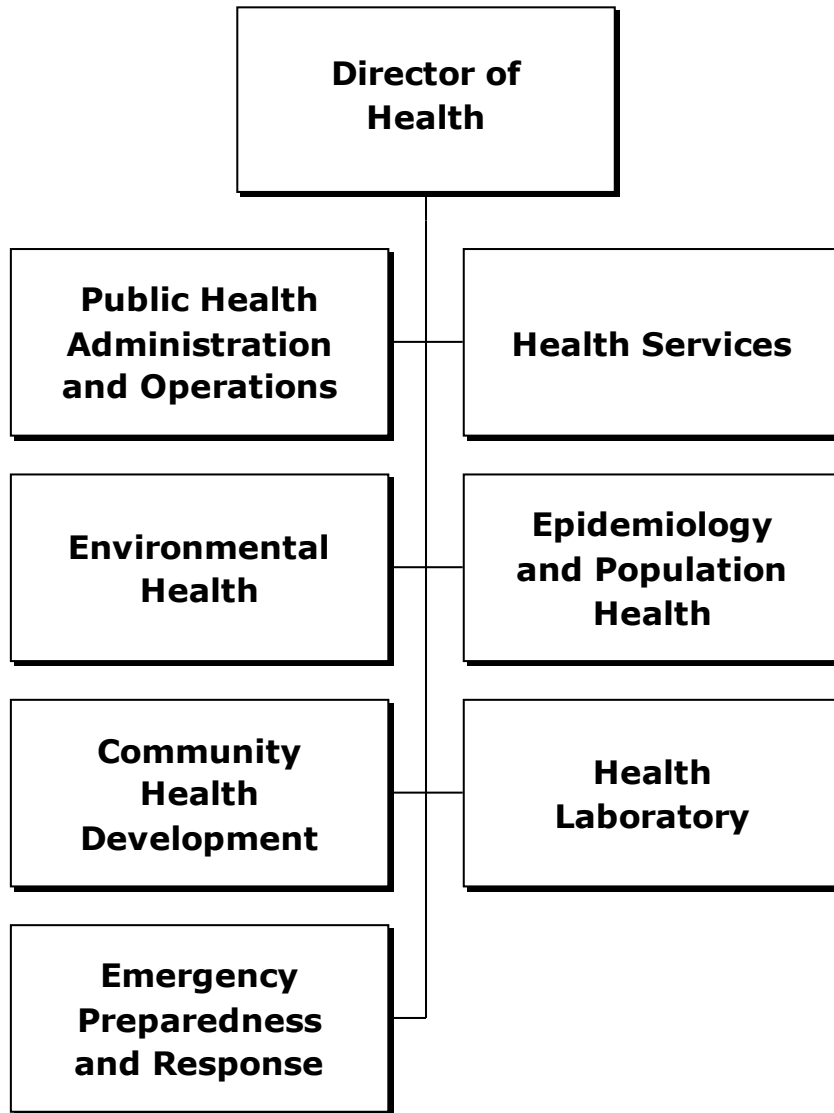


Health Department



Health Department

Mission

Protect, promote and improve health and quality of life for all in the community.

Focus

The Fairfax County Health Department (FCHD) has five core functions: preventing epidemics and the spread of disease; protecting the public against environmental hazards; promoting and encouraging healthy behaviors; assuring the quality and accessibility of health services; and responding to disasters and assisting communities in recovery. These functions are the community-facing elements of the 10 Essential Public Health Services (EPHS), which define public health and serve as the framework for quality and performance improvement initiatives nationwide. In order for the FCHD to address the evolving health needs of the community while continuing to provide traditional public health services, a major restructuring of the department was initiated in FY 2019 and is effective in FY 2020. The implementation of the new organizational structure, which has resulted in a new configuration of programmatic divisions, will better align functional areas, position the department to better address the root causes of health inequity, and scale-up ongoing efforts to become a values-driven high performing organization prepared to address 21st century public health challenges.



10 Essential Public Health Services

In FY 2018, the FCHD completed the fourth year of implementation of its Strategic Plan for 2014-2019, which outlines goals and objectives to strengthen the department's capacity to deliver the 10 EPHS. The department's strategic plan identifies the challenge of securing and retaining resources to address ongoing activities that are critical to the community, while seizing opportunities to leverage community assets and other resources that enable the department to reorient towards population-based programs focusing on disease prevention and health promotion. While progress has been made in developing internal resources, building a strong public health infrastructure remains central to effective delivery of the 10 EPHS and to adequately address the public health challenges of today and the future. This means investing in the workforce so that employees are prepared for the changing role of public health; continuing to build strategic partnerships to address the health needs of the community and the root causes of health inequities; communicating effectively with colleagues, partners, and customers; monitoring and evaluating community health data to understand the health status of the community; and leveraging technology to increase efficiency in service delivery. Enhancing capacity in these areas will improve the ability of the FCHD to anticipate emerging public health issues and to proactively address them.

Health Department

The 10 EPHS also serve as the framework for nationally-adopted performance and quality improvement initiatives, such as local public health department accreditation. In May 2016, the FCHD was accredited by the Public Health Accreditation Board (PHAB), having met national standards for high quality public health services, leadership and accountability. The department received the full accreditation for five years and is now one of 232 local, state and tribal health departments having achieved accreditation nationwide. In FY 2018, the department developed and implemented a new Performance Excellence Leadership Council to improve the alignment and integration of the components of its performance management system, which includes the use of performance standards to guide practice, the monitoring of program performance measures, the regular reporting of performance results, and quality improvement efforts to improve performance. Engaging in these performance improvement activities lays the foundation for improved protection, promotion, and preservation of community health.

Revenue Sources

The FCHD operates as a locally administered health department with support from the state based on a formula set by the General Assembly. For FY 2020, it is anticipated that the state will contribute a total of \$9,244,567 to support FCHD services. Additional financial support is provided through contracts with the Cities of Fairfax and Falls Church. Other revenue is generated from fees for licensure registration, permits, and commercial and residential plan review for environmental and health related services. Fees are also collected for x-rays, speech and hearing services, pregnancy testing, laboratory tests, pharmacy services, physical therapy, primary care services, immunizations, Sexually Transmitted Infection (STI) clinical services, Adult Day Health Care and death certificates. In FY 2019, FCHD anticipates a decrease in Vital Statistic revenue as a result of changes in how death certificates are reported and issued. Eligible health-related services are billed to Medicare, Medicaid, and other third party payers.

The Health Department supports the following County Vision Elements:



Maintaining Safe and Caring Communities



Creating a Culture of Engagement



Connecting People and Places



Maintaining Healthy Economies



Building Livable Spaces



Practicing Environmental Stewardship



Exercising Corporate Stewardship

Preventing Epidemics and the Spread of Disease

Communicable disease surveillance, prevention and control are core public health activities that are provided through many services within the Health Department by a diverse team of providers (physicians, nurses, laboratory technologists, epidemiologists, community health specialists, emergency planners and others). Several methods are used to control the spread of communicable disease. These methods include the use of social distancing to limit interaction between individuals with a communicable disease and those who are well; determining possible exposures; testing and/or treating those exposed; preventing further spread through education, and instituting infection control measures.

Health Department

In FY 2019, the FCHD realigned existing resources to form the Division of Epidemiology and Population Health. The division utilized these resources to develop more robust surveillance and investigations of healthcare associated infections. This increased emphasis has initiated a stronger partnership with hospitals and skilled nursing faculties within the Fairfax Health District, allowing for a more rapid public health response. This emphasis aligns with the overall objective of decreasing the spread of disease.

In the Adult Day Health Care Program, a concerted effort was undertaken by the Public Health Nurses to educate the participants and caregivers of the importance of getting the flu and pneumonia vaccines, especially for the elderly for whom these illnesses could prove fatal. In FY 2018, 73 percent received the flu vaccine, exceeding the CDC target of 66.7 percent, and 71 percent received the pneumonia vaccine, essentially matching the target of 70.7 percent.

FCHD remains actively involved in treating and providing public health support to patients with active tuberculosis (TB). In FY 2018, FCHD provided treatment for 75 confirmed cases of tuberculosis. As part of investigating each of these cases, FCHD performed contact tracing to identify others who may have been exposed; provided testing to identify contacts with latent infection; offered treatment to prevent TB disease; and provided laboratory and x-ray diagnostic services to 404 individuals suspected of having TB disease. These public health actions are crucial to preventing the spread of TB.

Over 60 percent of the active TB cases in Virginia are residents of Northern Virginia (NOVA). In response to the high rates of TB in NOVA, the department spearheaded the creation of a TB Taskforce comprised of the TB program leadership of the NOVA health departments to examine local challenges to TB elimination goals and provide recommendations to address them. Due to the unique needs required to care for this population, the TB Taskforce created the TB Community Advisory Community (TBCAC) which encompassed community members, including individuals who have had active TB in the past. Working together with the TBCAC, and with patient input, the Taskforce used a participatory approach to identify root causes and develop appropriate strategies to increase awareness, reduce stigma, and promote adherence to treatment. With partial funding from a Virginia Department of Health (VDH) grant, the Taskforce engaged a vendor to create culturally appropriate marketing campaigns based on data from the community assessment. The Taskforce is currently determining the appropriate venues to display the ads and the methodology to measure the effectiveness of the campaigns developed.

