Behavioral Health System Baltimore

FY 2017 Activities, Behavioral Health Indicators and System Utilization

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Table of Contents

Introduction

Behavioral Health System Baltimore (BHSB) is a nonprofit organization created in October of 2013 through the merger of Baltimore Mental Health Systems and Baltimore Substance Abuse Systems to form a single integrated behavioral health agency. BHSB provides leadership in advancing behavioral health and wellness and helps guide innovative approaches to prevention, early intervention, treatment and recovery. The goals of the organization are to build an efficient and responsive system that comprehensively addresses the needs of individuals, families and communities impacted by both mental health and substance use disorders by expanding the reach and quality of the public behavioral health system, promoting the development of new and innovative services and addressing specific population and system-level needs.

BHSB serves as the local behavioral health authority for Baltimore City. In this role and in collaboration with the State of Maryland Department of Health (MDH) Behavioral Health Administration (BHA), the organization is tasked with overseeing the continuum of publicly funded behavioral health services in the City. The majority of Public Behavioral Health System (PBHS) services are reimbursed through a statewide Medicaid fee-for-service system. In addition to overseeing these services, BHSB secures and directly awards public and private funds to support the development of innovative programs and the ongoing operations of behavioral health services not reimbursable by the fee-for-service system. In FY17, BHSB awarded approximately $66 million in grants, with 352 contracts issued to 172 Providers and Consultants. Addendum A describes BHSB's contract monitoring procedures.

The continuum of services that BHSB oversees is broad. Services within the fee-for-service system include outpatient and intensive mental health and substance use disorder treatment, medication assisted treatment for substance use disorder, partial hospitalization, inpatient treatment, psychiatric and residential rehabilitation, residential substance use disorder treatment, respite care, residential crisis, mobile treatment, assertive community treatment, and supported employment. Grant-funded services include: assertive outreach, court-based assessments, mobile crisis response, methadone home delivery, housing supports, school-based services, wellness and recovery centers, peer support, prevention, overdose education and naloxone distribution outreach, early childhood services, and specialty services tailored to meet the unique needs of special populations such as older adults, people experiencing homelessness, women with children and individuals involved in the criminal justice system.

The public system of care available in the city is also quite large. While Baltimore City represents 11% of the state’s population, it represents over 26% of those utilizing public mental health services, and over 31% of those utilizing public substance use disorder (SUD) services.

In fiscal year 2017 (FY 17), the fee-for-service system of care provided mental health services to more than 53,497 people, accounting for an annual expenditure of more than $280 million, and

32,513 people received substance use disorder services, accounting for over $130 million in expenditures.

Over the last three years utilization of mental health services has been relatively stable while there has been a 10% increase in SUD service utilization. The majority of individuals using the public behavioral health system receive outpatient services. As more SUD services are transitioned from grant funds to the fee-for-service system, it is expected that access will increase, and more people will be served. A more detailed analysis of the utilization of the public behavioral health system will be provided later in the document.

BHSB is required by BHA to document annually the system of care for behavioral health services in Baltimore City, the core activities of the organization, and updated goals based both on progress made to-date and new opportunities. This document represents the fourth integrated report submitted by BHSB to BHA and replaces what was previously referred to as the Annual Plan and Report for Mental Health, and the Grant Application and Local Drug and Alcohol Abuse Council Strategic Plan and Plan Update for substance use. The report includes the following areas as mandated by BHA: a description of the structure of the organization and its vision, mission and values, description of the planning process, FY 17 highlights of achievements and challenges in priority areas of work, an analysis of the utilization of public behavioral health services in Baltimore City as compared to the state for FY 17, and a strategic plan for behavioral health for Baltimore City in FY 19.

Organizational Structure

As an integrated agency and under the leadership of our Chief Executive Officer, the vision, mission and values of the organization guide the work of building an efficient and responsive system that comprehensively addresses behavioral health across the lifespan.

Vision Statement

We envision a city where people live and thrive in communities that promote and support behavioral health.

Mission Statement

BHSB's mission is to develop, implement and align resources, programs and policies that support the behavioral health and wellness of individuals, families and communities.

Statement of Values

BHSB embodies the following values in all of our work:

- Integrity

- Equity
- Innovation
- Collaboration
- Quality

BHSB employs approximately 85 individuals, including public health professionals, licensed behavioral health professionals and people with lived experience with mental illness and/or substance use disorders. BHSB is led by Crista M. Taylor, a clinical social worker and a leader in behavioral health in Maryland with more than 25 years of experience in this field. BHSB is overseen by a Board of Directors with the Baltimore City Health Commissioner serving as Chair. The Board of Directors serves in a governing role, guiding the strategic vision for the organization and, in addition, serves as the local mental health advisory council and the local drug and alcohol council as defined by the State of Maryland.

BHSB's organizational structure (Addendum B) supports a growing scope of work. It ensures responsiveness to the needs within the changing system and also establishes the organization as a leader in the new, integrated healthcare landscape. On the 432D form that BHSB submits to BHA for each funding agreement, BHSB provides staffing information for each position, including name and title, that is funded or partially funded by that contract. Also attached (Addendum C) is a document that BHSB created for providers and the general public that describes the organizational structure and highlights opportunities to partner with BHSB. It describes the five departments, which include:

- <u>Policy and Communications</u>

  Policy and Communications uses advocacy and communications strategies to advance evidence-based practices policy reforms and mobilize community action. The department manages internal and external communications for BHSB, oversees government and community relations, and implements public education and advocacy campaigns to create positive change. BHSB participates on several coalitions and collaborates with a range of partners to advance policies that support behavioral health and wellness.

- <u>Accountability and Provider Relations</u>

  Accountability and Provider Relations works collaboratively with behavioral health provider organizations to support high-quality behavioral health services in Baltimore City. This department provides support for providers in a variety of ways, including training and technical assistance, site visits, community relations, and a dedicated provider relations contact. The team also manages provider complaints, investigations, and sentinel events.

- Strategy

  Strategy seeks to instill a social determinants of health lens into all facets of BHSB's internal and external work. The department supports this in a variety of ways, including synthesizing and analyzing data to inform decision making and monitor outcomes, expanding prevention and harm reduction efforts, and supporting communities toward developing capacity to mitigate toxic stress and improve resilience so that residents can thrive.

- Programs

  Programs works to develop and manage a range of early intervention, treatment and recovery services for individuals and families with mental illness and/or substance use disorders. The department oversees services within the larger Medicaid fee-for-service system, as well as those directly funded by BHSB through private and public grants, including child and family services, peer support services, medication-assisted treatment, criminal justice diversion, and crisis services for youth and adults. The team collaborates with providers, city and state agencies, and other system partners to implement best practice programming and new or innovative pilots.

- Finance and Administration

  Finance and Operations manages the fiscal, contracting and administrative operations of the organization. The department provides oversight of private and public grant or funding awards, contracts issued to sub-vendors, grants accounting, and administrative support for organizational-wide work. Activities include oversight of procurements, issuance of letters of awards, monitoring of budgets and budget modifications, tracking of contract deliverables, and assurance that all funds are properly utilized and expended.

FY 2017-2018 Highlights, Achievements and Challenges

Summary of FY 2017 Highlights

- 53,497 people received mental health services, 26.6% of the total people served in Maryland.
- 32,513 people received substance use disorder services, 31.5% of the total people served in Maryland.
- 45,394 people called the Crisis, Information and Referral line for assistance.
- 8 out of 12 hospitals in Baltimore City, including the Veterans Administration Hospital, provide SBIRT in their emergency department.
- 23 people were transitioned from state hospitals to the community

- 4,272 people were trained on overdose prevention and how to administer naloxone, and 3,939 naloxone kits were distributed.
- 7,998 children and youth received individual treatment services through the Expanded School Mental Health program
- 783 children received early childhood mental health services within Head Start centers in Baltimore City.
- BHSB implemented two new, multiyear projects, with funding awarded by SAMHSA.
- BHSB implemented two police/behavioral health partnership projects that offer diversion to services instead of arrest.

The last several years have been a time of historical change for behavioral health in Baltimore City, the State of Maryland and the country as a whole. As a strong and forward-looking organization, BHSB recognizes that an integrated system with well-connected and coordinated access points to services is essential to ensuring the highest quality care for people with substance use and mental health disorders. It is also critical that the system continue to develop its capacity to use data to inform decision making and evaluate the impact of resource allocation in promoting behavioral health and wellness of individuals, families and communities.

While challenges in each of the priority areas of work are described below, there is a barrier that impacts every aspect of work in the behavioral health system - stigma. Stigma continues to be a significant challenge for individuals and families impacted by mental illness and substance use. It impacts people receiving services, family members supporting individuals in need, clinicians in the field delivering services, and personnel within other systems where individuals with behavioral health disorders present. Ongoing, assertive public education to help individuals and communities understand that mental illness and substance use disorders are treatable illnesses and that people recover will assist with reducing stigma. Implementing trauma-informed practices that acknowledge the experiences that people bring to the service setting is also needed. In addition, providers need support in developing client-centered practices that treat consumers as people with real value, empowering them to understand treatment options, make informed choices about service delivery and live a life in long-term recovery. Outright acknowledging the stigma and disparities that exist is the first step to developing a more accessible, quality-driven system of care that is responsive to the individuals, families and communities in need of behavioral health support.

1. SYSTEM MANAGEMENT AND INTEGRATION AT THE LOCAL LEVEL

System Partnership

BHSB works to strengthen the continuum of behavioral health services and ensure access to these services through collaborative partnerships. BHSB partners closely with the Maryland Department of Health (MDH), other State and City agencies, and a range of nonprofit

organizations and providers, as well as the community. These partnerships focus on systems where at-risk populations can be identified. Key partners include: Department of Juvenile Services, Department of Public Safety and Correctional Systems, the Maryland Hospital Association, Baltimore City Department of Social Services, Baltimore City Public Schools, Baltimore Police and Fire Departments, the District and Circuit Courts of Baltimore City, the Mayor's Office, and the Baltimore City Health Department. It is through these and other partnerships that BHSB will continue to expand access to and quality of care for residents of Baltimore City by creating opportunities for individuals across the lifespan regardless of what door they enter for services.

BHSB also works closely with system partners to develop policies that support behavioral health and wellness of Baltimore City residents. This is accomplished through legislative advocacy and the active participation in state-wide committees including, but not limited to: the Forensic Services workgroup, Buprenorphine Expansion workgroup, Maryland Crisis Hotline workgroup, Maryland Behavioral Health Coalition, Maryland Alliance for the Poor, Mental Health Association of Maryland (MHAMD) Mental Health and Criminal Justice Partnership, Maryland State Council on Child Abuse and Neglect, Children of Incarcerated Parents workgroup, Justice Reinvestment Act Advisory Council, Transition of Funds work group, Behavioral Health Advisory Council and sub-committees, and Maryland Association of Behavioral Health Authorities (MABHA), in which a BHSB staff member serves as co-facilitator. MABHA meets monthly with BHA leadership and provides feedback to the Behavioral Health Advisory Council.

<u>System Promotion</u>

BHSB staff works closely with the Baltimore City Council and the Baltimore City State Delegation to reform the behavioral health system and support behavioral health and wellness in Baltimore City. BHSB's 2017 Policy Priorities, which were developed to advance key policy reforms, were announced during a Behavioral Health Policy forum that BHSB convened in January 2017. The forum also offered an opportunity for stakeholders to engage in discussion with BHA and Maryland Medicaid about system changes.

BHSB announced 2018 Policy Priorities (Addendum D) during the Behavioral Health Leadership Network meeting which was held in January 2018. This is a new forum BHSB launched to bring together leaders and decision makers and is described in more detail below in the *Provider and Stakeholder Relations* section. Quarterly meetings will be held, with agendas focusing on different topics related to system change and special initiatives.

In the 2017 Maryland General Assembly legislative session, BHSB was a leader in the effort to pass the HOPE Act, which authorizes increased funding for community behavioral health providers, a key goal of BHSB and other behavioral health organizations. BHSB also partnered with stakeholders to pass legislation that will help establish the state's outpatient civil

commitment pilot program in Baltimore City. The legislation authorizes the state to launch a pilot program to allow for the discharge of people who had been involuntarily committed to inpatient care for mental illness. Through this pilot, those individuals will instead receive intensive services while being able to live in the community. BHSB is leading implementation of this pilot program in Baltimore City.

State Financing and Regulatory Structure Change

BHSB recognizes that its work has and will continue to undergo significant change and that changes in the financing and regulatory structures will promote integration, increase access, and improve outcomes. BHSB supports the sustainability of the provider system through ongoing technical assistance and change management support to help prepare providers for a successful future in a changing health care environment.

As will be discussed in more detail in the *Quality* section of *Highlights, Achievements and Challenges*, effective April 1, 2018, state regulatory changes require most behavioral health programs to be accredited and licensed under COMAR 10.63 to continue operations. BHSB supports providers in fulfilling accreditation and licensing requirements, one of which is to complete an Agreement to Cooperate. BHSB also partnered with BHA to manage grant funds that were allocated to reimburse for one-time accreditation assistance.

In preparation for residential substance use disorder (SUD) services to be managed by the Administrative Services Organization (ASO) instead of through grants at the local level, BHSB restructured the contractual and payment process for providers in FY 17. Specifically, residential providers moved from a slot-based, cost reimbursement structure to payment based on bed days and actual utilization. This change prepared providers to manage their budgets in a fee-for-service environment and allowed for a more effective use of funding, with transparent and real-time access to data on bed day utilization available for both providers and BHSB staff.

The Role of the Local Behavioral Health Authority

As stated in the introduction, BHSB merged the Core Service Agency and the Local Addiction Authority to become a Local Behavioral Health Authority (LBHA) in 2013. Integration is a process that has been happening over time. BHSB continues to find opportunities to integrate work at the service level, as well as integrating work into the community as a whole. The merger allowed BHSB to leverage resources to more fully engage in public education, advocacy and data analysis, as well as to promote quality throughout the entire system.

Merging two non-profits and integrating work is challenging and requires strategic leadership that addresses and supports staff through the change management process. In January 2017, the President/CEO resigned, creating a need to hire the third leader since 2013. In March of 2017 the Board of Directors promoted from within to fill the vacancy in this key leadership position. This appointment supported stability for the organization, as the new CEO had been with the

organization for almost 12 years and worked within the Maryland public behavioral health system for more than 20 years.

To further promote integration and establish BHSB as a leader in the system of care in Baltimore City and the state, the organization focused on developing human resource policies that recruit and retain talented staff, provided equity and inclusion and trauma/resiliency training to all staff to inform internal policies and practices, and intentionally used space to support a collaborative work culture by moving staff to one location with an open work space design concept. In addition, leadership has stressed the importance of using integrated, person-first language by talking about people living in communities all touched by mental illness and substance use. This intentional use of language has not only assisted staff in supporting an integrated organizational mission but has helped providers understand that the LBHA supports both mental health and substance use disorder service providers.

Integration has expanded the role of the LBHA to have a more active presence in promoting quality service delivery by adding authority at the local level to investigate complaints of both substance use disorder and mental health providers. In partnership with BHA, Office of Health Care Quality and the ASO, BHSB conducts site visits, oversees performance improvement plans, and documents approval of providers entering the system. BHSB has staff focused solely on complaint investigation and compliance and has integrated staff so that each person works with both mental health and substance use providers.

One of BHSB's role as the LBHA is to coordinate care of individuals who utilize high levels of services. BHSB created new positions dedicated to this clinical system management function and will use the expanded capacity to develop this role during FY 18 to better address the needs of high utilizers of both mental health and substance use disorder services.

Provider and Other Stakeholder Relations

During FY 17, BHSB recruited and promoted internally for a newly created position, Manager of Provider Relations. This position was created to increase BHSB’s organizational infrastructure to support providers’ needs and ensure open, bidirectional communication.

BHSB serves a crucial role in troubleshooting concerns for providers and responding to stakeholder issues that arise. More specifically, BHSB helps coordinate services, identify resources, provide information, provide technical assistance and coordinate meetings between providers, stakeholders, community organizations and other agencies. BHSB also manages provider closures in collaboration with BHA, providers, stakeholders and the ASO, including the transition of consumers. Other functions include answering questions about accreditation, licensure and Code of Maryland Regulations (COMAR) and completing Agreements to Cooperate. BHSB facilitates orientation sessions to welcome new and prospective providers into the system, introduce them to BHSB and begin building collaborative relationships. Five

sessions were held during FY 17, and scheduling is under way to meet with 35 newly identified providers during 2018.

BHSB hosts meetings for the full network of mental health and SUD providers and other stakeholders and partners in the city, as well as meetings focused on specific service lines within the public behavioral health system. In January 2017, BHSB hosted a policy and advocacy briefing that educated stakeholders on the changing political landscape and how it will impact service delivery, as well as offering tools on how to successfully advocate for the benefit of consumers served by the behavioral health system. This event included representatives from the National Council for Community Behavioral Health, the Deputy Secretary for Health Care Financing at MDH and the Deputy Secretary/Executive Director of BHA as speakers. Also during January 2017, BHSB launched RecoveryStat, hosting the first of regular, quarterly meetings for providers. RecoveryStat focuses on key indicators to analyze the city's behavioral health claims data, with the goal of increasing the capacity of providers to understand the system and use data to inform practices.

During July 2017, BHSB hosted a Meet and Greet, during which 70 providers and community stakeholders dropped in to meet staff, tour the new office space, and network and learn about BHSB's work. BHSB created a document (Addendum C) describing the work of each department to support an increased understanding of BHSB's evolving role in the system of care. BHSB's second annual gathering was held in November 2017, launching a new initiative: *A Fundamental Paradigm Shift: Using the Science of Stress & Resilience to Transform the Public Behavioral Health System*. This event was attended by 139 providers and system partners and will be followed with trainings to assist providers in implementing policies and practices that are informed by the science of neurobiology, adverse childhood experiences, epigenetics and resilience.

BHSB plans additional trainings to support the needs of providers and is also seeking funding to offer technical assistance and coaching to implement an Open Access model of service delivery. This model assists providers with changing business practices to eliminate waiting lists and increase timely access to counselors, physicians and other prescribing staff.

BHSB launched the Behavioral Health Leadership Network in January 2018, bringing together leaders and decision makers, including providers, funders, system partners and advocates. Quarterly meetings will be held, with agendas focusing on different topics related to system change and special initiatives.

Individual service line meetings are held with the following groupings of providers: Psychiatric Rehabilitation Programs (PRP), Residential Rehabilitation Programs (RRP), mobile treatment and Assertive Community Treatment (ACT), Targeted Case Management (TCM), residential SUD, buprenorphine, school-based, supported employment, Capitation Project, housing first, outpatient clinics, and veteran-serving providers. Meetings are generally held quarterly to

educate providers on happenings within the system and engage them in dialogue about how to best support and enhance service delivery, including ways to promote behavioral health integration.

In addition to meetings hosted by the organization, BHSB regularly attends the Directorate, a coalition of providers formed to collectively advocate for policy and programmatic changes to better serve individuals with substance use disorders. BHSB has worked with the leadership of the Directorate to provide guidance and support in reaching out to and integrating with mental health providers, as well as being a regular source of information concerning systemic changes.

BHSB also participates with the Association of Baltimore Area Grantmakers (ABAG), attending meetings regularly and participating in discussions regarding system needs. BHSB was invited to present during the November 2017 meeting, focusing on ongoing programs, new projects, the evolving system of care, organizational priorities and key challenges.

Integration at the Provider Level

A comprehensive, integrated crisis response system functions as the foundation of a high-quality behavioral health system. For this reason, a large focus of BHSB's integration activities at the provider level has been within this system. Key components of Baltimore's system offer integrated mental health and substance use disorder services, including the Crisis, Information, and Referral (CI&R) Line; mobile crisis teams; residential crisis beds and withdrawal management services. BHSB is also finalizing a plan for system improvement of the behavioral health crisis response system, which is described in more detail in the *Access* section of *Highlights, Achievements and Challenges*. A key principle in the plan is that the crisis response system in Baltimore should be fully accessible to individuals with mental illness and substance use disorder.

To address the criminalization of individuals with behavioral health disorders and increase access points to services, BHSB collaborated with the Baltimore Police Department and other partners to implement two initiatives, the Crisis Response Team (CRT) and Law Enforcement Assisted Diversion (LEAD), both of which provide integrated services. These initiatives will be discussed in more detail in the *Access* section of *Highlights, Achievements and Challenges.*

Screening, Brief Intervention and Referral to Treatment (SBIRT) is a practice that works to integrate behavioral health into the somatic health care system. BHSB was the first jurisdiction to systemically implement SBIRT and now serves as the project lead for what has become a state-wide project with multiple sources of federal, state and private funding. Through Substance Abuse and Mental Health Services Administration (SAMHSA) funding alone, the SBIRT initiative screened approximately 230,000 individuals from April 2015 to October 2017.

SBIRT provides prevention and early intervention through the use of validated screening tools and evidence-based interventions to identify individuals at risk of substance use disorders and

those in need of behavioral health services and to refer them to treatment. BHSB's efforts, through multiple SBIRT funding sources, have expanded over time to include 38 organizations with 86 sites in 14 Maryland counties:

- Eight Federally Qualified Health Center (FQHC) organizations with 32 sites
- Four non-FQHC health care organizations with seven sites
- Three large pediatric practices with five sites
- Ten hospital emergency departments (and three hospital-affiliated primary care centers)
- One additional hospital-affiliated primary care center with three sites
- Four family planning clinics with five sites
- One county detention center
- One mental health/family support organization with 3 sites
- Four county school systems with 15 schools
- Two college/universities with 2 sites

Behavioral Health Disaster Plan

BHSB coordinates with the Baltimore City Health Department (BCHD) and the City of Baltimore in the event of a public emergency. In this role, BHSB is responsible for the following functions:

1. Before emergency situations, BHSB:
    a. Reviews and updates the Baltimore City Behavioral Health Disaster Preparedness Plan.
    b. Identifies and trains BHSB's response team, behavioral health programs and professionals who volunteer to deliver behavioral health services during a public emergency.
2. During emergency situations, BHSB:
    a. Coordinates with the BCHD to assess the emergency, determine the types of behavioral health resources required, ensure adequate behavioral health services are available, and ensure accurate information on mental health resources is disseminated to the public.
    b. Assigns and oversees teams of behavioral health professionals at the Baltimore City Command Center, identified crisis centers, emergency shelters, and other locations as needed.
3. After emergency situations, BHSB:
    a. Assesses community needs for ongoing/long-term disaster recovery services and identifies resources to provide those services.
    b. Conducts debriefing sessions with emergency responders.
    c. Completes a report of the emergency response, including number of people served, types of services provided, etc., and recommendations for improving planning, response, and recovery activities in the future.

In October 2017, BHSB began updating the Baltimore City Behavioral Health Disaster Preparedness Plan that was approved in 2016. On November 9, 2017, BHSB met with the BCHD and agreed upon updated procedures to be used in the event of a snow/weather

emergency during the 2017/2018 winter. Plan updates are expected by March 2018, and an updated copy of the plan will be available at that time. A copy of the existing plan is not attached to this document due to it being large. It can be provided if needed.

Challenges

There are significant challenges in fully integrating at both the system and provider level. Not all providers have the infrastructure needed to effectively adapt to the changes in the reimbursement structure or plan for and implement the policies and procedures necessary for achieving accreditation. The city has seen several smaller providers merge with larger organizations. We anticipate that this will continue to happen as the system moves toward a more performance-based approach to service delivery.

An additional obstacle in encouraging providers to fully integrate at the service level is a lack of a rate structure that supports integration. Providers are forced to choose which rate structure they will utilize, mental health or substance use. While new, integrated regulations have been promulgated, the system will only reimburse for individual services and not on the same day, rather than an enhanced rate for integrated care.

At the system level BHSB is challenged with developing the infrastructure needed to sustain and expand system-integration practices and projects such as CRT, LEAD and SBIRT as well as implementing a 24/7 fully accessible crisis response system. BHSB is working to develop our internal capacity to sustain and continue to expand these projects.

Also at the system level, a challenge to full integration of the system management function is the unclear role and authority granted to local jurisdictions. To maximize progress in planning and management at the local level, the LBHA must have the stature and authority to perform those roles. Clarity of roles is needed at both the local and BHA level to ensure collaboration with other systems serving individuals with mental illness and SUD and overall more effective and rapid results. BHSB's CEO serves on the BHA Advisory Work Group for Local Systems Management Integration which is looking to clarify these roles. Training and support for system partners and staff at both the local and state level will be needed once roles and lines of authority are defined so that everyone works together effectively and avoids working at cross-purposes.

The last, and probably most crucial challenge is in recruiting and retaining direct service, clinical, administrative and system management staff. Hospitals and large managed care entities often have compensation packages that community organizations cannot match. In addition, in order to reduce stigma and integrate services, creative approaches to advocacy and public policy will be needed because of differing public views of mental illness and substance use. It is critical that the behavioral health field prepares leaders to address the change management needed to successfully facilitate integration at the staff, provider, community and system levels. Overall, the behavioral health workforce is too few, inadequately supported and trained, and facing

significant changes that impact practice, credentialing, funding, and ability to keep up with changes in practice models driven by changing science, technologies and systems.

2. ACCESS

A comprehensive, integrated crisis response system is the backbone of any successful behavioral health system; it connects individuals to the right care while reducing harm and overall system cost. One of the main goals of a well-functioning behavioral health crisis response system is to support people in the least restrictive settings by intervening as early as possible to prevent some of the negative outcomes associated with behavioral health crises, such as arrest, unnecessary hospitalization, homelessness, overdose, suicide, and other poor health outcomes. In the last year, BHSB embarked on a planning process to identify and prioritize recommendations to strengthen the behavioral health crisis response system in Baltimore City. It is expected that a forum for stakeholder input will occur in May 2018, with the revised plan released shortly afterward.

Crisis, Information and Referral

Baltimore City has one number, the Crisis, Information and Referral (CI&R) line, to call for crisis intervention, mental health and substance use disorder services and recovery supports. Services also include general resource information, telephone outreach to individuals for whom an intake appointment was scheduled, and assistance with obtaining health insurance if needed. The CI&R line is jointly staffed by Baltimore Crisis Response, Inc. (BCRI), which has the infrastructure to answer calls 24/7 and staff qualified to respond to a crisis or suicidal emergency, and HealthCare Access Maryland, Inc. (HCAM), which connects individuals not in need of crisis response but in need of ongoing behavioral health services to the resources they need.

Throughout the year, BHSB promoted the CI&R line. Posters and cards were developed and distributed widely at community events, conferences and trainings, and posters were hung in public areas of settings frequented by individuals with behavioral health needs. In addition, BHSB promoted the hotline regularly through social media, including Facebook, Twitter, and Instagram. This year, BHSB used a small amount of funding to purchase transit ads in certain areas of Baltimore City that advertise the hotline.

Baltimore City has seen a steady increase in the number of calls to the crisis hotline over the last 10 years from a total of 26,833 calls in FY 06 to 45,394 in FY 17, which is a 69% increase. When looking more closely at monthly call data, in January 2013 there were 2,162 calls and in January of 2017 there were 3,664 calls.

Crisis Services for Children and Families

Baltimore Child and Adolescent Response System (BCARS) is the youth crisis services provider for Baltimore City. BCARS' youth community stabilization program offers urgent care

appointments and six or two-week in-home/community/school stabilization services to youth and families. It also provides limited mobile crisis response services to the public school system and youth in foster care. BCARS currently operates Monday - Friday from 8:30 am to 7:00 pm. However, 24/7 telephonic supports for youth and families in crisis is supported through a partnership between BCARS and BCRI, utilizing the CI&R Line. BCARS' larger parent company, Associated Catholic Charities (ACC), has also worked to support Baltimore City's youth crisis response system through the provision of respite care services in Baltimore City.

BHSB worked with BCARS to assist in diverting youth from unnecessary hospital-based care through the Pediatric Diversion program in partnership with John Hopkins Hospital and University of Maryland Hospital's Emergency Departments. The Pediatric Diversion program is not adequately funded. For the last few years, the budget gap has been met through the use of rollover funds. Unfortunately, an Over the Allocation Request submitted by BHSB to secure ongoing funding to retain this valuable service was declined and Pediatric Diversion program services were discontinued at the end of FY 17.

In FY 17, BCARS responded to 1,024 CI&R Line calls. Of those calls, 117 youth received triage services and linkage to community resources, 278 received a formal assessment and 217 were admitted to individualized BCARS services. In addition, BCARS' Pediatric Diversion program received a total of 404 referrals, of which 170 youth referred from Emergency Departments, and 49 referred from schools, were assessed. Of these 219 assessments, 184 youth were admitted into individualized BCARS services.

Crisis Services for Adults

BCRI operates the CI&R hotline 24-hours-per-day, 7-days-per-week; mobile crisis services from 7 am to midnight; a 21-bed residential crisis program; targeted case management services and a 13-bed residential withdrawal management program for adults in Baltimore City.

In FY 17, BCRI:

- Responded to 45,394 hotline calls.
- Provided mobile crisis response to 2,497 individuals.
- Successfully diverted 998 of 1,316 (76%) emergency department referrals from inpatient hospitalization.
- Completed 734 admissions to residential crisis services, serving a total of 403 individuals, with 59% of those served having a co-occurring substance use disorder.
- Maintained an occupancy rate of 98% for the residential crisis beds.
- Completed 451 admissions to residential withdrawal management (level 3.7D), serving a total of 237 individuals.

