



Department
of Health

Annual Report 2015



Making New York the Healthiest State

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Message from the Commissioner



The New York State Department of Health – one of the nation’s largest state health departments – is an agency in motion. Our dedicated employees are continually working to promote healthier environments, enhance access to health care, encourage health system reform, and prevent chronic and communicable diseases.

We offer cancer screenings in neighborhoods with high cancer rates; hold listening sessions around the state where residents can share their health concerns; and work with local health departments, hospitals, community-based organizations, and many other health care providers and stakeholders to identify and address their greatest challenges. Throughout these efforts, we are working to achieve the Triple Aim – better individual care, improved population health, and lower costs.

In the two years that I have served as New York State’s Health Commissioner, we’ve faced Ebola, *Legionella*, and EVD68 (Enterovirus D68). We’ve made low-cost, high-quality health insurance plans available to even more New Yorkers, toughened our fight against opioid abuse and overdoses, and built up our statewide electronic health network to improve communication between health care providers. We’ve confronted environmental health challenges, deployed evidence-based methods to control outbreaks of measles and hepatitis A, and instituted reform initiatives that will transform our health care delivery system to one with lower costs and improved outcomes.

Our hard work is paying off. In 2015, smoking rates in New York hit an all-time low. It was also the first year that New York had no new cases of mother-to-child transmission of HIV since the AIDS epidemic began in the early 1980s. Now, we can dare to dream of a day when no one will become newly infected with HIV/AIDS in our state. Additionally, NY State of Health, our official health plan marketplace, has helped more than 850,000 uninsured New Yorkers get the coverage they need to protect themselves and their families.

To ensure that we’re ready to confront the unexpected, the State Health Department engages in strategic planning and health emergency preparedness. Whether it’s aligning the work of the Department with the rapidly evolving health care delivery system, confronting the emergence of new threats to the State such as the Zika virus, or preparing for and responding to extreme weather events, the Department, along with our partners across the State, is fully immersed in research, mitigation, preparedness, response, and recovery.

One of the greatest lessons I’ve learned in life is the importance of perseverance and creativity when facing challenges. That lesson is especially applicable here at the Department of Health, where persistent efforts and out-of-the-box thinking are often required to develop our best solutions.

There’s hard work ahead, but together we can make New York the healthiest state.



Howard A. Zucker, MD, JD

Commissioner

New York State Department of Health

Preface

Since 1901, the New York State Department of Health (NYSDOH) has been protecting and promoting the health, safety and well-being of the residents of New York. Early efforts focused on sanitation and vaccinations, emerging sciences that were fast becoming important weapons in the prevention and treatment of infectious disease. Over the years, the agency's responsibilities have grown significantly. Today, NYSDOH is accredited by the Public Health Accreditation Board (PHAB), which means the Department meets the highest possible standards in public health.

Governance

The New York State Department of Health's broad responsibilities are established in the state's Public Health Law (PHL). These responsibilities include overseeing reporting and control of disease, maintaining vital records, and promoting the prevention of disease. The PHL also establishes the authority of the the Commissioner of Health of the State of New York, who is charged with, among other things, investigating epidemics and causes of disease, enforcing PHL, and supervising the work of local boards of health and health officers. The powers and duties of the Department and Commissioner are set forth in PHL § 201 and 206, respectively.

The New York State Public Health and Health Planning Council (PHHPC) is comprised of the Commissioner and 24 members appointed by the Governor, and it possesses advisory and decision-making authority with respect to New York State's public health and health care delivery system. PHHPC is charged with adopting and amending the Sanitary Code and the regulations that govern health care facilities, home care agencies, and hospice programs. PHHPC makes recommendations to the Commissioner concerning major construction projects, service changes, and equipment acquisitions relating to health care facilities and home care agencies. PHHPC also advises the Commissioner on issues related to the general preservation and improvement of public health. PHHPC's powers and duties are set forth in PHL § 225. Current members of the Council and committee membership can be found [here](#).

Programs and Services

NYSDOH has provided public health services for over 100 years and administers a wide range of public health programs, directly or through contracts, that address disease prevention and control, environmental health protection, promotion of healthy lifestyles, and emergency preparedness and response. The Department also conducts health care surveillance in hospitals, home care agencies, and nursing homes throughout the state; conducts research, and maintains diagnostic and reference laboratories at the Wadsworth Center; manages the Medicaid program; administers New York's Health Exchange; and operates five health care institutions.

Resources

In 2015, the Department employed 3,375 people in its central office, three regional offices, three field offices, and nine district health offices across the state; an additional 1,528 worked in the five NYSDOH-operated health care institutions. In the 2015-16 fiscal year, the Department's appropriations totaled \$134.6 billion. Of this, approximately \$126.5 billion was Medicaid-related, \$7.9 billion supported public health initiatives, and \$200 million was allocated to institutions operated by the Department.



New York State Public Health and Health Planning Council Member Dr. Angel Alfonso Gutiérrez discusses an issue before the Council while Council Member Dr. John Palmer looks on.



Dr. Jonathan Wolpaw, director of the National Center for Adaptive Neurotechnologies at the Wadsworth Center, speaks at NCAN's official ribbon cutting in September. The first-in-the-nation facility works on research to improve the diagnoses and treatment of stroke, spinal cord injury, traumatic brain injury, and many other devastating conditions. Research is just one aspect of the NYS Department of Health.

Local Health Departments

In New York State, 57 county health departments and the New York City Department of Health and Mental Hygiene provide public health services at the local level. New York is one of 27 states where the provision of public health services is decentralized, meaning local health departments operate under the administrative authority of local governments. However, NYSDOH provides environmental health services in 21 counties where local health departments do not have this capacity. While federal and state public health statutes and regulations guide the process, each local health department addresses the needs of its own community.

Improving the Health of New Yorkers

Ensuring the health of nearly 20 million people isn't easy, but it's a task at the center of all we do. Whether it's encouraging people to exercise, deterring them from substance abuse or putting an end to the AIDS epidemic, our goal is a singular one: to keep New Yorkers healthy. To that end, we continuously strive to improve on what we're doing.

Celebrating Public Health Week

The American Public Health Association (APHA) celebrates the work of public health and calls attention to issues important to creating a healthier nation. For nearly 20 years, the APHA has invited communities across the country to participate in National Public Health Week.

Here in New York, Commissioner Zucker traveled to different regions of the state to promote important health messages. In Syracuse and Buffalo, he spoke about the importance of fitness to youths and seniors. In Long Island, he lauded the benefits of walking. He touted the role of Complete Streets and community gardens in Troy, and promoted the adaptive sports programs at Helen Hayes Hospital in Haverstraw. The weeklong celebration of public health gave the Department a pulpit to deliver some of today's most critical messages about health, nutrition, and good medicine, and to highlight the important role that local health departments play in keeping New Yorkers healthy.

Medical Marijuana Program

Throughout the year, NYSDOH continued laying the groundwork for its Medical Marijuana Program. After receiving 43 applications, the Department chose five organizations to grow, manufacture, and distribute medical marijuana. The dispensaries were spread out across the state so that patients and their caregivers all over New York would have access.

