleagues, Public Information Officer Jennifer Eisner and Director of Immunizations Bob Swanson, issued the press release to encourage residents to get vaccinated. CDC recommends two doses of chickenpox vaccine for children, adolescents, and adults.

Are cases higher because fewer people are getting vaccinated? They don’t if cases are higher because fewer people are getting vaccinated, but “we have some thinking in that direction,” says Blostein. “Herd immunity is a concept that is central to the discussion. If we do not have a high level of immunity in the population, we are at risk for outbreaks.”

Chickenpox was “very common prior to the introduction of the vaccination program 20 years ago,” he notes. The varicella vaccine was licensed for use in the U.S. in 1995. Up to that point, 4 million people got chickenpox every year, more than 10,000 were hospitalized, and 100 died. Since then, the numbers of cases, hospitalizations and deaths have decreased dramatically. (See the CDC infographic below).

One challenge is that chickenpox is less familiar than before People may not remember or know that chickenpox can be a very serious disease, they say. “Some people are able to get through the disease with mild discomfort; but others — not so lucky — have serious side effects,” says Blostein, noting that secondary bacterial infections from scratching the rash, blood infections (bacterial sepsis), pneumonia, or scarring can occur.

“Our strategy for getting the message out there has been less for the public and more for the health care community,” says Blostein. “That’s because of the decline in cases and because it’s a less familiar disease than it used to be. It’s not something where we can rely on a clinical diagnosis. We have to confirm with laboratory testing; testing that is readily available.”

“In Michigan, we want to assure that as many individuals are vaccinated as possible and that we don’t miss any opportunity to vaccinate,” says MDHHS Public Information Officer Jennifer Eisner.

When communicating to the public, as the recent press release did, Eisner adds, “We acknowledge that we know all parents want to do what’s best for their children. We encourage people to get vaccinated, and those that do have questions or concerns about the safety of vaccines, to talk to their doctors.”

For more information, visit the Michigan Department of Health and Human Services website at http://www.michigan.gov/mdhhs.
New Tick-Borne Disease Now On Radar In Arizona

By Laurie Boston, CCPH

In the last two years, the tick-borne disease Rickettsia parkeri rickettsiosis (R. Parkeri), has been identified in two people bitten by Amblyomma triste ticks within the mountainous regions of southern Arizona. So this is news?

It is if you consider all previously reported cases of R. Parkeri in the U.S. have been linked to transmission by the Gulf Coast tick (Amblyomma maculatum) from areas along the East Coast, inland to Oklahoma and Kansas, and along the Gulf of Mexico. Southern Arizona is a considerable distance from the known geographical range of this vector and the habitat is significantly different from the coastal uplands and tall grass prairies it has been associated with in the past.

“Only 40 cases of R. Parkeri have been reported in the U.S. since the disease was first recognized in 2004 and the tick responsible for these two cases was not known to be in this area until recent years,” said Dr. Cara Christ, director of the Arizona Department of Health Services.

R. Parkeri is transmitted to humans and animals by the bite of an infected tick. It is similar to Rocky Mountain spotted fever (RMSF), but tends to be less severe. Symptoms include fever, headache, fatigue, muscle aches, rash, and an identifiable, blackened or crusted scab at the site of the tick bite, known as an “eschar.” Prompt treatment with antibiotics can control the disease.

As seen in the photo (not scaled to size), the Gulf Coast tick has eight legs and is approximately 6mm in size. So how does such a small critter travel such large distances?

A study, published by Oxford University Press, by Christopher E. Paddock and Jerome Goddard in 2015, may provide some clues to this mystery. It states that migrating birds and white-tailed deer are capable of transporting these vectors who attach securely to their hosts. A conclusion from the study indicates that the geographical areas once associated with this tick species are not fixed and may expand or diminish in relatively short periods of time.

Because many questions still remain, this interesting phenomenon provides the basis for fascinating areas of future study to provide awareness and reduce the risk of disease to anyone working and recreating in southern Arizona.

However, more practically, it serves as a great reminder for us to increase our awareness of the ticks that exist in the areas we live, work, or play and the times of year they are most active. We know that populations of ticks may be found outside these noted areas, but it is our responsibility to take precautions for these known areas of risk.

If you do find a tick attached to your skin, don’t panic. Much folklore exists about removing a tick, but a plain set of fine-tipped tweezers are the key to safe removal. If you develop a rash or fever within several weeks of removing a tick, see your medical provider. Visit CDC for step-by-step instructions on safe tick removal and other instructional information at http://www.cdc.gov/ticks/index.html.