The Fairfax County Health Department Laboratory (FCHDL) offers a wide range of testing services in support of Health Department programs such as TB, Sexually Transmitted Infection, Rabies, and the Disease Carrying Insects Program, as well as mandated environmental tests and substance abuse tests for other County agencies. Laboratory testing is essential to disease surveillance, the diagnosis of new and emerging infectious diseases, the assessment of hazards in the environment, and monitoring of drinking water safety. In FY 2018, FCHDL supported the TB program in their efforts to reduce the spread of TB in the community, providing over 9,000 QuantiFERON Gold (QFT) tests to assess patients' risk of developing TB. In collaboration with the Division of Epidemiology and Population Health, FCHDL performs analysis of human samples for bacteria, viruses, parasites, and other infectious agents to assist in the identification of disease outbreaks and to plan effective public health interventions. FCHDL utilizes the latest technology and instrumentation to provide state-of-the-art communicable disease testing services. Molecular test methods have become increasingly popular due to their increased sensitivity and faster results compared with traditional test methods, allowing for faster diagnosis and access to care for the patient. In FY 2018, FCHDL expanded its molecular testing menu to include the identification of trichomonas utilizing the molecular testing platform, PANTHER. Utilization of these molecular methods has improved the ability of the Health Department to identify and reduce the transmission of disease in the community and continues to provide opportunities to expand laboratory services in the future.

Health Department

Protecting the Public against Environmental Hazards

A critical aspect of protecting the health of the public is education, coupled with enforcement of laws and regulations that mitigate or eliminate environmental hazards. Environmental Health Services (EHS) promotes compliance in the regulated community through routine inspections, outreach activities, and education on healthy practices. EHS also conducts complaint investigations to identify and correct potentially risky situations or behaviors that can adversely affect public health.

The Food and Drug Administration (FDA) in cooperation with both the National Association of County and City Health Officials (NACCHO) and the Association of Food and Drug Officials (AFDO), offer grant funding to support local health departments in developing, implementing, and improving the infrastructure necessary to support conformance with FDA's Voluntary National Retail Food Regulatory Program Standards. The FCHD's regulatory food program has achieved and maintained conformance with seven of the nine standards and is recognized as a model for applying these standards. In early FY 2018, NACCHO selected EHS for a sixth consecutive year to mentor other local health departments enrolled in the program standards. In late FY 2018, AFDO awarded two grants to EHS to support FCHD standards-related activities.

In early FY 2016, the FDA awarded grant funding to the FCHD for a three-year EHS project to achieve conformance with the Retail Program Standards and advance efforts for a nationally integrated food safety system. The project was completed in early FY 2019 with deliverables such as a basic food handler training course and the STAMP (Safety Through Actively Managing Practices) program which is voluntary for food establishment owners and operators. EHS will use the training course for food employees other than managers to help improve safe food handling practices. The program focuses on the practice of Active Managerial Control (AMC) for the reduction of foodborne illness risk factors in food establishments. Participants in STAMP are partnering with FCHD to implement and model best practices that help to maintain a safe food environment for their customers. The Fairfax County Public Schools, Office for Food and Nutrition Services is a participant in the program. STAMP participants receive a certificate of achievement and recognition on the FCHD website. Incentive programs like STAMP recognize the achievements of the food industry and complement intervention strategies implemented by the FCHD to improve compliance with the food regulations.

Vector-borne diseases such as West Nile virus (WNV), Zika, and Lyme are perennial public health concerns that require continuous surveillance of disease vectors to direct control efforts. The Disease Carrying Insects Program (DCIP) works to protect County residents and visitors from vector-borne diseases using integrated mosquito management principles. DCIP activities are supported through a special tax district and funded through Fund 40080, Integrated Pest Management Program (Volume 2). The emergence of Zika in FY 2015 stressed the need for more Health Department staff to be prepared to mount a public health response to the threat of mosquito-borne diseases should the need arise. The Division of Environmental Health has increased the number of staff that are licensed by the Virginia Department of Agricultural and Consumer Services (VDACS) as pesticide applicators and/or registered technicians from five in FY 2016 to 47 in FY 2019.

Beginning in FY 2016, the FCHD began conducting a systematic evaluation of County-maintained stormwater dry ponds for mosquito production in coordination with the Department of Public Works and Environmental Services. This evaluation includes routine sampling for immature mosquitoes (larvae and pupae) and treating to control immature mosquitoes when action thresholds are reached. To conduct these systematic evaluations, the FCHD increased its capacity to perform larval mosquito inspections and mosquito control activities by leveraging internal resources and decreasing its dependence on contracted services. FY 2018 is the first complete year that FCHD staff have conducted all surveillance and control

Health Department

operations without reliance on a contractor. The increase and expansion of routine fieldwork performed since FY 2017 has been primarily supported thus far by several Environmental Health Services staff from other program areas and an increase in seasonal staff from five each season to a minimum of 11. To improve efficiency and limit the strain on staff/resources from other Environmental Health Services program areas, additional full-time staff have been included in Fund 40080, Integrated Pest Management Program as part of the FY 2020 Advertised Budget Plan to help manage the new or expanded work done by the program. The new positions will improve the department's ability to respond to citizen concerns about mosquito issues (service requests) and help to prepare the County for an emergency response to mosquito-related issues if the need arises.

DCIP outreach activities include attending events, providing presentations to the public, and developing/updating outreach information for distribution. In addition to their annual calendar given to every fourth grader in Fairfax County Public Schools, the Health Department worked with the Department of Cable and Consumer Services' Channel 16 to develop its third public health hip-hop video in three years. Since its release in May of 2018, "Tick Check 1-2" has received more than 13,000 views on YouTube and been featured on local and national media outlets. In addition, Channel 16 created a 30-second PSA using clips from the video, shown at several movie theaters in the County.

Laboratory testing data is fundamental to the early identification and remediation of environmental health hazards within the community. In support of the Environmental Health Division, the FCHD laboratory offers a wide range of environmental testing services. In FY 2018, FCHDL performed over 5,000 routine molecular tests of mosquito samples for WNV and Zika, and tests deer ticks for *Borrelia burgdorferi*, the causative agent of Lyme disease. It also maintains certification as a Certified Drinking Water Laboratory providing chemical, heavy metal, and bacteriological testing of private and public water supplies to assure the quality and safety of drinking water supplies. The laboratory performs bacterial and chemical monitoring and surveillance testing on County streams to assist with determining the overall change and trends in the condition of County streams and to protect the health of the public. Due to the high mortality rate of rabies, FCHDL provides 24-hour turnaround time for rabies testing in animals to Fairfax County and surrounding jurisdictions to prevent individuals from receiving unnecessary rabies post-exposure shots. The laboratory continues to enhance and expand its laboratory capabilities to improve disease surveillance to provide timely identification and response to established and emerging pathogens and environmental hazards of public health interest.

Promoting and Encouraging Healthy Behaviors

Community-wide outreach to inform and educate residents about health issues can empower individuals to adopt healthy behaviors and take actions that are conducive to good health. In FY 2019 the Division of Epidemiology and Population Health initiated efforts to improve health and well-being through identification, investigation and prevention of acute and chronic health conditions, in addition to the ongoing surveillance for communicable disease illnesses and outbreaks, identification of causative factors, and intervention to reduce disease occurrence.

In FY 2018 the FCHD continued to reduce its media health promotion efforts from movie theater advertisements aimed at a general audience to more targeted cable and online advertising as part of a 15-month campaign on youth suicide prevention. The use of digital advertising has proven to be a cost-effective means of reaching targeted audiences across multiple screens and platforms. This innovative approach to invest in the delivery of public health messages through marketing research resulted in 8,180,572 impressions directed to the targeted demographic of young adults and parents of adolescents. In addition, the FCHD continues to engage ethnic, minority, and vulnerable populations on a wide range of issues through community partnerships and other population-based, culturally appropriate methods.

Health Department

The Multicultural Advisory Council, which celebrated its ten-year anniversary in FY 2018, and the Northern Virginia Clergy Council for the Prevention of HIV/AIDS are critical partners for building community capacity to deliver and reinforce key public health messages within targeted communities.

The Centers for Disease Control and Prevention (CDC) reports that the health status of students is strongly linked to their academic success and recommends coordinated school health programs to improve educational performance and the well-being of children. Over the last several years, the School Health Program has evolved and expanded its reach beyond the support of individual students' health needs to the promotion of health among the greater school population. In partnership with FCPS, public health nurses promote health and wellness in the elementary, middle and high school settings. In collaboration with the Department of Neighborhood and Community Services, they support health and wellness among youth who utilize the teen centers. In FY 2018, 37,175 students, parents and staff participated in health promotion sessions conducted by public health nurses on topics such as healthy food choices, physical activity, hand washing, oral health, medication safety, and smoking cessation. School Health program staff promote medication safety in the home and expand awareness of prescription drug misuse in adolescents using the Smart Moves Smart Choices program supported by the Virginia Department of Health. Education and outreach to the school community continues to increase, with a focus on supporting initiatives in Title 1 schools in partnership with the Department of Neighborhood and Community Services, the Department of Family Services, and community groups. Staff collaborate with Juvenile and Domestic Relations District Court involved youth to provide health promotion sessions on topics identified as priorities by the youth and staff.

