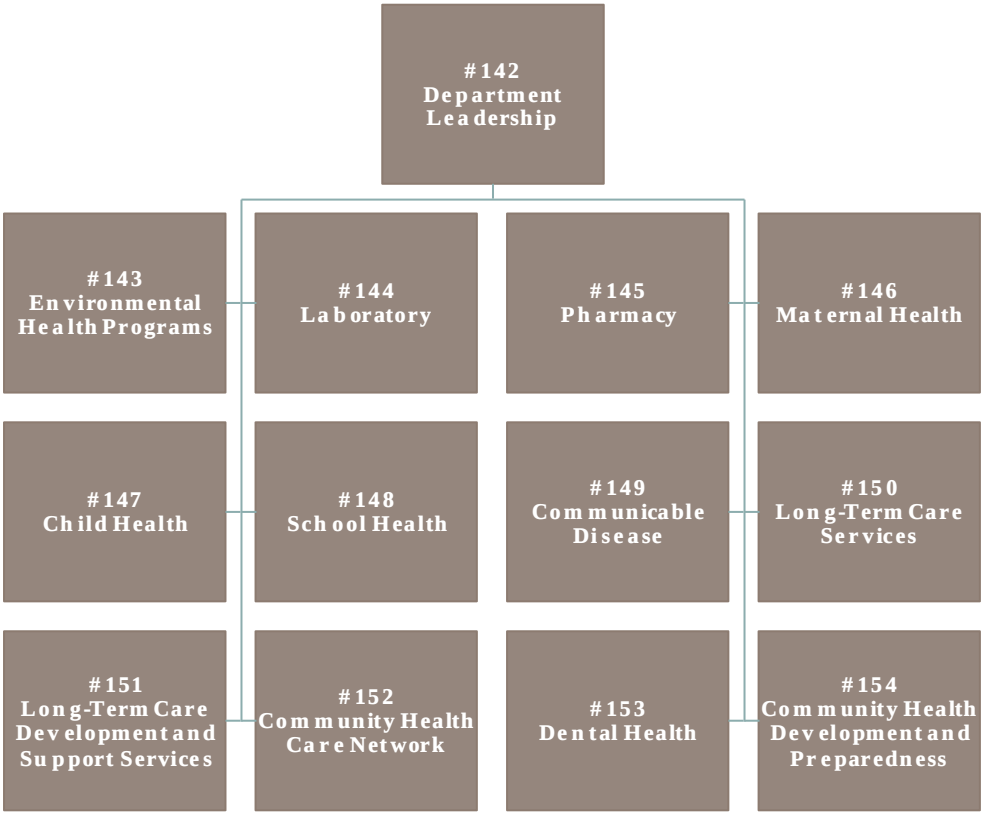
#142 Department Leadership
#143 Environmental Health Programs
#144 Laboratory
#145 Pharmacy
#146 Maternal Health
#147 Child Health
#148 School Health
#149 Communicable Disease
#150 Long-Term Care Services
#151 Long-Term Care Development and Support Services
#152 Community Health Care Network
#153 Dental Health
#154 Community Health Development and Preparedness

Department Overview

The Health Department operates under a Memorandum of Agreement with the Virginia Department of Health to provide mandated services to residents of the Fairfax Health District, which is comprised of Fairfax County and the cities of Fairfax and Falls Church. The department has 13 Lines of Business (LOB). Service activities and programs are based on five core functions – preventing epidemics and the spread of disease; protecting 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 serve as the foundation for the delivery of the 10 Essential Public Health Services (EPHS), which define public health and serve as the framework for quality and performance improvement initiatives nationwide. The department's ability to effectively deliver the 10 EPHS and achieve its mission to protect, promote and improve health and quality of life for all in the Fairfax community requires working across sectors and having a strong local public health system.

The department's 2014-2019 Strategic Plan outlines goals and strategies to strengthen the local public health system to effectively deliver the 10 EPHS and address traditional and emerging public health needs, while taking advantage of new and promising opportunities to address health disparities. The department is investing in developing its workforce to prepare employees for the changing role of public health; building strategic partnerships to address the health needs of the community and the root causes of poor health; monitoring and evaluating community health data to understand the health status of the community; and leveraging technology to increase efficiency in service delivery and communication with colleagues, partners, policymakers and the public.

For over a decade, the department has experienced an unprecedented period of change, driven in part by the requirement to maintain emergency preparedness and the passage and implementation of the Affordable Care Act. While the strategic planning process has reaffirmed the department's mission and core functions, there is recognition that how the core functions are achieved will need to change in order to effectively anticipate and respond to 21st century public health challenges. Furthermore, the department faces an increasing number of challenges – the increasing frequency and complexity of infectious disease threats; an inability to meet surge capacity demands required to simultaneously control ongoing outbreaks, detect and respond to new outbreaks, and monitor for potential threats; a rising burden of chronic illness; an increasingly diverse population; the health impact of climate change; and a fiscal climate that limits the expansion of programs and manages vacancies. These challenges are exacerbated by the need to balance the provision of traditional public health services with the urgent need to build the local public health system capacity to address emerging health needs and maintain foundational public health capabilities.

During this period of transformation, there has also been growing recognition that where people live, learn, work and play can be as important to health outcomes as medical intervention. This has required the department to develop new approaches and skills for collaborating with non-health sector partners to foster health considerations in all policymaking. This leads to improvements in the community's health and builds a stronger overall health system. The department has also seized on various opportunities to develop foundational capabilities and strategies that are crosscutting and integral to the effective delivery of population-centered services. Through community mobilization and partnerships, the department is able to successfully leverage community assets and resources to address many complex public health challenges. As a result of these innovative strategies and sustainable partnerships, the department's Lines of Business, collectively, supports all the Fairfax County Vision Elements.

Department Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
FUNDING			
Expenditures:			
Compensation	$35,213,610	$35,396,556	$37,926,833
Operating Expenses	16,504,702	16,337,531	17,156,196
Capital Equipment	60,953	139,613	0
Total Expenditures	$51,779,265	$51,873,700	$55,083,029
General Fund Revenue	$19,786,232	$19,836,648	$19,871,115
Net Cost/(Savings) to General Fund	$31,993,033	$32,037,052	$35,211,914
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	653 / 573.54	656 / 584.47	652 / 579.75
Total Positions	653 / 573.54	656 / 584.47	652 / 579.75

Lines of Business Summary

		FY 2016 Adopted	
LOB #	LOB Title	Disbursements	Positions
142	Department Leadership	$2,117,032	4
143	Environmental Health Programs	5,087,287	63
144	Laboratory	2,003,991	16
145	Pharmacy	865,805	2
146	Maternal Health	1,075,825	14
147	Child Health	6,848,113	89
148	School Health	14,907,292	279
149	Communicable Disease	7,845,242	100
150	Long-Term Care Services	2,250,533	40
151	Long-Term Care Development and Support Services	1,071,600	8
152	Community Health Care Network	8,951,913	9
153	Dental Health	681,440	9
154	Community Health Development and Preparedness	1,376,956	19
Total		$55,083,029	652

Lines of Business

LOB #142:

DEPARTMENT LEADERSHIP

Purpose

Department Leadership provides overall guidance and administration, including program development and monitoring; fiscal stewardship; maintaining a quality culture; and oversight of the implementation of the department's strategic plan and maintaining accreditation standards. Given the unprecedented climate of transformation and increasing complexity of public health challenges, a primary focus for 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 and improve community health and wellbeing. In order to provide the core functions and the 10 Essential Public Health Services effectively, Leadership takes advantage of new and promising opportunities to leverage community assets to address the determinants of health through collaboration with a wide range of community partners. These partnerships in turn build community capacity and strengthen the local public health system.

Description

The Health Department is locally administered and operates under a Memorandum of Agreement with the Virginia Department of Health to provide mandated public health services. The department has 13 Lines of Business – Pharmacy, Department Leadership, Dental Health, Environmental Health, Communicable Disease, Community Health Development and Preparedness, Community Health Care Network, Maternal Health, Child Health, Health Laboratory, School Health, Long Term Care (LTC) Development and LTC Services. All of the LOBs support the department's mission and core functions.

Department Leadership, which comprises of the Health Director and the Executive Management Team, provide the critical infrastructure of accountability and oversight for service delivery across all Health Department LOBs with a focus on:

- Ensuring the effective delivery of the department's five core functions.
- Developing strategies to strengthen the local public health system to deliver the 10 EPHS.
- Assuring preparedness to address traditional and emerging public health needs and threats.
- Monitoring and evaluating health data to understand the health status of the community.
- Building strategic partnerships to address health needs in the community.
- Developing the workforce for the changing role of public health.
- Building the department's infrastructure and capacity to address foundational gaps.
- Engaging employees and investing in leadership development (succession planning).
- Leveraging and harnessing technology to increase efficiency in service delivery.
- Identifying and acting upon quality improvement opportunities.
- Ensuring compliance with all local, state and federal public health and safety regulations and laws.

Benefits

Successfully achieving the department's mission protects, promotes and improves the health and quality of life for all in the Fairfax community. To that end, Department Leadership strives to create a quality culture environment in which all the LOBs are supported and can thrive.

Leadership has set the strategic direction for the development of many of the department's strategic partnerships, such as the Medical Reserve Corps (MRC); the Clergy Council for the Prevention of HIV/AIDS and other faith leaders; the Multicultural Advisory Council; and new strategic partnerships with community members, business, provider community, academia, and schools. These partnerships, together with the Partnership for a Healthier Fairfax are providing innovative and sustainable solutions to effectively address complex public health challenges. Collectively, these partners are critical the local public health system partners that the Health Department needs to engage to achieve the 10 Essential Public Health Services, which define public health and serve as the framework for quality and performance improvement initiatives nationwide. They also augment capacity and fill some critical gaps required to enhance the delivery of various aspects of the core functions and the provision of much needed community-centered services.

Exercising Corporate Stewardship is an important responsibility of Department Leadership. In these times of fiscal restraint, Leadership has seized upon a variety of opportunities to leverage community resources and assets to enhance and sustain Health Department community-based efforts, while constantly looking for opportunities to enhance efficiencies within each LOB. The return on investment from these community engagement and capacity building efforts is significant. Given the diversity of the community, having leaders from the ethnic community who understand public health and can promote policies and messaging goes a long way in building trust in governmental public health. Partners who have developed prevention programs within their community have enhanced the acceptance and accessibility of public health services. The MRC, which provides surge capacity during public health emergencies, thereby allowing department staff to continue to provide much needed services, provided 22,652 hours to assist dispensing site operations during the H1N1 pandemic and contributed over $516,187 in voluntary service to the County.

Leadership is responsible for keeping abreast of global, national and local trends and for forecasting the implications on the health of the Fairfax community. When Leadership is successful in providing informed guidance, the department is able to better prepare for and respond to emerging challenges and the potential impact on the community is minimized.

Department Leadership provides the strategic direction for all health programs with the goal of improving community health and wellbeing. Any action that enhances the overall health status of the community moves the County close to achieving the National Prevention Strategies' overarching goal for the nation's health in the 21st century to increase the number of Americans who are healthy at every stage of life.

Mandates

Program Leadership is not mandated; however it is responsible for ensuring that all mandated public health programs are provided to residents of Fairfax, and the cities of Falls Church and Fairfax.

Trends and Challenges

For over a decade, the Health Department has experienced an unprecedented period of change, driven in part by the requirement to maintain emergency preparedness and the passage and implementation of the Affordable Care Act. While the process of developing the Health Department's 2014-2019 Strategic Plan has reaffirmed the department's mission and core functions, there is recognition that how the core functions are achieved will need to change in order to effectively anticipate and respond to 21st century public health challenges. Furthermore, the department faces an increasing number of challenges – the increasing frequency and complexity of infectious disease threats; an inability to meet surge capacity demands required to simultaneously control ongoing outbreaks, detect and respond to new outbreaks, and monitor for potential threats; a rising burden of chronic illness; an increasingly diverse and aging population; and the health impact of climate change.

These challenges are exacerbated by the need to balance the provision of traditional public health services with the urgent need to build the local public health system capacity to address emerging needs in a fiscal climate that limits the expansion of programs.

During this period of transformation, there has also been growing recognition that where people live, learn, work and play can be as important to health outcomes as medical intervention. This has required the department to engage non-health sector partners to develop strategies that will promote health through policy, systems and environmental changes. Achieving this in a community such as Fairfax, where on the surface people appear to enjoy overall good health has its challenges and will require the department to develop new approaches and skills for collaborating with non-health sector partners, policymakers and the public to foster health considerations in all decision-making.

Effectively addressing 21st century public health challenges will require a strong public health infrastructure. Although significant improvements have been made in the department's emergency preparedness and response capabilities over the past decade, serious infrastructure gaps remain, especially in the area of epidemiology. Current epidemiology capacity falls well below the Council of State and Territorial Epidemiologists recommendation of 1 Epidemiologist ratio per 100,000 people for each jurisdiction, which translates to 11 Epidemiologists for a community the size of Fairfax. The paucity of infectious and chronic disease epidemiologists at the Health Department limits the department's capability and capacity to monitor the health status of the community; evaluate the effectiveness, accessibility, and quality of personal and population-based health services; and research new insights and innovative solutions to health problems. These functions are part of the 10 EPHS.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #142: Department Leadership			
FUNDING			
Expenditures:			
Compensation	$824,080	$531,273	$713,134
Operating Expenses	1,202,892	1,730,132	1,403,898
Total Expenditures	$2,026,972	$2,267,933	$2,117,032
General Fund Revenue	$724,181	$754,763	$747,514
Net Cost/(Savings) to General Fund	$1,302,791	$1,513,170	$1,369,518
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	7 / 7	4 / 4	4 / 4
Total Positions	7 / 7	4 / 4	4 / 4

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of performance measures evaluated	NA	68	75	75	75
Percent of quality and efficiency estimates met	NA	67%	55%	65%	60%
Percent of performance measurement estimates met	46%	56%	57%	65%	60%

Several new performance measures for Department Leadership were adopted in FY 2015 to reflect the department's progress on achieving its results-based accountability goals. The new measures focus on evaluating how well the department is performing overall in quality, efficiency, and outcome achievement.

For FY 2015 the Health Department did not achieve its target of 65 percent, but will continue to work towards this by reevaluating existing estimates to better reflect feasible and realistic targets, while working to improve performance in those areas that fall below set targets.

For quality and efficiency, the department achieved 55 percent of the estimates set. For outcome measures, the department met 57 percent of the estimates set for FY 2015. While this was a slight improvement over FY 2014 achievement measures (56 percent) it did not reach the target of 65 percent. Some factors which prohibited achieving the established estimates include: extended absences, extended vacancies in key personnel positions, weather conditions which inhibited service delivery for Environmental Health and Adult Day Health Care, and constrained resources under increased demand for services.

LOB #143:

ENVIRONMENTAL HEALTH PROGRAMS

Purpose

The Environmental Health Division enhances the quality of life by protecting public health and safeguarding environmental quality; educating the public to increase environmental awareness; and implementing and enforcing local, state, and federal environmental laws. As a Health Department core function, Environmental Health services work to prevent, minimize or eliminate exposure to biological, chemical, or physical hazards in the community. The Environmental Health program works closely with the Health Department's Communicable Disease Unit and Laboratory to investigate, confirm and contain disease outbreaks.

The division has three program areas: the Consumer Protection Program, the Onsite Sewage and Water Program, and the Disease Carrying Insects Program. The primary services conducted by these programs include routine and complaint investigations; commercial and residential plan reviews, surveillance and control activities, and community outreach. The division supports the regulated community, other agencies, and the general public to encourage healthy behaviors and maintain voluntary, long-term compliance with state and local regulations.

Description

Environmental Health has three program areas which work 24/7 to receive and respond to complaints; proactively inspect establishments (food service, swimming pools, and daycare centers) and homes; provide public health education that protect the community from environmental hazards and exposures that pose a risk to human health. In FY 2015 the number of inspections, permits and service requests for Onsite Sewage and Consumer Protection was 29,543. A general description of each program area is included below.

Onsite Sewage and Water Program (OSW)
This program administers state and local regulations for sewage disposal systems and private well water supplies to ensure proper construction, operation and maintenance. The first sanitation ordinance was adopted in 1928, and the first water supply ordinance was adopted in 1962. All new construction for commercial and residential properties without access to public sewer as well as existing malfunctioning sewage disposal systems require a site soil evaluation by a properly trained and licensed Environmental Health Specialist (EHS). These EHS review and inspect the installation of alternative onsite sewage systems that have been designed for property development by a professional engineer. The Onsite Sewage and Water Program also houses the water recreation facilities program which has regulatory oversight of pools, spas, interactive water features, and water parks.

Consumer Protection Program (CPP)
This program administers state and local regulations for food service establishments, religiously exempt child care centers, hotels/motels, campgrounds, and summer camps. The first local ordinance for food establishments was adopted in 1940. A risk and performance based approach is used to determine the annual inspection frequency of a food service establishment. Standardized inspections are conducted by a properly trained EHS to identify risk factors that may lead to foodborne illness and to educate food service employees on public health interventions that promote a healthy and safe community. The Consumer Protection Program also conducts health inspection for other licensing agencies and responds to reports of public health or safety menaces.

Disease Carrying Insects Program (DCIP)
This program protects the public by conducting mosquito surveillance and control activities; identifying aquatic habitats that support the development of mosquitoes and, when indicated, treating those habitats with a larvicide. In FY 2015 76,377 storm drain larvicide treatments were carried out by a contractor. Education, outreach and surveillance activities are conducted by EHS with expertise in entomology and a team of Environmental Health Technicians. Since 2001, Fund 40080, the Integrated Pest Management Program, has been financially supported by a countywide tax levy to fund both the Disease Carrying Insects Program and the Forest Pest Program (Stormwater Services).

Benefits

Environmental Health Programs include a comprehensive array of services that are essential to the protection, improvement, and preservation of public health and improve the quality of life in the community. Program staff play a vital role in promoting compliance with public health laws and regulations through routine inspections and outreach activities to the regulated community. All programs regularly provide formal and informal presentations to the public to encourage healthy and safe practices to prevent disease and mitigate environmental hazards. Services also include complaint investigations to identify and correct potentially risky situations or behaviors that could adversely affect public health.