[Special thanks to CDC’s William L. Nicholson, Ph.D., chief, Pathogen Biology and Ecology Activity, Rickettsial Zoonoses Branch for providing links to research and documentation for this article. –Ed.]

An “eschar” scab on a person’s leg.
Will ‘Screen Free’ Lead To Fat Free Kids?

By Polly Carver-Kimm

According to the latest data from the CDC, 8.4 percent of American children aged 2 to 5 years are obese. But in Louisiana, nearly 13 percent of children in that age group are obese. Therefore, public health leaders in that state are partnering with the Louisiana State University System to find new ways to trim the overweight rate.

Most research has focused on obesity prevention in schools rather than child care facilities; however, national research has found about 60 percent of children less than 5 years of age are in some type of child care for an average of 29 hours per week. Louisiana decided to focus on this setting — child care — as an opportunity for obesity prevention intervention and research.

The Louisiana Department of Health and Hospitals (LDHH) has partnered with the Louisiana Department of Education, LSU’s Pennington Biomedical Research Center and the Tulane School of Public Health on a project to test strategies on going “screen-free,” meaning little or no time watching TV or using an electronic device. The group is working with six child care centers on the project, which is funded by the Association of State Public Health Nutritionists (ASPHN). “We provided centers with posters, newsletter content, lesson plans for older children (3-4), and held a parent meeting,” said Leslie Lewis, the obesity prevention program manager for LDHH.

“We used an iterative and collaborative process with child care center directors with the goal of creating resources for the centers that will help them meet the new Louisiana Department of Education regulations regarding screen time (no screen time for children younger than 2 and less than 2 hours a day for 2-5 year olds),” says Amanda Staiano, Ph.D., assistant professor-research in the Pediatric Obesity and Health Behavior Laboratory at LSU’s Pennington Biomedical Research Center. “We first sat down with each of these centers’ directors to review their electronic device policy and worked with them to ensure the language aligns with the new standards and reflects the center’s mission,” adds Staiano.

Two signs were created for centers to post. Based on feedback from the directors, one says “We’re a screen free facility” and the other version reads “We’re a smart screen facility” (meaning screens are used for educational purposes and screen time meets the guidelines). The directors had input on style, colors, and size of the signs. “Next, we worked with the directors to develop parent-engagement resources,” notes Staiano. “Specifically, we created two newsletter blurbs - one brief and the other lengthier - to describe the negative consequences of excessive screen time for children and to provide alternative ways to spend time. This text is given to the centers for e-mails or fliers to reach parents. We also developed a lesson plan for parents to deliver at parent meetings regarding the benefits of reducing screen time.”

Finally, curriculum was developed to educate preschoolers on limiting their own screen time and choosing active alternatives (using developmentally appropriate language). These resources were provided to the six pilot centers and will be available in print and online this fall for all child care providers across Louisiana.

Though relatively new, the program already is expanding. “We’ve received additional funding from ASPHN. With those funds we plan to do more in-depth interviews with additional center directors to determine current practices, knowledge, and attitudes,” says Lewis. “In addition, Pennington Biomedical Research Center hosts a childhood obesity conference every year that brings in 400 to 500 professionals. This year’s theme will be...”

continued on page 15
Toxic-Shellfish Monitoring A Year-Round Challenge In California

By John Silcox, CCPH

California’s marine biotoxin monitoring program began in 1927, making it perhaps the earliest on record in the United States.

But some historical accounts suggest that monitoring for toxins in shellfish goes back much further in the state, says Gregg Langlois, a senior environmental scientist with the California Department of Public Health (CDPH). Legend has it that California’s Pomo Indians used to post sentries along the shoreline in order to spot bioluminescence in the surf, a sign that the shellfish may be toxic to eat, he says.

Today’s monitoring techniques are a little more sophisticated, but the principal is basically the same — to protect the public from potentially lethal levels of biotoxins that may be present in shellfish gathered along the California coast.

Paralytic shellfish poisoning (PSP) toxins and Domoic acid (DA) are two naturally occurring marine toxins produced by tiny single-celled plants called phytoplankton that form the basis of the marine food chain. These plants usually occur at very low concentrations and pose no problems. However, when the algae “blooms,” the concentration of toxin increases dramatically.

The increased amount of algae becomes a greater food source for marine creatures that filter their food from seawater. Mussels are a particularly high risk because they can concentrate these toxins very quickly. The more toxic algae the mussels eat, the more biotoxins they accumulate.

Biotoxins do not appear to harm the shellfish, but people or predatory animals eating them can become poisoned. Cleaning or cooking the shellfish does not destroy the toxins, and there is no known antidote.