The FCHD Maternal and Child Health program works to reduce infant mortality and morbidity and to promote the health of women, infants, and children in the community by providing public health services and facilitating access to prenatal care. Nurse home visiting services are provided through the Healthy Families Fairfax Program, the Nurse Family Partnership Program, and FCHD Maternal and Child Health field nurses. Services include prenatal support; postpartum assessment; screening and referral for depression; screening for behavioral health risks to include substance abuse, intimate partner violence, and food insecurity; promotion of positive parenting skills and parent-child bonding; screening and referral for developmental delays; and the development of economic self-sufficiency for the family, including working towards education and employment goals.

FCHD offers access to nutrition services and education as a means of improving and sustaining health for vulnerable populations. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides nutritious foods, nutrition education, breastfeeding support, and health care referrals to at-risk, low-income pregnant women, new mothers, infants, and children up to age five. In FY 2018, Fairfax County WIC staff served 2,041 pregnant and postpartum women, 1,305 breastfeeding women, 3,668 infants, and 7,359 children for a total of 14,373 clients. WIC activities are funded through a grant in Fund 50000, Federal-State Grant Fund (Volume 2).

FCHD promotes healthy behaviors for the frail elderly and adults with disabilities attending the Adult Day Health Care program. This service provides ongoing monitoring and coordination of each participant's health, in collaboration with their primary health care providers. This integrated approach promotes the health and well-being of the participants and aims to prevent unnecessary hospitalizations due to unmanaged chronic disease or injuries resulting from physical or cognitive impairments. The participants also receive nutritionally-balanced meals, daily exercise and opportunities for social engagement – all factors that promote healthy aging.

Health Department

In FY 2018, Community Health Care Network (CHCN) public health nurse liaisons continued to work in collaboration with the CHCN primary care providers to provide self-care management support to patients with chronic diseases. The public health nurse liaisons provided education and supportive interventions to increase the patient's knowledge, skills and confidence in adopting healthy behaviors and managing their chronic condition. Early data analysis shows promising results regarding medical regimen compliance, a reduction in hospitalizations and emergency room visits and improvements in clinical and laboratory measures. To expand the capacity of this program in FY 2019 three community health workers will be hired to complement the care coordination team. Community health workers are culturally competent mediators who can build a bridge between the health care system and members of diverse communities. Community health workers are a cost-effective way to increase capacity in the program.

Assuring the Quality and Accessibility of Health Services

Access to health services is vital to keeping communities healthy and strong. Linking people to needed personal health services and assuring the provision of healthcare when otherwise unavailable is an essential service for the FCHD. Due to the significant number of working poor and uninsured in Fairfax County, there continues to be a high demand for primary care services. The Community Health Care Network, Fairfax County's primary care program for low-income, uninsured Fairfax residents, provided 35,388 primary care visits to 16,837 unduplicated patients during FY 2018.

Integration of health care services is one of the County's strategic priorities for the local health system. Under the direction of the Deputy County Executive for Health and Human Services, and in collaboration with Inova Health System and two nonprofit Federally Qualified Health Centers, a new primary care model is being developed to strengthen and expand the County's safety net and improve access to integrated health care in the Fairfax community. This work will continue during FY 2019 with the goal of moving to a new model of primary care in FY 2020.

The FCHD Maternal and Child Health program strives to ensure all women have a safe and healthy pregnancy. Access to prenatal care services for uninsured and underinsured women continues through a partnership between the FCHD and the Inova Cares Clinic for Women. The FCHD remains the entry point for pregnancy testing and prenatal care and provides a Public Health Assessment visit to all pregnant women needing services. This visit entails screening for psychosocial risk factors, such as depression, intimate partner violence and substance use; tuberculosis and Zika screening; connection to WIC services, and referral to community resources. Eligible clients are referred to the Inova Cares Clinic for Women for the clinical components of prenatal care.

The Adult Day Health Care (ADHC) program, a service provided to adults who need supervision during the day, allows participants to remain at home while giving family caregivers relief from the daily caregiving needs of their loved ones. This enhances the participants' quality of life as well as the economic, emotional, and physical wellbeing of the family caregiver. In FY 2020 the new Lewinsville Multi-Service Center will be completed. This campus includes two new buildings: one is a low-income senior living facility while the other will be an intergenerational building that will house two privately operated childcare centers, the Lewinsville Adult Day Health Care program and a Senior Center (operated by the Department of Neighborhood and Community Services).

During a general examination of all County services, the Fairfax County Board of Supervisors instructed staff to review privatization options for the Adult Day Health Care (ADHC) program. A Steering Committee comprised of County staff and community members was established to evaluate the different options for the ADHC program. After completing a cost-benefit-analysis and evaluating a variety of

Health Department

service delivery models, the Steering Committee determined that it would be short-sighted to focus only on the ADHC services provided at the four co-located senior service facilities in the County. The next phase of this project will be to conduct a Request for Information to determine whether there are private providers in the community who were both interested and capable of administering these services.

Innovative models of service delivery such as neighbors helping neighbors "Age in Place" continues to expand in Fairfax County. Communities or neighborhoods initiate service models by self-identifying and self-determining the needs of their members. The needs identified are then used to design systems of service that engage volunteer and/or veteran service providers to deliver a variety of services, such as transportation, shopping, and chores. FCHD staff have assisted communities in planning for or initiating service models to support aging in place. Currently there are 12 neighbors-helping-neighbors programs, either fully operational or under development. Nationally, there are over 200 neighborhood-based age in place "villages."

The Long-Term Care Coordinating Council (LTCCC) develops community-based solutions to address gaps in access to services. In 2017, the LTCCC created a comprehensive Housing Needs Report for Older Adults and Adults with Disabilities including recommendations for the Board of Supervisors and a review by Department of Housing and Community Development staff for inclusion in the Fairfax County Housing Blueprint. The LTCCC also developed a new strategic plan in 2017, identifying the following priority areas for the next three years: transportation; technology; government affairs; community resource education; project development for unmet needs; and diversity in membership. LTCCC committees have been established to address each priority area with innovative solutions.

In FY 2018, FCHD's Emergency Preparedness and Response (EPR) team worked with community and emergency partners to improve the accessibility of public health emergency response services for community members with access and functional needs. Through partnerships with subject matter experts, EPR revised emergency plans, developed and acquired emergency response resources, and delivered trainings for staff and volunteers to improve the accessibility of health services during and after emergencies. A special focus was placed on community members with physical, sensory, mental health, or cognitive and/or intellectual disabilities, medical needs, language needs, and elderly, very young, or pregnant residents.

Responding to Disasters and Assisting Communities in Recovery

The capacity to detect potential public health threats and quickly mobilize a response is a critical aspect of protecting the health of the public. Emergency Preparedness and Response, which includes the Fairfax Medical Reserve Corps (MRC), prepares staff, volunteers, the community, and other partners to prepare for, respond to, recover from, and mitigate public health emergencies. EPR coordinates all emergency preparedness, response and recovery planning, logistics, training, and exercise activities for department staff and MRC volunteers, and ensures local and regional health and medical coordination before, during and after emergencies that impact the public health and healthcare systems.

During FY 2017 and FY 2018, EPR coordinated the department's response to eight emergencies impacting the public health and two planned events, including tuberculosis investigations, multiple severe weather incidents, the Forest Glen apartment fire mass care shelter, and Zika virus. EPR manages the department's Incident Management Team, a group of staff with specialized training to meet the increasing frequency, complexity, and severity of public health emergencies. In FY 2018, EPR continued to develop new, and expand existing trainings and exercise opportunities for Incident Management Team members, staff, and MRC volunteers.

Health Department

EPR ensures achievement of the department's National Association of County and City Health Officials (NACCHO) Project Public Health Ready (PPHR) recognition, a competency-based recognition program that assesses local public health preparedness. EPR coordinates the department's compliance with federal and state public health emergency preparedness and response reviews and requirements, and coordinates on a local, regional, state, and federal level to further public health emergency preparedness goals. At the local and regional levels, EPR coordinates with response partners and community organizations to ensure support of FCHD emergency preparedness and response objectives, and to ensure that FCHD is ready to coordinate or support Fairfax County emergency response activities. In FY 2018, EPR supported healthcare organizations as they developed and improved their emergency preparedness plans and resources, and supported efforts to successfully expand the region's healthcare preparedness coalition.

In FY 2018, EPR significantly expanded its plans, resources, and capabilities to rapidly provide medication to the community, successfully completed a federally mandated review of those capabilities, and began leading a regional initiative to exercise community dispensing plans at all levels of government.

Recruit, Train and Retain a Diverse Competent Workforce

Assuring a competent public health workforce is essential to protecting, promoting, and improving community health. Given the unprecedented climate of transformation and increasing complexity of public health challenges, a primary focus for the FCHD leadership is developing critical crosscutting foundational capabilities within the department that provides the flexibility required to meet traditional, as well as changing public health needs. The FCHD and its staff are guided by five values: Making a Difference; Integrity; Respect; Excellence; and Customer Service. There are several ongoing initiatives to create an environment that promotes these values and supports the department's quality culture and quest to become a value driven high performing organization.