Mandates

All Environmental Health Programs are state mandated by the Code of Virginia. The percentage of the Line of Business resources used to satisfy the mandate is 100 percent. The following services are performed in accordance with provisions of the Code of Virginia, the regulation of the Board of Health and/or Virginia Department of Health (VDH) agreements with other state or federal agencies:

Consumer Protection Program

- The local health department is responsible for the regulatory activities of all frozen desserts plants that are part of a Grade "A" milk plant operation or food establishment, per the VDH Memorandum of Agreement (MOA) with the Virginia Department of Agriculture and Consumer Services (VDACS).
- The local health department is responsible for the administering the Food Regulations to food establishments and will conduct at least one annual inspection of each food establishment to ensure compliance, per Virginia Code § 35.1-14.
- The local health department is responsible for administering the Rules and Regulations Governing Migrant Labor Camps and conducting inspections to ensure compliance, per Virginia Code §§ 32.1-203-32.1-211
- The local health department is responsible for administering the Hotel Regulations and conducting inspections to ensure compliance, per Virginia Code § 35.1.13.
- The local health department is responsible for administering the Regulations Governing Grade "A" Milk and conducting the inspection of Grade "A" milk to ensure compliance, per Virginia Code §§ 3.2-5130, 3.2-5206, 3.2-5208 and the VDH MOA with VDACS.
- The local health department, at the request of the Department of Social Services (DSS) will inspect DSS-permitted homes for adults to evaluate their food safety operations, wastewater disposal and general environmental health conditions, per 22VAC40-80-160(B)(3).
- The local health department, at the request of DSS will inspect DSS-permitted daycare centers to evaluate their food safety operations, wastewater disposal and general environmental health conditions, per 22VAC40-80-160(B)(3).
- The local health department is responsible is responsible for conducting at least one annual unannounced inspection of juvenile justice institutions in order to evaluate their kitchen facilities,

general sanitation and environmental health conditions, per Virginia Code § 35.1-23 and the VDH MOA with the Department of Corrections.

- The local health department is responsible administering the Regulations for Summer Camps and the Rules and Regulations for Campgrounds and for conducting inspections to ensure compliance, per Virginia Code §§ 35.1-16 and 35.1-17.
- The local health department is responsible for investigating complaints and reports of suspected rabid animals exposing a person, companion animal, or livestock to rabies, per Virginia Code §3.2-6500 et seq.
- The local health department may assist VDH Central Office with radon testing and analysis, per Virginia Code § 32.1-229

Onsite Sewage and Water Program

- The local health department is responsible for administering the Alternative Discharging Regulations as applicable to single family dwellings and for conducting regular inspections of alternative discharging systems in order to ensure that their construction and operation are in compliance with the Alternative Discharging Regulations, per Virginia Code § 32.1-164(A)
- The local health department is responsible for the administration of the Sewage Handling and Disposal Regulations and the Alternative Onsite Sewage System Regulations to conventional and alternative onsite sewage systems and for assuring that onsite sewage systems are inspected at time of construction for compliance, per Virginia Code § 32.1-163
- The local health department is responsible for assuring that surveys are conducted of properties which include soil evaluations and identification of potential sources of contamination to determine site suitability for onsite sewage systems, alternative onsite sewage systems, alternative discharging sewage systems and wells, per Virginia Code §§ 32.1-163, 32.1-164(A) and 32.1-176.2.
- The local health department is responsible for administering the Private Well Regulations and for inspecting private wells to ensure that their construction and location are in compliance, per Virginia Code § 32.1-176.2.
- The local health department is responsible for administering the Marina Regulations and for inspecting marinas and other places where boats are moored to ensure that their sanitary fixtures and sewage disposal facilities are in compliance, per Virginia Code § 32.1-246.
- The local health department is responsible for regulating hotel swimming pools, per a state mandate for hotel pools and posting of water quality results in all pools, per Virginia Code § 32.1-248.1. There is a local option for regulation and inspection of all public pools.

Disease Carrying Insects Program

The Board of Health shall develop and maintain the capability and technical competence to investigate diseases borne by insects and rodents and shall recommend such measures as may be necessary to prevent the spread of such diseases and to eradicate or control disease-bearing insects and rodents. The Board shall make provision for assistance to mosquito control commissions when requested, field surveys and investigations of complaints, advice to citizens and local governments, training in vector control, advice and recommendations on proper use of pesticides and identifying specimens, per Virginia Code §§ 32.1-163 through §32.1-248.2.

Trends and Challenges

The most significant emerging issues in environment health are food safety, climate change adaption, and the increase emergence of disease carrying vectors. Food safety, which underlies the importance of protecting the community against bacteria in food and food preparation, is critical to preventing foodborne illness. There are multiple reasons for increased incidents of foodborne illness including better methods of detection and identification, resistant microorganisms that are adapting to changes in their environment, changes in consumer lifestyles (more than 30 percent of meals are eaten away from home), and changes in the food system (farm to table). Mobile food vending has grown considerably in recent years. One of the most intrinsic and logical concerns regarding food trucks, and one that has been a basic consideration since their inception, is public health. Looking to adopt sanitation regulations for mobile vendors is a pressing and emerging environmental health issue.

Climate change is projected to impact the severity of natural disasters such as floods and storms, air and water quality, and patterns of communicable diseases. Efforts by local governments for climate change adaption are increasing. Adaption can consist of a wide variety of actions by an individual or community to prepare for, or respond to, climate change impacts. Examples of climate change adaption can include increase energy efficiency to help offset increases in energy consumption, implementing early warning systems and emergency response plans to prepare for changes in frequency, duration, and intensity of extreme weather events, improving emissions from idling vehicles that impact air quality and improve water use efficiency.

The vast majority of insects encountered each day are harmless to man and some are even beneficial. Increased temperature and precipitation suggest the emergence of more disease-friendly conditions that did not previously host diseases or disease carriers. In addition to changing weather patterns, climatic conditions affect diseases transmitted via vectors such as mosquitoes (vector-borne disease) and through rodents (rodent-borne disease). Adaption of the community to warmer weather will be required to protect against deadly diseases often associated with hot ambient temperatures, like West Nile virus and Lyme disease. Disease carriers like mosquitos, ticks, and mice thrive in warmer temperatures.

The Environmental Health Program has a number of highly specialized technical staff who are eligible for retirement in the next three to five years. To address this challenge, Environmental Health will make succession planning efforts for continuity of this technical expertise including intensive and specialized cross-training through temporary work assignments. Workforce planning includes efforts to provide entry level environmental health positions through reclassification of existing positions. These entry level positions foster the retention of staff by providing an opportunity for professional growth and development in the field of environmental health.

Another trend in Environmental Health Programs is doing more with fewer resources and needing to hold managed vacancies. In response to the loss of four FTEs as part of the FY 14 budget reduction process, the Environmental Health Program has reallocated and cross-trained staff to maintain the mandated level of services. New hires are no longer trained in one specialized environmental field, such as onsite sewage or food safety. Instead training and experience is generalized in an effort to build the capacity of the program to respond to community needs and trends. The long-term goal is to have Environmental Health Specialists who are licensed or certified to conduct services in all environmental programs.

Due to ongoing budget constraints, funding of non-mandatory training and development opportunities has been impacted. As a model regulatory food program, the Health Department has been able to secure approximately $63,000 in grant funding over the last three years through FDA's cooperative agreement programs. This funding has been used to support travel and training for professional development that would otherwise not be available to build the competency of the program staff.

An opportunity to increase efficiency and improve monitoring exists with existing retail food service establishments currently only under regulation through an inspection program conducted by the Virginia Department of Agriculture and Consumer Services. Improved coordination and local oversight of the regulatory activities for these food service establishments allows the County to assure the frequency and quality of inspections by properly trained and standardized staff in a program that complies with the FDA's Retail Program Standards.

Having information technology software packages that allow Environmental Health to better collaborate with other state and local agencies, including the Virginia Department of Health, is an ongoing challenge. A recent upgrade to HealthSpace, the state electronic inspection system, had a significant negative impact on the productivity of the Consumer Protection Program staff with regards to conducting food service establishment inspections per the prescribed inspection frequency.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #143: Environmental Health Programs			
FUNDING			
Expenditures:			
Compensation	$3,787,326	$3,800,390	$4,514,432
Operating Expenses	388,351	280,323	572,855
Total Expenditures	$4,175,677	$4,080,713	$5,087,287
General Fund Revenue	$3,124,415	$3,133,057	$3,140,541
Net Cost/(Savings) to General Fund	$1,051,262	$947,656	$1,946,746
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	61 / 61	63 / 63	63 / 63
Total Positions	61 / 61	63 / 63	63 / 63

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of Environmental Health community protection activities: inspections, permits, and service requests	29,640	30,983	29,543	30,000	30,000
Mosquito larvicide treatments of storm drains to control West Nile virus	101,013	103,661	76,377	105,000	105,000
Percent of foodborne illness risk factor inspections conducted in food service establishments within the prescribed inspection frequency	76%	95%	95%	95%	95%
Percent of out-of-compliance onsite sewage disposal and water supply systems corrected within the specified time period	92%	89%	90%	90%	90%
Percent of environmental complaints resolved within 60 days	86%	91%	88%	90%	90%

In response to the FY 2014 reduction in program staff, while also meeting the Department's managed vacancy rate, Environmental Health Services reallocated staff and realigned program areas to meet state and local mandates for services. There has also been an increased collaboration with partner County departments to streamline the provision of services, improve customer service, and reduce redundancy. As a result of these program improvement activities, the number of Environmental Health community protection activities (i.e., inspections, permits, and service requests) in FY 2015 (29,543) is less than in FY 2014 (30,983).

Approximately 36,500 storm drains are treated with a larvicide during three separate six-week cycles from mid-May through October, for a total of approximately 109,500 storm drain treatments. Weather conditions are the principal factors that determine the number of storm drains that will be treated, as well as the percent of storm drains treated within the scheduled timeframe, during a given year. There was a significant decrease in the number of larvicide treatments of storm drains for the control of mosquitoes that transmit West Nile Virus from FY 2014 (103,661) to FY 2015 (76,377). The new contract with the provider of mosquito control activities was delayed and not awarded until late May 2015. Multiple days of rainfall in June 2015 limited the application of larvicide treatment. Future estimates for this measure have been set at 105,000 treatments.

The prescribed inspection frequency during a 12-month period for each food service establishment is based on the complexity of the food operation and the history of its compliance with foodborne illness risk factor interventions. Inspections are conducted on a routine interval of one, two, or three times a year. In FY 2015, Environmental Health Services achieved the goal of 95 percent of foodborne illness risk factor inspections conducted in food service establishments within the prescribed inspection frequency.

During FY 2015, 90 percent of the violative conditions of sewage disposal and water supply systems were corrected within the time period specified by Environmental Health Services. This is a slight increase from FY 2014 (89 percent) and meets the estimated outcome for this measure.

During FY 2015, 88 percent of service requests to investigate complaints of public environmental health concern were resolved within 60 days. This slight decrease from FY 2014 (91 percent) is due to the design of a new report of complaint investigation records in the County's inspection database that yields more accurate and reliable information for this measure.

LOB #144:

LABORATORY

Purpose

The Health Department Laboratory provides comprehensive laboratory services to support essential public health services including communicable disease testing (e.g., sexually transmitted infection, rabies testing), environmental monitoring (e.g., water quality, environmental hazards) and patient specific health monitoring (e.g., drug testing). The Laboratory also serves as surge capacity for the state public health laboratory, particularly for testing to support emergency response.

Description

The Health Department Laboratory, the only BSL-3 public health laboratory in Northern Virginia, offers a wide range of testing to aid in the diagnosis, treatment, and monitoring of diseases of public health significance as well as surveillance and monitoring of environmental health hazards. These services support Health Department programs such as Tuberculosis (TB), Sexually Transmitted Diseases (STD), Rabies, Environmental Health, and the Disease Carrying Insects Program (DCIP) as well as mandated environmental tests and substance abuse tests for other County agencies such as the Community Services Board, the Juvenile and Adult Detention Centers, the Court System, and the Police Department. The work performed assists these County agencies and governmental entities with carrying out their programs in the prevention of disease and in the enforcement of local ordinances, state laws, and federal regulations, a Health Department core function.

The Laboratory holds two Certificates of Compliance through the Clinical Laboratory Improvement Amendments. The five Health Department Clinics sites are certified to perform moderate-complexity testing on site for screening of STDs. The Health Department Laboratory is certified to perform high-complexity testing on specimens for tuberculosis, enteric pathogens, intestinal parasites, sexually-transmitted diseases, HIV, and drugs of abuse. The environmental laboratory is certified by the Division of Consolidated Laboratories, an agent of the Environmental Protection Agency, as a "Certified Drinking Water Laboratory" and tests water for bacterial and environmental hazards from private wells, streams, and public water systems. The laboratory also performs Rabies testing of animal heads, monitoring and surveillance testing of County streams for bacteria, as well as molecular testing of mosquito pools for West Nile virus.

The Laboratory is recognized as an Advanced Sentinel Laboratory in the nation's Laboratory Response Network. As such, the laboratory maintains the capability to perform testing outlined in the ASM *Sentinel Level Clinical Microbiology Laboratory Guidelines for Suspected Agents of Bioterrorism and Emerging Infectious Diseases* and demonstrates annual competency by participation in proficiency testing or exercises, such as the Laboratory Preparedness Exercise or state-developed challenge sets.

The Laboratory uses existing infrastructure, federal certifications, and staff to provide selected laboratory tests on a "fee for service" basis to surrounding counties and municipal governments. Revenue from these services significantly offset the cost of providing mandated laboratory testing for Fairfax County.

The Laboratory performs testing at the main site in central Fairfax and at specified times at each of the five Health Department District offices. The Laboratory operates from 8:00am to 5:00pm daily but responds to communicable disease and environmental testing request 7 days a week. Service is also provided at sexually-transmitted disease clinics during evening clinic hours. The Laboratory is partially staffed on Saturdays, Sundays and holidays to provide emergency rabies testing and to meet specialized testing requirements. During FY 2015, the laboratory performed 218, 403 clinical and environmental tests.

Benefits

The Laboratory plays an important role in the early identification of food, waterborne, and other communicable disease outbreaks and in the planning of effective and timely public health interventions. It also supports other County agencies and government entities in the enforcement of state and federal regulations. Testing is essential to disease surveillance, the diagnosis of new and emerging infectious diseases, the assessment of hazards in the environment, substance abuse monitoring, and the evaluation of drinking water safety. Providing local public health laboratory testing services enables early identification of health hazards and diseases within the community. This results in faster access to care and earlier initiation of appropriate drug therapy, ultimately preventing the spread of disease in the community.

Having testing services at the site of patient care during sexually transmitted disease clinics provides the opportunity to diagnose and treat clients immediately. The local laboratory is able to tailor its testing services to local public programs and needs, while also serving as surge capacity for the state laboratory, particularly for testing to support emergency response efforts.

The laboratory is able to provide support to Health Department clinical services at significantly reduced costs when compared to tests offered by commercial labs. In addition, using the existing Laboratory infrastructure to extend services to other jurisdictions generates revenue and offsets the cost of testing.

The Health Department continues to enhance and expand its laboratory capabilities to improve disease surveillance and position the laboratory to meet the public health challenges of the future. In the fall of 2010, the laboratory was relocated to a new secure facility with expanded biosafety level 3 capacity for TB and molecular testing. The facility was a cost-effectively renovated County building that achieved LEED Gold© status. The new facility increased capacity and efficiency, allowing the laboratory to expand the scope of testing services in order to better protect the health of the community now and in the future.

Mandates

Services provided by the Laboratory are integral to the provision of mandated LOBs in the Health Department and other County agencies. As such these services are indirectly federally or state mandated. The percentage of this LOB's resources utilized to satisfy the mandate is 91 to 95 percent.

Trends and Challenges

Public health has traditionally focused on identifying and treating communicable diseases. With increasing frequency and complexity of communicable disease outbreaks, the Laboratory must be prepared to collaborate with a variety of program partners to detect, investigate, prevent and control emerging and reemerging public health threats. These threats include the emergence of new communicable diseases (Middle Eastern Respiratory Syndrome, Chikungunya); reemerging communicable diseases (multi-drug resistant tuberculosis, measles); outbreaks of illness from consuming contaminated food or water; environmental emergencies (chemical hazards); and bioterrorism.

Across the nation, Public Health Laboratories continue to face the challenge of an aging workforce and difficulties associated with recruitment and retention of a qualified workforce. In the next 3 to 5 years, the Health Department Laboratory has a number of highly specialized scientists who will be eligible for retirement. To address this challenge, laboratory management is assessing the current organizational structure of the laboratory to identify and target areas for improved efficiency. This will include succession planning efforts and intensive cross-training of all laboratory staff to ensure continuity of expertise.

Additional challenges include identifying resources to maintain and replace outdated, inefficient equipment; limited capacity and redundancy of equipment in case of failure or increase in test volume; and updating and maintaining information technology to ensure that data can be shared with and accessed by those who need it.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #144: Laboratory			
FUNDING			
Expenditures:			
Compensation	$1,146,319	$1,127,269	$1,382,117
Operating Expenses	1,100,729	934,985	621,874
Capital Equipment	46,186	110,463	0
Total Expenditures	$2,293,234	$2,172,717	$2,003,991
General Fund Revenue	$952,048	$954,691	$974,569
Net Cost/(Savings) to General Fund	$1,341,186	$1,218,026	$1,029,422
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	17 / 17	16 / 16	16 / 16
Total Positions	17 / 17	16 / 16	16 / 16

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Total number of laboratory tests performed	235,289	213,696	218,403	200,000	200,000
Average cost/all tests	$6.11	$8.35	$7.61	$7.77	$7.98
Percent of customers satisfied with services	96%	97%	97%	95%	95%
Percent of rabies tests involving critical human exposure completed within 24 hours	99%	99%	99%	95%	95%
Percent of individuals saved from unnecessary rabies post-exposure shots by timely receipt of negative lab results	99%	99%	99%	95%	95%

The number of tests performed by the Laboratory has fluctuated over the past several years due to various factors including budgetary constraints, changes in customer service delivery protocols, elimination of outdated test methods, and implementation of new testing methods. The number of environmental laboratory tests performed decreased with the closing of the last dairy plant in Fairfax County and the decrease in drinking water tests as cities have transitioned this testing to local water authorities. However, the number of laboratory tests performed on vectors for surveillance purposes has increased as laboratory staff has validated new test methods and extended services to surrounding localities on a fee-for-service basis.

