Local public health officials have the enormous responsibility of promoting and protecting the health of their communities. They perform a wide array of activities to improve residents’ health, including health education and screenings, vaccination promotion, investigation of communicable diseases and emergency response. While the effort to focus on population health is growing in popularity, this is the work that local health officers have been doing for some time. New Jersey’s transition from a healthcare delivery system of episodal care to broader population health care was the topic of my recent State of Health speech at the local health officers’ conference during the New Jersey League of Municipalities Convention in Atlantic City on November 18. More than 50 local health officers attended the conference and I enjoyed meeting many of them and hearing about issues affecting their communities.

During my remarks, I highlighted that this evolving time in healthcare presents a great opportunity for public health and healthcare to come together in a population health village. This will refocus healthcare not on just the sick but also the well. The population health village is broader than a single episode of care; it requires coordination among local public health, community health workers, community and faith-based organizations. The Department’s goal is to knit together the work that is going on in our hospitals, municipalities, and community groups to broaden its impact.

The Department, local health officials and community groups have been partnering to make changes in the local environment to help residents build healthier lives. The Department has been funding, through its Shaping NJ initiative and Office of Minority and Multicultural Health, health education, screening, healthy food initiatives and opportunities for physical activity across the state, which provide the foundation for good health.

During my presentation, I also discussed how the Department is investing in population health by providing funding to hospitals through the Delivery System Reform Incentive Payment program, called DSRIP. This program’s goals are to better care for individuals, improved health for the population and lower costs. Payment to hospitals is contingent on achieving health improvement goals in chronic conditions such as asthma, diabetes and obesity.

A critical tool to build population health is examining data to assess progress. Healthy NJ 2020 is the state health improvement plan, which sets a vision for public health, desired outcomes and indicators that will help us understand how well health is being improved and protected. Healthy NJ 2020 covers numerous topics including improving birth outcomes, chronic disease and immunization. We are currently meeting with stakeholders to identify additional topic areas to focus our surveillance on.

continued on page 8
New Jersey Takes Childhood Lead Poisoning Seriously

By Cathleen Bennett, Acting Commissioner
New Jersey Department of Health

Every day in New Jersey, in local health departments, community health centers, doctors’ offices, WIC clinics and in home visits with at-risk populations, health professionals test children for elevated lead levels and educate families about preventing lead poisoning, which can cause behavior and learning problems, lower IQ, hyperactivity, slowed growth, hearing problems, anemia and kidney damage.

Each year, the Department provides $11 million to the DCF to support its evidence-based home visitation programs, which bring nurses, community health workers and, in some cases, trained parents into the homes of at-risk families to provide information and referrals on child health and safety issues including lead poisoning prevention.

Several DOH programs also provide lead poisoning education including the Women, Infant and Children program—known as WIC. In fact, every mother or caregiver who enters one of the state’s 100 WIC clinics is asked if their child has been tested for lead. If they have not, they are referred to a clinic or to their physician for testing. If a child’s results are elevated, the family is warned about potential sources of lead exposure in the home such as chipping paint and imported products and counseled on the importance of nutritious foods rich in Iron, Vitamin C and Calcium.

For years, New Jersey’s poison control center, the New Jersey Poison Information and Education System (NJPIES), has used state funding for lead poisoning education including staffing its 24/7 hotline (1-800-222-1222). It has also issued numerous warnings about non-traditional sources of lead poisoning including imported candies, jewelry, cosmetics, spices, pottery and home remedies.

The Department also pays for continuing medical education for health care providers so they can better identify lead poisoning.

Fortunately, the number of New Jersey children with lead poisoning has steadily declined for two decades from 13,448 in 1996 to 3,426. And the number of children who are tested for lead each year has increased over the past decade. More than 200,000 children were tested for elevated lead levels in the last state fiscal year.

