M00F03
Prevention and Health Promotion Administration
Department of Health and Mental Hygiene

Operating Budget Data

($ in Thousands)

	FY 16 Actual	FY 17 Working	FY 18 Allowance	FY 17-18 Change	% Change Prior Year
General Fund	$38,719	$52,673	$67,263	$14,589	27.7%
Adjustments	0	-7,500	-15,055	-7,555	
Adjusted General Fund	**$38,719**	**$45,173**	**$52,208**	**$7,035**	**15.6%**
Special Fund	104,600	113,967	112,023	-1,944	-1.7%
Adjustments	0	0	-6	-6	
Adjusted Special Fund	**$104,600**	**$113,967**	**$112,017**	**-$1,950**	**-1.7%**
Federal Fund	182,146	207,222	215,306	8,084	3.9%
Adjustments	0	0	-80	-80	
Adjusted Federal Fund	**$182,146**	**$207,222**	**$215,226**	**$8,005**	**3.9%**
Reimbursable Fund	6,355	2,476	3,337	861	34.8%
Adjusted Reimbursable Fund	**$6,355**	**$2,476**	**$3,337**	**$861**	**34.8%**
Adjusted Grand Total	**$331,820**	**$368,839**	**$382,788**	**$13,949**	**3.8%**

Note: Includes targeted reversions, deficiencies, and contingent reductions.

- There is a proposed negative deficiency for fiscal 2017 of $7.5 million and a contingent reduction in fiscal 2018 of $15.0 million to restructure operational grant funding to the University of Maryland Medical System. This funding is intended to ease the transition to the new regional medical center in Prince George's County. There is an additional across-the-board contingent reduction for pensions.

- After adjusting for a fiscal 2017 negative deficiency appropriation and contingent reductions, the Governor's fiscal 2018 allowance increases by $13.9 million, 3.8% over the fiscal 2017 working appropriation.

Note: Numbers may not sum to total due to rounding.

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Personnel Data

	FY 16 Actual	FY 17 Working	FY 18 Allowance	FY 17-18 Change
Regular Positions	366.80	419.80	417.80	-2.00
Contractual FTEs	4.63	6.40	7.70	1.30
Total Personnel	**371.43**	**426.20**	**425.50**	**-0.70**

Vacancy Data: Regular Positions

Turnover and Necessary Vacancies, Excluding New Positions	20.47	5.02%
Positions and Percentage Vacant as of 12/31/16	57.00	13.58%

- The fiscal 2018 allowance includes a decrease of 2.0 regular full-time equivalents (FTE) over the fiscal 2017 working appropriation, due to a transfer of positions to the Office of Population Health Improvement and an increase of 1.3 contractual FTEs for the Maryland AIDS Drug Assistance Program.

- As of December 31, 2016, there were 57.0 vacant positions, more than the number of positions needed to meet turnover.

Analysis in Brief

Major Trends

Marylanders at a Healthy Weight Decrease, Diabetes Rate Increases: In calendar 2015, the number of adult Marylanders considered a healthy weight declined to 35.0% and the rate of diabetes in the population increased slightly to 10.3%, remaining above the national average.

Adult Visits to the Dentist or Dental Clinic Decline, Following National Trends: In calendar 2014, 70% of adult Marylanders visited a dentist or dental clinic for any reason. This is down from 72% in calendar 2012 and is lowest among the 25- to 34-year olds age group at 61%.

Tobacco Use Continues to Decrease: The prevalence of cigarette smoking among all ages has continued to decrease. In calendar 2016, usage for adults declined slightly to 14.5%.

Cancer Mortality Rates Continue to Improve: Both the overall cancer mortality rate and the breast cancer mortality rate continue to decline steadily in Maryland.

Infant Mortality Rates Increase Slightly for All Races: Following national trends, Maryland's infant mortality rate among African Americans has consistently been disproportionally high but has declined in the past several years (driving the overall reduction in the infant mortality rate). However, in calendar 2015, infant mortality increased for African Americans for the third year in a row, while infant mortality increased slightly for all races. Infant mortality rates continue to vary widely by geographic region, likely driven by racial disparities.

Childhood Vaccination Rates Increase, Remains Above National Average: In calendar 2015, 77% of children in Maryland received the typical coverage of vaccinations – an increase from the previous calendar year. The Maryland rate remains above the national average of 72%.

Syphilis Rates Remain High, While Chlamydia Rates Decrease: In calendar 2015, the Centers for Disease Control and Prevention reported a statewide infection rate of primary and secondary syphilis in Maryland of 8.5 cases per 100,000 population. This rate, driven by high primary and secondary syphilis rates in Baltimore City, is the tenth highest in the nation. Meanwhile, chlamydia rates statewide have continued to approximate the national average and decreased slightly in 2015 from the previous calendar year. Chlamydia continues to be driven by high rates among women, with the highest rates among African American women.

HIV and AIDS Cases, High among States, Continue to Decline: Despite a steady decline in newly reported HIV and AIDS cases, Maryland's incidence of new cases remains high compared with other states. According to the most recent national data, Maryland had the fourth highest diagnosis rate of HIV infection.

Issues

The Cost of the Gun Violence Epidemic: As firearm-related homicides increase and gun violence has become more lethal, hospitals are dealing with more firearm-related injuries. The cost to the health care system has increased.

Recommended Actions

1. Concur with Governor's allowance.

Updates

Report on Chronic Obstructive Pulmonary Disease Prevention: The 2016 *Joint Chairman's Report* (JCR) requested information on the current resources being utilized statewide for chronic obstructive pulmonary disease prevention. This update will discuss that report.

Report on Diabetes and Obesity: The 2016 JCR requested information on initiatives and funding for diabetes and obesity in the State. This update will discuss that report.

Study on Sickle Cell Disease: The 2016 JCR requested information on sickle cell disease infusion center models. This update will discuss the findings from the study

M00F03
Prevention and Health Promotion Administration
Department of Health and Mental Hygiene

Operating Budget Analysis

Program Description

The mission of the Prevention and Health Promotion Administration (PHPA) is to protect, promote, and improve the health and well-being of Marylanders and their families through the provision of public health leadership and through community-based public health efforts in partnership with local health departments, providers, community-based organizations, and public- and private-sector agencies.

PHPA accomplishes this by focusing, in part, on the prevention and control of infectious diseases, investigation of disease outbreaks, protection from food-related and environmental health hazards, and helping impacted persons live longer, healthier lives. Additionally, the administration works to assure the availability of quality primary prevention and specialty care health services with special attention to at-risk and vulnerable populations. Finally, the administration aims to prevent and control chronic diseases, engage in disease surveillance and control, prevent injuries, provide health information, and promote healthy behaviors.

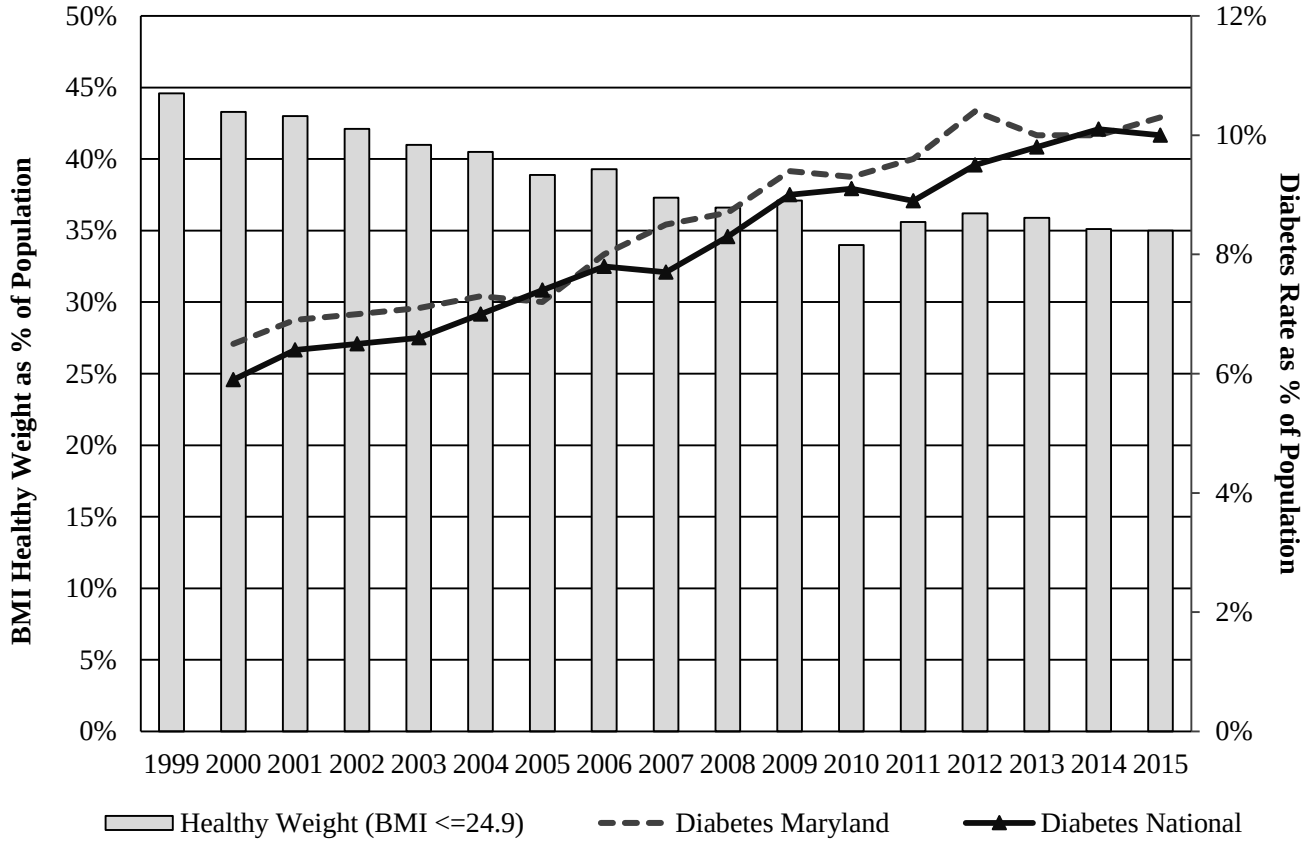
Performance Analysis: Managing for Results

1. Marylanders at a Healthy Weight Decrease, Diabetes Rate Increases

The Department of Health and Mental Hygiene (DHMH) set a goal to have 36.6% of adult Marylanders not considered overweight or obese by 2017 and 33.9% by 2020 as a Healthy People Goal. In calendar 2015, 35.0% of all Marylanders were considered not overweight or obese (a body mass index equal to or less than 24.9), a slight decrease from calendar 2014. As **Exhibit 1** shows, the percentage of Marylanders at a healthy weight declined steadily until 2010, increased in 2011 and 2012, and has since decreased.