A continuing focus of laboratory performance is the control of average cost per test, ensuring accessible laboratory testing for control of communicable disease and revenue enhancement. The high cost of laboratory tests is often prohibitive to individuals without some form of health insurance. Special public health pricing through test manufacturers allows the Laboratory to provide these critical testing services to the residents of Fairfax County to assist in the rapid diagnosis and treatment of communicable diseases. The average cost per test has remained relatively low despite escalating medical equipment and supply costs. These costs have been offset by increased revenue generated by tests performed on a fee-for-service basis to residents, private and public organizations throughout Northern Virginia.

Quality improvement is an ongoing process in the operation of any laboratory. The recent enhancement of the Laboratory Information System includes a web portal for ordering and viewing test results and the ability to create individualized statistical reports. This has allowed the Laboratory to improve service delivery, reduce turnaround time, improve customer satisfaction, and increase both testing volumes and testing revenues. Fairfax County Health Department Laboratory distributes an annual customer satisfaction survey in an effort to measure whether services provided by staff 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. In FY 2015, 97 percent of customers were “satisfied” or “very satisfied” with the services provided by Laboratory, consistent with previous years.

Rabies is a preventable viral disease of mammals most often transmitted through the bite of a rabid animal. Rabies 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 Laboratory provides 24 hour turnaround time for rabies testing in animals to prevent individuals from receiving expensive rabies post-exposure shots if not necessary. In FY 2015, 463 residents received their negative test results within 24 hours, saving an estimated $1,852,000 on needless medical costs for a series of rabies post-exposure immunizations which average $4,000 per series. The rabies laboratory reported rabies test results in less than 24 hours on 99 percent of critical human exposures to potentially rabid animals.

LOB #145:

PHARMACY

Purpose

The Pharmacy supports all clinical services of the Health Department and facilitates procurement of selected vaccines/pharmaceuticals for the Community Health Care Network and other County programs, at special request. It functions in coordination with the Pharmacy Division of the Virginia Department of Health and utilizes state/federal contracts for procurement of biologics and vaccines. It obtains stock supplies and prepares unit dose packaged medications for use in clinics. It supports the dispensing of the state's Aids Drug Assistance Program (ADAP). The pharmacy also serves as a direct drug and vaccine resource for clinic staff.

Description

The Health Department has had a central pharmacy housed at the Joseph Willard Health Center in Fairfax for several decades. The two pharmacists are responsible for ordering, receiving and distributing all medications and vaccines utilized by the five district office clinic sites, dental services, adult day health care, and homeless medical services.

Medications/biologic stock levels are established for each site and are restocked monthly. Pharmacists ensure completion of regular inventory checks and regular assessments of compliance of medication/biologic handling and storage regulations. Outdated or soon to be expired biologics/medications are removed and returned to the central pharmacy; such items are subsequently returned to the appropriate vendor for credit.

The central pharmacy also fills individual patient prescriptions for some diseases (e.g., tuberculosis, HIV, and sexually transmitted diseases) that are forwarded to the appropriate site for dispensing to the client. The pharmacy is responsible for dispensing medications directly to individuals enrolled in the state ADAP program. In FY 2015 the pharmacy filled 10,156 individual prescriptions.

The pharmacy supports the broader emergency preparedness efforts of the County having an integral part in managing the pharmaceutical inventory (stockpile) held in case of a local emergency. The pharmacists are responsible for monitoring drug and vaccine shortages. They work with programs to provide information and assist with alternative strategies to fill the gap during a manufacturer's shortage.

Pharmacy services are available Monday-Friday from 8:00am-4:30pm. The pharmacists are also on call during public health emergencies (for management of pharmaceutical stockpiles) and events such as power outages that may affect vaccines and medications stored at the five clinic sites or central pharmacy to minimize loss of drugs.

Benefits

The Pharmacy contributes to the Health Department's core functions of preventing epidemics and the spread of disease, and assuring the quality and accessibility of health services, namely vaccines and pharmaceuticals. The Pharmacy is essential to providing low cost pharmaceutical support to the mandated clinical programs operated by the Health Department. The central pharmacy model with Health Department approved formularies at the district offices provides tremendous economic and public health benefits. It is a cost-effective approach because the dispensing fees and additional expenses of using a contract or private pharmacy are avoided.

Many of the drugs that are dispensed are critical to decrease disease transmission (e.g., sexually transmitted diseases, tuberculosis) and to protect children from vaccine preventable diseases (e.g., whooping cough, measles). Research has demonstrated that compliance with treatment is a major factor in disease control for infectious diseases. The ability to provide the medications directly to the client increases treatment compliance and decreases barriers to individuals obtaining pharmaceuticals. The ability to provide childhood vaccines not only protects the individual but also helps to prevent the spread of communicable disease in the community.

The Pharmacy also serves as a real time drug and vaccine information resource. This enables clinic staff to manage vaccine and drug interaction questions in a timely manner without causing delay to services provided to clients. The pharmacists are also part of the health care team and are in close contact with clients, prescribers, and case managers to ensure that medications are utilized safely, appropriately, and effectively. These functions could not be accomplished with the use of private or contract pharmacies.

Another unique aspect of the Pharmacy is their role in public health emergencies. Pharmacists work with emergency management to manage stockpiles of pharmaceuticals locally in a surge or emergency event. They also are key to ensuring that prophylaxis (preventative measures) are available for the Health Department response during a public health event. This enables a timely response when public health threats arise.

Mandates

This Line of Business is not mandated. However, it provides essential support to all the Health Department's mandated clinical services. The Senior Pharmacist is responsible for assuring that the department remains in compliance with all Board of Pharmacy rules and regulations.

Trends and Challenges

Multidrug resistance in bacteria has become common worldwide. Although the Pharmacy has always used generic medications as the first line choice when possible, as more drug resistance is seen, it has had to move to different pharmaceuticals. Some of these drugs are difficult to obtain from general pharmacies as they are not stocked regularly (e.g., certain tuberculosis drugs). Many of these are agents that have not become generic yet which makes them more costly. Having the central pharmacy stocking some of these unusual drugs ensures immediate access to treatment and aids in more efficient disease control efforts.

Vaccines are the best defense against infections that may have serious complications such as pneumonia, meningitis, cancer, and even death. The Pharmacy makes available all of the recommended and required childhood vaccines and many recommended adult vaccines. In order to reduce the number of shots a child receives during their Health Department clinic visit some vaccines are now offered in combination. The combination of two or more vaccines can significantly reduce the number of shots received and this trend in combining vaccines continues.

The Pharmacy plays an important role in providing timely access to free or low cost, up-to-date vaccine products thus reducing missed opportunities for vaccination and the spread of communicable diseases.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #145: Pharmacy			
FUNDING			
Expenditures:			
Compensation	$197,468	$208,752	$258,402
Operating Expenses	603,470	408,515	607,403
Total Expenditures	$800,938	$617,267	$865,805
General Fund Revenue	$111,782	$112,563	$113,319
Net Cost/(Savings) to General Fund	$689,156	$504,704	$752,486
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	2 / 2	2 / 2	2 / 2
Total Positions	2 / 2	2 / 2	2 / 2

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of individual prescriptions filled	16,993	19,170	10,156	10,000	10,000
Number of prepackaged prescriptions dispensed	2,628	2,582	1,958	2,000	2,000
Number of vaccines distributed	43,332	42,456	35,619	35,000	35,000

The Pharmacy has seen a general reduction in outputs for all of the measures provided, largely due to more efficient and streamlined processes being implemented. This has resulted in a decrease in the unnecessary purchasing, distribution and return of unused inventory. With these new processes, the distribution of product more likely resulted in use by a client, and less in inventory management. Although the pharmacy has made great strides, an electronic inventory at the pharmacy and district offices through an Electronic Health Record would add additional efficiency and cost benefits to inventory management.

The number of individual prescriptions filled dropped from 19,170 in FY 2014 to 10,156 in FY 2015. The decline in the number of individual prescriptions filled was expected and is due to several factors:

- The Tuberculosis (TB) program recently implemented a more precise newly approved method of testing for the TB organism, which has prevented many clients from testing as false positives. This has reduced the number of prescriptions filled unnecessarily for clients.
- The pharmacy also streamlined the process of refills for clients with active TB allowing the pharmacy to anticipate when a dose change might occur and therefore reducing the number of scripts filled and avoiding waste.
- Additionally, with the implementation of the Affordable Care Act (ACA), many clients serviced through the state's AIDS Drug Assistance Program (ADAP) became eligible for insurance. While the number of total clients has decreased, the process of filling prescriptions for clients in this group has become more intricate due to time spent to verify insurance eligibility, helping clients navigate the retail pharmacies that accept their insurance, understand insurance rejections, as well as bridging prescriptions during insurance gaps.

The reduction in the number of pre-packaged medications dispensed and vaccines distributed was expected as well. During FY 2013 the pharmacy started to track monthly usage of medications and vaccines at each office. This captured the true vaccine usage for each office and greatly improved vaccine ordering and storage efficiency at the Health Department. Based on the medication numbers, the offices were provided with inventory guidelines for their monthly orders starting with FY 2014. In addition, Health Department physicians reviewed the Sexually Transmitted Disease formulary and changes were made when drug regimens had alternatives, were more cost effective, or were not used regularly. This review led to a decrease in the number of prepackaged prescriptions filled.

LOB #146:

MATERNAL HEALTH

Purpose

The Maternal Health Program serves to promote the health of women and infants and to reduce infant mortality and morbidity. The program provides an entry point to prenatal care for low-income and uninsured women who reside in the County and have difficulty accessing prenatal care through other means. These services support two of the five core functions of the Health Department – promoting and encouraging healthy behaviors, and assuring the quality and accessibility of health services. Comprehensive obstetric care and support services are provided in partnership with Inova Cares Clinic for Women. This collaborative practice model provides quality early public health services and continuous prenatal clinical care which is critical to improving pregnancy and birth outcomes.

Description

The Maternal Health Program provides services to low-income pregnant women in an effort to improve pregnancy outcomes and reduce infant morbidity and mortality. Public health nurses provide clinical services that include pregnancy testing for a flat fee and follow-up education on a walk-in or an appointment basis at all five district offices. Services are offered Monday to Friday from 8:00am to 4:30pm and during weekly extended clinic hours. Pregnant women are then provided a free public health assessment (PHA) which identifies tuberculosis risk, immunizations, and risk factors that may negatively impact pregnancy outcomes. In FY 2015, there were 3,240 pregnant women who received a PHA. Family Assistance Workers (FAWs) assess client eligibility for a number of programs, assist with finding a medical home, and connect clients to appropriate services.

Although the Maternal Health Program has been in place for decades, the program service model is continuously evolving. The most recent change involved the transition of clinical maternity care services to the Inova Cares Clinic for Women (ICCW). In FY 2015, the number of births through ICCW was 2,516. The number of births is lower than the number of PHAs (3,240) because of several factors including clients who were deemed ineligible for ICCW services, delivery occurred after the end of the fiscal year and/or clients moved prior to delivery. The Health Department continues to provide public health assessments, care coordination and public health field case management for high-risk maternity clients. The ICCW provides the full scope of obstetric care from entry through delivery on a sliding fee schedule for income-eligible clients. Public Health Nurse Liaisons coordinate care between the Health Department and ICCW. Pregnant women also receive comprehensive clinical management and support services, such as nutrition services, social work and care coordination. Following delivery, high risk clients and their babies are referred back to the Health Department where field public health nurses provide post-partum public health services, as discussed in Child Health Services.

Benefits

The Health Department strives to improve the wellbeing of mothers, infants and children, an important public health goal for the United States according to Healthy People 2020. Their wellbeing determines the health of the next generation and can help prevent future public health challenges for families, communities and health care systems.

The Health Department in partnership with InovaCares Clinic for Women (ICCW) is the safety net for the pregnant women who are medically indigent and/or have limited access to prenatal care. Services available through this program provide this vulnerable population with essential maternal health care. The transition of prenatal maternity care to the ICCW provides for continuity of care, eliminates the need for clients to transition services mid-pregnancy, ensures that the health department remains the entry point of care for this high risk population, and maximizes community resources

Pregnancy testing is provided to any community member regardless of income in an effort to educate and counsel clients regarding the importance of early prenatal care and/or family planning services. Pregnancy is an opportunity to identify existing health risks in women and prevent future health problems for women and their children. The Maternal Health Program screens all pregnant women entering the Health Department, regardless of their income and eligibility for maternity care services. Conducting a public health assessment identifies health and behavioral risks important for all pregnant women, and provides an opportunity to connect women to needed nurse home visiting programs and/or other resources available within the County's communities.

A common barrier to a healthy pregnancy and birth is lack of access to appropriate health care before and during pregnancy. The target population for referral to Inova Cares Clinic for Women (ICCW) for prenatal care is the medically indigent who is at a higher risk for poor pregnancy outcomes due to health disparities. According to the U.S. Department of Health and Human Services, Maternal and Child Health Bureau, babies born to mothers who received no prenatal care are three times more likely to be born at low birth weight, and five times more likely to die, as compared to infants whose mothers received prenatal care. Access to the Health Department's prenatal care collaboration with ICCW can increase the proportion of pregnant women who receive early and adequate prenatal care, and reduce the incidence of preterm births, low birth weight births, and maternal and infant mortality, leading to better long-term health outcomes for both mothers and their children.

Mandates

Maternal Health services are state mandated per Virginia Code § 32.1-77 which guides state plans for maternal and child health services and children's specialty services.

Trends and Challenges

The Health Department's goal is to help ensure that all women have a safe and healthy pregnancy. The Center of Disease Control's (CDC) Safe Motherhood At A Glance 2015 identifies a trend of an increasing number of pregnant women in the United States who have chronic health conditions such as high blood pressure, diabetes, and/or heart disease that may put them at higher risk of adverse pregnancy outcomes. The CDC states that women who take steps to prevent and control these chronic conditions before and during pregnancy have the best chance for a healthy outcome. By assuring the provision of maternity care, the Health Department can improve health outcomes for mothers and their children.

According to Trends and Emerging Needs Impacting the Fairfax County Human Services System (Rev. January 2015) , in 2013, an estimated 129,716 (or 11.6 percent) Fairfax County residents did not have health insurance and upwards of 46,000 of these residents were at or below 200 percent of the FPL (Federal Poverty Level). This report also identified that poverty has increased in the County, and with it, so has the demand for services such as the Women, Infant and Child (WIC), supplemental nutrition program. The early consequences of poverty and pregnancy include both short term risks (preterm birth, low birth weight, infant mortality) and long term risks (delayed cognitive development, poor school performance, emotional and behavioral problems). Maternal Health services (maternity care and WIC) are essential to improving birth outcomes and providing a healthy foundation in childhood.

The population served in the Maternity Health Program (MHP) is culturally diverse, mirroring the population shifts in the County demographics. This diversity poses special challenges in the provision of health care. Language and the ability to communicate are major concerns, and unique cultural and religious beliefs have an impact on how care is given and received. The MHP strives for delivering culturally competent care with the desired outcomes of a full-term pregnancy without unnecessary interventions, the delivery of a healthy infant, and a positive environment after delivery that supports the physical and emotional needs of the woman, infant, and family.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #146: Maternal Health			
FUNDING			
Expenditures:			
Compensation	$925,218	$908,833	$1,008,873
Operating Expenses	79,485	62,466	66,952
Total Expenditures	$1,004,703	$971,299	$1,075,825
General Fund Revenue	$1,392,748	$607,041	$610,199
Net Cost/(Savings) to General Fund*	($388,045)	$364,258	$465,626
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	14 / 14	14 / 14	14 / 14
Total Positions	14 / 14	14 / 14	14 / 14

* Historically, the Health Department functioned as the entry point for pregnancy testing and prenatal care through the second trimester at which time clients were transferred to Inova Cares Clinic for Women for the remainder of their prenatal care and delivery. However, beginning in July 2013, a new service delivery model was implemented in partnership with the Inova Cares Clinic for Women. While the Health Department remains the entry point for pregnancy testing and prenatal care (public health nurses conduct public health assessments on pregnant women needing maternity services), the clients continue to receive their entire prenatal care and delivery at the Inova Cares Clinic for Women clinic. This ensures continuity of care and eliminates the need for clients to transition services mid-pregnancy. The allocation methodology applied to VDH revenue was adjusted as a result of this service delivery change and accounts for the reduction in revenue in this LOB between FY 2014 and FY 2015. A corresponding increase in revenue appears in the Child Health LOB.

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of pregnant women provided a public health assessment visit	NA	2,984	3,240	3,300	3,300
Percent of high-risk pregnant women who received home visiting services	NA	52%	47%	52%	52%
Percent of pregnant women served who deliver a low birth weight baby	5.0%	5.5%	8.4%	8.0%	8.0%

Prior to FY 2014, pregnant women receiving prenatal care through the Health Department were seen until 26 weeks gestation after which they were transitioned to the Inova Cares Clinic for Women (ICCW) for third trimester care and delivery. High risk pregnancies and clients starting prenatal care after 26 weeks gestation were immediately transitioned to ICCW in the old service model and did not receive maternity services through the Health Department. Since FY 2014, all clients, including those entering care in the third trimester (after 26 weeks) and high risk clients receive a public health assessment by the Health Department. Clients also receive care coordination and case management services by public health nurses throughout the prenatal and postpartum period. After the initial public health assessment, clients are then referred to ICCW for the full scope of clinical care from entry into maternity services through delivery.

The number of pregnant women provided a public health assessment (PHA) increased in FY 2015 by 8 percent in comparison with FY 2014. This increase in PHAs was primarily a result of transition to the new service delivery model in mid FY 2014 and FY 2015 being the first full year of operation at four Health Department sites. The increase in pregnant women receiving services was also influenced by the inclusion of all eligible pregnant women regardless of gestation and risk status. There was also a slight increase in the population of Fairfax County in FY 2015 (0.4 percent) per the Economic, Demographic and Statistical Research branch, Department of Neighborhood and Community Services.

The percent of high risk pregnant women who received home visiting services decreased in FY 2015 by 5 percent. The Health Department's nurse home visiting staff had 2.5 vacant positions for FY 2015. This decrease in staffing reduced the ability to reach as many clients via a home visit as the previous fiscal year. The percent of high risk pregnant women receiving home visiting services is anticipated to increase in the next fiscal year due to stabilization in staffing.