Level 3.7D (residential withdrawal management) is seen as an acute service and an important part of the crisis response system, as it serves as an entryway to ongoing care for many people in

urgent need of intensive services. In FY 17, an additional five grant-funded treatment slots were added to this service line in Baltimore City. Programs offering this level of care served 468 individuals, maintaining a utilization rate of 98%. With a more comprehensive reimbursement rate offered in July of 2018 as a result of the state securing Medicaid reimbursement for residential SUD treatment services, providers are looking to expand capacity over the next year.

Maryland Crisis Stabilization Center

Through the support and leadership of the State of Maryland, BHSB developed the Maryland Crisis Stabilization Center (Stabilization Center) in partnership with the BCHD to address substance use and overdose in Baltimore City. This project will serve to pilot these services to determine whether they should be made available in other jurisdictions in Maryland.

An eleven-member Implementation Board for the Stabilization Center will be established to ensure proper project oversight and accountability of all project partners. The Implementation Board will be chaired by the Maryland Department of Health's Secretary and the Behavioral Health Administration's Deputy Secretary, who will appoint six of the board's members. The other members will be appointed by the Mayor of Baltimore City.

The Stabilization Center will offer a safe place for individuals who are under the influence of drugs and/or alcohol ("under the influence") to sober and receive short-term interventions, such as buprenorphine induction and medical screening and monitoring. Individuals will also be offered the opportunity to connect with ongoing behavioral health treatment, peer and recovery support services, and case management assistance. The Stabilization Center will be a city-wide program that is responsive to local needs, grounded in a public health framework, and integrated into the behavioral health crisis care system. It will divert people under the influence away from emergency departments and provide stronger links to community-based behavioral health care for individuals who have not been engaged well by the behavioral health system.

The Stabilization Center will be staffed 24 hours per day, 7 days per week, with a mix of Peer Recovery Specialists and medical staff. It will serve any person within Baltimore City who meets the eligibility criteria, which include:

1. Adults ages 18 and older who are under the influence of drugs and/or alcohol or recently revived from an overdose,
2. Meet medical criteria for safe transport to the program, as determined by protocols approved by the Maryland Institute for Emergency Medical Services Systems (MIEMSS), and
3. Voluntarily agree to transport to the Stabilization Center by Emergency Medical Services (EMS) or a crisis response team.

Initially, there will be two main avenues to identify individuals in need of the Center's services: Emergency Medical Technicians (EMTs) and Mobile Crisis Teams (MCTs). EMTs will identify

individuals during their regular work routine as they respond to 911 calls for emergency services. The MIEMSS has approved a protocol for the Baltimore City Fire Department Emergency Medical Services to use for the Stabilization Center as an alternative transport site. This means that if individuals meet the eligibility criteria and agree to be transported to the Center, ambulances can transport them directly to the Stabilization Center instead of an emergency department.

BCRI's behavioral health mobile crisis teams will serve as the second avenue of the "front door" access to the Center. This approach builds on and expands the existing behavioral health crisis system. The mobile crisis team will be trained on the use of the EMS protocol and will respond to referrals from hospital emergency departments, police, community outreach workers, and other provider organizations.

Admission will be voluntary, and any person brought to the Center may leave at any time. This will be a low barrier service; individuals will not be required to provide identification, their name, or address. Services will be provided regardless of a person's ability to pay. Insurance will not be required but may be utilized for certain aspects of service delivery.

BHSB will utilize an action research paradigm to learn from experiences during both the development and implementation phases of this project to ensure high quality sobering and crisis stabilization services. A self-adjusting evaluation model will be used to assess the effectiveness of the proposed interventions. Both process and outcome data will be collected throughout the pilot project. The data derived from this effort will be used to achieve the following outcomes:

- Decrease drug and alcohol-related emergency department visits
- Increase the number of individuals discharged from the Stabilization Center who are linked to community-based behavioral health services and recovery supports upon discharge or within 30 days

Significantly, this project will create a non-traditional access point within the crisis services continuum for individuals with behavioral health disorders who engage in high-risk substance use and related behaviors. Traditionally, crisis services are accessed by calling the 24/7 CI&R Line. This mode of access is dependent upon the individual or a concerned family member or citizen calling the hotline for help and the individual in crisis agreeing to be visited by the team. Sometimes in the middle of a crisis, an individual may not see the need to call a hotline for behavioral health support and instead ends up in contact with police and/or EMS. The incorporation of direct referral protocol and training for EMS and police supports the integration of emergency personnel into the behavioral health crisis response system.

24/7 Urgent Opioid Use Disorder Crisis Services

In September 2017, BHSB received grant funding through the Maryland Opioid Rapid Response initiative to fund a new service that will provide 24/7 crisis services operated within a residential substance use disorder setting. These services are available for adults with an opioid use disorder on a walk-in basis. The project began operations on November 13, 2017 and has 12 beds that can serve individuals for up to 96 hours before being transitioned to another level of care. Walk-in intake and assessment is available seven days a week, 24 hours a day.

Law Enforcement and Behavioral Health

Public safety officials often find themselves on the front lines of responding to behavioral health crises but have few resources available to address the needs of people with serious behavioral health conditions. Meanwhile, people with behavioral health conditions are over-represented in jails and prisons: 65% of inmates meet the criteria for a substance use disorder, and more than half have a mental illness.[1] To address the criminalization of individuals with behavioral health disorders and increase access points within the system, Baltimore City has implemented several initiatives.

BHSB, the Baltimore Police Department (BPD), National Alliance on Mental Illness Metropolitan Baltimore (NAMI Metro) and the city's two crisis providers, BCRI and BCARS partnered in 2004 to create a program to train patrol officers to better respond to behavioral health crises. The five partners have maintained a strong collaboration that has supported changes to the approach over time to integrate ongoing learning and quality improvement.

These five partners work collaboratively to sustain the CIT program. CIT stands for Crisis Intervention Team, which is a nationally recognized model for community policing that has proven to keep those experiencing mental illness out of jails and improve public safety. CIT helps to improve officers' ability to identify and address behavioral health crises and ensure safety of officers, individuals in crisis, and bystanders. The collaboration between officers and behavioral health providers allows for the identification of resources, provides assistance to those experiencing the crisis and their families, and ensures officers get the training and support needed to respond. BHSB employs a full-time coordinator for the project who is a clinician and works out of the police training academy. The coordinator works to fully integrate the training into the police department, facilitate improved provider and police relationships and implement components of the CIT model.

The CIT program provides all new city officers with 16 hours of CIT training, and experienced officers with 40 hours. CIT training results in officers having the knowledge and ability to:

- Reduce stigmatization of persons with mental illness

[1] The National Center on Addiction and Substance Abuse at Columbia University, Behind Bars II: Substance Abuse and America's Prison Population (February 2010).

- Prevent unnecessary restraint, incarceration, and hospitalization
- Help prevent injury to officers, family members, and individuals in crisis
- Link individuals with mental illness to treatment and resources in the community

In FY 17, eight training classes were held, with 90 new patrol officers and 109 experienced officers trained. The Collaborative Planning and Implementation Committee (CPIC), an element of the national CIT model, met regularly to oversee the implementation of the project and plan for enhancements.

The CIT program implemented the Crisis Response Team (CRT), a pilot CIT officer-clinician team in BPD's Central District during FY 17. This pilot program created a new behavioral health unit within the BPD to respond to 911 and other dispatch calls believed to be related to behavioral health crises occurring in the Central District of downtown Baltimore City. The CRT also provides some outreach and follow-up support to individuals who have had prior contact with the police department and/or the behavioral health unit. One year of funding was secured from the Morton K. and Jane Blaustein and Stulman Foundations. The police department is committed to finding sustainable funding. An evaluation of the project includes enhanced data collection in order to demonstrate the effectiveness of this model, with the goal of expanding it throughout the city.

Law Enforcement Assisted Diversion (LEAD) is a diversionary pilot program that was launched on February 21, 2017. Initial funding to support this program was secured from Open Society Institute; Governor's Office of Crime, Control and Prevention; Abell Foundation; and Morton K. and Jane Blaustein Foundation. Since its implementation the program has served 60 participants while maintaining an active caseload of 55 individuals. Five participants have transitioned to an inactive status as a result of success.

LEAD provides public safety officials with an alternative to incarceration by diverting people with low-level drug offendenses to treatment and support services. Care is provided through intensive interventions such as assertive community treatment, residential substance use disorder services, comprehensive case management, medication assisted treatment, and other support services. LEAD has demonstrated that treatment and recovery supports improve health and reduce recidivism.

LEAD was first implemented in Seattle, WA in 2011. A 2015 study found the following positive outcomes:

- Participants are 58% less likely to be arrested than individuals arrested for similar offenses but not enrolled in LEAD.
- Participants have lower recidivism rates than individuals in the normal criminal justice system, including those in therapeutic or problem-solving courts.
- Criminal justice costs declined by $2,100 for participants, while control group

participants' costs increased by $5,961.

In addition, an unplanned, but welcomed effect of LEAD in other states has been the reconciliation and healing brought to police-community relations. LEAD has helped facilitate positive relationships between police officers and residents and strong alliances between police and the behavioral health provider community. Baltimore City is looking forward to experiencing similar outcomes.

Finally, BHSB works closely with BPD to provide leadership and oversight of specific projects as well as to more generally inform and coordinate efforts within each other's systems. A major shared goal is to significantly decrease the number of people with behavioral health disorders who encounter the criminal justice system through prevention and diversion efforts. Some of those efforts have already begun and others are still being developed, as described above. To further grow this area of work BHSB and BPD have formed the Community Planning and Implementation Committee or CPIC. The CPIC is a group of stakeholders facilitated by BHSB and BPD that provides oversight to the behavioral health police work. CPIC was originally formed to guide the implementation of CIT in the city. BHSB and BPD are currently working to restructure the CPIC so that it provides integrated oversight to all joint behavioral health projects and increases the scope of stakeholders participating. It is expected that the first restructured CPIC meeting will occur in early Spring 2018.

Outpatient Civil Commitment

There are some Baltimore City residents with serious mental illness that the PBHS has not engaged well in treatment. These individuals may end up involuntarily hospitalized or unnecessarily involved in the criminal justice system, resulting in poor overall health outcomes.

BHSB received $2.8 million in federal funding from SAMHSA to implement a pilot Outpatient Civil Commitment (OCC) program in Baltimore City. The OCC program serves Baltimore City residents with a mental illness who are currently civilly committed to an inpatient psychiatric unit and

1) have been civilly committed to an inpatient psychiatric hospital at least one other time over the past 12 months,
2) have a demonstrated history of not engaging in available community treatment, and
3) are unlikely to seek and/or participate in community treatment upon discharge.

Legislation was passed during the 2017 legislative session to support implementation of the project and regulations that grant the legal authority to operate the program were promulgated October 27, 2017.

The program offers intensive outreach and engagement by peer specialists, with the goal of building trusting relationships and connecting people to ongoing treatment to reduce the

incidence and duration of psychiatric hospitalization, homelessness, incarceration and interaction with the criminal justice system, while improving the health and social outcomes of individuals with a serious mental illness. The pilot is being implemented in partnership with BHA, National Alliance on Mental Illness (NAMI), MHAMD and other partners.

BHSB selected Bon Secours Baltimore Health System through a competitive procurement process to provide peer outreach and engagement to individuals referred to the OCC program. Peer specialists work with the individual, family members, hospital treatment team and a community treatment provider of the individual's choice to develop client-centered service plans based on the individual's wants and needs. Individuals receive help connecting to behavioral health services, primary and/or specialty care providers, housing support, employment services, entitlements and benefits.

BHSB is responsible for the full implementation of the OCC project, including reviewing all referrals to ensure that the eligibility criteria are documented sufficiently and that providers are serving individuals in a client-centered manner. It is currently staffed by a project monitor and evaluator. As referrals are made and the caseload grows, a project manager and additional project monitor will be added to the team. The Consumer Quality Team at the MHAMD will conduct regular qualitative interviews with participants and relay important feedback to project partners. A community advisory group will monitor the implementation of the project through reviewing data and program outcomes.

To date there have been four referrals and there are two active participants in the project.

State Hospitals

BHSB works closely with the state hospitals to assist individuals with transitioning from a state hospital facility to the community. In FY 17, twenty-three (23) individuals were successfully transitioned from a state hospital into a community placement.

BHSB partners with an Assertive Community Treatment (ACT) team to support people who are homeless to acquire and maintain housing. The team provides in-reach, engagement, and transition planning services to individuals residing in state psychiatric hospitals with complex mental health and other secondary diagnoses who require additional support for discharge readiness. Funding is available for subsidies to help make housing affordable, and the ACT team provides follow-up services after discharge from the hospital. This project was successful in assisting six consumers who transitioned from state hospitals in previous years to maintain independent housing in the community throughout FY 17.

BHSB also partners with a Forensic Assertive Community Treatment Team (FACTT) to serve individuals with serious and persistent mental illness who are involved with the criminal justice system. Fifteen individuals were assisted in transitioning out of state hospitals during FY 17.

Housing First is another project that provides increased support to individuals in Baltimore City, Prince George's County and Montgomery County who are homeless. During FY 17, one consumer was assisted in transitioning from a state hospital into independent community housing. Eight consumers who transitioned from state hospitals through the project in previous years maintained independent housing in the community throughout FY 17.

Residential Rehabilitation Program (RRP) programs in Baltimore City have a total of 357 beds serving city residents. Additionally, two providers participate in the Capitation Project, which has 354 slots to serve city residents. For both of these services, BHSB serves as the point of contact for all referrals, which originate from state hospitals as well as from the community, although state hospital referrals are prioritized. BHSB clinical staff reviews applications for appropriateness and medical necessity, maintains a waiting list for RRP beds when they are not available, monitors vacancies to ensure system capacity is fully utilized and forwards referrals to programs when capacity becomes available. BHSB clinical staff ensures that individuals who are on the RRP waiting list are connected with other resources. During FY 17, 1,088 individuals were served in RRP beds in Baltimore City.

BHSB has been working during FY 18 to streamline and structure the referral processes to increase efficiency and support quality of care transitions. An additional goal is to track demographic data to increase capacity to understand the needs of the population served and gaps in services.

Early Childhood Services

Early Childhood Mental Health (ECMH) services supported by BHSB were provided in four of the five Head Start centers in Baltimore City, serving 783 children. ECMH ensures that children who are enrolled in Head Start Centers and their families have access to high-quality mental health services that promote optimal social-emotional health and academic success. To be effective, behavioral health service providers in early childhood centers collaborate with teachers, administrators, families and clinicians to employ sound behavioral health service integration that leads to academic success and is essential to overall health. A special emphasis is placed on ensuring support for children and families during the critical transition from pre-school settings to school settings.

Behavioral Health Services in Schools

Mental illness and substance use among youth are important behavioral health issues that significantly impact youth, families, and communities. Behavioral health conditions experienced by youth contribute to significant problems found in schools, such as chronic absence, low achievement, disruptive behavior, and dropping out. Schools can provide stability, important educational and social supports, and the opportunity to link to behavioral health services to which many youths might not otherwise have access.

BHSB partners with Baltimore City Public Schools (City Schools) to ensure that youth have access to high-quality behavioral health care that promotes social-emotional health and academic success. BHSB plays a critical role in funding, coordinating and overseeing a range of behavioral health services for youth and families through the schools.

The Expanded School Mental Health (ESMH) program provided prevention and mental health treatment services in 126 out of 177 (71%) schools to 7,997 youth during school year 2016-2017. Annual funding of $2.7 million for the ESMH program is provided through a long-standing collaboration between BHSB, City Schools, and several private foundations. This funding supports licensed mental health professionals who provide a range of services, including screenings and evaluations, parent and teacher consultations, individual and group treatment, and prevention services to youth at schools. Costs of some mental health treatment services are covered by Medicaid.

The prevention services for 6th graders embedded within the ESMH program is LifeSkills Training (LST), which is provided by ESMH clinicians in 35 schools, targeting sixth graders who are at risk of drop-out based on a set of specific criteria, including academic performance in math and reading, attendance, and behavior. LST is a research-validated SUD prevention program proven to reduce violence and the risks of alcohol, tobacco, and drug use by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors. This program provides adolescents and young teens with the confidence and skills necessary to successfully handle challenging situations. Rather than just teaching about the dangers of drug use, LST promotes healthy alternatives to risky behaviors through activities designed to:

- Teach students the necessary skills to resist social (peer) pressure to smoke, drink and use drugs,
- Help students develop greater self-esteem and self-confidence,
- Enable students to effectively cope with anxiety,
- Increase students' knowledge of the immediate consequences of substance use and
- Encourage cognitive and behavioral competency to reduce and prevent a variety of health risk behaviors.

SUD prevention, early intervention and treatment services were provided to students in 15 schools and two school-based sites in Baltimore City. BHSB provides $525,000 annually to support licensed behavioral health professionals with skills in the area of addictions treatment who provide a range of services, including screenings and evaluations, individual treatment and early intervention services, parent and teacher consultations, and group prevention activities for youth and families. Licensed behavioral health professionals also coordinate closely with School-Based Health Centers and health suites to address students' health care needs and refer for HIV or TB testing.

Peer Delivered Services

Peer Recovery Specialists ("peers") use their personal experience of recovery from trauma, substance use, or mental illness to help others make their own journey to recovery. Peers' personal experience makes them uniquely capable of authentically engaging with people, building trust, and instilling a sense of hope that treatment works and recovery is possible. State-credentialed "Certified Peer Recovery Specialists" have received training and passed an exam on ethics, advocacy, self-care, mentoring and other topics.

BHSB's partner providers employ peers in various roles and settings, including:

- Overdose education and naloxone distribution
- Street outreach/overdose outreach
- Anti-stigma trainings and group support around mental health disorders, substance use, and medication assisted treatment
- Recovery coaching in outpatient treatment settings
- Case management support for clients in Law Enforcement Assisted Diversion and Outpatient Civil Commitment programs
- Emergency Department SBIRT (Screening, Brief Intervention, and Referral to Treatment)

Baltimore's seven Wellness and Recovery Centers provide consumer-centered peer support services, such as anti-stigma workshops, Wellness Recovery Action Planning (WRAP), educational sessions such as parenting and GED classes, one-on-one peer counseling, peer-led group support (e.g. SMART Recovery®, Alcoholics Anonymous (AA), and Narcotics Anonymous (NA), acupuncture, tai chi, and other activities that reduce isolation and promote family and social support. One of these centers focuses on LGBTQ persons. Three of the centers provide nearly 24/7 availability of drop-in recovery support, which helps bridge the time when traditional services are not available.

Two centers are unique in following the Clubhouse International model: one serves adolescents ages 13-17 who are at risk for behavioral health issues and the other serves adults with a serious mental illness. The Adolescent Clubhouse, run by Progressive Life Center, receives an average of 392 visits per month and provides a culturally-centered and spiritually-based Afrocentric therapeutic approach called NTU, with a focus on harm reduction and reducing high-risk behaviors such as alcohol and drug use and unsafe sex. The adult program, B'More Clubhouse, receives approximately 606 visits each month and obtains most funding support from outside of the behavioral health system. It maintains accreditation through Clubhouse International with a unique approach to transitional employment which guarantees attendance for the employer by ensuring that, if a member is unable to show up to work, another member or staff person will fill in for them.

In FY 17, Baltimore residents visited Wellness and Recovery Centers 241,833 times. The Centers provided 10,209 one-on-one peer counseling sessions, over 185,615 group support sessions, and placed 178 persons in jobs. In addition, 987 persons were confirmed to have entered a treatment program as a result of a referral from a Wellness and Recovery Center.

This year, BHSB invested in training peer recovery specialists to grow SMART Recovery® discussion groups in Baltimore. SMART Recovery® is an internationally-organized addiction self-help program that emphasizes empowering language and cognitive-behavioral therapeutic strategies. The number of SMART groups had been growing in Maryland counties over the past several years but had not yet grown in Baltimore until this year, when BHSB sponsored trainings for 35 peer recovery specialists from 14 organizations. Now, seven organizations in Baltimore City have started nine new SMART Recovery® discussion groups with a yearly estimated attendance of 1,013.

The Overdose Survivor Outreach Program (OSOP) employs peers (persons with lived experience of recovery from substance use) who offer overdose survivors linkage to treatment and other support through face-to-face follow up in the community after discharge from the hospital. BHSB partners with four hospitals in Baltimore City that provide OSOP: Bon Secours, Mercy Medical Center, MedStar Harbor Hospital and University of Maryland Medical Center.

When an individual survives an overdose in the emergency department of one of the hospitals identified above, they are referred to a Peer Specialist. The Peer Specialist screens the individual for risky alcohol or drug use, has a conversation with the consumer about the screening results, and refers them to appropriate treatment and support services. If a consumer declines the initial offer to connect with treatment services, an offer is made for an OSOP Peer Specialist to meet with the consumer in the community at a later date. An OSOP Peer Specialist will then meet with the consumer at a time and place convenient for the individual, and offer assistance with accessing treatment, insurance, benefits, and other recovery and social supports.

During FY 17:

- Approximately 60% of people referred to OSOP were encountered by an OSOP Peer Specialist.
- Approximately 51% of OSOP referrals encountered agreed to receive a referral to treatment.
- Approximately 64% of OSOP referrals who were referred to treatment attended their first appointment.

In FY 18, BHSB is pursuing an expansion of OSOP to provide outreach to overdose survivors who are revived by EMS and refuse transport to a hospital.

Medication Assisted Treatment

Paid claims data shows that 13,670 people received Opioid Maintenance Treatment (OMT) in FY 17. The number of people served in OMT programs is the second highest utilized service next to outpatient services. It is expected that OMT services will continue to grow due to an increased need and a change in the Medicaid reimbursement structure for this service.

BHSB oversees the Baltimore Buprenorphine Initiative (BBI), which provides treatment, care coordination and other support services within nine provider locations in Baltimore City. In addition, one program is funded to provide non-traditional services, in which buprenorphine is available to consumers in a community setting, rather than an office-based location. BBI served approximately 717 people during FY 17. This number represents only a portion of individuals in the city receiving buprenorphine.

The BBI model has demonstrated success in transitioning consumers from traditional OMT treatment to primary care providers for buprenorphine maintenance. The protocol was recently revised to enhance the induction process and to integrate physical health care services into outpatient SUD treatment. BHSB anticipates that the revisions will facilitate increased consumer linkage to treatment while promoting overall health and wellness.

In January 2017, BHSB released a report that quantified a significant unmet need for Medication Assisted Treatment (MAT) services in the city. The number of individuals potentially in need of MAT is estimated to be 24,887, which is the estimated number of opioid users. The MAT treatment capacity in Baltimore City is 17,587, derived from OTP and buprenorphine provider self-report of capacity. Based on these numbers, BHSB estimates a capacity deficit of 7,300.

To address this need, BHSB partnered with the BCHD to develop a plan to expand access to buprenorphine treatment. One of the strategies that BHSB is partnering with BCHD to implement is a Hub and Spokes model, which builds on existing infrastructure in the system. SUD providers, such as Opioid Treatment Programs, serve as Hubs, which induct and stabilize consumers on buprenorphine. Spokes, which can include primary care physicians, health homes, federally qualified health centers and psychiatrists, provide ongoing maintenance on buprenorphine. The model facilitates coordination among Hubs and Spokes to ensure that consumers can be readily transitioned to higher and lower levels of care as their treatment needs change over time.

In addition, BHSB is working with the Baltimore City Needle Exchange Van Program to support its initiative to offer peer support services to van consumers. Peer Support Specialists will employ best practices to initiate and maintain relationships with consumers who utilize services from the BCHD Needle Exchange Program. Best practices include motivational interviewing, a harm reduction model that includes drug education, a non-confrontational/non-judgmental approach and education concerning the benefits of MAT.

BHSB is also working with the BCHD Field Services Unit to revise the Methadone Home Delivery Service protocol. This service ensures there is no interruption of methadone while an individual is in substance residential treatment (3.7/3.7D), long-term skilled nursing facility or homebound.

Problem Gambling

Beginning in July 2017, BHA created a new billable service line for problem gambling. BHSB partnered with BHA to manage grant funds that were allocated to reimburse for problem gambling treatment services, including assessments, outpatient, intensive outpatient, and 3.3 and 3.5 residential levels of care. Effective January 1, 2018, BHA shifted these funds to the ASO, which now is responsible for managing these services. During the six months managing the service line, BHSB registered 30 SUD treatment providers as problem gambling providers and reimbursed a total of $5,716 for services for 16 individuals.

Homelessness

BHSB works closely with other system partners to better address the needs of individuals with mental illness and substance use disorders. Two systems in particular are the homeless services and criminal justice systems. BHSB is an active participant in Hands in Partnership, a coalition of homeless outreach advocates. BHSB also works closely with the Mayor's Office of Human Services, which is the oversight entity for the HUD continuum of care and is a direct recipient of HUD funding for homeless outreach and Safe Haven services.

As of FY 18, BHSB funds several outreach programs to respond to individuals with behavioral health disorders and people experiencing or at risk of homelessness. Street outreach workers proactively canvass communities and develop trusting relationships that help them identify and intervene early with vulnerable people who have unmet behavioral health needs. Due to their close relationships with individuals and community members, outreach workers can sometimes be the first response to a crisis. Outreach is typically the only non-police-based service that assertively maintains efforts to engage a person who declines assistance. In FY17, BHSB funded 14 full-time and 4 part-time outreach staff at 5 organizations: 7 full-time and 4 part-time positions were dedicated to working with persons experiencing homelessness and mental illness, while 7 positions were dedicated to working with persons experiencing substance use disorders.

Of the staff dedicated to working with persons experiencing homelessness, 5 full-time and 4-part time positions comprised a peer-and-clinician integrated street outreach team that exclusively served unsheltered persons. This team has elevated responsibilities during severe weather events get unsheltered persons to safety. In the last fiscal year, this team provided outreach to 734 unduplicated persons. BHSB works closely with the Mayor's Office of Human Services, police, health care providers, and other systems of care to ensure that behavioral health outreach efforts are coordinated with homeless and crisis services.

Criminal Justice

BHSB is a close partner with the problem-solving courts in the city. The city is fortunate to have drug treatment and mental health courts at both the District and Circuit court levels. BHSB worked closely with the courts and BHA to ensure that the needs of individuals assessed as needing residential SUD treatment were met as the funding for this service moved from local management to the ASO. BHSB is also active in the BHA Forensic Work Group, the BHA Advisory Council Forensic Sub-Committee and the City's Criminal Justice Coordinating Council.

In addition, BHSB has been working closely with city partners to plan for a sequential intercept mapping process to identify additional intervention points within the Baltimore City continuum of care for individuals with mental illness and substance use disorders. The goal of the mapping process is to develop a system of care that prevents individuals from having contact with the criminal justice system.[2] BHSB has submitted a grant to SAMHSA GAINS Center to secure funding to begin this process. Lastly, BHSB has an active committee of its Board of Directors that consists of key decision makers in the criminal justice system. This group meets regularly to educate each other about resources within their respective departments as well as to strategize ways of addressing system level gaps.

Challenges

Despite having an integrated crisis response system that diverts a large number of people from unnecessary hospital-based care, more services are needed. Data from the Maryland Health Services Cost Review Commission showed that there were over 16,000 visits to EDs for alcohol and/or drug related diagnoses with more than 50% of those visits by Medicaid recipients and the majority discharged to home. A cursory examination of Baltimore City Fire Department dispatch data estimates that approximately 77% of EMS calls involve at least some connection to alcohol or drug use.[3] Data from a Baltimore study demonstrates that the most common health concern of frequent users of EMS is substance use intoxication and/or mental illness.[4] In addition, 32% of Maryland Medicaid enrollees with a substance use disorder visited the emergency department three or more times in a one-year period.[5]

Our current system of care is not designed to address the crisis needs of individuals and families 24/7. In behavioral health, crises are predictable but the timing of them is not. The crisis services should be expanded to include 24/7 walk-in crisis care and mobile crisis response, increased capacity for emergency respite services, centralized receiving for emergency petition

[2] For more information about the Sequential Intercept Model, click this link: https://www.samhsa.gov/criminal-juvenile-justice/samhsas-efforts
[3] Knowlton A, Weir BW, Hughes BS, et al. Patient demographic and health factors associated with frequent use of emergency medical services in a midsized city. *Acad Emerg Med*. 2013;20(11):1101–11. doi:10.1111/acem.12253.
[4] BQUEST study 2008-2013
[5] Hilltop Institute, 2010

evaluations, peer respite services, jail re-entry services and a data sharing platform that tracks people through the continuum of crisis response services while also providing data needed for partners to more effectively provide care. Funding is the biggest barrier to implementing a full continuum of crisis services. The majority of services within the system are not reimbursable by Medicaid. Relying solely on grant funding is not possible. Alternate, sustainable sources of funding are needed. In particular, hospitals that stand to directly benefit from the outcome of a comprehensive crisis response system should contribute to the long-term sustainability of the system through the use of community benefit dollars.