Obesity increases risk of chronic diseases such as diabetes, hypertension, high blood cholesterol, coronary heart disease, stroke, arthritis, and some cancers (breast, colorectal, endometrial, and kidney). From calendar 2000 to 2017 the percentage of Marylanders with diabetes increased from 6.5% to 10.3%.

Exhibit 1
Rate of Individuals at a Healthy Weight and Rate of Diabetes
Calendar 1999-2015



BMI: body mass index

Source: Centers for Disease Control and Prevention

Among the Maryland diabetic population, comorbidities such as high blood pressure, high cholesterol, obesity, and smoking increase mortality, complications, hospitalization, and cost of treatment. Although diabetes is widely associated with old age, the older, working-age population (ages 50 to 64) represent the fastest growing diabetic group in Maryland. Additionally, many have diabetes and may not know it or have been diagnosed with prediabetes, an elevated blood sugar level that greatly raises their risk of developing Type 2 diabetes. The Centers for Disease Control and Prevention (CDC) notes that 9 of 10 adults who have prediabetes do not know that they have the condition. In 2014, only 10.5% of Marylander adults (approximately 408,000) reported that a health care provider told them they have prediabetes (or borderline) diabetes. Without proper prevention and management these individuals may add to the State's increasing diabetic population.

The cause of Type 2 diabetes is largely unknown, but genetics and lifestyle play roles. Type 2 diabetes has been linked to obesity, genetic risk factors, and inactivity. A growing body of research shows that sugary beverages – because they provide all of their calories from sugar in liquid form – are uniquely harmful. Liquid sugar is more easily absorbed, leading to spikes in blood sugar that can overwhelm the body and lead to the transformation of sugar into fat in the liver, which contributes directly to the development of Type 2 diabetes.

As sugar joins cigarettes and alcohol as a substance implicated in rising health care and other costs, more governments are creating disincentives to decrease consumption of sugar-sweetened beverages. Maryland has made a substantial reduction in smoking through both cigarette taxes and funding spent on education and prevention efforts through the Cigarette Restitution Fund (CRF). In addition to creating a disincentive for consumption, taxes on sugar-sweetened beverages (SSB) can generate considerable revenue for the State. **Exhibit 2** shows the tax revenue per year a similar tax on SSBs would create.

Exhibit 2
Revenue Created from Sugar-sweetened Beverage Tax
Calendar 2016

Sugar-sweetened Beverages	Gallons Per Year	Tax Revenues Per Year
Soft Drinks	114,267,723	$146,262,685
Fruit Drinks	36,534,192	46,763,766
Sports Drinks	12,412,861	15,888,463
Ready-to-drink Tea	15,209,888	19,468,657
Energy Drinks	5,627,254	7,202,885
Flavored Water	1,897,052	2,428,226
Ready-to-drink Coffee	1,758,750	2,251,200
Total	**187,707,720**	**$240,265,882**

Note: Tax revenues based on a penny-per-ounce tax. Beverage consumption based on population, pricing, as well as socio-demographic information on the variation in sugar-sweetened beverage consumption.

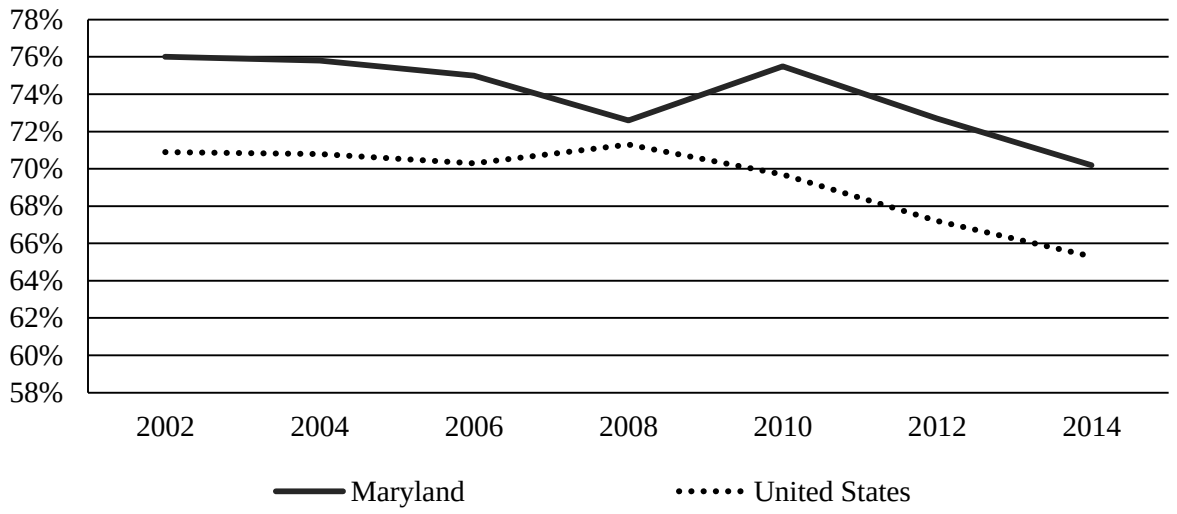
Source: University of Connecticut Rudd Center for Food Policy

2. Adult Visits to the Dentist or Dental Clinic Decline, Following National Trends

According to CDC, nearly one-third of all adults in the United States have untreated tooth decay, or dental caries, and one in seven adults aged 35 to 44 years old has periodontal (gum) disease. Given

these serious health consequences, it is important to maintain good oral health. It is recommended that adults and children see a dentist on a regular basis. Professional dental care helps to maintain the overall health of the teeth and mouth, and provides for early detection of precancerous or cancerous lesions. Maintaining good oral health by using preventive dental health services is one way to reduce oral diseases and disorders. **Exhibit 3** shows the percentage of adults who have visited a dentist or dental clinic within the past 12 months.

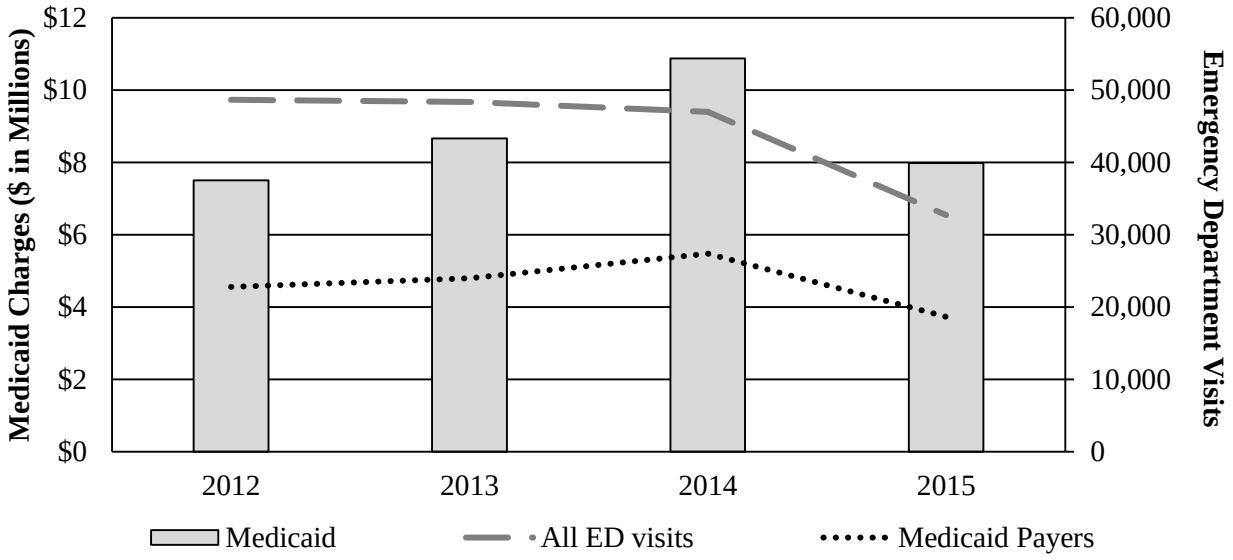
Exhibit 3
Adult Visits to the Dentist or Dental Clinic
Calendar 2002-2014
(% of All Adults)



Source: Department of Health and Mental Hygiene – Office of Vital Statistics

In calendar 2014, 70.2% of Maryland adults had visited a dentist, greater than the 65.0% of adults nationally, although lower than previous years. While visits are decreasing, dental-related emergency department (ED) visits have remained high. **Exhibit 4** shows dental ED visits from calendar 2012 to 2015. Statewide there were approximately 49,000 dental ED visits in 2012 and 2013. This decreased slightly in 2014. However dental ED visits for Medicaid enrollees increased, especially in 2014, likely reflecting the growth in Medicaid enrollment under the Affordable Care Act. Consequently, charges to Medicaid increased to over $10 million in 2014 for ED dental visits.

Exhibit 4
Emergency Department Dental Visits – Medicaid Charges
Calendar 2012-2015



ED: Emergency Department

Note: The 2015 data only includes the first three-quarters of the year.

