STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

December 22, 2014

The Honorable Edward J. Kasemeyer
Chair
Senate Budget and Taxation Committee
3 West Miller Senate Office Building
Annapolis, MD 21401-1991

The Honorable Norman H. Conway
Chair
House Appropriations Committee
121 House Office Building
Annapolis, MD 21401-1991

RE: 2014 Joint Chairmen's Report, Page 77, M00F03– Report on Sexually Transmitted Infection Levels

Dear Chair Kasemeyer and Chair Conway:

Pursuant to page 77 of the Joint Chairmen's Report of 2014, the Department of Health and Mental Hygiene (the Department) respectfully submits this report on sexually transmitted infection levels in Maryland. Specifically, it was requested that the Department provide the budget committees with a semi-annual report on the rates of chlamydia, primary/secondary syphilis, HIV, and AIDS in the State, including rate information by age, sex, and race for each sexually transmitted infection. Additionally, it was requested that the Department advise the budget committees of: 1) any programmatic changes made within the Department to improve infection levels, and 2) programmatic, technological, or other changes needed for the Department to be able to accurately report the above-mentioned information on a quarterly basis.

I hope this information is useful. If you have any questions regarding this report, please contact Ms. Allison Taylor, Director of the Office of Governmental Affairs, at (410) 767-6481.

Sincerely,

Joshua M. Sharfstein, MD
Secretary

Enclosure

cc: Laura Herrera Scott, Deputy Secretary, Public Health Services
Michelle Spencer, Director, Prevention and Health Promotion Administration
Donna Gugel, Deputy Director, Prevention and Health Promotion Administration
Allison Taylor, Director, Office of Governmental Affairs

Semi-Annual Report on Sexually Transmitted Infection Rates in Maryland

Maryland Department of Health and Mental Hygiene
October 2014

MARTIN O'MALLEY
Governor

ANTHONY G. BROWN
Lieutenant Governor

JOSHUA M. SHARFSTEIN, MD
Secretary

Table of Contents

Introduction

In response to the 2014 Joint Chairmen's Report, the Department of Health and Mental Hygiene (the Department) has developed this semi-annual report on sexually transmitted infections (STIs), including human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS), in Maryland. This report includes:

1. Rates of chlamydia, primary and secondary syphilis, HIV, and AIDS in the State;
2. For each type of STI, rate information by age, sex, and race;
3. Any programmatic changes made within the Department to improve infection levels; and
4. Programmatic, technological, or other changes needed for the Department to be able to accurately report the above-mentioned information on a quarterly basis.

In this report, HIV prevention activities are frequently described separately from other STI prevention activities. The Department's Center for HIV Prevention and Health Services and Center for HIV Surveillance, Epidemiology and Evaluation focus on HIV, while syphilis and chlamydia fall under the purview of the Center for STI Prevention. Therefore, when this report refers to STIs, it is referring to syphilis and chlamydia, not HIV.

Although this report focuses on State-level activities, it is important to note that Maryland's public health structure is de-centralized, meaning direct clinical services are provided by local health departments according to local need and available resources. In addition to STI clinical service delivery, local health departments provide case management and conduct local outreach to private providers, high-risk populations, local school systems, and the public at large. Baltimore City, in particular, initiates and engages in extensive prevention efforts using their direct funding from the Centers for Disease Control and Prevention (CDC) STI and HIV prevention programs.

I. Rates of STIs and HIV in Maryland

The following two tables show the rates of chlamydia, primary and secondary syphilis, HIV, and AIDS in the State, including rate information by age, sex, and race for each STI.

Table 1. Maryland Chlamydia, and Primary and Secondary (P&S) Syphilis Cases and Rates per 100,000 population, 2012

	Chlamydia		P&S Syphilis	
	No. Cases	Rate	No. Cases	Rate
Maryland (total)	26,534	450.9	431	7.3
Age Group				
13-24	19,433	2,028.1	120	12.5
25-44	6,568	416.1	249	15.8
45-64	447	27.2	61	3.7
65+	17	2.3	1	0.1
Sex at Birth				
Male	7,205	253.0	386	13.6
Female	19,329	636.5	45	1.5
Race/Ethnicity				
Hispanic	942	189.9	12	2.4
Non-Hispanic Black	14,485	846.4	374	21.9
Non-Hispanic White	3,260	101.9	42	1.3
Non-Hispanic Other	435	91.2	2	0.4