While BHSB continues to pursue exciting new opportunities to expand the depth and reach of the public behavioral health system in Baltimore City, many barriers exist:

- Funding and access is limited for the training and certification of peer support specialists.
- Funding is limited (and recently cut in Baltimore City) for the development, implementation and ongoing sustainability of peer-delivered services.
- Providers are reluctant to prescribe, and consumers are hesitant to take, medication to assist with substance use disorders.
- Communities are often opposed to behavioral health services being located in their neighborhood, especially MAT services.
- Safe, affordable, supportive housing that meets people's basic needs is not readily available.
- Housing subsidies are limited, especially for families.
- Family-focused interventions are limited in scope and number within the system of care.
- While opioid use and overdose are significant problems and much more is needed to continue addressing the epidemic, reducing the impact of substance misuse and dependence cannot be done without acknowledging and taking efforts to reduce the impact of alcohol use disorder.
- Implementing, promoting and holding providers accountable for quality clinical and service delivery standards is difficult when payment is not directly linked to outcomes.
- Securing ongoing sustainable funding for services not reimbursable by Medicaid is an ongoing challenge. Too often new services are implemented with time-limited federal and private funding without sufficient long-term sustainable funding readily available to sustain the new service while continuing to sustain other ongoing, grant-funded services.
- Our current system of care is not designed for a consumer to have a no wrong door experience when requesting help, i.e. the provider directly serves the client or fully links them with a warm hand off to a service that would better meet their needs if they are unable to provide the service.

While the items bulleted above represent specific system design and funding barriers across the system of care, one opportunity specific to Baltimore City is the consent decree between the Baltimore Police Department and the Department of Justice. BHSB was actively involved in

providing feedback to the Department of Justice, and specific recommendations will involve partnership with the behavioral health system to fully implement reforms that will improve behavioral health crisis response services in Baltimore City. While there will be funding and system change challenges in fully implementing recommendations, BHSB views the consent decree as an opportunity to fully operationalize policies and procedures that will better support police interactions with individuals with behavioral health needs. In addition, through a required gaps analysis of the behavioral health system, the consent decree will hopefully help build a system that provides the services individuals with behavioral health disorders need to minimize or even avoid contact with the police.

3) QUALITY

Quality Initiatives

The *Organizational Structure* section of this document includes BHSB's *Statement of Values*, which identifies *quality* as one of the key values BHSB embodies in its work. A high-quality system of care that ensures access to safe and effective treatment is essential to promote and support behavioral health and wellness of individuals, families and communities. BHSB is working to enhance its role in the promotion of quality within the provider system by developing structures that support ongoing quality improvement using data-driven monitoring approaches. To support a strong change management process, BHSB implements change in a well-defined, transparent and systematic manner, and re-evaluates processes to ensure that improvement has occurred. To increase organizational capacity to lead this work, BHSB created and filled two new positions to lead quality initiatives work – Vice President of Accountability and Provider Relations and Director of Quality.

One of the initial focuses during FY 17 was to review and strengthen monitoring processes to ensure that providers are in compliance with state regulations and standards of care including accreditation standards. Internal processes, site visit protocols and tools were analyzed and updated. To positively impact consumer care and prevent the occurrence of serious adverse outcomes, in partnership with BHA, BHSB strengthened its *Sentinel Events* protocol during FY 17. A sentinel event is an unexpected occurrence involving death or serious physical or psychological injury, or the risk of serious adverse outcome. Sentinel events signal the need for immediate investigation and response, with the goal of focusing the provider's attention on understanding and changing the contributing factors to reduce the probability of such an event in the future.

In addition, BSBH developed measures to review customer satisfaction, and work is under way to develop standard performance measures specific to various service lines. During the spring of 2018, BHSB will begin reviewing processes and tools using an equity lens, with the goal of adding measures regarding ethnicity, race and language.

During FY 17, BHSB conducted 120 site visits, 22 follow up site visits, and 42 audits, which were in partnership with the ASO. Twelve providers were placed on performance improvement plans (PIPs), of which nine PIPs remain open and three are closed. BHSB investigated 48 complaints about providers, of which 32 are closed and 16 remain under investigation. There were 52 sentinel events, of which 30 are closed, and 21 remain under investigation.

Effective April 1, 2018, state regulatory changes require most behavioral health programs to be accredited and licensed under COMAR regulations 10.63 to continue operations. The deadline to apply for licensure was December 31, 2017. Before applying for licensure, license renewal, or a change to an existing license, providers must become accredited by an approved, national accrediting organization. In addition, providers in Baltimore City must enter into an Agreement to Cooperate with BHSB. BHSB supported providers in fulfilling these requirements by processing 165 Agreements to Cooperate prior to the December 31, 2017 deadline. BHSB also partnered with BHA to manage grant funds that were allocated to reimburse for one-time accreditation assistance. Fifty applications for one-time accreditation assistance were processed, totaling $255,041, of which $168,447 was for Baltimore City providers and $86,594 for Prince George's, Howard and Arundel County providers.

While leadership of the quality improvement work is embedded in the Accountability and Provider Relations department, BHSB developed structures to facilitate cross-departmental collaboration to ensure that the full range of organizational capacity is utilized. One such structure is in the provision of technical assistance, which is a formalized and systematic process to assist providers in resolving non-compliance violations. Based on criteria such as the size of the organization, total number of consumers served, number and severity of compliance violations and number of prior PIPs, BHSB provides weekly, intensive assistance. Follow up is scheduled at 30-day and 60-day intervals, with a site review audit happening at 90 days. The goal of this process is to work in partnership with the provider to support and assist in improving the quality of services.

BHSB implemented the Quality Council during FY 17, which is a proactive and collaborative forum to engage providers in quality improvement activities and resolve challenges before they escalate. Staff from the Accountability and Provider Relations Department facilitates the sessions, and BHSB staff members from across the organization participate. Quality Council meets monthly to focus on a specific issue or set of concerns upon request by a provider or BHSB staff person. After discussion of the issues, recommendations and action plans are developed. BHSB documents the recommendations and plans and monitors implementation going forward. The first Quality Council met in March 2017, with a total of four sessions during FY 17. Outcomes resulting from the sessions were: one provider was offered suggestions regarding billing practices; three providers received technical assistance, of which one is completed and two are ongoing; and one provider was placed on a PIP which also resulted in technical assistance.

During the spring of 2018, BHSB plans to implement the Quality Assurance Committee, which will involve staff from across the organization, as well as providers from all service lines. This Committee will be responsible for defining, prioritizing, overseeing and monitoring performance improvement activities within the PBHS, including consumer and environmental safety. It will provide a formal process to objectively and systematically monitor and evaluate the quality, appropriateness, efficiency, safety and effectiveness of care and service utilization, using a multidimensional approach. This approach will support focusing on opportunities for improving operational processes as well as health outcomes and satisfaction of consumers and providers.

Equity and Inclusion

Health inequities and the prevalence of racial and ethnic disparities in health care delivery and outcomes in the United States are well-documented.[6] Culturally and linguistically diverse groups and individuals with limited English proficiency typically experience less adequate access to care, lower quality care and poorer health status and outcomes. BHSB is committed to addressing issues related to achieving equity in Baltimore City's PBHS. This commitment is reflected in the strategic plan with a goal to promote racial justice in policies and procedures.

To increase its organizational knowledge of how culture influences beliefs, values and behaviors, BHSB engaged in a cultural competency training process during FY 17 that included an all-staff training followed by facilitated dialogues. Building on this groundwork, during the fall of 2017 BHSB developed a structure and process to facilitate the implementation of culturally competent values that promote equity and inclusion internally and within the provider network. An internal work group was formed and is charged with leading the organization in developing and implementing strategies to address equity and inclusion.

A consultant with the National Center for Cultural Competence at Georgetown University facilitated a full-day training for all staff during October 2017 to increase knowledge and awareness of the realities of racism at the personal, organizational and systemic levels. One of the goals was to increase staff's comfort level in engaging in racism-informed dialogue with each other and with system partners. This skill is essential to creating an environment in which BHSB's organizational culture and infrastructure support equity and inclusion and embed these values within routine operations and activities. The consultant conducted trainings with each department during January 2018 to identify the programmatic structures unique to each team and explore how the implementation of cultural competence can be made manifest within those structures.

[6] Culturally and Linguistically Appropriate Services. U.S. Department of Health and Human Services. https://www.thinkculturalhealth.hhs.gov/clas

Providing culturally and linguistically appropriate services (CLAS) is one strategy toward eliminating health inequities. The U.S. Department of Health and Human Services (HHS) developed the National CLAS Standards to advance health equity, improve quality, and help eliminate health care disparities. By tailoring services to an individual's culture and language preferences, health professionals can help bring about positive health outcomes for diverse populations.

Cultural and linguistic competence in the delivery of behavioral health services affecting Limited English Proficient (LEP) persons has a profound impact on access to and the quality of care. To advance an agenda that minimizes health disparities and addresses the behavioral health needs of this growing population, BHSB participated in preliminary discussions with targeted informants during the summer and fall of 2017. Next steps are to convene a *Structured Conversation with Community Stakeholders* to conduct a landscape review of resources and prioritize needs. BHSB will then work with stakeholders to create a plan, including trainings and workforce development opportunities for behavioral health providers.

For consumers who are deaf or hard of hearing and meet criteria for public behavioral health services, BHSB provides communication assistance by clinicians and interpretors fluent in American Signed Language (ASL) and trained to provide signing communication as part of clinical and rehabilitation services. ASL services are available within the following levels of care: outpatient mental health treatment, Residential and Psychiatric Rehabilitation Programs (RRP, PRP) and Supported Employment Program (SEP). During FY 17, 14 consumers were served in outpatient mental health treatment, 15 in PRP, 7 in RRP and 1 in SEP.

<u>High Utilizers</u>

Many individuals who utilize high levels of behavioral health services also have frequent acute health care needs. They are often highly vulnerable with co-morbid and/or tri-morbid conditions and need a higher level of care management. When a high utilizer is identified, BHSB works in partnership with the ASO to ensure that the individual's needs are met. During the fall of 2017, BHSB convened an internal work group to develop a systematic approach to this work that more broadly includes all populations served by the PBHS. Key goals that have been identified include: improving wellness, providing more effective care, increasing community-based as opposed to institutional care, and reducing the cost of care.

<u>Smoking Cessation</u>

BHSB believes that health and wellness are vital components of the recovery process for individuals with behavioral health disorders. To assist individuals with achieving health and wellness, BHSB promotes smoking cessation within the provider network through discussions and presentations in provider meetings. BHSB also requires contracted providers to assess all consumers for nicotine dependence and incorporate interventions into treatment plans when

nicotine dependence is indicated. BHSB continues to have staff active with the State's MDQUIT Advisory Board and disseminates MDQUIT resources to providers and consumers.

Challenges

BHSB values quality and appreciates the opportunity to partner with providers across the system of care to promote access to safe and effective treatment. However, many challenges exist, one of which is the lack of safe and sanitary housing. BHSB receives complaints from consumers, families and providers about housing for individuals who have behavioral health disorders. Programs promote themselves as supportive housing or recovery housing but do not have State of Maryland certification. Unfortunately, BHA does not monitor housing that is not certified, and the LBHA does not have authority to investigate complaints. A comprehensive approach at the state level that creates a mechanism to monitor non-certified programs and far reaching communication on how concerned citizens can file a complaint is needed.

Another persistent challenge is a lack of access to medication management services. BHSB receives complaints from consumers that they experience lengthy waits for appointments for medication management. Some are told that they must see a therapist for a certain number of sessions before they can see the psychiatrist, even though COMAR prohibits this practice. Existing clients also report experiencing difficulty scheduling medication management appointments, or re-scheduling when the psychiatrist misses appointments. Many programs have a medical director who does not provide the required hours per week onsite, resulting in insufficient medication management hours. Programs can alleviate this challenge by hiring supplemental psychiatrists or nurse practitioners whose licensing permits prescribing.

An additional workforce issue is the lack of licensed social workers, counselors and certified addiction counselors and high turnover rates. The HOPE Act, which authorized funding for community behavioral health providers, was important legislation, but it does not address the systemic underfunding that has resulted from many years of level funding of the PBHS.

4) BEHAVIORAL HEALTH AND WELLNESS OF INDIVIDUALS, FAMILIES AND COMMUNITIES

BHSB recognizes that to achieve health and wellness in the city, we need more than a strong public behavioral health system. We need thriving communities that nurture families and children and support access to needed resources. As described earlier, BHSB's organizational structure supports its commitment to promoting population health, community resiliency and prevention of behavioral health conditions.

Trauma-Informed Care Learning Community

BHSB convened a Trauma-Informed Care (TIC) Learning Community during FY 17 that provided coaching, technical assistance and collaborative learning opportunities for eight organizations. It was informed by a focus group held in September 2016, to which leaders of interested organizations were invited to talk about their organizational needs. This information was used to ensure that the learning community was structured to address identified needs. The organizations that decided to participate were responsible for identifying teams composed of staff members who were tasked with developing and implementing plans to infuse trauma-informed policies and practices into the organization.

The learning community kicked off with a full day of training that included a morning introductory session on trauma-informed care and a facilitated session in the afternoon for the teams to begin planning the work on which they would focus. There were four meetings for the entire learning community, during which the teams provided informal presentations regarding their planning, challenges and implementation efforts to date, with facilitated learning opportunities and collaborative problem-solving. The facilitator provided individualized technical assistance and coaching to each of the teams via conference calls and site visits throughout the year.

Stress, Trauma and Resilience

The Centers for Disease Control and Prevention's (CDC's) landmark 1998 study on Adverse Childhood Experiences (ACE) demonstrated the connection between traumatic childhood experiences and many emotional, physical, social and cognitive impairments that lead to increased incidence of health risk behaviors, which, in turn, lead to disease and premature death.[7] Roughly 75% of individuals with substance use disorders have experienced trauma.[8] The mechanisms that underlie the connection between ACEs and long-term health risk are highly complex, and neurobiological research is helping us understand what happens. This science shows the biology of stress and the way that toxic stress impacts the developing brain.

The implications of this research point to a fundamental paradigm shift. The diseases that we think about and treat based on a system of discrete categories are not, in fact, separate disease entities. They are symptoms of conditions that caused such stress during critical developmental periods as to result in adaptations.[9] The problem of stress is the major public health challenge of

[7] Fellitti, V.J., et al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. American Journal of Preventive Medicine, 14(4) 245-258. doi: http://dx.doi.org/10.1016/S0749-3797(98)00017-8

[8] Mills, K.L., Teeson, M., Ross, J., et al (2006). The Costs and Outcomes of Treatment for Opioid Dependence Associated with Post-Traumatic Stress Disorder. Psychiatric Services, 56(8), 940-945.

[9] Bloom, S.L. (2016). Advancing a National Cradle-to-Grave-to-Cradle Public Health Agenda. Journal of Trauma and Dissociation, 17(4) 383-396. http://dx.doi.org/10.1080/15299732.2016.1164025

the 21st century.[10] This is a challenge that cuts across all systems and institutions, and the behavioral health field has a critical role.

Based on this research, BHSB is undertaking a system-wide transformation initiative with the following goals:

- Increase behavioral health providers' capacity to create cultures and implement policies and practices that mitigate and/or prevent the impact of toxic stress and trauma.
- Collaborate with providers to support, reinforce and build upon resilience in the individuals, families and communities we collectively serve.

The initiative was launched in November 2017 during BHSB's annual gathering. Dr. Sandy Bloom, who was co-founder and developer of the Sanctuary Model® training and implementation process and who presently co-chairs the national *Campaign for Trauma-Informed Policy and Practice*, was the keynote speaker. Dr. Bloom spoke about the science that points to stress being the major public health challenge of the 21st century. She highlighted the need for a fundamental paradigm shift across systems, institutions and communities. A series of trainings will be offered to providers during the winter and spring of 2018.

U-TURNS

U-TURNS (Trauma, Unity, Recovery, Navigation and Safety) launched in February 2017. It utilizes a trauma-informed approach, with the goal of creating a safe space where young people who have been exposed to violence, chronic stress and trauma can be supported to fulfill their positive potential. It is funded by a five-year award from SAMHSA under the National Child Traumatic Stress Initiative.

Outreach workers engage youth through street outreach and support them in reaching their goals through peer support, yoga, tai chi, acupuncture and *S.E.L.F. Community Conversations*, which is a framework of culturally-appropriate exercises that uses structured dialogue, with relevant and culturally-competent exercises, to address the learning points that accompany exposure to trauma, abuses, and other forms of adverse conditions.

S.E.L.F. is an acronym - for Safety, Emotions, Loss, and Future - that identifies these four facets of universal human responses to complex and potentially dangerous life circumstances. The goal is to focus on the effects of exposure to trauma, which include: loss of safety, inability to manage emotions, overwhelming losses and a paralyzed ability to plan for or even imagine a different future.

[10] Bloom, S. L., & Reichert, M. (1998). Bearing witness: Violence and collective responsibility. Binghamton, NY: Haworth Press.

During FY 17, the outreach workers made 2,463 outreach contacts and formally enrolled 40 young people into U-TURNS. A total of 62 young people participated in *S.E.L.F. Community Conversations*.

Family Peer Support

Parents, caregivers and family members of children with behavioral health challenges need significant support and education resources. BHSB supports a state-wide network of Parent-Peer Supports through funding and technical assistance provided to Maryland Coalition of Families (MCF). MCF utilizes a Family Peer Support Specialist (FPPS) model, involving individuals with "lived experience" as caregivers for a child with mental health, substance use and/or other behavioral health conditions, providing supports to parents in similar caregiver roles. These supports can include helping families navigate services and systems, attending meetings with families, explaining rights and responsibilities and providing opportunities to meet with individuals in similar, stressful roles. There is no cost to parents/caregivers for services state-wide, reducing barriers to engagement and support. Expansion of these services to support loved ones of all ages who are impacted by individuals with a Gambling Disorder began during FY 18.

MCF also provides webinars and family trainings on behavioral health topics and coordinates the Family Leadership Institute, which provides education and resources to parents, caregivers and family members of children with behavioral health challenges. It is also an active partner in the Children's Mental Health Matters! (CMHM!) campaign with the MHAMD.

Overdose Response

Baltimore City is experiencing a public health emergency, as the number of opioid overdose fatalities continues to rise. The Maryland Opioid Operational Command Center requires that each jurisdiction establish an Opioid Intervention Team (OIT) to coordinate local opioid response efforts and integrate with statewide efforts. As the City's public health agency, the BCHD leads the overdose response and chairs the OIT. BHSB participates on the OIT, as well as on the city's Opioid Fatality Review team, which is also chaired by BCHD. To facilitate communication and coordination, a BCHD staff person attends BHSB's internal overdose response work group.

In partnership with the Baltimore City Fire and Health Departments, BHSB developed a system of notification to providers and other partners of increases in opioid-related overdoses in specific neighborhoods within the city. Overdose data is analyzed in real time, and usually within 48 hours of a spike being detected, a message is sent electronically warning behavioral health providers of the general location of the spike and asking that the information be shared with colleagues and community members. The alert includes critical information, including:

- Naloxone reverses the symptoms of an overdose and saves lives.
- Naloxone reverses fentanyl-related overdoses, but it may require more than one dose.
- Good Samaritan law protections

- Accessing treatment and recovery services information by calling the 24/7 CI&R line.
- Schedule of upcoming street outreach naloxone trainings.

Harm Reduction

Harm reduction is an approach that utilizes practical strategies to reduce negative consequences associated with drug use. It is based on an understanding that drug use is highly complex and some ways of using drugs are safer than others.

BHSB continued providing overdose education and naloxone distribution during FY 17. Through targeted street outreach and classroom trainings, outreach workers utilized a harm reduction approach to support the residents of Baltimore in preventing and responding to overdoses by training 4,272 people and distributing 3,939 naloxone kits.

BHSB has supported the development of a network of people with lived experience related to drug use since 2015. In FY 17, this network named itself Bmore POWER (Peers Offering Wellness Education and Resources). During the summer of 2017, BHSB continued to build the Bmore POWER network by facilitating the HaRT Program, a ten-week harm reduction training program (40 hours total) for people with lived experience related to drug use, for the third time since 2015.

Given the enormous increase in overdose deaths involving fentanyl, BHSB and Bmore POWER collaborated to hold a summit on fentanyl for people with lived experience related to drug use and frontline workers in June 2017. The summit was attended by over 100 people and included education and experience-sharing on fentanyl, as well as brainstorming ways to help people stay safe and make informed decisions.

BHSB staff also participated on the BRIDGES (Baltimore Resources for Indoor Drug-use Grassroots Education & Safety) Coalition, a group of peers, providers, and advocates working together to advance harm reduction strategies, such as safe consumption spaces, to improve health and justice in and around Baltimore.

Opioid Misuse Prevention Plan

Based on a needs assessment that was completed and approved by BHA during FY 15, BHSB developed an Opioid Misuse Prevention Plan (OMPP) that was approved by BHA in FY 16. This plan included two initiatives: (1) provide training and clarity regarding the Good Samaritan Law and its implementation and use for the Baltimore Police Department and at-risk community residents, and (2) provide linkages to the public behavioral health system for individuals who experience a non-fatal overdose in the community.

The curriculum for training law enforcement was implemented in FY 17, and training will continue during FY 18. A revised strategic plan for the 2nd initiative was approved in May 2017

to investigate why individuals who survive an overdose refuse transport by ambulance to the hospital and to determine what linkages would best meet their needs at the time of an overdose.

Other OMPP activities in FY 17 included launching a digital media and community outreach campaign for National Take Back Day, which is sponsored by the Drug Enforcement Administration (DEA) to raise awareness of prescription return boxes throughout the city. The campaign led to a 25% increase in pounds of unwanted and unused prescription medications collected in Baltimore City compared to the previous year. In addition, OMPP created a variety of outreach materials (including brochures, palm cards, hand sanitizers, and stickers) to inform the community about the Good Samaritan Law and how this law protects individuals seeking help when someone has overdosed.

Public Education

BHSB participated in several community-wide events this year that raised awareness of behavioral health issues and addressed stigma. As referenced above, in April, BHSB partnered with the BCHD, BPD and DEA to raise awareness about National Drug Take Back Day by co-hosting a press conference reminding people to drop off unused and unwanted drugs at drop-box locations throughout Baltimore City.

BHSB participated in Mental Health Awareness month in May by sponsoring the annual NAMI Walk in Baltimore City and promoting stories of recovery. NAMI Metro also provided an In Our Own Voice presentation for BHSB staff, in which people with mental health conditions shared their powerful personal stories. In September 2017, BHSB promoted Recovery Month by sponsoring a community walk and picnic and promoting stories of recovery on our website and social media.

In addition to the public education activities conducted by staff, BHSB funds the following organizations to provide public education and support activities for individuals, families and communities in Baltimore City:

- MHAMD provides children's mental health information and campaign materials for Children's Mental Health Matters, participates in health fairs, conducts older adult mental health and advanced directive trainings, collaborates with BHSB to disseminate Mental Health First Aid throughout the City, and oversees a public education project to address the behavioral health needs of new mothers.
- NAMI (Metro and State chapters) provides family support trainings and workshops on mental health topics and coordinates its annual NAMI Walk, a public education event that promotes awareness of mental illness.
- MCF provides webinars and family trainings on mental health topics and coordinates the Family Leadership Institute, which provides education and resources to parents, caregivers and family members of children with behavioral health challenges.

- On Our Own of Maryland provides presentations on the stigma of mental illness, partners with local consumer-run organizations in various educational events and provides assistance and referrals to consumers via telephone and in person.

Prevention

One of the goals identified in the strategic plan that BHSB developed during FY 17 is to promote a comprehensive behavioral health and wellness prevention strategy for Baltimore City. BHSB began the initial planning for a collaborative process during FY 18 that will engage City residents, community coalitions, and other key stakeholders in developing a strategic prevention approach that prioritizes addressing the structures and social determinants that negatively impact behavioral health and wellness.

During FY 17, BHSB funded primordial, primary, secondary and tertiary prevention strategies. Primodial strategies change social and environmental conditions so as to prevent the development of risk factors. The work under the Maryland Strategic Prevention Framework (MSPF 2) is a primordial strategy.

MSPF 2 focuses on the reduction of underage and binge drinking amongst adolescents and young adults, ages 12-24. Based on a vast amount of data collected from the Youth Risk Behavior Survey (YRBS) and the Maryland Youth Survey on Alcohol (MYSA), in addition to a needs assessment, key informant and focus group interviews, the following issues were identified: high alcohol outlet density and the lack of responsible drinking practices. These factors are being addressed in targeted Community Statistical Areas (CSAs) of Baltimore City. The targeted CSAs are Greenmount, Oliver East, Coldstream, Homestead and Northwood. BHSB supported a community-based, MSPF 2 Coalition, that developed and employed individual action steps to facilitate positive change regarding these issues, leading toward the following goals:

- Increase liquor store sanctions;
- Decrease retail availability of alcohol for adolescents and young adults.

The partnerships included:

- Baltimore Liquor License Commission
- Baltimore City Law Enforcement
- Baltimore Good Neighbors Coalition
- Baltimore City Health Department
- Morgan State University
- Johns Hopkins Center on Alcohol Marketing and Youth
- Baltimore City Local Media
- East Baltimore Drug-Free Communities Coalition
- Oliver Community Association
- Local community-based organizations and businesses represented in the targeted CSAs

Transform Baltimore, which is an update to the Baltimore City zoning code passed by the Baltimore City Council on December 5, 2016, presents an opportunity for the MSPF 2 Coalition to significantly impact its focus areas during FY 18. BSHB will be supporting its capacity to organize and advocate for its goals.

SBIRT, described in the *System Management and Integration* section of *Highlights, Achievements and Challenges*, is both a primary and secondary prevention approach. Primary strategies are universal approaches that seek to reach all members of the population, without regard to level of risk exposure, whereas secondary prevention includes early detection and intervention, focusing on individuals who have been exposed to elevated levels of risk. SBIRT is implemented as a universal screening of all patients at a clinic or other health services center. It identifies risky alcohol and/or drug use and helps individuals avoid the worsening of medical problems and the development of behavioral health disorders.

Tertiary strategies focus on reducing impairments and optimizing functioning. BHSB's overdose prevention and harm reduction areas of work, described earlier in this section of *Highlights, Achievements and Challenges*, are examples of tertiary interventions focused on reducing negative consequences associated with drug use.

Challenges

The conditions in which people are born, grow, live, work and age, and which are affected by the distribution of money, power and resources, are referred to as the social determinants of health. These determinants result in enormous health disparities between communities. As described in the *Baltimore City Demographics* section of this plan, Baltimore City has a disproportionate burden of structures and conditions that increase the likelihood of chronic behavioral health conditions.

Baltimore City's Department of Planning has collected and analyzed data that shows enormous disparities in the city's investment between neighborhoods that are predominantly white, versus predominantly communities of color.[11] Historical federal and local policies, such as redlining, racial zoning city ordinances and racially restrictive housing covenants, have resulted in disinvestment that continues to be structured into the systems, policies and procedures that guide resource distribution today. As a steward of public funds, it is incumbent on BHSB to work to ensure that resources are distributed equitably, in ways that intentionally address the harm to communities that resulted from disinvestment. As described under *Equity and Inclusion* in the *Quality* section of *Highlights, Achievements and Challenges*, BHSB has developed a structure and process to facilitate the implementation of culturally competent values that promote equity

[11] Abello, Oscar Perry. Baltimore Reckons With Its Legacy of Redlining. Next City. November 22, 2017. https://nextcity.org/daily/entry/baltimore-reckons-legacy-redlining

and inclusion internally and within the provider network. This work will be ongoing, and BHSB anticipates that many challenges will arise, some of which will be internal. Others may arise from conflict between the requirements of funders and BHSB's broader equity vision. BHSB also recognizes that to maximize outcomes from the investment of public funds, systems and institutions must collaborate to align resources around shared goals. Effective collaboration, however, is very challenging. It requires the sustained commitment of leadership, strong communication and ongoing relationship-building.

An additional challenge is funding for prevention services, which is limited and primarily targeted toward preventing or reducing substance use. The process for distributing these resources is highly structured at the state level, which can result in conflict between community-driven processes and funding requirements. There is a need for a broader scope of prevention activities, in particular suicide prevention.

5) DATA AND SYSTEM OUTCOMES

One of BHSB's strategic priorities is using data to support practice. In support of this priority, the data team developed multiple strategies to increase the capacity of BHSB staff and the wider provider network to use data.

RecoveryStat

BHSB launched RecoveryStat during January 2017. RecoveryStat analyzes and reports on utilization of the public behavioral health system in Baltimore City using paid claims data. In collaboration with a provider work group, BHSB identified the following key indicators:

- Average expenditures per consumer
- Number of providers using public dollars and volume
- Average number of consecutive months of outpatient engagement
- Percent of consumers who transition from inpatient to outpatient care within 30 days
- Percent of consumers reporting good health, employment, homelessness

Providers are invited to participate in quarterly meetings, during which analyses are presented and discussed. The goals are to support providers in increasing their capacity to use data to enhance practice and to increase the collective understanding of how the provider network functions as a system of care.

Several weeks prior to each RecoveryStat for providers, BHSB holds an Internal RecoveryStat. This meeting ensures a full range of programmatic input into the analyses and data presentation. It also supports staff in developing BHSB's capacity to use data to inform practice, policy and system change.

Evaluation Projects

BHSB's data team engaged in several research and evaluation projects during FY 17. One such project is a qualitative study that aimed to understand the barriers among syringe service program clients to calling 911 following the implementation of the Good Samaritan Law (GSL), a law which extends legal immunity to overdose bystanders who call for emergency assistance. The study results suggest that the even within the context of the GSL, many barriers still exist for bystanders. Overdose bystanders reported fearing arrest for drug or paraphernalia possession, homicide, outstanding warrants, and/or trespassing. Other factors that deterred calling 911 after overdose include a strong distrust of police stemming from a history of police maltreatment, fear of losing housing or custody of children, stigma and violent repercussions at the hands of local drug dealers.