In the fall, the Department began offering an online course for physicians interested in certifying patients for the use of medical marijuana. After completing the course, physicians were invited to register to participate in the Medical Marijuana Program. In December, the Department launched the online Patient Certification and Registration system for patients to apply for a registry identification card. These steps paved the way



Dr. Howard Zucker, then the Acting Commissioner of Health, walks at Belmont Lake State Park in North Babylon with Sen. Kemp Hannon (left), DOH epidemiologist Dr. Julius Ade (far left), and community resident Phyllis Henry (right) during during Public Health Week in April 2015.

for the program to start providing medical marijuana in January 2016, just 18 months after Governor Cuomo signed the Compassionate Care Act into law.

In support of the program, a medical marijuana testing lab was established at Wadsworth Center. Staff developed methods for detecting and quantifying cannabinoids and potential contaminants in medical marijuana products. As a result of these efforts, New Yorkers suffering from some of the most debilitating diseases – including Parkinson's, amyotrophic lateral sclerosis, and epilepsy – now have another option for the treatment of pain, seizures, and other life-altering complications.

Preventing Overdoses

Heroin and prescription opioid abuse is a major public health problem in New York and the rest of the nation. To prevent overdoses from becoming deadly, NYSDOH has been aggressively training people to administer



Left: Preparing the medical marijuana program involved testing at Wadsworth Center labs. Right: Naloxone, a drug that quickly reverses an opioid overdose, is administered intranasally.



In 2015, New York had its first year with no new mother-to-child transmissions of HIV since the epidemic began in the early 1980s. This development demonstrates extremely high rates of viral suppression among HIV-infected women of child-bearing age.

naloxone, an opioid antagonist that counters the effects of heroin and other opioids. Naloxone quickly reverses the effects of the opioid drug.

Since the Department launched the overdose prevention program in 2006, a total of 100,000 individuals in the community have been trained to use naloxone; more than half were trained in 2015. The Department has also trained firefighters, law enforcement, and soon-to-be-released incarcerated individuals. As of December, naloxone has been administered more than 3,000 times. To enhance these efforts, the Department is making naloxone available in some pharmacies. NYSDOH plans to expand to more pharmacies in the first quarter of 2016, so the drug is readily available in the community.

Controlling Synthetic Cannabinoids

Between January 1 and December 31, 2015, New York had 9,161 emergency department visits and 1,630 poison control center calls associated with synthetic cannabinoids. That's more than an eleven-fold increase over the same period in 2014 (801 ED visits and 343 poison control center calls in 2014). Synthetic cannabinoids encompass a wide variety of chemicals that stimulate the same receptor in the body as cannabinoid 9-tetra-hydrocannabinol (THC), the psychoactive ingredient in marijuana.

But synthetic cannabinoids are not marijuana, and their effects are unpredictable. Synthetic cannabinoids are applied to plant materials, then packaged as incense, herbal mixtures or potpourri and sold in gas stations, convenience stores and head shops, as well as by drug dealers on the street. The slick packaging bears falsely reassuring disclaimers, and is designed to appeal to young people.



In 2015, Governor Cuomo called on the Department to pass emergency regulations that expanded the list of synthetic cannabinoids and bath salts first banned in 2012. With two additional lists of chemical compounds, these recently developed substances that had bypassed previous regulations are now illegal. The regulations will help curb the availability of these drugs, popular among youth and those with histories of substance abuse or mental illness, who are the most vulnerable.

Ending the AIDS Epidemic

Since the early 1980s, New York has been at the center of the HIV/AIDS epidemic. Today, the state stands on the brink of putting an end to this devastating disease.

In April, Governor Cuomo formally endorsed the blueprint for ending the AIDS epidemic. The goal is to decrease new HIV infections to 750 per year by the end of 2020. When successful, this achievement will mark the state's first-ever decrease in HIV prevalence since the disease emerged in New York.

To meet its goal, the Department began using HIV surveillance data to improve outcomes for certain groups impacted by the epidemic. By matching information available in the NYS Medicaid system and HIV/AIDS registry, NYSDOH identified 6,000 HIV-positive patients whose viral loads were not suppressed. Steps are being taken to relink these persons to care and provide antiretroviral medications to achieve viral suppression. The Department also took its Expanded Partner Services program statewide, and used HIV surveillance data to identify more than 2,000 people diagnosed with HIV who were potentially not receiving care. More than 90% were located, and 72% were relinked to care.



Left: Synthetic cannabinoids come in colorful packaging that often appeals to young people. Right: Getting high-risk people to take pre-exposure prophylaxis is part of the state's "Ending the Epidemic" campaign to reduce HIV/AIDS.

A key component of ending the epidemic is the use of pre-exposure prophylaxis (PrEP) that can prevent high risk individuals from contracting HIV. To assist with plans to link hundreds of high-risk people to PrEP, the Department launched the PrEP Assistance Program (PrEP-AP). PrEP-AP helps people who are uninsured or underinsured pay for the medical and laboratory services associated with a PrEP regimen, although not for the drug itself. The use of PrEP has increased four-fold since the Governor announced the End of the Epidemic campaign in June 2014.

Addressing Antibiotic-Resistant Gonorrhea

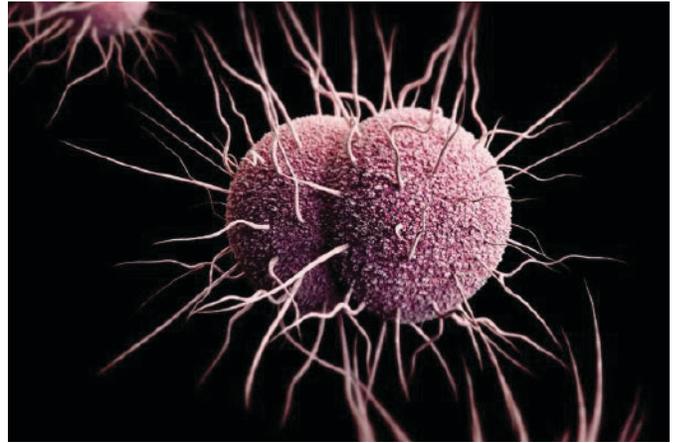
Neisseria (N.) gonorrhoeae, the bacteria that cause gonorrhea, has become resistant to nearly all antibiotics used for treatment except one, cephalosporins. The Centers for Disease Control and Prevention (CDC) calls this an “urgent public health threat.” To delay the emergence of antibiotic-resistant gonorrhea, it is essential to treat infected individuals with recommended antimicrobial agents.

To encourage screening, NYSDOH implemented a performance incentive in the 57 counties of New York State outside New York City. The Department worked with local health departments to disseminate treatment guidelines to health care providers, facilitate clinical consultation for the management of persons with gonococcal infection, and ensure epidemiologic follow-up to promote timely treatment of infected persons and prompt medical referral of exposed partners. More than 90% of reported cases received adequate treatment.

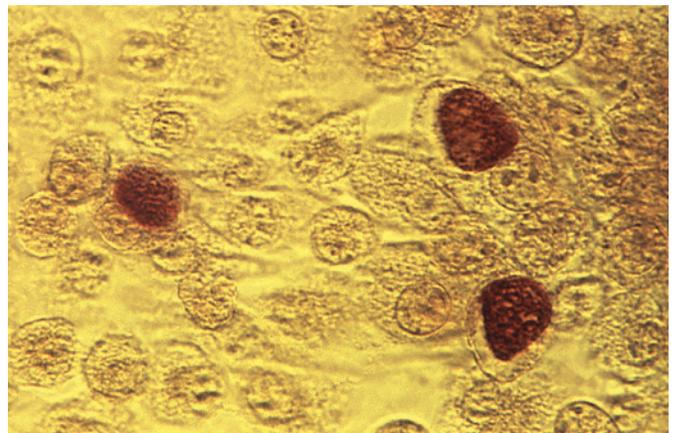
In 2015, 8,719 cases of gonorrhea were reported, none of which were antibiotic resistant. Treatment rates continued to be high with greater than 91 percent of individuals receiving the recommended treatment regimen.

