# **Department of Public Health**



#### At a Glance

RAUL PINO, M.D., M.P.H., Commissioner

Janet Brancifort, M.P.H., R.R.T., Deputy Commissioner

Yvonne Addo, M.B.A., Deputy Commissioner

Established – 1878

Statutory authority – C.G.S. Chap. 368a, Sections 19a-1a et seq.

Central office - 410 Capitol Avenue, Hartford, CT 06106

Number of employees – 725, as of June 30, 2017

Recurring operating expenses –

Federal: \$118,697,576 (40.7%)

Federal: \$118,697,576 (40.7%) State: \$99,853,681 (34.2%)

**Additional Funds: \$72,739,492 (25%)** 

#### Organizational structure

- Office of the Commissioner
- Affirmative Action/Equal Employment Opportunity
- Communications/Government Relations
- Community, Family Health and Prevention
- Drinking Water
- Environmental Health
- General Counsel
- Health Care Quality and Safety
- Health Statistics and Surveillance
- Infectious Diseases
- Office of Health Care Access
- Operational and Support Services
- Public Health Laboratory
- Public Health Systems Improvement

#### Mission

To protect and improve the health and safety of the people of Connecticut by:

- Assuring the conditions in which people can be healthy
- Preventing disease, injury, and disability; and
- Promoting the equal enjoyment of the highest attainable standard of health, which is a human right and a priority of the state.

# **Statutory Responsibility**

The Department of Public Health (DPH) is the state's leader in public health policy and oversight. The agency is the center of a comprehensive network of public health services, and in partnership with local health departments, provides coordination and access to federal initiatives, training and certification, technical assistance and oversight, and specialty public health services that are not available at the local level. The agency is a source of up-to-date health information and analytics for the governor, the General Assembly, the federal government and local communities. This information is used to monitor the health status of Connecticut's residents, set health priorities and evaluate the effectiveness of health initiatives. The agency is a regulator focused on positive health outcomes and assuring quality and safety, while also minimizing the administrative burden on the personnel, facilities and programs regulated. The agency is a leader on the national scene through direct input to federal agencies and the United States Congress.

# **Public Service**

# Office of the Commissioner

# **Affirmative Action/Equal Employment Opportunity**

The Affirmative Action Office (AAO), also known as the Equal Employment Opportunity Office, is responsible for ensuring compliance with federal and state antidiscrimination laws and department policies to ensure equal opportunity for all individuals. This compliance applies to all programs and services, without regard to race, color, religious creed, age, sex, gender identity or expression, marital status, national origin, ancestry, present or past history of mental disability, intellectual disability, physical disability (including blindness) or learning disability, genetic information, sexual orientation, domestic violence, prior conviction of a crime, and/or previously opposing such discriminatory practices (regardless of substantiation).

# **Communications and Government Relations**

The *Communications Office* provides a full range of communication activities that serve the department and its stakeholders. The office manages public information, social media,

Freedom of Information responses, media and community relations, marketing communications, issues management and public affairs, the agency's website, internal communications, and crisis and emergency risk communications.

The *Government Relations Office* is responsible for legislative and regulatory information and referral activities, including the implementation of strategies to achieve the goals of DPH's legislative agenda. The office tracks and analyzes public health-related legislation, ensures the implementation of approved legislation, coordinates the development of the agency's regulations, and maintains the Public Health Code. The office also handles inquiries and requests from the public and other related constituent services.

#### **General Counsel**

The Office of General Counsel is the legal office for the Department of Public Health. The General Counsel is responsible for overseeing the legal and administrative activities of the office and provides legal support for the commissioner and the agency. The Office provides legal and administrative support for 14 professional licensing boards, presides over hearings and renders decisions concerning appeals of public health orders as well as reporting to federally mandated and private professional databases. The Office also responds to ethics and HIPAA questions, provides ethics and HIPAA privacy trainings, conducts investigations, responds to requests for personally identifiable health information, and generally ensures HIPAA compliance.

The Office of the General Counsel includes the Public Health Hearing Office, the Ethics Officer, the HIPAA Privacy Officer, and the Attorney General Designee.

# **Office of Health Care Access**

The Office of Health Care Access (OHCA) is responsible for the administration of the certificate of need (CON) program; preparation of the Statewide Health Care Facilities and Services plan; health care data collection, analysis and reporting; and hospital financial review and reporting.

The CON program promotes appropriate health facility and service development that addresses a public need. The CON program strives to ensure accessibility for needed services while limiting duplication or excess capacity of facilities and services.

OHCA has statutory authority to gather and analyze hospital financial, billing and discharge data. Information collected, verified, analyzed and reported on includes hospital expenses and revenues, uncompensated care volumes, and other financial data as well as hospital utilization, demographic, clinical, charge, payer and provider statistics.