The Transport Refusal study aimed to identify reasons why overdose survivors refuse emergency medical services (EMS) transport to the hospital following an overdose, and conditions under which overdose survivors would be more likely to accept transport and behavioral health linkages to care in the prehospital setting. Intolerable withdrawal symptoms after naloxone administration was a pervasive theme and primary driver of refusal. Due to these symptoms, many participants described resistance to naloxone administration by EMS, and many reported drug consumption immediately after resuscitation with naloxone to ease these symptoms.

Study participants cited reasons for transport refusal related to the hospital and EMS staff. Hospital-related reasons included perceived poor treatment; inadequate care and/or referrals; insufficient severity of their medical condition; and fears of disclosure of their drug use by hospital staff to family, friends and the authorities. Reasons for transport refusal related to EMS included perceived treatment by EMS providers, fear of the ambulance vehicle itself and cost. Respondents reported increased willingness to accept transport and other services if withdrawal symptoms could be eased (buprenorphine induction was discussed), if they perceived more "sensitive" treatment by EMS providers and if respondents believed their medical condition were more severe. Alternative destinations (e.g. stabilization center), particularly if withdrawal symptoms were relieved, alternative transport (e.g. peer transport) and buprenorphine induction were favorably discussed by participants. Focus groups were also held with EMS providers and leadership to triangulate findings and identify practical opportunities for intervention.

At the request of the State, BHSB provided early support for an evaluation of SBIRT, OSOP and Buprenorphine induction programs. This support included documenting a framework for evaluation, facilitating discussion among partners to define research questions and identifying possible data sources and analytic approaches. BHSB is working in a consultative capacity with BHA and University of Maryland's Systems Evaluation Center in what is now called the Hospital-based Peer Support Interventions Evaluation (HPSIE).

The Outpatient Civil Commitment (OCC) project, described in the *Access* section of *Highlights, Achievements and Challenges*, is a pilot project to engage individuals who are high-cost, high utilizers of inpatient mental health services and not well-engaged in traditional outpatient behavioral health services. Over the next four years of this pilot project, BHSB will conduct an extensive evaluation of the OCC program to monitor service provision and assess impact of the program. Specifically, the project seeks to closely examine provider activities; participant engagement, needs and assets and the impact of the project on outcomes such as behavioral health service utilization, health and health behavior and social determinants across time. Outcomes at six months (and 12 months, where data is available) will be compared to baseline and/or six months prior to program enrollment, as appropriate. Quasi-experimental evaluations with a comparable population are currently under consideration.

The Expanded School Behavioral Health (ESBH) Evidence Based Assessment (EBA) Initiative was begun during FY 16 with the goal of collecting information and data from the school-based behavioral health providers serving all school grades, from kindergarten through 12th grade, to understand the characteristics of students served and continue to improve services provided. Annually, after the full EBA data collection is complete for the school year, an Impact Evaluation is developed. The Impact Evaluation is used by individual providers to inform their practices and is also utilized by BHSB and system partners to support quality improvement efforts and advocate for continued ESBH implementation. During FY 16, the initiative collected 436 surveys, of which 390 were from mental health providers, and 46 from SUD providers. Of the 436 surveys, 62% of the students identified as male, and 38% as female. The racial demographic breakdown was 85% African American, 10% white, and 5% other, with 5% identifying as Hispanic. Key outcome measures indicated that 20% of the students experienced depression or depressive disorders, and 15% experienced anxiety disorders. While the initiative was briefly suspended during FY 17 to allow for planning, BHSB has resumed the initiative for FY 18 and plans to continue it each school year to improve tracking of evidence-based outcomes and ongoing support of quality improvement.

<u>System Capacity Tracking Projects</u>

One of the pressing needs in Baltimore City and other jurisdictions across Maryland is a centralized mechanism to access real-time information regarding the capacity of behavioral health treatment programs to admit new consumers into various levels of care. In September 2017, BHSB partnered with the BCHD to launch a pilot project to develop a low-tech mechanism to share real-time information regarding capacity. The goals of the pilot are to track real-time capacity for admissions across programs, rapidly connect individuals with needed treatment and maximize utilization of available treatment services. A small group of providers agreed to participate in the project by utilizing a shared tool to record available capacity. The group meets monthly to identify systemic, technical and operational challenges and collectively problem-solve.

During October 2017, BHSB convened a group of individuals from jurisdictions across Maryland that were working on and/or interested in projects to use technology to track treatment availability and track consumers across the system of care. The goal was to identify opportunities to align projects and resources. At the state level, the Chesapeake Regional Information System for our Patients (CRISP), which is the regional health information exchange (HIE) serving Maryland and the District of Columbia, is working to build electronic consent into CRISP, capturing the specificity required in order to be compliant with 42 CFR. At the local level, Anne Arundel County and the City of Annapolis recently implemented a real-time capacity tool, and the BCHD was awarded the Accountable Health Community (AHC) grant, which supports the integration of social needs into clinical care. The BCHD is partnering with CRISP to use technology to connect hospital patients with needed social and behavioral health resources. BHSB anticipates that the lessons learned from Baltimore City's real-time capacity pilot project will inform the technology that will be built through CRISP's partnership with BCHD under the AHC project. Other organizations that have either attended or expressed interest in joining the statewide work group include the MDH, BHA, Maryland Hospital Association, Howard County and Prince George's County.

The work group has continued to meet to work on two shared goals: to identify guiding principles to ensure that infrastructure developed by local jurisdictions under various funding projects connects seamlessly across the statewide system of care, and to describe the "gold standard" technological infrastructure that is needed to support Maryland's statewide behavioral health system.

Challenges

The U.S. Department of Health and Human Services (HHS) finalized changes to Confidentiality of Alcohol and Drug Abuse Patient Records regulations, (42 CFR Part 2) to facilitate health integration and information exchange within new health care models, while continuing to protect the privacy and confidentiality of patients seeking treatment for substance use disorders. The changes went into effect in March 2017.

In parallel to the regulatory changes at the federal level, CRISP has been preparing to implement Consent2Share in Maryland. Consent2Share is an application created in partnership with SAMHSA to enable consumers to determine and indicate through an online consent process, the type and amount of health information they would like to share and the providers with whom they would like that information shared. Among other positive outcomes, this would enable timely access to behavioral health data for primary care and behavioral health providers, hospitals, and other individuals involved in a consumer's care, supporting improved clinical decision-making and care coordination.

However, COMAR regulations allow for the transmission of sensitive health information via point to point, such as secure email, not via a query portal, such as would be utilized by CRISP

to implement Consent2Share. BHSB submitted a letter to the Maryland Health Care Commission in support of proposed amendments to COMAR 10.25.18, *Health Information Exchanges: Privacy and Security of Protected Health Information*, that are needed in order to support the implementation of Consent2Share.

BHSB has a talented and deeply skilled data team that is working hard to analyze claims data and support BHSB staff and providers in using the data to inform decision making. Analyzing claims data is challenging and requires a deep knowledge of reimbursement processes, including an understanding of the intricacies of fee schedules and claims coding. BHSB's data team is working with BHA to advocate for additional standard reports in Intelligence Connect, which would allow certain indicators to be easily tracked without having to perform an in-depth analysis of claims data.

There are also limitations in the current claims data that hinder the ability to fully use it for system monitoring. For example, there is no way to accurately track the number of providers serving a specific community due to lack of unique provider identifiers and service locations (versus facility locations) in the claims data available to BHSB. The system also lacks the ability to track how many providers are certified to prescribe buprenorphine and the extent to which they are prescribing buprenorphine relative to their waiver type. While BHSB has sought additional data from SAMHSA to answer questions on the capacity of buprenorphine in the city, limitations to the SAMHSA data limit the implications of the analyses. Another significant limiting factor is the segmentation of mental health and substance abuse disorder claims.

Data

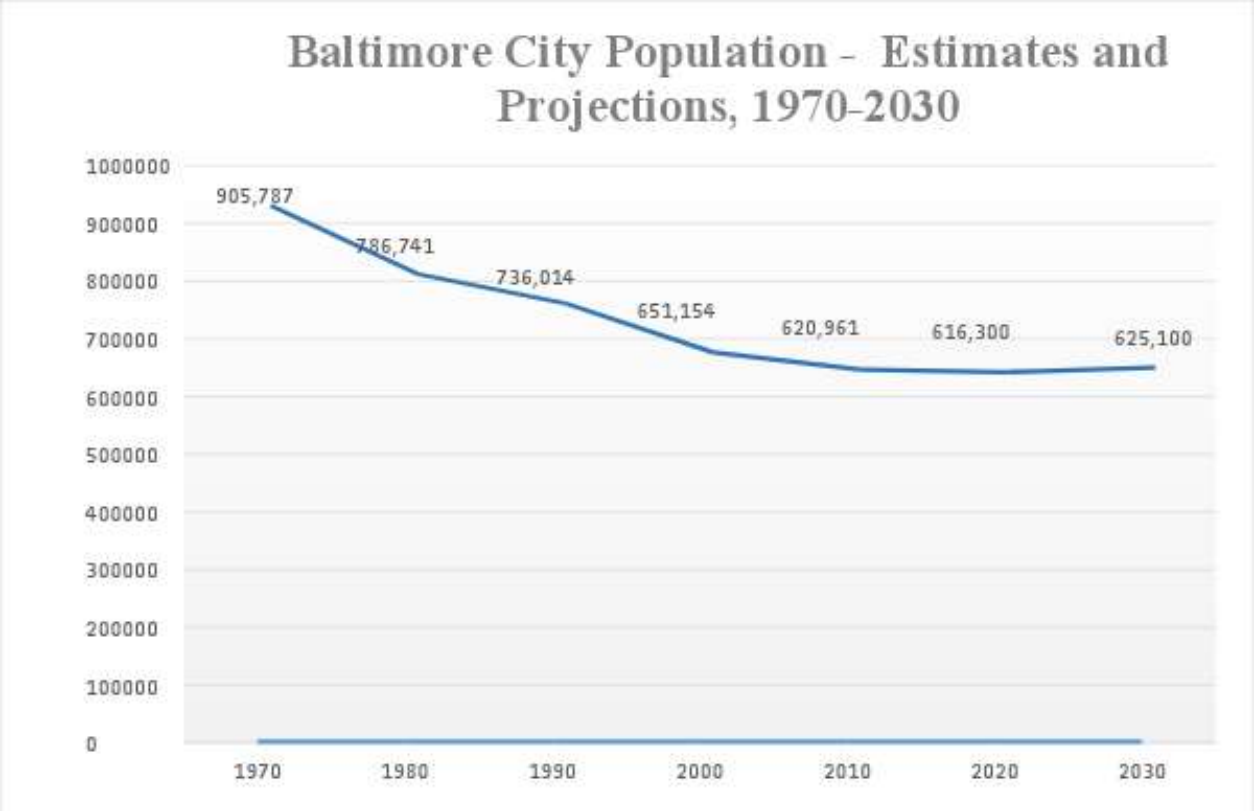
1. BALTIMORE CITY DEMOGRAPHICS

The Demographics section of the Plan presents data describing Baltimore City's population and characteristics of the City relevant to behavioral health. These characteristics include age, race, health, income, and housing status, which are factors that impact the incidence of behavioral health disorders and the utilization of behavioral health services. They highlight the s*ocial determinants of health*, which are the conditions in which people are born, grow, live, work and age, and which are affected by the distribution of money, power and resources. These determinants result in enormous health disparities between communities.[12]

Population

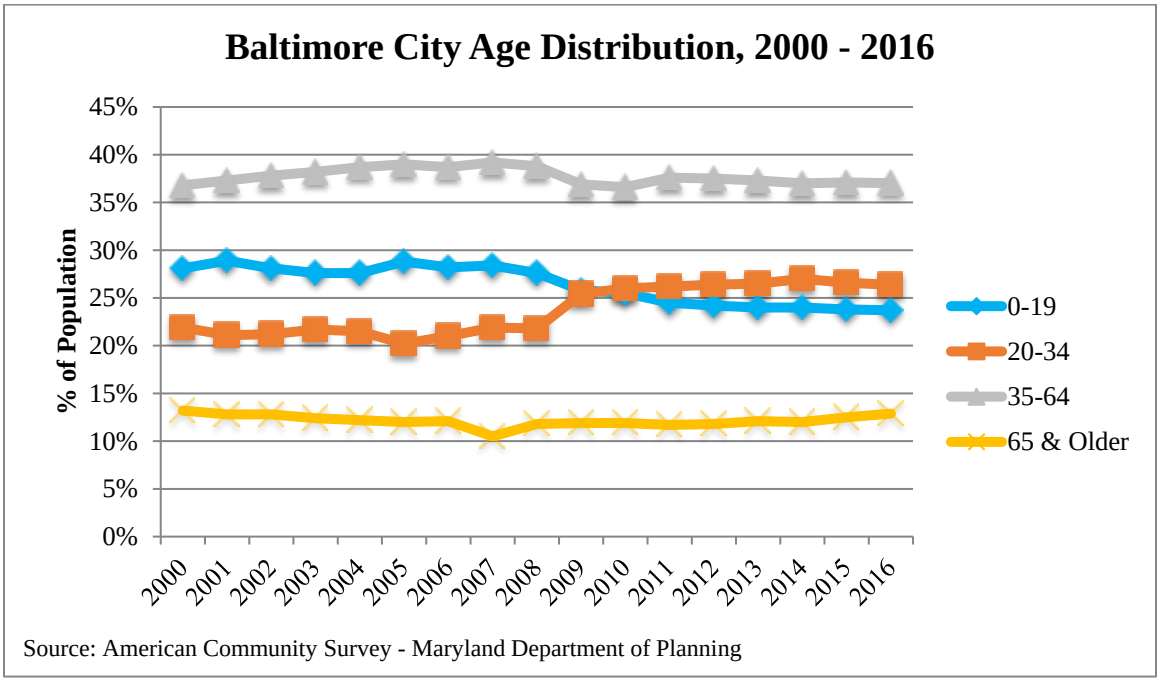
Baltimore City is the 30th most populous city in the nation and the largest city in Maryland, comprising almost 11% of the State's population in 2016, with approximately 614,664 people based on American Community Survey (ACS) estimates. Although census data indicate that the City's population has decreased significantly since the 1970s, the Maryland Department of Planning projects an increase of 5,000 people (0.6% growth) by 2030.

[12] World Health Organization. "About Social Determinant of Health." http://www.who.int/social_determinants/sdh_definition/en/

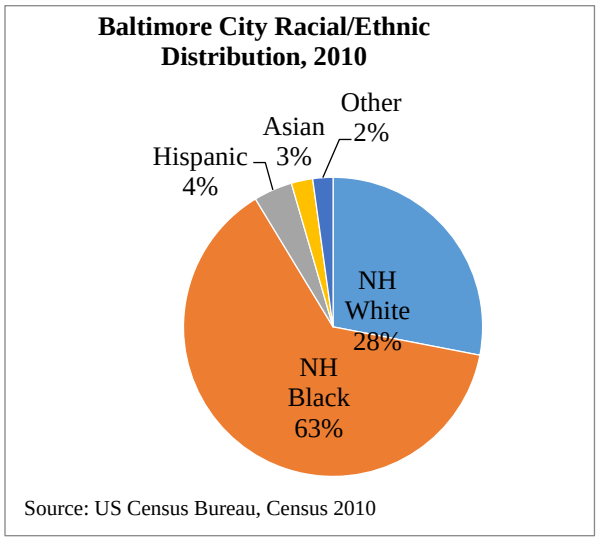


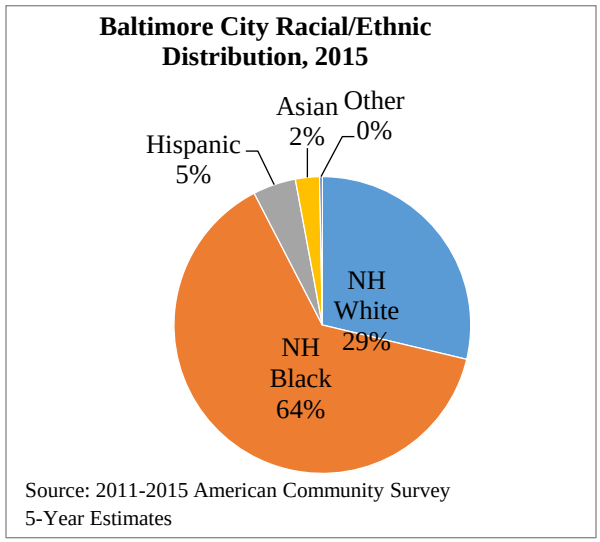
Source: Maryland Department of Planning - July 2016

As evidenced by the chart below, the age distribution has shifted slightly in the last six years. Between 2009 and 2016, the population aged 65+ experienced a slight increase, while the remaining age groups experienced a slight decrease. In 2016, there were an estimated 130,308 children under the age of 18 and 484,356 adults in Baltimore City. Overall, the median age in Baltimore City remained around 34.7 during 2016, whereas the median age in the State is 38.3 years. The distribution by gender was 47.1% (male) and 52.9% (female).

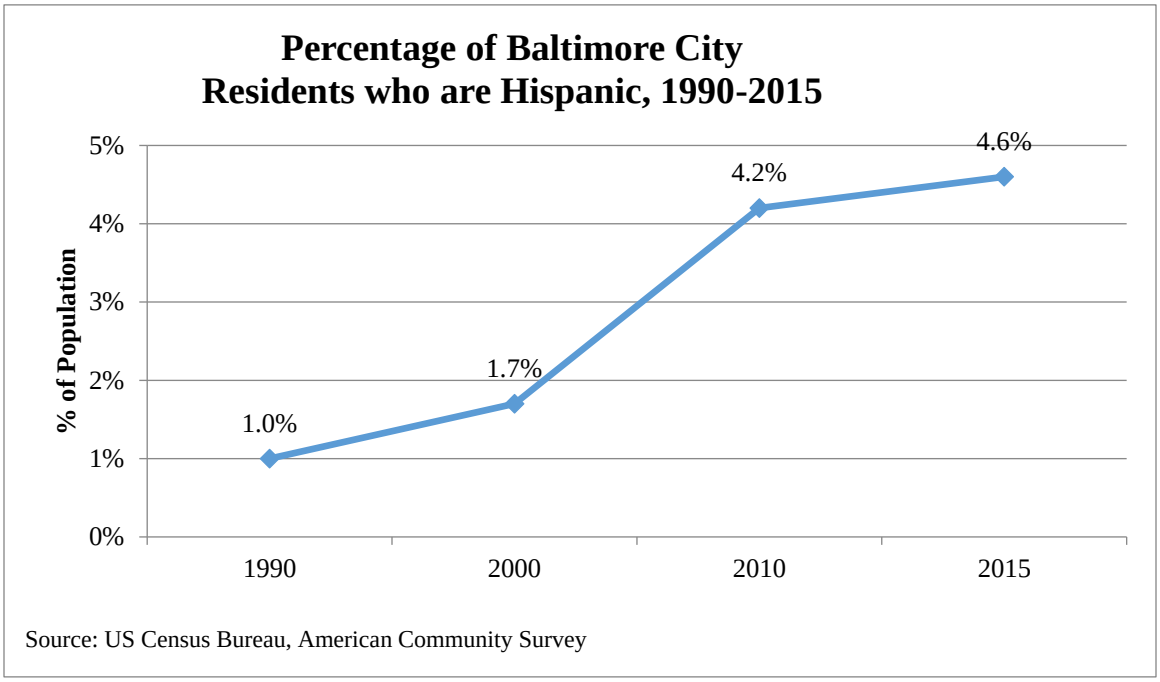


The City's racial/ethnic distribution is bi-modal, with almost two-thirds non-Hispanic Black individuals and more than quarter non-Hispanic white individuals.

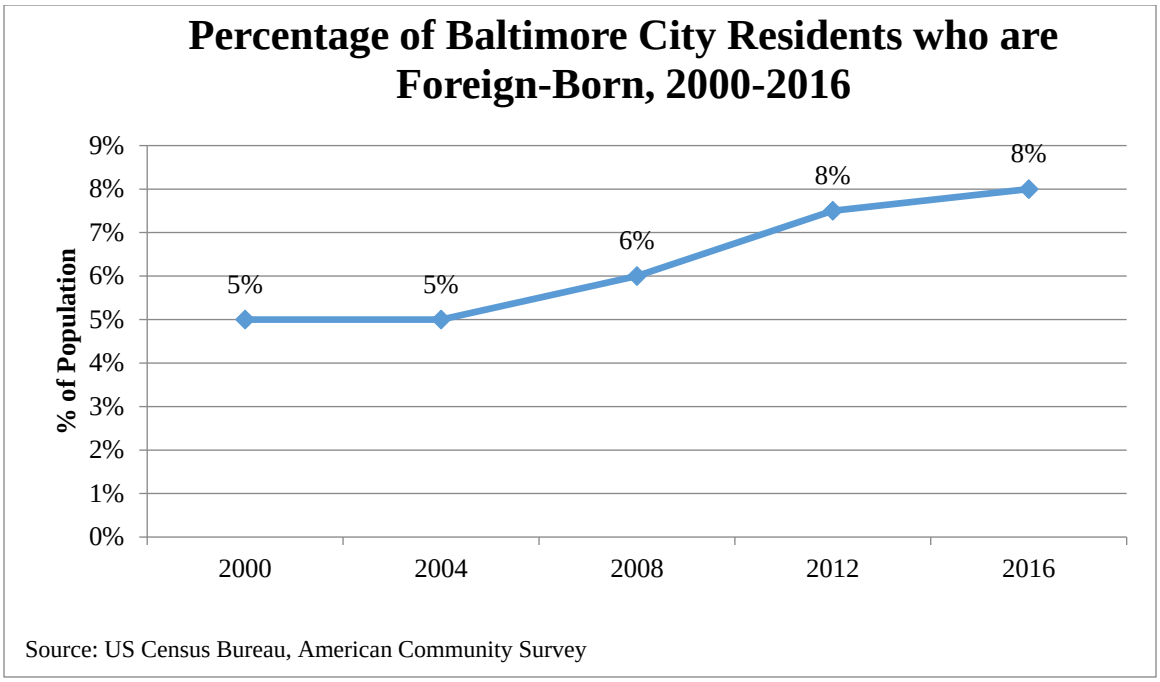




The population is slowly becoming more diverse, as indicated by the increase in the percentage of Hispanic and Asian residents, both of which have almost doubled since 1990 and are likely to be under-counts at present. It is difficult to accurately count immigrant residents, many of whom may be undocumented and often do not show up in official population counts.

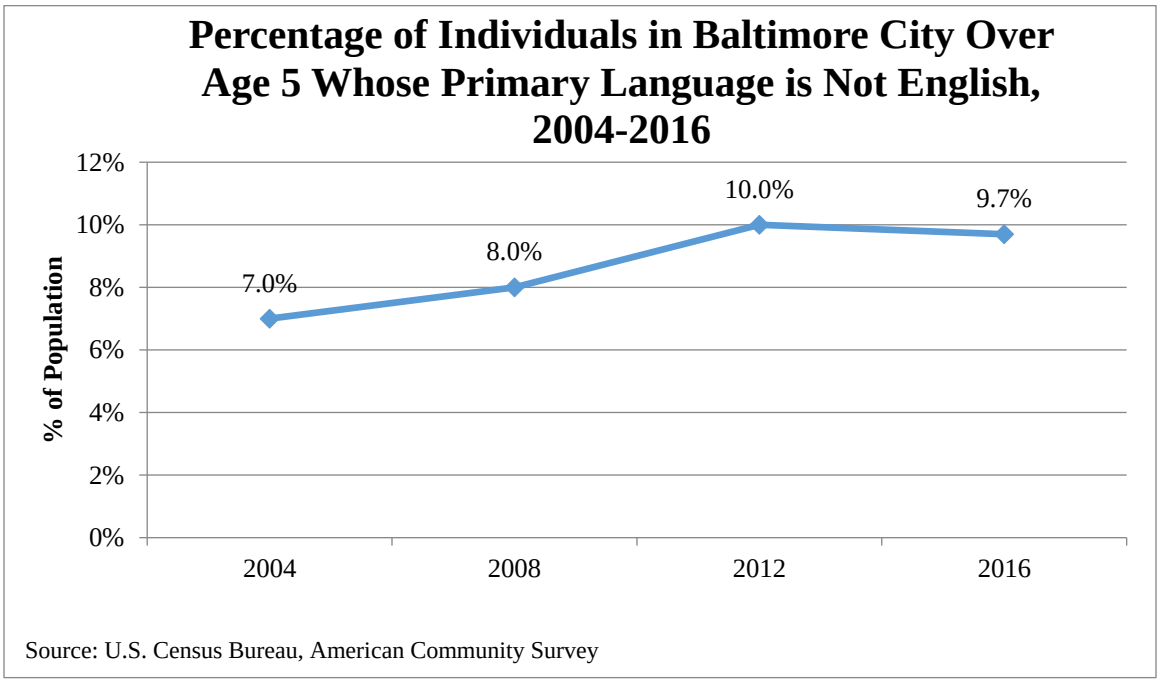


Source: US Census Bureau, American Community Survey

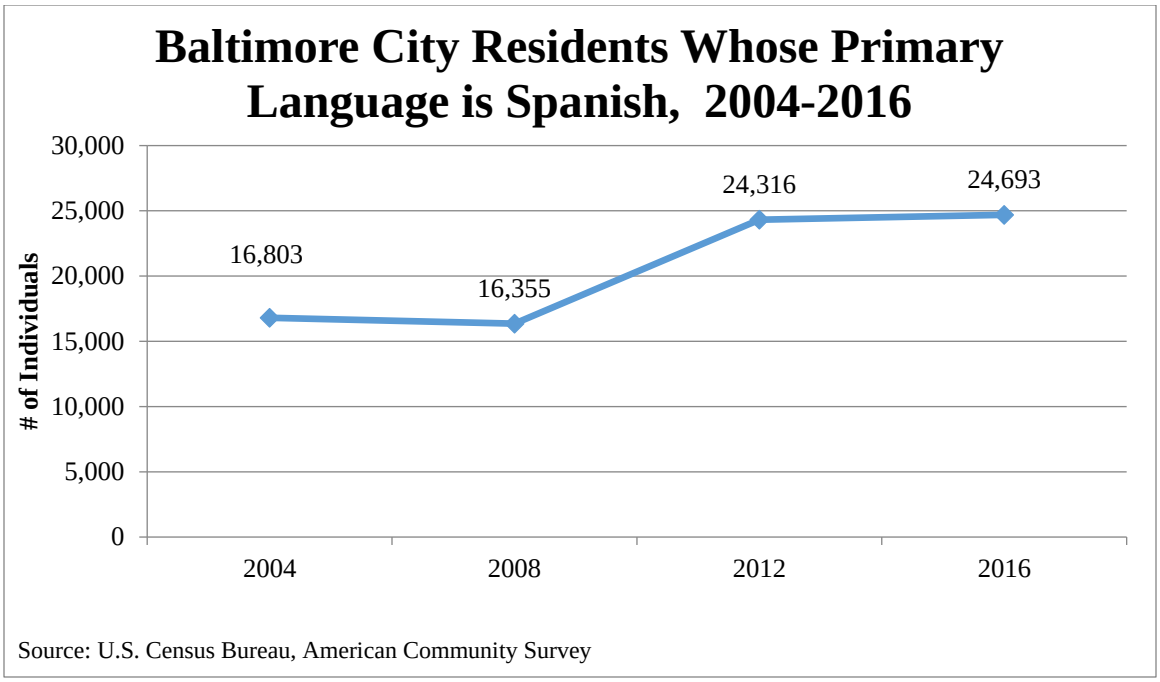


Source: US Census Bureau, American Community Survey

Languages other than English were spoken in 9.7% of households in 2016, with Spanish being the most frequently spoken non-English language. Between 2004 and 2016, the number of individuals whose primary language is Spanish increased by 46%.