In FY 2017, the FCHD provided training based on core public health competencies: *Health Behavior Theory*, diversity training: *Can We Talk about Race, Diversity & Bullying*, and *Cultural Influences on Perceptions Insights for Healthcare Workers*; emergency preparedness: *Emergency Preparedness and Response 101*, *Point of Dispensing for Staff*, and *Staffing of Emergency Shelters*; communication: *Crisis and Emergency Risk Communication*. To address the emerging threat of Zika Virus Disease in the community, multiple online trainings were developed to inform clinical staff, community partners, citizen groups and healthcare facilities and included, *Epidemiology & Clinical Implications of Zika Virus Disease*, *Follow-up of Infants associated with Zika Virus Disease*, and *Vector Prevention and Control for Zika Virus*. Uploading the online training in Employee U provided the ability to reach a greater number of County employees.

The workforce development plan for FY 2018 included training and learning opportunities to enhance the specialized knowledge and skills in core public health disciplines; however, a greater focus was competency expansion with strategic skills development around systems thinking, change management, data analysis and policy engagement to prepare staff for the cross-sector and leadership work required to effectively address the social, economic and community-based determinants of health. The Health Department, in collaboration with the Health and Human Services system has developed an organizational change plan to address trauma-exposed environments. Individual and organizational action steps are planned to support clients and staff exposed to secondary trauma, and enhance individual and departmental resiliency to ensure optimal health.

Succession planning is an integral part of the department's workforce development plan; therefore, efforts to prepare staff for promotional opportunities and career advancement were expanded in FY 2018.

Health Department

Some additional strategies that are utilized include cross-training, mentoring, shadowing, and the implementation of career management plans.

Investing in Technology to Improve Efficiency and Service Delivery

For the FCHD service delivery system to be efficient and effective, it must have an operational technology foundation with the right tools and resources to meet program needs. In FY 2018 the FCHD further expanded technology platforms that provide self-service portals for provider partners, automate workflows in key program areas such as school health, Sexually Transmitted Infection management, emergency response, rabies management, and outreach. In addition, FCHD successfully deployed database tools that allow for integration with County standard office suite tools, and provide a foundation through which large data sets will be analyzed and presented on key public health indicators in the County.

In FY 2018, FCHD the Division of Epidemiology and Population Health made significant improvements to its public health data analytics capabilities. Partnering with VDH and other resources, FCHD has begun to establish models for visualizing trends and statistics in communicable disease, opioid use, and other population-based health issues. In the coming months and years, FCHD will apply health analytics technologies to provide population based reporting to internal and external audiences. The Community Health Dashboard, a web based data visualization tool, will be expanded in FY 2019 to include more robust local information for public consumption.

The FCHD is actively participating in the Health and Human Services system wide integrated care model, including pilot projects developed during FY 2018 for document management, integrated entry to care, and health analytics. The integrated care model encompasses the wide array of health care services provided to County residents in behavioral, social, medical, and dental programs, and supports coordination of care using client-centered business models and systems. A critical part of the integrated care model, is the replacement of the existing FCHD client healthcare application with a Health Care Services Information System (HCSIS) that includes an Electronic Health Record (EHR). FCHD will be among the County agencies selecting an automated solution for the HCSIS components. The solution will allow for the capture, storage and secure exchange of relevant health information with appropriate service partners in the Health and Human Services System.

The FCHD Environmental Health division is participating in the multi-agency Land Development Services System Replacement project, scheduled to be implemented in spring 2019, with expanded functionality planned through FY 2020. The system will provide a modern enterprise solution to support development plan review, permit and license issuance, code enforcement and inspection, and cashing activities. The division also worked with the Department of Information Technology to modernize the field collection and pesticide application recording system for the Disease Carrying Insects Program. Paper-based methods and records were completely replaced with an end to end mobile data collection management system that provides real-time inspection and treatment data.

The FCHDL continues to evaluate and assess technology to enhance and expand laboratory reporting and data analysis capabilities. In FY 2018, the FCHDL promoted hardware and software upgrades to enhance the existing Laboratory Information System (LIS) to enable electronic billing, ordering and reporting of laboratory results. Plans for FY 2019 include the addition of the SoftMedia module, which allows all documents and images related to an individual client to be electronically scanned and stored. As part of the HCSIS/EHR project, interfaces to the existing LIS will be built to automate laboratory test requests and results delivery. The laboratory continues to work with the Department of Information Technology to expand capacity for secure, web-based access to laboratory test ordering and results.

Health Department

In FY 2018 the Emergency Preparedness and Response (EPR) division upgraded hardware components and software programming of the Health Department Operations Center's audio/visual system to modernize its communications and display capabilities. The Emergency Preparedness and Response division continues to identify ways in which new or existing technologies may be better utilized to communicate with community partners and manage the department's response to emergencies.

Improving Organizational Capacity to Fulfill the Evolving Role of Public Health

Effectively addressing 21st century public health challenges will require a strong public health infrastructure. Over the next several years a strategic aim is to build capacity to address health issues at a population level, with a focus on reducing health inequities. Five principles that characterize and guide the FCHD's population-based approach are a community perspective, population-based data, evidence-based practice, an emphasis on outcomes and prevention. This approach will seek to leverage many traditional and non-traditional partners, using innovative strategies to influence policy, systems and environmental changes across sectors. These actions will require mobilizing and aligning stakeholders and resources in new ways that result in broader population impacts and ultimately, improved community health outcomes.

As part of the FCHD's focus on population health, the Live Healthy Fairfax branding has highlighted collaborative community health improvement work by the Health Department's public health system partners. Health Department partners and coalitions contribute to improved health and quality of life for all in the community. The Community Health Dashboard was implemented in FY 2015 to provide a web-based data resource for the Fairfax community to explore existing population data and track year-to-year trends in population health improvement efforts. In partnership, with the Department of Neighborhood and Community Services, the Community Health Dashboard includes outcomes data for the Collective Impact for Successful Children and Youth Policy Plan. In FY 2017 the Community Health Dashboard was further expanded to highlight social, economic and physical environments which create good health for all by hosting the Health and Human Services Report card. In FY 2019, it is anticipated that the dashboard will be enhanced with additional local data indicators.

In FY 2018, the Partnership for a Healthier Fairfax (PFHF) completed its year four evaluation of implementation goals and objectives for the five-year Community Health Improvement Plan (CHIP). Through the work of public, nonprofit, and business sectors, progress is reported on key actions in each of the seven priority issues: Healthy and Safe Physical Environments; Active Living; Healthy Eating; Tobacco-Free Living; Health Workforce; Access to Health Services; and Data. In FY 2018, FCHD worked with PFHF to develop a Community Health Assessment, and facilitated the process to develop the next CHIP. In FY 2019, the FCHD will continue to collaborate with the PFHF on the implementation of current CHIP objectives, while creating a new CHIP for 2019-2023. The efforts to expand capacity to address community health have been successful, in part, due to grants awarded for implementation of some objectives.

Relationship with Boards, Authorities and Commissions

The FCHD works closely with and supports two advisory boards appointed by the Board of Supervisors.

- The Health Care Advisory Board (HCAB) was created in 1973 to assist the Fairfax County Board of Supervisors in the development of health policy for the County and to advise the Board on health and health-related issues that may be expected to impact County citizens. The HCAB performs duties as mandated by the Board of Supervisors, those initiated by the Board or by the HCAB itself. The underlying goal of the HCAB's activities is promotion of the availability and accessibility of quality cost-effective health care in Fairfax County.

Health Department

- The Fairfax Area Long Term Care Coordinating Council (LTCCC) was created in FY 2002 to identify and address unmet needs in long-term care services and supports. The LTCCC has over 50 members confirmed by the Board of Supervisors and representing other boards and commissions (including the HCAB), public and private agencies, and stakeholders. The LTCCC has supported and developed new services using little or no new County funds to assist adults with disabilities and older adults in a variety of areas.

Budget and Staff Resources

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
FUNDING				
Expenditures:				
Personnel Services	\$39,490,240	\$43,102,196	\$43,136,112	\$45,216,643
Operating Expenses	17,695,349	19,324,898	20,958,095	19,752,991
Capital Equipment	330,877	0	185,876	0
Total Expenditures	\$57,516,466	\$62,427,094	\$64,280,083	\$64,969,634
Income:				
Elderly Day Care Fees	\$979,372	\$915,108	\$998,960	\$998,960
City of Fairfax Contract	1,180,625	1,304,170	1,387,057	1,387,057
Elderly Day Care Medicaid Reimbursement	255,477	297,196	297,196	297,196
Falls Church Health Department	381,348	379,461	379,461	387,050
Licenses, Permits, Fees	3,829,406	3,913,120	3,956,314	3,895,147
Reimbursement - School Health	3,995,766	3,995,766	3,995,766	3,995,766
State Reimbursement	9,208,508	9,244,567	9,244,567	9,244,567
Total Income	\$19,830,502	\$20,049,388	\$20,259,321	\$20,205,743
NET COST TO THE COUNTY	\$37,685,964	\$42,377,706	\$44,020,762	\$44,763,891
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	656 / 584.59	668 / 596.09	668 / 596.09	675 / 603.09

This department has 65/65.0 FTE Grant Positions in Fund 50000, Federal-State Grant Fund.

FY 2020 Funding Adjustments

The following funding adjustments from the FY 2019 Adopted Budget Plan are necessary to support the FY 2020 program.