# **Public Health Systems Improvement**

Public Health Systems Improvement (PHSI) is responsible for managing, coordinating and supporting organization-wide and multi-sector activities that result in measurable improvements of public health structures, systems and outcomes. After successfully managing the agency's national public health accreditation efforts, PHSI ensures that the agency maintains the standards required to keep its accreditation. PHSI also leads statewide assessment, planning and performance improvement activities through coordination and technical assistance to agency personnel and public health partners.

PHSI administers the Office of Health Equity established through Public Act 98-250, and works to monitor the health status of at risk populations, to ensure that health equity is a crosscutting principle in all agency programs, data collection, and planning efforts, that DPH activities focus on the underlying social determinants of health, and the promotion and implementation of culturally and linguistically appropriate services in DPH contractor, local health, and community-based organizations.

# **Community, Family Health and Prevention Section**

The *Community, Family Health and Prevention* (CFHP) Section works to improve the health of the overall population across the lifespan, especially mothers, infants, children, adolescents and other vulnerable groups, by establishing opportunities that support healthy living habits through education, early detection, access to care, chronic disease prevention and management, and injury prevention. The CFHP Section manages approximately 190 contracts and administers 44 accounts, including federal grants and state appropriations. Resources are dedicated to serve Connecticut's residents and affect the public health system, while maintaining a focus on the objectives of Healthy People 2020 and the CT State Health Improvement Plan.

The CFHP Section conducts comprehensive needs assessments to establish service priorities. Through significant contractual relationships, the CFHP Section provides health education and promotion, supports health screenings and referrals, leads care coordination initiatives, and provides technical assistance to promote quality improvement. Target populations and public health priorities are served by one or more of the CFHP Section's units, including: 1) Women, Infants and Children (WIC); 2) Maternal and Child Health Epidemiology; 3) Adolescent and Child Health; 4) Chronic Disease; 5) Office of Injury Prevention; and 6) Epidemiology.

The CFHP Section works to affect systems of care by supporting policies, systems and environmental change strategies, and developing and maintaining a strong and sustainable infrastructure to support essential public health activities. This is possible through: collaborations with providers, patients and families; coordination of resources; support, development and implementation of statewide plans; translation of current and emerging information into health benefits; and efficient and quality programming by evaluating performance and promoting quality improvement.

- 47,770 WIC clients enrolled and served through 187,032 WIC clinic visits
- 107,784 students enrolled in School Based Health Centers
- 7,200 children and youth with special health care needs received care coordination and services

# **Drinking Water Section**

The *Drinking Water Section* (DWS) is responsible for the administration and implementation of state and federal public health-focused drinking water laws and regulations, and is dedicated to assuring the purity and adequacy of the state's public drinking water systems and sources. The DWS has primacy over the U.S. Environmental Protection Agency's Safe Drinking Water Act (SDWA) of 1974, as well as state public drinking water laws.

DWS provides technical assistance, education and regulatory enforcement to Connecticut's 2,550 public drinking water systems, which provide public drinking water to approximately 2.8 million people on a daily basis. The DWS is committed to protecting and promoting healthy people in healthy Connecticut communities by assuring the use and distribution of high quality public drinking water for human consumption.

The DWS is organized into seven programmatic areas: Capacity Unit; Drinking Water State Revolving Fund (DWSRF) Unit; Enforcement Unit; Grant and Administration Unit; Safe Drinking Water Rule Implementation Unit; Source Assessment and Protection Unit; and, Technical Review and Field Assessment Unit.

- 585 inspections of Public Water Systems (PWS) conducted and completed
- 118 water infrastructure improvement projects reviewed
- 430,045 PWS water sample results processed

# **Environmental Health Section**

The Environmental Health Section (EHS) is responsible for assessing and controlling the impact of the environment on people and the impact of people on the environment. It is both protective and proactive. Its responsibility to protect the health and safety of Connecticut's citizens is accomplished through technical assistance, enforcement of the public health code and relevant statutes, as well as the implementation of public health policy.

The section is comprised of twelve programs which are diverse in their scope and oversight of both regulated and unregulated professions/entities: Asbestos; Environmental and Occupational Health Assessment; Environmental Engineering; Environmental Laboratory Certification; Environmental Practitioner Licensing; Food Protection; Healthy Homes; Lead Poisoning Prevention and Control; Private Wells; Radon; and, Recreation.

- 75,423 children under age six tested for lead poisoning
- 1,230 radon test kits distributed to local health departments
- 512 water sampling kits distributed by the Private Well Program

#### **Healthcare Quality and Safety**

The Healthcare Quality and Safety Branch regulates access to health care professions and provides regulatory oversight of health care facilities and services. The branch consists of four major program components: Facility Licensing and Investigations; Practitioner Licensing and Investigations; Office of Emergency Medical Services; and, Office of Legal Compliance.