After Superstorm Sandy devastated New Jersey—heightening the risk of lead exposure due to extensive debris from thousands of destroyed homes and businesses—DOH asked the federal government for and received $5.4 million for a lead poisoning prevention initiative. The funding was distributed as follows:

- $4.1 million in grants to 11 local health departments for lead testing
- $373,201 for lead-testing kits and equipment for local health departments
- $750,000 for regional lead and healthy homes coalitions to conduct public education on the use of lead safe work practices and lead prevention training for inspectors and other professionals who visit homes
- $150,000 to the NJ Chapter of American Academy of Pediatrics for continuing medical education so that health care providers understand how housing hazards can result in lead poisoning
- More than 14,150 children, pregnant women and recovery workers have been tested so far in the Superstorm Sandy project including nearly 5,000 people in Monmouth County, 3,320 in Essex, 3,000 in Hudson County and 1,300 in Ocean County

Challenges certainly remain as long as there are children with lead poisoning, but county and local public health officials, doctors, nurses and community health workers strive to reduce and prevent childhood lead poisoning.
Population Health Helps Reduce Chronic Disease

Chronic diseases—including arthritis, cancer, diabetes, heart disease, and stroke—caused 59 percent of deaths in New Jersey last year. It is estimated that millions of Americans will be newly diagnosed with a preventable chronic disease over the next two decades.

We cannot tackle this public health challenge separately. To succeed in maintaining healthy populations and preventing those with chronic conditions from becoming more ill, we must function as an interconnected village equipped with tools and technologies necessary to weave health initiatives into residents’ day-to-day activities.

New Jersey is transitioning from a health care delivery system of individual care to population health management in which residents benefit from enhanced opportunities to lead better lifestyles where they live, work, and play.

Clinicians are no longer the lone voices of health care. Instead, they are collaborating with community health workers, faith-based agencies and family members to connect patients with resources that extend beyond clinical care, helping this village with community health workers, faith-based agencies and family members to connect patients with resources that extend beyond clinical care, helping this village model come full circle.

The “Healthcare Collaborations Summit: Transforming Healthcare Outside of Healthcare,” hosted by Virtua and The Children’s Hospital of Philadelphia on Oct. 30, centered on how leaders can offer a continuum of care to both well and sick populations.

There, New Jersey’s Acting Health Commissioner Cathleen D. Bennett participated in a panel discussion—moderated by Elizabeth Ryan, President and CEO of the New Jersey Hospital Association—with Rita Landgraf, Secretary of the Delaware Department of Health and Social Services, and Corey Coleman, Executive Deputy Secretary of the Pennsylvania Department of Health, on state efforts to mitigate chronic diseases.

Efforts in New Jersey include:

• Significant investment in the Delivery System Reform Inventive Program, designed to result in better care and health, and lower costs.
• Partnering for a Healthy New Jersey: The state’s five-year chronic disease plan.
• NJ Cancer Education and Early Detection Program, providing free screening for uninsured and low-income residents.
• Workplace wellness toolkits help employers with health policies and programs.
• Shaping NJ mini grants to create policy and environmental changes in communities.
• Chronic Disease Self-Management Program
• Promote health system interventions, such as supporting hospitals in increasing breastfeeding rates.
Reducing Sepsis-Related Mortality

By David Condoluci, DO, MACOI, Chief Patient Safety & Quality Officer - Kennedy Health

In recent years, Kennedy Health has made strides in reducing mortality due to sepsis, a potentially life-threatening complication of an infection. While Kennedy’s baseline sepsis-related mortality was 21.5 percent in 2011 – below the state average of 30 percent – our senior hospital leadership, including President and CEO Joseph W. Devine, was committed to lowering this figure. Through ongoing meetings with key stakeholders, system-wide protocols, and continued education to nursing and medical staff, Kennedy’s sepsis program reduced its overall patient sepsis mortality to 11.9 percent by 2014.

Our sepsis program began in 2012 with a multidisciplinary sepsis committee, chaired by Emergency Services Director Henry Schuitema, DO, and Kennedy–Stratford Chief Nursing Officer Marianne Kraemer, RN, MPA, Ed. M, CCRN. Its main objective was to reduce sepsis-related mortality.

This committee developed various initiatives, including an Emergency Department-based Sepsis Alert that notifies the nursing supervisor to secure a Critical Care bed; the laboratory to anticipate STAT lab work; and the pharmacy to prepare appropriate antibiotics if sepsis is diagnosed. A “Sepsis Warning” program to call an internal alert for ED staff was created, and a “hand-off” sepsis worksheet facilitated communications among ED and ICU staff members.