Source: Health Services Cost Review Commission

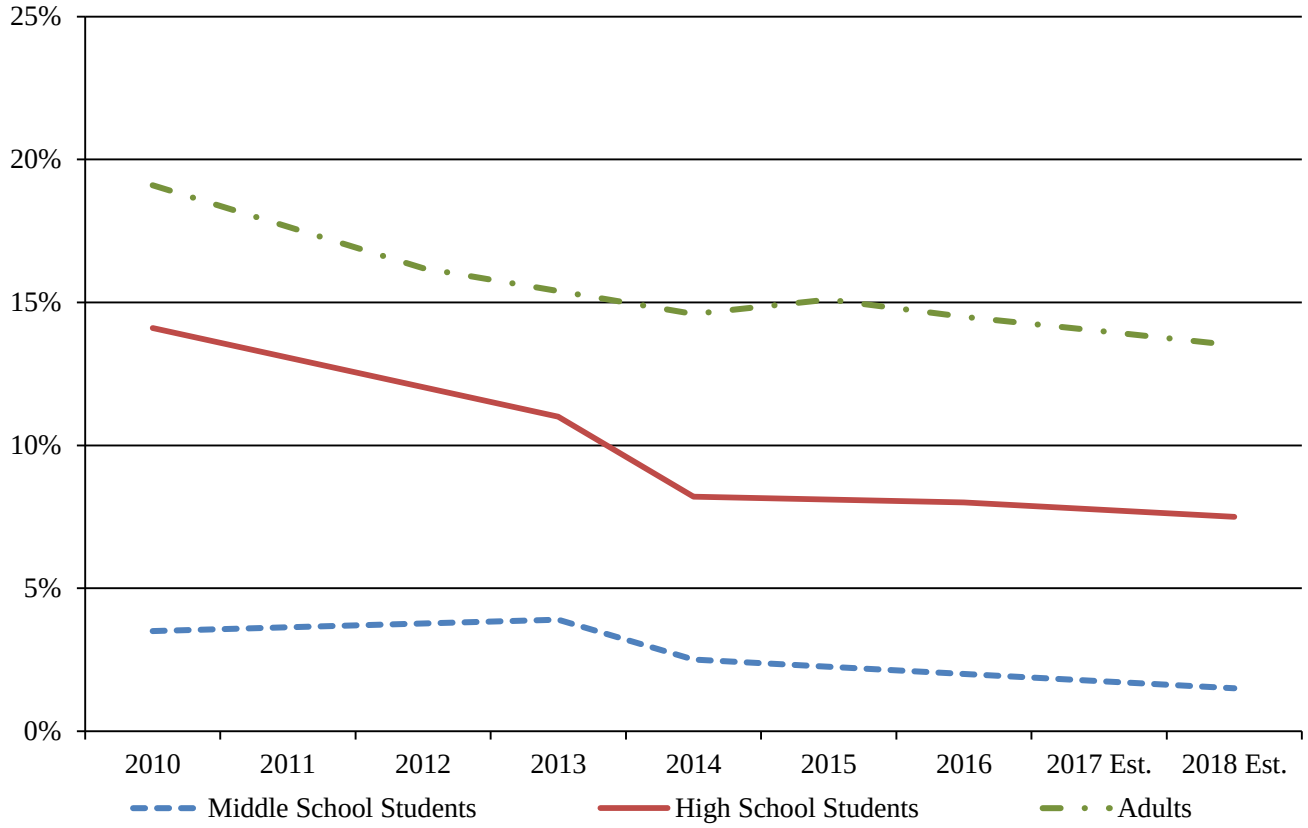
Currently, the department's Office of Oral Health maintains the expansion of dental public health capacity for low-income, disabled, and Medicaid-eligible population. However, in some areas of the State, access to preventative dental care still remains limited. Additionally, a large number of adults lack dental insurance and many have no plan in place to pay for dental care once they retire. For most adult Medicaid enrollees, with the exception of pregnancy, preventative dental coverage is not available except as provided voluntarily by Managed Care Organizations (MCO). Individuals without dental coverage are reliant on a grant-funded safety net of local health departments, federally qualified health centers, and hospitals.

3. Tobacco Use Continues to Decrease

The mission of the Tobacco Use Prevention and Cessation Program is to reduce the use of tobacco products and to reduce the burden of tobacco-related morbidity and mortality in the State. One of the goals of the program is to reduce the proportion of Maryland youth and adults who currently smoke cigarettes. Surveys funded with CRF revenue are intended to track smoking preferences and

usage among Marylanders. As shown in **Exhibit 5**, the prevalence of cigarette smoking has decreased for all ages in 2016.

Exhibit 5
Tobacco Usage Rates
Calendar 2010-2018 Est.

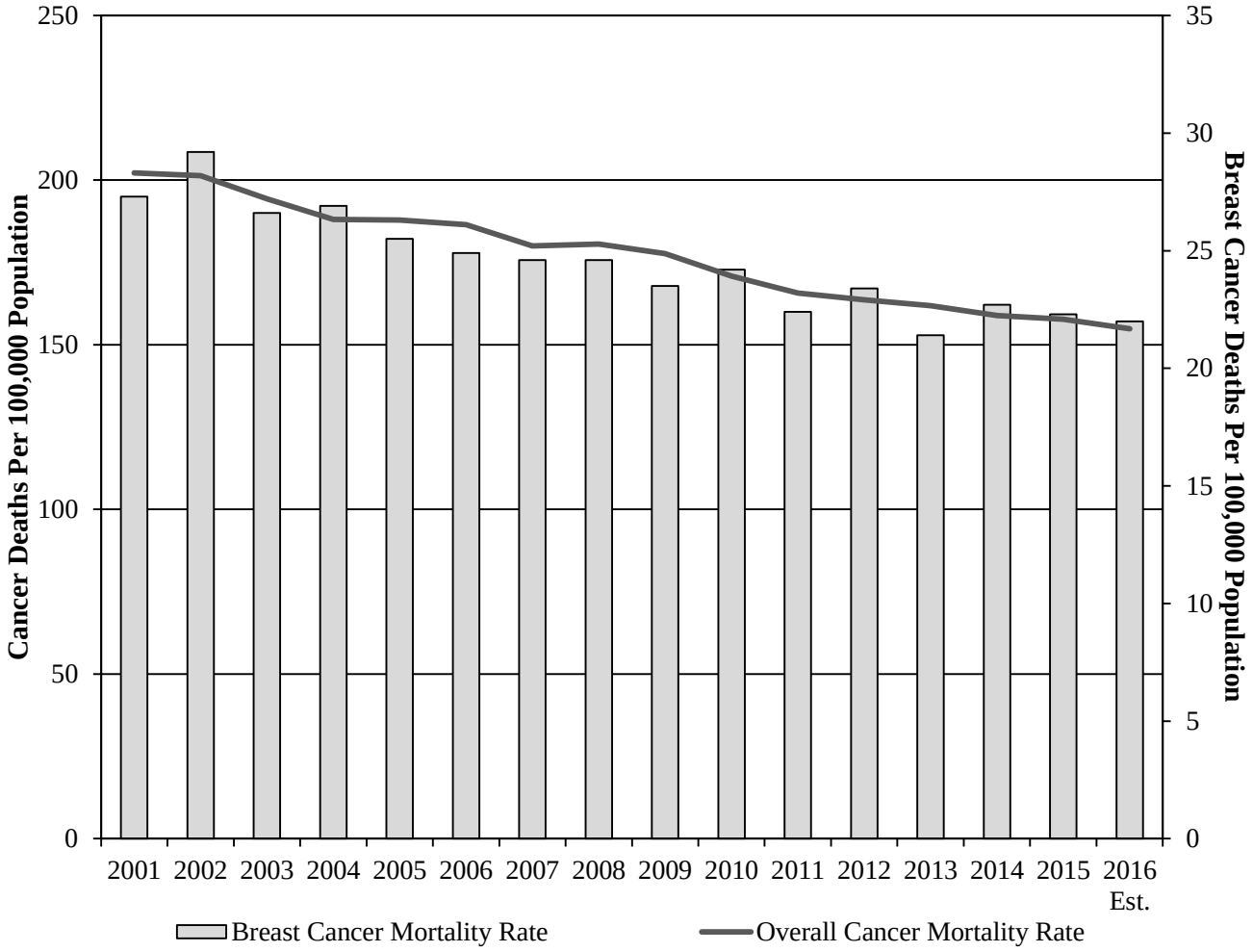


Source: Department of Health and Mental Hygiene

4. Cancer Mortality Rates Continue to Improve

One of the main functions of the Cancer Prevention, Education, Screening, and Treatment Program is to fund community-based programs that prevent, detect, and treat cancer. The mission of the program is to reduce the burden of cancer among Maryland residents by reducing overall cancer mortality in the State. **Exhibit 6** shows that there has been a steady decline in both the overall cancer mortality rate and the breast cancer mortality rate in Maryland. The cancer programs within the CRF target colorectal cancer and cancers associated with tobacco use.

Exhibit 6
Cancer Mortality Rates
Calendar 2001-2016 Est.



Source: Department of Health and Mental Hygiene

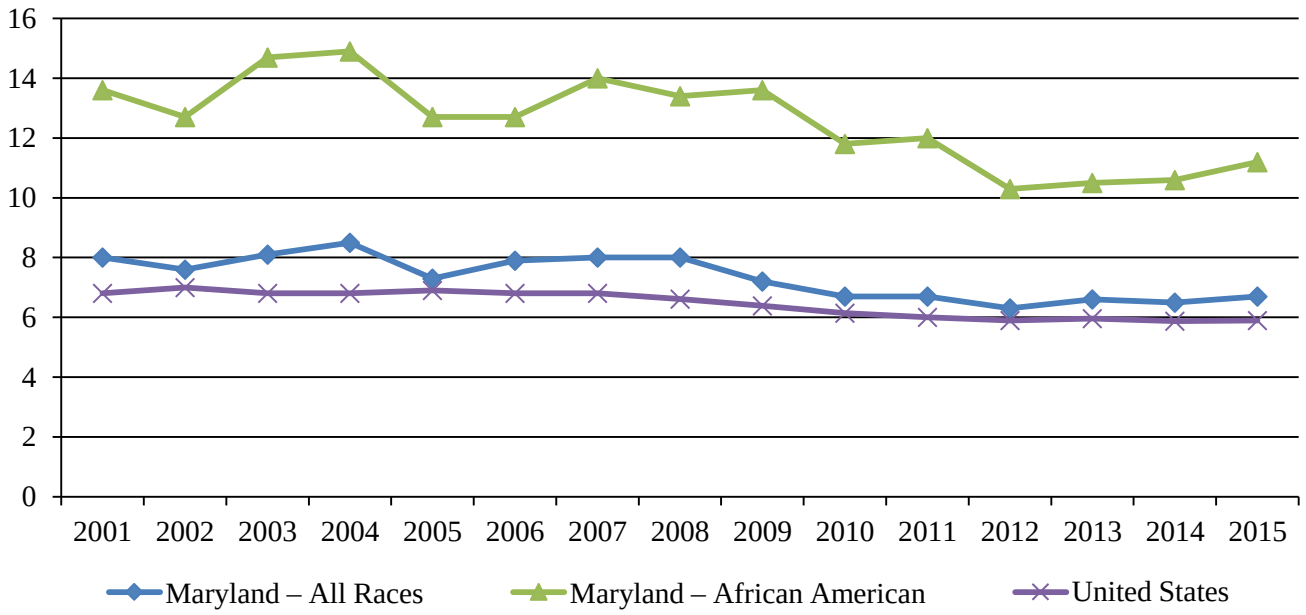
5. Infant Mortality Rates Increase Slightly for All Races

The Maternal and Child Health Bureau within PHPA is charged with reducing infant mortality and promoting the health and well-being of all women and children. Infant mortality rates refer to the number of deaths under age one per 1,000 live births and are used to indicate the total health of populations in the United States and internationally. During the second half of the twentieth century,

infant mortality rates in the United States fell from 29.2 to 6.9 per 1,000 live births, a decline of 76%. Mirroring the national trend, Maryland's infant mortality rate decreased 23% during the 1990s due to improved access to preconception, prenatal, and family planning services. Also contributing to the decline was the development of hospital perinatal standards, high-risk consultation, and community-based perinatal health improvements.