The Practitioner Licensing and Investigations Section (PLIS) ensures that a practitioner in a field has the required training, knowledge and experience to perform as a qualified professional in that field. PLIS receives and investigates complaints about specific providers that fall under its authority. The Section responds to Scope of Practice Review requests to ensure that proposed changes to the scope of practice of health care practitioners contribute to the improvement of overall health of people in this state.

The Facility Licensing and Investigations Section (FLIS) licenses, monitors, inspects and investigates complaints involving a variety of facilities and services. It a performs federal certification inspections in health care facilities participating in the Medicare and/or Medicaid programs and identifies deficiencies that may affect state licensure or eligibility for federal reimbursement.

The Public Health Office of Legal Compliance (OLC) prepares evidence and witnesses for public administrative hearings, represents DPH in administrative hearings before professional healthcare licensing boards and commissions, and settles legal cases involving over 60 different professions licensed and regulated by DPH. This office is also responsible for providing information for reporting adverse actions to national databases and processing long-term care criminal history and patient abuse background searches.

The Office of Emergency Medical Services (OEMS) functions include strategic planning, education, licensing, regulatory and statutory oversight of EMS provider training, and identification and follow-up on medical issues that affect patient care. This Section is also involved in investigation of complaints about EMS organizations, patient care concerns, and provider activities. OEMS conducts provider site visits and vehicle inspections.

- 300,00 individuals licensed in 65 different professions throughout CT
- 24,200 Emergency Medical Services providers licensed
- 1.756 health care facilities licensed

#### **Health Statistics and Surveillance**

The Health Statistics and Surveillance section consists of the Vital Records Office, the Connecticut Tumor Registry, and the Surveillance Analysis and Reporting Unit. The State Vital Records Office carries out general supervision of the state-wide birth, marriage, death and fetal death registries. The Connecticut Tumor Registry is a population-based resource for examining cancer incidence and trends in Connecticut. The registry's electronic database of over one million cancers is used to estimate the cancer burden in Connecticut residents and to assist in planning cancer control interventions. The Surveillance Analysis and Reporting Unit is responsible for the collection of health morbidity and mortality data, and the enhancement of statewide registries for births, deaths and marriages in Connecticut. The section analyzes and interprets vital statistics, adult and youth health surveys, hospital discharge and hospital quality of care data, and chronic disease surveillance. These data are used to help track the health of Connecticut residents, provide guidance for health programs, and provide a better understanding of health risk behaviors that face our youth.

- 10,746 vital records certificates issued
- 715 adoptions processed
- 12,762 birth records processed for paternity issues

# **Infectious Disease Section**

The Infectious Diseases Section encompasses surveillance programs for emerging infections and more than 50 acute communicable diseases including conditions potentially associated with bioterrorism; outbreak detection and investigation; planning for the public health response to infectious disease emergencies, and programs for the prevention of perinatal infectious diseases, vaccine-preventable diseases, healthcare-associated infections, human immunodeficiency virus (HIV), hepatitis, sexually transmitted diseases and tuberculosis. A critical part of the section's mission is to provide health education to the public, medical professionals and public health providers on prevention and management of disease transmission and emerging infections.

The Immunization Program prevents disease, disability and death from vaccinepreventable diseases in infants, children, and adolescents by actively engaging in surveillance, case investigation and control, monitoring of immunization levels, provision of vaccine, and professional and public education on the benefits of vaccination.

The HIV Program administers prevention, care and surveillance services through various interventions such as: HIV screenings, referring high risk populations to medical providers for Pre Exposure Prophylaxis (PrEP), referring individuals in need of care to medical providers as well as providing assistance with transportation, housing and drug rehabilitation services with the ultimate goal of reducing new infections and keeping infected residents living healthy.

- 170 outbreaks reported per year, on average
- 24,775 electronic laboratory reports processed
- 2,602 Narcan (overdose prevention) dosages distributed by the Syringe Services Program

# **Operational & Support Services**

The Operational & Support Services Branch is essential to the delivery of public health services across the state, ensuring that department-wide administrative activities are coordinated and accomplished in an effective and efficient manner. In addition, Operational & Support Services coordinates the Office of Public Health Preparedness and Response and the Office of Local Health Administration. The branch provides the following services to all organizational sections of the agency: Contracts and Grants Management, Fiscal Services, Human Resources, and Information Technology.