By 2014, we found that occasionally patients who had become septic while in the hospital were not always quickly identified. Kennedy Infection Control Officer Cindy Hou, DO, MBA, FACOI established the Sepsis on the Floors task force along with Ms. Kraemer. The group meets once monthly at one hospital campus and is teleconferenced to the other sites. The original goal was to decrease hospital-acquired sepsis, but it also led to increased recognition of sepsis, severe sepsis, and septic shock, regardless of whether the event was present on admission.

The task force has developed many initiatives. Nurse aides and technicians immediately alert nurses when certain Systemic Inflammatory Response criteria are met. Nursing then assesses for additional criteria, including whether physician notification should occur. To improve lactic acid compliance, a nurse-initiated lactic acid policy was put in place. The goal of the program is to prevent sepsis from occurring, which is promoted by focusing on hand hygiene education, managing and removing the threat from devices, identifying high-risk patients, and teaching patients about infection prevention.

We have seen success, and we have been honored to share our story so other hospitals may learn from our experiences. At the request of the NJHA’s Institute for Quality and Patient Safety Sepsis Learning-Action Collaborative, Kennedy was invited to share information about its program via a statewide webinar hosted in August 2015. The American Hospital Association’s “In Pursuit of Excellence” website has also featured a case study about Kennedy’s Sepsis Program.
After 32 Years At the Helm of NJPIES, Director Dr. Marcus Has Seen It All

For more than three decades, it’s been the place to call 24/7 in New Jersey when your child accidentally swallows a detergent pod or pills from the medicine cabinet. At the New Jersey Poison Information and Education System (NJPIES), trained doctors, nurses, pharmacists and other poison experts answer 60,000 calls a year about childhood lead poisoning, carbon monoxide poisoning, Ebola, wild mushrooms, alcohol poisoning, drug overdoses and other unintentional poisonings. As Executive and Medical Director of NJPIES for 32 years, medical toxicologist Dr. Steven Marcus has seen it all. He’s retiring on June 30, 2016, so we asked him about his legacy as well as the calls he’s answered over the years at 1-800-222-1222.

What is your proudest accomplishment at the helm of NJPIES?
The establishment of NJPIES. The greatest joy is knowing we have helped people during times of stress and fear. Recently an ICU physician told me I made a diagnosis—over the phone and with an ECG that was photographed by a cell phone and sent to me—which was missed by three physicians before I became directly involved.

Involvement in the public health response to a previously unreported neurological “disease” associated with eating eastern blowfish was also amazing. We were also involved in an outbreak of rogue botulism injections which nearly caused four deaths. The center also helped report the unexpected deaths of multiple patients at Somerset Medical Center, resulting in the 2003 arrest and conviction of nurse Charles Cullen and the end of his serial killings.

How have the issues phoned in to NJPIES changed over the years?
In the beginning, we were primarily dealing with children who consumed something in their environment. The level of toxicity this represented was much lower then. Today we get fewer calls, but the severity of the poisonings has increased.

Have many of the topics remained the same?
We still receive a lot of calls from parents concerned about adventuresome children. About 50 percent of our calls are related to medication.

Have you tracked the number of lives NJPIES has saved?
There is no way to attribute a life saved to us, but if we didn’t stop Cullen from killing patients at a rate of at least four to five annually, that would be well over a hundred lives lost over the decades.

What have been the key issues people have called NJPIES about over the past three decades?
In terms of total volume, the types of calls are about the same. The major difference is that many people now look online for information before calling. It is frustrating to know they have “wasted” valuable time by not calling immediately. In some cases, we might have been able to prevent a critical illness if we intervened earlier.

Dr. Steven Marcus
Statewide Conferences Highlight the Importance of Immunizations Throughout the Life Span

Officials from the New Jersey Department of Health were featured speakers and key participants at two statewide conferences highlighting the importance of immunizing against vaccine-preventable diseases. Together both conferences reached approximately 450 health care and public health professionals.