Stopping Chlamydia

Chlamydia is a leading cause of infertility. Since most cases are asymptomatic, screening is essential. In a small pilot looking at chlamydia in adolescents, four pediatric primary care practices enrolled in a project to promote sexual history assessments and screenings during well child visits. The result: a 40% increase in young adults who received a sexual history assessment and a 16% increase



Neisseria (N.) gonorrhoeae diplococcal bacteria is shown here as a computer-generated 3D image. The bacteria, which causes gonorrhea, is becoming increasingly resistant to treatment.



Chlamydia trachomatis, the bacteria that causes chlamydia, is magnified here at 200 times its size. Chlamydia is the most common bacterial sexually transmitted disease.

in those screened for chlamydia. The intervention strategies identified through this pilot are expected to be used in other pediatric settings across the state.

Expanding Organ Donation

Enrollment in the New York State Donate Life Registry has been steadily increasing. Approximately 4 million New Yorkers are now registered to donate their organs. This represents an increase of 8% over the previous year. Even so, the Department continues to work with the donation and transplant community to increase organ donations to meet growing demand which continues to exceed supply. In New York, more than 10,000 people are awaiting transplants.

To that end, NYSDOH has enlisted the New York Alliance for Donation to operate and promote the New York State Donate Life Donor Registry (NYSDLR), an electronic database administered by the Department and the Office of Information Technology Services. Donors who enroll are giving legal consent for the donation of their organs, eyes and tissues, without requiring permission of family or next of kin.

NYSDOH provided \$1 million in funding to New York City clinics that diagnose and treat sexually transmitted diseases. The funds will enable the creation of a “One-Stop STD Clinic” model, which provides immediate access to PrEP for those at high risk, and anti-retrovirals for people newly diagnosed with HIV.



New York's first-ever Hepatitis C Testing Law led to a 51% increase in the numbers of specimens obtained from patients born between 1945 and 1965, according to a report released in 2015, a year after the law went into effect.

Adding Capabilities at Helen Hayes Hospital

In 2015, Helen Hayes Hospital expanded its repertoire of offerings with the acquisition of three new state-of-the-art pieces of rehabilitation equipment, enabling the facility to remain on the cutting edge of rehabilitative therapy.

Bertec Balance Advantage helps restore balance in patients affected by dizziness, vertigo, vestibular disorders, Parkinson's disease, stroke, traumatic brain injury, and more. It uses immersive virtual reality to challenge the patient's balance system. Balance rehabilitation optimizes available sensory information while helping the patient develop strategies to remain balanced during different sensory conditions. The Bertec works by simulating complex visual environments such as a busy street or a grocery aisle within a safe clinical setting. The clinician can assess the patient's progress by collecting objective data, allowing for accurate tracking of improvement.

BalanceWear BW300 is an orthotic vest for patients with mobility difficulties from the loss of postural control and balance caused by a neurologic or orthopedic disorder, such as multiple sclerosis, Parkinson's Disease, ataxia, stroke, and more. The vest uses light weights on its inner shell to stabilize the upper body, waist and pelvis to improve mobility. The vest provides supplementary sensory information to the nervous system, helping to improve balance and stability in all directions of movement, giving greater mobility and confidence.

AlterG Antigravity Treadmill uses NASA technology to reduce body weight to as low as 20% of the user's weight in 1% increments, creating an experience that users describe as "running on air" or "walking on the moon." Users are securely contained in the treadmill's adjustable air chamber, allowing for a fall-safe environment. The AlterG Antigravity Treadmill is used in patients who have had an injury or surgery on a lower extremity or a total joint replacement. It can also aid in gait training and strengthening for individuals with Parkinson's Disease, stroke, traumatic brain injury, and other neurological conditions.

Surveillance and Enforcement of Health Care Facilities

In the midst of a changing health care environment, NYSDOH continued working to ensure effective licensure and surveillance of health care providers, always with patients and residents in mind. To make it easier for new providers to begin offering services, the licensure process for adult care facilities was streamlined. In addition, by applying the LEAN process, which gives customers greater value with fewer resources, NYSDOH reduced the time it takes to conduct pre-opening surveys for hospital and clinic services by more than 60 percent. The Department will continue looking for ways to protect the health and safety of patients and residents while at the same time streamlining the process.



Helen Hayes Hospital added three new pieces of rehabilitation equipment in 2015. From left: the Bertec Balance Advantage, the BalanceWear BW 300 vest, and the AlterG Antigravity Treadmill.

Promoting Healthier Environments

Health can be affected by the air we breathe, the water we drink, the food we eat, or the contaminants we touch. Chemicals, radiation, microbes, or anything in the physical world has the potential to affect our health. The Department works every day to prevent and reduce New Yorkers' health risks at home, work, school, and play.



Confronting Legionella

In July, an outbreak of Legionnaire's disease in the Bronx sickened 138 people, and 16 people died. In response to the emerging outbreak, Department staff were deployed to the Bronx to collect samples from cooling towers and to provide outreach and education for the community. With help from the Wadsworth Center, scientists traced the outbreak to cooling towers that tested positive for *Legionella*.

The outbreak led to the establishment of comprehensive public health regulations to improve the maintenance of cooling towers throughout New York State. In collaboration with our partners, NYSDOH created regulations that mandate timeframes and processes for the maintenance and testing of cooling towers, set fines for failure to comply, and established a statewide registry of all cooling towers.

The goal of the regulation is to reduce the public's exposure to *Legionella*, which can grow in the warm water environments of cooling towers. New York State took the additional step of adding a component to the regulation to protect more vulnerable people by requiring general hospitals and residential health care facilities to have a *Legionella* sampling plan for their internal water systems. The deadly outbreak demonstrated the Department's capacity to rapidly respond to emerging public health issues, and to swiftly implement measures and actions to protect the public's health.

Improving the Delivery of Drinking Water

Access to acceptable drinking water is essential to public health. In 2015, the Department's ability to help municipalities improve their drinking water infrastructure was greatly enhanced by the NY Water Infrastructure Improvement Act, which provided funds to municipalities with drinking water and wastewater infrastructure projects.

In the first year, \$20 million in grant funding was available for drinking water projects. The state also provided an additional \$37 million in low-interest Drinking Water State Revolving Fund (DWSRF) loans to assist municipalities with drinking water infrastructure projects. These funds will help ensure that municipalities and water system operators can provide the best possible water delivery to New York residents.



Wadsworth scientists did extensive testing for Legionella during the outbreak in August.

Setting New Limits on Trichloroethene

Trichloroethene (TCE) is a volatile chlorinated solvent and a common environmental contaminant in New York State. It is used to remove grease from metal during the manufacture of various products, including building/furniture materials, fixtures, fabricated metal, and electric/electronic equipment. Trichloroethene is also used as a paint stripper, adhesive solvent, an ingredient in paints and varnishes, and in the manufacture of other chemicals.