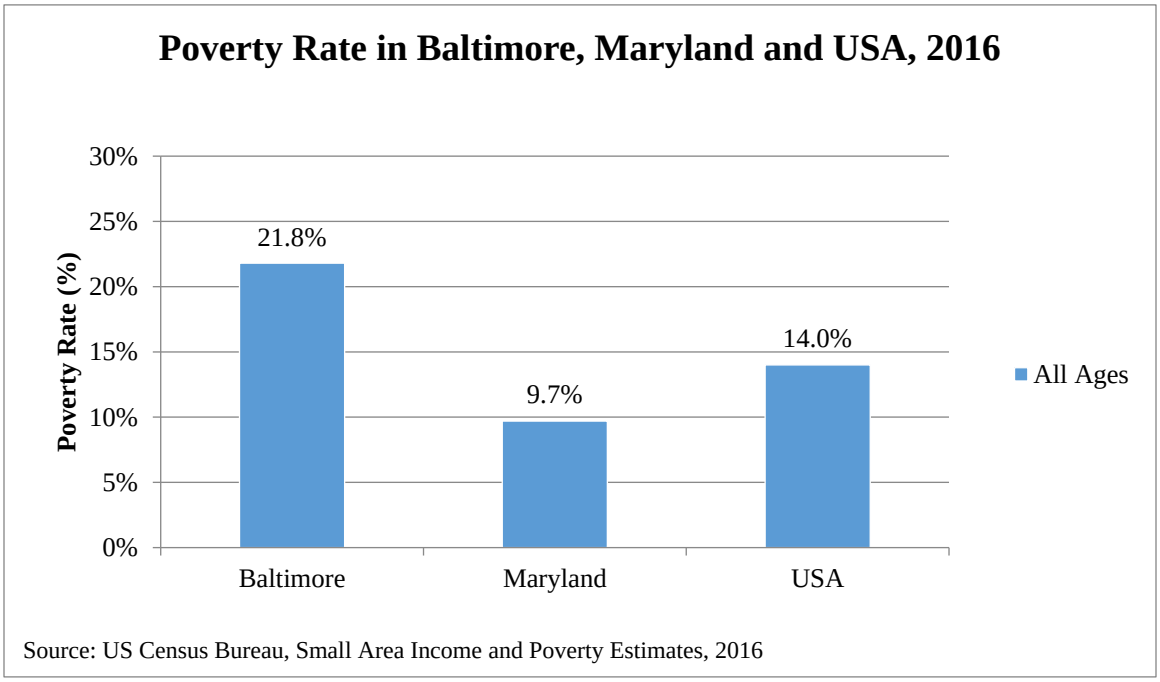
Source: U.S. Census Bureau, American Community Survey



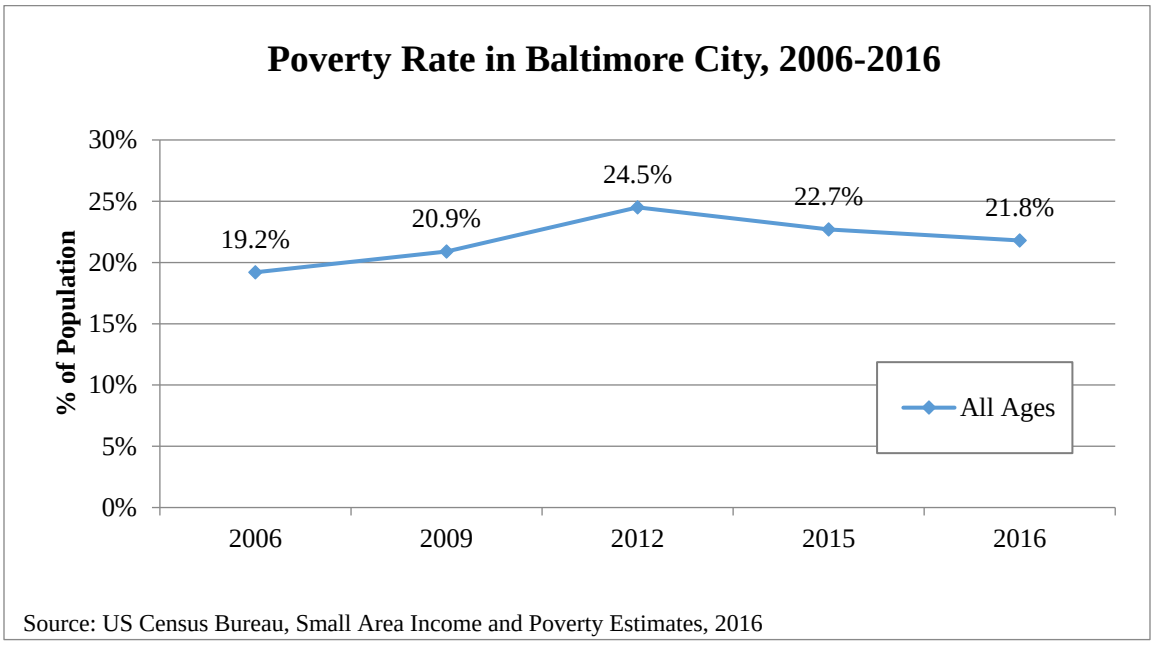
Source: U.S. Census Bureau, American Community Survey

Poverty

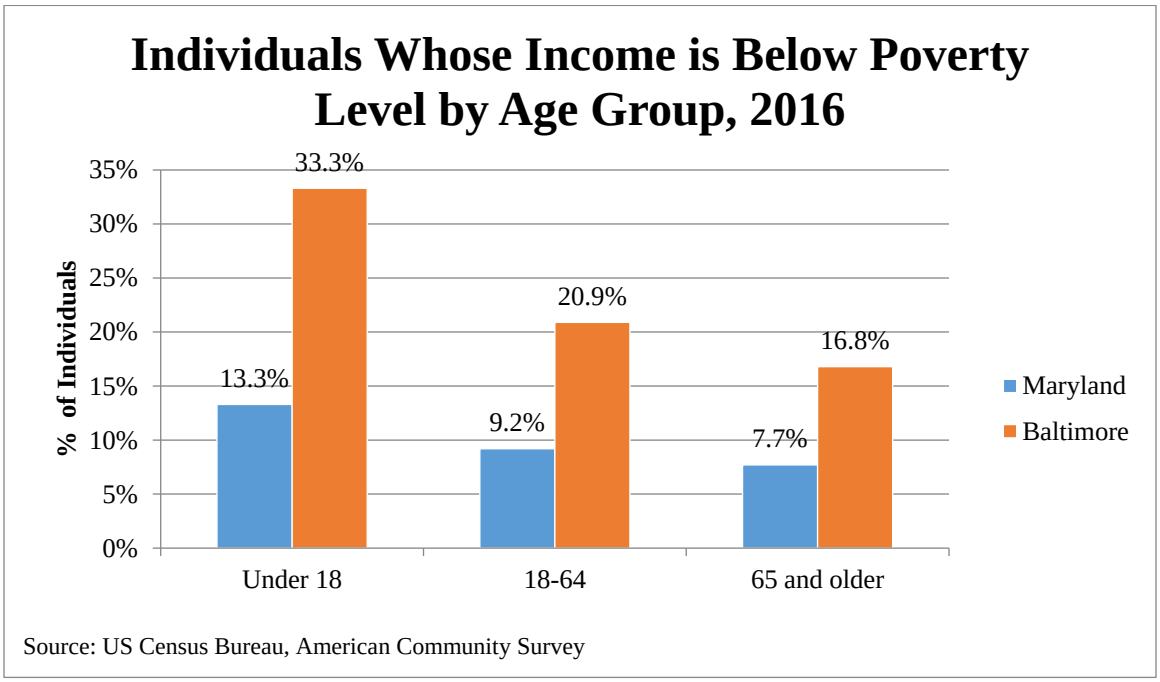
There is a gap in poverty rates between Baltimore City and the State. In 2016 the Baltimore City median household income was $44,262, whereas the State median income was $76,067. In addition, almost one in four City residents (22%) was below the poverty line, as compared to one in ten Maryland residents (10%).



Source: US Census Bureau, Small Area Income and Poverty Estimates, 2016



Source: US Census Bureau, Small Area Income and Poverty Estimates, 2016



Source: US Census Bureau, American Community Survey

Adverse Childhood Experiences (ACE)

The Centers for Disease Control and Prevention's (CDC) landmark 1998 study on Adverse Childhood Experiences (ACE) demonstrated the connection between traumatic childhood experiences and many emotional, physical, social and cognitive impairments that lead to increased incidence of health risk behaviors, chronic disease and premature death.[13] ACEs have a strong dose-response relationship to health and social problems throughout the lifespan. As the number of ACEs increases, there is an increased likelihood of risky behaviors and chronic physical and mental health conditions.

Maryland began collecting ACEs data through the Centers for Disease Control Behavioral Risk Factor Surveillance System (BRFSS) in 2015. The BRFSS is a statewide survey that collects data on the behaviors and conditions that put individuals at risk for chronic diseases, injuries and preventable infectious diseases. Over 8,500 Maryland households anonymously participate in this survey each year. Statewide, the prevalence of three or more ACEs was 24%, whereas for Baltimore it was 42%.[14]

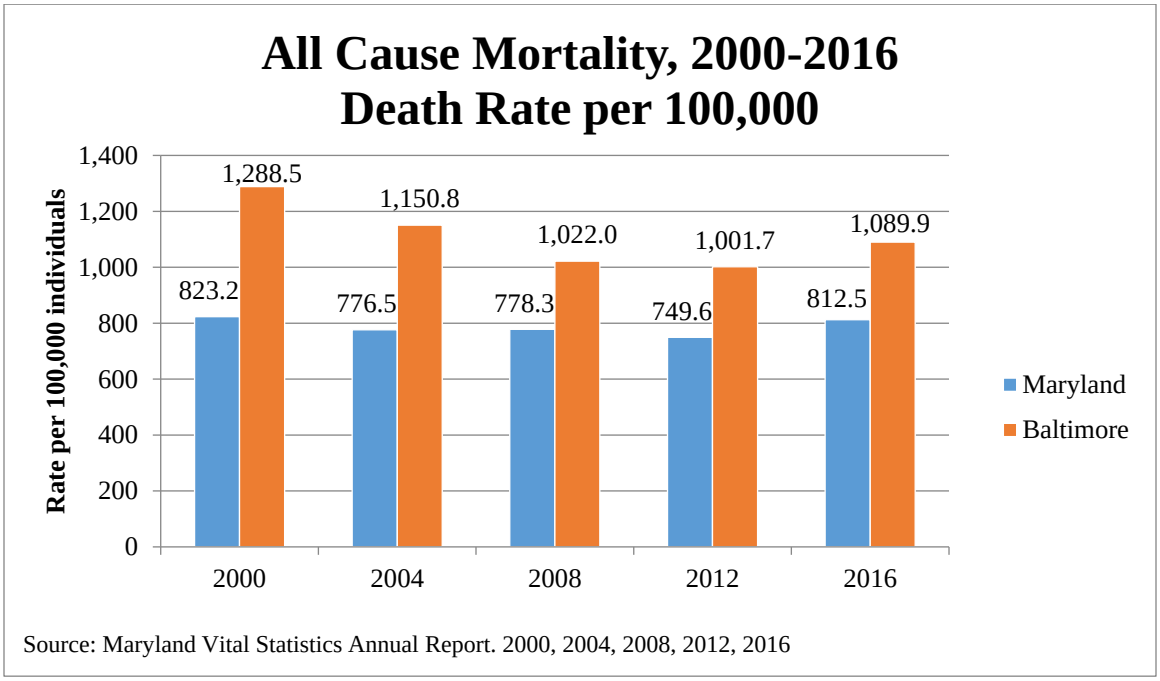
[13] Fellitti, V.J., et al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. American Journal of Preventive Medicine, 14(4) 245-258. doi: http://dx.doi.org/10.1016/S0749-3797(98)00017-8

[14] Maryland Behavioral Risk Factor Surveillance System (2017). "Adverse Childhood Experiences (ACEs) in Maryland: Data from the 2015 Maryland BRFSS Data Tables Only." https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

Health Status

Health indicators suggest that Baltimore City residents experience a significantly greater burden of illness, disability, and mortality compared to the State, with substantial disparities between neighborhoods within the City. The average life expectancy is 73.4 years for Baltimore City residents and 79.5 years for Maryland residents.[15] The Baltimore City Health Department Neighborhood Profiles data comparing Baltimore City neighborhoods found an average life expectancy range of 68.4 years in Poppleton/The Terraces/Hollins Market, versus 83.9 years in Roland Park/Poplar Hill.[16]

While Baltimore's all-cause mortality rate[17] has declined by 15% over the past sixteen years, it remains significantly higher than the State's rate. The gap has been closing over time.



Source: Maryland Vital Statistics Annual Report. 2000, 2004, 2008, 2012, 2016

The Baltimore City 2016 infant mortality rate was 34% higher than the State's overall rate. According to the Healthy Baltimore 2015 Report (Interim Report):

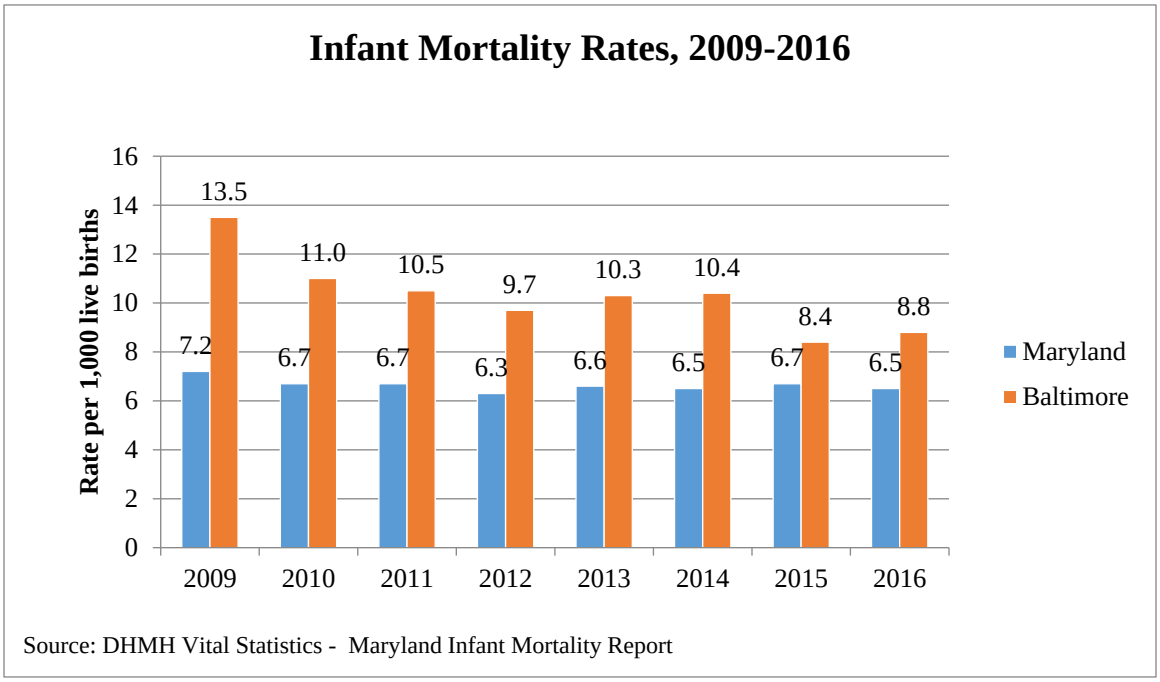
- There has been a decrease in the overall infant mortality rate of 35% between 2009 and 2016.
- Infant mortality rates among Black infants have decreased by 38.9% in the same period.
- Between 2013 and 2016, mortality rates among white infants in Baltimore City has been higher than the previous four-year period (2009-2012). However, the number of white

[15] Source: Maryland Vital Statistics Administration, 2016. Table 7

[16] Baltimore City Health Department Neighborhood Profiles, 2017
https://health.baltimorecity.gov/neighborhood-health-profile-reports

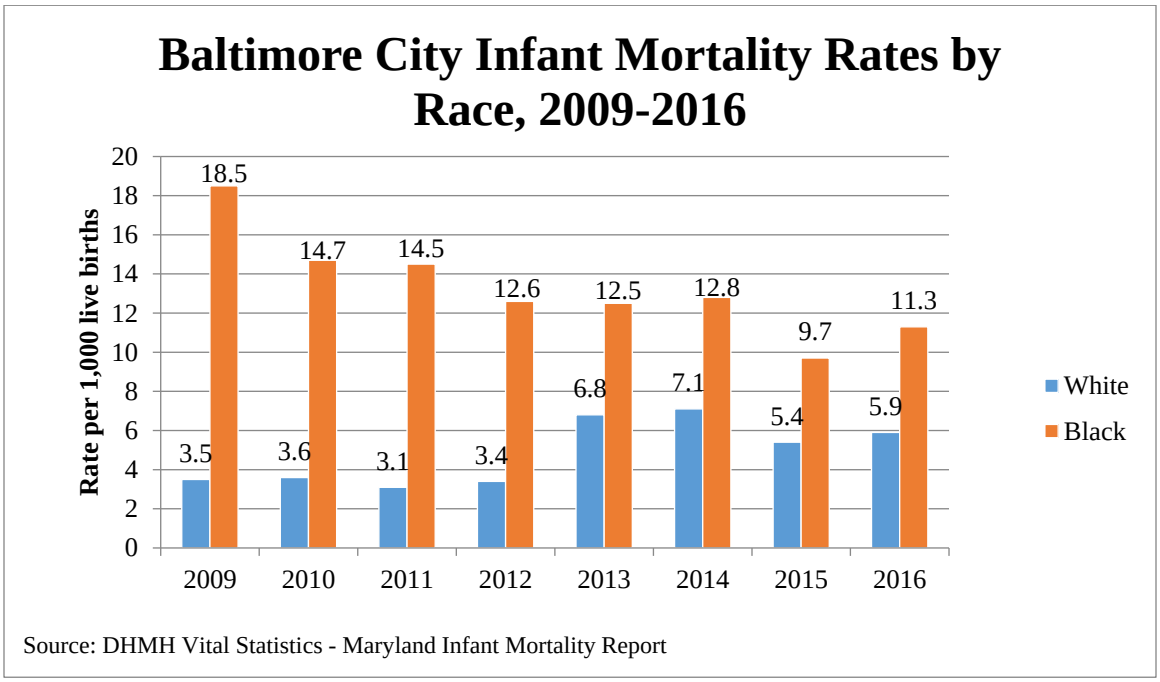
[17] Maryland Vital Statistics Annual Report 2017.

infant deaths is low enough such that small changes in the number of deaths can lead to great fluctuations in the white infant mortality rate from year to year.



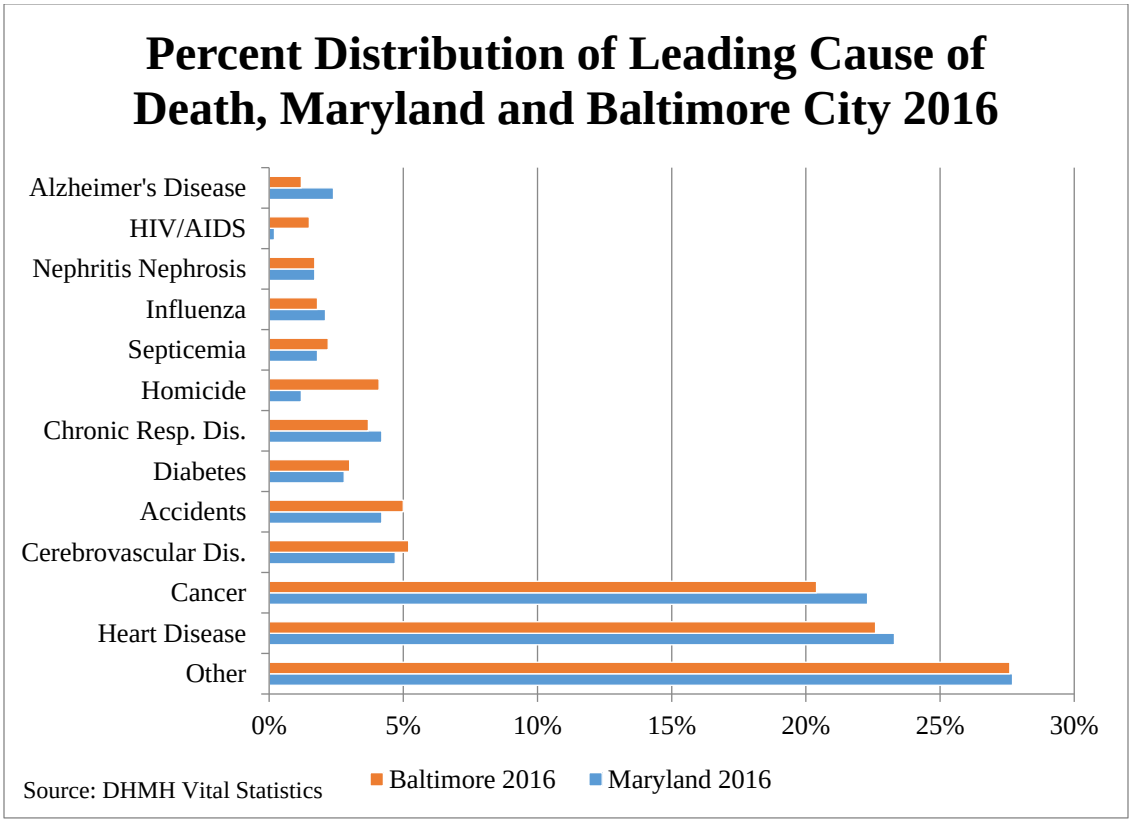
Source: DHMH Vital Statistics - Maryland Infant Mortality Report

There are significant disparities by race. The mortality rate for Black babies was almost two times that of white babies in 2016, with an even higher discrepancy in previous years.



Source: DHMH Vital Statistics - Maryland Infant Mortality Report

The leading causes of death vary between Baltimore City and Maryland. HIV/AIDS, septicemia, homicide, and accidents account for significantly more deaths in the City than the State. Homicide was the 15th leading cause of death in the State, and the fifth in Baltimore City in 2016. HIV/AIDS was not in the 15 leading causes in the State, whereas it was tenth in the City.



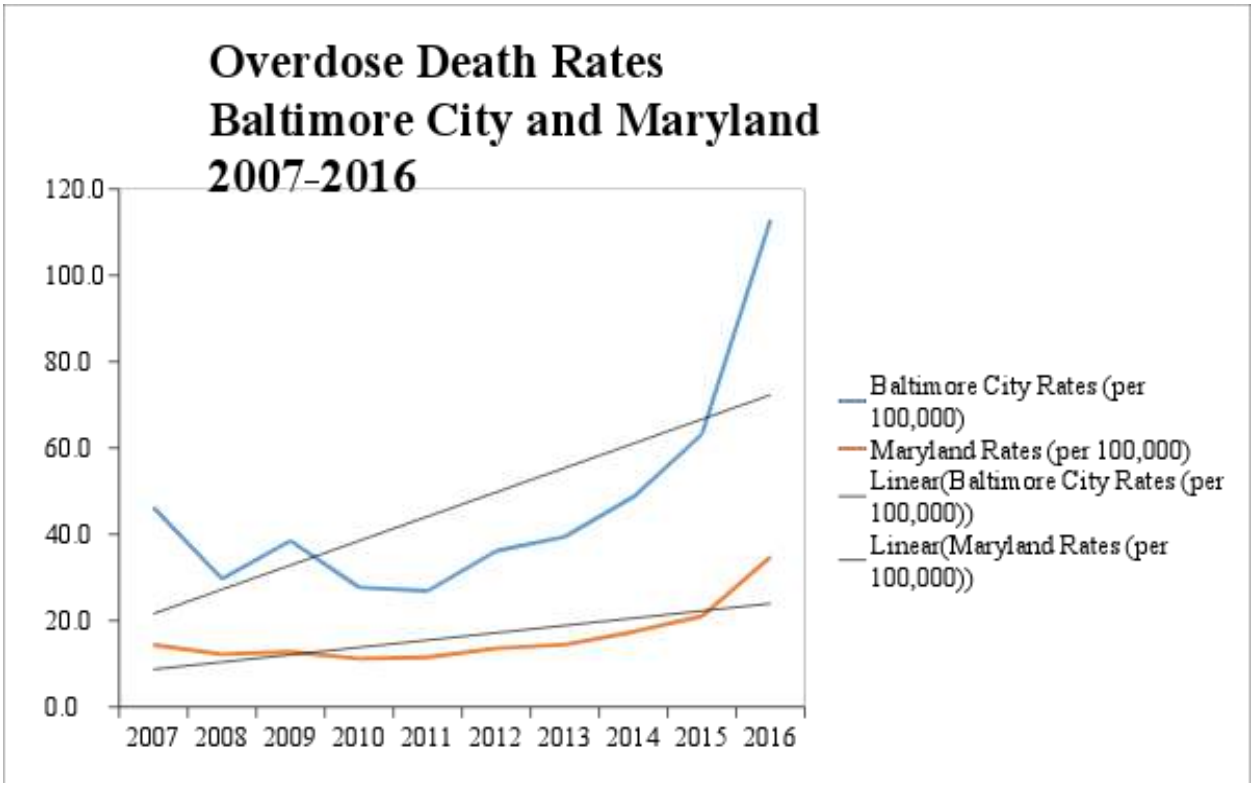
Nine percent (9.0%) of Baltimore City residents have no health insurance, and 4.2% of Baltimore City residents under 18 years are uninsured, which is a significant decline from 2006, when 14% under 18 years of age were uninsured.[18]

[18] U.S. Census Bureau, 2012-2016 American Community Survey 5–Year Estimates

Overdose

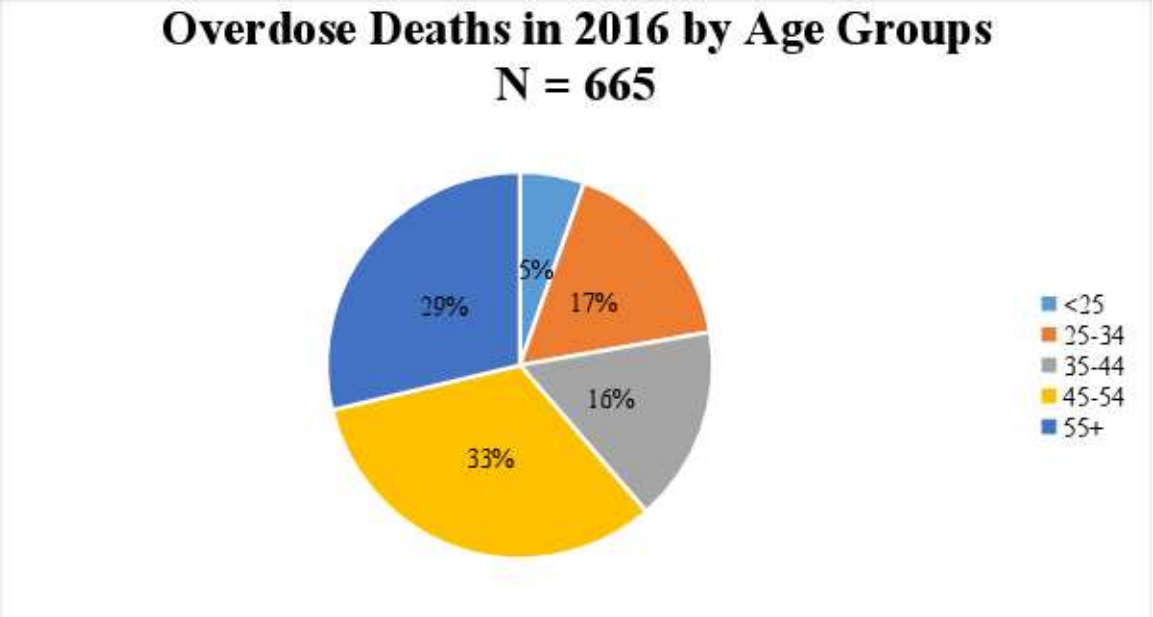
Baltimore City has seen an increase in the number of deaths due to overdose for the last five years, with 694 overdose deaths occurring in 2016, which represents a 77% over the previous year. It is important to note that the data period for this indicator is a calendar year. The fiscal year is used for most other indicators in this document.

Baltimore City Deaths Due to Overdose			
Year	# of Deaths	Population	City Rates (per 100,000)
2007	287	620,306	46.3
2008	184	620,184	29.7
2009	239	620,509	38.5
2010	172	621,317	27.7
2011	167	620,889	26.9
2012	225	622,950	36.1
2013	246	623,404	39.5
2014	303	622,793	48.7
2015	393	621,849	63.2
2016	694	614,664	112.9



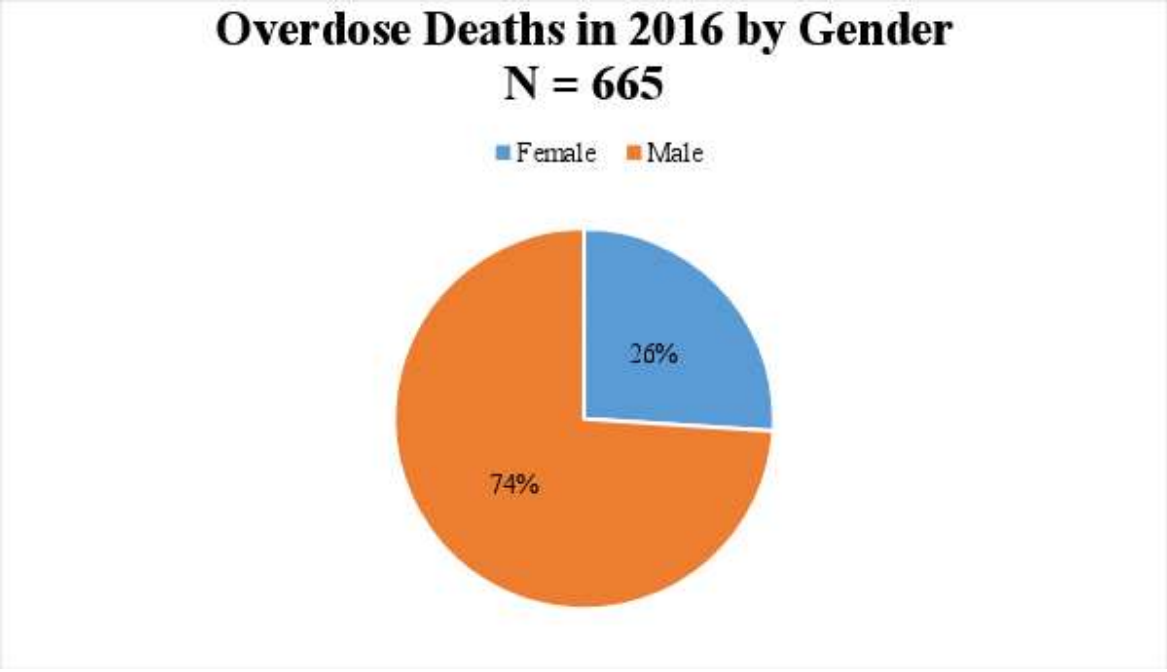
Source: Drug and Alcohol-Related Intoxication Deaths in Maryland, 2016. Maryland Department of Health

The demographic information associated with overdose was based on the Overdose Fatality (OFR) data. While OFR data does not match the official total overdose numbers in the MDH Vital Statistics report, OFR data provide additional details on decedents than is available from the official reports. In 2016, adults over the age of 44 comprise the majority (61%) of deaths due to overdose.