Source: Maryland Sexually Transmitted Disease Management Information System

Table 2. Maryland Reported HIV and AIDS Diagnoses, and Living HIV/AIDS Cases and Rates per 100,000 population, 2012, as Reported through 12/31/2013

	HIV Diagnoses 1/1/12-12/31/12		AIDS Diagnoses 1/1/12-12/31/12		Living HIV/AIDS Cases on 12/31/12	
	No. Cases	**Rate**	**No. Cases**	**Rate**	**No. Cases**	**Rate**
Maryland (total)	1,415	28.7	829	16.8	28,978	588.5
Age Group*						
13-24	295	31.0	133	14.0	1,097	115.4
25-44	674	42.7	417	26.4	10,516	666.7
45-64	409	25.0	259	15.9	15,963	977.7
65+	37	4.8	20	2.6	1,402	183.7
Sex at Birth						
Male	1,032	43.7	559	23.7	18,678	791.3
Female	383	14.9	270	10.5	10,300	401.8
Race/Ethnicity						
Hispanic	83	21.4	43	11.1	1,364	351.9
Non-Hispanic Black	1,079	76.5	655	46.4	22,144	1,569.8
Non-Hispanic White	189	6.9	90	3.3	4,345	158.4
Non-Hispanic Other	64	16.7	41	10.7	1,125	294.2

Source: Maryland HIV and AIDS Reporting System
* Age at diagnosis for HIV or AIDS. Age on 12/31/12 for living HIV/AIDS cases.
- Reported HIV diagnoses are reported HIV cases with or without an AIDS diagnosis.
- Reported AIDS diagnoses are reported HIV cases with an AIDS diagnosis.
- Living HIV/AIDS cases are reported HIV cases with or without an AIDS diagnosis and not reported to have died.

II. Current Activities and Programmatic Changes Made to Decrease Infection Rates

The Department's current STI and HIV prevention activities focus on decreasing Maryland's infection rates through: monitoring and surveillance of infection rates and trends over time; offering STI screening; ensuring STI treatment and/or linkage to HIV medical care; educating public and private providers and the general public and; providing technical assistance and professional development and training to local health departments. The Department's core activities in these areas include:

1. Collection, analysis and dissemination of data;
2. Providing partner services for syphilis and HIV and linkage to HIV medical care;
3. Providing access to testing;
4. Promoting STI screening of the general public and targeted high-risk populations through various campaigns; and
5. Collaborating with internal and external partners.

The following programmatic changes are being implemented by the Department or Baltimore City Health Department to decrease STI and HIV infection rates in the State:

1) Initiatives in Baltimore City

Baltimore City rates for chlamydia, primary and secondary syphilis, and HIV and AIDS are highest in the state. As a result, the CDC provides STI and HIV prevention funds directly to the Baltimore City Health Department. Prevention activities in Baltimore City include:

a. Physician outreach: In partnership with Johns Hopkins University, the Baltimore City Health Department provides outreach to private medical practices to increase patient HIV screening and testing in communities with the highest rates of HIV. HIV education kits containing information on infection rates in the communities they serve, how to conduct HIV screening, testing, and counseling, as well as how to bill for these services are distributed to these practices.
b. Increasing private sector screening: The Baltimore City Health Department and Johns Hopkins University are collaborating with a national pharmacy chain to implement STI testing in their stores. This new screening venue would make testing more accessible and appealing to youth as these stores have longer business hours, and do not have the stigma sometimes associated with traditional STI clinics.
c. Increasing hospital screening: Johns Hopkins Hospital Emergency Departments have implemented a large-scale screening program for STIs. In state Fiscal Year 2014, 36,034 tests were provided, identifying 1,725 chlamydia cases and 382 gonorrhea cases.
d. Increasing efficiency of city STI clinics: Recent budget cuts have resulted in reducing Baltimore City Health Department STI clinic hours by 50% at two sites. In an effort to mediate the impact of this reduction, clinicians were consolidated so that only one of the two sites are open each day, and an express testing program was implemented. Express testing allows patients without symptoms and who meet other specific criteria to provide specimens for testing directly to a nurse (instead of seeing a physician or nurse practitioner). These patients receive their results at a later visit. From October 1, 2013 – September 30, 2014, there were 2,345 express visits, which identified and treated 54 cases of gonorrhea and 235 cases of chlamydia. These innovations have allowed for continued provision of services despite reduced funding.
e. Improving efficiency in providing test results: The Baltimore City Health Department is implementing a system to provide automated STI test results. A portal is being developed that will automatically download patient test results to a database on a Baltimore City server. The results will be linked to a username and password that will be given to the patient, along with a phone number to call. When the number is called and the username and password are inputted correctly, a voice on the phone will read the patient their test results. If the patient needs treatment, it will tell them to return to the clinic. This will reduce the need for return clinic visits to obtain results. The system is expected to be fully operational by the end of the calendar year, and this change is expected to result in more individuals receiving their test results, as well as reducing staff time spent providing results. In the event that an individual does not return to the clinic for treatment, a Disease Intervention Specialist would follow-up with them.
f. Increasing STI screening for the general public: STI testing efforts at large public events is ongoing. Testing at the 2014 Artscape and Baltimore Pride events increased approximately 20% from 2013.
g. Improving perinatal HIV screening: The Baltimore City Health Department (BCHD) has initiated a perinatal HIV prevention program to stop the transmission of HIV from

mother to fetus. Funded by the CDC, this program aims to improve coordination between multiple systems such as maternal and child health programs, maternity hospitals, and non-profit organizations. The program works closely with the BCHD Maternal and Child Health program to ensure that HIV positive women received appropriate home visiting services and are linked to care. For women who are lost to follow-up and never receive the care they need after diagnosis, the Baltimore City STI/HIV program works in collaboration with the Maternal and Child Health program to locate women to enable them to receive treatment during pregnancy.

h. Improving STI treatment for sexual partners: Baltimore City Health Department continues to provide Expedited Partner Therapy (EPT) for gonorrhea and chlamydia from its two public STI clinics. Through this program, individuals diagnosed with gonorrhea or chlamydia may receive a medication which they can give to their sex partner(s) to treat their presumptive infection. Since inception of this program in 2007, more than 3,000 partner packs have been distributed. The Department is exploring the possibility of revising statute to authorize EPT statewide in public and private healthcare settings.

2) Targeting HIV Prevention Efforts to African American Men who have Sex with Men

The Department and the Black AIDS Institute have partnered to create and implement a multi-phase statewide Community Engagement and Mobilization Initiative to improve outcomes for the most at-risk populations in Maryland, including African American men who have sex with men. The Community Engagement and Mobilization Initiative has four phases: 1) readiness assessment; 2) training; 3) technical assistance; and 4) engagement and mobilization. The goal of the campaign is to engage and mobilize young black men who have sex with men, primarily in Baltimore City and Prince George's and Montgomery counties, in order to reduce the number of new infections among this population and link young black men who have sex with men living with HIV to treatment, care, and support services. This engagement will include a statewide capacity building and leadership conference for young black men who have sex with men, specifically targeting but not limited to historically black colleges and universities and the communities they serve.

3) Expanding Partner Services

Increased data sharing across programs within the Department has increased the number of newly diagnosed persons with HIV who are offered partner services by 220%. A cross-program data sharing protocol was implemented in April 2013 to ensure partner services investigation of newly diagnosed HIV cases reported to the Department. Prior to implementation of this protocol, local health department disease investigation specialists could only provide partner services to cases reported directly to the local health department, which represented approximately 25% of total cases reported to the State. This expansion in the number of HIV cases offered partner services leads to earlier diagnosis and linkage to HIV medical care for infected partners. The Department continues to work with local health departments to assess the effects of this expansion, and to increase the partner services workforce to meet the expanded caseload.

4) Improving HIV Linkage-to-Care Outcomes

One of the most important strategies for preventing new HIV infections is ensuring that persons living with HIV are connected to HIV medical care and achieve viral suppression

through adherence to anti-retroviral treatment (linkage-to-care). To increase engagement in HIV care in the four Maryland counties with the highest HIV prevalence (Anne Arundel, Baltimore, Montgomery, and Prince George's counties), the Department is currently implementing a CDC-funded demonstration to enhance and expand linkage-to-care activities.