In humans, exposure to high levels of TCE has been associated with a number of health effects in humans. In recent years, science has proven that TCE moves from contaminated groundwater and/or soil into buildings through the process of vapor intrusion. This can result in elevated TCE levels in indoor air that may increase the risk for adverse health effects.

In light of these findings, NYSDOH lowered its air guideline level for TCE. The Department also set a new urgent-action level that addresses concerns about exposure during pregnancy and the need for special advice when pregnant women are exposed to TCE. These values are used to characterize and respond to situations where TCE is found in indoor air. NYSDOH posted three documents providing technical analysis and summary information to support its updated human health risk assessment of airborne TCE.



NYSDOH has a new [website](#) on Healthy Gardening that features tips on how to grow and harvest vegetables and fruits while reducing your exposure to chemical contaminants in the soil.

At the same time, the Department of Environmental Conservation (DEC) added the NYSDOH cancer-based air value for TCE into the latest update of their Air Guide Annual Guideline Concentration table. The table is used in the development of DEC-issued facility operating permits, and the cancer value defines the threshold at which a chemical may cause cancer.

Ensuring Healthy Fish Consumption

The NYSDOH's Great Lakes Biomonitoring Project, funded by the federal Agency for Toxic Substances and Disease Registry (ATSDR), set out to describe contaminant levels among people who consume fish from the Great Lakes Basin of New York State. To do that, the Department collected blood and urine samples to measure levels of a dozen different chemicals in people. Data from biomonitoring can help identify at-risk populations, inform public health policies on reducing contaminants in the environment, and evaluate the effectiveness of such policies.

NYSDOH recruited approximately 600 participants representing two different target populations who ate locally-caught fish: 400 English-speaking licensed anglers who fish with hook and line residing in areas near the Buffalo River, Niagara River, Eighteen Mile Creek, and the Rochester Embayment; and 200 non-English-speaking refugees from Burma residing near the Niagara River and Buffalo River. Both anglers and refugees had higher levels of certain chemicals, such as mercury, than the general U.S. population. Licensed anglers had elevated levels of chemicals such as PCBs in the Great Lakes Basin; while refugees had higher levels of DDT, which reflects exposures before coming to this country.

NYSDOH shared these results with a community-based advisory group that includes environmental groups, academia, and local health departments. The results will be used to guide people on the fish they eat so they can reduce chemical exposures from contaminants in Great Lakes Basin water bodies.

Managing Blue-Green Algal Blooms

Blue-green algae, technically known as cyanobacteria, are microscopic organisms that are naturally present in lakes and streams. Under certain conditions, blue-green



Burmese immigrants are among those who eat fish from the Great Lakes Basin in western New York.



Without appropriate action, blue-green algal blooms like this one can produce toxins that are harmful to people and wildlife.

algae can become abundant in surface waters that receive a lot of sunlight. When this occurs, blue-green algae can form blooms that discolor the water, or produce floating mats or scum on the water's surface. Exposure to blue-green algae can cause health effects in people and animals when water with blooms is touched or ingested, or when airborne droplets are inhaled.



Beachgoers at Coney Island

New Yorkers and vacationers heading to beaches on the Atlantic Ocean, Long Island Sound, and Great Lakes are now able to look up information about beach water quality and closures on the [website](#).

In response to the increase in blue-green algal blooms in New York, the Department developed comprehensive guidance for local health departments to protect the public from blue-green algae exposure. It also provided guidance to bathing beach operators and drinking water treatment plant operators dealing with blue-green algae in surface waters used for recreation or consumption. In addition, the Department conducted surveillance of adverse health outcomes from potential blue-green algae exposure, and provided education to physicians, veterinarians, and local health care providers.

NYSDOH followed up on over 50 cases reportedly linked to blue-green algae and other harmful algal blooms (HAB) exposures, closed 37 regulated bathing beaches impacted by blue-green algae, and conducted sampling at public drinking water supplies potentially affected by blue-green algae. The Department is working with the U.S. Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) in the formation of a national HAB response protocol.

Tackling Climate Change

In recent years, New York has experienced more frequent and longer-lasting extreme weather events and coastal storms, including Superstorm Sandy. Increasing levels of greenhouse gases have been associated with rising and extreme temperatures, and with heat waves. New York is becoming warmer and wetter. Changes in climate put New Yorkers at risk for health-related effects, including

heat-related illnesses and deaths, vector-, food-, and water-borne disease, respiratory distress, allergies, and exacerbation of cardiovascular disease.

With support from the CDC and other agencies, NYSDOH is expanding its understanding of the connection between climate change and health. Health impacts range from those that are direct, such as illness from extreme heat, to those that are secondary, such as increases in disease because of the expansion of habitats for ticks and mosquitoes. Climate changes could also affect drinking water supplies, the food supply, and access to quality food. Certain conditions, including socioeconomic status or older age, make some people particularly vulnerable. People who work outdoors, or who live near the coast or in lower-lying, flood-prone areas are also at greater risk. In addition, people with chronic diseases, such as diabetes or asthma, are more vulnerable to climate health impacts, such as excessive heat or air pollution.

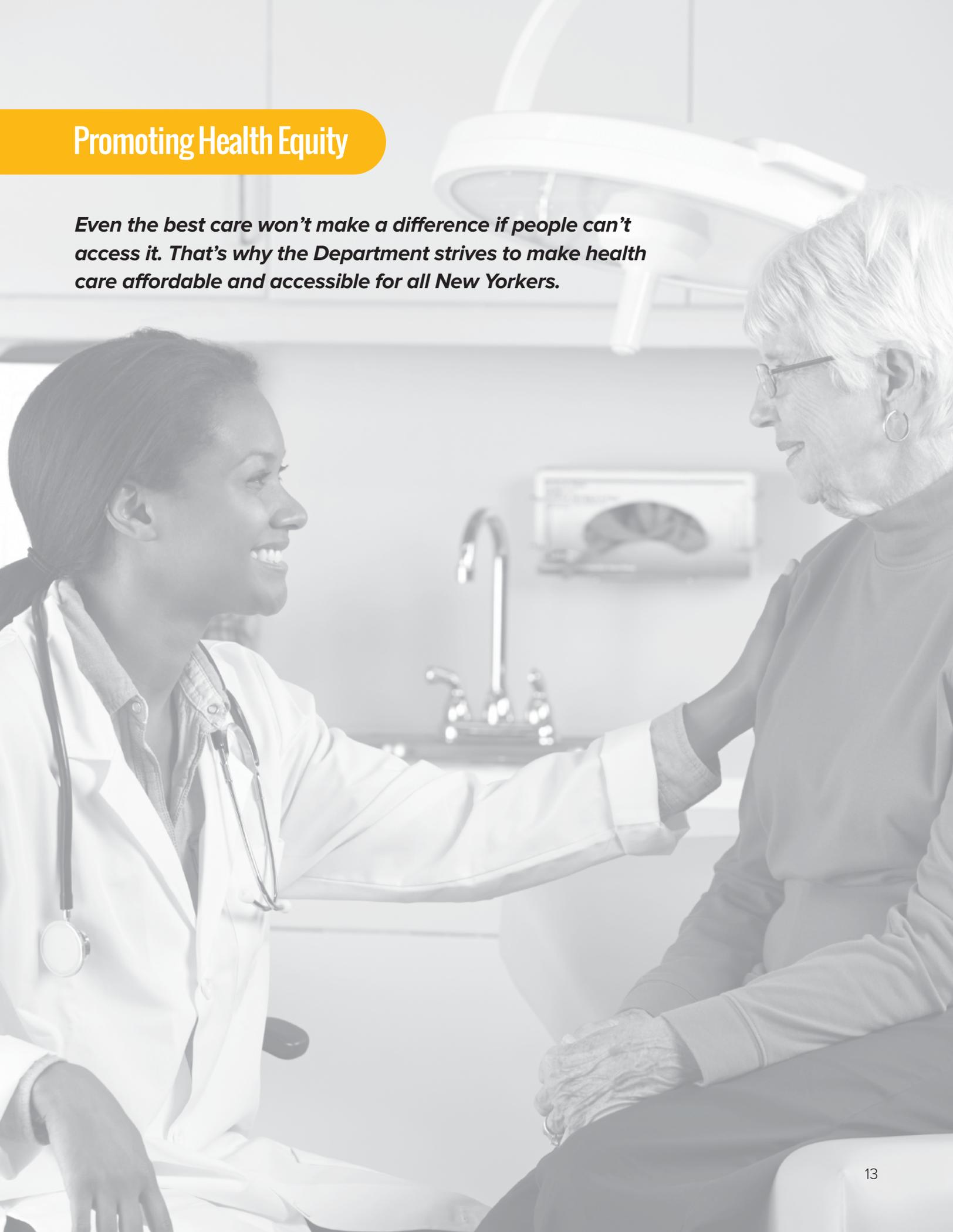
NYSDOH completed a multi-year effort to collect feedback from stakeholders and develop priorities for a New York State climate and health plan. NYSDOH also developed the *Building Resilience Against Climate Effects in New York State – Climate and Health Profile*, which summarizes the public health impacts from the changing climate and describes the populations most affected. NYSDOH is collaborating with government agencies and non-governmental organizations to build community resilience, and foster adaptation to prevent health impacts on the population.