- 758 active multi-year contracts, valued at \$725,975,274
- \$43,271,584 total revenues collected
- \$78,670,355 in grants to local health departments across Connecticut

# **Public Health Laboratory**

The Dr. Katherine A. Kelley Public Health Laboratory (PHL) serves all communities in the state through the analysis of clinical specimens and environmental samples submitted by federal and state agencies, local health departments, clinical laboratories, health care providers, and water utilities. The PHL provides well over 2 million test results on approximately 150,000 specimens and samples it receives each year. Although the PHL does not charge sister agencies or local health departments, the value of these testing services is over \$7 million per year. Analytical data are used to monitor for agents harmful to the public health, identify the cause of outbreaks, and assure that control measures (e.g., vaccines, antibiotics, environmental remediation) are effective. The PHL is comprised of the following testing and support sections: Administrative and Scientific Support Services; Environmental Chemistry; Infectious Diseases; and, Newborn Screening.

- 37,202 newborn screening tests conducted
- 255 Zika tests conducted
- 2,000+ drinking water samples from CT schools tested for lead at no cost to the schools

# Improvements and Achievements 2016-17 Highlights

# **National Recognition and Achievements:**

# **Rankings**

- Connecticut was ranked the 3<sup>rd</sup> healthiest state in the nation by the United Health Foundation behind only Hawaii and Massachusetts. The rankings were based on a comprehensive health assessment of each state including behaviors, community and environment, public and health policies, and clinical care.
- In a CDC Annual Report on Sexually Transmitted Diseases (STDs), CT was ranked in the Top 10 of States with Lowest Rates of STD's.
- The DPH Immunization Program received recognition from the Centers for Disease Control and Prevention for having the highest coverage level in the country for children 19 through 35 months of age, for outstanding progress towards Healthy People 2020 targets for 3 adolescent vaccines, and for outstanding progress towards Healthy People 2020 goals for influenza vaccination among children 6 months-17 years old.

# **National Accreditations**

- On March 14, 2017, the agency was officially accredited by the National Public Health Accreditation Board (PHAB) and was the 22nd state in the nation to receive this designation. PHAB identified DPH's greatest strengths as having a strong commitment to health equity, engagement of partners, and its performance management system.
- The Public Health Laboratory (PHL) successfully achieved ISO 17025 accreditation for microbiological analysis of food. With this accreditation, the Laboratory is now part of a nationally integrated food safety system of food testing laboratories. The PHL is working collaboratively with the Food and Drug Administration (FDA) and the State Department of Consumer Protection to test suspect food for microbial pathogens, such as Salmonella, E. coli O157:H7, and Listeria.
- The American Industrial Hygiene Association Laboratory Accreditation Programs
   Analytical Accreditation Board approved the PHL as an accredited Food Laboratory
   Accreditation Program laboratory. This accreditation program is specifically designed
   for laboratories testing food products (including raw agricultural commodities), finished
   food products, and food ingredients.

# **Recognitions**

- The Healthy CT 2020 Chronic Disease Action Team developed a Food Donation Guide and List that has received approval from the USDA. The United Way of Greater New Haven collaborated with the American Heart Association ANCHOR Partnership project and the City of New Haven's Office of Food System & Policy to expand use of the guide.
- The DPH Emerging Infections Program (EIP), was one of 10 states awarded a five-year, \$20 million grant from the Centers of Disease Control and Prevention to continue its

ongoing surveillance and research of infectious diseases in Connecticut (<a href="https://www.cdc.gov/ncezid/dpei/eip/index.html">https://www.cdc.gov/ncezid/dpei/eip/index.html</a>). The EIP tracks a wide range of infectious diseases that impact state residents, including invasive bacterial diseases (e.g. MRSA, meningitis, pneumococcal disease, etc.), food-borne disease caused by common bacteria and parasites, *C. difficile* and other infections in health care and community settings, influenza-related hospitalizations, pre-cancerous cervical lesions due to human papillomavirus infections, and Lyme and other tick-borne diseases. Tracking these diseases allows DPH and its partners to better understand risk factors for contracting one of these diseases, identify targets for future public health interventions and evaluate the effectiveness of current interventions such as vaccines.

- The School Based Health Center (SBHC) program worked with the National School Health Alliance on the National Quality Initiative, piloting five national performance measures. Connecticut was one of two states selected for participation in the programmatic pilot.
- DPH was recognized as a national leader in addressing health equity. The agency was invited by the Association of State and Territorial Health Officials (ASTHO) to present Connecticut's health equity initiatives on a national webinar entitled, *Public Health Department Accreditation to Advance Optimal Health for All*. The webinar was open to federal, state, local and non-profit organizations to demonstrate the importance of health equity in national accreditation and how accreditation has helped to leverage health equity work within state public health agencies.