In mild cases, symptoms can include vomiting, diarrhea, abdominal cramps, headache and dizziness. But the toxins can be fatal if consumed in high doses, and death has been known to occur within 30 minutes of eating poisonous shellfish.

Because the algae blooms that produce high levels of the toxins in plants can occur at any time, California maintains a year-round monitoring program for both sports harvesting and commercial seafood.

Like other states, California’s program monitors for both toxins in shellfish, as well as for the phytoplankton species that produce these toxins. And it seems to be working.

California hasn’t had a severe illness from PSP since 1991 or a death since 1981, and no human cases of DA poisoning have ever been reported.

But that success, Langlois says, is due in large part to the efforts of a vast network of volunteers — including dozens of coastal county health department staff, university researchers, citizen scientists and just plain citizens — who collect the shellfish and plankton samples for analysis at the State Public Health Laboratory in Richmond, Calif.

Since the biotoxins do not affect the shellfish’s appearance or behavior of in any way, the only way to tell if shellfish are toxic is through testing.

Based on that testing, warnings are issued and quarantines established as needed for recreational and commercial shellfish harvesting.

An annual quarantine for mussels is normally in effect from May 1

continued on page 15
Toxic Shellfish, continued from page 14

through October 31 – the period when mussels are most likely to accumulate PSP toxins – for the entire coastline, stretching from the Mexican border all the way north to the Oregon border and including all bays, inlets and harbors.

However, CDPH may begin the quarantine early, or extend it, if monitoring results indicate the presence of dangerous levels of biotoxins.

CDPH will also declare special localized quarantines whenever necessary, and these quarantines are sometimes extended for other bivalve shellfish, such as clams, oysters and scallops.

To keep sport harvesters and the public informed, CDPH regularly issues health advisories and posts monthly reports on its website. It also operates a biotoxin information line in which callers hear a recorded message with the most current updates and marine toxin activity or can leave a message to request more information.

Although commercially-grown shellfish are generally exempt from the quarantines, state and federal agencies heavily regulate the aquaculture industry and certify the seafood as safe in conformance with the National Shellfish Sanitation Program, Langlois says.

As California’s indigenous people once observed, bioluminescence can be a sign of a toxic algae bloom that may indicate poisonous shellfish. But it is not a method that should be trusted, Langlois says.

It doesn’t take a visible bloom for dangerous levels of toxins to build up in shellfish. And while bivalves like mussels can purge the toxin relatively quickly once a bloom subsides, it can be several months or longer before other creatures feeding on the phytoplankton are safe to eat again.

For example, CDPH issued a warning about Dungeness and Rock crabs caught in waters along the central and northern California coast last November due to detectable levels of domoic acid and parts of the ban are still in effect.

So until there are better predictive tools for these marine events, year-round monitoring of the California coastline will continue to be the prudent way to keep the public safe, Langlois says.

More information on California’s marine biotoxin monitoring program can be found on this website.

Fat Free Kids, continued from page 13

early childhood, so we will have a presence at that meeting.”

“We are examining the possibility of launching a texting program for parents of preschoolers to provide them with ‘life hacks’ to promote physical activity for their families,” says Staiano. “Also, I lead a study together with the Mayor’s Healthy City Initiative called Pause & Play (funded by the NIMHD). This study is examining childcare centers’ policies and practices related to screen time and physical activity. We have randomly selected 10 centers and are observing classroom practices and children’s physical activity and screen time both at childcare and at home. This will provide important data that we can use for creating future interventions.”

Too much time sitting in front of the screen has been linked to poor school performance, childhood obesity and attention problems. Louisiana’s initiative seeks to improve the health of its youngest residents by encouraging more time moving and less time sitting – a goal that could reduce childhood obesity in that state now, while setting the stage for a generation of good health.

40% of children in Louisiana are overweight or obese.
Wisconsin Toolkit Tackles Childhood Lead Poisoning

By Kimberley Conrad Junius, CCPH

Flint, Mich. may have captured the recent headlines, but lead toxicity in children is a national problem. Approximately half a million young children in at least four million U.S. households have elevated blood-lead levels, according to the CDC. The Wisconsin Department of Health Services (WDHS) has developed an outstanding communications toolkit titled “Lead-Free Kids for a Healthy Future.” Created for Lead Poisoning Prevention Week last October, the kit can be used as a resource now to raise awareness of the dangers of lead, or in planning for this October’s observance.