The percent of pregnant women served who delivered a low birth weight baby increased from 5.5 percent to 8.4 percent in FY 2015. This result is due to the increased number of high risk women included in the total number of women served in FY 2015. In previous years, the women who entered care after 26 weeks gestation and those seen in the high risk maternity clinic at ICCW were not included in the total number of deliveries, as they were not considered Health Department clients. With the new Health Department-ICCW model of maternity care delivery, all clients are included in the total number of clients, no longer separating low/moderate risk and high risk maternity clients. Maternity clients with high risk medical conditions are more likely to deliver a low birth weight infant. This data is now provided to the Health Department by ICCW per the partnership contract. Given that the population served by the Health Department is generally at higher risk for poor birth outcomes, the FCHD and Inova will closely monitor and collaborate to decrease this low birth weight rate, aiming for the national goal established in Healthy People 2020 which is 7.8 percent.

LOB #147:

CHILD HEALTH

Purpose

Child Health services provide preventive health programs to infants and children in order to reduce mortality and morbidity, promote nutritional status and health, and prevent developmental delay through early intervention. Services provided include assessment, case management, health education, home visiting, childhood immunizations, speech therapy, nutrition supplementation, and referral to other needed services. Child Health Services are essential to the Health Department's core functions of promoting and encouraging healthy behaviors, and preventing epidemics and the spread of disease.

Description

Child Health includes five discrete direct service programs that provide preventive health services to infants and children. Childhood immunizations, speech and hearing, infant/preschool case management, and Women, Infant, and Children (WIC) a supplemental nutrition program, are critical long-standing programs. Field case management has expanded in the past several years to incorporate additional evidence-based practices to improve early childhood outcomes for the highest risk populations. These services are provided by a diverse team of providers (physicians, nurses, speech therapists, audiologists, community health specialists and others). Clinical services are offered on a walk-in or appointment basis during the workday and extended evening hours. Community services are offered 24/7 to ensure timely follow up of any reportable communicable disease. A general description of each program is included in the section below.

Childhood Immunizations

Childhood immunization services have been provided since the establishment of the Health Department and include the administration of childhood vaccines and community education and outreach to improve the immunization status for children. Vaccines can prevent outbreaks of disease and save lives. When a critical portion of the community is immunized against a communicable disease, most members of the community are protected against that disease because there is little opportunity for an outbreak. Even those who are not eligible for certain vaccines—such as infants, pregnant women, or immunocompromised individuals—get some protection because the spread of contagious disease is contained. Childhood Immunization services are aimed at reducing vaccine preventable diseases in the community. Public Health Nurses assess immunization status, determine required and recommended vaccines, administer vaccines, and provide official documentation of vaccines received. By law, any child under the age of 19 may receive free vaccines required for school entry at the Health Department. Immunizations are offered daily in each of the five district offices from 8:00am-4:30pm, including early morning and evening hours at least once each week. FY 2015 the number of vaccines administered to children was 34,417.Childhood immunization services.

Speech and Hearing

Speech and Hearing services promote functional, effective communication skills through the delivery of speech, language and hearing services in the clinic and community setting. Speech services are provided to children who do not qualify for Fairfax County Public Schools individual services and may not otherwise receive services. The audiology clinic provides infant screening and hearing assessments for the Infant Toddler Connection, the County's federal and state mandated early intervention program. In addition, Speech and Hearing serves children with Medicaid due to the limited number of Medicaid providers in Fairfax County. Early identification and prevention is a core function of the program and as a result there is a strong outreach and community education component. The Hearing program was established in 1957 and the Speech program was added in 1965. Therapy based services are provided at three clinic locations and in the community. Services are provided Monday-Friday from 8:00am to 4:30pm. In FY 2015, the number of children who received speech therapy or audiology assessments was 2,616 and 1,152 respectively.

Infant/Preschool Case Management

The Infant/Preschool Case Management program provides monitoring, teaching, and guidance to families with infants in an effort to improve health outcomes and maximize each child's potential. Case management services are provided by public health nurses to high-risk pregnant and postpartum women and for their infants. Infants who are at risk for developmental delay are served by an interdisciplinary team consisting of a physician, public health nurse, speech therapist and physical therapist. Services are provided in clinic, home, and community settings. Public Health Nurses make referrals to meet needs, such as mental health and substance use treatment, free child safety seats, breastfeeding support, family planning, childcare, and injury prevention. Public Health Nurses have been providing case management services since the Health Department was first established. In FY 2015, there were 581 clients who received case management services.

Field Case Management

Field Case Management includes community health programs and client services that aim to improve early childhood health outcomes with an emphasis on providing community resources; prenatal, postpartum and child health, as well as home-visiting services from pregnancy to three years of age for the County's most vulnerable children and families. In FY 2015 the number of clients who received field case management services was 2,353. These services include Beginning Steps Parenting Program, Healthy Families Fairfax (HFF), Nurse Family Partnership, and Maternal & Child Health (MCH) field nurse prenatal and postpartum services. Services are provided by Public Health Nurses via telephone and/or by home visits, based on the client's needs/acuity as well as the client's acceptance of services. Home visiting services are provided Monday-Friday from 8:00am-4:30pm in collaboration with the Department of Family Services, Inova Fairfax Hospital, and three nonprofit organizations.

Women, Infants, and Children Program (WIC)

WIC is a special supplemental short-term nutrition program to improve nutritional status and promote healthy behaviors among low-income families. The Fairfax WIC Program was established in 1976 and provides the following services: 1) educates pregnant women and new mothers about nutrition with personalized assessments, counseling and support; 2) provides supplemental nutritious foods to women, infants, and children up to age five; 3) gives women the support they need to successfully breastfeed their babies; and 4) offers referrals to additional social services and healthcare resources. WIC participants include children up to five years of age, and pregnant, postpartum, and breastfeeding women. Services are fully grant-funded and provided by Nutritionists and Nutrition Assistants across nine WIC service delivery sites throughout the County. In FY 2015 the number of participants enrolled in WIC was 17,129. Services are offered Monday-Friday from 8:00am to 4:30pm and during extended hours.

Benefits

Child Health services provide preventive health programs to infants and children in an effort to identify and reduce illness, improve nutritional status, promote healthy behaviors, prevent potentially handicapping conditions through early intervention, and increase childhood immunizations levels to reduce vaccine preventable diseases. All these programs share the goal of improving health and early childhood outcomes for vulnerable families. Early identification and treatment of health conditions can prevent death or disability and enable children to reach their full potential.

Immunizations are one of the most effective ways that public health can prevent communicable diseases, such as pertussis, measles, and influenza. Assuring access to affordable immunizations protects the population from health threats and supports the up-to-date immunization status of children in the community so they will be ready to enter school without delay.

The Speech and Hearing program provides access to services to children who might not otherwise be able to receive care. The program remains one of a few providers in the Fairfax community that delivers speech and hearing services to patients with Medicaid insurance coverage. The program is the sole provider of hearing aid services for children with Medicaid in the County. In addition, the clinic offers services on a sliding scale which allows greater access to speech and hearing services to low-income residents.

The cognitive and physical development of infants and children is influenced by the health, nutrition, and behaviors of their mothers during early childhood. Case management and home visiting services provided by Public Health Nurses to families with infants and young children are essential to the County's continuum of services which focus on preventive interventions. The Department of Family Services, Health Department, Inova Fairfax Hospital, and three nonprofit organizations – Northern Virginia Family Services (NVFS), United Community Ministries (UCM) and Cornerstones – work in partnership to ensure the right level and intensity of services is available to families in the community. Evidence-based programs such as Healthy Families Fairfax (HFF), Early Head Start, and the Nurse Family Partnership (NFP) lead to improved pregnancy outcomes and subsequent infant and child development, better school-readiness, and reductions in child abuse and neglect which all have profoundly positive impacts on families and communities. The unique relationship between a home visiting nurse and her client fosters skill building and confidence for vulnerable families to fulfill their hopes and dreams for a positive life-course which may entail completing educational goals, employment opportunities, and economic self-sufficiency.

Women, Infant, and Children (WIC) services benefit infants and young children beginning with the critical growth and development period that occurs prenatally, the vulnerable newborn stage, and throughout infancy and early childhood. Access to adequate nutrition promotes optimum growth and development and reduces health disparities related to food insecurity. Nutrition education is an integral part of the program, promoting the establishment of healthy habits early in life and reducing childhood obesity.

Mandates

Most of the programs in Child Health are mandated, with a few exceptions.

Immunizations

- Local Health Departments are mandated to provide immunizations required for school attendance without charge. Virginia Code §§ 22.1-271.1 and 22.1-271.2 require documentary proof of immunizations for a child to enter school.

Speech and Hearing

- Although non-mandated, the Hearing program is the provider of hearing assessments for the Infant Toddler Connection, the County's federal and state mandated early intervention program.

Infant/Preschool Case Management

- Infant/Preschool Case Management services are required through an Agreement for Local Administration of Health Department Services with the Virginia Department of Health. Through Virginia's Thriving Infants Statewide Strategic Initiative, federal funding is distributed to local health departments for the provision of evidence based strategies to reduce infant mortality (Title V, Social Security Act).

Field Case Management

- Field Case Management services such as Healthy Families Fairfax (HFF) and the Nurse Family Partnership (NFP) are non-mandated; however HFF receives partial state funding and the NFP is fully funded by the Maternal and Infant Early Childhood Home Visiting (MIECHV) federal program. The purpose of the NFP-MIECHV is to assure effective coordination and delivery of critical health, development, early learning, child abuse and neglect prevention, and family support services to at-risk children and families through voluntary evidence-based home visiting programs. The NFP-MIECHV also promotes collaboration at state and local levels to improve the early childhood systems of care across public and private providers (Social Security Act, Title V, Section 511) (42 U.S.C.§711, as amended by Section 2951 of the Patient Protection and Affordable Care Act of 2010 (P,L, 111-148).

- The Health Department is required to operate a program to promote, purchase, and distribute child restraint devices to applicants who need a child restraint but who are unable to acquire one because of financial inability. (§§46.2-1095, 46.2-1097). Funding for certification training and seats is provided by the Child Restraint Special Device Fund.

Women, Infants and Children (WIC)

- WIC is a federally-funded mandated program to provide supplemental foods and nutrition education through payments of cash grants to the Virginia Department of Health which in turn administers the program through local agencies per §32.1-2, Section 123, Federal regulation Chapter 7, Part 246- Special Supplemental Food Program for Women, Infants and Children.

Trends and Challenges

Childhood vaccines are among the most cost-effective clinical preventive services and provide a high return on investment. Despite improvements in awareness and access to vaccines, immunization rates for two-year-olds have not yet reached the public health objective of 90 percent completion rates as set in Healthy People 2020. Many children remain inadequately immunized until they must meet requirements for kindergarten entry. In FY 2014, only 61 percent of children served by Fairfax County Health Department received all the required immunizations by 24 months of age. The recent addition of new recommended and required vaccines has resulted in a more complex immunization schedule and a greater need for children's immunization services in the community. The cost of safe vaccine storage and handling has led to some medical practices not providing all necessary childhood immunizations. The Health Department strives to reduce barriers to immunization services by assuring access to school required vaccines at no charge and recommended vaccines at reduced costs at all district offices.

Home visiting services can positively impact the cognitive and physical development of infants and children. Maternal and child health research has demonstrated results in improved health and social outcomes, such as a decrease in infant mortality, reduced child abuse and neglect, fewer childhood injuries, improved school readiness, improved parenting skills, increased economic self-sufficiency, and reduced behavioral and intellectual problems in early childhood. Strengthening the continuum of home visiting services for vulnerable families continues to be a challenge as the demand and identified need for services surpasses the capacity of the programs. The families served by these programs are becoming more culturally and linguistically diverse, which present difficulties in the provision of health care and home visiting services due to language and communication barriers. Increasingly diverse populations often have difficulty navigating human services and health care systems and frequently need language interpretation services. Home visiting nurses use both tele-interpreter and certified interpreter staff to support communication needs, but these resources are frequently over-extended. Many clients have complex histories of trauma, violence, or emotional distress, which makes meeting their needs with existing community resources particularly challenging.

In Fairfax County, poverty among children under 18 years of age has increased by 27 percent from 2008 to 2013, which is roughly 4,200 more children living in poverty (Trends and Emerging Needs Impacting the Fairfax County Human Services System (Rev. January 2015). As poverty has increased in the County, so has the demand for services. There are an increasing number of families with children with Medicaid requiring hearing aid services, where no alternative provider is available in the community. The number of infants and children eligible for car safety seats can be expected to rise. It is anticipated that more pregnant women, infants, and children will be eligible for WIC services. Reaching those who are eligible for services is often a challenge because those in poverty also experience language, communication, and transportation barriers. Therefore, outreach and improved access points are areas of focus to broaden the reach for Women, Infant, and Children services in the community.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #147: Child Health			
FUNDING			
Expenditures:			
Compensation	$5,865,762	$5,743,754	$6,423,207
Operating Expenses	498,706	392,870	424,906
Total Expenditures	$6,364,468	$6,136,624	$6,848,113
General Fund Revenue	$2,535,154	$3,292,489	$3,361,071
Net Cost/(Savings) to General Fund	$3,829,314	$2,844,135	$3,487,042
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	88 / 88	86 / 86	89 / 89
Total Positions	88 / 88	86 / 86	89 / 89

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of vaccines administered to children	27,849	30,590	34,417	34,000	34,000
Percent of children served by the Health Department who are protected against vaccine preventable diseases as a result of completing the recommended vaccination series by 24 months of age	61%	61%	61%	61%	61%
Speech Language: Client visits	2,743	3,116	2,616	3,000	$2,700
Speech Language: Percent of students discharged as corrected; no follow-up needed	89%	74%	83%	75%	75%
Number of WIC participants	18,926	18,824	17,129	18,000	18,000

The total number of vaccines administered to children in FY 2015 (34,417) increased slightly when compared with FY 2014 (30,590). This is a positive outcome and could be attributed to availability and access to immunizations provided through the Health Department. The percent of children served who have completed the recommended vaccine series by 24 months of age also increased slightly to 62 percent. However, this vaccine coverage rate has consistently remained below the health department goal of 80 percent. A major contributing factor is having a highly transient population who fails to complete their vaccines at the Health Department and is difficult to track to assure completion of recommended vaccines.

Speech client visits decreased by 16 percent from FY 2014 to FY 2015, attributable in part to two of the five speech clinicians going on Family Medical Leave (FML) with frequent and reoccurring absences. The outcome-based performance measure for speech services is that 75 percent of those clients who remain in service are discharged as corrected, no further follow-up needed. In FY 2015, the unit exceeded this goal by 8 percent, discharging 83 percent of the client base as corrected.

The Women, Infant and Children (WIC), nutritional supplement program, experienced an 8 percent drop in participation in FY 2015 (17,200) as compared to FY 2014 (18,824). Decreases in WIC participation are consistent with national trends and could be explained by increased participation in Food Stamp (SNAP) benefits which have less restrictive use of funds for foods. State and national enrollment in WIC have also decreased as a result of reduced staffing and fewer outreach activities. The WIC program continues to work with the Health Department's outreach team to target outreach and education in those ethnically diverse communities with low WIC enrollment.

Grant Support

FY 2016 Grant Total Funding: Federal funding of $4,240,852 and 57/57.0 FTE grant positions support the Child Health LOB. There is no Local Cash Match associated with these grants.

Women, Infants, and Children Grant (WIC) - $3,411,964 and 49/49.0 FTE grant positions
The U.S. Department of Agriculture (USDA) provides the Virginia Department of Health pass through funding for the Women, Infants, and Children Grant. This program provides food, nutrition education, and breastfeeding promotion for pregnant, postpartum, or breastfeeding women, infants, and children under age 5. The annual award is based on participation levels in the program. While grant funds have increased in prior fiscal years, there appears to be a leveling off of enrollment in the WIC program.

The USDA also provide the VDH with pass through funding for the WIC Breastfeeding Grant. This program provides enhancements to the continuity and consistency of WIC's breastfeeding promotion efforts by offering mother-to-mother breastfeeding support. .

Immunization Action Plan and Perinatal - $333,373 and 4/4.0 FTE grant positions
The U.S. Department of Health and Human Services (DHHS) provides funding through the Virginia Department of Health for outreach and education services regarding immunizations for children from low-income families within the community. Additional pass through funding from DHHS supports perinatal health services in Fairfax. These funds are used to provide nutrition counseling for low-income pregnant women to reduce the incidence of low birth weight in Fairfax County.

MIECHV - $495,515 and 4/4.o FTE grant positions
Multi-year pass through funding from the Health Resource and Services Administration (HRSA) through the VDH supports the implementation of a Nurse-Family Partnership an evidence-based early childhood home visiting service delivery model. The goal of this program is to improve the health and early childhood outcomes for vulnerable children and families by drawing on the expertise of public health nurses.

LOB #148:

SCHOOL HEALTH

Purpose

The School Health Program works collaboratively with school partners to maximize the potential of school-age children to be healthy, safe, and ready to learn. The program achieves this through the delivery of supportive health services in the public school setting. Services include the provision of care for sick and injured students, health screenings, care coordination, disease and illness prevention, and health promotion. The interrelationship between health and academic success is recognized as necessary for students to reach their full capability, and therefore the program functions through a strong collaborative partnership between the Fairfax County Public School system and the Health Department.

Description

The School Health Services Program was established in 1956 by a collaborative agreement between the Health Department and the Fairfax County Public Schools (FCPS). Since 2011 the program has operated under a Memorandum of Agreement between the two organizations to provide supportive health services to students during the school day. Consultation, training, and collaboration with FCPS administration and staff assure that both the health and educational needs of students are met. During SY 2014-2015, the School Health Services Program supported 185,347 students in 196 school sites during the regular school year and 24,902 students in 170 sites in the summer school and community recreation programs. During this period, the number of students receiving health specific consultations by the public health nurse was 7,526 and the number of school staff that received training and education to support these students was 17,067.

The School Health Services Program contributes to all of the five core functions of the Health Department's core functions. The program provides health promotion and prevention services, education and training, emergency first aid care, referral to community resources, case management of acute and chronic health conditions, care coordination for pregnant teens, and surveillance and prevention of communicable disease. The program operates in all 196 schools and centers and serves a diverse body of students from 2-21 years of age.