New York's smoking levels fell to the lowest rate in recorded history as a result of the Department's wide-ranging tobacco cessation efforts. The adult smoking rate fell to 14.5% in 2015, from 16.6% in 2013. New York's smoking rates are below the national average of 17.8%.

Promoting Health Equity

Even the best care won't make a difference if people can't access it. That's why the Department strives to make health care affordable and accessible for all New Yorkers.





Reaching the Hispanic/Latino Community

Hispanics/Latinos make up 18.4% of the state's population. As a group, they have higher rates of premature death, unintended pregnancy, occupational lead poisoning, asthma, and HIV/AIDS mortality. And more than other populations, Hispanics/Latinos rank their own physical health as being fair/poor, and their mental health as poor.

To determine the best way to deliver health information to this audience, the Department partnered with Bassett Research Institute and the University at Albany School of Public Health to conduct the New York State Media and Technology Use Survey Research Project. The project enabled the Department to better understand technology use patterns and identify preferences and/or barriers in using technology so that communication campaigns can be better targeted, using the most appropriate communication channels.

First Nations Health and Wellness

New York State is home to eight federally recognized American Indian tribes: Cayuga, Oneida, Onondaga, Seneca, St. Regis Mohawk (also known as Akwesasne), Shinnecock, Tonawanda, and Tuscarora. New York has one of the nation's largest American Indian populations.

American Indian people experience disparities in health outcomes that reflect the impacts of social determinants of health such as education, income and housing.

Together with the Native American Community Services of Erie and Niagara Counties, NYSDOH established a First Nations Health and Wellness Planning Initiative in 2015, with the goal of achieving optimum health and well-being among the American Indian people in New York.

As part of that, the Department held a summit on "Health and Well-being for Native People, Organized by Native People" in March in Buffalo. Representatives from the New York Nations and Urban Indian Organizations came together collectively to discuss issues affecting the health of their people, and health and wellness priorities. Plans for a follow-up conference in 2016 are underway.

A Refuge for Recovery

Alcoholism and drug addiction are among the most persistent health issues identified by the Saint Regis Mohawk Health Services. In recent years, the extent of the problem has increased, and the relapse rate after inpatient rehabilitation care is high. The Saint Regis Nation identified the need to provide a safe and supportive gathering place for community members in recovery from alcohol and/or substance abuse, so they could continue their journey in sobriety.

With funding from NYSDOH, the Saint Regis Mohawk Health Services created Sewakwatho, a drop-in center for recovering alcoholics and people suffering from substance abuse. The center is staffed by people in recovery who are trained as life coaches.

After a successful pilot in 2014, the Department chose to open the center under a five-year contract. Since its opening, the center has logged 500 visitors a month. Sewakwatho has provided participants with support in a various ways. In addition to helping visitors manage "triggers" that could lead to relapse, the center provides food, warm coats, and business clothes. Providing a drop-in center filled a void between attainment of sobriety and successful maintenance. This void often leads to relapse; but, with the right supports, individuals are encouraged and supported in maintaining sobriety.

A More Appropriate Curriculum

According to the 2010 Census, 42% of New York's population currently belong to an underserved racial or ethnic group. Demographic projections show that by 2025, underserved racial and ethnic groups will make up most of the state's population. Inherent in this diversity are cultural and linguistic differences and health profiles that challenge health care delivery and utilization, and contribute to disparities in health and health care.

One way to overcome these challenges is with cultural and linguistic competency training for service providers who work with these diverse groups. The Department's Office of Minority Health-Health Disparities Prevention, worked with the Governor's Office of Employee Relations and the University at Albany Rockefeller College to

develop a cross-agency Culturally and Linguistically Appropriate Services (CLAS) Training Curriculum for NYS health and human services agency employees, as well as employees from the Department of Corrections and Community Supervision. The training curriculum is expected to be released in 2016.

Voices from the Community

Data shows that the highest rates of disease are concentrated in communities with the highest proportion of racial minorities, poverty, unemployment, and low educational attainment. Health disparities are also a product of deficiencies in knowledge, skills, leadership, communication, social ties, and linkages among existing services.

In response to a charge from Commissioner Zucker, the Office of Minority Health – Health Disparities Prevention and the Minority Health Council convened three community listening sessions in areas where 40% or more of the population is made up of underserved racial and ethnic groups. The listening sessions were held in Buffalo, Rochester, and Albany, and gave residents a chance to discuss challenges facing their communities.

They also identified assets that can be tapped for partnerships, and gaps and resource needs for improving health and well-being, including changes in service delivery. Information gleaned from these sessions will be used to inform policy and programmatic decisions that improve the health of communities now and in the future.



Participants at a NYSDOH listening session in Rochester provided insight into the health needs of that community. Two other sessions were held in Albany and Buffalo.

Reforming the Health Care System

Health care is changing rapidly, from a fee-for-service system that rewards volume to a value-based one that rewards outcomes. At the same time, we're striving to improve the quality of that care, while building a healthier population.



The Essential Plan

The New York State of Health implemented the Essential Plan, an option available under the Affordable Care Act, funded in part by federal tax credits. The plan covers inpatient and outpatient care, physician services, diagnostic services, and prescription drugs among others, with no annual deductible and low out-of-pocket costs. Enrollees pay no fees for routine visits and recommended screenings that keep them healthy.

People who enrolled in late fall had coverage beginning January 1, 2016. Families or individuals at or below 150% of the federal poverty level have no monthly premium. Those with incomes greater than 150%, but at or below 200% of the federal poverty level have a low monthly premium of \$20.

As of December 30, approximately 300,000 individuals were enrolled in the Essential Plan. The Essential Plan provides consumers with a lower-cost health insurance option than was previously available on the marketplace.