In 2013, the Department partnered with the local health departments in the four target counties to conduct a systematic review of linkage-to-care practices and processes to identify gaps in services and opportunities for program strengthening. In 2014, these local health departments are participating in a linkage-to-care performance improvement process to implement and track changes in linkage-to-care outcomes. This demonstration project also seeks to increase the utilization of HIV surveillance data to initiate and inform linkage-to-care efforts.

In early 2014, the Department analyzed HIV surveillance data to identify people living with HIV who may have dropped out of HIV care during the previous year. Using these data, local health department linkage-to-care staff in the four target counties are conducting record searches, calling the last known HIV providers, and conducting client outreach to determine if the identified people living with HIV have dropped out of care, and providing support to re-link these clients to HIV medical care, as needed.

Additionally, in 2014 the Department was awarded Secretary's Minority AIDS Initiative funding through a CDC grant to partner with local health departments and Federally Qualified Health Centers to expand the provision of HIV prevention and care services within communities most impacted by HIV, especially racial/ethnic minorities and to improve linkage-to-care for people living with HIV in these communities. Through this award, the Department will be partnering with local health departments and four Federally Qualified Health Centers (three in Baltimore City and one in suburban Maryland).

5) Supporting Local Health Department STI Program Sustainability

Local health departments are looking for ways to use existing resources more efficiently so they can continue to assure access to care for vulnerable populations at high risk for STIs. Local health department STI Programs provide critical confidential STI screening and treatment services for high-risk populations statewide. Services are available to the uninsured, the underinsured, and patients with insurance who are seeking confidential care and may be unwilling to visit their private providers. Without access to these specialized STI services provided by local health departments, such patients may continue transmitting infections to sex partners, contributing to sustained or increased infection levels in their communities.

The Department offered all local health department STI programs a series of on-site and web-based training and technical assistance opportunities to ensure that they remain viable safety net providers for vulnerable populations. Training was provided in coordination with regional CDC training centers and private vendors with expertise in these areas. Topics included analysis of current clinical and administrative processes, improved utilization of existing clinical staff time, fundamentals of billing and coding for use with those patients

eligible for billing, and revenue cycle management. Participating local staff included administrative, clinical, and fiscal staff.

Participating health departments reported the following operational improvements as a result of the initial sustainability trainings: increasing regular staff communication, improving physical or staffing infrastructure, taking steps to implement or improve electronic health records systems, and establishing or continuing routine cost and cycle time analyses. More sustainability technical assistance is planned. This assistance supports local health departments in efficiently using their limited resources, and in continuing to provide STI clinical services to high-risk and vulnerable populations.

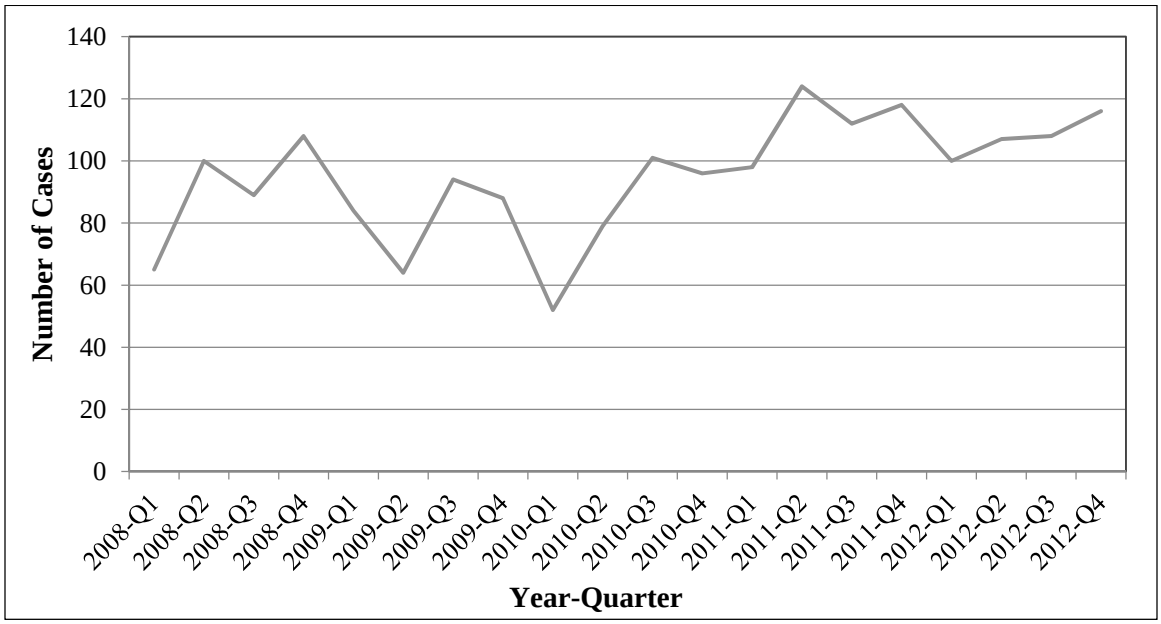
6) Improving Syphilis-Related Program Outcomes
The Department has also implemented a few structural changes with the purpose of improving syphilis-related program outcomes. In 2013 the Department designated a "Surveillance Manager" that oversees the initiation of syphilis and HIV cases initiated to local health departments for field follow-up. Additionally, staff from two different Centers within the Department were combined into a single "Field Services Unit" which oversees both STI and HIV partner services. This allows for more efficient and effective oversight of statewide syphilis and HIV partner services.