Maryland has made steady progress to reduce its infant mortality rate, reaching a low of 6.3 in calendar 2012 (the lowest rate ever recorded in Maryland), as shown in **Exhibit 7**. Following national trends, Maryland's African American infant mortality rate has consistently been higher than other races. This rate has generally declined in the past several years – driving the overall reduction in the infant mortality rate – but has slightly increased over the last three years.

Exhibit 7
Infant Mortality Rates
Calendar 2001-2015



Source: Department of Health and Mental Hygiene; Office of Vital Statistics

Historically, the infant mortality rate has been much higher for African Americans than for Whites. While the rate rose slightly for all races in 2015, it has been increasing at a higher rate for African Americans.

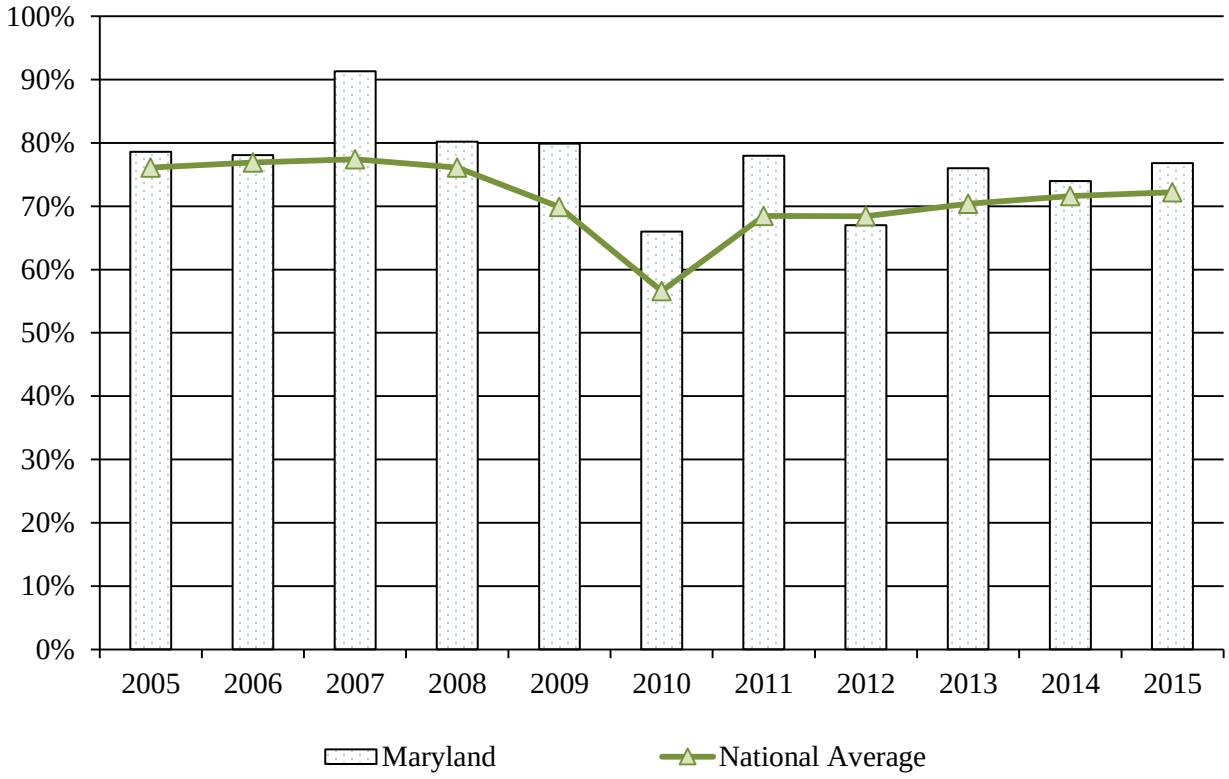
5. Childhood Vaccination Rates Increase, Remains Above National Average

As shown in **Exhibit 8**, 77% of children in Maryland received the typical coverage of vaccinations in calendar 2015, which is above the national average of 72%. Between calendar 2006 and 2007, the rate of immunizations jumped 13 percentage points, although, reasons for this increase were unclear. In calendar 2008, the vaccination rate returned to historic levels. Low points in calendar 2010 and 2012 resulted, in both cases, from nationwide vaccine shortages. Maryland's childhood vaccination rates have generally remained slightly above national rates.

Maryland is able to keep its vaccination rates relatively high for several reasons. First, the State allows parents to opt out of vaccinating toddlers for medical or religious reasons but not for philosophical reasons. Also, DHMH operates the Maryland Vaccines for Children Program, which works with 850 providers at 1,000 public and private practice vaccine delivery sites to provide all routinely recommended vaccines free of cost to children 18 years old or younger who are:

- Medicaid eligible;
- uninsured;
- Native American or Alaskan Native; or
- underinsured.

Exhibit 8
Children, Ages 19 to 35 Months, with Up-to-date Immunizations
Calendar 2005-2015



Source: Department of Health and Mental Hygiene

6. Syphilis Rates Remain High, While Chlamydia Rates Decrease

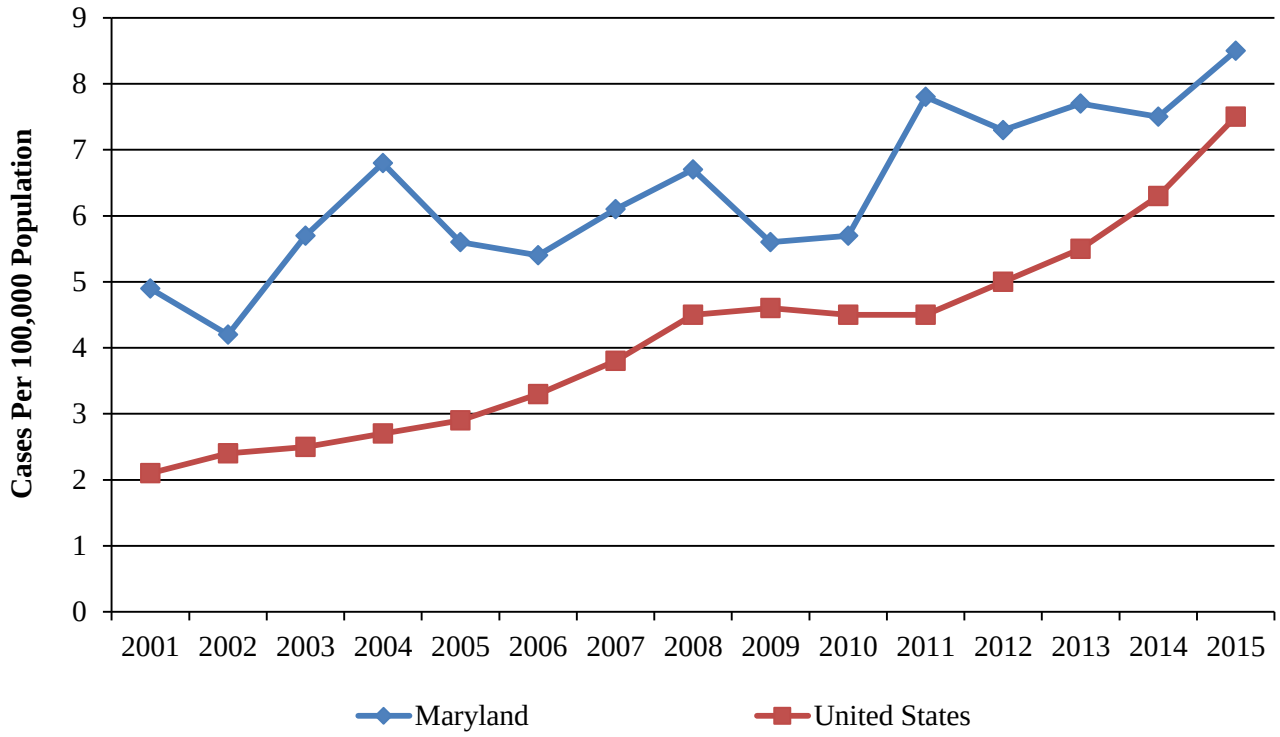
Syphilis Infection Rates

PHPA is charged with preventing and controlling the transmission of infectious diseases, including sexually transmitted infections (STI). The administration has developed initiatives to reduce the spread of STIs, with an emphasis on at-risk populations, such as economically disadvantaged and incarcerated populations. Syphilis continues to be a major concern in the State, with the rate of infection in Maryland among the highest in the nation. Untreated syphilis in pregnant women can result in infant death in up to 40% of cases. In addition to its primary effects, syphilis presents public health concerns for its role in facilitating transmission of HIV.

Exhibit 9 shows syphilis rates in Maryland compared with the national average. In calendar 2015, CDC reported a statewide infection rate of primary and secondary syphilis in Maryland

of 8.5 cases per 100,000 population. The primary and secondary stages are curable, yet extremely contagious. If left untreated, the disease may progress into the tertiary stage, which may not be curable. This rate, driven by high primary and secondary syphilis rates in Baltimore City (34.0 cases per 100,000 population), is one of the highest in the nation (tenth).

Exhibit 9
Rates of Primary/Secondary Syphilis
Calendar 2001-2015



Source: Department of Health and Mental Hygiene; Centers for Disease Control and Prevention

Syphilis rates increased from 6.3 to 7.5 nationally, a 19% increase. CDC has indicated that syphilis remains a major health problem, with increases in rates persisting among men who have sex with men (who account for a majority of all primary and secondary syphilis cases). Cases that involve men who have sex with men have been characterized by high rates of HIV co-infection. While the rate is high among men who have sex with men, nationally, the rate increased 19% for men and 27% for women. These increases among women are of particular concern because congenital syphilis cases tend to increase as the rate of primary and secondary syphilis cases among women increases.

