Population Health Heroes Honored by DOH, Five Cabinet Officers

By Cathleen Bennett, Commissioner, NJ Department of Health

Nearly 400 leaders of business, academia, health care, state and local government, and faith-based and community groups shared innovative ways they are keeping communities healthier during the Department’s second annual Population Health Summit at Rider University in Lawrenceville on June 7.

We were proud, along with our co-sponsor, the New Jersey Innovation Institute, to showcase best practices to reduce childhood obesity and lead exposure, provide stable housing to the chronically homeless, and increase exercise and recreational opportunities to keep communities healthier.

Secretary of Agriculture Douglas Fisher, Community Affairs Commissioner Charles Richman, Environmental Protection Commissioner Bob Martin and Transportation Commissioner Richard Hammer, who are members of our Population Health Action Team, talked about their efforts to reinforce health in all policies, and presented our Population Health Hero awards to eight community groups and individuals (See Population Health Heroes on page 6).

During a panel titled “Community Approaches That Promote a Culture of Health,” school nurse and Population Health Hero Robin Cogan explained how community cafés were used to bring parents, school nurses and the Camden Healthcare Coalition together to improve access to pediatric care and reduce reliance on emergency rooms.

Commissioners Richard T. Hammer (Transportation), Charles A. Richman (Community Affairs), Bob Martin (Environmental Protection), Cathleen D. Bennett (Health), and Department of Agriculture Secretary Douglas H. Fisher attended the Population Health Summit on June 7.

Department of Health Achieves National Accreditation

Following almost three years of rigorous screening and review against more than 100 quality criteria, the Department of Health has received national accreditation from the Public Health Accreditation Board (PHAB) for achieving high standards for public health services, leadership and accountability.

It is one of 26 state and 162 local health departments accredited by PHAB, out of about 3,000 government public health agencies. The Bloomfield Department of Health & Human Services received its own PHAB accreditation in 2015 and is the only other accredited public health agency in New Jersey. Several other local health departments are in the process of applying for accreditation, including those in Camden and Princeton.

“Accreditation has become the national standard for public health,” Commissioner Cathleen D. Bennett said. “The Department is proud to be nationally recognized for achieving standards in public health quality and performance. Through this three-year process, we evaluated and improved our services to ensure we are effectively meeting the public health needs of residents.”
#ZapZika Safeguarding New Jersey Campers

In preparation for camp season, the New Jersey Departments of Health and Environmental Protection partnered on May 16 to host a free webinar titled “ZapZika: Safeguarding Campers from Mosquitoes.” Participating accredited youth camp staff were provided educational information on the Zika virus and additional resources to increase their youth population’s awareness of mosquito bite prevention and mosquito breeding habitat source reduction strategies. Participants also received an electronic toolkit featuring mosquito bite awareness resources.

![A mother correctly applies mosquito repellent to her child’s forearm. Using repellents consistently is among he best ways to protect yourself and your family from Zika and other mosquito borne illnesses, such as West Nile Virus. (Photo courtesy of CDC)](https://goo.gl/WS6tBn)

##Technology in Public Health

To advance the use of technology in public health, the Rutgers School of Public Health will be sponsoring an Epidemiological Computing and Graphics in Public Health course on July 7, 2017 to provide practitioners of epidemiology/statistical computing with hands on experience. “R” is a free software environment for statistical computing and graphics that will allow participants to develop programs and applications related to public health.

The course will be held at the Rutgers School of Public Health campus in Piscataway and will consist of seven hours of education and laboratory training in public health applications, “R” documentation and a special section on the opioid epidemic in New Jersey.

The course will also give participants the chance to network with other data professionals. Visit [https://goo.gl/W56tBn](https://goo.gl/W56tBn) to learn more.

##DOH Achieves National Accreditation

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The DOH accreditation team, led by Colette Lamothe-Galette, Director of Population Health, collected and reviewed more than 10,000 pages of documents, developed a strategic plan, conducted Healthy NJ 2020 mid-point regional collaboration sessions, and created a Quality Improvement plan.

“The PHAB Accreditation decision for the New Jersey Department of Health is a testament to the hard work and dedication of our staff, who are committed to providing quality programs and services to the residents of New Jersey,” Lamothe-Galette said.

Public health departments serve as the front lines for improving and protecting the health and well-being of people and communities. Accreditation provides departments with a framework for setting priorities and gives valuable, measurable feedback about how they are performing.