The staffing of the program is mainly supported by the County and is comprised of trained paraprofessional School Health Aides (SHA), Public Health Nurses (PHN) and a School Health physician, who provides medical oversight. SHAs are assigned to health rooms in each school to manage routine health room activities; provide medication; conduct annual vision and hearing screening; and determine the health status of students during the school day. The SHAs are trained and supervised by PHNs and work during the academic school year. SHA work hours are determined by their school assignment and range from 7:30am to 4:05pm.

PHNs provide services to an average of 2,989 students at three to five schools and provide supervision to SHAs assigned to these schools. There were 793,252 student visits to the school health room in FY 2015 and 50,188 students with health care plans in place. PHN's provide a variety of services in partnership with school staff. Services include the coordination of health care needs that occur during the school day, training of school staff, illness and injury prevention activities, health education and promotion, participation on multi-disciplinary teams, consultation on medically fragile students, and outreach to the diverse school community. PHN services are provided during and after FCPS hours and extend beyond the academic year to the FCPS extended school year summer programs and to County community summer programs. In July/August 2014, there were 24,902 students who received PHN services during the FCPS summer program.

Benefits

The academic success of youth is strongly linked with their health. Since educators must focus on academic achievement, the collaborative arrangement between the Fairfax County Public School system and the Health Department for the delivery of school health services supports this focus. Educational goals are more likely to be achieved when the health and safety of students are fostered so they are ready and available to learn. A robust school health program with a public health focus ensures access to supportive health services during the school day, illness and injury prevention interventions, a healthy school environment, and health promotion and education needed to foster a healthy lifestyle.

School-aged children and youth spend up to half of their waking hours at school for 13 formative years of their lives. Physical health and emotional health are closely linked in the development of school age children as they grow into healthy responsible adults. Health promotion fosters the establishment of healthy attitudes and behaviors at an early age that can continue through adolescence and into adulthood, thus reducing the potential for obesity and chronic disease and the high cost of health care associated with long-lasting health problems. Educators have little time in their school day to focus on student health, health promotion, and disease prevention activities; therefore the support from public health nurses to improve student health is highly valued by the school community. Keeping children healthy and in school reduces the potential for truancy and school dropout, which can have a direct impact on life-course trajectories, such as post-high school education, career development, and economic self-sufficiency. School dropout has also been linked with higher risk behaviors, such as teen pregnancy, smoking and drug and alcohol abuse.

Mandates

Certain health activities with the program are mandated in the Code of Virginia, but School Health Services is not mandated in Virginia. Each school district develops its own service delivery model.

Public health nurses:

1. Conduct surveillance and investigation of reportable communicable disease in the school community which falls under the mandate of the State Board of Health and is delegated to the local authority (Virginia Code §§ 32.1-35, 32.1-39).
2. Support the provision and assurance of immunizations required for school entry (Virginia Code §§ 22.1-271.1 and 22.1-27.2 require documentary proof of immunization in order for a child to enter school).
3. Train FCPS staff in all technologies and procedures that enables students to attend school in the least restrictive environment in accordance with state and federal mandates (Virginia Code § 22.1-215 requires that each school division shall provide free and appropriate education, including special education, for the children with disabilities residing within its jurisdiction) (Section 504 of the Federal Rehabilitation Act of 1973 prohibits discrimination in access to education based on disabilities).

The Health Department Assistant Director of Patient Care Services serves on the Fairfax County Public Schools School Health Advisory Committee as a required health professional representative. School health advisory boards may assist with the development of health policy in the school division and the evaluation of the status of school health, health education, the school environment, and health services and shall annually report on the status of needs of student health in the school division to the Virginia Department of Health and the Virginia Department of Education (Virginia Code § 22.1-275.1).

Trends and Challenges

The growth in FCPS student enrollment and increasing complexity of health conditions in the student population pose challenges for School Health Services. The demand for School Health services is expected to rise as student enrollment increases along with an increasing number of students with identified health conditions. On average, over 4,000 students visit health rooms each day across the system for reasons such as medication administration and illness and injury care. When specific support is needed during the school day, public health nurses develop care plans to meet these health needs. During school year 2014-2015, over 25 percent of students had an identified health conditions needing a care plan in order to fully access their education. Developing a care plan within the target goal of five days can be very challenging as it involves coordinating involvement from FCPS staff, family members, private health care providers, and other professional service providers. Some plans are routine and change little year to year, whereas others require intense assessment and planning for implementation.

Public health nurse resources have not kept pace with the increased demand for school health services presented by rising student enrollment, especially for students with special education and health needs. In 1995, the Virginia Code § 22.1-274 was amended to direct school boards to strive to employ or contract with local Health Departments for nursing services consistent with a ratio of at least one nurse per 1,000 students by 1999. The current student to nurse ratio in Fairfax County Public Schools (FCPS) is one nurse per 2,989 students, which may lead to a delay in student enrollment if an individualized health care plan and corresponding FCPS staff training must be in place prior to the student's entry to school.

The increasing diversity of the County's population and the student body can make communicating about student health needs difficult. Twenty-six percent of students (47,435) live in non-English speaking households and have difficulty accessing health care services. This presents challenges for staff who must communicate with parents and families regarding health needs. Cultural sensitivity and awareness are important considerations in order to avoid stigmatizing students and their families and to create a welcoming environment for the newcomers.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #148: School Health			
FUNDING			
Expenditures:			
Compensation	$10,455,680	$10,890,482	$11,218,974
Operating Expenses	3,356,781	3,419,538	3,688,318
Capital Equipment	14,767	0	0
Total Expenditures	$13,827,228	$14,310,020	$14,907,292
General Fund Revenue	$6,006,878	$6,021,855	$6,035,048
Net Cost/(Savings) to General Fund	$7,820,350	$8,288,165	$8,872,244
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	275 / 195.54	275 / 203.47	279 / 206.75
Total Positions	275 / 195.54	275 / 203.47	279 / 206.75

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of student visits to school health rooms	770,744	731,306	793,252	795,000	795,000
Students with health plans	48,781	48,647	50,188	50,000	51,000
Percent of students' health care plans established with 5 days	58%	57%	55%	60%	60%
Percent of parents/guardians who report their child's health condition was managed effectively in the school setting	NA	87%	85%	85%	85%
Number of students, staff and parents/guardians who participated in health promotion activities	14,580	14,127	28,446	30,000	30,000

Fairfax County Public School enrollment for FY 2015 was 185,347 students at 196 school sites. This represents a 2.8 percent increase in enrollment since FY 2013. Each Public Health Nurse (PHN) provides services to an average of 2,989 students at three to five school sites and provides supervision to several School Health Aides (SHAs) who provide direct care for sick and injured students at their assigned school. Services are routinely provided during and after FCPS hours. In FY 2015 there was an 8 percent increase in student visits to school health rooms (793,252 visits) in comparison with the previous year (731,306 visits).

Nurses provide support to students with identified health conditions such as asthma, allergies, heart disease, seizure disorder, diabetes and other significant chronic conditions. During FY 2015, 27 percent of students (50,188 students) were identified as having a health condition requiring a health care plan. The department goal is for PHNs to establish a health care plan within five days of notification of the student's condition, and train the school staff on its implementation. This allows the student to enter school with minimal delay. In FY 2015, 55 percent of these health plans were put in place within five days. The care plan metric remains essentially unchanged over the past three years and as a result, improvements to the care plan process are in development to improve efficiencies. Parent surveys conducted in the past two school years indicate that 85 percent agree that their child's health condition is managed appropriately in the school setting.

Nurses routinely provide counseling and education for teens at risk for unhealthy behaviors. In addition, they are involved in promoting health and wellness by encouraging students to make healthy choices. These health promotion messages are a component of several initiatives to address childhood obesity and develop resiliency to support emotional health in students. The number of students, staff, and parents/guardians participating in health promotion activities during FY 2015 (28,446) doubled in comparison to FY 2014 (14,127). The health promotion component of the School Health Program has received tremendous support and acceptance from the school community and therefore continued increases are projected for future years.

LOB #149:

COMMUNICABLE DISEASE

Purpose

The Communicable Disease (CD) Program is responsible for the investigation of outbreaks of communicable diseases, the surveillance of reportable diseases, and the provision of educational materials and services to assist communities in reducing the incidence of infectious diseases by preventing their spread. Communicable diseases of public health significance in the community include foodborne illnesses, tuberculosis (TB), sexually transmitted diseases (STD), HIV, vaccine preventable diseases, zoonoses (Lyme disease, West Nile Virus and rabies) and emerging/re-emerging infectious threats such as Middle East Respiratory Syndrome-MERS, Ebola Virus Disease and Enterovirus D68.

Description

The Communicable Disease Unit works around the clock to receive and respond to communicable disease reports, with the goal of preventing or reducing infectious disease in the community through prompt identification of illness, and by providing timely intervention and quality care to those affected. Each year, the Unit investigates thousands of reports of suspected communicable diseases, in collaboration with local public health system partners such as the healthcare community, laboratories, the Virginia Department of Health (VDH) and other local, state and federal agencies. In FY 2015, the number of investigations, screenings, or treatment services for selected communicable diseases was 32,485.

Communicable disease surveillance, prevention and control are core Public Health activities that are provided through a number of services within the Health Department by a diverse team of providers (physicians, nurses, laboratory technicians, epidemiologists, community health specialists and others). Clinical services are offered on a walk-in or appointment basis during the workday and extended evening hours at all clinic locations. Community services are offered 24/7 to ensure timely follow up on any reportable communicable disease.

The Unit offers seven overarching services:

- Surveillance and Investigation: The Health Department receives notification of the diagnosis of diseases required by state law to be reported by providers, clinics, or laboratories. In addition, outbreaks and health conditions of concern are monitored through the Virginia Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), a web-based system through which the hospitals share emergency department data. Disease Intervention Specialists provide person-centered interviews and active investigation to prevent and reduce the spread of disease.
- Tuberculosis (TB) Control: The Health Department prevents the spread of tuberculosis in the community by identifying illness, providing treatment, and taking control measures. Public Health Nurses provide screenings to identify individuals at risk of developing tuberculosis in the five clinic locations. Physicians diagnose and treat TB, providing chest x-rays, medications, and respiratory diagnostics, and oversight of disease treatment. In order to ensure compliance with treatment, nurses provide Directly Observed Therapy (DOT) and case management to affected individuals.
- Sexually Transmitted Diseases (STD)/HIV/AIDS: In order to prevent the spread of sexually transmitted diseases, public health physicians, nurses, and their clinic team provide testing, counseling, diagnosis and treatment, partner notification, referral services, epidemiological investigation, and preventative education. Services are available to the public at all clinic locations.

  Additionally, the Health Department administers the AIDS Drug Assistance Program (ADAP), providing medication to individuals infected with HIV that meet federal requirements for program enrollment.

- Newcomer Health Screening: This collaborative effort between VDH and Local Health Departments assures that all new refugees and other qualified individuals receive an initial health screening by a Public Health Nurse within 45 days of their arrival in the United States. Services for adults and children are provided at all five clinic locations and include an initial health assessment, provision of vaccinations, screening for communicable disease, and referrals to appropriate services.
- Adult and International Travel Immunizations: The Health Department provides recommended adult vaccines, and vaccinations recommended for international travel, as a fee-based service at all five clinic locations.
- Zoonotic Diseases: Also called zoonoses, zoonotic diseases are infectious diseases that can be spread from animals to humans. In collaboration with the Health Department's Disease Carrying Insect Program and the Police Department, the Unit educates residents about prevention and control of vector-borne diseases (such as Lyme disease and West Nile Virus) and rabies. Program staff also consults with veterinarians and medical providers on potential cases of exposure and disease in both humans and animals; investigates animal cases or outbreaks; integrates human and vector surveillance to inform interventions associated with a human case; and provides community-based prevention education. As part of investigations, the Unit also works with pet shops to prevent disease transmission.
- Homeless Program: Prevention of communicable disease; health promotion; provision of acute care; and linkage to primary, dental and specialty care are the core of the three services (Medical, Homeless Healthcare and Medical Respite) provided by public health nurses and nurse practitioners at the County's five homeless shelters. Services are provided to both sheltered and unsheltered homeless residents associated with the shelters, in collaboration with staff from the Department of Family Services and the Community Services Board. In FY 2015, the number of unduplicated clients in the program served by Nurse Practitioners was 518.

Benefits

Communicable disease prevention and control is a critical Health Department function because communicable diseases present an ever-changing threat to public health and safety. They significantly impact the health of the community and pose a substantial economic burden. A community's economic vitality and social opportunities cannot grow and thrive in an environment that is hampered by rampant health hazards and disease, thus the activity of a health department to control and prevent disease bring substantial value beyond health outcomes alone. Communities with effective communicable disease investigations and controls have healthy residents who can be productive; healthy places of business that attract and grow customer bases; healthy children that learn effectively and enhance a community's educational achievement; and healthy neighborhoods for social, spiritual, and service enhancement.

The Health Department provides direct care to individuals with Tuberculosis (TB) and Sexually Transmitted Disease (STD) due to the critical importance of controlling these diseases. TB is a difficult infectious disease to treat, and requires specialized services following national guidelines to be considered adequate. Ensuring adherence to treatment is critical to prevent drug resistance. Many clients with STDs are afraid to seek care from their providers, or are uninsured and have no affordable options for care. The Health Department provides a safe environment to get free, confidential, quality care.

Often the first encounter that new arrivals have with the U.S. healthcare system is at the Health Department for a Newcomer Health Screening. The screening provides the opportunity to identify and intervene on diseases and conditions of public health concern, and address health issues that may impact the successful resettlement of newly arrived refugees and other qualified individuals.

Adult immunization is a national priority to protect not only those immunized, but to protect community members who are vulnerable to disease. Access to adult immunization remains a challenge, as some providers in the community do not offer vaccines for logistical and financial reasons. Therefore, the Health Department is key to providing access to affordable adult immunizations.

The Homeless Program provides transitional care to some of the County's most vulnerable individuals and families. This healthcare program is one aspect of a comprehensive approach to addressing homelessness, as it gives individuals the health security they need to begin reestablishing their lives. This service is not only a key component of the County's strategy to end homelessness, but also a critical piece of the Health Department's communicable disease control efforts.

Mandates

Communicable Disease is a core public health function and the provision of services is defined in accordance with the Virginia State Board of Health. With the exception of the homeless program, Adult and International Travel services, all of the programs in this LOB are mandated. However, even those programs and services that are non-mandated programs promote the control of communicable and chronic diseases in the community.

- Surveillance and investigation of reportable diseases are mandated to the Board of Health, and delegated to the local authority, per Virginia Code §§32.1-35, 32.1-39.
- Local health departments should have the capacity to provide screening, diagnosis, treatment, and surveillance of tuberculosis, according to Virginia Code § 32.1-49 et seq.
- Local health departments must have the knowledge and expertise to approve treatment plans for TB patients according to Virginia Code § 32.1-50.1.
- Local health departments must have the capacity to assure surveillance of STDs, according to Virginia Code § 32.1-57.
- Local health departments should have the capacity to provide no-cost STD diagnosis and treatment according to Virginia Code § 32.1-57 et seq.
- Local health departments must have the capacity to investigate reported incidence of HIV, according to Virginia Code §§ 32.1-36, 32.1-36.1, 32.1-39.
- Local health departments must have the capacity to provide surveillance data on HIV, according to Public Health Service Act, Virginia Code §§ 3101 (A), 311, 317 (K) (3).
- Local health departments must have the capacity to provide ADAP medications, according to PHS Act, Public Law (P.L.) 101-381, 104-146, 106-345, 111-87 (Ryan White).
- United States Federal Refugee Act of 1980 entitles all newly arriving refugees to a variety of services including initial health screenings provided at local health departments.
- Adult and International Travel Immunizations, and the Homeless Program are not mandated services.

Trends and Challenges

In recent years, there have been increasing numbers of reports of communicable diseases and outbreaks that the Health Department must investigate. In addition, today's communicable diseases challenges are more complex because of:

- The speed and scale of international travel. As increased international travel brings the world closer together, the high prevalence of disease around the world presents a challenge. The unique opportunities for exposure that arise as a result of the County's diversity and high frequency of international travel within the community, require jurisdictions in metropolitan areas, such as Fairfax County, to maintain constant alert and preparedness for disease outbreaks.
- Rising antibiotic resistant bacterial infections. The development of drug resistance is rendering first line antibiotic treatments ineffective. The spread of drug-resistant TB presents a continued challenge for the Health Department's TB program.
- Increasing rates of vaccine preventable diseases (such as measles and pertussis) and other infectious diseases (such as foodborne illness, Norovirus and influenza). Increasing rates of disease affect the most vulnerable individuals within the community who are susceptible because of a wide-range of chronic disease conditions and treatments. As adults choose not to vaccinate themselves or their children, community immunity wanes, which creates the environment for community outbreaks. Adult vaccination is a population health improvement strategy because when adults are vaccinated, they cannot transmit dangerous diseases to those who are most vulnerable – infants, frail elderly, and anyone who is immunocompromised.
- Increasing frequency and scope of new and emerging infectious disease outbreaks (such as MERS-CoV and Ebola Virus Disease) and new strains of influenza with pandemic potential (such as avian influenza H5N1). While Fairfax County has not had a case of Ebola, preparedness for rapid public health action is a priority, and the Health Department has engaged many partners to assure a state of readiness. The 21-day traveler monitoring program which started in the fall of 2014 is labor intensive and has required over 9,602 staff hours to monitor more than 801 hundred individuals.

Communicable disease is also impacted by global trends. The threat of zoonotic diseases to human health is also growing due to increasing global movement of people and animals and the effects of human populations expanding into previously undeveloped wildlife habitats. Climatic change may also lead to greater zoonotic diseases threats. The numbers of refugees worldwide continues to increase drastically, and as a result the need for Newcomer Health Screenings is likely rise. According to the United Nations High Commission on Refugees, there are 59.5 million individuals worldwide forcibly displaced from their homes or countries. There were 14.2 million new displaced individuals in 2014 alone, representing an unprecedented increase in the number of individuals and families fleeing war, violence, and/or persecution.