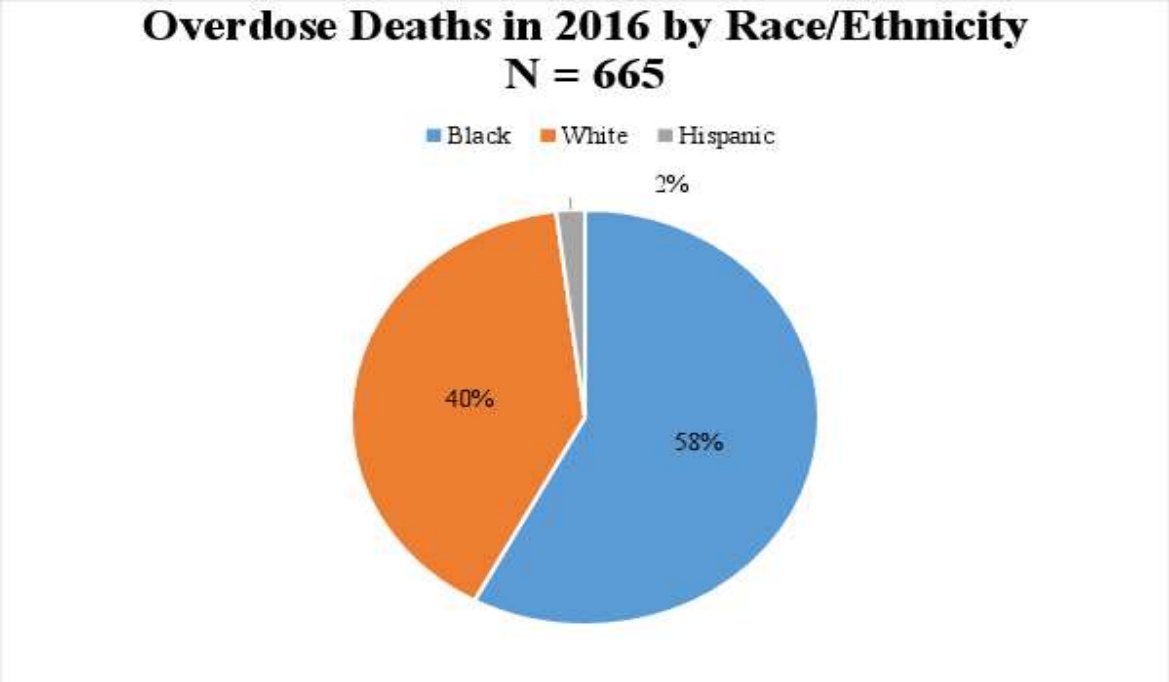
Source: Overdose Fatality Review (OFR) 2016

In 2016, the gender ratio was about 3 males to every 1 female.



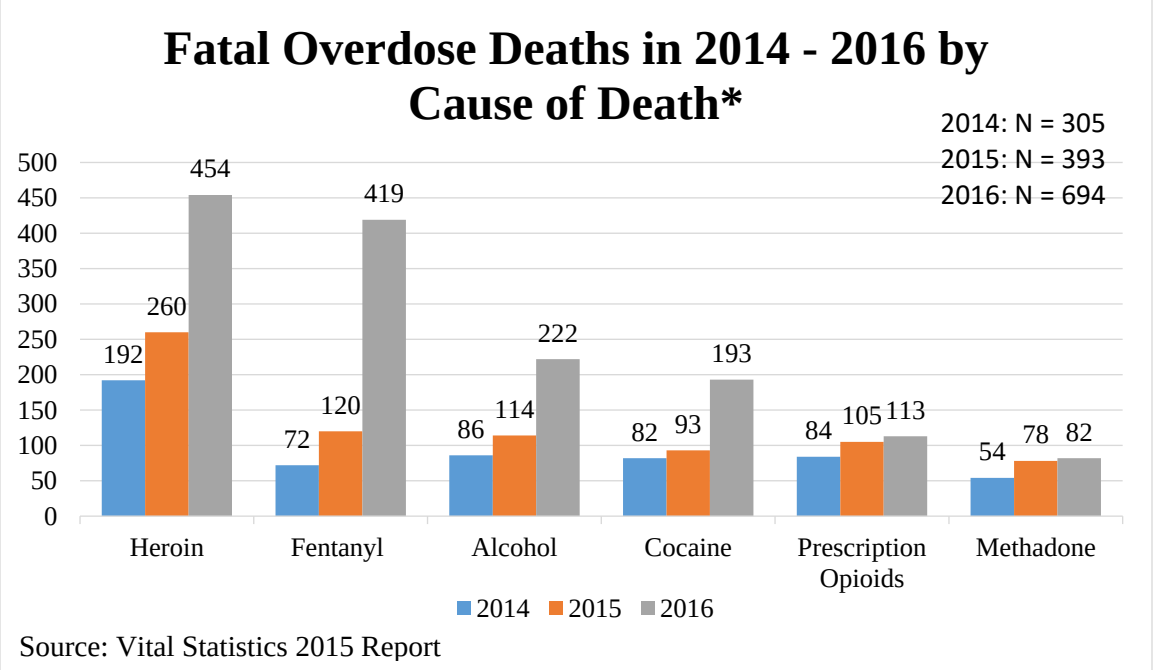
Source: Overdose Fatality Review (OFR) 2016

In 2016, the majority (58%) of individuals who died from overdose were Black.



Source: Overdose Fatality Review (OFR) 2016

Heroin contributes to the largest number of deaths due to overdose, much of which can be attributed to the rise in fentanyl-laced street drugs.

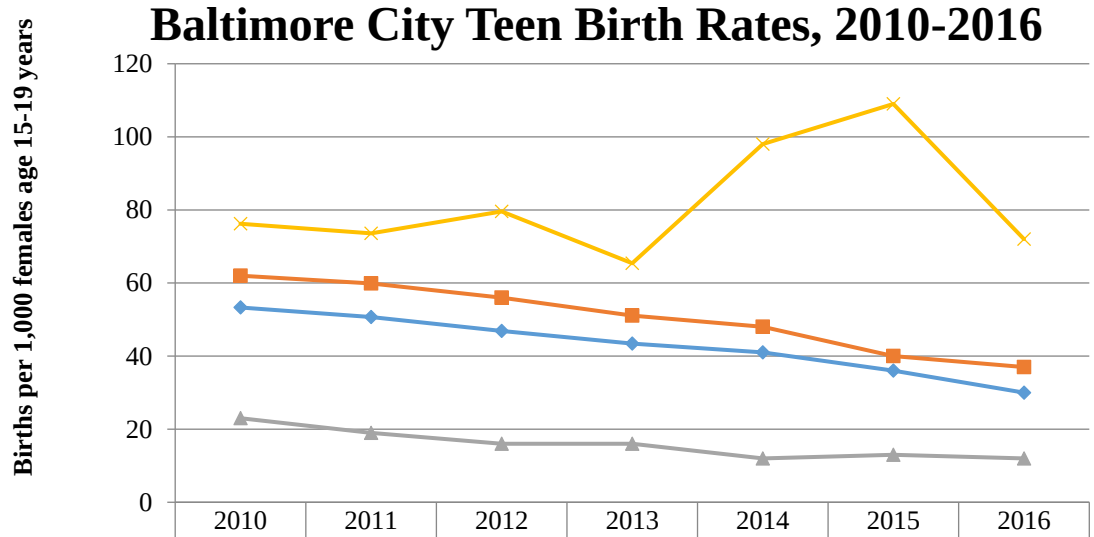


Source: Vital Statistics 2015 Report

* Cause of death is not mutually exclusive.

Teen Pregnancy

The overall Baltimore City and non-Hispanic white and Black population teen pregnancy rates have steadily decreased over the last five years, while the Hispanic rates have fluctuated but decreased over the past year. The Hispanic teen pregnancy rates remain significantly higher than the non-Hispanic rates.



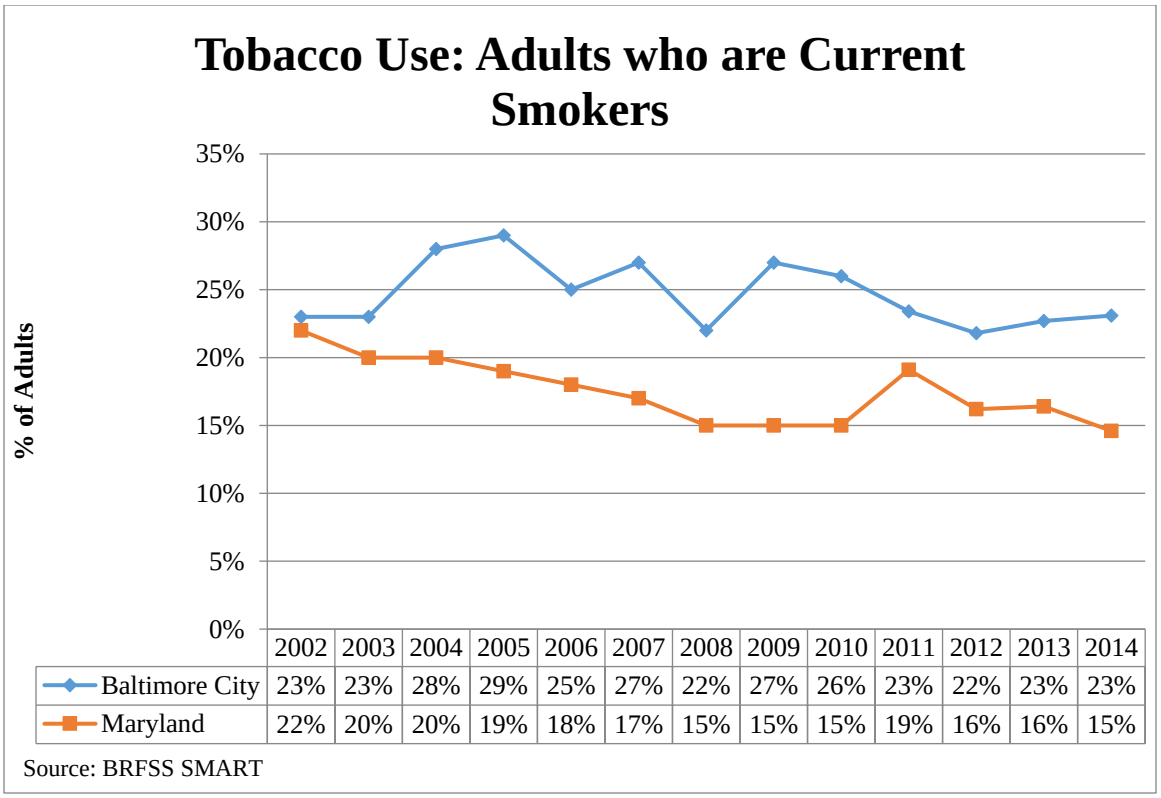
	2010	2011	2012	2013	2014	2015	2016
All Races	53	51	47	43	41	36	30
Black non-Hispanic	62	60	56	51	48	40	37
White non-Hispanic	23	19	16	16	12	13	12
Hispanic	76	74	80	65	98	109	72

Source: Maryland Vital Statistics Report 2016

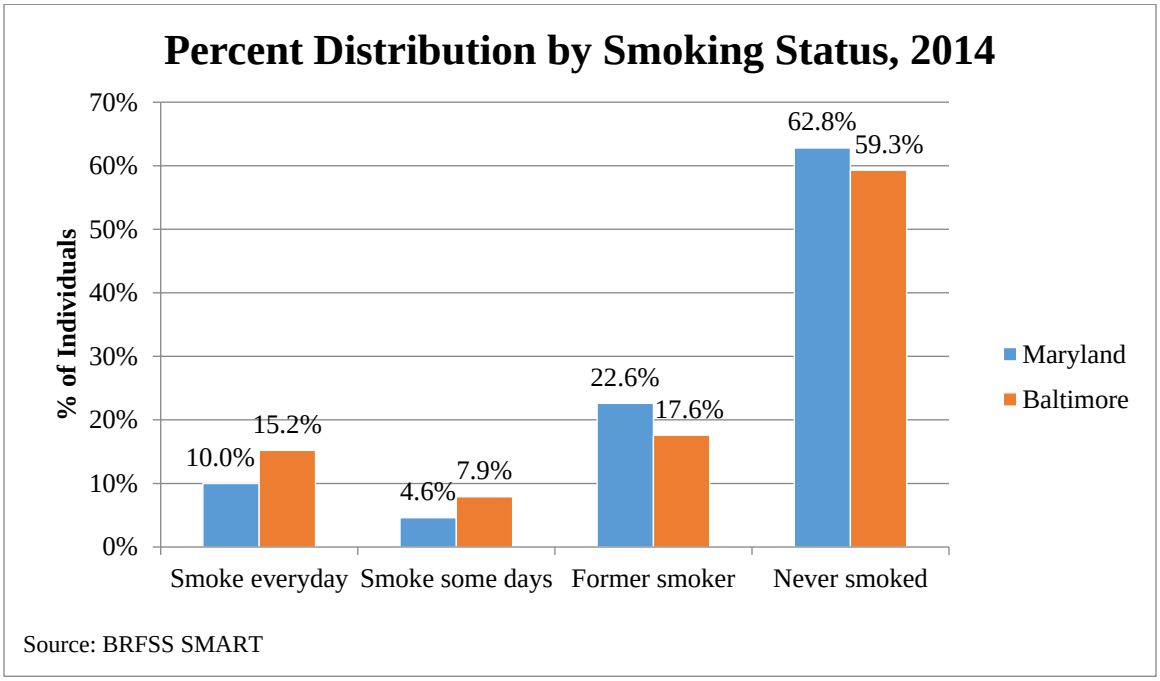
Tobacco Use

Tobacco use is a significant public health status indicator, as it results in approximately 480,000 premature deaths in the United States annually.[19] In the chart below, the BRFSS data shows that a higher percentage of adults in the City smoke tobacco, as compared to the State. The BRFSS found that 23% of adults in the City versus 16% of adults in the State smoked tobacco in 2014.

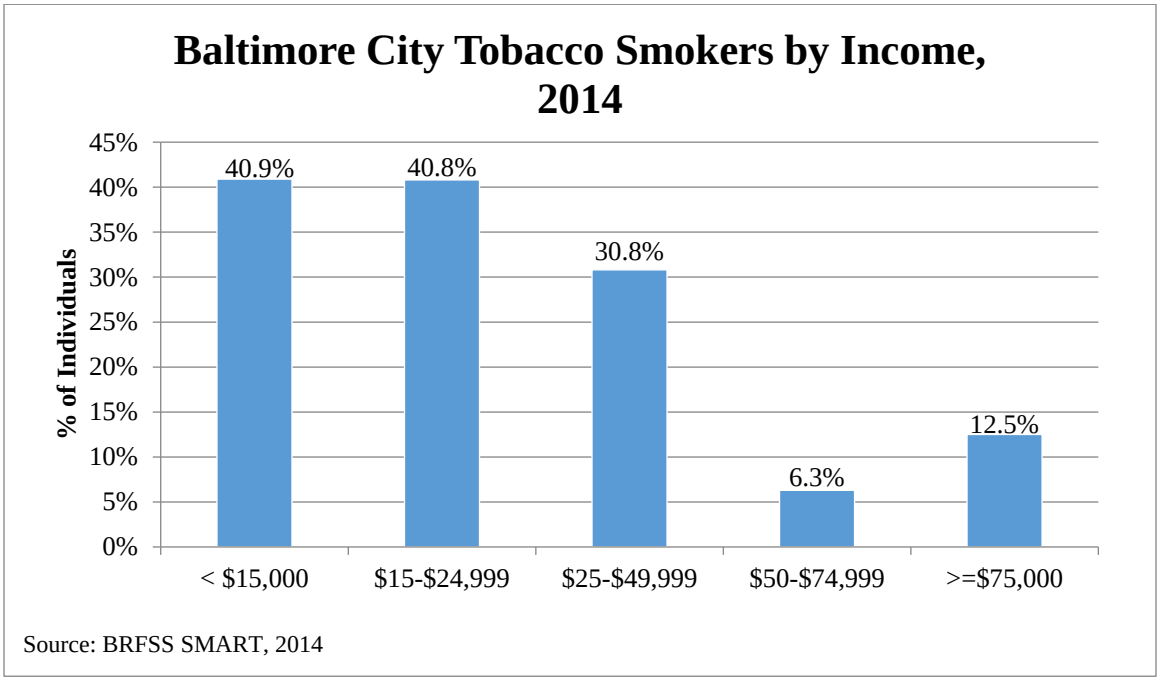
[19] CDC Current Cigarette Smoking Among Adults, United States, 2005-2014



The BRFSS also found that a higher rate of smokers who reside in Baltimore City, compared to Maryland smokers, identify themselves as daily smokers.



Finally, the BRFSS found that tobacco smokers in Baltimore City are disproportionately represented in lower income populations. Approximately forty-one percent (40.9%) of individuals with an income below $15,000 were current smokers. The same approximate percent (40.8%) of individuals with an income between $15,000 and $24,999 were current smokers. People with higher incomes categories have lower smoking prevalence rates (below 31%).



Source: BRFSS SMART, 2014

Crime and Violence

Crime and violence remain serious problems in Baltimore City, with significant disparities between neighborhoods. In the 2015 Mayor's Annual Citizen Survey, 63% of respondents felt safe or very safe in their neighborhoods at night, whereas only 37% felt that way downtown.[20] Baltimore's violent crime rate (murder, aggravated assault, robbery, and rape) was more than three times the statewide rate in 2015. Moreover, Baltimore is one of several large cities to see large increases in its homicide rate in recent years.[21] In 2016, Baltimore also had more than 9,500 victims of property crime.[22]

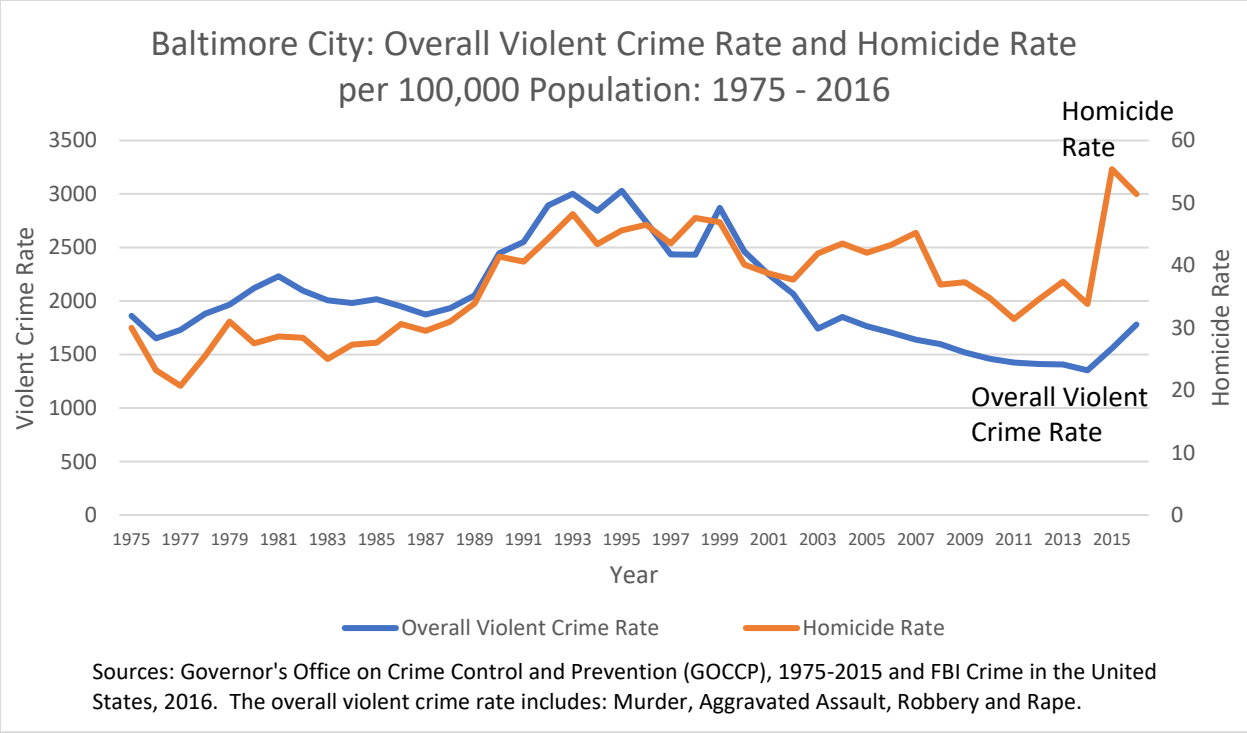
In 2015, Baltimore's homicide rate was 55 per 100,000 individuals, which was the highest rate in in its history and surpassed peak rates in the 1990s. This rate was exceeded in 2017, with 343 homicides, or 56 per 100,000 individuals. For all ages, homicide was the fourth leading cause of death in Baltimore City and the leading cause of death for the 15-24, 25-34, and 35-44 age groups. [23]

[20] City of Baltimore. 2015 Baltimore Citizen Survey. https://bbmr.baltimorecity.gov/sites/default/files/2015%20CITIZEN%20SURVEY%20FINAL%20REPORT_1.pdf. .

[21] Rosenfeld R, et al. Assessing and Responding to the Recent Homicide Rise in the United States. Nov 2017. https://www.ncjrs.gov/pdffiles1/nij/251067.pdf.

[22] FBI. Crime in the United States, 2016: Table 6. https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-6/table-6-state-cuts/maryland.xls.

[23] Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released December, 2016. Data are from the Multiple Cause of Death Files, 1999-2015, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Dec 18, 2017 10:15:52 AM.



Sources: Governor's Office on Crime Control and Prevention (GOCCP), 1975-2015 and FBI Crime in the United States, 2016. The overall violent crime rate includes: Murder, Aggravated Assault, Robbery and Rape.

In addition to the tragic loss of life, each homicide has a traumatic impact on the individuals, families and communities that survive the loss of a family member, friend, or acquaintance. Such losses, particularly when compounded by ACEs and toxic stressors, can have long-term negative consequences on health and well-being, including mental health conditions, substance use, asthma, autoimmune, cardiac and other chronic diseases.

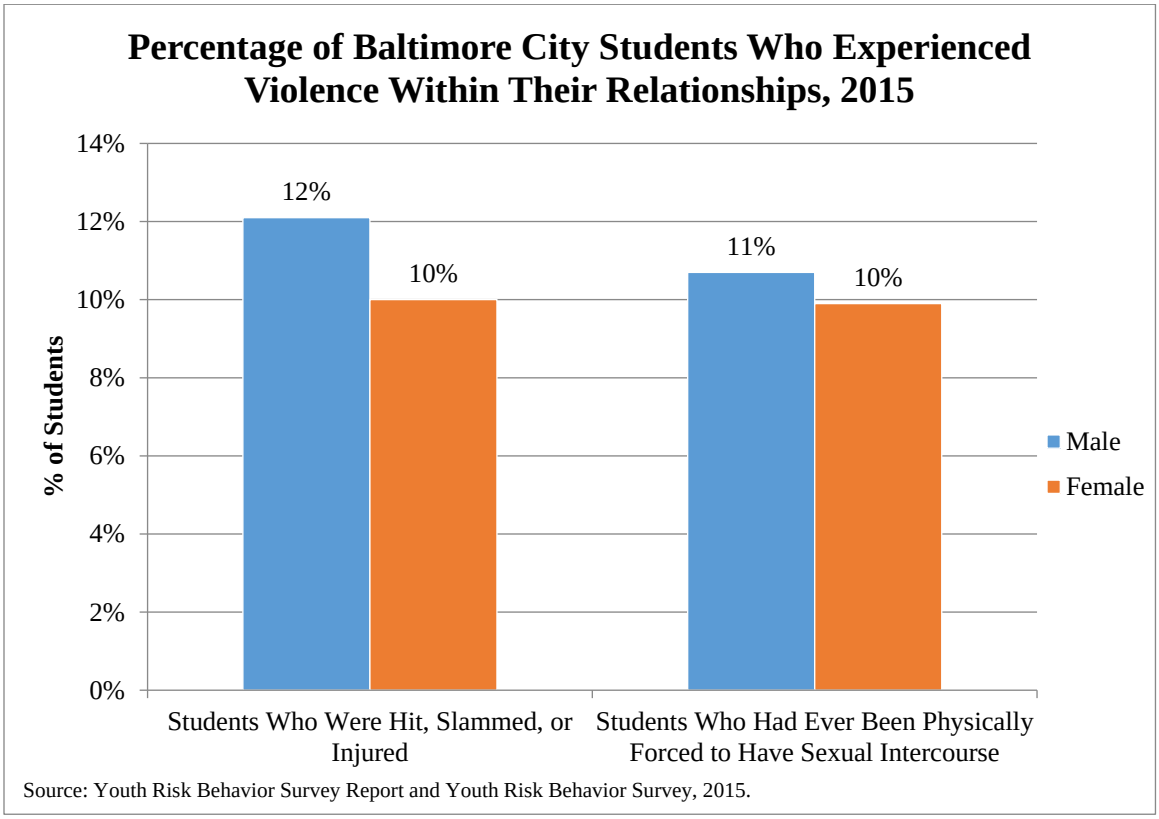
Although illicit drug use remains a serious epidemic in the city, drug enforcement efforts by Baltimore Police Department have significantly shifted in recent years to a greater focus on violent crime, resulting in fewer drug arrests. Arrests for illicit drug violations fell 39 percent from 27,800 in 2008 to 17,000 in 2012. More recently in 2015, Baltimore Police Department (BPD) made 6,600 arrests for drug abuse violations.[24]

The rate of juvenile arrests has also significantly fallen due to reforms but remains higher than most other major jurisdictions in the state. In 2015, the juvenile arrest rate for Baltimore City was 484 per 10,000 youths age 10-17, compared to 375 statewide.

Because crime victimization and other forms of violence and toxic stress do not always come to the attention of police, Emergency Medical Systems, or health professionals, surveys are an important tool to highlight the impact of crime, violence, and toxic stressors. According to the 2015 Youth Risk Behavior Surveillance Survey (YRBS), 12% of Baltimore City high school

[24] Crime in Maryland (2015)-Uniform Crime Report. http://mdsp.maryland.gov/Document%20Downloads/Crime%20in%20Maryland%202015%20Uniform%20Crime%20Report.pdf.

students reported not going to school at least one day prior to the survey because they felt unsafe. In addition, 12% reported being "hit, slapped, or physically hurt by their boyfriend or girlfriend" more than once in the last 12 months. The percentage of students who reported ever having been physically forced to have sexual intercourse was 10.7% for male and 9.9% for female high school students.



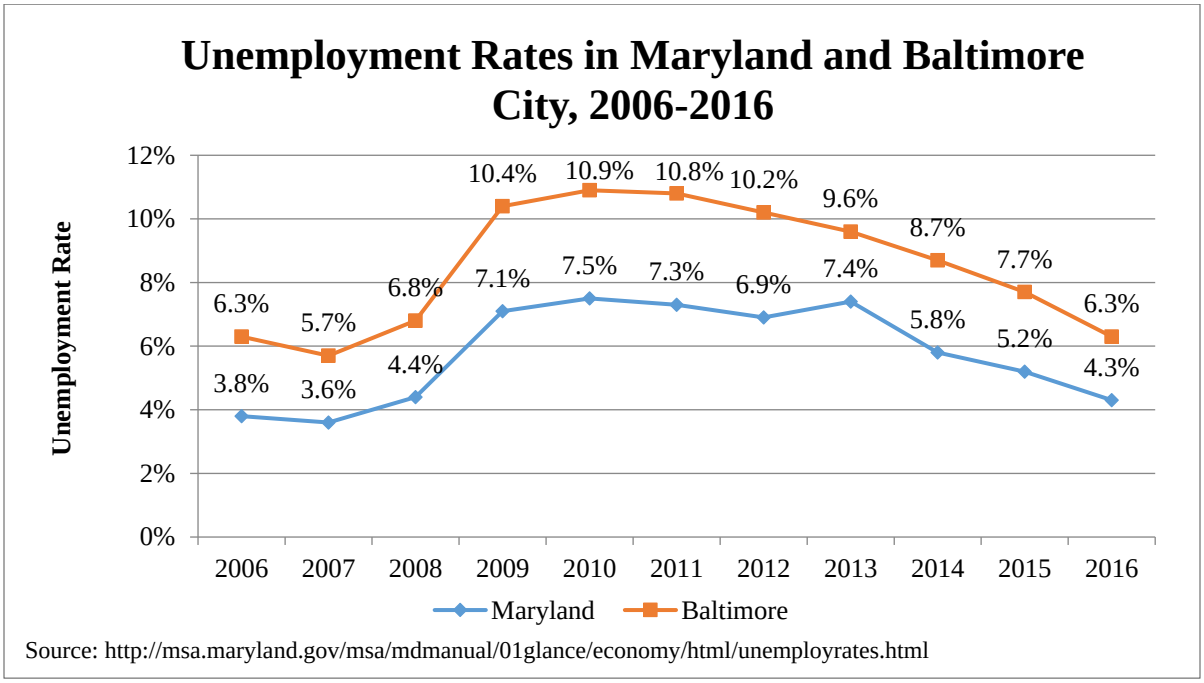
Source: Youth Risk Behavior Survey Report and Youth Risk Behavior Survey, 2015.