III. Changes Required to Report STI and HIV Rates Quarterly

National partner agencies, including the CDC and the Health Resources and Services Administration, use annual data when making strategic programming decisions and monitoring trends in STIs and HIV. Annual case counts and rates are more meaningful than quarterly changes in case counts. For example, as shown in Figure 1, there can be substantial variation in syphilis case reports by quarter. Syphilis reporting, as well as chlamydia and HIV reporting, in any given quarter can be driven by a number of factors other than actual changes in the occurrence of STIs and HIV. These factors may include: testing and clinical activities of health care providers, testing activities of local health department-sponsored programs, and test-seeking behavior of patients.

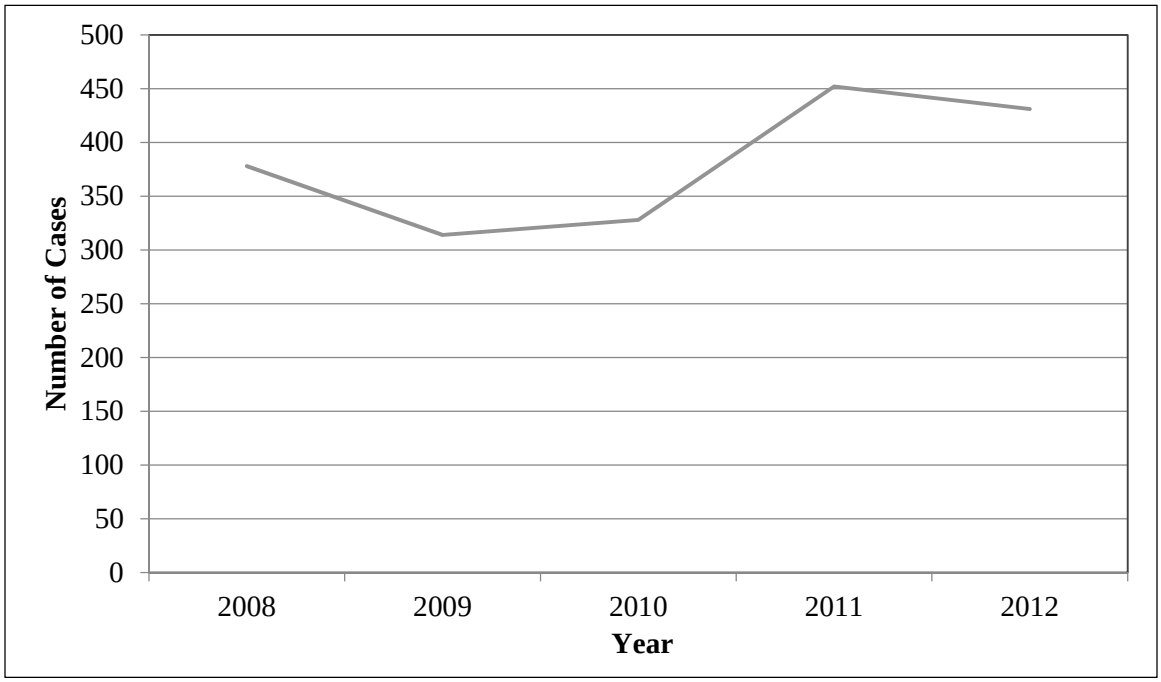
Basing programmatic decisions or evaluations on quarterly data would be ineffective because the data show an imprecise picture of the overall epidemic that is obscured by factors other than true increases or decreases in infection. Annual data trends, as shown in Figure 2, are far less volatile than shorter-term monitoring, and are more useful in informing programmatic decisions.