- Employee Compensation** **\$1,311,675**
 An increase of \$1,311,675 in Personnel Services includes \$430,871 for a 1.0 percent market rate adjustment (MRA) for all employees and \$730,804 for performance-based and longevity increases for non-uniformed merit employees, both effective July 2019, and \$150,000 for increased hours for School Health Aides.
- Positions to Support Epidemiology** **\$291,664**
 An increase of \$291,664 and 3/3.0 FTE positions is included to support the Epidemiology and Population Health program. The three new Epidemiologist positions will enhance the County's ability to prevent and control infectious diseases, develop the capability to monitor the health status of the community, and guide new approaches to the delivery of population-based health services in

Health Department

order to reduce health inequities. It should be noted that an increase of \$138,255 in Fringe Benefits funding is included in Agency 89, Employee Benefits. For more information on Fringe Benefits, please refer to the Agency 89, Employee Benefits, narrative in the Nondepartmental program area of Volume 1.

- ◆ **Contract Rate Increases** **\$243,433**
An increase of \$243,433 in Operating Expenses supports a contract rate increase for the providers of contracted health services and for providers of repair and maintenance services for laboratory and medical equipment.
- ◆ **School Health Clinical Specialists** **\$183,056**
An increase of \$183,056 and 2/2.0 FTE Public Health Nurse positions is included to meet increased training, mentoring, and ongoing clinical support requirements for students with complex and chronic health conditions. It should be noted that an increase of \$86,418 in Fringe Benefits funding is included in Agency 89, Employee Benefits.
- ◆ **School Nurse Vacancies** **\$167,872**
An increase of \$167,872 is included to allow the Health Department to fill two existing Public Health Nurse positions that are part of the School Health Program. These positions, which have been held vacant as part of the agency's managed vacancy plan, are necessary in order to meet the growing demand for services as a result of the increasing student population and number of students with health conditions that require care plans and treatments throughout the school day. It should be noted that an increase of \$78,746 in Fringe Benefits funding is included in Agency 89, Employee Benefits.
- ◆ **Homeless Healthcare Program** **\$130,660**
An increase of \$130,660 in Operating Expenses is included to increase the number of contracted hours for Homeless Outreach Workers from 20 to 40 hours per week in order to expand capacity to conduct more street outreach and increase the team's presence in the community.
- ◆ **Position to Support the New Bailey's Crossroads Homeless Shelter** **\$100,068**
An increase of \$100,068 and 1/1.0 FTE position is included to support the new Medical Respite program at the new Bailey's Crossroads homeless shelter, which is scheduled to open in FY 2020. The new Bailey's Crossroads Homeless Shelter has been expanded and will now include a Medical Respite program. The Medical Respite program provides four dedicated beds for homeless clients with an acute medical condition from which they have to recuperate. The Medical Respite program is administered by both the Health Department and the Department of Family Services. The Health Department is responsible for clinical services such as wound care, medication management, oxygen and IV antibiotics while the Department of Family Services provides support services such as case management, authorizing transportation and accessing meals. It should be noted that an increase of \$47,523 in Fringe Benefits funding is included in Agency 89, Employee Benefits.
- ◆ **Position to Support the Rabies Program** **\$80,196**
An increase of \$80,196 and 1/1.0 FTE position is included to address the growing workload associated with the Rabies Program. Fairfax County has one of the highest incidences of rabies in the nation. This position is necessary to monitor domestic pets for potential rabies exposure, collect animals for testing, and track patients. It should be noted that an increase of \$37,484 in Fringe Benefits funding is included in Agency 89, Employee Benefits.

Health Department

- ◆ **Health and Human Services Position Realignment** **\$33,916**
As previously approved by the Board of Supervisors as part of the *FY 2018 Carryover Review*, an increase of \$33,916 in Personnel Services is included to support the transfer of a benefits eligible position from the Office of Strategy Management for Health and Human Services to the Health Department to better align resources within the Health and Human Services System.

Changes to FY 2019 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2019 Revised Budget Plan since passage of the FY 2019 Adopted Budget Plan. Included are all adjustments made as part of the FY 2018 Carryover Review, and all other approved changes through December 31, 2018.

- ◆ **Carryover Adjustments** **\$1,819,073**
As part of the *FY 2018 Carryover Review*, the Board of Supervisors approved funding of \$1,819,073, including \$1,744,073 in encumbered funding in Operating Expenses and \$75,000 in unencumbered carryover in Operating Expenses associated with the Incentive Reinvestment Initiative.
- ◆ **Health and Human Services Position Realignment** **\$33,916**
As part of the *FY 2018 Carryover Review*, the Board of Supervisors approved the transfer of \$33,916 in Personnel Services funding and benefits eligible support from the Office of Strategy Management for Health and Human Services (OSM) to the Health Department to better align resources within the Health and Human Services System.

Cost Centers

The Health Department is divided into seven cost centers which work together to fulfill the mission of the department. They are: Public Health Administration and Operations, Community Health Development, Emergency Preparedness and Response, Environmental Health, Epidemiology and Population Health, Health Laboratory, and Health Services.

Public Health Administration and Operations (formerly Program Management)

Public Health Administration and Operations provides overall department guidance and administration including agency leadership, program development and monitoring, fiscal stewardship, human resources, and informatics. A primary focus of agency leadership is working with the community, private health sector, governing bodies, and other jurisdictions within the Northern Virginia region and the Metropolitan Washington area to maximize resources available in various programmatic areas.

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$1,900,348	\$2,793,787	\$3,214,898	\$2,920,408
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	10 / 10	21 / 20.5	22 / 21.5	29 / 28.5

Health Department

1 Director of Health	1 Business Analyst I	2 Financial Specialists I
3 Deputy Directors for Health Dept.	1 Human Resources Generalist III	3 Administrative Assistants V
3 Management Analysts IV	1 Human Resources Generalist II	4 Administrative Assistants IV
1 Program and Procedures Coordinator	1 Human Resources Generalist I, PT	2 Administrative Assistants III
1 Business Analyst IV	1 Financial Specialist III	
3 Business Analysts III	1 Financial Specialist II	

TOTAL POSITIONS

29 Positions / 28.5 FTE

PT Denotes Part-Time Position

Community Health Development (formerly part of Community Health Development and Preparedness)

Community Health Development serves to strengthen the local public health system through community engagement, health planning initiatives, and partnership development. The division works to improve health outcomes by engaging target populations and ensuring that interventions and messaging are culturally and linguistically appropriate. Several of its program areas support essential department-wide functions, including strategic planning, communications, community outreach, health promotion, and partnership development.

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$1,144,876	\$1,371,345	\$1,268,267	\$1,401,622
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	14 / 14	14 / 14	16 / 16	17 / 17

1 Director Comm Health Dev. & Prep	1 Management Analyst II	6 Community Health Specialists
1 Management Analyst IV	1 Public Safety Information Officer IV	1 Administrative Assistant III
4 Management Analysts III	2 Communications Specialists II	

TOTAL POSITIONS

17 Positions / 17.0 FTE

Emergency Preparedness and Response (formerly part of Community Health Development and Preparedness)

Emergency Preparedness and Response ensures the department can anticipate, prepare for, effectively respond to, and recover from public health threats and emergencies, and meet community health preparedness needs. Preparedness activities include inter- and intra-departmental coordination, resource management, planning and capability building, and training and exercising. These activities improve readiness and community resiliency while ensuring staff and volunteers are adequately trained to respond to emergencies that impact the public health. The Medical Reserve Corp expands the departments capacity in public health emergencies and supports traditional public health activities.

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$353,951	\$570,931	\$571,097	\$585,143
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	5 / 5	5 / 5	5 / 5	6 / 6

Health Department

1 Public Health Emergency Mgmt. Coord.
3 Emergency Mgmt. Specialists II

1 Public Health Doctor

1 Material Management Specialist III

TOTAL POSITIONS

6 Positions / 6.0 FTE

Environmental Health

Environmental Health provides public health services that protect the community from potential environmental hazards and exposures that pose a risk to human health. The division has three program areas: Consumer Protection Program, Onsite Sewage and Water Program, and Disease Carrying Insects Program (Fund 40080, Integrated Pest Management Program, Volume 2). The primary services conducted by these programs include inspections, complaint investigations, commercial and residential plan reviews, surveillance and control activities, and community outreach. The division supports the regulated community, other agencies, and the public to encourage healthy behaviors and maintain voluntary, long-term compliance with state and local regulations.

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$4,594,100	\$5,287,057	\$5,287,505	\$5,493,535

AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)

Regular	62 / 62	62 / 62	62 / 62	61 / 61
---------	---------	---------	---------	---------

1 Director Environmental Health	15 Environmental Health Specialists III	1 Administrative Assistant V
3 Environmental Health Prog. Managers	26 Environmental Health Specialists II (1)	2 Administrative Assistants III
5 Environmental Health Supervisors	4 Environmental Health Techs. II	3 Administrative Assistants II
	1 Environmental Health Tech. I	

TOTAL POSITIONS

61 Positions (1) / 61.0 FTE (1.0)

() Denotes New Position

Epidemiology and Population Health (formerly part of Communicable Disease Control)*

Epidemiology and Population Health improves the health and well-being of County residents through the identification, investigation, control and prevention of acute and chronic health conditions. For communicable diseases, this includes surveillance for reportable diseases, investigation of disease outbreaks, identification of causative factors, and intervention to reduce disease occurrence. For non-communicable conditions (e.g., obesity, opioid use), the division analyzes and displays data and trends for situational awareness and to support decision-making; identifies racial, ethnic and socioeconomic disparities in disease occurrence; supports development and implementation of preventive interventions; provides expertise in data collection, analysis and use; conducts program evaluations; and engages in research.