# **Systems Improvements and Efficiencies:**

#### **Streamlining Through Technology**

- Practitioner Licensing continued to transition to online services to make applying for and renewing health care practitioner licenses more efficient and convenient and to allow easier public access for license verification. IN FY16, online licensing availability doubled from 8 license categories to 16 license categories.
- Since August of 2016, DPH has been sending renewal reminder notices and license documents electronically to all physicians, dentists, nurses (approximately half of all licensees). These changes eliminate the delay between the date a license is renewed and the date people receive updated licensing documents. This also provides the ability to easily forward an electronic copy of a license to assist with hospital credentialing, HMOs and other employment activities. DPH plans to transition this license renewal process to other licensed professions.
- All new licensing applicants can now view and track the progress of their applications electronically by logging into their account online.
- With support and equipment from DPH's Information Technology unit, the Facility Licensing and Investigation Section implemented a mobile computing complaint investigation process that will enable complaints to be investigated and processed remotely. This will allow more timely conclusions and responses to the public.

- In May 2017, the Health Care Quality and Safety Branch required online submission of Adverse Events reporting for hospitals and ambulatory surgery centers (ASC). 98 facilities have registered 212 users on the adverse events reporting website. This automated process will eliminate multiple fax receipts, eliminate all repetitive data entry, streamline reporting and allow for better data presentation to the public.
- Efforts are continuing to enhance the Laboratory Information Management System (LIMS), with one focus being on the secure electronic transmission of test results to DPH disease surveillance and control partners, as well as external clients. The interface for the electronic transmission of results to DPH's Epidemiology program was completed, improving the completeness and timeliness of transmission of laboratory findings for use in disease surveillance and control. Electronic transmission of laboratory results should result in quicker diagnosis and treatment of disease which will minimize the risk of disease transmission to other individuals.
- By using new hardware and software technology with a Leaned public water system survey process, the Drinking Water Section (DWS) improved survey processing by over 50%. Utilizing new software, DWS engineering staff utilized hand held tablets for field data collection, and a new streamlined integrated question set to improve the time involved with identification and correction of unsanitary system conditions. With this new public water system survey process and technology, DWS engineers identify and address unsanitary conditions and public health code violations quicker and more effectively therefore reducing the potential of water system contamination and protecting consumers.
- The Office of Vital Records recently modernized the electronic birth registration system (ConnVRS) to enable the Town Clerk in any city or town to issue a birth certificate to a legally eligible person for a child born from 2002 to the present. Previously, birth certificates could only be obtained from the town where the baby was born or where the mother resided at the time of birth, or the State Office of Vital Records.
- In May 2017, The Office of Health Care Access implemented Adobe digital signatures to sign all documents electronically. This technology streamlined the signing process and reduced paper waste by eliminating the need to print, sign, and re-scan documents.
- IT increased wide area network bandwidth at the Public Health Laboratory and several Women, Infants and Children Program (WIC) remote offices through the use of App Service Environments (ASE) service. This bandwidth increase has allowed the Lab and the WIC offices to process test results and applications more quickly.

# **Education and Training**

• The Office of Emergency Medical Services (EMS) has had several gains in the realm of education and training. These improvements will standardize and enhance the quality of EMS care across the state. The office successfully released an updated version of written exams for the Emergency Medical Responder (EMR) certification and EMR/Emergency Medical Technician (EMT) recertification on Feb 1, 2017. Additionally, the office offered a Train-the-Trainer Course for EMS-I (instructors) in June 2017 and released an update on the requirements for the certification process for the Advanced EMT.

- The Affirmative Action Office (AAO) facilitated requisite trainings under Conn. Gen. Statutes Sec. 46a-54 (15)(A) and (16) for State employees Sexual Harassment Prevention Training and Diversity Training, respectively –free on-site, saving the Department \$55 in per person, per course costs.
- The WIC Peer Counseling Programs were trained in the use of the WIC Management Information Systems (MIS), the CT-WIC Peer Counseling Module. Throughout this fiscal year, the local clinic-based peer counseling programs transitioned from a paper system of documentation to the electronic version in CT-WIC. This integration allowed for increased communication between WIC Peer Counselors and the WIC staff. Intensive planning for the hospital based peer counseling programs to launch in the use of CT-WIC is currently underway.

#### **LEAN**

- Public Health Systems Improvement (PHSI) updated the agency's student internship process through a modified LEAN process and developed an agency policy to standardize the process and minimize risk to the agency related to academic contracts, international students, volunteers, and security for student visitors to the agency.
- Following a LEAN process, the WIC Program implemented operational changes that have resulted in WIC vendor enrollment application processing times being reduced from six months to three months.
- The Drinking Water Section worked with the Public Utilities Regulatory Authority (PURA) to streamline the water system takeover process to assist the transfer of system ownership quicker for small failing community public water systems. This will ensure a sustained, safe and adequate supply of drinking water for the public served by those systems.