Delivery System Reform Incentive Payment (DSRIP) Program

In 2015, 25 Performing Provider Systems (PPS) applications were evaluated and approved, paving the way for projects to begin. By the end of its first year, all 25 PPS were working to bring tangible reform to the state's Medicaid delivery system. A two-day learning symposium in September helped participants share ideas and network.

Overseeing the process is the DSRIP Project Approval and Oversight Panel, a panel convened by the state and Independent Assessor, which meets to monitor PPS progress and ensure DSRIP goals continue to be met. Each PPS reports quarterly on implementation progress of their respective projects. The reports serve as the basis for authorizing incentive payments to the PPSs for achieving DSRIP milestones. Maintaining the momentum and achieving statewide performance measures will be the new focus, as the state's health care delivery system transitions from a fee-for-service model to a value-based payment system.

Medicaid's Global Spending Cap

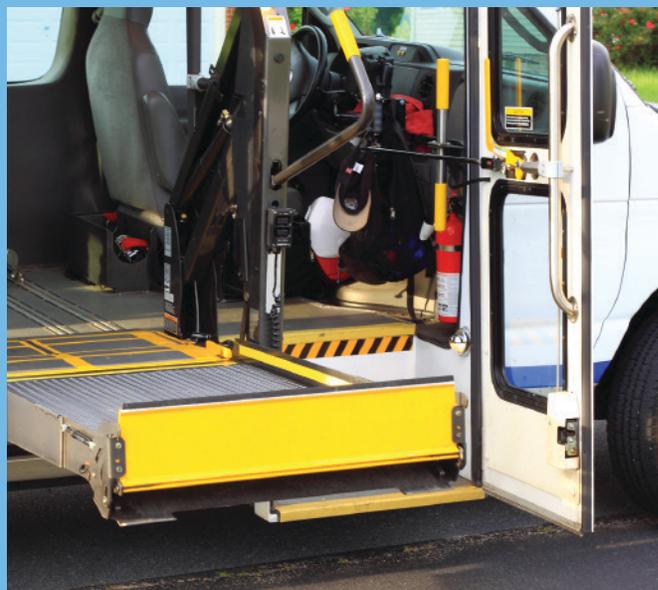
A key part of New York's Medicaid reforms is the Global Medicaid Spending Cap, which was implemented in April 2011 at the request of the Medicaid Redesign Team. The Global Medicaid Spending Cap is consistent with the Governor's goal to limit total Medicaid spending growth to no more than the ten-year average rate for the long-term medical component of the Consumer Price Index.

The Global Cap, which applies to the state share of Medicaid spending, has fundamentally changed how state officials and stakeholders view the program. Every policy change must now be viewed in terms of its impact on Medicaid resources. If spending appears to be on the path to exceed the cap, the Commissioner of Health has "super powers" to change reimbursement rates and implement

utilization controls to bring spending back in line. In 2015, the state was under the Global Cap again, having met this goal for four consecutive years while expanding health coverage to the state's neediest populations.

Medicaid Transportation Management Initiative

Since 2011, the Department has been gradually assuming the administration of Medicaid transportation from the counties and New York City. In December, the transition was successfully completed statewide with the Department's assumption of these services in the Long Island region. The result of this Medicaid reform initiative has been a more seamless, cost-efficient, and quality-oriented delivery of transportation services to Medicaid beneficiaries. The savings result from a decrease in the number of higher cost trips in favor of more appropriate lower cost modes, such as public transportation and other targeted efficiency efforts, including group rides. In addition, state administration has improved service quality, including faster service during natural disasters, and better fraud and abuse identification and prevention.



Care Management for All

As part of New York's Medicaid reforms, the Department is striving to have virtually all Medicaid beneficiaries enrolled in managed care by October 2019, an effort known as Care Management for All. The Department has enrolled nearly three-quarters of the 6.3 million Medicaid enrollees in a managed care plan.

Part of the process involves transitioning benefits into managed care, including the transition of behavioral health services. The process began in 2015 in New York City. Eventually, all behavioral health and physical health services will be under risk-bearing qualified mainstream managed care plans and Health and Recovery Plans (HARPs). HARPs were created for people with significant

behavioral health issues. The transition of behavioral health services into Medicaid managed care will continue in the rest of the state in 2016.

The transition from a primarily fee-for-service environment to a managed care environment will improve clinical and recovery outcomes for adults with serious mental illness and substance use disorders; reduce costs by cutting down on unnecessary emergency and inpatient care; and increase the capacity to deliver community-based recovery-oriented services and supports. Over the next three to four years, the majority of the remaining benefits and patient populations will transition into managed care.

As part of the Care Management for All initiative, NYSDOH completed the statewide expansion of Managed Long Term Care (MLTC). This multi-year project began in 2011 as one of our key Medicaid Redesign efforts. It required the mandatory transition and enrollment of certain community-based long term care services recipients into Managed Long Term Care. In 2015, four existing MLTC plans expanded their service areas to support the statewide initiative. Total enrollment in MLTC during the year grew to more than 150,000 individuals.

In a partnership with Centers for Medicare and Medicaid Services, the Department also launched the Fully Integrated Dual Advantage (FIDA) demonstration in New York City and Nassau County. FIDA was created to integrate and manage care for dually-eligible Medicare and Medicaid consumers. As of December 31, there were more than 6,000 members enrolled in FIDA.

SHIP and PHIP: Moving Toward the Triple Aim

The State Health Innovation Plan (SHIP) is New York's roadmap to achieving the Triple Aim. At its heart is the Advanced Primary Care (APC) model, which promises to integrate care across all parts of the health care system, including community-based services, with better coordination for patients who have complex medical needs. These efforts will be supported by enhancements in the state's primary care workforce, the judicious use

of health information technology, and appropriate performance measurements.

In 2015, the SHIP began receiving \$100 million in federal funds, with most of it going toward the transformation of the state's primary care practices into APC models of care. The APC model features enhanced capabilities and processes that will improve the way primary care providers deliver care. Over time, New York's primary care practices will evolve into a highly integrated, team-based model of care that includes targeted care management for patients with chronic disease, as well as alternative payments models that promote outcome-based reimbursement.

Population Health Improvement Plan (PHIP) contractors are working to support the SHIP. PHIP promotes the Triple Aim – better care, better population health, and lower health care costs. As part of PHIP, the Department has enlisted regional contractors to identify local health needs and ways to meet them. Working with local health care organizations, health networks, and patient advocacy groups, among others, these contractors are striving to advance the Prevention Agenda, with the goal of keeping New Yorkers healthy.



The Triple Aim strives to deliver better care for individuals and improved population health, all at lower costs.

State Health Innovation Plan



Goal **Delivering the Triple Aim – Better health, better care, lower costs**

Pillars	1	2	3	4	5
	Improve access to care for all New Yorkers, without disparity	Integrate care to address patient needs seamlessly	Make the cost and quality of care transparent to empower decision making	Pay for healthcare value, not volume	Promote population health
	Elimination of financial, geographic, cultural, and operational barriers to access appropriate care in a timely way	Integration of primary care, behavioral health, acute and postacute care; and supportive care for those that require it	Information to enable consumers and providers to make better decisions at enrollment and at the point of care	Rewards for providers who achieve high standards for quality and consumer experience while controlling costs	Improved screening and prevention through closer linkages between primary care, public health, and community-based supports
	Enablers				
	Workforce strategy		A	Matching the capacity and skills of our healthcare workforce to the evolving needs of our communities	
Health information technology			B	Health data, connectivity, analytics, and reporting capabilities to support clinical integration, transparency, new payment models, and continuous innovation	
Performance measurement & evaluation			C	Standard approach to measuring the Plan's impact on health system transformation and Triple Aim targets, including self-evaluation and independent evaluation	

The State Health Innovation Plan essentially has five goals that will be met with three strategies.