On November 4, the New Jersey Immunization Network (NJIN) and the American College of Physicians (ACP) hosted the Adult Immunization Leadership Summit at Princeton University. NJIN is New Jersey’s statewide immunization coalition. The summit brought together leaders in healthcare, business, government, academia, and medical research to discuss how increasing adult immunization rates can improve public health in New Jersey. The summit featured nationally recognized presenters in the fields of vaccine-preventable disease, health economics, and health disparities. Acting Health Commissioner Cathleen D. Bennett provided the welcome address and highlighted the national impact of vaccine-preventable diseases and the rationale for adult immunization. State Epidemiologist/Assistant Commissioner Dr. Tina Tan presented the public health case for adult immunization in the state by providing an overview of New Jersey’s adult immunization rates and emphasizing evidence-based strategies to help achieve Healthy People and Healthy NJ 2020 objectives.

The NJDOH and the NJ Chapter of the American Academy of Pediatrics hosted the New Jersey Immunization Conference on November 12 at the Renaissance Woodbridge Hotel. The conference theme, “Time Matters: Vaccine Management and Disease Prevention,” was reinforced throughout the day with presentations on topics such as vaccine administration, storage and handling, and the timely reporting of vaccine-preventable diseases. Deputy Health Commissioner Dr. Arturo Brito provided the State of the State update and congratulated the NJDOH Vaccine Preventable Disease Program on their immunization efforts and contribution to the department’s public health accreditation process. Other feature speakers included JoEllen Wolicki, Centers for Disease Control and Prevention nurse educator and Dr. Margaret ‘Meg’ Fisher, medical director for the Unterberg Children’s Hospital at Monmouth Medical Center.

National Influenza Vaccination Week

As part of National Influenza Vaccination Week (NIVW), December 6-12, 2015, the New Jersey Department of Health reminded residents that it’s not too late to get the seasonal flu vaccine. The Centers for Disease Control and Prevention (CDC) recommends everyone six months of age and older receive the yearly flu vaccine.

“With holiday celebrations fast approaching, residents should get vaccinated against the flu now before spending time with loved ones,” said Acting Health Commissioner Cathleen D. Bennett. “It takes about two weeks after vaccination for your body to provide protection against the flu.”

Flu vaccines are safe and effective and are offered in many locations including doctor’s offices, clinics, health departments, urgent care centers, and pharmacies. Visit the Flu Vaccine Finder at [http://www.nj.gov/health/flu/findflushot.shtml](http://www.nj.gov/health/flu/findflushot.shtml) to find clinics.
On National Rural Health Day, Deputy Commissioner Dr. Arturo Brito, right, joined Zufall Health for a ribbon cutting ceremony at its expanded Hackettstown office.

The DOH Food & Drug Safety Program met with a delegation of shellfish regulators from South Korea this fall.

Deputy Commissioner Dr. Arturo Brito at the Critical Congenital Heart Defects conference on Dec. 1.

World AIDS Day commemoration at St. Paul's Episcopal Church in Camden.

### Community Outreach & Events

**November-December 2015**

- **November 10**: Acting Commissioner Bennett delivered opening remarks at the Partnering for a Healthy NJ stakeholder meeting at University Medical Center of Princeton at Plainsboro.
- **November 19**: Deputy Commissioner Dr. Brito participated in National Rural Health Day in Hackettstown.
- **December 1**: Dr. Brito, Regina Grazel and Kim Van Naarden Braun presented the Department’s efforts on newborn screening for critical congenital heart defects at a conference hosted by the American Academy of Pediatrics New Jersey Chapter.
- **December 2**: Acting Commissioner Bennett delivered opening remarks at the Building a Culture of Health Summit in Edison.
- **December 9**: Acting Commissioner Bennett delivered remarks at AtlantiCare’s Employer Retreat in Atlantic City.

### DOH Welcomes New Chief of Staff, Deputy Chief of Staff

The Department welcomed a new Chief of Staff, Gregory L. Myer, and Deputy Chief of Staff, Alison Gibson, on November 16.

Greg comes to the Department from the New Jersey Higher Education Student Assistance Authority, where he has worked since 2004, first as Deputy Chief Information Officer and, since 2011, as Chief of Staff. Prior to joining state government, he spent 19 years in private sector management and consulting.