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$0	\$0	\$0	\$2,210,865

AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)

Regular	0 / 0	0 / 0	0 / 0	22 / 22
---------	-------	-------	-------	---------

Health Department

1 Public Health Doctor	6 Public Health Nurses III	1 Administrative Assistant IV
2 Epidemiologists IV	1 Environmental Health Specialist III	1 Administrative Assistant III
5 Epidemiologists III (2)	1 Environmental Health Specialist II	
2 Epidemiologists II (1)	2 Community Health Specialists	

TOTAL POSITIONS

22 Positions (3) / 22.0 FTE (3.0)

() Denotes New Positions

*The Epidemiology and Population Health division was formerly a portion of the Communicable Disease Control division under the previous Health Department organizational structure, which is now part of the new Health Services division. Therefore, the positions and funding for FY 2018 Actuals, FY 2019 Adopted, and FY 2019 Revised for the Epidemiology and Population Health division are reflected in the Health Services division.

Health Laboratory

Fairfax County Health Department Laboratory (FCHDL) provides medical and environmental laboratory testing in support of the Health Department's public health clinics and environmental services. FCHDL offers a wide range of testing services to aid in the diagnosis, treatment, and monitoring of diseases of public health significance. These services support Health Department programs such as Tuberculosis, Sexually Transmitted Infection, Rabies, and the Disease Carrying Insects Program, as well as mandated environmental tests and substance abuse tests for other County agencies.

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$2,565,263	\$2,438,273	\$2,730,746	\$2,527,309
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	15 / 15	15 / 15	15 / 15	17 / 17

1 Public Health Laboratory Director	2 Public Health Lab Scientists III	1 Material Management Driver
1 Management Analyst II	2 Public Health Lab Scientists II	1 Administrative Assistant IV
	8 Public Health Lab Scientists I	1 Administrative Assistant III

TOTAL POSITIONS

17 Positions / 17.0 FTE

Health Services (formerly Communicable Disease Control, Community Health Care Network, Dental Health, Maternal and Child Health, School Health, and Long-Term Care Development and Services)

Health Services includes programs and interventions across the lifespan to encourage healthy behaviors, prevent the spread of disease, and provide treatment to those most in need. Programs include: Maternal Child Health; School Health; Women, Infant and Child Supplemental Nutrition; Public Health Clinical Services (Pharmacy, Immunizations, Maternity, Dental, Homeless HealthCare, Speech and Hearing, Newcomer Health); Integrated Health Services; and Long Term Care services (Adult Day Health Care).

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Revised	FY 2020 Advertised
EXPENDITURES				
Total Expenditures	\$46,957,928	\$49,965,701	\$51,207,570	\$49,830,752
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	550 / 478.59	551 / 479.59	548 / 476.59	523 / 451.59

Health Department

3 Asst. Directors Patient Care Svcs.	1 Sr. Pharmacist	4 Sr. School Health Aides, PT
1 Division Director Health Svcs.	1 Pharmacist	195 School Health Aides, PT
1 Management Analyst IV	2 Audiologists II	1 Human Service Worker IV
2 Management Analysts III	5 Speech Pathologists II	8 Human Service Workers II
5 Public Health Doctors	1 Rehabilitative Svcs. Manager	5 Human Services Assistants
3 Public Health Dentists	3 Dental Assistants	1 Administrative Associate
3 Licensed Practical Nurses	2 Radiologic Technologists	6 Administrative Assistants V
4 Nurse Practitioners (1)	4 Sr. Home Health Aides	12 Administrative Assistants IV
19 Public Health Nurses IV	20 Home Health Aides	14 Administrative Assistants III
28 Public Health Nurses III (2)	5 Social Svcs. Specialists II	29 Administrative Assistants II
131 Public Health Nurses II, 3 PT	4 Park/Rec Specialists III	

TOTAL POSITIONS

523 Positions (3) / 451.59 FTE (3.0)

PT Denotes Part-Time Position

() Denotes New Positions

Key Performance Measures

The Fairfax County Health and Human Services System has adopted the Results-Based Accountability (RBA) approach to measure impact across the system, foster joint accountability, and collectively strengthen programs and services. This framework focuses on measuring how much work is done; how well work is completed; and whether clients are better off as a result of receiving FCHD services. As a part of this effort, FCHD continues to revise and refine its performance measures to better reflect desired client and community health outcomes. Many new measures have replaced key performance measures used in prior years; therefore, data is no longer being collected for the measures previously reported on. Additionally, data are not available for some years for newer measures due to changes in collection methodologies and reporting tools.

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2016 Actual	FY 2017 Actual	FY 2018 Estimate/Actual	FY 2019	FY 2020
Administration and Operations					
Percent of performance measurement estimates met	56%	66%	60% / 61%	60%	60%
Community Health Development					
Percent of community members served who report intent to practice healthy behaviors	78%	87%	75% / 77%	75%	75%
Emergency Preparedness and Response					
Percent of staff and volunteers who report they are better prepared for public health emergencies as a result of preparedness training and exercises	94%	98%	95% / 97%	98%	98%
Percent of volunteers who report experiencing a stronger connection to their community through their services	88%	95%	95% / 91%	96%	96%
Environmental Health					
Percent of environmental complaints resolved within 60 days	89%	97%	90% / 82%	90%	90%
Percent of food service establishments demonstrating FDA risk factor control measures to reduce foodborne illness	93%	95%	95% / 95%	95%	95%

Health Department

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2016 Actual	FY 2017 Actual	FY 2018 Estimate/Actual	FY 2019	FY 2020
Environmental Health					
Percent of out of compliance onsite sewage disposal and water supply systems corrected within the specified time period	92%	93%	90% / 94%	90%	90%
Epidemiology and Population Health					
Percent of individuals exposed to a confirmed norovirus outbreak who did not develop illness after the implementation of Health Dept. outbreak control measures.	95%	94%	90% / 86%	90%	90%
Health Laboratory					
Percent of individuals saved from unnecessary rabies post-exposure shots by timely receipt of negative lab results	99%	100%	95% / 98%	95%	95%
Health Services					
Percent of Community Health Care Network clients with stable or improved health outcomes	72%	67%	64% / 73%	67%	70%
Percent of pregnant women served who deliver a low birth weight baby	7.5%	7.9%	7.8% / 7.3%	7.8%	7.8%
Percent of children served by the Health Department who are up-to-date on immunizations at 24 months of age	57%	62%	60% / 63%	60%	64%
Rate of TB Disease/100,000 population	5.4	5.7	5.7 / 6.3	5.8	6.0
Percent of clients who report that the services they received at a public health clinic addressed their health need	98%	98%	98% / 98%	98%	98%
Percent of parents and guardians who report that their child was able to attend school as a result of having a health care plan	85%	87%	85% / 73%	85%	85%
Percent of participants who met the criteria for institutional level of care who were able to remain in the community	96%	98%	92% / 99%	93%	92%
Percent of caregivers who report experiencing less stress as a result of Adult Day Health Care	96%	96%	93% / 97%	95%	95%

A complete list of performance measures can be viewed at
<https://www.fairfaxcounty.gov/budget/fy-2020-advertised-performance-measures-pm>

Health Department

Performance Measurement Results

Public Health Administration and Operations (formerly Program Management)

Public Health Administration and Operations, composed of the Health Director and supporting staff, oversees the FCHD General Fund Budget of \$64,969,634 and all the department's performance objectives. In addition, the department anticipates receiving grants totaling approximately \$4,679,837 and revenue of \$20,205,743 in FY 2020. The department met 61 percent of all the performance measurement estimates set for FY 2018, exceeding the performance target of 60 percent. However, estimates for quality and efficiency measures decreased to 58 percent, thereby missing the target of 60 percent. The reasons are explained in the respective cost centers' performance measurement results sections.

Community Health Development (formerly part of Community Health Development and Preparedness)

Community Health Outreach (CHO) serves as a resource for FCHD programs, helping them link with communities and provide residents with information about services, disseminate important health messages and engage in direct health education. Much of CHO's activity is based in the County's growing minority and multicultural communities. In FY 2018, the number of health promotion events increased 42 percent over FY 2017; however, fewer community members were reached overall. The decline is because health promotion sessions tended to be longer in duration and more in depth than prior years. CHO worked with more than 387 governmental and community-based organizations, participated in over 687 individual health promotion events, and served as guest speakers on Telemundo, Channel 16 and County sponsored podcasts in English and Spanish. In total, the team reached nearly 34,000 individuals; of those surveyed, 97 percent were satisfied with the health promotion activities provided. Outreach and health promotion activities include the Chronic Disease Self-Management Program; the Diabetes Self-Management Program; the Vaccine Literacy Campaign; facilitated dialogues to reduce the stigma of mental health diagnosis, and outreach related to hand washing, vector control, emergency preparedness, and access to Health Department services and programs. As a result of these efforts, 77 percent of survey respondents reported an intent to practice healthy behaviors. Outreach activities in FY 2020 will be focused on establishing a cohort of public health ministries within interfaith houses of worship throughout the community.