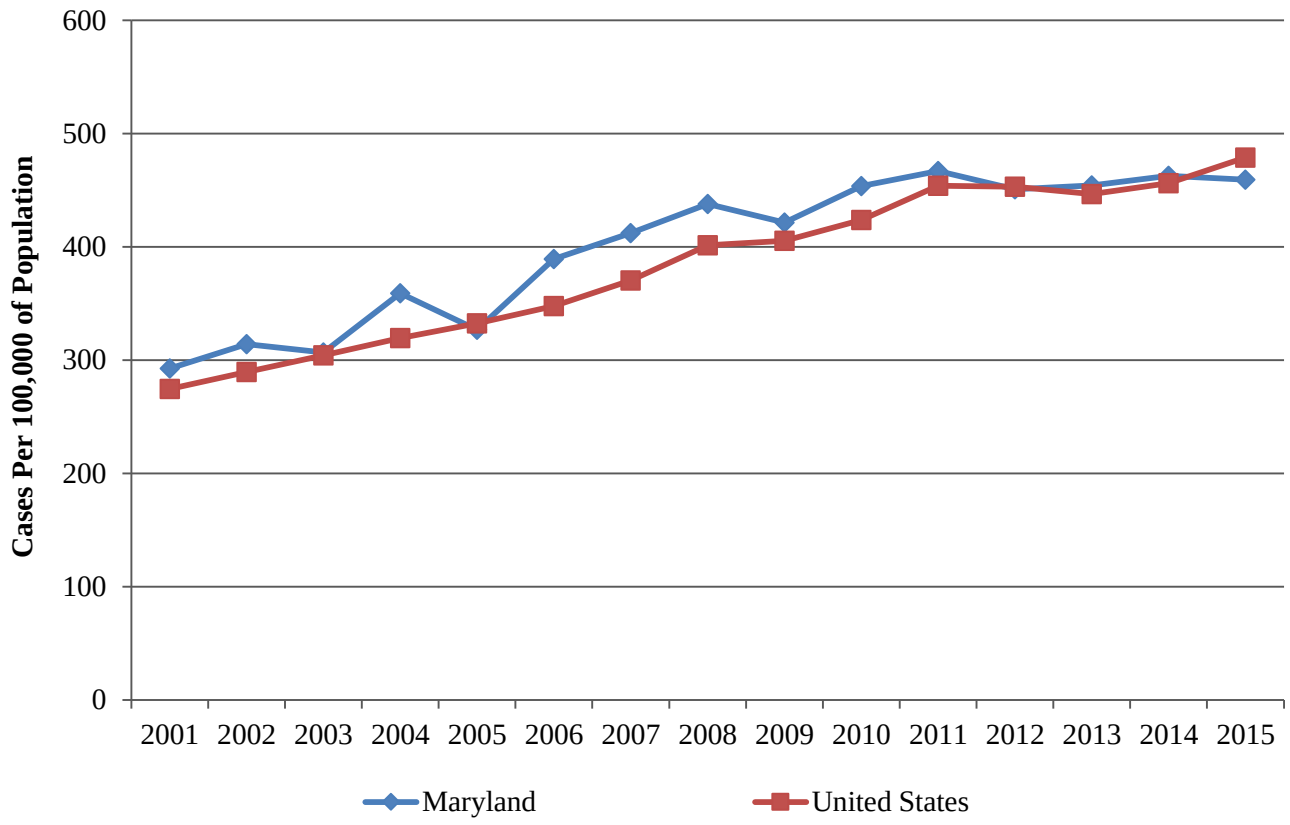
Antibiotic resistance also contributes to an increase in sexually transmitted diseases. The World Health Organization has issued new guidelines for the treatment of chlamydia, syphilis, and gonorrhea

in response to the growing threat of antibiotic resistance. These STIs are generally curable with antibiotics. However, they often go undiagnosed and are becoming more difficult to treat, with some antibiotics now failing as a result of misuse and overuse. This is particularly true for gonorrhea.

Chlamydia Infection Rates

As shown in **Exhibit 10,** in calendar 2015, chlamydia rates statewide decreased slightly, falling below the national average. Consistent with national trends, chlamydia rates for females are two and a half times greater than those for males. Rates are driven by high rates among 15- to 24-year olds, where rates for females are three times greater than those for males. Among both male and female 15- to 24-year olds, rates among the African American population are nearly six times as high as those for Whites.

Exhibit 10
Rate of Chlamydia
Calendar 2001-2015



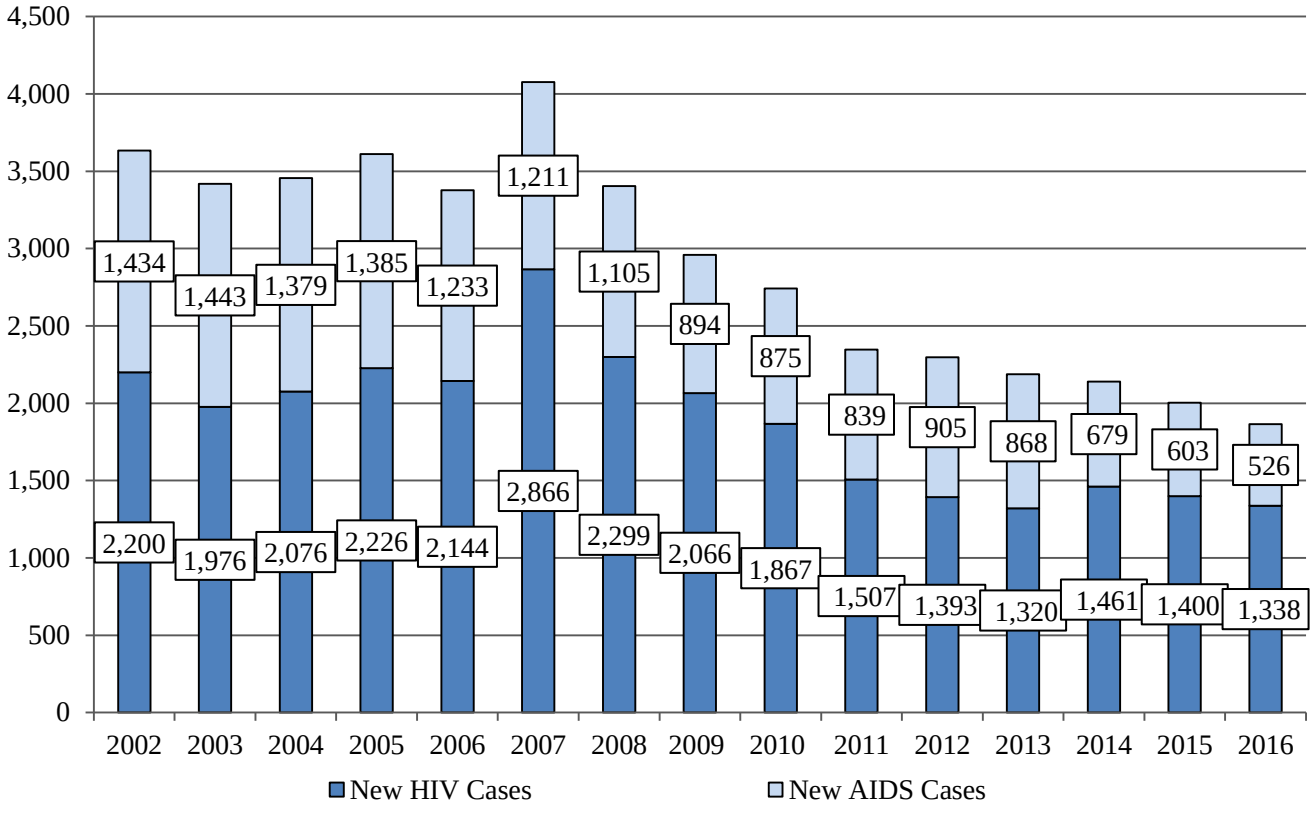
Source: Department of Health and Mental Hygiene; Centers for Disease Control and Prevention

In Baltimore City, where rates for all STIs are the highest in the State, the Baltimore City Health Department receives funding directly from CDC to respond to STIs. Among other activities, Baltimore City has an active outreach program to find and test high-risk individuals, including commercial sex workers. It also has an STI clinic that provides free testing and treatment as well as school-based clinics that test for chlamydia and gonorrhea.

7. HIV and AIDS Cases, High among States, Continue to Decline

Exhibit 11 details the continued decline in newly reported cases of HIV and AIDS in Maryland. As the chart demonstrates, after seeming to stall in calendar 2012, that decline has since continued.

Exhibit 11
Incidence of New HIV and AIDS in Maryland
Calendar 2002-2016 Est.



Source: Department of Health and Mental Hygiene; Centers for Disease Control and Prevention

Despite the downward trend, the number of newly reported HIV cases in Maryland remains high compared with other states. According to the most recent national comparison conducted by CDC (based on calendar 2015 data), Maryland had the fourth highest diagnoses of HIV infection. Enrollment in the State's two major programs related to HIV/AIDS, the Maryland AIDS Drug Assistance Program (MADAP) and MADAP-Plus, is stable.

Fiscal 2017 Actions

Proposed Deficiency

There is one proposed negative deficiency of $7.5 million in general funds to restructure operational grant funding to the University of Maryland Medical System (UMMS). This funding is intended to ease the transition to the new regional medical center in Prince George's County. The reduction leaves $7.5 million for fiscal 2017 operating support.

Section 20 Position Abolitions

The fiscal 2017 budget bill contained a section that directed the Executive Branch to abolish 657 positions and achieve a savings of $25 million, including $20 million in general funds and $5 million in special funds. This agency's share of the reduction is 4 positions and approximately $7,538 in special funds. The 4 positions include 1 administrative specialist, 2 research statisticians, and 1 health policy analyst. These positions were federally funded and the agency is working to contract the position through the Maryland Institute for Policy Analysis and Research (MIPAR) in order to utilize the funding.

Proposed Budget

As shown in **Exhibit 12**, after adjusting for a fiscal 2017 deficiency appropriation, a contingent reduction, and a back of the bill reduction, the fiscal 2018 allowance increases by $14 million from the fiscal 2017 working appropriation, primarily due to an increase in HIV State rebates and an increase in a grant to the Prince George's Regional Medical Center. General funds and federal funds increase by $7 million (15.6%) and $8 million (3.9%), respectively. Special funds decrease by $2 million (-1.7%), while reimbursable funds increase by $861,000 (34.8%).