Rates of active disease of Tuberculosis (TB) remain high in Fairfax County – 5.3 cases per 100,000 people compared to the state rate of 2.4 cases per 100,000 and the national rate of 3.0 cases per 100,000. This is attributable to the diversity of the community, as many cases of TB occur in individuals from high-incidence countries. Outreach to communities with high rates of latent infection and their healthcare providers requires time and resources to build effective community partnerships that promote timely identification of illness and treatment.

Maintaining a state of readiness remains a challenge for the Department as it struggles to meet the surge capacity demands required to simultaneously control ongoing outbreaks; detect and respond to new outbreaks; and monitor for potential threats. Although significant improvements in the Department's emergency preparedness and response capabilities have been achieved through service redesign, cross training and the leveraging of the Fairfax Medical Reserve Corps (MRC), serious infrastructure gaps remain. As was the case with the Robert E. Lee High School tuberculosis investigation, the H1N1 pandemic and most recently the Ebola response, the Department has had to temporarily suspend some services and reassign staff to ensure continuation of critical operations.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #149: Communicable Disease			
FUNDING			
Expenditures:			
Compensation	$6,564,402	$6,579,385	$6,957,976
Operating Expenses	1,120,170	1,005,969	887,266
Total Expenditures	$7,684,572	$7,602,417	$7,845,242
General Fund Revenue	$3,180,470	$3,168,115	$3,139,669
Net Cost/(Savings) to General Fund	$4,504,102	$4,434,302	$4,705,573
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	97 / 97	104 / 104	100 / 100
Total Positions	97 / 97	104 / 104	100 / 100

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of screenings, investigations and treatment for selected communicable diseases	28,032	34,550	27,000/ 32,485	27,000	29,000
CD program cost per capita	NA	$5	$7 / $6	$6	$6
Percent of selected reportable communicable disease investigations for which initial public health control measures were initiated within the appropriate timeframe	NA	85%	90%	85%	85%
Rate of TB Disease/100,000 population*	8	5.1	5.9 / 5.3	5.9	5.9
Percent of clients who report that the services they received at a public health clinic addressed their health need	91%	93%	90% / 91%	90%	90%

*Rates are calculated by calendar year which is reflective of how state and national tuberculosis rates are calculated and reported.

In FY 2014 and FY 2015, the number of screenings, investigations, and treatment for selected communicable diseases was higher than in prior years. The Health Department has seen a steady increase in reports of suspected or confirmed communicable diseases, potentially as a result of outreach efforts aimed at increasing awareness of the requirement to report. While the number in FY 2015 (32,485) is lower than FY 2014 (34,550), the intensity of the screenings and investigations has risen. For example, more than 800 individuals have been screened as part of the Ebola Virus Disease monitoring program since October 2014, and more than 500 were screened in response to a measles case in May 2015. Although this represents about 3 percent of the total metric, the acuity of these events necessitated intense resources; reports indicate that staff invested more than 10,600 work hours in these two incidents alone.

In FY 2015, the reported rate of tuberculosis (61 cases, or 5.3 per 100,000) is higher than in FY 2014 (59 cases, or 5.1 per 100,000), but is lower than prior years (8.0 per 100,000 in FY 2013 and 7.2 per 100,000 in FY 2012). The decrease seen in Fairfax County is consistent with the decrease in tuberculosis rates at the state and national levels. However, the number of suspected cases in the County has increased, and resources are needed to provide the clinical and diagnostic care, treatment, and care coordination necessary to maintain the lower rate. While this is a positive sign that the morbidity of tuberculosis is lower, it still falls short of the national goal of decreasing tuberculosis disease to 1 case per 100,000.

The Health Department maintains a commitment to high quality service and cost effectiveness, reflected in the metrics demonstrating expediency of initiating public health actions, cost per capita, and customer satisfaction. Maintaining this level of quality and service to the public requires sustained resources. Despite the acuity and intensity of some of the communicable disease events over the past year, staff performed at a high quality level in providing public health interventions to protect the community. Additional limitations in positions and resources could pose a threat to that sustainability, and ultimately inhibit the Department's ability to protect the public's health.

Resource limitations are a major factor in the Health Department's ability to maintain communicable disease control programs at a high quality level, and to keep pace with the increases in communicable disease reports, investigation, and diagnosis. The Health Department must maintain an adaptable, flexible system to handle surges in communicable diseases that require investigation and control. Mitigating major public health events, or even surges of diseases such as influenza or Norovirus, requires an expanded operation. A significant challenge to maintaining this level of surveillance is the limited epidemiology capacity to work on investigations of an immediate, time sensitive nature such as food-borne or infectious disease outbreaks. Epidemiologists maintain the scientific integrity of the departments work by remaining rigorous yet adaptable to the challenges of new and reemerging public health threats. The Health Department has worked to reallocate resources to rapidly respond when required and mobilize staff from other programs and services. However, these staff do not have the requisite epi knowledge, skill and ability, and most other programs and services are at a minimum staffing level due to vacancy management strategies, and so pulling staff from other areas often limits the ability to provide a full range of services during a surge event.

Grant Support

FY 2016 Grant Total Funding: Federal and state funding of $437,305 and 4/4.0 FTE grant positions support the Communicable Disease LOB. There is no Local Cash Match associated with these grants.

The Centers for Disease Control (CDC) and Prevention Tuberculosis Control Program, administered by the Virginia Department of Health (VDH) Tuberculosis Control Division, provides funding to coordinate tuberculosis case investigation, case management, and reporting activity for Fairfax County. These efforts include timely reporting of newly diagnosed cases, monitoring the follow-up of tuberculosis suspects to ensure timely diagnosis and treatment, outreach to monitor client adherence to their treatment regime (Direct-Observed Therapy) and assisting nursing staff with investigation of contacts with active cases of tuberculosis in the County.

The Health Department also receives funding from the VDH to support the purchase of supplies and reagent associated with laboratory testing to control and prevent sexually transmitted diseases. In addition, a limited amount of pass through funding is received from CDC through VDH for Public Health Preparedness and Response (PHEP&R) activities. These funds support an epidemiologist who in the Communicable Disease Unit. The activities of this position are critical to the investigation of suspected communicable diseases in the community.

LOB #150:

LONG-TERM CARE SERVICES

Purpose

Long Term Care (LTC) Services promote the health and independence of the frail elderly and adults with disabilities. The Adult Day Health Care (ADHC) Program provides a safe environment for individuals who need support during the day due to physical and/or cognitive impairments, including all types of dementia. ADHC is an important part of the continuum of LTC services, offering a greater level of assistance than senior centers or Senior Plus Programs, and providing a bridge to more intensive late stage Alzheimer's care. ADHC offers participants a vibrant, stimulating, and nurturing alternative to more restrictive and costly long term care options, such as a nursing home or assisted living facility. ADHC also improves the quality of life for caregivers by providing respite to alleviate stress, enabling them to continue to work and take the time needed to care for themselves and their families.

Description

The first Adult Day Health Care (ADHC) center was established over 30 years ago to allow frail elderly and adults with disabilities to live in the community of their choice by promoting their health and independence and by providing respite to family caregivers. Today the Health Department operates five ADHC centers throughout the County (one scheduled to close in December 2015) as a part of the progressive continuum of care for this population. The average age of the participants is 79, ranging from 29 to 98 years, and 93 percent have cognitive impairment including all types of dementia. Sixty-eight percent suffer from both cognitive and physical impairments related to chronic diseases. Ninety-two percent of the participants meet the criteria for a more restrictive care setting such as assisted living dementia units or a nursing home, yet because they attend ADHC during the day, they are able to remain in the community with their caregivers' support. During FY 2015, there were 249 clients enrolled in the program with an average daily attendance of 95 clients.

The ADHC centers operate Monday through Friday from 7:00am to 5:30pm, serving two nutritious meals and a snack. Participant daily fees are determined by a sliding scale ranging from $16.00 to $107.00 which is based on the State Health Department eligibility scale. Medicaid reimburses the program $60.10 per day for participants who meet the eligibility criteria established by the Department of Medical Assistance Services DMAS) for community-based long term care waiver programs. This represents a significant cost savings to families considering that the average annual cost of a nursing home in Northern Virginia is $90,885 (MetLife Report 2012) and the annual cost of attending the ADHC program is $26,750 (based on the highest fee and full attendance).

Each ADHC center is staffed by two nurses, a certified recreation therapist, and several program assistants. The center director is a nurse who provides supervision and operational oversight, and the second nurse provides the daily clinical care including health monitoring, regular physical and cognitive assessments, and medication administration. Monitoring health status on a regular basis, allows for early intervention to manage or stabilize a participant's chronic or acute health conditions, thereby avoiding the need for hospitalization or the complications associated with unmanaged symptoms. A certified recreation therapist learns each individual's preferences and functional and cognitive abilities and tailors the recreation program accordingly, so that all participants experience a sense of accomplishment each day, in spite of their limitations. Each center also employs at least five program assistants who provide personal care and implement the programming. All ADHC staff members are highly qualified and experienced in the field of geriatrics and dementia.

Benefits

LTC Services provided at the Adult Day Health Care centers are a key component of a progressive continuum of care for older adults and adults with disabilities. ADHC serves as a bridge from more independent programming, such as senior centers, to the more intense supervision provided at locations serving individuals with late stage Alzheimer's disease. If this level of care were not available to community members, participants would be at risk of being institutionalized, or placed in a community setting with inadequate staffing to meet their needs. ADHC allows individuals who might otherwise be in a nursing home to receive an appropriate level of care and remain in the community.

The value of this program extends into many facets of quality of life for both participants and caregivers. For participants, the program offers the opportunity to socialize, enjoy peer support, and to receive health services in a stimulating and supportive environment that promotes better physical and mental health. Each year the ADHC program surveys the caregivers to monitor the quality and impact of the services provided. According to the 2015 Annual Caregiver Satisfaction Survey respondents reported that 96 percent of family members benefitted overall from attending ADHC.

The ADHC program is as important to the caregivers as it is to the participants. Most caregivers are adult children caring for their frail elderly parents and also hold full or part time jobs. The stress of caregiving can lead to burnout, which can result in lost productivity at work and increased anxiety. According to the Family Caregiver Alliance National Center for Caregiving report in 2009, caregiver burnout is one of the main factors in the premature placement of a family member in a nursing home or assisted living facility.

Results from a Penn State University Study on caregivers' health status and stress levels, which Fairfax County ADHC caregivers participated in, revealed positive changes in stress hormones for caregivers on the days their family member attended ADHC compared to the days they did not. Receiving education and care coordination from staff, and knowing their loved one is being well cared for alleviates a great deal of caregiver stress. According to the 2015 Annual Caregiver Satisfaction Survey respondents reported that 93 percent of caregiver experienced less stress as a result of their family member attending ADHC.

The survey results clearly show that ADHC has many benefits that all lead to a higher quality of life for both the participants and their caregivers, not the least of which being able to keep families together living in the community.

Mandates

Long Term Care Services (Adult Day Health Care) are not mandated; however each center is licensed by the Virginia Department of Social Services and inspected annually to ensure compliance with standards and regulations.

Trends and Challenges

The number of older adults in Fairfax County is increasing. There are an estimated 140,000 older adults (age 65 years and older) living in Fairfax County. According to the U.S. Census Bureau, that number is expected to grow to over 192,000 by 2030. Due to increasing life expectancies, a greater number of older adults are living with disabilities. The incidence of disabilities, from arthritis to Alzheimer's, doubles every five years after the age of 65. With the oldest baby boomers turning 75 in 2021, the demand for assistive services will accelerate rapidly after 2020.

This increase in the aging and disabled population is anticipated to create a greater demand for Long Term Care Services, and a continued need for alternatives to institutional care. According to the AARP, over 90 percent of older adults report a desire to remain in their own homes for as long as possible. ADHC provides a safe community-based alternative to nursing home placement for individuals needing a higher level of care across the LTC spectrum of services.

The ADHC Program is over 30 years old and at the time of its inception there were limited providers in the County offering this service. Over the years other providers in the community have demonstrated an ability and interest in expanding their capacity to provide adult day services. It is important to note that there has been a proliferation of long term care services to include home care agencies, assisted living facility memory units, the Program of All Inclusive Care for the Elderly (PACE) and other adult day programs offering alternatives to the County-operated ADHC Centers. The growth in service providers has, in part, resulted in a significant reduction in ADHC enrollment over the last 5 years. While the increase in options is a positive trend, many of these options are not affordable for individuals with limited income. Simultaneously, the County has experienced economic shortfalls reducing the available resources for each department. These long-term fiscal constraints have forced County departments to scrutinize the use of their limited resources to ensure that they are being used efficiently and to support programs/ services that align with their core mission. Waning enrollment, alternative community providers and limited County resources threaten the sustainability of the County-operated, non-mandated ADHC program. This presents an opportunity to explore alternative service delivery models that take advantage of new community resources while promoting a more sustainable program.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #150: Long-Term Care Services			
FUNDING			
Expenditures:			
Compensation	$2,495,217	$2,396,543	$2,129,611
Operating Expenses	121,316	155,478	120,922
Total Expenditures	$2,616,533	$2,552,021	$2,250,533
General Fund Revenue	$1,250,146	$1,244,999	$1,169,427
Net Cost/(Savings) to General Fund	$1,366,387	$1,307,022	$1,081,106
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	48 / 48	48 / 48	40 / 40
Total Positions	48 / 48	48 / 48	40 / 40

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Average daily attendance of participants	105	96	95	97	100
ADHC clients per year	268	260	249	250	255
Net cost per ADHC client per day to the County*	$78	$93	$89	$84	$72
Percent of ADHC clients/caregivers satisfied with services	97%	99%	99%	95%	95%
Percent of participants who met the criteria for institutional level of care who were able to remain in the community	93%	93%	92%	90%	90%

*As approved in the FY 2016 Adopted Budget Plan, the Annandale ADHC will be closing mid-year FY 2016 and thus the net cost per ADHC client per day to the County will most likely be impacted in both FY 2016 and FY 2017.

The Adult Day Health Care Program (ADHC) has always provided a highly valued and high quality service with satisfaction surveys showing 99 to 100 percent satisfaction in the overall services provided. Even though 92 percent of the participants met the criteria for institutional level of care they were able to remain in the community, in part, due to the high quality of support services received at the ADHC. Despite high satisfaction levels and the increasing aging demographic, the ADHC program has been experiencing a slow decline in enrollment over the past five years in the average daily attendance and the total number of people served annually. There are several factors contributing to this trend. There has been an increase in other long term care options, such as more assisted living facilities with dementia units and an increase in the number of home health agencies offering in home care. There is also a lack of public awareness about the program especially in the ethnically diverse communities who tend to care for their frail elderly at home. As a result, none of the five ADHC centers met their service capacity in the last three years.

Noting the declining participation rate, the Board of Supervisors elected to close the Annandale ADHC Center by the end of December 2015 with assurances that all of the Annandale ADHC Center participants could be served in the remaining four centers located throughout the County. A comprehensive transition plan has been developed in order to minimize impact of the closure on the participants and their family. The program is striving to maintain its high quality standards; to continue to serve individuals of all income levels; to implement a new, more focused marketing campaign; and to explore other provider options to meet the needs of community members.

Ideas for improvements to the marketing plan were addressed in collaboration with the ADHC caregivers and the Department's Public Information office. A more focused marketing approach has been initiated in FY 2016 and includes presentations to physicians groups, enhancing the Department website, use of social networking, and concentrating more marketing efforts on the Hispanic and Ethiopian communities. By eliminating one center and improving the focus of the marketing efforts it is anticipated that the ADHC program will see a two percent growth rate in participation. With an increase in attendance and a reduction in overhead costs, it is anticipated that the net cost per service unit will decrease.

LOB #151:

LONG-TERM CARE DEVELOPMENT AND SUPPORT SERVICES

Purpose

Long Term Care (LTC) Development and Support Services works in partnership with the community to promote the health and independence of older adults and individuals with disabilities. In order to facilitate access to quality community-based services, the program conducts mandated nursing home pre-admission screenings and quality assurance for County assisted living and adult day health care programs. Program staff also provides coordination and support for the LTC Coordinating Council, community groups and County agencies. These services aim to provide opportunities, resources and support to build community capacity and ensure that older adults and individuals with disabilities remain active, engaged and in the community of their choice, and to coordinate County LTC services to assure best practices and eliminate duplication.

Description

Long Term Care Development and Support Services are comprised of two areas which each support the provision of LTC services in the community.

LTC Development

The Long Term Care (LTC) Development unit was established in 2002 by the Board of Supervisors in response to recommendations of its Long Term Care Task Force. The unit provides opportunities, resources and a variety of planning and guidance that builds community-based service capacity to ensure that older adults and individuals with disabilities remain active, engaged, and in the community of their choice. The team supports the Fairfax Area Long Term Care Coordinating Council (LTCCC) and its seven committees, consisting of over 50 members, to provide community and County planning efforts around the development and enhancement of long term care services and supports within the community. Staff helps communities establish neighbor to neighbor services, assists community-based organizations to help address the needs of community members, and works with LTC partners to coordinate initiatives. Staff also coordinates and facilitates the County's multi-departmental LTC Work Group (Department of Family Services, Area Agency on Aging; Fairfax-Falls Church Community Services Board; Department of Housing and Community Development, Department of Neighborhood and Community Services and the Health Department) to seek efficiencies, modify processes, recommend program realignments and assure a seamless delivery of services to consumers. The unit also works closely with the 50+ Committee to implement the 50+ Community Action Plan serving older adults and caregivers. The LTC Development unit is comprised of three staff, a LTC Program Manager and two LTC analysts. While some services are offered Monday-Friday, 8:00am to 4:30pm, the LTC Development staff routinely meets with individuals, community groups, the LTC Coordinating Council and its seven committees during evening and weekend hours.

LTC Support Services

Nursing Home Pre-Admission Screenings (NHPAS) and quality assurance services have been provided for over 10 years to help to support access to long term care services in the community. A Medicaid-funded NHPAS is provided to individuals of any age who need the type of services provided in a nursing home. A joint home visit is made by a public health nurse and a Department of Family Services (DFS) social worker to complete the assessment. If an individual meets the criteria, they may choose to stay in the community with supportive services rather than the more costly option of entering into a nursing home. Services are provided in the home Monday-Friday, 8:00am to 4:30pm or as needed. The number of Medicaid pre-admission screenings completed in FY 2015 was 1,224.