Alison, a nurse, has served as Assistant Commissioner of the Division of Health Facilities Survey and Field Operations, which is responsible for the oversight of more than 2,200 health care facilities. Alison also has 20 years of hospital inpatient and outpatient clinical and managerial experience in the state. She has been with the Department for more than a dozen years.

The Department is excited to have Greg and Alison as part of its senior leadership team.

### New Jersey Observes World AIDS Day 2015

On December 1, New Jersey joined the World Health Organization in observing World AIDS Day with events to support those living with HIV, to honor those who have died and to encourage those who may be at risk to get tested.

Community-based organizations, hospitals and churches hosted events featuring HIV testing clinics, patient testimonials, education outreach and health fairs. Acting Commissioner Bennett attended St. Paul's Episcopal Church in Camden for an interfaith prayer service.

Better integration of behavioral and primary health care is also part of population health. The Department is supporting this coordination in a number of ways. Using $4.3 million in federal Superstorm Sandy recovery funds, we awarded grants to 11 hospitals and community health centers to screen people for post-traumatic stress disorder and other behavioral health issues in Sandy-impacted counties. So far, more than 63,300 residents have been screened. We have also granted a global waiver that allows Federally Qualified Health Centers to provide both primary and behavioral health services in the same clinical space. Our next step is providing grants to serve veterans’ primary care, behavioral health and other needs, and to support mini-grants that provide wellness and management services to veterans and their families.

During another League presentation, Deputy Commissioner Dr. Arturo Brito participated in a panel focused on the heroin addiction epidemic. Dr. Brito discussed state efforts to combat this challenge. He highlighted a Department of Human Services two-year pilot, the Opiate Overdose Recovery Program, that is funded at $1 million. Through the program, counselors in hospitals in Atlantic, Camden, Essex, Monmouth, and Ocean counties meet overdose victims in the emergency room to discuss treatment. Dr. Brito credited Gov. Chris Christie’s commitment to reducing addiction as a critical driving force behind state efforts.

Health improvement goes beyond care delivered in our hospitals. Local health officers and municipal leaders are in a position to improve the health of their residents, but it is critical that the state and its partners make investments in our communities to offer prevention and wellness. Working together in the population health village allows us to leverage efforts to drive meaningful improvements in health outcomes for all New Jerseyans.

Annual EMS Conference Draws 700, Largest Ever

More than 700 Emergency Medical Services professionals, physicians, nurses, educators and administrators attended the 11th Annual Statewide EMS Conference from Nov. 11-14 in Atlantic City. There were 100 education sessions presented by more than 50 experts from around the country, making it the largest conference the New Jersey Department of Health has convened. In addition to the educational sessions and traditional vendors, there were special events held within the conference that showcased the skills and dedication of EMS workers.

During the NJ Simulation Games held on Nov. 12, teams of EMS professionals tested their ability to triage and treat simulated patients, competing against other EMS agencies in both Advanced Life Support (ALS) and Basic Life Support (BLS) categories. More than 100 spectators watched the final competition at the conference with many more watching on a live podcast.

On November 13, the best and brightest in New Jersey’s EMS field were honored with 60 individuals and agencies honored in 20 categories at the 17th annual EMS Awards Ceremonies.

Acting Commissioner Cathleen Bennett provided welcoming remarks for the evening, recognizing the EMS community for their service and commitment to New Jersey’s residents.

“You help people at their most vulnerable moments with compassion and professionalism,” Commissioner Bennett said. “I want to thank all of you for your everyday heroism.”
Behavioral Health Screenings Help Superstorm Sandy Survivors Recover

Raychelle Black moved to Atlantic City from New York two weeks before Superstorm Sandy, grieving the recent loss of her mother and searching for a fresh start. But after 4 feet of water damaged her family’s home, that dream was temporarily tossed away along with most of her personal belongings.

“Sandy was a low-blown for me,” she said. “It kicked my feet right from underneath me.”

On the third anniversary of Sandy, Acting Health Commissioner Cathleen D. Bennett visited Southern Jersey Family Medical Center (SJFNC) with clients and staff about assistance the Department of Health provided to help residents like Raychelle recover.