Using Data for Good Health

Reforms to the health care system will require advances in technology that supply data and link networks, with the goal of improving patient care and reducing costs. Here in New York, technological advances are taking place on several fronts.

Gauging New York's Prevention Efforts

With three years to go, the Department took a look at the Prevention Agenda's 96 health outcome indicators, which are found on the dashboard [here](#). As of April 2015, New York had already met 16 of the objectives, including the rate of preventable hospitalizations and the rate of hospitalizations due to falls in older adults over age 65. In addition, the state made progress on 22 other indicators, including emergency department visits for asthma, unintended pregnancies, exclusive breastfeeding in the hospital, well-child visits, and the prevalence of tobacco use among high school teens. But other indicators show that New York still has to work on reducing rates of adult obesity and the incidence of syphilis in men, both of which are public health problems across the nation.

As part of the Prevention Agenda, all local health departments and hospitals must collaborate to develop and implement community health improvement plans. Data from 2015 showed a strong commitment to reducing chronic disease. Many counties are working to encourage participation in self-management programs for people with a chronic illness, as well as efforts to adopt standards for healthy food and beverage procurement.

Others are working to promote mental health and prevent substance abuse. Among these organizations, many are focused on strengthening collaboration and infrastructure among health, mental health, and substance abuse prevention agencies. Finally, to promote healthy women, infants and children, large numbers of local health departments and hospitals are implementing policies to promote breastfeeding.

A Brighter SHIN-NY

The Statewide Health Information Network for New York (SHIN-NY) is a virtual network that, with patient consent, links personal health information across health care

providers and clinical settings. The SHIN-NY facilitates real-time secure exchange of patient data across health care teams. Having an interoperable health information exchange (HIE) will reduce costs and give providers a more comprehensive picture of a patient's health history. A recent study by the Brookings Institution found that use of HIE technology reduces duplication of tests, which saves money and improves patient care.

In 2015, the SHIN-NY advanced on several fronts. The eight Regional Health Information Organizations (RHIOs) that comprise the SHIN-NY attained Qualified Entity (QE) status, which allows them to pass personal health information on the SHIN-NY. The statewide Patient Record Lookup (SPRL) went live in July, making patient health information available across the state. And more than 90% of the state's hospitals are now connected to the SHIN-NY. Rules and regulations governing the SHIN-NY are due in 2016.

The SHIN-NY will provide major infrastructure support to several major NYS initiatives, including the Delivery System Reform Incentive Payment program and the State Health Innovation Plan, by serving as a valuable source of data, and supporting the integrated care and care coordination that are the basis of both initiatives. In the near future, the SHIN-NY will be leveraged to meet growing demands for quality measures, population health information, and health care cost reduction.

The All Payer Database

Knowing how and what we pay for health care is critical to helping consumers make health care decisions. Collectively, this data is important for reforms to the health care delivery system. Since 2011, the Department has been working to create an All Payer Database (APD). Once in service, the APD will house health care claims data from all major public and private insurance payers,



NYS Prevention Agenda 2013-18: A blueprint for state and local action to improve the health of all New Yorkers

- Prevent chronic diseases
- Promote a safe and healthy environment
- Promote healthy women, infants and children
- Promote mental health and prevent substance abuse
- Prevent HIV, STDs, health care-associated infections, and vaccine preventable diseases



In 2015, Health Data NY added 140 updated and new open datasets.

including insurance carriers, health plans, third-party administrators, and pharmacy benefit managers, as well as Medicaid and Medicare. The APD will also house valuable data from the Statewide Planning and Research Cooperative System (SPARCS), which collects data on all hospital discharges, emergency department visits, ambulatory care visits, and hospital outpatient service visits. Eventually, the APD will add other databases that include clinical and public health data sources, such as lab testing, pharmacy and clinical data from electronic health records, and data contained within public health registries, such as the NYS Cancer Registry.

With the APD, the Department will have, for the first time, a comprehensive picture of the health care being provided to New Yorkers, including multiple payers and

categories of service, with data on costs, pricing and payments related to care. In the past, such information was highly fragmented. Data systems were unable to communicate, and unable to support data analyses that address health care trends, needs, improvements, and opportunities.

The APD will change all that by weaving together health data from multiple sources. The database will feature user-friendly integrated data views and consumer portals that help foster analysis and decision-making, using large amounts of information. By having access to this information, consumers will be empowered to make more informed decisions on health plans and providers, and to make relative comparisons on quality, cost, and efficiency among potential insurers.



In 2015, the NYS Health Profiles received approximately 140,000 unique users.

A Commitment to Research

As part of the Department of Health, the Wadsworth Center has become a leading center for health research in the U.S. In 2015, the research center had a 45% increase in grant funding. Because of its rigorous research efforts, scientists at Wadsworth are remarkably prolific, with nearly 200 articles published in peer-reviewed journals in 2015. And with funding from the National Institutes of Health, Wadsworth established the National Center for Adaptive Neurotechnologies.





Left: A scientist at Wadsworth tests apples for food-borne illness. Right: Children's blood samples are diluted before being analyzed for toxic metals such as lead and mercury.

Protection from Food-borne Illnesses

Food-borne illnesses are a major public health problem, each year causing illness in one in six Americans; 128,000 are hospitalized, and 3,000 die. In 2015, NYSDOH, together with Cornell University, was named an Integrated Food Safety Center of Excellence (CoE) by the CDC, becoming one of six in the nation. The CoE will engage 11 states from Maryland to Maine, as well as local public health partners, to create a regional model for food safety improvement. The effort will also regionalize performance management, competency-based training, and program evaluation activities. The goal is to protect New Yorkers and save lives by preventing and controlling foodborne disease outbreaks across New York State and the Northeast.

Environmental Exposures and Children

Wadsworth was also awarded funding from the National Institutes of Health as a Children's Health and Environmental Analytical Resource (CHEAR). Scientists at Wadsworth will work with NIH and five other centers to measure exposure to chemical contaminants in children's blood and urine.

Working with NIH-funded investigators, Wadsworth will provide accurate measurements that support research studies of the impact of environmental exposures on children's health. The studies are looking at children's urine and/or blood for the presence of organic chemical contaminants, such as flame retardants, insecticides, and toxic heavy metals, including lead, cadmium, mercury and arsenic. Wadsworth will play a key role in overseeing the quality of measurements for toxic metals in blood and urine.

A Better Understanding of the Flu and Tuberculosis

The Wadsworth Center secured two prestigious national contracts that will enhance our understanding of influenza and tuberculosis (TB). These contracts reflect our commitment to the use of genomics in public health. As a National Influenza Surveillance Reference Center – known as NISurRC – Wadsworth scientists will study influenza using whole genome sequencing to better understand circulating flu strains and learn more about emerging viral strains.

Separately, Wadsworth will be doing whole genome sequencing of TB. This research will enable more rapid detection of antibacterial resistance in TB. Information from this research will help doctors determine the best combination of antibiotics to cure TB.