The Health Department also promotes access to local assisted living facilities (ALFs) by providing quality oversight of County-owned ALFs. Quality assurance (QA) activities include resident chart review, medication administration monitoring, development and oversight of measurable annual performance goals, regular review of facility issues, consultative services and establishment and oversight of corrective action plans when needed. This service is provided by one public health nurse, Monday-Friday, 8:00am to 4:30pm. The number of QA related activities completed in FY 2015 was 52.

Benefits

Long Term Care (LTC) Development and Support Services promote the health and independence of older adults and individuals with disabilities in the community. Staff work in collaboration with community and County groups to coordinate LTC services and supports to assure coverage, prevent duplication, and develop new services to enhance services for older adults and individuals with disabilities. Community groups have benefitted by gaining services that were not previously available, such as day supports for young adults with disabilities who age out of the school system and do not qualify for other job or day support programs; and community or neighborhood groups that organize to provide volunteer and other services to enable individuals to age in place in the home of their choice. The LTC provides communities with innovative models of service delivery such as neighbors helping neighbors "Age In Place" to support these efforts. These service models benefit individuals and communities by enabling them to self-identify and self-determine their needs and align appropriate service providers. These services are community-based and provided at little or no cost to the County, but enable individuals to remain in their home. The LTC staff work group has streamlined the delivery of County services and created a "no wrong door" entry and information system to provide consumers with the best possible experience from multiple agencies.

Nursing Home Pre-Admission Screenings are an important service to help community members who are medically frail or unstable access care options. When an individual is found eligible for services, the client may select placement in a long term care facility or home-based services. The primary purpose of the home-based community services is to help people access care in their communities instead of a nursing home.

The County owns two assisted living facilities (ALF) to meet the needs of moderate to low income seniors or disabled persons 55 years of age and older who otherwise cannot afford market rate ALFs. The Health Department provides quality assurance support to ensure that licensing standards are met and maintained.

Mandates

Some services in this LOB are mandated while others are not.

LTC Development

- LTC Development services are not mandated, but were established by the Board of Supervisors in 2002 in response to the recommendations of its Long Term Care Task Force.

LTC Support Services

- Nursing Home Pre-Admission Screenings (NHPAS) are a mandated service as outlined in the Code of Virginia (12 VAC30-60-300) by the Virginia Department of Medical Assistance Services (DMAS).
- Quality assurance is mandated by the Standards and Regulations for Licensed Assisted Living Facilities (22 VAC40-71-50).

Trends and Challenges

The demographic composition of Fairfax County has changed with the aging of the overall population. Between 2008 and 2013, the number of Fairfax County residents, age 65 and older, grew by 8.6 percent, to comprise 11.1 percent of the County's total population. Between 2008 and 2013, the number of individuals with disabilities out-paced County growth by 11 percent, while the number of individuals with disabilities age 65 and older, grew at a rate almost 70 percent higher than that of the County. The likelihood of vulnerability and additional demand for resources in these areas increases with the estimated growth around older adults and individuals with disabilities residing in Fairfax County. Without an integrated planning effort in these areas, the County will likely see an increase in costs to the County and overall strain on the human services system.

The demand for Long Term Care (LTC) services has been growing as evidenced by an increase in requests for Nursing Home Preadmission Screening (NHPAS) services on an average of 9 percent each year since 2010. In 2014 the Virginia General Assembly mandated the completion of the NHPAS process to any individual who requests it within 30 calendar days. This has required additional County manpower and oversight to ensure this mandate is consistently met.

Of those approved for nursing home preadmission the percentage of those who elect community-based services has increased from 87 percent to 91 percent since 2012. Over 90 percent of individuals report a desire to remain in their own homes for as long as possible. In light of these trends, the LTC Development and Support Services unit seeks to expand community-based options and to assure quality services in LTC settings.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #151: Long-Term Care Development and Support Services			
FUNDING			
Expenditures:			
Compensation	$632,401	$719,017	$745,886
Operating Expenses	316,457	319,481	325,714
Total Expenditures	$948,858	$1,038,498	$1,071,600
General Fund Revenue	$225,767	$285,189	$303,294
Net Cost/(Savings) to General Fund	$723,091	$753,309	$768,306
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	8 / 8	8 / 8	8 / 8
Total Positions	8 / 8	8 / 8	8 / 8

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of community organizations receiving facilitation, support, or technical assistance from Long Term Care Planning and Development	NA	22	30	34	38
Number of County committees, agencies, workgroups, or councils receiving facilitation, support, or technical assistance from Long Term Care Planning and Development	NA	19	29	33	37
Average # of calendar days between request for NHPAS and submission to DMAS for processing*	NA	36	18	18	18
Medicaid pre-admission screenings that met criteria (adults only)	649	871	835	927	1,029
Low-income, frail elderly, and adults with disabilities who meet criteria for Medicaid waiver services and have access to Medicaid community-based services	86%	91%	92%	92%	92%

*New metric to monitor the State legislation requiring that screenings are processed within 30 calendar days of client request.

The number of Medicaid Nursing Home Pre-Admission Screenings (NHPAS) completed in FY 2015 increased to 1,224 which represented a 25 percent increase in service demand since FY 2013. This trend is reflective of the aging population both nationally and in Fairfax County. The increase in requests for home-based community services is indicative of the desire to age in place and provides a means for older adults and individuals with disabilities to access services in the community if they so choose. In order to support the increase in NHPAS service requests, the Health Department Long Term Care unit collaborated with the Department of Family Services Adult and Aging to evaluate the process for requesting and providing the screening service in a timely manner. This interdepartmental partnering allowed for the implementation of process improvements that resulted in a decrease in the time from initial client request for a screening to submission of the screening results from 36 to 18 calendar days. This is the first time this metric has been used as the data is new and represents screening done from September 1, 2014 through June 30, 2015.

Of the 1,224 NHPAS completed in FY 2015, 835 or 68 percent low-income, frail elderly and adults with disabilities were found eligible for services. Of those found eligible, 92 percent selected community-based services rather than the more costly institutional care.

The LTC Program Development unit provided information, guidance, planning and facilitation for community-based organizations and internal County cross-departmental groups at a growing pace from FY 2014 to FY 2015. This support enabled community groups to build capacity to meet the needs of the disproportionately increasing aging and adults with disabilities demographic in Fairfax County. It also reduced duplication of effort by increasing collaboration and building partnerships among County agencies and stakeholders who work with these populations. Projections for FY 2016 and FY 2017 take into consideration that as organizations become self-sufficient and/or group projects are completed, the support this unit provides is either reduced or no longer necessary leaving capacity for new groups and organizations in need of support from this unit.

LOB #152:

COMMUNITY HEALTH CARE NETWORK

Purpose

The Community Health Care Network (CHCN) provides subsidized basic healthcare to the low-income, uninsured, "working poor" that have no access to affordable healthcare. Assuring the quality and accessibility of health services is a core function of the Health Department. CHCN ensures this access by providing to comprehensive and continuing primary healthcare to approximately 15,000 low-income, uninsured residents who are enrolled in the program each year. The vast majority of CHCN patients are adults over the age of 21 years old that are working or are being supported by someone who is working. All participants have gross family incomes at or below 200 percent of the Federal Poverty Guidelines. As the County's largest provider of primary healthcare services for the safety net population, CHCN plays an important role in County and regional planning and implementation efforts to address local changes to the healthcare delivery system since the enactment of The Patient Protection and Affordable Care Act of 2010 (ACA).

Description

Community Health Care Network (CHCN) has provided comprehensive primary care services since 1990 using a public/private partnership model at community health centers for low-income, uninsured residents. The three health centers—currently located in Merrifield (Falls Church), South County (Alexandria) and North County (Reston)—are operated under contract with a private healthcare organization to provide primary care services in partnership with County staff. In addition to primary care, CHCN service delivery components include ancillary services, behavioral health services, referral to specialty care, management of Patient Assistance Programs (PAP) for pharmaceuticals, care planning, and case management. In FY 2015, the number of clients enrolled in CHCN was 18,120 and clients received primary care services during 48,000 visits.

CHCN utilizes a contract services model for the staffing and operating expenses of the primary care centers, reference laboratory tests, prescription drug medications, and physician specialist services. Primary care is delivered at the health centers by a diverse team of providers (physicians, nurse practitioners, nurses, pharmacists, laboratory technicians, and others). Upon referral by a primary care practitioner, patients may also obtain limited medical specialty care from private physicians who participate in a pro-bono charity care network with CHCN and other area safety net providers. With the exception of the direct provision of administrative management and support, enrollment/eligibility determination, public health nurse liaison services, and medical social work/specialty referral services by County employees all other program functions are contracted.

All three CHCN health centers are open on Monday and Tuesday from 10:00am to 6:30pm, and Wednesday through Friday from 8:00am to 4:30pm. After hours advice and consultation are also available by phone. The health center currently located in Bailey's Crossroads will be relocating to the Merrifield area in November 2015. The CHCN program clinics are certified as a National Committee for Quality Assurance (NCQA) Level 3 Primary Care Medical Home (PCMH). NCQA PCMH recognition is based on meeting certification standards related to six areas: Patient-Centered Access, Team-Based Care, Population Health Management, Care Management and Support, Care Coordination and Care Transitions, and Performance Measurement and Quality Improvement.

Benefits

Community Health Care Network (CHCN) is a key healthcare safety net provider, filling a gap in access to healthcare services for some of the County's most vulnerable residents. The assurance of quality and accessible primary care services is a core function of the Health Department and supports the County vision element of maintaining a safe and caring community. Over the years, CHCN has worked with local safety net providers (Federally Qualified Health Centers; local for profit and non-profit hospitals) and public entities (Community Services Board and Department of Family Services) to develop an integrated model of service that will achieve the triple aim of improving the patient experience, health of the population, and reducing the per capita cost of health care.

Recent County estimates indicate that there are approximately 46,000 individuals residing with Fairfax County who are uninsured and earn incomes under 200 percent of the federal poverty guidelines. Of this total, approximately one third currently receive their primary care services from the Community Health Care Network (CHCN). Special needs populations served and prioritized for access by the CHCN program include individuals who are homeless, have behavioral health needs, and/or are over the age of 65 but not yet eligible for Medicare. Many CHCN patients also do not speak English as their primary language (for FY 2015, 86.1 percent spoke a primary language other than English); have low health literacy, and do not understand health insurance or how the health care system is organized, making it especially difficult for them to access healthcare services. Fairfax County has also received a special designation from the Governor identifying portions of the County as a Medically Underserved Area/Population (MUA/MUP). One of the CHCN clinics (South County) is currently located in a MUA/MUP designated area.

Given its size, scope, and relationships with other area healthcare providers, CHCN is a major contributor of healthcare delivery in the County. The CHCN program is a key player on the Fairfax County Health Collaborative, which was formed to define the County's role in the future of health safety net services. As such, CHCN is a major contributor to the County's work and progress towards assuring a seamless experience for those needing County health services, while achieving the best possible use of Fairfax County resources to sustain the health of the community.

Mandates

This Line of Business is not mandated.

Trends and Challenges

The Community Health Care Network (CHCN) is experiencing similar trends in health services utilization seen among insured populations nationally. As reported in the Health Care Cost Institute's, 2013 Health Care Cost and Utilization Report, nationally, office visits to a primary care provider fell by 3.8 percent to 1,472 per 1,000 insured. For the CHCN program, between FY 2014 and FY 2015, office visits to a CHCN primary care provider decreased 4.1 percent, from 50,174 to 48,100. Inversely, specialist office visits rose 8.0 percent nationally for insured, while CHCN specialty care referrals increased 6.1 percent between FY 2014 and FY 2015. A trend increasingly is the use of telehealth tools (video, mobile messaging, email) to improve patient access to specialty care, which reduces costs associated with delayed diagnosis and treatment, and improve health outcomes.

A challenge of particular note for the CHCN program is that within Northern Virginia safety net clinic populations, demand for specialty care is very high and greatly exceeds the supply of available and accessible local specialty resources. Depending on the specialty required, current wait times between when specialty referrals are ordered and patients are actually seen by a specialist can take up to nine months. In addition, because of limited local specialty resources for safety net patients (due in part to budget reductions over the years), there are increasing numbers of specialty referral orders and appointments being made to facilities out of the Northern Virginia region, specifically the University of Virginia Medical Center. Long travel distances, limited transportation options, and lost time at work make these needed specialty services extremely difficult to access for safety net populations.

Additional challenges facing the CHCN program include: the need to retain a qualified contractor for services (i.e., Molina Inc., the existing vendor, will cease clinical operations in Virginia on June 30, 2016) the high prevalence of multiple chronic disease conditions within CHCN patients that are difficult and expensive to treat; the constant need to maintain and/or upgrade the CHCN program's electronic medical record (EMR) to meet operating requirements; the difficulties in managing medical documentation, communications, and health information exchange effectively and efficiently with multiple other health providers while maintaining compliance with HIPAA regulations; and meaningful participation in County and health system-wide activities to improve health services integration, population health outcomes, and health services efficiencies.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #152: Community Health Care Network			
FUNDING			
Expenditures:			
Compensation	$646,918	$614,531	$621,886
Operating Expenses	7,604,766	7,459,158	8,330,027
Total Expenditures	$8,251,684	$8,073,689	$8,951,913
General Fund Revenue	$0	$0	$0
Net Cost/(Savings) to General Fund	$8,251,684	$8,073,689	$8,951,913
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	9 / 9	9 / 9	9 / 9
Total Positions	9 / 9	9 / 9	9 / 9

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of primary care visits provided through the Community Health Care Network	50,287	50,174	48,100	50,250	50,250
Number of clients who received primary care through the Community Health Care Network	15,021	14,678	13,795	15,000	15,000
Net cost to County per visit	$184	$169	$173	$177	$181
Percent of clients satisfied with their care at health centers	94%	98%	96%	95%	95%
Percent of Community Health Care Network clients with stable or improved health outcomes	N/A	63%	52%	64%	64%

The continuing prevalence of a large number of low-income, uninsured residents continues to provide significant demand for Community Health Care Network (CHCN) services. During FY 2015, the CHCN provided access to health services for 18,120 enrollees; served 13,795 of those individuals through at least one visit; provided 48,100 primary care visits across all three CHCN clinic sites; and coordinated 8,715 referrals for specialty care services.

Over the past three fiscal years, annual enrollment totals of uninsured, low-income individuals meeting CHCN program eligibility criteria were: 20,451 (FY 2013), 20,434 (FY 2014), and 18,120 (FY 2015). The notable decrease in FY 2015 is likely attributable in part to completion of the second year of the Affordable Care Act (ACA), and the availability of subsidies for health insurance on the ACA marketplace. A commensurate decrease in the number of primary care visits provided and unduplicated patients who had at least one visit was noted as well. If determined eligible for subsidized health insurance on the ACA marketplace, in compliance with federal law, CHCN enrollees are expected to acquire health insurance and are transitioned to other healthcare providers in the community that accept their new health insurance. The area of the County where enrollments onto ACA insurance policies were initially most successful was the South County/Richmond Highway corridor. Subsequently, recent enrollment decreases in the CHCN program have been observed mostly at the CHCN-South clinic, but remain stable at the Reston and Falls Church clinic locations. Further, since Medicaid coverage has not been expanded in Virginia, many individuals with incomes below the threshold required to qualify for ACA subsidies still remain uninsured and eligible for CHCN services overall.

The net cost per patient visit to the County for CHCN services increased only 2.3 percent (from $169 to $173) between FY 2014 and FY 2015, and is projected to increase 2.0 percent in FY 2016 (to $177). In coordination with the Department of Family Services' Healthcare Access Assistance Team (HAAT), the program continues to utilize and enforce strict eligibility and enrollment criteria to ensure that patients receiving CHCN services truly have no other alternatives for access to affordable healthcare. In addition, the CHCN program makes extensive use of prescription patient assistance programs and bulk purchase programs to maximally acquire free and/or low-cost medications for CHCN patients to keep the program's pharmaceutical costs down.

Based on the most recent patient satisfaction survey of CHCN patients conducted by researchers at George Mason University, the percent of CHCN clients satisfied with their care at CHCN health centers was 96 percent. This maintenance of patient satisfaction reflects the program's ongoing commitment to quality assurance and is expected to continue at this level for the foreseeable future.

At this time, the percent of CHCN patients with stable or improved outcomes for FY 2015 is 52.1 percent. This outcome is a decrease in positive outcomes compared to 63.3 percent in FY 2014 To assess the program's performance on this outcome measure, an extensive review of the medical records for a cohort of patients with at least two measured readings within the fiscal year of glycosylated hemoglobin (HbA1c) levels and systolic blood pressure for patients diagnosed with diabetes and high blood pressure was required. This measure will continue to be closely monitored and corrective action will be taken as needed to improve health outcomes.

It should be noted that the CHCN program is currently in the process of soliciting a new contractor for the operation of the CHCN clinics with an anticipated start date of July 1, 2016 (FY 2017). The new contractor will be expected to participate fully in the County's ongoing initiatives related to health services integration, cross-sector health data exchange, and the leveraging of other non-County payer sources for health services provision that are expected to increase the effectiveness and efficiency of the County's health and human services delivery system. Consequently, FY 2017 estimates for the CHCN program's output and efficiency measures reflect the projected effects of these anticipated changes and new contract requirements.

LOB #153:

DENTAL HEALTH

Purpose

The Dental Health Program serves to provide access to oral healthcare and education for high-risk populations. It is a direct service program that provides screening/evaluation, preventive and restorative dental care to low-income maternity clients, and low-income children, ages 3 years through 18 years of age. Oral health education and onsite screenings are provided at schools, pre-schools, childcare centers and other community settings.

Description

The Dental Health Program has been operating for many decades to meet the needs of children and pregnant women who meet financial eligibility criteria for care. Services include screening, evaluation, preventative and restorative dental care for low-income children through age 18 years of age and pregnant women. In FY 2015, there were 854 new patient visits and over 2,700 patient visits.

The Health Department provides Dental Health services in three of the district offices. The dental clinics are located at the Herndon/Reston District office serving the north end of the County, the Mount Vernon District Office serving the south end of the County, and the Joseph Willard Health Center serving the central County. Services are provided during County business hours, Monday-Friday, 8:00am-4:30pm. Patients are seen by appointment only at the three clinic sites. Each dental clinic is staffed by a Dentist, a Dental Assistant, and an Administrative Assistant who handles registration, billing and fee collection.