# **Advancing Public Health**

- The Public Health Laboratory (PHL) became the first state in the country to implement a newborn screening protocol for Adrenoleukodystrophy (ALD), using a methodology recently developed by the Centers for Disease Control and Prevention (CDC). ALD is a disorder that can cause severe neurological symptoms, including profound developmental delays and progressive loss of motor control and cognitive function. Testing went live in July, 2016 and, so far, nine children have been identified and are receiving treatment and medical monitoring.
- The PHL also undertook the validation of a newborn screening method for detecting Succinylacetone, a primary marker for Tyrosinemia Type 1. Type 1 is the most severe form of Tyrosinemia. The addition of this method provides a more robust screening procedure for a disorder that is typically fatal in the first year of life, if undetected and untreated.
- The PHL validated and brought on-line testing for various infectious disease agents, utilizing upgraded molecular methodologies; agents included Bordetella identification; Listeria, Campylobacter, Mycobacteria and Enterobacteriaceae; and Gastrointestinal (GI)

panel. These molecular assays provide the PHL with the most advanced identification tools and expand capability for more rapid detection of disease, and identification of outbreaks, thereby protecting the public from emerging and evolving disease threats such as food-borne disease or arbovirus infection.

# **Reducing Health Disparities and Enhancing Health Equity**

# **Protecting Children from Lead Poisoning**

- The Public Health Laboratory (PHL) has analyzed more than 5000 environmental samples in our continuing support of the childhood lead poisoning prevention program. These samples consist of dust wipes, soils, paint chips and a variety of spices, jewelry, cosmetics and other products that may be contaminated with lead. Many of these samples are of an urgent nature because a child has been identified as having elevated lead levels and is undergoing medical treatment. It is critical that the source of contamination be identified and removed immediately to protect the child from further exposure.
- The Lead Poisoning Prevention and Control Program (LPPCP) implemented data sharing agreements with the Department of Housing and 12 Public Housing Authorities to match the addresses of federally subsidized voucher recipients with data from the DPH lead surveillance system to determine if lead poisoned children reside in these units. This new data sharing practice will assure timely enforcement of lead inspections and lead abatement of identified units to ultimately reduce and prevent childhood lead poisoning.
- The Drinking Water Section (DWS) developed and coordinated a drinking water testing program for lead in schools in the 5 cities with the highest childhood blood lead levels (Hartford, New Haven, Meriden, Waterbury and Bridgeport). The program brought together DWS engineers, local health directors, DPH Lead Program, the Public Health Laboratory (PHL), and water companies in order to offer free drinking water testing and technical assistance to schools in these cities. Further, DWS engineering staff provided technical assistance to school administrators to address any test results with high lead levels.

#### **Protecting Children and Families from Preventable Disease**

- During 2016, the CT Vaccine Program distributed 1,178,530 doses of vaccine to 717 enrolled providers to vaccinate children aged 0 through 18 years. DPH's ability to purchase the vaccinations at a reduced cost saved providers and parents \$59 million.
- The PHL has been working closely with DPH's Private Well Program to provide free
  testing for Arsenic and Uranium contamination in Drinking Water. More than 1,000
  private wells have been tested for this contamination, allowing the Private Well Program
  to further characterize and address Arsenic/Uranium contamination throughout
  Connecticut.

#### **Achieving Cultural Competence**

• In August 2016, The DPH Office of Health Equity launched the "I SPEAK" cards which describes patients'/clients' rights to interpreter services in English and other languages,

- and can be taken to medical and social services appointments. The cards signal that the bearer does not speak English and is requesting a qualified interpreter.
- In October, 2016, the Office of Health Equity completed a language access plan that provides a strategy for ensuring meaningful access for limited English proficiency (LEP) persons at all points of contact to DPH programs, services, and activities for which they may be individually eligible. A corresponding agency policy was executed to enforce critical provisions of the plan.
- A Health Equity Toolkit for DPH staff is made accessible to provide tools, definitions, policies, and training and talking points for Culturally and Linguistically Appropriate Services (CLAS) standards. These resources are provided to staff to support cultural competency and incorporating health equity considerations into everyday work.

# **Protecting Communities and Health**

# **Ensuring Healthcare Quality**

• In an effort to ensure public health, safety and welfare of the consumer/public, the Practitioner Licensing and Investigation Section issued 18,811 new professional licenses and renewed 161,595 licenses. They also registered ~30,000 nurse aides and provided permits for physician interns. The Department received 2,099 new complaints against health care practitioners and closed 1,889 investigations. The Facility Licensing and Investigations section (FLIS) received 1,445 complaints and conducted 1,147 investigations.