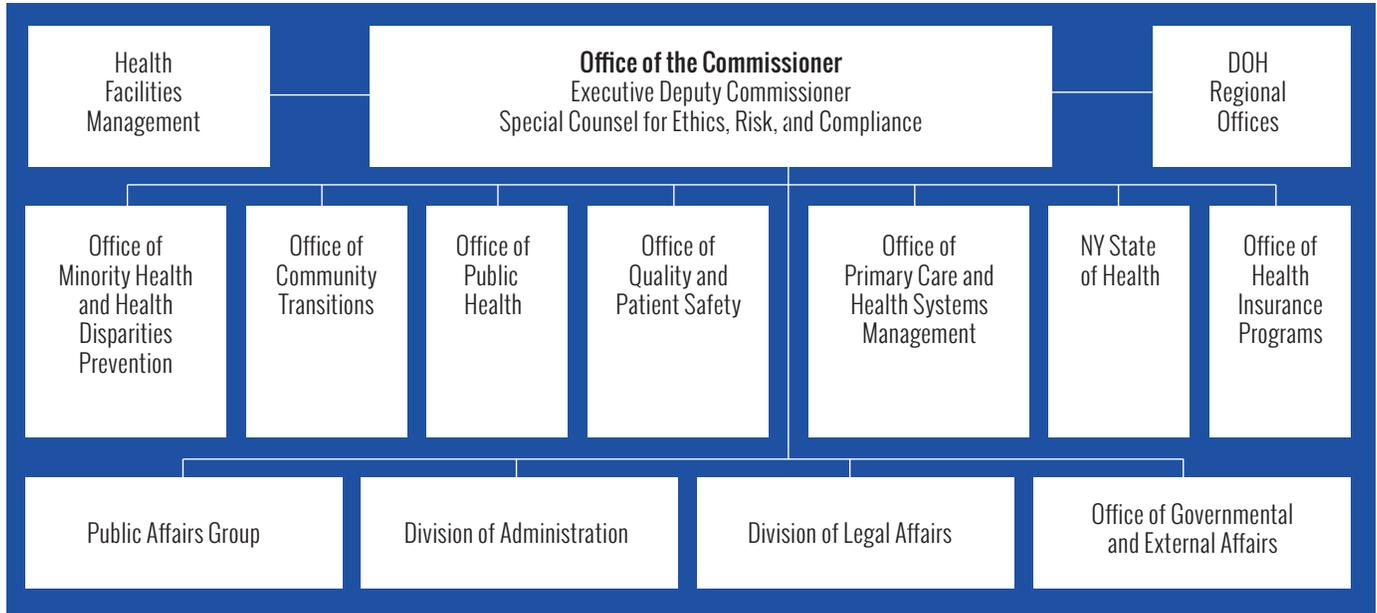


Conclusion

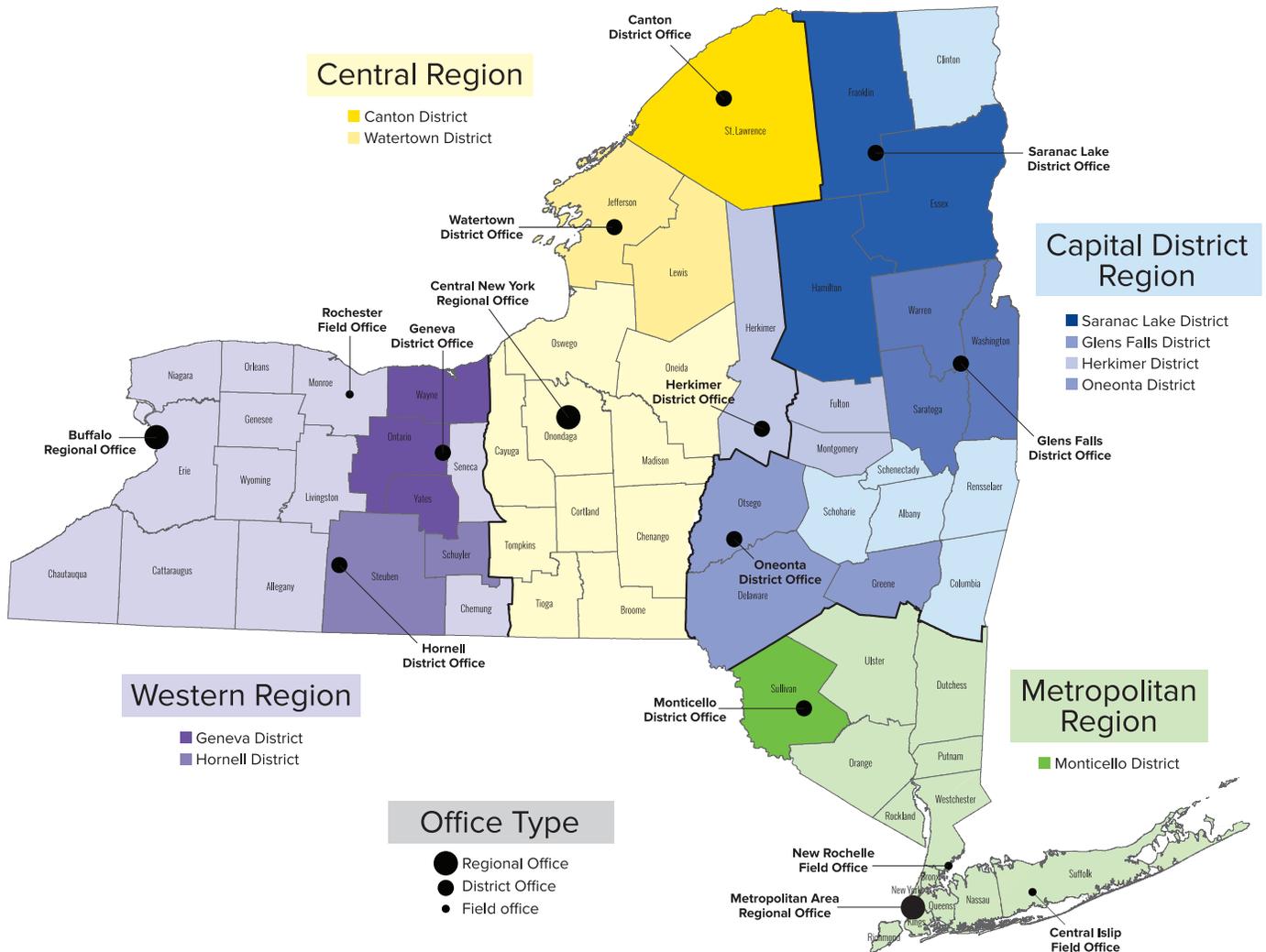
The New York State Department of Health's unwavering commitment to protecting the health of all New Yorkers is reflected in all its activities, whether it's improving access to health care or doing research to better understand disease. The year 2015 was no exception, as the Department continued its role as the state watchdog for public health.

The mission at NYSDOH is to protect, improve and promote the health, productivity and well-being of all New Yorkers. Our vision is that New Yorkers will be the healthiest people in the nation, protected from health threats, and have access to quality, evidence-based, cost-effective health services. Working with our multiple partners across the state, we are confident that these goals are within our reach.

Appendix A: NYSDOH Organizational Chart



Appendix B: NYSDOH Regional, District and Field Offices



Appendix C: NYSDOH Publications

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