Figure 1. Variation in Primary and Secondary Syphilis Case Reports in Maryland by Quarter



Source: Maryland Sexually Transmitted Disease Management Information System

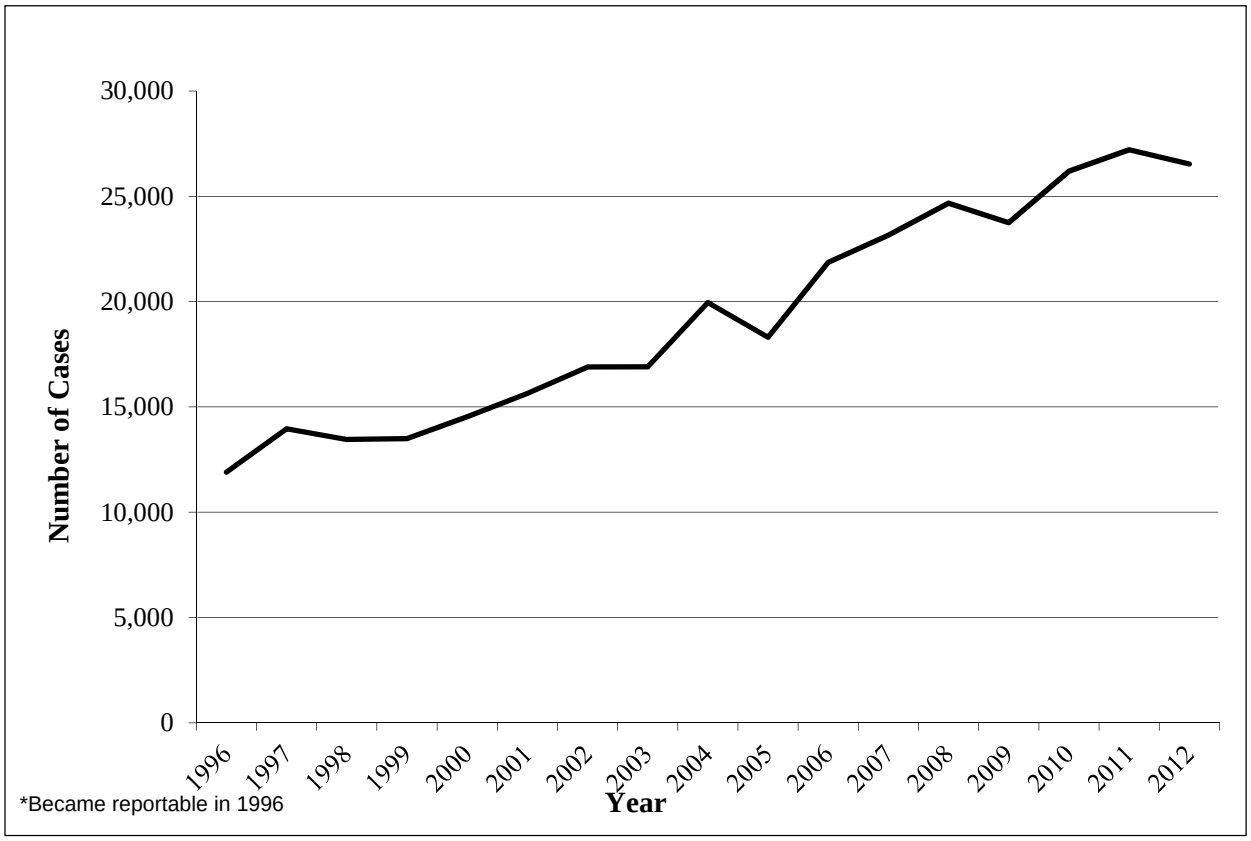
Figure 2. Trend in Annual Primary and Secondary Syphilis Cases in Maryland