Emergency Preparedness and Response (formerly part of Community Health Development and Preparedness)

In FY 2018, the department's response to multiple public health emergencies, coupled with the increased variety and frequency of preparedness and response trainings, exercises, and activities provided excellent opportunities for staff and volunteers to participate in preparedness and response activities. Ongoing efforts will focus on providing additional opportunities for staff and volunteers to complete the two new required trainings added in FY 2017 as well as the multiple trainings and exercises needed to prepare new Incident Management Team members. Emergency Preparedness and Response staff collect data to determine if its efforts are making a difference in how staff and volunteers feel about their own individual level of preparedness. In FY 2018, 97 percent of staff and volunteers surveyed indicated that they were better prepared as a result of participating in an emergency preparedness training or exercise.

Environmental Health

Consumer Protection Program: The Consumer Protection Program (CPP) currently has oversight of 3,869 permitted facilities that include 3,648 food establishments and 221 other commercial establishments. CPP also conducts health inspections for other licensing agencies and responds to reports of public health or safety menaces. In FY 2018, CPP responded to 55 percent of public health or safety menace complaint

Health Department

investigation requests within three days of receipt, and 96 percent of these requests were resolved within 60 days of receipt.

CPP categorizes food establishments and conduct inspections on a risk and performance-based frequency. Depending on its assigned category, a food establishment is inspected one, two, or three times within a 12-month period. For a food establishment with a poor compliance history, CPP provides additional tailored services (e.g., inspection, onsite training, and risk control plan) to help the establishment achieve long-term compliance with the regulations. In FY 2018, food establishment inspections were completed per regulatory mandates with 99 percent of those inspections being conducted within the prescribed risk and performance based inspection frequency. In FY 2018, CPP evaluated the effectiveness of the regulatory food program's services and found that 95 percent of all food establishments follow the Food and Drug Administration risk factor control measures to reduce foodborne illness. This means that 5 percent of the food establishments had an increase in inspection frequency during FY 2018 to help improve their compliance. In FY 2019 and FY 2020, CPP will continue to identify risk factors that could lead to disease in regulated establishments and to educate employees on public health interventions that contribute to a healthy and safe community.

Onsite Sewage & Water Program: The Onsite Sewage & Water Program (OSW) focuses on disposal systems and private well water supplies to ensure proper construction, operation and maintenance that protect public health. During FY 2018, 94 percent of sewage disposal system violations and well water system deficiencies were corrected within 60 days.

All new construction for commercial and residential properties without access to public sewer and existing malfunctioning systems require a site soil evaluation review by OSW. Once approved, a conventional or alternative sewage disposal system can be designed for property development. Alternative Onsite Sewage Systems (AOSS) regulations require design by professional engineers. OSW reviews these designs and inspects the installations of AOSS. In FY 2018, OSW conducted 160 soil evaluations. Over half of all new sewage disposal systems approved were alternative designs.

The water recreation facilities program has regulatory oversight of approximately 1,210 pools, spas, interactive water features, and water parks. In FY 2018 Environmental Health completed inspections per regulatory mandates with each pool vessel receiving two or more inspections.

Disease Carrying Insects Program (DCIP): Mosquitoes, ticks and other vectors are responsible for transmitting pathogens that can result in life-changing illnesses such as West Nile Virus (WNV), Lyme disease, and Zika. The program uses principles of integrated mosquito management that combines public education, surveillance, and vector control to help protect the public from mosquito and tick-borne diseases. The DCIP activities are funded through Fund 40080, Integrated Pest Management Fund in Volume 2. For performance measurement information related to the DCIP, refer to the Fund 40080 narrative.

Epidemiology and Population Health (formerly part of Communicable Disease Control)

The number of Communicable Disease screenings, investigations and treatments for selected communicable disease was 27,474 during FY 2018, a decrease from prior years. This resulted in an increase in the percent of selected reportable communicable disease investigations for which initial public health control measures were initiated within the appropriate timeframe from 78 percent in FY 2017 to 86 percent. These fluctuations are influenced by factors such as annual differences in the specific pathogens that circulate in the community and the impacts of infection control and prevention efforts. Sixty-four

Health Department

outbreaks were reported and investigated in the Fairfax Health District in FY 2018, an increase from 49 outbreaks investigated in FY 2017. There has been a 94 percent increase in outbreak investigations since FY 2016 (33 outbreaks investigated). This increase is likely due, in part, to better reporting resulting from increased outreach, communication and collaboration with healthcare facilities, long-term care for older adults, childcare facilities and schools, rather than increased outbreak occurrence in the community. Enhanced education and outreach has led to early notification and better understanding that health department support will limit the spread of illness and keep the community healthy. In FY 2019, FCHD will continue to conduct disease investigations and respond to outbreaks, while continuing to enhance prevention efforts, particularly for healthcare associated, emerging and drug-resistant infections.

Population Health is a new function in the Division with two epidemiology staff hired in mid-FY 2018 to perform this work. In FY 2019, the team will work to identify new performance measures to reflect the level of effort in this area and its impact upon the community.

Health Laboratory

A continuing focus of laboratory performance is control of average cost per test. The average cost per test in FY 2018 (\$9) was higher than FY 2017 (\$8) due to increased cost of personnel, reagents and supplies associated with the addition of new test methods and the increase in test volume. Future projected cost per test reflects increased costs of supplies and personnel costs. The implementation of more specific molecular methods which allow for earlier detection of Sexually Transmitted Infections and Tuberculosis disease and the elimination of unnecessary chest x-rays and treatment for false positive tuberculin skin tests has resulted in significant savings to the County. The Health Insurance Portability and Accountability Act (HIPAA) compliant Laboratory Information System (LIS) was recently enhanced to include a web portal for ordering and viewing test results and to provide the capability to create individualized ad hoc statistical reports. These will allow the laboratory to improve service delivery, reduce turnaround time, improve customer satisfaction, and increase both testing volumes and testing revenues.

Quality improvement is an ongoing process in the operation of any laboratory. The FCHDL distributes an annual Customer Satisfaction Survey to measure whether services provided meet or surpass the needs of clients. The responses to the survey assist laboratory staff to develop and monitor quality improvement projects, assess test menus, monitor trends, and improve communication with customers. The FCHDL continued to maintain a high level of customer satisfaction as measured by FY 2018 survey results which indicate that 97 percent of customers were satisfied with current services.

To achieve and maintain certification through regulatory authorities, laboratories must participate in annual proficiency testing programs. The FCHDL participates in the following proficiency testing programs: College of American Pathologists, Wisconsin State Laboratory of Hygiene, Centers for Disease Control and Prevention, and Environmental Protection Agency approved environmental studies. The FCHDL continued to maintain a high degree of accuracy as measured by its FY 2018 scoring average of 96 percent on accuracy tests required for certification. The department's scoring level exceeds the goal of 95 percent and exceeds the accepted benchmark of 80 percent required for satisfactory performance by laboratory certification programs.

Rabies, a preventable viral disease often transmitted through the bite of a rabid animal, is almost always fatal once symptoms appear, but can be prevented almost 100 percent of the time when post-exposure prophylaxis is administered soon after an exposure occurs. The FCHDL provides 24-hour turn-around-time for rabies testing on animals to allow for timely prophylactic treatment when needed and the avoidance of unnecessary rabies post-exposure shots, which average \$4,000 per series. The rabies laboratory exceeded its service quality goal of 95 percent and reported rabies test results in less than

Health Department

24 hours on 98 percent of critical human exposures to potentially rabid animals. Of the 430 rabies tests conducted, 17 individuals were confirmed to have been exposed to rabid animals. The savings in medical costs associated with the 331 individuals exposed to potentially rabid animals with negative test results is estimated at \$1,324,000.

Health Services (formerly Communicable Disease Control, Community Health Care Network, Dental Health, Maternal and Child Health, School Health, and Long Term Care Development and Services)

Integrated Health Services: The large number of low-income, uninsured residents continues to provide significant demand for Community Health Care Network (CHCN) services. During FY 2018, the CHCN provided access to health services for 19,253 enrollees; served 16,837 of those individuals through at least one visit; provided 35,388 primary care visits across the three CHCN clinic sites; and coordinated 10,714 referrals for specialty care services. Over the past three fiscal years, annual enrollment totals of uninsured, low-income individuals meeting CHCN program eligibility criteria have remained constant.

During FY 2018, there was a 14 percent increase in the number of primary care visits provided, from 30,925 in FY 2017 to 35,388 in FY 2018, and an increase of 44 percent in the number of unduplicated patients seen, from 11,662 in FY 2017 to 16,837 in FY 2018. While the number of primary care visits anticipated for FY 2018 was not met, the number of unduplicated patients having at least one visit exceeded expectations.

In FY 2018 the percent of CHCN patients with stable or improved outcomes was 73 percent. This outcome reflected an increase in positive outcomes compared to 67 percent in FY 2017. Clinical guidelines for controlled glycosylated hemoglobin (HgbA1c) and hypertension ranges were utilized to identify the proportion of CHCN patients with measured readings within specified control ranges for these two high-prevalence chronic conditions.