Dentistry is an equipment-reliant field so almost all services are provided at the three sites. However, the program does have mobile equipment to allow for dental evaluations outside of the clinical setting, (e.g., schools, pre-schools, childcare centers and other community settings). These services are provided on a scheduled basis during County business hours.

Benefits

Public Health dentistry is different than general dentistry. Community oral health programs and education for the prevention and control of dental diseases at the population level are important benefits of this program. Last year, the Health Department performed over 700 screenings and education sessions. The screenings and community education is a vital piece in outlining the need for regular and preventative oral health visits.

Access to dental care remains a challenge for low-income uninsured children throughout the region. In the broader community, the participation level of the dental providers in the children's Health Insurance (Medicaid-FAMIS, Health Exchange) programs varies. For every child with insurance there are 2.6 children without dental insurance. Currently the Health Department's Dental Program is open to both uninsured low-income and Medicaid-covered children, with approximately 70 percent of the clients served being uninsured, and 30 percent having Medicaid. Many of the County's youth dental needs could go unmet without this program. Studies now link oral health to patients overall health and well-being. Individuals who do not have access to preventative services and dental treatment have greater rates of oral diseases and need more costly intervention in the long run.

The Dental Health Program also provides dental services for children enrolled in the Medical Care for Children Program (MCCP) who meet financial eligibility. MCCP refers approximately 30 percent of their enrolled children to the Dental Health program. Without access to this program, MCCP would incur significant costs to secure dental services from a private provider.

Mandates

This Line of Business is not mandated; however, the County must administer the program in compliance of the Board of Dentistry regulations.

Trends and Challenges

Dental disease is the biggest chronic disease among Virginia children and causes 1 million lost school hours a year. Even for children with Medicaid, less than 50 percent of them have been seen by a dentist. The Dental Health program remains the key program for uninsured low-income and Medicaid children to receive their services in Fairfax County. However, the demand for services exceeds current capacity. The referrals from the Medical Care for Children Program (MCCP) have increased over the years and there are many months when the waiting list for services is greater than six weeks long.

The landscape of the oral health safety net has had some transitions in the last year. Northern Virginia Community College closed their restorative dental clinic which has further limited options for uninsured clients to obtain care. Although Federally Qualified Health Centers (FQHCs) are mandated to provide oral healthcare, the two in Fairfax County do not have their own on-site dental services and have looked at partnerships with existing safety net providers to meet their needs. At this time, the FQHCs have not offset any of the demand on the Health Department for dental services. Northern Virginia Dental Clinic is the other primary source for safety net oral health services and they serve only the adult low-income population.

In response to the growing demand for dental services for those in need, the County convened a taskforce to review and develop a more comprehensive approach to safety net oral health services. Much work has been done through this taskforce by all partners, however full implementation has not yet been achieved.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #153: Dental Health			
FUNDING			
Expenditures:			
Compensation	$646,702	$636,336	$645,142
Operating Expenses	57,485	64,707	36,298
Total Expenditures	$704,187	$706,602	$681,440
General Fund Revenue	$282,643	$261,886	$276,464
Net Cost/(Savings) to General Fund	$421,544	$444,716	$404,976
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	9 / 9	9 / 9	9 / 9
Total Positions	9 / 9	9 / 9	9 / 9

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
New patient visits	1,547	714	854	900	900
Total patients visits	2,603	3,640	2,717	3,400	3,400
Net cost to County	$249	$179	$196	$195	$196
Customer satisfaction index	97%	97%	97%	97%	97%
Percent of treatment completed within a 12 month period	42%	44%	43%	40%	40%

The Dental Health Program has been working towards a goal to increase the amount of time that program staff spends on service provision and to reduce the time spent on administrative tasks. This has been very successful over the last two years as evidenced by the increase in the number of new patient visits for FY 2015. The program has been able to increase the number of clients seen each day and to offer more appointment times for client visits.

In dentistry, the output is determined by the productivity of the dentist, and without a dentist no direct services can be provided. Each dental office is staffed by only one dentist, who influences the output of that office. As a result of Family Medical Leave (FML) situations at two of the three offices, there was a decrease in the number of total visits and less growth than expected in the new patient visits. Baring such extenuating circumstance, reduced number of total visits is not anticipated to occur in future years. Patient satisfaction ratings were not impacted by this and have remained at 97 percent for the past three fiscal years.

The acuity and complexity of cases are increasing. Many of the recent unaccompanied minors that entered the County have presented for services with years of neglected oral health. These patients have needed a significant amount of care, taking more time, and resulting in longer visits. The decrease in total visits is partially attributed to this trend in longer and more complex individual visits. Despite this, the percent of treatment completed within a twelve month period has remained consistent at 43 percent.

LOB #154:

COMMUNITY HEALTH DEVELOPMENT AND PREPAREDNESS

Purpose

The Community Health Development and Preparedness (CHDP) division leads the department's strategic efforts to build local public health system capacity to effectively prepare for and respond to public health emergencies and emerging community health needs. Activities within the program areas enhance the department's emergency preparedness; surge capacity; external and internal communications; strategic planning; outreach, education and capacity building efforts; and ability to provide community-centered and culturally appropriate services. CHDP serves as a communication, knowledge and capacity bridge between the Health Department and the people who live, work, learn and play in the Fairfax. CHDP works to engage and educate staff, governmental partners and community stakeholders to collaboratively address complex public health challenges and advance health equity. Staff works internally to guide the development and implementation of the department's strategic plan and performance management efforts across the 10 essential public health services. CHDP assures the department's role as a public safety partner in emergency preparedness and response activities through planning, coordinated incident management, public information, medical reserve corps volunteer management and community outreach.

Description

The Community Health Development and Preparedness Division was formally established in FY 2011 to provide structure and better coordinate the many initiatives the department began over more than a decade ago to anticipate, plan and respond to emerging public health needs and threats. Over time, the department recognized that these initiatives were part of the foundational capabilities the department needed to develop in order to meet preparedness requirements and successfully address 21st century public health challenges. The department's comprehensive approach to emergency preparedness, community mobilization, outreach to hard-to-reach populations and capacity building strategies were born out of these initiatives. The integration of these activities and others in communications and planning has strengthened the Health Department's infrastructure and serve as the foundation for ongoing efforts to strengthen the local public health system. The result is an enhanced capacity to support and sustain public health emergency response activities, improved health outreach to the County's increasingly diverse communities, coordinated implementation of strategic priorities, and engagement of public health system partners in population health initiatives.

Emergency Preparedness

The Office of Emergency Preparedness (OEP), which includes the Fairfax Medical Reserve Corps (MRC), prepares staff, volunteers and residents to respond effectively to public health emergencies. OEP coordinates all emergency preparedness planning, training, and exercise activities for department staff and MRC volunteers, and ensures local and regional coordination before, during and after public health emergencies. OEP serves as the lead entity to support Emergency Support Function (ESF) 8 – Public Health and Medical Services – which routinely includes activities related to sheltering, isolation, quarantine, and mass dispensing of prophylactic medications. OEP works with regional partners to enhance community preparedness through planning, resource sharing, and response coordination. Using the incident command system, OEP coordinates the department's response to various public health threats, such as outbreak investigations, Ebola virus response and monitoring. In addition, OEP has established plans and protocols to support rapid response to suspected acts of bio-terrorism within the community. OEP community education services are available 7 days/week and Public Health response activities are conducted 24/7.

Number of staff and MRC volunteers who have completed required training in FY 2015: 1,164, which represents 89 percent of staff and 70 percent of volunteers.

Outreach

The Outreach Unit serves to bridge department programs with Fairfax' diverse communities through community education and engagement. The diversity of the Outreach Team mirrors that of the community, enabling the department to deliver important health information in a culturally competent manner. Outreach and health promotion activities include chronic disease self-management, diabetes self-management, vaccine literacy, hand washing, emergency preparedness, and how to access Health Department services. In addition, the team's outreach efforts support routine public health and emergency preparedness and response activities to help prevent the spread of infectious and communicable diseases such as seasonal influenza, tuberculosis, Ebola, and measles. Community members are reached by providing educational materials for broad distribution, conducting community presentations, engaging ethnic media to raise awareness among target populations, and engaging community leaders and health care providers to promote key health messages for targeted communities.

The goal of the department's community engagement efforts is to build community capacity to sustain public health prevention programs, in collaboration with trusted leaders within the community. In 2007, the department's Multicultural Advisory Council was established to formally engage leaders within Fairfax' ethnic communities in important Public Health policy discussions. The Council members, together with their corresponding media, are critical partners of the Outreach team and often serve as a focus group for testing new messaging and are a conduit for reaching otherwise hard-to-reach populations within the County. Depending on the initiative, community champions are recruited to augment outreach efforts and build community trust.

To accommodate the needs of the community, outreach activities occur throughout the community Monday-Sunday. The number of residents served through outreach and health promotion activities in FY 2015 was 42,477.

Benefits

Community Health Development and Preparedness' role in providing strategic guidance to the Health Department on outreach to underserved populations, serves to advance an essential Public Health service thereby reducing the leading causes of preventable health and disability, with emphasis on health disparities.

Emergency Preparedness training and exercises have built internal and external capacity to respond to all-hazards. Over 89 percent of staff has received the required Incident Command training. The Medical Reserve Corps provides a cadre of trained volunteers who are ready to augment surge capacity during public health emergencies and large outbreak investigations. Communicable disease investigation and response activities are labor intensive. At present the agency struggles to simultaneously control ongoing outbreaks, detect and respond to new outbreaks, and monitor for potential threats, resulting in temporary closures of a few clinic services. Without the MRC, the department would have to devote more staff to the incident and therefore institute larger clinic closures. Notable contributions made by the MRC in recent years include the H1N1 pandemic and the Lee High School TB investigation, where MRC volunteers contributed 22,652 and 747 hours, respectively. MRC volunteers have also participated in the ongoing Ebola response and monitoring and have contributed 213 hours.

CHDP supports a culture of engagement in Health Department initiatives throughout the community. Community health improvement objectives are actively being implemented by members of the Partnership for a Healthier Fairfax. Faith leaders are leading HIV prevention efforts to address the root cause issues fueling the epidemic in communities of color. They also champion other public health prevention efforts. The Multicultural Advisory Council meets quarterly to inform Health Department approaches to childhood immunization, older adult care, mental health, suicide prevention and other public health services. Community members volunteer to be trained as certified leaders in Chronic Disease and Diabetes Management curriculums to support behavioral change and improved health within their neighborhoods.

CHDP supports the department in routinely conducting public health system assessments and community health needs assessments, which has informed the development of a comprehensive community health improvement plan for 2013-2018. CHDP serves as the department's convener for engaging the local public health system partners that comprise the Partnership for a Healthier Fairfax to implement seven key priorities to improve health and wellbeing for all who live, work and play in the community. The coalition of residents, businesses, faith leaders, schools, nonprofits, healthcare providers, developers and government partners in human services, transportation, parks, planning and zoning, and housing are engaged in initiatives to address healthy community design and increase awareness about the health implications of policy decisions across non-health sectors.

In May 2015, CHDP launched a new community resource, the Live Healthy Fairfax Community Health Dashboard, which provides easily accessible data on health factors related to behavior, access and quality of care, social and economic factors, and physical environment.

Mandates

Community Health Development and Preparedness supports compliance with relevant federal and state program mandates.

Emergency Preparedness
Per the Code of Virginia (§ 44-146.19.E), review and revision of the Fairfax County Emergency Operations Plan (EOP) is required every four years. As the coordinating department for Emergency Support Function (ESF) 8 – Public Health and Medical Services – the Health Department participates in this revision. The Health Department's EOP, which is the document that operationalizes responsibilities as defined in the County EOP, is also reviewed and revised on this four-year cycle.

Emergency Preparedness addresses the Health Department's obligation to provide the local emergency preparedness and response activities specified in the Virginia Department of Health contract. In addition, Medical Reserve Corps volunteer management requirements for professional liability coverage are managed by this LOB.

Outreach
Discrimination under Title VI of the Civil Rights Act of 1964 has been determined to include preventing meaningful access to federally funded services for "national origin minorities" with limited English proficiency (Title VI prohibits discrimination on the basis of national origin). The Department of Health and Human Services ("HHS") applies Title VI's nondiscrimination provisions to its programs receiving Federal financial assistance including "money paid, property transferred, or other Federal financial assistance." The Outreach Program's focus on connecting department services to underserved and low language proficiency residents enhances the Health Department's compliance with Title VI.

Trends and Challenges

In May 2014 the Robert Wood Johnson Foundation convened public health leaders to identify public health challenges for governmental health departments. The national public health trends and challenges are reflective of the Fairfax County community and will shape the activities of the Community Health Development and Preparedness LOB as an integral capacity building component of the Health Department. One of these trends includes the changing healthcare needs of the population with the increasing prevalence of chronic disease and illnesses such as obesity and asthma. Since resources are limited to address these costly health conditions, population health level policy, system and environmental change strategies need to be implemented throughout the County with targeted program strategies focused on areas of the community with identified health disparities and poor health outcomes.

Non-health sectors will be the key to improving the health of the public as many factors contributing to chronic disease are within their scope of influence as policy, systems and environmental change agents. CHDP actively promotes public health system collaborations by diverse sectors to create conditions that are likely to improve the health and well-being of the community. This "Health in All Policies" approach to population health improvements is a challenge to leverage community assets and engage intergovernmental, business, public safety, education and non-profit leaders who may be focused on routine demands of direct services.

The demographics of the community are changing with an increase in life expectancy as well as an increase in the diversity of the County's communities. CHDP will be challenged to continue to perform outreach and deliver enhanced services to the County's diverse communities to reduce the incidence of health disparities. The 2013 U.S. Census American Community Survey indicates that 116,000 residents in Fairfax County speak English less than "very well," which is a known predictor of poor health outcomes due to language barriers resulting in inadequate health care and compliance.

An information and data revolution is underway. This revolution will require public health to be the interpreter and distributor of population health information. CHDP will continue to support the distribution of critical health messages through social media and community leaders. In addition, CHDP will support the department's provision of a Community Health Dashboard resource for community members to access essential information in understandable formats.

The increasingly globalized society has introduced public health threats, such as tuberculosis, measles and Ebola virus disease, to the County. CHDPs Emergency Preparedness plays a critical role in ensuring the Health Department's operational readiness as a first responder agency to these emerging and reemerging public health threats. Deliberate acts of bio-terrorism remain a public safety concern that requires vigilance and operational readiness.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #154: Community Health Development and Preparedness			
FUNDING			
Expenditures:			
Compensation	$1,026,117	$1,239,991	$1,307,193
Operating Expenses	54,094	103,909	69,763
Total Expenditures	$1,080,211	$1,343,900	$1,376,956
General Fund Revenue	$0	$0	$0
Net Cost/(Savings) to General Fund	$1,080,211	$1,343,900	$1,376,956
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	18 / 18	18 / 18	19 / 19
Total Positions	18 / 18	18 / 18	19 / 19

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of community members served through outreach and health promotion activities	16,672	23,423	42,477	20,000	25,000
Number of staff and volunteers who have completed required training	1,345	1,170	1,164	1,200	1,200
Ratio of training hours invested to volunteer hours leveraged	1 : 0.4	1 : 3.1	1 : 2.2	1 : 3.0	1 : 3.0
Percent of staff and volunteers who have completed required training	34%	93%	77%	90%	90%
Percent of staff and volunteers who report they are better prepared for public health emergencies as a result of preparedness trainings and exercises	NA	88%	91%	90%	90%

Emergency Preparedness

The number of staff and volunteers who received training in FY 2015 was comparable to the prior year. However, the percentage of staff and volunteers who completed the required trainings dropped from 93 percent to 77 percent in FY 2015. An extended vacancy in the Office of Emergency Preparedness Training and Exercise Coordinator position and resources required for real world responses (measles, Ebola virus disease) led to a drop in ICS offerings for staff in FY 2015. In addition, due to a recruitment campaign for MRC volunteers in the Spring 2015, there is a large number of pending Medical Reserve Corp (MRC) volunteers who are working to complete required trainings. Nevertheless, 91 percent of staff and volunteers report that they are better prepared for public health emergencies as a result of preparedness trainings and exercises. The return on investment of training MRC volunteers is considerable. In FY 2015, for every training hour provided, volunteers contributed an additional 2.2 hours of their time to public health efforts.

Outreach

The number of community members served through outreach and health promotion activities increased dramatically from FY 2014 to FY 2015. Over the past five years, the Community Health Specialist dedicated to the Muslim population has built a tremendous amount of trust with the leaders of this community. As a result, staff was asked to deliver health-related messages during Friday prayers at two separate mosques for audiences of up to 3,000 attendees in FY 2015. These opportunities led to further outreach events and help to account for the increase in the number of participants reached in FY 2015. The receptivity of these communities has significantly increased the ability of the Health Department to communicate health messages to the Muslim community more effectively. Annual fluctuation in the data is attributable to fluid community partnerships and changing event schedules. Inconsistencies may exist when events hosted by a community partner one year may not be offered or needed again in subsequent years.

Grant Support

FY 2016 Grant Total Funding: Federal funding of $484,669 and 4/4.0 FTE grant positions support the Community Health Development and Preparedness LOB. There is no Local Cash Match associated with these grants.

For the Public Health Emergency Preparedness and Response (PHEP&R) grants, the Centers for Disease Control and Prevention (CDC) provide funding for ongoing development of public health preparedness and response efforts through the Virginia Department of Health. The goal of this grant is to have an emergency response plan that is coordinated with local agencies, hospitals, physicians, and laboratories in the County and the region.

The Urban Area Security Initiative (UASI) grant program is funded by the U.S. Department of Homeland Security through the D.C. Homeland Security and Emergency Management Agency as the State Administrative Agency. This grant consists of two focus areas:

- Public Health Planning: The Public Health Planning focus area provides funding for the continuation of one grant Emergency Management Specialist II and one part-time benefits-eligible Emergency Management Specialist I to support public health emergency preparedness and response planning initiatives. These positions will continue the review, revision, and operationalization of the agency's Emergency Operations Plan and various supporting documents.
- MRC Program Sustainment: The MRC Program Sustainment focus area of UASI provides funding for continuation of the MRC program capacity building which supports public health emergency preparedness and response of the Health Department. Grant program activities include increasing enrollment through recruitment, fostering long-term retention, developing outreach capabilities, providing numerous training and exercise opportunities, and equipment to support emergency response activities.