Exhibit 12
Proposed Budget
DHMH – Prevention and Health Promotion Administration
($ in Thousands)

How Much It Grows:	General Fund	Special Fund	Federal Fund	Reimb. Fund	Total
Fiscal 2016 Actual	$38,719	$104,600	$182,146	$6,355	$331,820
Fiscal 2017 Working Appropriation	45,173	113,967	207,222	2,476	368,839
Fiscal 2018 Allowance	52,208	112,017	215,226	3,337	382,788
Fiscal 2017-2018 Amount Change	$7,035	-$1,950	$8,005	$861	$13,949
Fiscal 2017-2018 Percent Change	15.6%	-1.7%	3.9%	34.8%	3.8%

Where It Goes:

Personnel Expenses	
Workers compensation	$183
Turnover adjustments	82
Other fringe benefit adjustments	-79
Employee and retiree health insurance	-311
Retirement contributions	-359
Regular earnings and other compensation	-940
HIV/AIDS Programs	
HIV State rebates (special funds) fund prevention, surveillance, and care services	6,347
HIV services (federal funds) fund clinical and academic programs	2,060
HOPWA (federal funds)	323
Testing and linkage to HIV care (federal funds)	-665
HIV prevention services (primarily federal funds)	-1,047
Other Infectious Disease and Environmental Health	
Immunizations and vaccines for children (federal funds)	1,875
Epidemiology and lab capacity (federal funds)	903
Immigrant health (reimbursable funds)	872
Emerging Infections Program (federal funds)	469
Food protection (general funds)	115
Ebola disease monitoring (federal funds)	-350
Family Health and Chronic Disease	
Zika surveillance and intervention (federal funds)	400
Children's medical services (federal funds)	371
Abstinence education (federal funds)	290

Where It Goes:	
Oral Health and Chronic Disease Collaborative Model (federal funds)	250
Home visiting (federal funds)	188
Primary Care Office transfer to OPHI	-70
Medical daycare centers (federal funds)	-150
State Loan Repayment Plan transfer to OPHI (federal funds)	-400
Maryland Cancer Fund (special funds)	-425
Rural Health transfer to OPHI (primarily general funds)	-582
WIC program (federal funds)	-2,885
Other Changes	
Prince George's Hospital Grant (general funds)	7,500
Other	16
Total	**$13,949**

DHMH: Department of Health and Mental Hygiene
HOPWA: Housing Opportunities for People with AIDS
OPHI: Office of Population Health Improvement
WIC: Women, Infants, and Children

Note: Numbers may not sum to total due to rounding.

Contingent Reduction

A contingent reduction of $15 million is included in the fiscal 2018 budget bill to restructure operational grant funding to the Board of Directors of UMMS to assist in the transition to a new Prince George's County Regional Medical System.

As shown in **Exhibit 13**, Chapter 13 of 2016 provided for up to $70.0 million of operating support between fiscal 2017 and 2021. The Budget Reconciliation and Financing Act (BRFA) still provides $70.0 million between fiscal 2017 and 2022, but pushes the State's support into the future.

Exhibit 13
Operating Support Provided to Prince George's Hospital System
Fiscal 2017-2022
($ in Millions)

	2017	2018	2019	2020	2021	2022	Total
Fiscal 2017 Appropriation and Chapter 13 of 2016	$15	$30	$15	$5	$5	-	$70.0
Fiscal 2018 Budget and BRFA of 2017	$7.5	$15	$15	$15	$15	$2.5	$70.0

BRFA: Budget Reconciliation and Financing Act

Note: Chapter 13 committed the State to $15.0 million to be provided in 2018 or $20.0 million if a grant of $15.0 million was not provided in a fiscal 2016 deficiency appropriation. No deficiency appropriation was provided in fiscal 2016.

Source: Department of Legislative Services

The operating funds budgeted support the current Prince George's Hospital System that is maintaining operations until the new regional medical center is built. The current system is tasked with maintaining investments in quality while replacing aging capital equipment. If operational improvements and savings are not achieved ($16 million in fiscal 2017 and rising to over $50 million by 2021, and anticipated levels of State and local support are not provided as anticipated under current law, the system projects operating losses. Based on data through the first six months and even with the full level of operating support that was expected from the State in fiscal 2017 ($15 million), the system may struggle to end the fiscal year at an operating profit.

Across-the-board Reductions

The fiscal 2018 budget bill includes a $54.5 million (all funds) across-the-board contingent reduction for a supplemental pension payment. Annual payments are mandated for fiscal 2017 through 2020 if the Unassigned General Fund balance exceeds a certain amount at the close of the fiscal year. This agency's share of these reductions is $55,000 in general funds, $6,000 in special funds, and $80,000 in federal funds. This action is tied to a provision in the BRFA of 2017.

Personnel Expenses

Personnel expenses for the agency decrease by $1.4 million over the fiscal 2017 general fund appropriation, primarily due to a decline in regular earnings. Additionally, the Office of Rural Health and Primary Care Office were transferred to the Office of Population Health Improvement. Other major personnel changes include a decrease of $311,000 for employee and retiree health insurance, $359,000 for employee retirement, and an increase of $183,000 for workers compensation.

HIV Programs

Funding for HIV programs increases by over $7.0 million. Major changes include funding authorized by Chapter 384 of 2015, which expanded the authorized use of pharmaceutical rebates to include all Ryan White Part B covered services, including outreach services and medical transportation. In fiscal 2018, PHPA will use the funding for clinical academic programs at the University of Maryland and local health departments, an increase of $2.1 million. Additionally, in calendar 2016, the agency created a State-only rebate fund that was established with an initial investment of $100,000 of general funds in fiscal 2016 and that has since generated special fund rebate dollars to be used for State HIV services. In fiscal 2018, $6.4 million from this fund will support a range of HIV prevention, surveillance, and care activities including outreach to migrant farm workers, pre-exposure prophylaxis, and syringe services.

There is also a $1 million decrease in HIV prevention services due to aligning funds with actuals. This program funds HIV counseling and testing services, HIV partner services, health education/risk reduction, capacity building, minority outreach, public information, program evaluation, community leader education, and community prevention planning activities.

Other Infectious Disease and Environmental Health Programs

Funding for immunizations and vaccines for children increases in the fiscal 2018 budget by $1.9 million in federal funds for maintenance of the immunization registry system. The support includes standard product upgrades, software patches, and database design consultation due to an increase of children financially eligible for the program and an increase in clinical exams and hospitalizations for this population. The epidemiology and laboratory capacity program increases by $903,000 in federal funds, primarily to contract with MIPAR to provide staff. The funds, in addition to those in the Zika program discussed in the next section, will fund 20 positions. Of the 20 positions, 11 positions are dedicated to preventing the spread of Zika and 2 positions are for increasing HPV (Human papillomavirus) vaccine coverage. An additional increase of $872,000 in federal funds in fiscal 2018 is to support the completion of health assessments of new refugees, provide operational support for refugee health programs in local health departments, and provide a contractual refugee health educator to help educate newly arrived humanitarian immigrants in navigating the health care system, preventive health, and other population-specific health issues.

Other significant changes include an increase of $469,000 for the emerging infections program for the investigation of cases of invasive bacterial diseases and a decrease of $350,000 for Ebola disease monitoring.

Family Health and Chronic Disease Programs

The fiscal 2018 budget includes an additional $400,000 in federal funds for Zika surveillance and intervention activities. This includes $207,000 to fund MIPAR positions that will collaborate with the Birth Defects Program Chief and Zika Pregnancy Registry Coordinator to track the medical outcomes and coordinate referral services for children and pregnancies with a positive or inconclusive

Zika virus test, and $164,000 for DHMH to work with the Chesapeake Regional Information Systems (CRISP) to expand their current work with hospital admission and discharge data sets to ensure rapid identification to Zika-affected newborns. In addition, it is expected that Zika-affected newborns will require high levels of follow up and the current CRISP query portal offers providers a comprehensive view of a patient's medical history, including clinical data from an array of sources across Maryland.

Funding for children's medical services increases $371,000 in federal funds as more children become eligible. Funding for abstinence education increases by $290,000 in federal funds to fund abstinence education in local health departments and community-based organizations providing abstinence education programs.

The budget also includes $250,000 in federal funds for an oral health and chronic disease collaborative model. Of this amount; $88,000 will support salary and administrative costs for the Water Fluoridation Program, School-based/linked Dental Program, and community health education and outreach at the University of Maryland; and $35,000 will support local health departments.

Funding for the Special Supplemental Food and Nutrition Program (WIC) falls in the budget by $2.8 million, primarily reflecting a reduction in the average monthly food package from $64.10 to $62.21 for 143,000 participants.

Issues

1. The Cost of the Gun Violence Epidemic

In calendar 2015, there were 445 firearm-related homicides and 707 deaths from injuries related to firearms in Maryland, increasing from 245 and 535 in calendar 2014, respectively. Of these, 301 of the 445 firearm-related homicides occurred in Baltimore City. Of the 445 firearm-related homicides in 2015, nearly 90% of the victims were African American, although they make up only 29% of the population. In Baltimore City, in calendar 2015, 278 of the 301 homicide victims were African American men. Young African American men, in particular, are most likely to fall victim to gun violence homicides. The rate is highest among 18- to 25-year olds, followed by 26- to 34-year olds.