The toolkit contains a wealth of ideas to engage the education community, create a social media campaign, plan a community project, host a training event, and reach out to the media. Click this link to access the toolkit.

“Wisconsin ranks in the top 10 states that have the highest number of children that are lead poisoned,” says Reghan Walsh, a public health educator with that state’s Childhood Lead Poisoning Prevention Program. Walsh and her colleague, Kristi Tennie, from Wisconsin’s Asbestos and Lead Certification Program, managed the development of the toolkit.

Listen to your stakeholders and pay attention to best practices
Walsh and Tennie say they listened to stakeholders, paid attention to best practices, were open to involving a variety of people, and had to be creative with limited resources. What they developed is a very simple communications toolkit template that can serve as a model for lead or any other topic. Many of the ideas came from an education committee comprised of about 50 state and local partners, Walsh notes.

Since lead impacts a child’s brain development, intelligence and ability to learn, the education community (principals, school boards, teachers and teaching assistants, school nurses, social workers and psychologists, and Parent Teacher Associations) has a critical interest in helping prevent lead poisoning. Ideas for how to engage the education community, such as accessing the Wisconsin Blood Lead Registry to get students’ blood lead histories, and referencing this “Blueprint for Action” from the National Center of Healthy Housing, were informed by educators themselves, and by Walsh’s involvement in a CDC workgroup.

“Educators tell us, ‘The kid was poisoned and we can’t do anything about it,’ but we wanted them to know there are strategies and resources they can use,” Walsh says. Mapping blood lead level data and using the information to target early childhood education program resources, as well as outreach to parents, are recommendations for state and local health departments from the Blueprint for Action. Walsh notes that Wisconsin is “the only state that has a blood lead test history on an immunization online database.”

Be open to involving a variety of people when creating a toolkit
Walsh and Tennie involved a mix of people in the toolkit’s

continued on page 17
development. A co-worker’s granddaughter, who was visiting the health department for Take Your Daughter to Work Day, helped demonstrate how to write social media messages on a white board with the hashtag #LeadFreeKids, and then photograph and share the messages. “We set up a camera and tested it out to see if it would work,” says Walsh. “It was really a group effort.”

Think about how to reach your target through related programs

One of the ideas suggested by the toolkit is to host a training for home visitors and/or childcare providers about the dangers of lead so they can educate the families they work with. “The home-visitors idea came out of something we did in 2004, when we wanted to reach low- to moderate-income families likely living in homes with lead and chipping paint,” adds Walsh.

Design (and distribute) on a dime

The WDHS did not have a big budget to spend on graphic design or distribution of the toolkit. Staff time was funded by CDC and the State of Wisconsin; and Walsh, who is not a professional graphic designer, used Publisher to lay out her document in-house. It is a very simple, straight-forward layout that others can copy, even using Microsoft Word, with a photograph above the fold and tips below the fold.

The toolkit was distributed to local health department (LHD) health officers and lead staff. “We have contracts with LHDs and part of their contract requires them to do outreach,” says Walsh.

“In Wisconsin, we have urban areas where there are a number of staff; but also tremendously rural areas, where the staff wears multiple hats — so being able to provide resources to help them get messaging out to their population is very important,” says WDHS Communications Specialist Jennifer Miller. “I’m very impressed with how they put together a product that is a standard for other divisions and for other health departments to engage the public on how to address this issue.”

Prevent Childhood Lead Poisoning

**The Impact**

- **535,000** U. S. children ages 1 to 5 years have blood lead levels high enough to damage their health.
- **24 MILLION** homes in the U. S. contain deteriorated lead-based paint and elevated levels of lead-contaminated house dust.
- **4 MILLION** homes are home to young children.

It can cost **$5,600** in medical and special education costs for each seriously lead-poisoned child.

Visit [www.cdc.gov/nceh/lead](http://www.cdc.gov/nceh/lead) to learn more.

New Membership Information

- **Kenyatta Esters**, no affiliation listed, La.
- **Khali Gallman**, Durham County Dept. of Public Health, N.C.
- **Diana Gomez**, Yuma County Public Health, Ariz.
- **Robert Greathouse**, no affiliation listed, Md.
- **Aleandra Merceron**, student member, Washington, D.C.
- **Andrew Pappas**, Indiana State Health Department
- **Dan Suffoletto**, Dayton & Montgomery County Public Health, Ohio
- **Keri Zaleski**, McHenry County Health Dept., Ill.

These folks are the newest members of NPHIC. Now is the time to invite the communicators you know to join NPHIC, too. Let’s keep NPHIC growing!
Delaware Health and Social Services obviously is concerned with
the health and well-being of all of its residents, and that includes
dogs and cats. The Public Health Division has an Office of Animal
Welfare (OAW), which in May held its first Animal Rescue Summit.