DOH awarded a total of $4.3 million to community health centers and hospitals to provide behavioral health screenings and identify patients struggling with storm-related stresses. These grants serve individuals in the nine counties hardest hit.

“It was like an angel walked into my life and asked, ‘How are you feeling today?’” Raychelle recalled of her experience at the Pleasantville facility. “For a moment, it was about me and not everything else.”

The storm devastated New Jersey: 80 percent of the state’s population lost power, about 7,000 people were in shelters at the height of the storm, and thousands of homes and businesses suffered extensive damage.

Studies show that following such disasters, increases in mental health issues, household discord, substance abuse, domestic violence and child abuse are common. Post-traumatic stress is often not recognized immediately but must be addressed as an integral part of routine medical care.

“One of the ongoing benefits of grants like this is primary care providers asking the right questions to determine underlying issues and coordinate care,” Commissioner Bennett said. “Getting the right help puts you on the pathway to wellness.”

So far, more than 63,300 residents have been screened and referred for follow-up treatment, including about 5,000 at Southern Jersey Family Medical Center alone.

“I am very proud of our staff for the concerted effort that they’ve put into this program,” said Linda Flake, CEO of SJFMC. “It’s not just about doing a job. It’s about your compassion and listening to these stories.”
DOH Staff Volunteer Their Time This Holiday Season

On Dec. 7, DOH staff helped Superstorm Sandy survivors rebuild and paint their home in Union Beach with the United Way of Monmouth County and sorted donations at the FoodBank of Monmouth and Ocean Counties. The United Way's "Rebuild NJ" program helps get families back in their homes. The FoodBank’s mission is to alleviate hunger and build food security by providing access to nutritious foods.
The holiday season is here, and it is a busy and exciting time. Filled with family and friends, it is a time to reconnect and strengthen our relationships. It is a time filled with activities and many “to do” lists, leaving us wondering how we will get it all done. Stress is just part of the season. Fortunately, there are strategies to help you manage it all, allowing you to pay attention to the joy. These tactics can improve quality of life and most of them are cancer preventative too!

Start by taking stock of what the holiday season means to you.
Think what you have enjoyed over the years. What memories make you smile or even laugh out loud? What warms your heart? As you look back, pay attention to the words “should” and “ought to.” If those crept into your mind, the activity is less something you care about and more what you think others want you to care about. Imagine letting go of those activities or at least engaging in them in a different way this year. Prioritizing or altering what you do can improve the whole experience.

Give to yourself first.
Your body is a machine that performs best when it has the right kind of fuel, is in action, and gets recharged. By giving yourself those three critical gifts – good food, body movement and adequate sleep – you will have a great holiday season.

**Good food** for health and cancer prevention includes complex carbohydrates, healthy fats, lower-fat proteins and many fruits and vegetables. Most of your plate should be filled with whole grains, vegetables, fruit, and beans. Have fun with flavoring these healthy foods by experimenting with vinegars, herbs, and spices. Whenever possible, choose water over a sugary drink and limit your alcohol intake.

**Moving your body** doesn’t require a gym, just an awareness of opportunities. When you go shopping, park far away from the entrance. Take the stairs over the elevator or escalator. Leave the grocery cart at the door and carry the bags to the car. Just pay attention and you will find ways to easily add more movement to your day.

**Adequate sleep** is critical to recharge all the parts of your body. It starts with a decision. Look at when you need to wake up and count backwards 7 to 9 hours. That is your bedtime! Plan your evening to be ready for sleep at the designated time. It helps to have a 15-minute routine you follow beforehand, something in lower light that is minimally engaging, since it cues your body for sleep.

**Learn some relaxation techniques for the unavoidable.**
Stress is an unavoidable part of life, especially during the holiday season. Having a quick way to manage it can really help. Working with breathing is simple and can be done anytime, anywhere. One method is to breathe in slowly, counting to four then exhaling slowly, counting to four. Do it again and image your muscles smoothing out and going slack. This breathing technique can be done as many times as needed until you’re relaxed.

Want more information? Using your favorite search engine try “sleep hygiene,” “relaxation techniques,” or “healthy eating.”