Financial Costs of Gun Violence

Nearly one of every three people struck by gunfire in Baltimore dies. While the number of fatal shootings in Baltimore have declined slightly in 2016, total shootings have continued to increase, as shown in **Exhibit 14.**

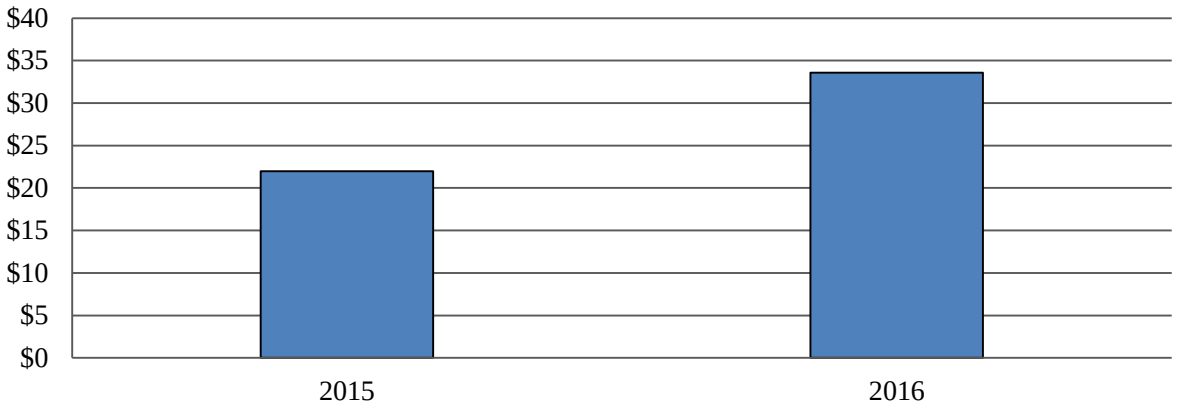
Exhibit 14
Baltimore City Shootings
Calendar 2012-2016

	2012	2013	2014	2015	2016
Non-fatal Shootings	369	402	370	634	667
Fatal Shootings	181	189	160	301	275
Total Shootings	**550**	**591**	**530**	**935**	**942**

Source: Baltimore City State's Attorney Office

There are societal costs associated with gun violence. For example, allostasis, the physiological consequence of chronic exposure to stress, contributes to a number of adverse health effects including increased cortisol levels, obesity, hypertension, and heart disease. In addition to societal costs associated with firearm-related homicides, there are significant quantifiable health care costs. **Exhibit 15**, for example, shows total hospital costs for inpatient and outpatient charges due to injuries from guns. From calendar 2015 to 2016, total costs increased from $22 million to $34 million, more than a 50% increase. Three hospitals – University of Maryland Medical Center, Prince George's Hospital System, and Johns Hopkins Hospital – make up nearly 70% of total charges. Nearly two-thirds of the costs were charged to Medicaid.

Exhibit 15
Total Hospital Charges for Firearm-related Injuries
Calendar 2015-2016
($ in Millions)

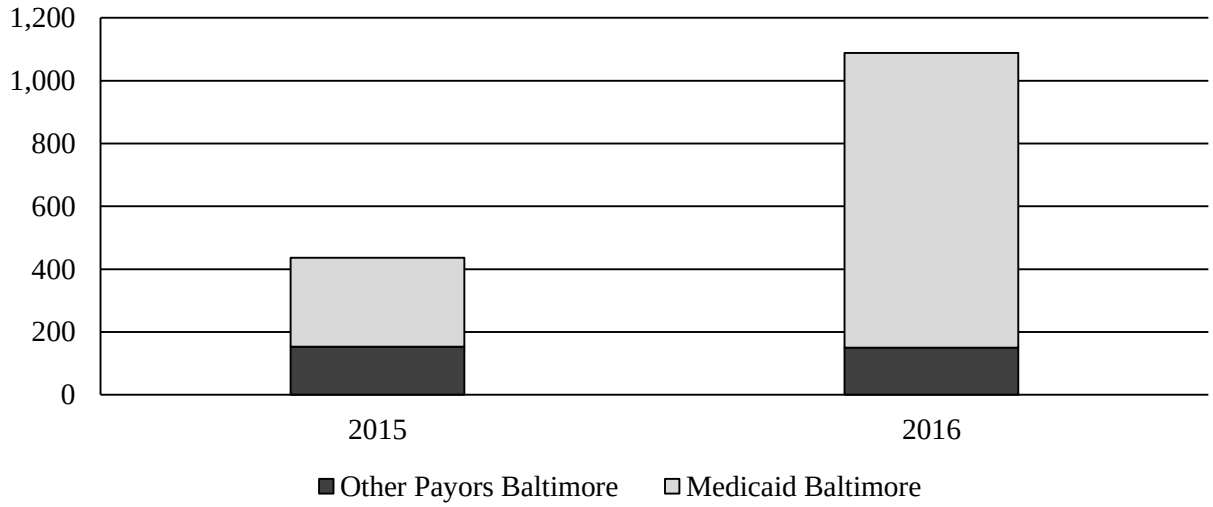


Note: Includes only hospitals with more than $500 in total charges.

Source: Maryland Health Services Cost Review Commission

In calendar 2016, for hospitals reporting more than 10 cases of firearm-related injuries, there were over 1,750 inpatient and outpatient hospital cases. Over 1,000 of these cases stem from gun violence in Baltimore City, as shown in **Exhibit 16**, nearly 90% of which were charged to Medicaid. Baltimore-based MCOs have specifically raised the issue about the increased costs experienced because of gun violence costs that are difficult to readily capture in rates.

Exhibit 16
Baltimore City Hospital Cases for Firearm-related Injuries
Calendar 2015-2016



Note: Includes both inpatient and outpatient charges for hospitals with cases of more than 10.

Source: Maryland Heath Services Cost Review Commission

Some of these charges are for the same individual coming back with additional firearm-related injuries. From calendar 2005 to 2016, the number of individuals shot five to nine times doubled. While Baltimore City has the highest gun violence in the State, they are not the only Maryland locality that has been impacted by this issue. Currently, the agency has no funding or initiatives dedicated to preventing gun violence. **The agency should comment on the role public health agencies should play in addressing gun violence.**

Recommended Actions

1. Concur with Governor's allowance.

Updates

1. Report on Chronic Obstructive Pulmonary Disease Prevention

The 2016 budget bill language in the 2016 *Joint Chairmen's Report* requested information on the current resources being utilized statewide for chronic obstructive pulmonary disease (COPD) prevention. Specifically, it was requested that the report include an evaluation of effectiveness of treatment and prevention strategies currently in place in the State and an investigation of the need for improving the quality and accessibility of existing COPD-related community-based services. The agency submitted the report to the committees on January 20, 2017.

COPD is an umbrella term used to describe progressive lung disease including emphysema, chronic bronchitis, and nonreversible asthma. It is the third leading cause of death in the United States, the fourth leading cause in Maryland, and largely preventable as tobacco use is the primary risk factor for COPD. There is no cure for COPD, but treatment is available to manage symptoms and improve quality of life. In 2015, an estimated 284,835 adult Maryland residents (6.1%) reported that they have been told that they have COPD, emphysema, or chronic bronchitis. Nationally, this rate is 6.3% of U.S. adults. The COPD-related death rate for U.S. adults aged 25 and older declined from calendar 2000 through 2014 for all genders and races, except for African American women.

The main test for detecting COPD is spirometry where a patient breathes into a tube (spirometer). There are other ways to test for COPD and costs range from $40 to $800, usually covered 80% to 100% by health insurance. Once diagnosed with COPD, patients will commonly work with primary care providers, general internists, or pulmonologists. The treatment options for COPD, in order from least severe cases to most severe cases include:

- self-management education and smoking cessation;
- bronchodilators;
- inhaled corticosteroids;
- pulmonary rehabilitation;
- oxygen; and
- surgery.

For prevention, Maryland has various tobacco-use prevention efforts including a tobacco quitline, an information resource center, and campaigns to increase awareness on services available to Marylanders who are ready to quit. There are also initiatives to eliminate exposure to secondhand smoke, including Chapter 502 of 2007, which prohibited smoking in public places, workplace

initiatives, and statewide smoke-free multi-unit housing. Various community agencies host Chronic Disease Self-Management Programs.

Medicare and Medicaid provide coverage for bronchodilators and oxygen at home. However, recent Medicare reimbursement reductions have led to fewer equipment suppliers providing oxygen support and services to patients. Medicare, Maryland Medicaid, and commercial insurers vary in their coverage of surgical treatments for COPD. Pulmonary rehabilitation, often an outpatient program based in a hospital or clinic, is provided by 1 of the 14 pulmonary rehabilitation centers in 11 different locations in Maryland. Nationally, there is a severe shortage of pulmonary rehabilitation programs. There are three Pulmonary Education programs in Maryland to keep individuals engaged after rehabilitation ends.

Additionally, Maryland has a COPD action plan and a COPD coalition. The action plan includes four sections with specific strategies: data and surveillance; strategies for smoking cessation; strategies for employers, purchasers, and payers; and patient resources and toolkits.

The report concludes that COPD treatment in Maryland reflects the same challenges that face COPD treatment nationally. Treatment is delivered through a complex system of care that varies by the patient's health insurance, geographic location, and economic status. DHMH notes that it is beyond the department's purview to evaluate the effectiveness of COPD treatment or to determine the need for improving the quality and accessibility of existing COPD community-based services. DHMH does not routinely collect data on or perform assessment of clinical treatment strategies for COPD. Determining whether Marylanders have sufficient access to COPD-related community-based services is not currently possible using existing Maryland data collection efforts, tools, and systems.

2. Report on Diabetes and Obesity

The 2016 budget bill language requested information on initiatives and funding for diabetes and obesity in the State. Specifically, it was requested that the report include a detailed analysis of the department's (1) current initiatives for addressing obesity and diabetes statewide and by county; (2) spending by county on initiatives addressing obesity and diabetes; and (3) identification of potential long-term dedicated funding streams for programs aimed at reducing diabetes and obesity.

Obesity and diabetes are major contributors to chronic diseases both nationally and in Maryland, and represent significant public health challenges. The report notes that because diabetes and obesity are priorities to the department, the department seeks and submits applications for all relevant federal funding opportunities to address these issues. The department's current obesity-related initiatives are funded through multiple CDC cooperative agreements. During fiscal 2016 and 2017, the department awarded more than $2.57 million to support community obesity-related initiatives and nearly $600,000 to support statewide obesity-related initiatives.

Additional obesity initiatives focus on communities, workplaces, and schools. Participants in the Maryland Women, Infants, and Children program, which serves 100,000 families, receive extensive nutrition education. Additionally, more than 300 worksites have joined the Healthiest Maryland

Businesses worksite wellness program. The department also works with the Maryland State Department of Education to assess local school wellness policies and practices. The Student Healthy Weight Program facilitates communication between pediatricians, parents, and school staff to support elementary students who are severely obese in making lifestyle changes to maintain a healthier weight.

The department awarded $4.81 million in federal funds to community prediabetes and diabetes initiatives, and more than $300,000 to statewide diabetes initiatives. Historically, $100,000 in general funds have been allocated annually to diabetes prevention and control efforts. This funding supports evidence-based programs, including the national diabetes prevention program (DPP), to help prevent diabetes. Between July 2012 and 2015, the CDC reported that 1,270 people in Maryland participated in DPP classes. Of the 1,270 participants, 191 completed at least four sessions. The diabetes self-management program, a six-week program for people with Type 2 diabetes, completed 85 workshops in fiscal 2016, reaching 569 individuals with Type 2 diabetes. The department is working on improving processes in health systems, which include provider practices to report and monitor clinical quality data in order to adopt systems changes to improve diabetes care and outcomes. Additionally, the department created a communication campaign "Power to Prevent Diabetes" to increase awareness of prediabetes and encourage Marylanders to take the CDC Prediabetes Screening Test.