“Achieving accreditation indicates that the New Jersey Department of Health is dedicated to improving and protecting the health of the community by striving to continuously improve the quality of the services it delivers,” said Ray (Bud) Nicola, MD, MHSA, chair of PHAB’s Board of Directors and affiliate professor at the University of Washington School of Public Health in Seattle. “With an ever-increasing number of health departments now applying for and becoming accredited, you will be able to expect to receive the same quality of public health services wherever you go in the United States.”

To receive national accreditation through the PHAB, the Department of Health underwent a multi-faceted, peer-reviewed assessment process to ensure it met a set of 105 public health quality standards and measures. The Department submitted its application in 2014.
Community Partnerships Drive Population Health

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DEP Commissioner Martin and Transportation Commissioner Hammer talked about how the state’s natural areas, parks, recreational areas and bike paths provide residents with opportunities to exercise and stay healthy. Their agencies have worked collaboratively with local officials and community-based organizations to develop walkable communities and protect green space.

Linda Mead, CEO of D&R Greenway Land Trust, talked about how walks on preserved trails and in parks reduces the risk of heart attack, diabetes and stress, and increases energy, immunity and cancer causing white blood cells.

DCA Commissioner Richman outlined efforts to reduce homelessness and to remediate lead in housing using lead-safe practices. DCA created the Statewide Housing First Initiative, an innovative, nationally recognized approach to ending homelessness that will help 550 individuals who suffer from at least one chronic medical illness and are chronically homeless. The program has succeeded in keeping the costliest, most vulnerable, long-term and chronically homeless patients stably housed, dramatically reducing unnecessary hospitalizations, emergency room visits and incarcerations. A pilot project in Camden, which has been operating for 18 months, found a 50 percent reduction in hospital emergency room visits from people who are participating in the program.

Secretary Fisher said the Summer Food Service Program served more than three million meals last summer at more than 1,100 sites. During the school year, local schools partner with farmers to bring Jersey Fresh fruits and vegetables into cafeterias. Thanks to hard work and collaboration, Secretary Fisher said the state has improved its ranking in the school breakfast program to 19th from 46th in the nation.

Recognizing the impact that elevated lead levels can have on a child’s ability to learn and grow, Department of Human Services Deputy Commissioner Valerie Harr said the Medicaid program is working with providers to get all children enrolled in Medicaid screened for lead.

University deans and Department chairs from Seton Hall-Hackensack Meridian School of Medicine, the Department of Public Health at Montclair State University, Rutgers Bloustein School of Planning and Public Policy, Rowan College of Science and Mathematics and Fairleigh Dickinson School of Pharmacy and Health Sciences talked about data analytics and focusing on the cross section between public health and medicine.

Nearly two dozen award winners, hospitals, community and business organizations, health departments and news organizations tweeted live from the conference about how health is not just about health care anymore; it’s about value-based care, community gardens, “walking school buses” and cancer screenings on beaches.

During a panel called “How Municipal Leadership Drives Population Health Improvements,” Bridgeton Mayor Albert Kelly, Princeton Mayor Liz Lempert and Bergenfield Mayor Norman Schmelz outlined the wellness initiatives that have made their communities healthier.

Mayor Lempert highlighted a partnership with Princeton University to provide shuttle bus service to a nearby hospital and anti-smoking ordinances that ban smoking in public parks, raise the age for purchase of tobacco products to 21 and require licensing of e-cigarette shops.

Mayor Schmelz said the Mayors Wellness Challenge in Bergenfield uses Zumba classes, walks with the mayor and sessions with aromatherapists and financial planners to engage the community.

Mayor Kelly described how the tragic suffocation of a homeless man in a clothing bin in the winter of 2013 led Bridgeton to create the “Code Blue” program, which provides warming shelters in churches. He also talked about hiring high school students in the summer to increase participation in the Summer Food Service Program, which provides healthy meals for kids and saves families $300 each. He got funding from the Robert Wood Johnson Foundation to hire youth to promote the Summer Food Service Program.

Helping to build healthier communities is a cornerstone of the Department’s work. That’s why it was important for us to shine a spotlight on the incredible work ongoing all across our state to improve the health of our communities.
The New Jersey State Cancer Registry (NJSCR) received top ratings from the National Program of Cancer Registries (NPCR), the North American Association of Central Cancer Registries (NAACCR), and the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute.

The NJSCR received the 2016 Registry of Excellence designation from NPCR, the 2014 Gold Certification from the NAACCR, and SEER’s 1st Place Data Quality Profile, meeting all the SEER data quality profile measures for the third consecutive year.