Source: Maryland Sexually Transmitted Disease Management Information System

Appendix: Historical Trends of Chlamydia, Primary and Secondary Syphilis, and HIV/AIDS in Maryland

Figure 1. Trends in Reported Chlamydia Cases in Maryland, 1996-2012

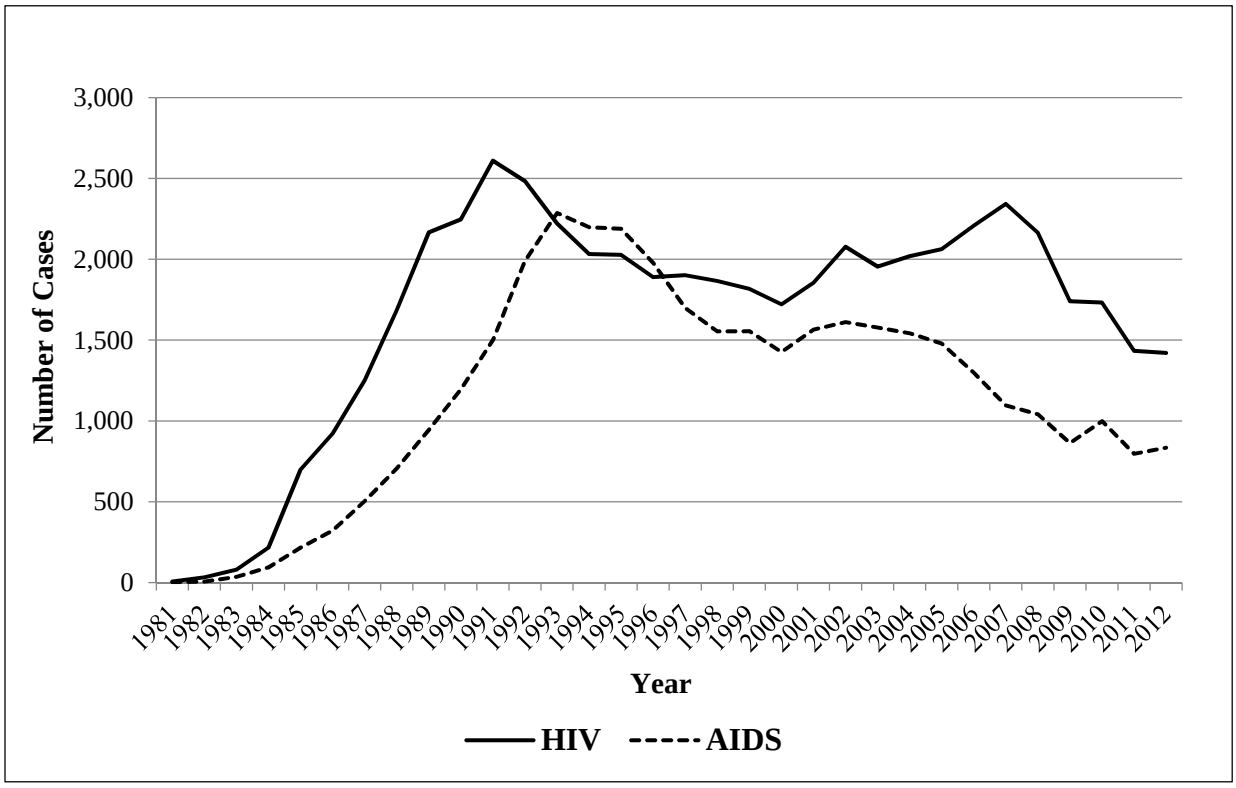


Source: Maryland Sexually Transmitted Disease Management Information System

Figure 2. Trends in Reported P&S Syphilis Cases in Maryland, 1981-2012

Source: Maryland Sexually Transmitted Disease Management Information System

Figure 3. Trends in Reported HIV and AIDS Diagnoses in Maryland, 1981-2012, Reported through 12/31/2013



Source: Maryland HIV and AIDS Reporting System