The report concluded that the majority of obesity prevention and diabetes prevention and control initiatives are funded through federal grants, therefore the long-term sustainability is not guaranteed. The department noted that many areas of influence remain that could improve diabetes and obesity outcome. As overweight and obesity are serious and costly concerns in Maryland, systemic and cultural change is needed to make healthy weight the normal weight in the State again.

3. Study on Sickle Cell Disease

The 2016 budget bill language requested information on sickle cell disease (SCD) infusion center models. Specifically, it was requested that DHMH review adult SCD infusion center models and complete an analysis of the feasibility of establishing additional sickle cell infusion centers for adults in the State. The department submitted the report on January 31, 2017.

SCD is a genetic blood disorder where oxygen-carrying red blood cells become distorted into the shape of a sickle. This altered shape can result in a range of complications for patients, including pain crises, which may prompt ED visits, some of which result in hospital admissions. SCD infusion centers are designed to provide rapid and specialized care for SCD pain crises and function as alternatives to EDs. The ED admission rate for SCD patients was highest in calendar 2014, among Black nonHispanic patients, males, patients ages 18 to 44, and Medicaid insured patients. The report notes that ED utilization and reliance can be reduced by increased SCD patient's access to outpatient acute care facilities.

Historically, there have been three models of care for individuals with SCD: (1) the medical home approach (comprehensive care model); (2) the chronic care model in primary care; and (3) disease-specific, multidisciplinary specialty clinics. According to the report, the chronic/primary

care model may not be ideal for patients with SCD, as many family physicians report that they are not comfortable treating this patient population and many patients encounter barriers in finding a primary care physician as they transition from pediatric to adult care. The report excluded the primary care model from the study for this reason.

The report analyzed the feasibility of implementation for the comprehensive care model and the disease-specific, multidisciplinary specialty clinic model. The models analyzed in the report included the Johns Hopkins Sickle Cell Infusion Center (comprehensive care model), which opened in 2008; the Sickle Cell Disease Clinic at Froedtert Hospital in Milwaukee, Wisconsin (multidiscplinary specialty clinic model), which opened in 2011; the Georgia Comprehensive Sickle Cell Center at Grady Health System in Atlanta, Georgia (multidiscplinary speciality clinic model), established in 1984; and the Howard University Center for Sickle Cell Disease (multidisciplinary specialty clinic model), founded in 1972.

The report concluded that a comprehensive infusion center with appropriately trained staff and wraparound services can improve care quality and reduce ED visits by nearly 50%. An in-depth statistical analysis by a health economist would further evaluate cost efficiency and equity concerns, corroborate trends, and provide final recommendations about the feasibility of a new center. The report notes that the health economist input would be needed to determine whether a center could be added to an existing facility, whether a new facility should be built, the projected annual operating costs of a facility, and the appropriate staffing model.

Appendix 1
Current and Prior Year Budgets
DHMH – Prevention and Health Promotion Administration
($ in Thousands)

	General Fund	Special Fund	Federal Fund	Reimb. Fund	Total
Fiscal 2016					
Legislative Appropriation	$35,903	$91,017	$205,562	$2,495	$334,977
Deficiency Appropriation	1,456	0	0	0	1,456
Budget Amendments	1,359	20,846	-18,092	3,860	7,974
Reversions and Cancellations	0	-7,263	-5,324	0	-12,587
Actual Expenditures	**$38,719**	**$104,600**	**$182,146**	**$6,355**	**$331,820**
Fiscal 2017					
Legislative Appropriation	$52,290	$113,948	$206,913	$2,476	$375,626
Budget Amendments	382	21	309	0	712
Working Appropriation	**$52,673**	**$113,967**	**$207,222**	**$2,476**	**$376,339**

DHMH: Department of Health and Mental Hygiene

Note: Does not include targeted reversions, deficiencies, and contingent reductions. Numbers may not sum to total due to rounding.

Fiscal 2016

The budget for the Prevention and Health Promotion Administration (PHPA) closed at $331.8 million, $3.2 million below the original legislative appropriation.

A deficiency appropriation added $1.5 million in general funds for the State share of the certificate of need for the new Prince George's Regional Medical Center.

Budget amendments increased the budget by $8.0 million, increases of $1.4 million in general funds, $20.8 million in special funds, and $3.9 million in reimbursable funds, partially offset by a decrease in federal funds of $18.0 million. Special funds increased by $20.7 million (available from the Maryland AIDS Drug Assistance Program (MADAP) rebates) to cover the cost of providing HIV formulary pharmaceuticals to eligible individuals. Federal funds increased by $286,538, general funds increased by $235,056, and special funds increased by $24,639 to reflect the restoration of the 2% pay reduction. General funds increased by $303,908 to realign fiscal 2016 2% cost containment with the agency's cost containment plan and an additional $125,000 to provide support for children's medical daycare services to reflect legislative priorities. Federal funds increased by $7.2 million including $2.5 million to cover the cost of increased maternal home care, $3.5 million to cover the cost of contracts with local health departments for health disparity measures, $1 million for costs associated with children with special health care needs, and $240,000 for maternal and child health surveillance initiative. Reimbursable funds increase by $3.9 million to reflect funds from the Behavioral Health Administration for Synar Tobacco Enforcement.

One full-time equivalent (FTE) transfer from the Office of Population Health Improvement into Infectious Disease and Environmental Health Services along with the transfer of funds for the Office of Primary Care Services (2 FTEs) and Office of Rural Health (1 FTE) from the Office of Population Health Improvement into Family Health and Chronic Disease Services increased federal funds by $770,040 and general funds by $695,127.

These increases were offset by a reduction of $26.7 million in the federal fund appropriation for HIV care formula grants for HIV services due to special fund MADAP attainment.

At the end of fiscal 2016, approximately $5.3 million of the agency's federal fund appropriation was canceled primarily due to lower than anticipated participation in the Women, Infants, and Children program ($4.8 million). Special funds of $7.3 million were canceled made up primarily of MADAP rebates ($7 million).

Fiscal 2017

To date, the fiscal 2017 legislative appropriation for PHPA has increased by $712,000 ($382,000 in general funds, $21,000 in special funds, and $309,000 in federal funds). Of this amount, $309,000 in federal funds, $203,000 general funds, and $21,000 in special funds relates to the centrally budgeted fiscal 2017 salary increment. General funds increase by an additional $178,958 to realign funding to implement Section 20 of the fiscal 2017 budget bill.

Appendix 2
Object/Fund Difference Report
DHMH – Prevention and Health Promotion Administration

Object/Fund	FY 16 Actual	FY 17 Working Appropriation	FY 18 Allowance	FY 17 - FY 18 Amount Change	Percent Change
Positions					
01 Regular	366.80	419.80	417.80	-2.00	-0.5%
02 Contractual	4.63	6.40	7.70	1.30	20.3%
Total Positions	**371.43**	**426.20**	**425.50**	**-0.70**	**-0.2%**
Objects					
01 Salaries and Wages	$ 32,387,093	$ 39,768,287	$ 38,484,997	-$ 1,283,290	-3.2%
02 Technical and Spec. Fees	248,678	323,051	420,266	97,215	30.1%
03 Communication	613,186	786,002	611,694	-174,308	-22.2%
04 Travel	664,476	631,369	671,822	40,453	6.4%
07 Motor Vehicles	230,428	122,767	189,503	66,736	54.4%
08 Contractual Services	229,950,609	240,314,164	255,061,759	14,747,595	6.1%
09 Supplies and Materials	35,572,118	45,382,509	38,494,663	-6,887,846	-15.2%
10 Equipment – Replacement	142,320	0	129,900	129,900	N/A
11 Equipment – Additional	727,851	358,972	354,921	-4,051	-1.1%
12 Grants, Subsidies, and Contributions	31,140,609	48,519,328	63,366,698	14,847,370	30.6%
13 Fixed Charges	142,434	132,121	142,412	10,291	7.8%
Total Objects	**$ 331,819,802**	**$ 376,338,570**	**$ 397,928,635**	**$ 21,590,065**	**5.7%**
Funds					
01 General Fund	$ 38,718,518	$ 52,673,307	$ 67,262,717	$ 14,589,410	27.7%
03 Special Fund	104,600,002	113,967,454	112,023,184	-1,944,270	-1.7%
05 Federal Fund	182,146,292	207,221,606	215,305,897	8,084,291	3.9%
09 Reimbursable Fund	6,354,990	2,476,203	3,336,837	860,634	34.8%
Total Funds	**$ 331,819,802**	**$ 376,338,570**	**$ 397,928,635**	**$ 21,590,065**	**5.7%**

DHMH: Department of Health and Mental Hygiene

Note: Does not include targeted reversions, deficiencies, and contingent reductions.

Appendix 3
Fiscal Summary
DHMH – Prevention and Health Promotion Administration

Program/Unit	FY 16 Actual	FY 17 Wrk Approp	FY 18 Allowance	Change	FY 17 - FY 18 % Change
01 Administrative, Policy, and Management Systems	$ 107,953,860	$ 134,436,834	$ 145,887,126	$ 11,450,292	8.5%
04 Family Health and Chronic Disease Services	223,865,942	241,901,736	252,041,509	10,139,773	4.2%
Total Expenditures	**$ 331,819,802**	**$ 376,338,570**	**$ 397,928,635**	**$ 21,590,065**	**5.7%**
General Fund	$ 38,718,518	$ 52,673,307	$ 67,262,717	$ 14,589,410	27.7%
Special Fund	104,600,002	113,967,454	112,023,184	-1,944,270	-1.7%
Federal Fund	182,146,292	207,221,606	215,305,897	8,084,291	3.9%
Total Appropriations	**$ 325,464,812**	**$ 373,862,367**	**$ 394,591,798**	**$ 20,729,431**	**5.5%**
Reimbursable Fund	$ 6,354,990	$ 2,476,203	$ 3,336,837	$ 860,634	34.8%
Total Funds	**$ 331,819,802**	**$ 376,338,570**	**$ 397,928,635**	**$ 21,590,065**	**5.7%**

DHMH: Department of Health and Mental Hygiene

Note: Does not include targeted reversions, deficiencies, and contingent reductions.