This is the first time that the state registry has achieved the highest recognition from all three organizations.

The NJSCR is a population-based registry, mandated by state law, that collects data on all cancer cases diagnosed and/or treated in New Jersey since 1978.

Cancer data serves as a vital resource to providers and consumers of cancer services, and contributes to the advancements of cancer surveillance not only in New Jersey but also in the United States.

Of the 48 cancer registries supported by the CDC, New Jersey is one of 19 that achieved this designation for the most recent data submission, indicating the high-quality data available for cancer prevention and control activities at the local, regional and national levels.

Meeting NPCR standards also allows New Jersey data to be included in this year’s United States Cancer Statistics (USCS) report and other data sets.

Cancer registries that meet the Gold Standard for Registry Certification have achieved the highest NAACCR standard for complete, accurate, and timely data to calculate standard incidence statistics for the year reviewed.

As part of New Jersey’s ongoing effort to protect and educate residents about the Zika virus and to learn more about the mosquito-borne illness, the New Jersey Department of Health partnered with the NJ Association of County and City Health Officials (NJACCHO) to host the 2017 “Zika Conference: Public Health Updates and Resources for New Jersey Communities” on May 17.

Held at The Palace at Somerset Park in Somerset, the conference featured welcoming remarks by Health Commissioner Cathleen Bennett and Department of Environmental Protection Commissioner Bob Martin who highlighted each department’s Zika prevention initiatives. They also commended the New Jersey State Mosquito Control Commission and all of the county and local health agencies across the state for their work in reducing mosquito populations.

As New Jersey moves through mosquito season, it is projected that there will be an increase in mosquito sample submissions this year statewide and nationally. With increased funding from the Centers for Disease Control (CDC), the Department of Environmental Protection provided additional traps to county mosquito control agencies, as well as continued to participate in insecticide resistance screening programs. Data was shared nationally for mosquito surveillance monitoring.

"Since we gathered together last year, there have been many developments in Zika research and response to this virus,” Commissioner Bennett said. “Specifically, we have learned how Zika impacts infants and determined the high-risk timeframe for microcephaly during pregnancy."

While the risk of local transmission of the virus remains low, New Jersey has the fifth highest number of travel-associated Zika cases in the country. The Department continues to focus on addressing the most seriously affected populations, update healthcare professionals about Zika transmission, screening and prevention and distribute Zika prevention kits for at-risk pregnant women and their partners. The Department’s #ZapZika public awareness campaign and “Know Before You Go” social media messaging is ongoing.

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“The county mosquito control agencies are the boots on the ground to conduct mosquito surveillance and control activities” Commissioner Martin said. "While the mosquito that transmits Zika (Aedes aegypti) is not native to New Jersey, we have increased our vigilance so that if it does appear, we will know it quickly and take steps to control it immediately.”

This is in addition to covering all mosquito-borne diseases such as the West Nile virus, Eastern Equine Encephalitis, Saint Louis Encephalitis, Chikungunya and Dengue.

Dr. Emilio Dirlvik, a CDC epidemic intelligence service officer to the Puerto Rico Health Department, was the keynote speaker at the conference, providing a thorough overview of his lessons learned about the Zika virus from Puerto Rico’s surveillance of neurologic complications.
In addition, Commissioner Bennett asked the New Jersey Hospital Association (NJHA) to create a Sepsis Learning and Action Collaborative. Hospitals across the state implemented life-saving sepsis detection and care tools that resulted in nearly 400 lives saved in one year of action. Results showed reduced severe sepsis mortality by about 11 percent, an increase in the use of a hospital-wide sepsis screening tools from 20 to 70 percent and increased adoption of a hospital-wide sepsis protocols from 40 to 90 percent, among other positives.

Sepsis was the seventh leading cause of death in New Jersey in 2015 when about 2,100 people died of sepsis. The state’s sepsis mortality rate, which was about 20.7 per 100,000 in 2015, has been trending upward from 19.4 per 100,000 in 2011.

At Cooper, Dr. Phillip Dellinger helped treat Nicole. She was weaned off some of the medications, and on Feb. 7, 2016, Nicole came out of the coma. She underwent surgery for more kidney stones, but shortly before being discharged from the hospital, a blood clot was identified in her right leg. She was put on blood thinners and other medications for the next three months to dissolve the clot. Nicole also began losing her hair; it is unclear whether that was because of the sepsis or medication, she said.

Nicole was finally discharged on Feb. 14, 2016. She knew she had a long road to recovery ahead of her, but she was happy to go home.