Employment

Baltimore City's unemployment rate is higher than Maryland and the United States, although the trend shows a decrease over the last four years. In 2006 the average unemployment rate for the city was 6.3%.

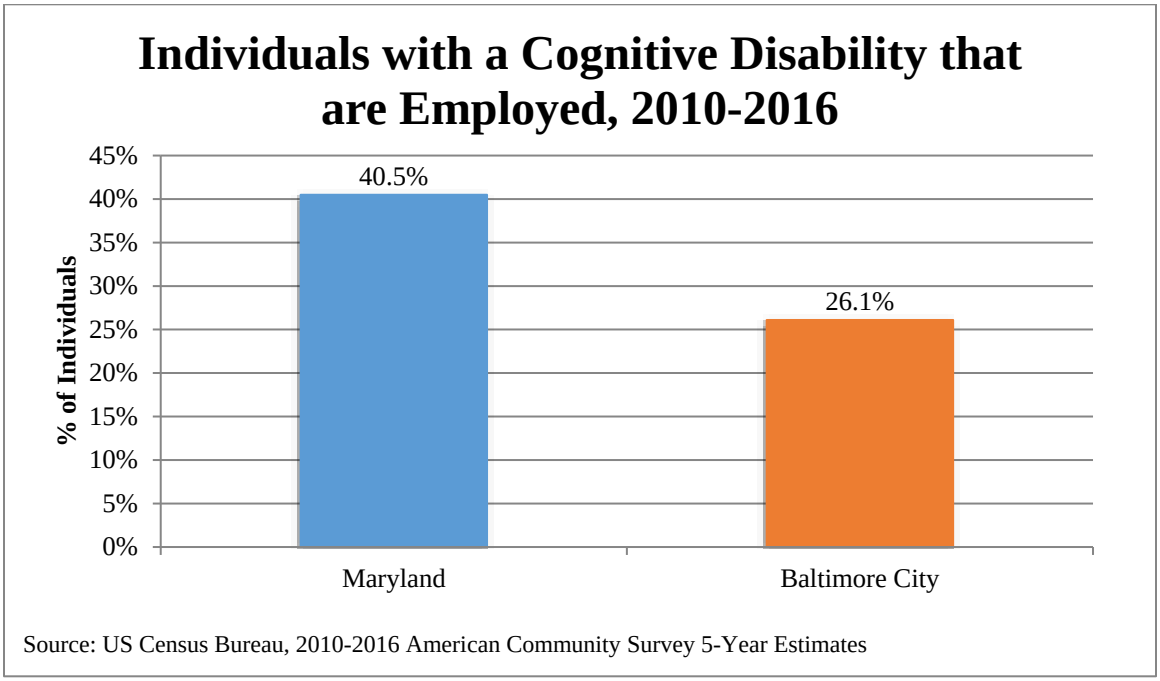
Annual Average Unemployment Rates, 2016	
Area	**Rate**
United States	4.9%
Maryland	4.3%
Baltimore City	6.3%

Source: Bureau of Labor Statistics. https://www.bls.gov/news.release/srgune.nr0.htm



Source: http://msa.maryland.gov/msa/mdmanual/01glance/economy/html/unemployrates.html

The employment rate of individuals with a cognitive disability was lower in Baltimore compared to the State.



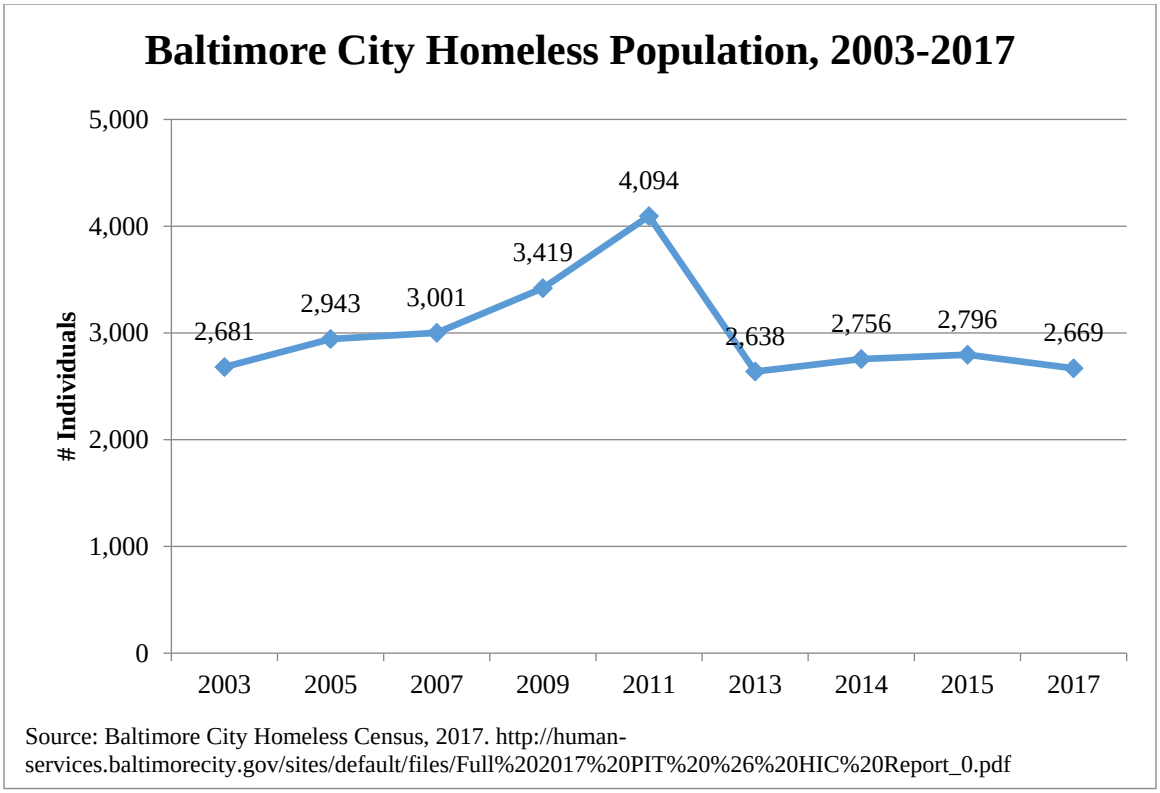
Source: US Census Bureau, 2010-2016 American Community Survey 5-Year Estimates

Homelessness

Homelessness is a persistent and growing problem in Baltimore City. In 2017, the Baltimore City Homeless Census estimated 2,669 homeless individuals.[25]. However, it is difficult to accurately count the number of homeless individuals, and data on the number are thought to be underestimates.

As a result, many adults and families lack the stability of a home or live in unhealthy conditions. The data below show that on a single night in January 2017, 2,669 persons were identified living in transitional housing, shelters, or on the street, with 546 counted on the street. Among those counted, 40% self-reported having a mental illness and 41% self-reported substance use issues.[26] Among 369 clients served by one BHSB-funded homeless outreach provider in 2016, upon enrollment in services, 68% of clients self-reported a mental illness, 24% self-reported alcohol misuse, and 37% self-reported illicit drug use."

[25] Baltimore Point in Time Count. January 22, 2017. https://human-services.baltimorecity.gov/homeless-services/documents
[26] Baltimore Point in Time Count. January 22, 2017. https://human-services.baltimorecity.gov/homeless-services/documents



Source: Baltimore City Homeless Census, 2017. http://human-services.baltimorecity.gov/sites/default/files/Full%202017%20PIT%20%26%20HIC%20Report_0.pdf

Housing

Lack of access to safe and affordable housing is a significant obstacle to the recovery of individuals with behavioral health disorders. In Baltimore City, a person earning minimum wage would need to work 2.9 full-time jobs to rent a two-bedroom apartment at fair market rent.[27] This is less affordable than the U.S. as a whole, but more affordable than Maryland. Baltimore City's high eviction rate adds to the stress of many renters. Although there is no national data tracking evictions, one analysis found Baltimore's eviction rate for low-income renters ranked in the top 36% of 152 metro areas analyzed.[28]

Even when it is affordable, much of Baltimore's housing stock is aging, substandard, or uninhabitable, with issues such as poor ventilation, mold, inadequate heating, and lead paint adversely impacting the health of residents. Of the city's occupied housing, 44% was built before 1940, and 70% was built before 1960.[29] Owners and tenants struggle to maintain aging

[27] Out of Reach 2017. National Low Income Housing Coalition. http://nlihc.org/sites/default/files/oor/OOR_2017.pdf
[28] Salviati, Chris. *Rental Insecurity: The Threat of Evictions to America's Renters*. Apartment List. October 20, 2017. https://www.apartmentlist.com/rentonomics/rental-insecurity-the-threat-of-evictions-to-americas-renters/
[29] American Community Survey, 2016

properties. As the data below indicate, Baltimore City's vacancy rate is significantly higher than the state as a whole. It is also important to note that vacancy rates are generally underreported.

Characteristics of Housing		
	Baltimore City	**Maryland**
Total housing units	296,923	2,421,909
Occupied units	242,416	2,177,492
Vacant units	54,507	244,417
Vacancy rates		
Homeowner	4.7%	1.7%
Rental	7.8%	6.3%
Gross monthly rent		
Less than $500	20,849	55,059
$500 - $999	45,143	151,151
More than $999	59,213	495,821

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

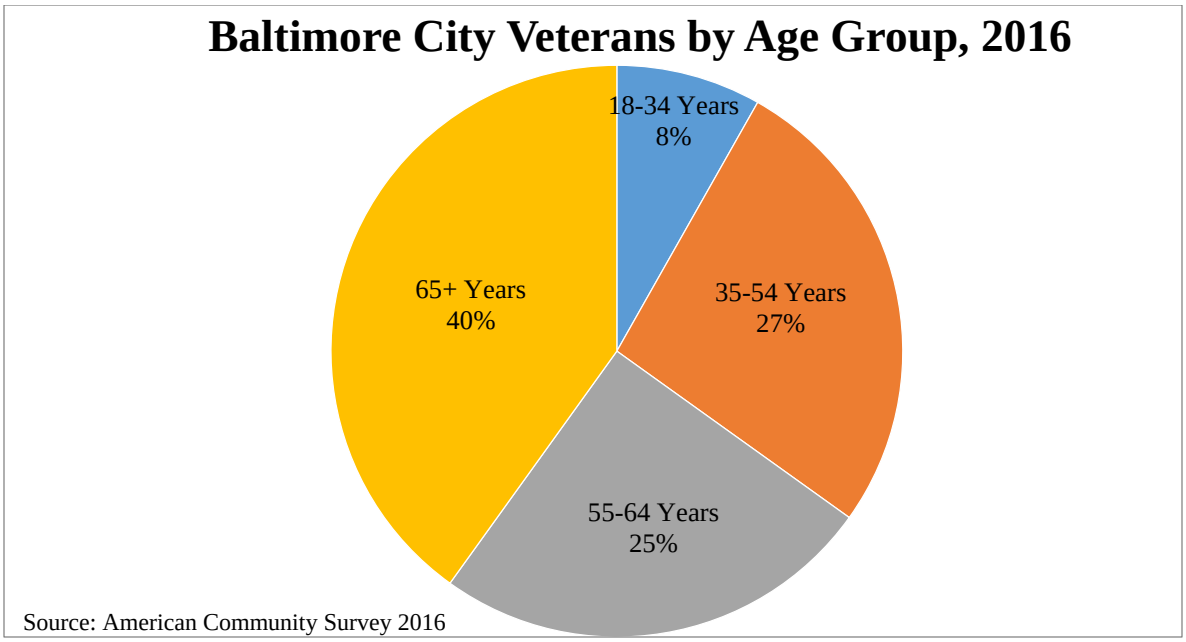
The cost of housing relative to income is a significant barrier to safe and stable housing. According to the 2016 American Community Survey, 33% of Baltimore City residents with any disability live below the poverty level.[30] The median monthly housing cost for renter-occupied units in Baltimore City was $974, and 45% of renters were spending more than 35% of their household income on rent.

Veterans and War Returnees

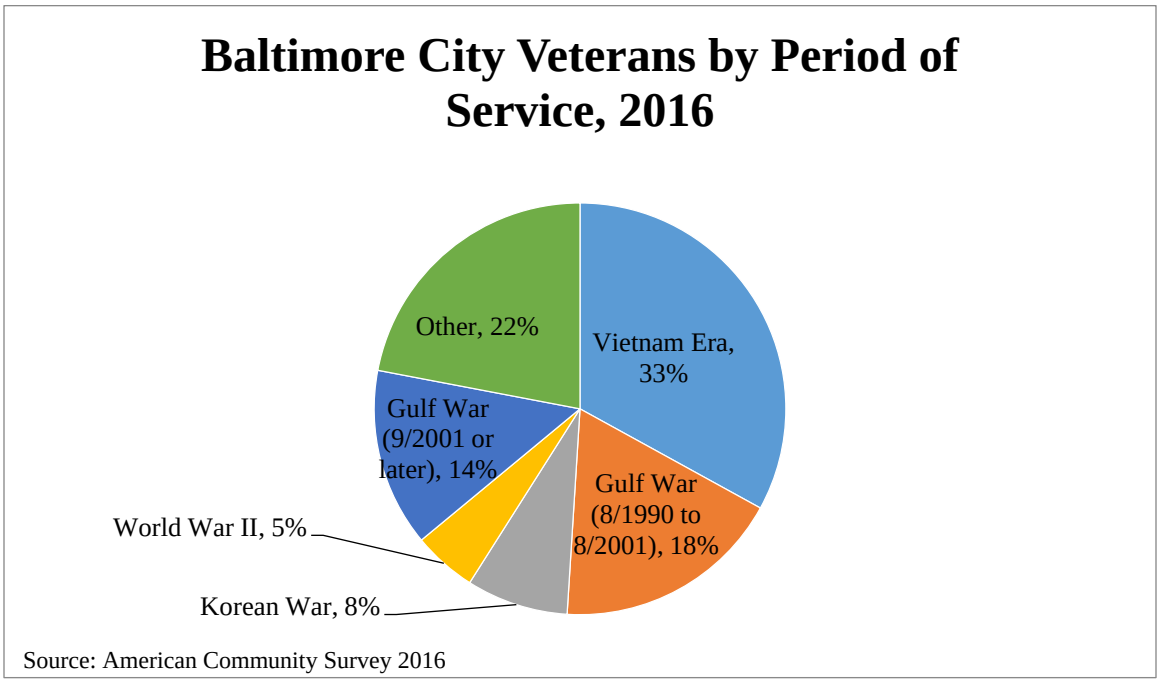
The US Department of Veterans Affairs estimates that there are 30,783 veterans in Baltimore City, representing 7.8% of all veterans in Maryland. Adults ages 35-64 represent 47% of the City's veteran population, and adults over 65 years represent 40%. Because of the high prevalence of behavioral health needs of veterans and war returnees,[31] this is a critical population.

[30] American Community Survey, 2016

[31] ,War returnee refers to any personnel returning from war zones, regardless of military status, including civilian personnel.



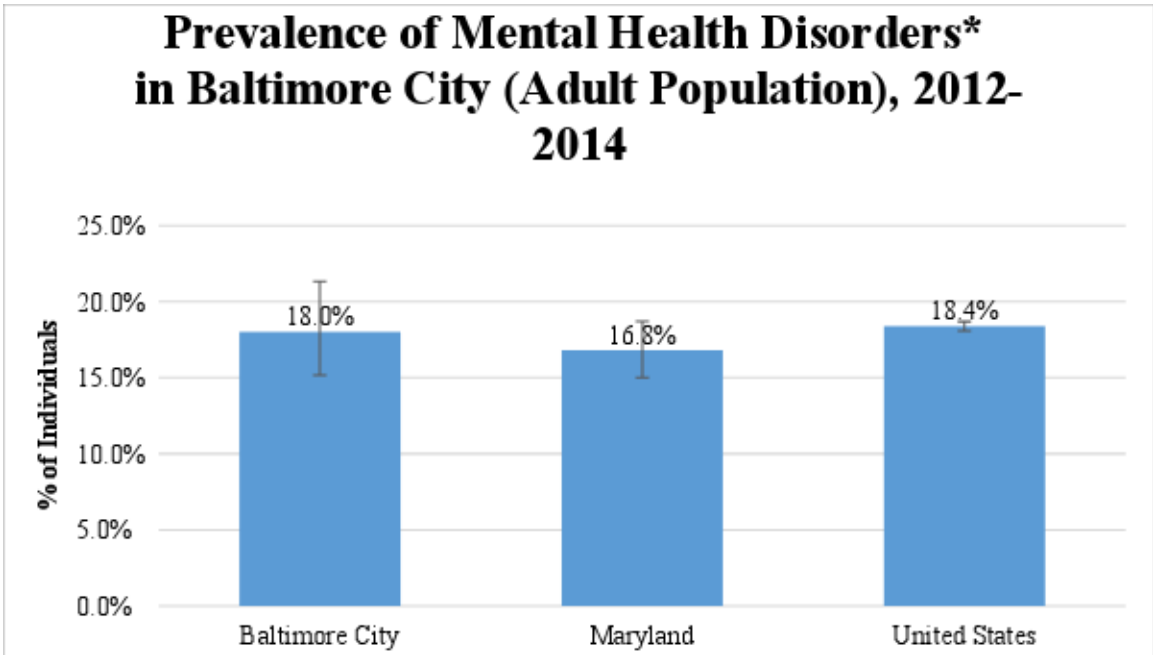
Most veterans served in the Vietnam War (33%) and the two periods of the Gulf Wars (32%).



2. BEHAVIORAL HEALTH INDICATORS OF THE CITY

Prevalence of Mental Illness

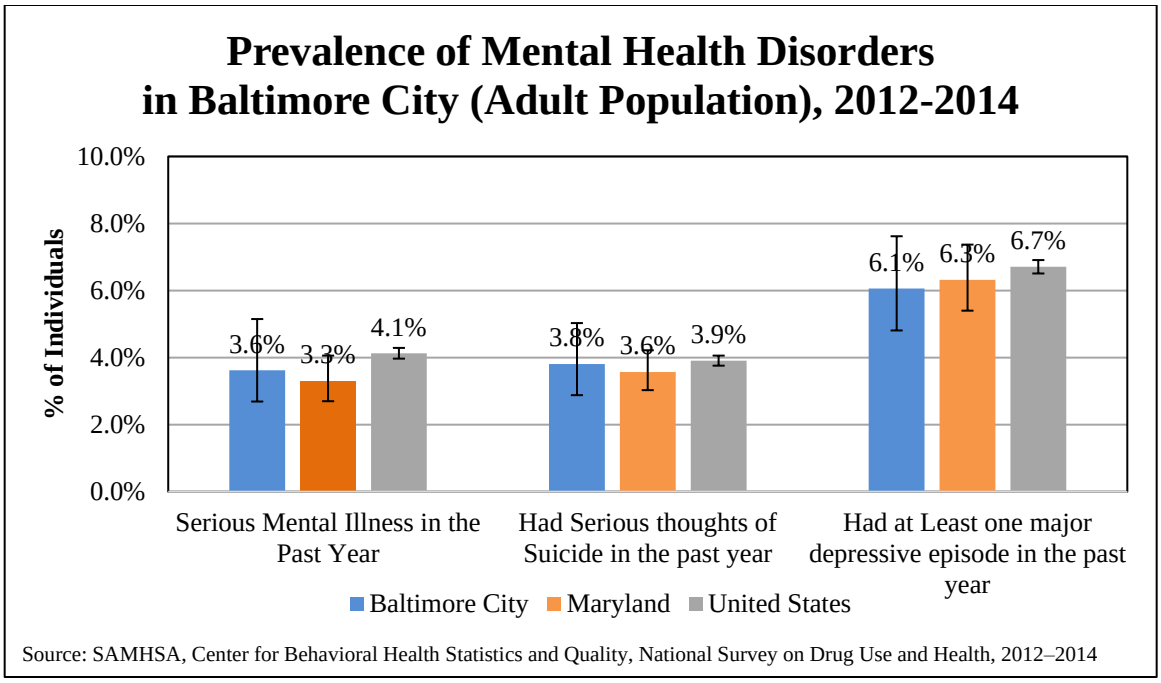
Although the rate of any mental illness in the past year in Baltimore City was slightly higher than the state rate, it remains below the national rate (18.4%). Overall, nearly one out of five adults in Baltimore City suffers any mental illness.



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012–2014.

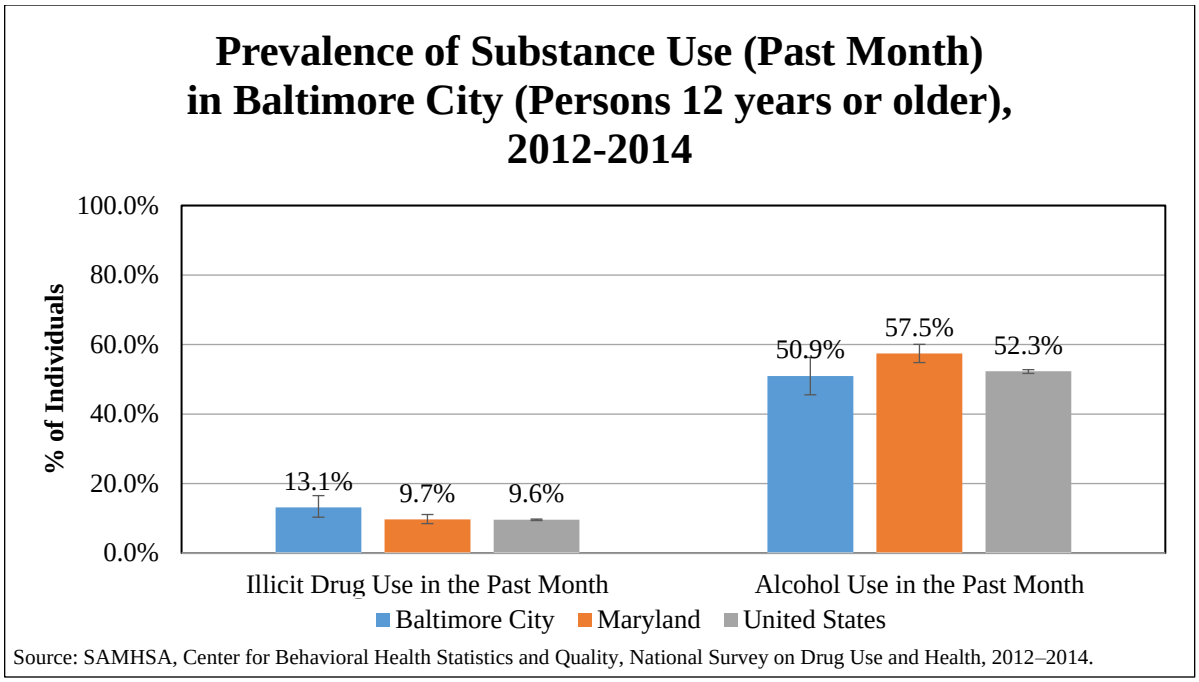
*Any Mental Illness (AMI) is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, which met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

The highest rates of mental illness were for individuals who had at least one major depressive episode in the prior year, with Baltimore City having a rate slightly below the state and nationwide rates. The Baltimore City rates for serious mental illness and those who had serious thoughts of suicide were slightly above the rates for the state, but neither surpassed the national rate of 4.1%.

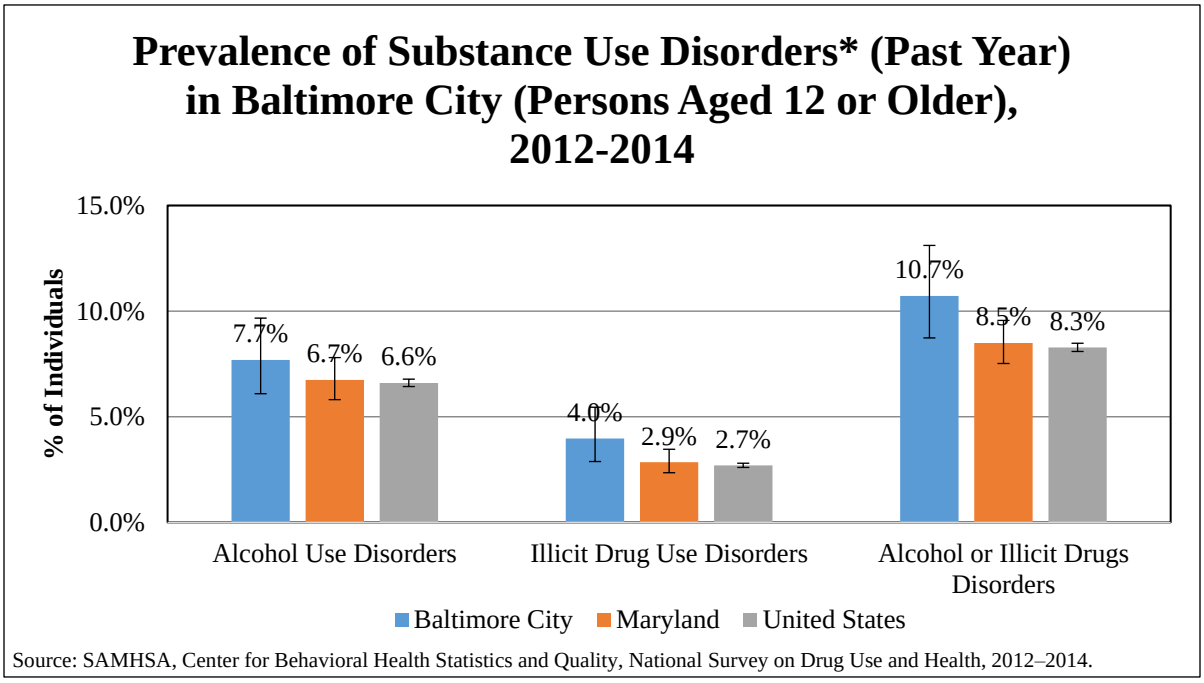


Prevalence of Substance Use Disorders

Both nationally and locally, rates of alcohol use in the past month are significantly higher than rates of illicit drug use in the past month. However, in comparison to state and national rates, Baltimore City experiences more illicit drug use and less alcohol use.



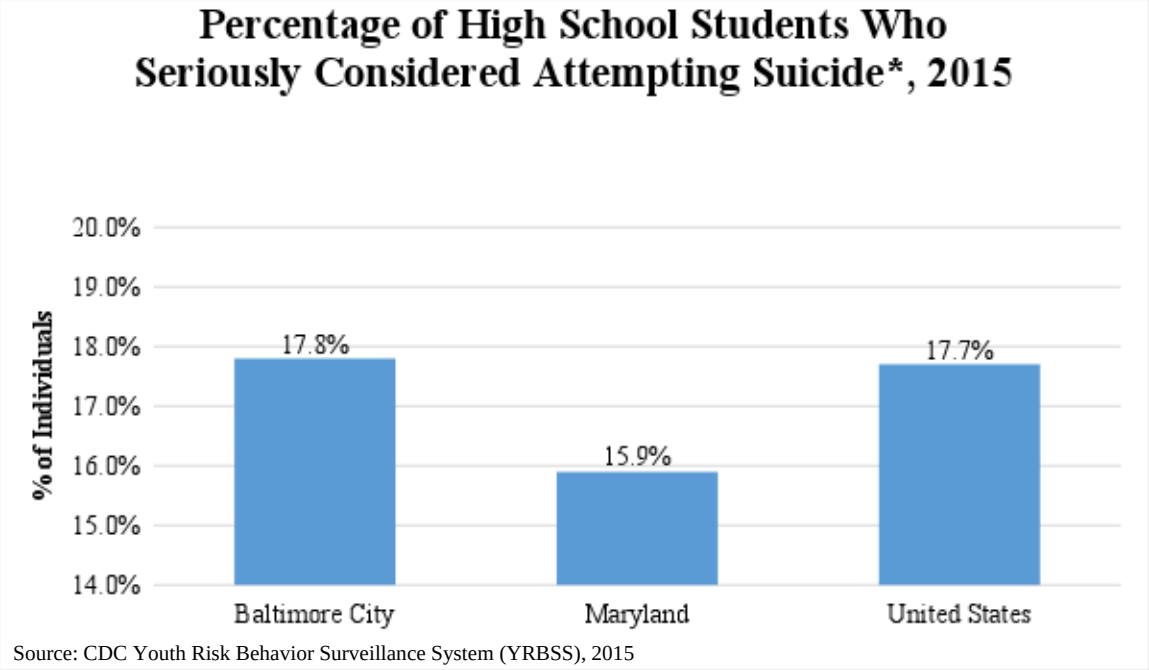
The prevalence of those with alcohol or illicit drug disorders in the past year for Baltimore City (10.7%) was higher than both the state and national rates. The rate of alcohol use disorders in the past year for Baltimore City (7.7%) was greater than the statewide rate (6.7%) and the national rate (6.6%). Likewise, the rate of illicit drug use disorders in the past year for Baltimore City (4.0%) was greater than the state (2.9%) and national rates (2.7%).