The goal of the one-day summit in Dover was to provide animal
rescuers with additional training and to recognize the tremendous
contribution they make to the overall animal welfare effort.
Sponsored by the Humane Society of the United States, the
summit provided training on boosting adoptions, volunteer and
foster networks, fundraising, strategies for difficult-to-place
animals, disease prevention, medicine for rescues, and targeted
trap-neuter-return.

“Animal rescues are very important
in our state, and likely help as many
homeless and neglected animals in
total as our animal shelters,” notes
Christina Motoyoshi, deputy director of
OAW. “We wanted to offer a conference
that brought together animal rescue
organizations and independent animal
rescuers for a day of networking and
seminars with regional and national animal welfare experts on
topics that they [rescues] identified as needs.”

“There are many professional education opportunities for animal
shelters both locally and nationally, but not as much tailored
specifically for rescues which are largely volunteer-run and home-
based,” adds Motoyoshi.

The OAW reached out to the Humane Society after seeing the
organization’s program, “Adopters Welcome,” at the Animal
Expo, a national conference hosted by the society. The program
encourages adoption of animals through community engagement
and by removing barriers to adoption. “We thought it [Adopters
Program] would be beneficial to the rescue community,”
Motoyoshi says. “Many shelters and rescues across the country
have had restrictive policies, such as not adopting to someone
who doesn’t have a fence, has young children, or who rent.
Meanwhile, animals are being turned away or sitting in shelters,
or with rescues for long periods of time because the perfect
adopter hasn’t come along.”

OAW handles animal control for the state of Delaware, and the
first quarter of 2016, officers responded to about 1,000 calls for
stray dogs, says Motoyoshi, adding, “This is in addition to the
estimated 60,000 community cats living in Delaware. We do not
pick up stray cats, only seriously injured or endangered stray cats.”

Approximately 100 people participated in the summit including
animal rescue organizations and individual animal rescuers from
across Delaware, as well as from Maryland and Pennsylvania.
In addition to presenters from the Humane Society’s Adopters
Program, other national and regional thought leaders in the field
of animal rescue, rehabilitation, and adoption generously donated
their time. Representatives from the University of Pennsylvania
School of Veterinary Medicine, the Animal Legal Defense Fund, St.
Hubert’s Animal Welfare Center, Hello Bully, Neighborhood Cats,
and Bucks County SPCA all provided resources for the summit, Motoyoshi notes.

The OAW plans to continue offering training programs, like the Animal Rescue Summit, in the future, Motoyoshi says. “Other states may have companion animal programs under Department of Agriculture or Natural Resources; however, we’re not aware of any other state offices that are similar in scope to ours,” she adds.

The OAW was established in 2013, and charged with the mission of protecting the health, safety, and welfare of companion animals, and promoting the human-animal bond in the state. It coordinates programs and policies that protect animals from abuse and neglect, reduce pet homelessness, and improve the quality of care provided by shelters, rescues, and foster care systems. The office works in partnership with all levels of government, animal control providers, and animal welfare organizations to address emerging issues for the protection of animals and the public.

OAW’s history is brief but impressive. Accomplishments already include:

- Establishment of the first statewide animal control and cruelty enforcement unit, Delaware Animal Services (DAS), with a centralized case dispatch function. DAS receives and responds to more than 1,000 calls per month concerning endangered or abused animals.

- Creation of a statewide Lost and Found Pet Registry and licensing database to aid in reuniting owners with lost pets and track rabies vaccination and dog licensing records.

- Reformed the state emergency response and sheltering program for animals affected during disasters, and developed a State Animal Response Team of more than 100 volunteers.

- Implemented several critical updates to the State Spay & Neuter Program, including a statewide campaign with website (www.FixedandFab.com), online applications and easy payment options, and new grant program offered to non-profit shelter and rescue groups.

- Published regulations and developed an oversight function for the Shelter Standards Law. Now all shelters receive annual inspections and persons conducting euthanasia in shelters are state-certified.

- Hosted annual Delaware State Spay Days, providing free surgeries and rabies vaccinations to pet owners with low incomes.

- Successfully advocated for new laws to prohibit animals from being left in vehicles in dangerous temperatures, increase adoption opportunities for animals seized in cruelty investigations, protect outdoor dogs in inclement weather, improve dangerous dog case management for a more fair and equitable process, and prohibit inhumane euthanasia procedures in animal shelters.