# **Protecting the Air We Breathe**

- The PHL validated two new testing platforms to support various environmental public health initiatives. Radon in Air was brought on-line to support DPH's Radon Program and has provided more than 2,500 tests to private home owners through their local health director. An Environmental Protection Agency method for Volatile Organic Compounds in non-drinking water was also validated and added to our testing capabilities to support the Department of Energy and Environmental Protection's Remediation Program.
- In 2017, the Radon Program conducted a media campaign during January, National Radon Action Month, focusing on the importance of radon measurement and mitigation with geo-targeted online efforts and singular media vehicles delivering our message to high radon potential regions. Free radon tests kits were given to the first 1,000 Connecticut residents to request one on the DPH website. Additionally, 19 local health department partners provided free radon measurement opportunities using radon test kits analyzed by the Public Health Laboratory (PHL).

#### **Protecting the Water We Drink**

- The PHL has been working closely with Local Health and the Private Well Program to investigate contamination of drinking water from road salt.
- DPH worked with the United States Geological Survey (USGS) to bring attention to the presence of arsenic and uranium in private well groundwater supplies. This culminated

- in May 2017, with the publishing of a report by the USGS titled *Arsenic and Uranium in Private Wells in Connecticut*, 2013-2015. The report focuses on occurrences of arsenic and uranium in private well groundwater supplies that exceed drinking water maximum contaminant levels (MCLs). Arsenic and uranium are two metals that may not have been previously tested for in most private wells across Connecticut.
- To address growing concerns with Lead contamination in drinking water, the Drinking Water Section (DWS) developed several strategies to more quickly address all lead exceedances in public water systems by: providing 350 direct expert technical assistance contacts to system owners including school administrators and day cares; developing and providing 5 technical system operator trainings on all new EPA technical information and guidance and issuing over 40 DPH Orders to proactively reduce exposure to Lead contamination. The DPH orders require immediate public notice and education to parents and customers and appropriate treatment design and installation to address lead exceedances. Also, the DWS had direct involvement with the EPA in the revision of the Safe Drinking Water Act's (SDWA) Lead and Copper Rule.
- The Drinking Water Section (DWS) initiated a new program by securing \$20 million dollars of state bond funds to support 2 regional water treatment plants and interconnection projects in southeastern Connecticut. These 2 safe Drinking Water State Revolving Loan Fund projects, totaling over \$72 million dollars, will provide for interconnections between 5 public water systems within 4 towns and enhance drinking water treatment and public health protection for over 80,000 people throughout southeastern Connecticut.
- During the 2016/2017 statewide drought, Drinking Water Section (DWS) staff oversaw all community public water system's status to assure adequate drinking water supply to the state's 2.9 million residential customers. DWS staff tracked and reported on drought status for over 500 community systems, issued and administered 3 DPH Emergency Orders assuring water supply to over 300,000 people, and worked in a leadership role for the Interagency Drought Workgroup by leading the integration of modifications to the State's Drought Plan. DWS staff provided technical assistance to numerous public water systems during the drought in order to assure safe drinking water. Further, DWS engineers developed and employed a new system status tracking tool for 500 community systems that more closely tracks system capacity.

# **Protecting Our Children and Families**

- The Environmental & Occupational Health Program developed a risk-based ranking system to prioritize toxic chemicals in children's products and has developed a fact sheet for three toxic flame retardants that are known to be in children's products. DPH is working with the Connecticut Departments of Consumer Protection and Energy and Environmental Protection under a Memorandum of Agreement to list high concern chemicals and help the public understand the risks and alternatives.
- The Asbestos Program, in grant partnership with the EPA, performed asbestos compliance evaluations at thirty (30) schools during the past year. These audits included detailed reviews of the Asbestos Management Plan for each school, as well as walkthrough inspections of all accessible asbestos containing materials in the buildings.

Additionally, the Program closely monitored the performance of over two hundred (200) school asbestos abatement projects, including 45 that were performed while the schools were at least partially occupied with students. Protecting the school age population of children continues to be a priority for the Asbestos Program.

# **Public Health Response to Emerging Threats**

# **Opioids**

- Since 2014, DPH's Overdose Prevention Education and Naloxone Access (OPEN Access CT) community distribution program, in collaboration with a variety of state, local, and community-based providers, has coordinated overdose prevention education and referrals to naloxone access services. The goal of this intervention is to provide a coordinated effort to increase overdose (OD) awareness, training, and community access to Naloxone and overdose prevention services. Since, 2014, over 2,500 OD trainings have been conducted across the state with Syringe Service Program (SSP) clients, their friends and family members. In 2016, 1,301 OD Prevention Kits were distributed to 924 SSP clients. Among those SSP clients who were given an OD Prevention Kit, 22.5% (208/924) reported using their OD kit to reverse an overdose.
- In June 2017, DPH partnered with The Yale School of Medicine and held a Media Summit in New Haven to discuss the most appropriate ways to address the opioid crisis, reduce stigmatizing language, and answer questions from the print and TV media.
- DPH helped sponsor an opioid overdose prevention summit in October 2016 for 300 attendees.
- On March 1, 2017, the Environmental & Occupational Health Program's Occupational Health Unit brought together over 150 practitioners, researchers, and other professionals to begin a conversation about the opioid crisis and its effect on Connecticut workers, particularly the relationship between work-related injuries and opioid use. Attendees represented the fields of worker injury, pain management, and addiction treatment and recovery and discussion was focused on strategies and resources available to address challenges with work-related injury prevention, the prescribing of opioids after injury, the resulting addiction in workers, and pain management alternatives. The event was hosted by Travelers Insurance and was held at Travelers Claim University in Windsor.