“I had to learn how to do everything all over again. I was very weak and had trouble walking. I could not even hold a 6 oz. cup of water without help. My life had completely changed,” she said. “I had to move home with my parents for three months to get back on my feet.”

In addition to the medical team at Cooper, Nicole credits her recovery to her devoted family.

“Without my family and my amazing fiancé’s love and support, I would have never made it through this nightmare. I cannot thank Dr. Phillip Dellinger and his team and all of the doctors and nurses at Cooper University Hospital enough for all they did for me. They saved my life! They didn’t treat me like a patient; they treated me like a part of their family.”

Nicole said people across the world have reached out to her to hear her story.

“I will never stop spreading awareness because I don’t want another family to ever have to go through what we went through,” she said. “I survived for a reason! My story isn’t over yet.”
Drug Used with Bipolar Disorder May Help Traumatic Brain Injuries

A drug used to treat bipolar disorder and other forms of depression may help to preserve brain function and prevent nerve cells from dying in people with a traumatic brain injury, according to a new Rutgers University study.

In research published in Scientific Reports on May 8, Rutgers scientists discovered that lithium – used as a mood stabilizer and to treat depression and bipolar disorder – and rapamycin, a treatment for some forms of cancer, protected nerve cells in the brain and stopped the chemical glutamate from sending signals to other cells and creating further brain cell damage.

“Many medications now used for those suffering with traumatic brain injury focus on treating the symptoms and stopping the pain instead of protecting any further damage from occurring,” said lead author Bonnie Firestein, professor in the Department of Cell Biology and Neuroscience in the School of Arts and Sciences at Rutgers University-New Brunswick. “We wanted to find a drug that could protect the cells and keep them from dying.”

According to the Centers for Disease Control and Prevention, traumatic brain injury (TBI) is a major cause of death and disability in the United States with an estimated 1.7 million people sustaining a TBI annually. About 30 percent of all deaths due to injury are due, in part, to a TBI.

The symptoms of a TBI can include impaired thinking or memory, personality changes and depression, as well as vision and hearing problems. The CDC reports that every day 153 people in the U.S. die from injuries that include a TBI. Children and older adults are at the highest risk, according to the CDC.

When a TBI occurs, Firestein said, a violent blow to the head can result in the release of abnormally high concentrations of glutamate, which under normal circumstances is an important chemical for learning and memory. But an overproduction of glutamate, she said, causes toxicity which leads to cell damage and death.

In the Rutgers research, scientists discovered that when these two FDA-approved medications were added to damaged cell cultures in the laboratory, the glutamate was not able to send messages between nerve cells. This stopped cell damage and death, Firestein said.

Further research needs to be done, she said, in animals and humans to determine if these drugs could help prevent brain damage and nerve cell death in humans after a traumatic brain injury.

“The most common traumatic brain injury that people deal with every day is concussion which affects thousands of children each year,” said Firestein. “Concussions are often hard to diagnose in children because they are not as vocal, which is why it is critical to find drugs that work to prevent long-term damage.” — Robin Lally, Rutgers University
Although resorts are usually aggressive with mosquito control to avoid nuisance complaints from guests, there is no guarantee Zika exposure will not occur. Women who are pregnant (in any trimester) should consider postponing travel to any area with a Centers for Disease Control and Prevention (CDC) Zika travel notice or other areas with Zika risk. Pregnant women should also avoid travel to areas with malaria. If you are pregnant and must travel to one of these areas, talk to your healthcare provider first and strictly follow steps to prevent mosquito bites during your trip.

Women who are trying to become pregnant should talk to their healthcare provider about plans to become pregnant and the risk of Zika virus infection before travel and strictly follow steps to prevent mosquito bites during travel.

Credible sources include national and international resources such as the CDC, Pan American Health Organization (PAHO) and the World Health Organization (WHO) as well as state and local public health agencies such as the New Jersey Department of Health or your local health department. Use caution when obtaining information from any other source, especially social media and even some news websites. These sites are not always monitored and the information may be incorrect. Myths and rumors quickly spread online, so always make sure to use credible and trustworthy sources.

Zika While Traveling: Who to Trust

Understanding Testicular Cancer
By Thomas L. Jang, MD, MPH, FACS and Eric A. Singer, MD, MA, FACS

Overview
According to the National Cancer Institute, testicular cancer is the most common malignancy among men ages 15 to 35. In 2017, about 8,850 new cases and nearly 410 deaths are expected from testicular cancer in the United States. While the risk of developing testicular cancer is low, every man should understand some basic facts about this disease.