Maternal Child Health Services (MCH): The number of Public Health Assessments (PHAs) provided to pregnant women in the FCHD district offices decreased by 14 percent in FY 2018 (2,613) from FY 2017 (3,030), resulting in the program falling short of the designated target of 3,000 PHAs. This reduction corresponds to the 11 percent reduction in the number of pregnancy tests done at the district offices during FY 2018 and is comparable to the nearly 8 percent decline in total deliveries reported to the FCHD in FY 2018 by Inova Cares Clinic for Women (ICCW). Service delivery data and potential contributing factors to these declines will be monitored and assessed over this next year.

FCHD's Home Visiting Programs includes two evidence-based programs (Healthy Families Fairfax and Nurse Family Partnership) and one evidence-informed program (MCH Field). These three programs' goals align with the Health Resources and Services Administration's (HRSA) Federal Home Visiting Goals which aim to improve maternal and child health, prevent child abuse and neglect, encourage positive parenting, and promote child development and school readiness. MCH home visiting services held steady at 1,908 clients in FY 2018. The percent of Nurse Family Partnership pregnant women retained through their entire pregnancy decreased in FY 2018 from 75 percent to 65 percent, resulting in a shortfall of reaching the 90 percent national Nurse Family Partnership target. However, the client retention rate during pregnancy was still slightly above the Nurse Family Partnership national rate of 67 percent and slightly above the state rate of 62 percent in FY 2018. Staffing transitions and vacancies in the Nurse Family Partnership program were the primary contributors to this drop in the retention rate.

Health Department

The percent of pregnant women served through FCHD-ICCW who delivered a low birth weight (LBW) baby decreased from 7.9 percent in FY 2017 to 7.3 percent in FY 2018. This is below the national low birth weight target of 7.8 percent established by Healthy People 2020, but above the overall County LBW rate of 6.9 percent. Maternity clients with medical conditions are at a higher risk for delivering a low birth weight newborn. Given that the population served is generally at higher risk for poor birth outcomes than the general population, FCHD and ICCW closely monitor birth outcomes and will continue to address risk factors which contribute to low birth weight, such as poor maternal nutritional status and adequacy of prenatal care. The collaborative care delivery model between the FCHD and ICCW provides quality early public health services and continuous prenatal clinical care, which is critical to improving pregnancy and birth outcomes.

In FY 2018, 28,277 vaccines were administered to 8,408 children, newborn to 18 years of age, which is a 25 percent reduction in vaccines administered during FY 2017. This drop-in childhood immunizations is a significant decline from previous years, and the contributing factors are not fully understood. FCHD serves an ethnically and culturally diverse population often faced with challenges (e.g., language, literacy, transportation, cultural beliefs), which may restrict their access to health services. The FCHD will closely monitor immunization service data as well as the immunization status of the community in order to protect residents from vaccine-preventable diseases.

The percent of children served who completed the recommended vaccine series by 24 months of age increased slightly to 63 percent from the prior value of 62 percent (Up-to-Date Report, Quarter 1, January–March 2018, Virginia Department of Health), which may be due to the ongoing implementation of a reminder/recall live telephone call system. This vaccine coverage rate has consistently remained below the FCHD and Healthy People 2020 goal of 80 percent. A major contributing factor is having a highly transient population and an inability to track individuals who are unable to complete vaccination series started at the FCHD. However, by the time of school entry, a much higher percentage of children are adequately immunized, with an 85 percent kindergarten entry immunization rate (Comprehensive Clinical Assessment Software Application [CoCASA] FY 2018), despite having lacked these immunizations or adequate documentation of vaccination at the age of two. This is attributable to the state law which establishes minimum vaccination requirements for school entry to lower the incidence of vaccine preventable diseases.

Public Health Clinical Services: Clinic services have experienced an overall decline in the number of clients served. This is primarily attributed to an initiative which took place in effort to improve quality and promote efficiencies; the implementation of QuantiFERON Gold (QFT) test, a highly specific and sensitive test to aid in the detection of TB. This test has eliminated the need for multiple visits associated with TB skin testing (TST), chest x-rays and INH medication. The decline in clinic services has also been attributed to a decrease in the quota of newcomers into the County and the implementation of billing for Sexually Transmitted Infection services across the FCHD district offices. The calendar year 2018 rate of active TB disease in Fairfax County is 6.3 per 100,000 as compared to 5.7 in calendar year 2017. The TB program also reports rates per calendar year as required by VDH. The County case rate remains higher than many areas of the state due to the County's diversity and high prevalence of TB in many parts of the world. Despite the declines in clinic volume, the overall satisfaction rate among clients remains high regarding the degree to which clinic services has met their needs.

School Health: In FY 2018, the School Health Program supported 188,591 students at 197 school sites in Fairfax County Public Schools (FCPS) during the regular school year, 24,180 students at 98 sites in summer school and community recreation programs and 2,660 students enrolled in four Falls Church City Public Schools (FCCPS). A student with a health condition that could potentially impact his or her

Health Department

school day is provided with support through a health plan developed by a Public Health Nurses (PHN). The plan is shared with school staff and appropriate training is provided by the PHN to support the student's health needs and to maintain school attendance. The number of students in FCPS with an identified health condition increased by 22 percent from 66,887 in FY 2017 to 81,376 in FY 2018. This increase may be due to changes in the Health Information Form (HIF) submitted by parents/guardians to FCPS. This revised HIF specifies health conditions that may have been previously identified under the "other" category, and may not have been noted by parents or guardians during prior years. This change supports an improved data collection system for the PHNs to obtain a more accurate assessment of the health status of students and to develop effective plans to manage health conditions at school. Student visits to school health rooms, which are staffed by School Health Aides (SHA), occur for student illness or injury during the school day. Health room visits dropped slightly to 780,534 visits which is a 3 percent decrease from 807,229 visits during FY 2017, and may be attributed to a variety of factors, such as effective management of children's health conditions and children staying at home when sick.

The provision of training (e.g., epinephrine administration, asthma inhalers, glucometers and individual student procedural training) to school staff enables students with health conditions to fully access their education and is a critical activity in the school health program. Public Health Nurses provided training to 26,870 school staff in FY 2018. As the student population has grown, along with an increasing complexity of health needs identified among the students, the School Health program has worked in partnership with FCPS to develop efficiencies in service delivery in support of students' health. The expanded use of online health training efficiently enables school staff to effectively manage students' health conditions during the school day.

In the past five years, the enrollment of students in the FCPS system has increased by 2.8 percent. FCPS estimates indicate that student enrollment will remain stable or increase slightly in the coming school year(s); however, the health needs of students continue to increase and become more complicated at a rate not commensurate with enrollment. A PHN:student ratio of 1:2000 (currently 1:3,136) is essential to the management of chronic and/or complex medical conditions in the school setting and development of health care plans upon entry to FCPS. There was a decrease in the percent of parents and guardians who reported their child could attend school as a result of having a health care plan in place from 87 percent in FY 2017 to 73 percent in FY 2018. The overall satisfaction of parents with school health services also dropped with 72 percent of parents and guardians reporting that their child's health condition is managed effectively in the school setting, a 12 percentage point decrease in satisfaction from the 84 percent reported in FY 2017. These declines may be due to a combination of factors, including the increased number of students identified as having a health condition and in need of a health plan, as PHN staffing has not kept pace with the increase in reported health conditions.

Long Term Care: The number of Medicaid Nursing Home Pre-Admission Screenings (NHPAS) completed in FY 2018 for low-income, frail children or elderly and adults with disabilities was 1,253. FY 2018 screening numbers decreased from prior years as a result of further implementation of the online Department of Medical Assistance Services (DMAS) ePAS screening process allowing hospitals access to complete and submit the NHPAS electronically prior to the individual's discharge from the hospital, thereby providing improved access to services. In FY 2018 the average number of calendar days between the request for a screening and its submission to DMAS was 16 calendar days with 98.5 percent of all screening requests being completed within 30 calendar days thus meeting the Code of Virginia requirement to provide and complete the screening service within 30 calendar days of the client or caregiver's request.

Health Department

Ninety-nine percent of the Adult Day Health Care (ADHC) participants met the criteria for institutional level of care but could remain in the community due in part to the support services received at the ADHC. This exceeded the estimate of 92 percent, as the population served this year was frailer. Ninety-seven percent of family caregivers surveyed this year state that they experienced less stress when their loved one attended an ADHC Center, which was higher than projected. Additionally, the program achieved a 100 percent satisfaction rate amongst family caregivers who responded to an annual survey. The ADHC program saw an increase in the average daily attendance (ADA) for the first time in many years in FY 2018, serving 98 daily as compared to 90 in FY 2017. In FY 2018, the FCHD increased marketing efforts to improve the digital exposure of ADHC, as well as accelerate collaborations with other County agencies and community groups resulting in much higher visibility and a 9 percent increase in daily attendance. It is expected that attendance will grow another 10 percent in FY 2019 as these efforts continue. Another factor that will impact attendance in the ADHCs is the closure of Inova Cares for Senior, Program for All-Inclusive Care of the Elderly (PACE) which includes adult day health care as a component. During FY 2018, the actual net cost to provide services to a participant was \$82 per day compared to FY 2017 cost of \$85 per day. This decrease resulted from the better than expected enrollment rates.