# Zika

• As the lead agency for the State response to Zika virus, the DPH coordinated surveillance and communications. Surveillance consisted of several components including monitoring mosquitoes and people for Zika virus infections. While there are mosquito species potentially capable of transmitting the virus, none tested positive during the 2016 season. The Public Health Laboratory (PHL) developed the capacity to test people who may have been infected. Testing of pregnant women was emphasized due to the potential for infection during pregnancy to cause birth defects in infants. DPH is following four babies

- born with birth defects potentially associated with Zika virus to mothers who tested positive for Zika virus.
- The Connecticut Department of Public Health Birth Defects Registry (BDR) program was awarded a CDC Zika grant to conduct surveillance, intervention, and referral to services for infants with microcephaly or other adverse outcomes linked with the Zika virus. The BDR program used these grant funds to establish, enhance, and maintain rapid "real time" active population-based surveillance of select major birth defects (microcephaly and other Central Nervous System defects) possibly linked to maternal Zika virus infection during pregnancy, and to use the data for public health action through monitoring, intervention, and referral to services. CT also participated in the State-coordinated Zika response, including prevention efforts and information sharing, as well as performing data linkages.

# **Emerging Infections**

- The PHL validated and brought on-line testing for emerging infectious diseases, including Ebola and Zika viruses, and implemented an expanded biosafety outreach and training program for Connecticut's acute care hospitals. For Zika, the Laboratory received authorization from the Centers for Disease Control and Prevention (CDC) to implement two complementary test methods and began testing clinical samples, including those from pregnant women, in accordance with CDC's screening recommendations.
- The Connecticut DPH investigated the second and eighth findings of a gene called mcr-1 in the United States. This recently discovered gene gives bacteria resistance to a last-line antibiotic, called colistin, and can make deadly infections resistant to all available antibiotics. With CDC's guidance, DPH gathered information on where the gene could be coming from and contacted people at risk for acquiring resistance. Testing showed no evidence for spread of the resistance gene. DPH is working with healthcare facilities in Connecticut to control the spread of highly resistant pathogens.

# **Capacity Building**

#### **Partnerships**

- The Children and Youth with Special Health Care Needs Program established a statelevel medical home care coordination collaborative to support regionally based collaboratives. The collaboratives work to reduce duplication of services while connecting medical home providers, care coordinators, network navigators and others to local and state level resources.
- DPH is working with partners at the Department of Mental Health and Addiction Services, Department of Children and Families, Connecticut Children's Medical Center Injury Prevention Center, United Way of CT - 211 and Wheeler Clinic to increase the rate of callers served by the National Suicide Prevention Lifeline (NSPL) in the state and improve the quality and efficiency of the CT NSPL providers.
- The Office of Injury Prevention (OIP) developed and began implementing a statewide evaluation of sexual violence. Sexual violence surveillance was increased by adding relevant questions to the Behavioral Risk Surveillance System. The OIP worked with partners to develop a sexual violence prevention evaluation tool to be used by all nine

- rape crisis centers throughout the state. Advocates at all nine centers have been trained on the evaluation tool, and have begun implementation and data collection. Data collected will inform the best course of action for sexual violence prevention in CT.
- The DWS simultaneously convened 3 regional water supply planning areas known as the WUCC (Water Utility Coordinating Committee) employing a new streamlined planning approach for the first time since the original planning process was implemented 30 years ago. The process streamlined and saved state funding by reducing the number of regional planning areas from 7 to 3, integrating \$600,000 for resiliency planning and providing resources for the development of the State's first Water Plan.
- National accreditation site visitors identified engagement of partners as one of DPH's greatest strengths specifying that the agency has established strong relationships with a variety of partner organizations including local and tribal health departments, health care providers, elected officials and community based organizations. Site Visitors also stated that the agency has facilitated the formation of numerous statewide partnerships to foster collaborative initiatives to address priority health issues.

# **Preparedness**

- The Office of Public Health Preparedness (OPHPR) conducted a three-day mass fatality full-scale exercise held in October.
- In October, DPH hosted a FEMA Region 1 Medical Countermeasures Summit at Camp Niantic in East Lyme that included the New England states, New York and New Jersey. The primary goal of the summit was to strengthen regional collaboration between the states.