Risk Factors
Men whose testicles did not descend into the scrotum at birth, a condition known as cryptorchidism, are at an increased risk for testicular cancer. Bringing the testicle down into the scrotum with surgery doesn’t decrease the risk of developing testicular cancer but it does make it easier to examine the testicle and find any abnormalities early. Other established risk factors include a family history or personal history of testicular cancer.

Symptoms and Evaluation
Testicular cancer usually presents as a lump on the testicle. The mass may be painless, but some men notice a “fullness” in their scrotum on the side of the tumor. In cases of advanced testicular cancer, or cancer that has spread to other parts of the body, men can experience back pain, abdominal pain, cough, or unintentional weight loss. Any man who feels a testicular mass should seek medical attention immediately.

Treatment and Outcomes
“When in doubt, get it checked out.” Many men ignore what is happening to their bodies. Waiting and hoping that a testicular mass will simply go away on its own is dangerous and can lead to cancer affecting other parts of the body. Most men with testicular cancer, even those with advanced disease, can be cured with surgery, chemotherapy, radiation, or a combination of these treatments. Surveillance may be appropriate for some men after the diagnosis has been established.

Thomas L. Jang, MD, MPH, FACS and Eric A. Singer, MD, MA, FACS are urologic oncologists at Rutgers Cancer Institute of New Jersey.

Cancer Matters is brought to you by Rutgers Cancer Institute of New Jersey.
ICAR Team Tackles Healthcare-Associated Infections

Healthcare-associated infections are infections patients can get while receiving medical treatment in or out of a healthcare facility. These types of infections account for about 75,000 deaths each year in the United States, equal to the number of deaths caused by motor vehicle traffic accidents and breast cancer combined. Although they are widespread, significant progress has been made in New Jersey and nationally to reduce the burden of these preventable illnesses.

In 2015, the New Jersey Department of Health entered into a cooperative agreement with the Centers of Disease Control and Prevention to tackle healthcare-associated infections, resulting in the formation of the Infection Control Assessment and Response (ICAR) team within the Department’s Communicable Disease Service. The ICAR team is multidisciplinary, comprised of nurses, infection preventionists, epidemiologists and a health educator. This team utilizes standardized, CDC-created assessment tools to evaluate basic infection prevention practices across the healthcare continuum, with the goal of identifying and mitigating gaps in infection prevention throughout the healthcare spectrum. Local public health agencies are also invited to the ICAR assessment site visits and bring local resources to the facilities. The team has visited over 75 healthcare facilities in New Jersey, including hemodialysis centers, ambulatory surgery centers, acute care hospitals and long-term care facilities.

To bridge some of the infection control gaps identified through these assessments, the ICAR team developed several educational initiatives to share with healthcare providers and administrators. Most recently, the ICAR team scripted, filmed and delivered three infection prevention videos along with an accompanying “Facilitator Guide.” The videos can be used by health facilities for in-service, re-education and staff development. The guide is meant to be used by facilities to prompt a dialogue between staff in healthcare settings. The videos were introduced during a webinar on May 17, garnering more than 430 registrants from various healthcare and public health facilities throughout the state. The videos highlighted proper aseptic technique and hand hygiene during glucometer use; proper cleaning of the medication preparation area; and important injection safety procedures. As of June 9, each video had well over 100 views. The videos and guide are available at the ICAR page on the Department of Health website.

Perhaps the team’s greatest accomplishments are the partnerships they have developed with numerous professional associations, such as the Association for Professionals in Infection Control and Epidemiology and New Jersey Hospital Association, as well as relationships with healthcare facility leadership and staff. The ICAR team maintains an open line of communication and shares updates and notifications as appropriate. Although substantial efforts have been made to reduce healthcare-associated infections through ICAR, there are still opportunities for improvement before this public health threat can be eliminated.

Commissioner Bennett Promotes Fresh Produce

On April 29, Commissioner Bennett participated as a chef at the launch of Virtua’s Mobile Farmers’ Market program designed to reduce hunger and increase consumption of fruits and vegetables in communities where access to fresh produce is limited. The Virtua Throw Down for Kids was a free public event in Camden to launch the program. The Mobile Farmers Market is a major new public health initiative in Camden and Burlington counties, designed to help thousands of area residents eat more fresh produce and improve their health. The cooking competition was a high-spirited contest between five VIPS, judged by a panel of children from the Boys and Girls Club of Camden and LUCY organizations. Each contestant made a healthy dish using fresh produce.