*Substance Use Disorder (either Alcohol and/or Illicit Drugs) includes the concepts of Dependence or Abuse. Dependence or Abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Youth

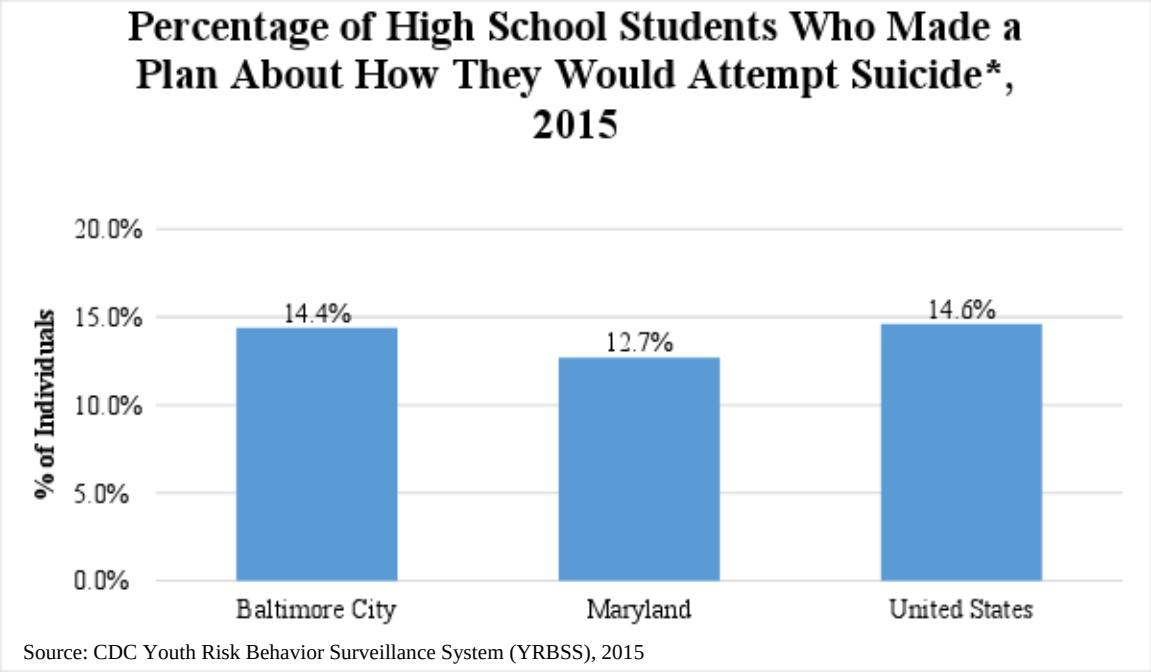
The Maryland YRBSS offers a unique look into the emotional needs and behavioral health risks of youth in Baltimore City. The percentage of high school students who seriously considered attempting suicide in Baltimore City was higher than both the state and national rates.



Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015

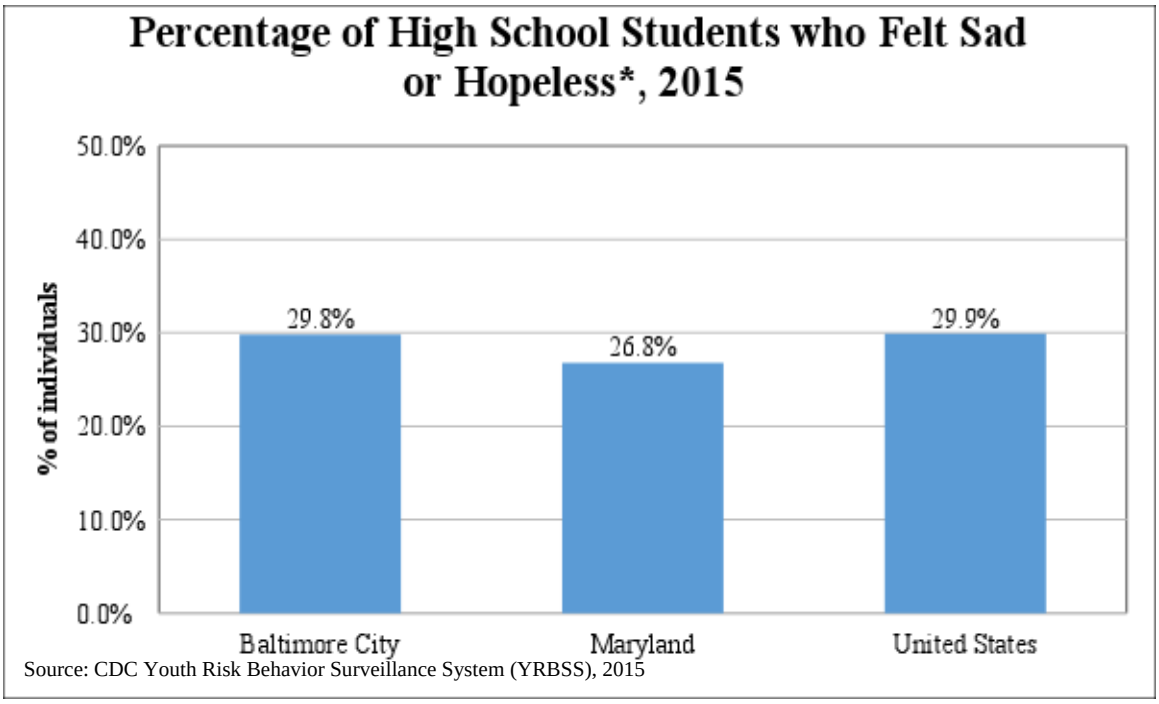
*During the 12 months before the survey

The percentage of high school students who made a plan about how they would attempt suicide was lower in Baltimore City than the nation, but higher than Maryland.



*During the 12 months before the survey

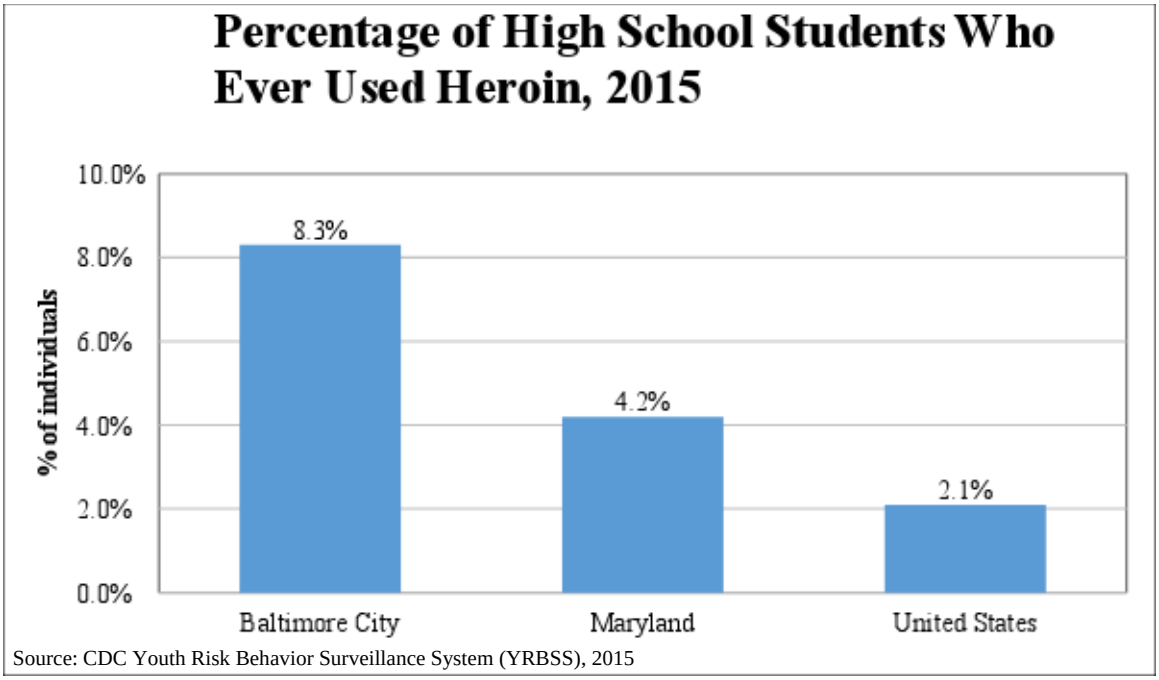
A large percentage of high school students reported feeling sad or hopeless in the prior 12 months.



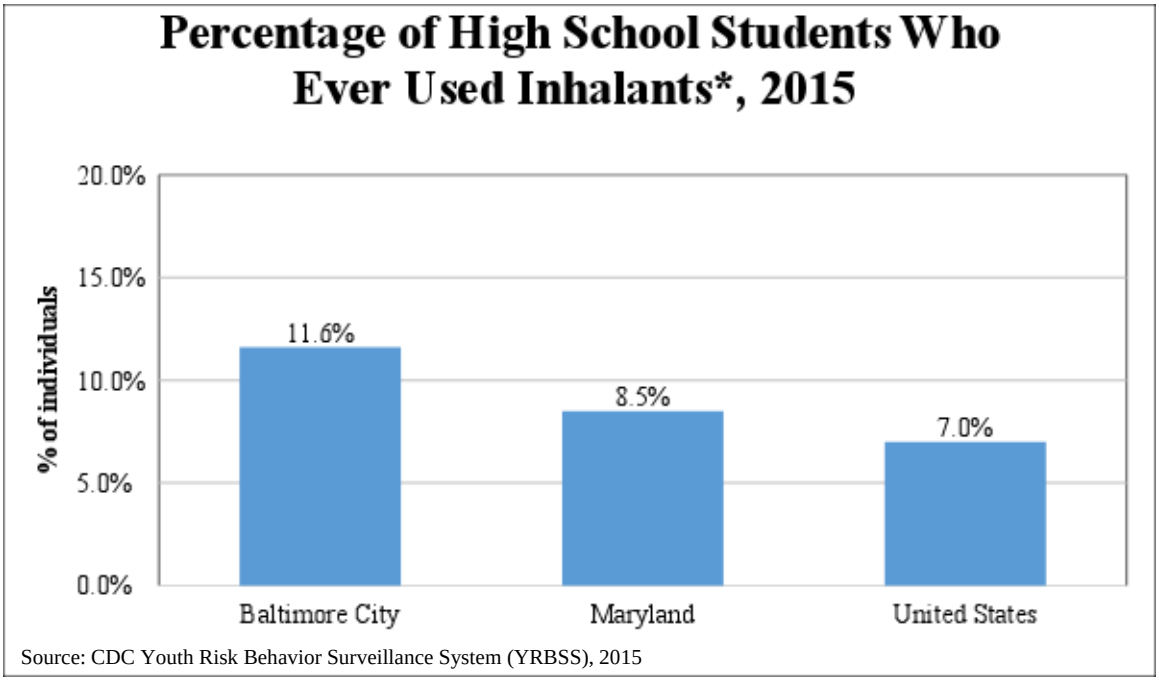
*During the 12 months before the survey, almost every day for 2 or more weeks in a row so that they stopped doing some usual activities

The next five charts demonstrate that a large percentage of high school students use drugs and alcohol, with the rate of use being substantially higher in Baltimore City than in Maryland and the United States

for everything except alcohol. The percentage of high school students who ever used heroin is 8.3% for Baltimore City, versus 4.2% for Maryland and 2.1% nationally. Use of inhalants and cocaine reflected similar disparities. Baltimore City's lifetime prevalence for alcohol use, however, was lower than the national average, although close to the Maryland average.

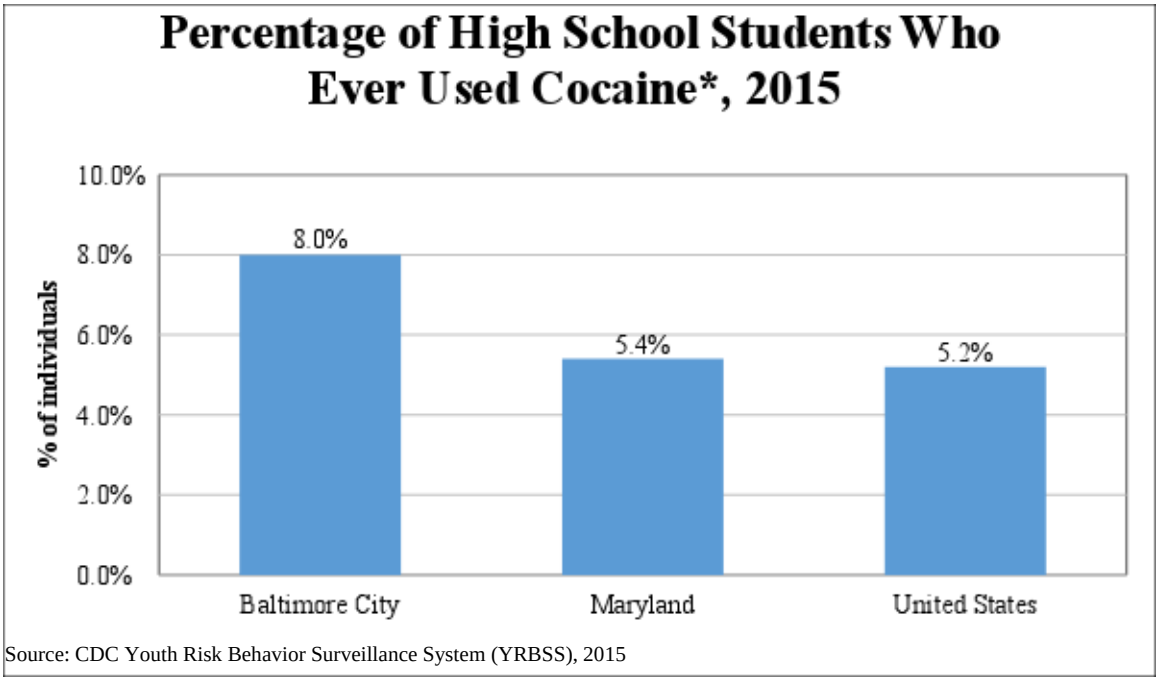


Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015



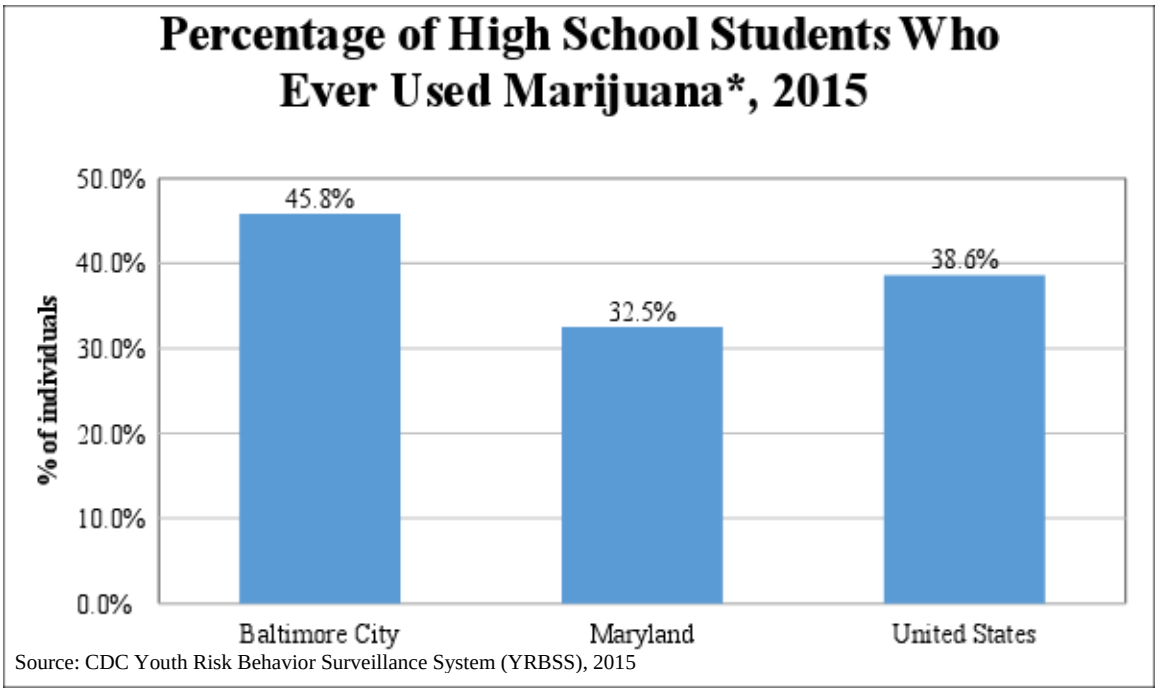
Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015

*Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life



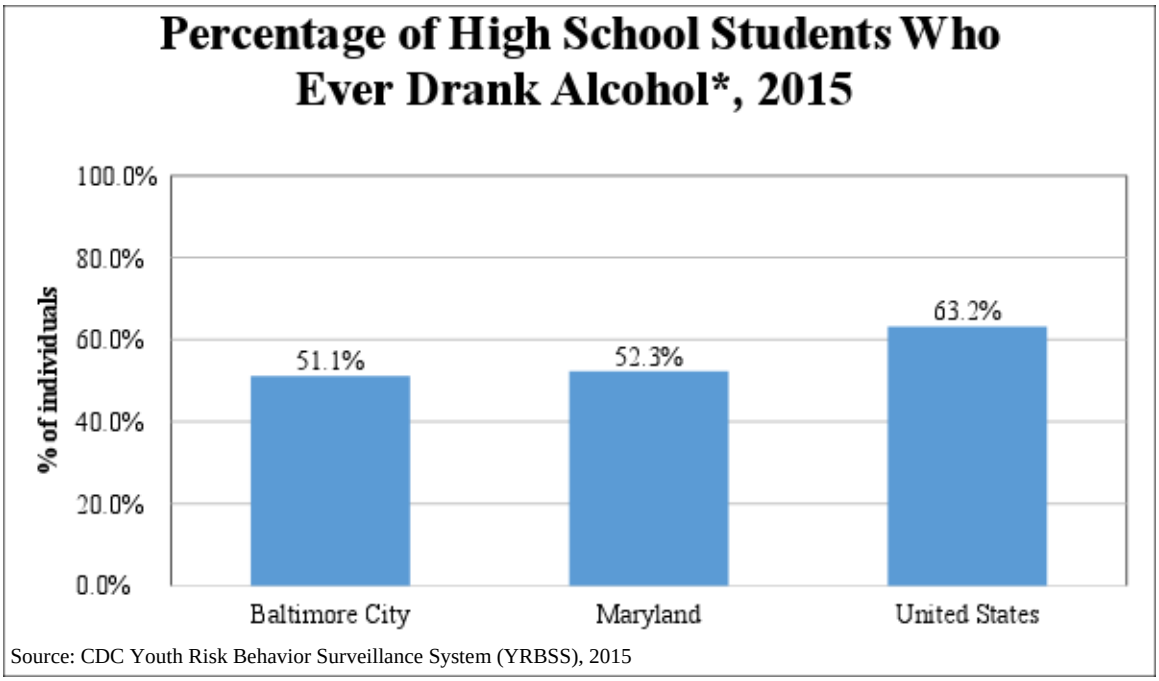
Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015

*Used any form of cocaine (e.g. powder, crack, or a freebase one or more times during their life



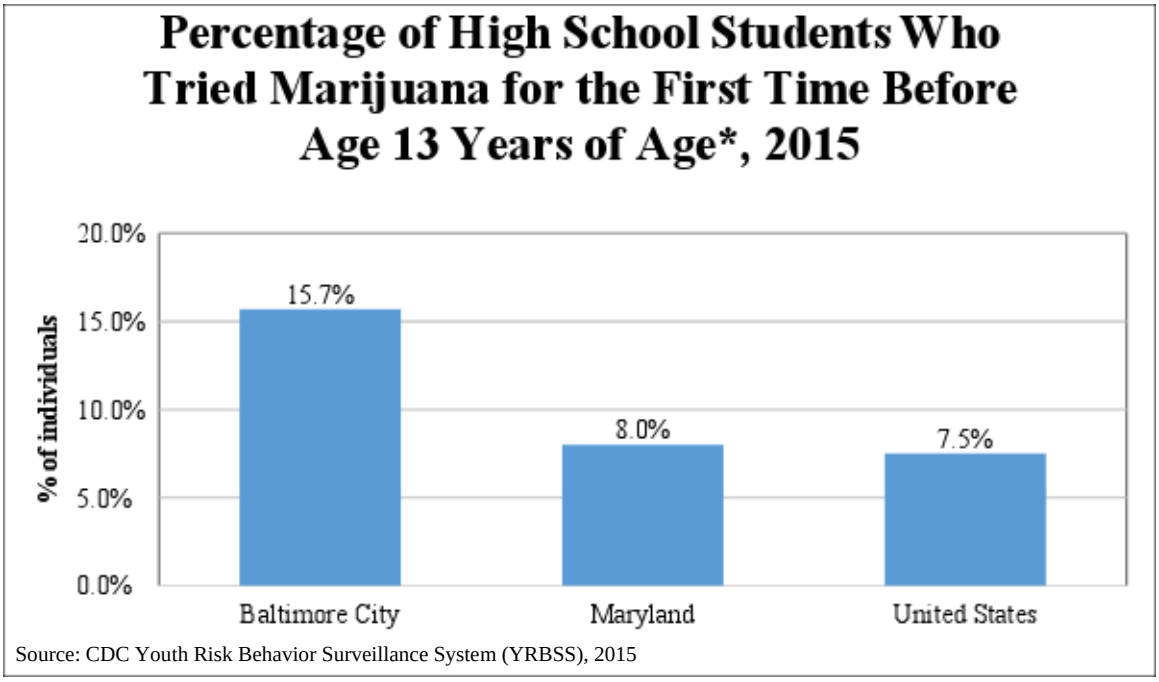
Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015

*One or more times during their life

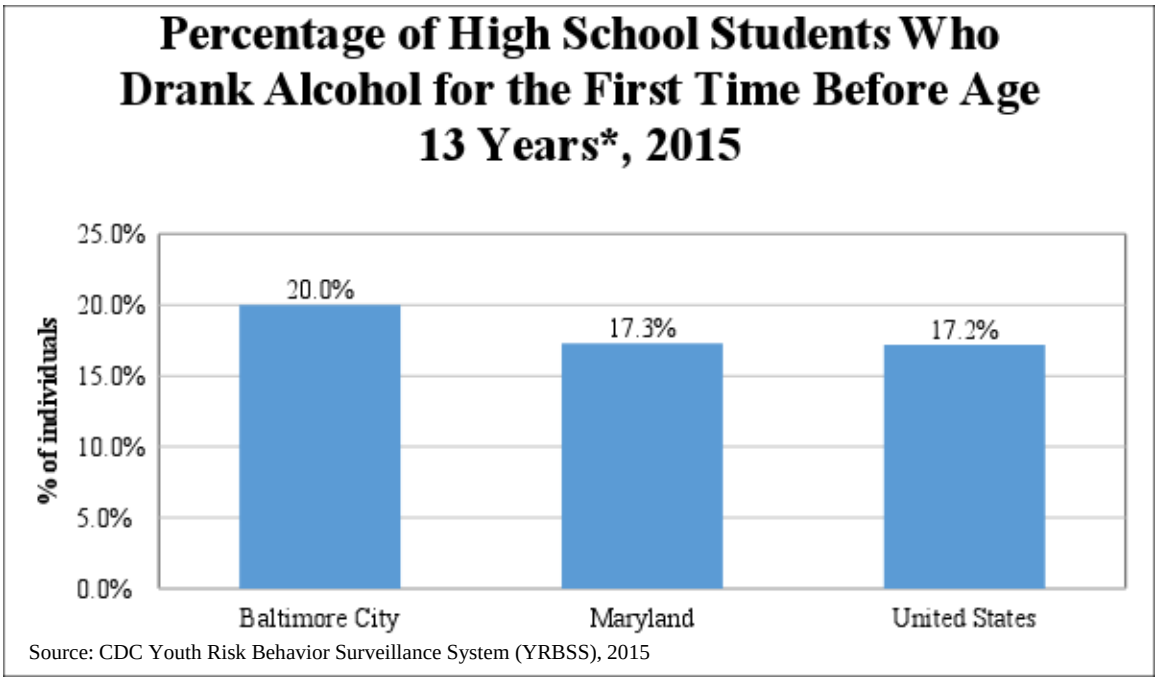


*Had at least one drink of alcohol on at least 1 day during their life

The next two charts reflect that a large percentage of youth began using marijuana or alcohol before the age of 13, again with the rate of use being higher for Baltimore City than Maryland or the United States.

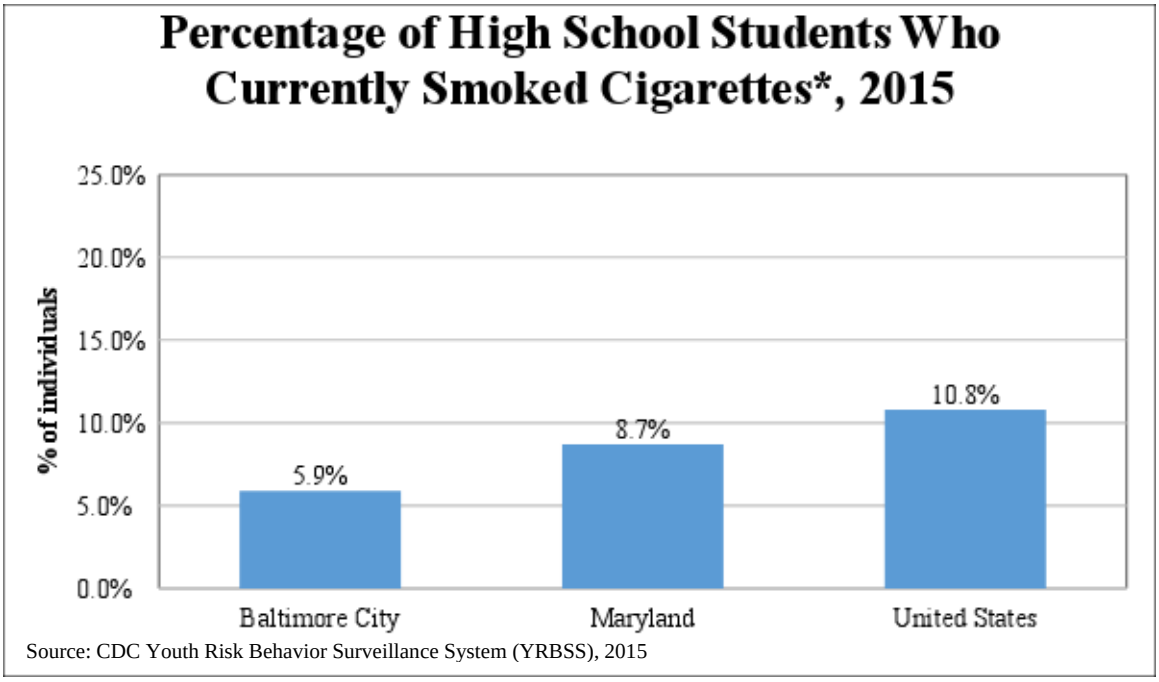


*One or more times during their life

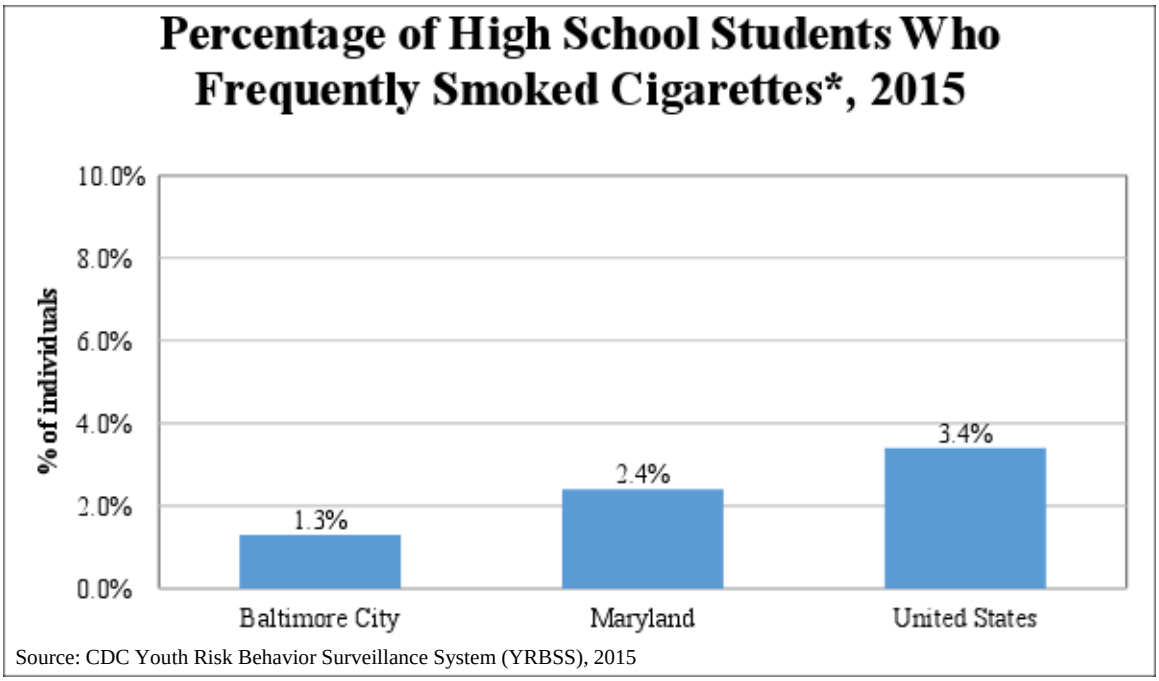


*Had at least one drink of alcohol on at least 1 day during their life

The next three graphs show that Baltimore City youth smoke cigarettes less frequently, as compared to Maryland or the United States.

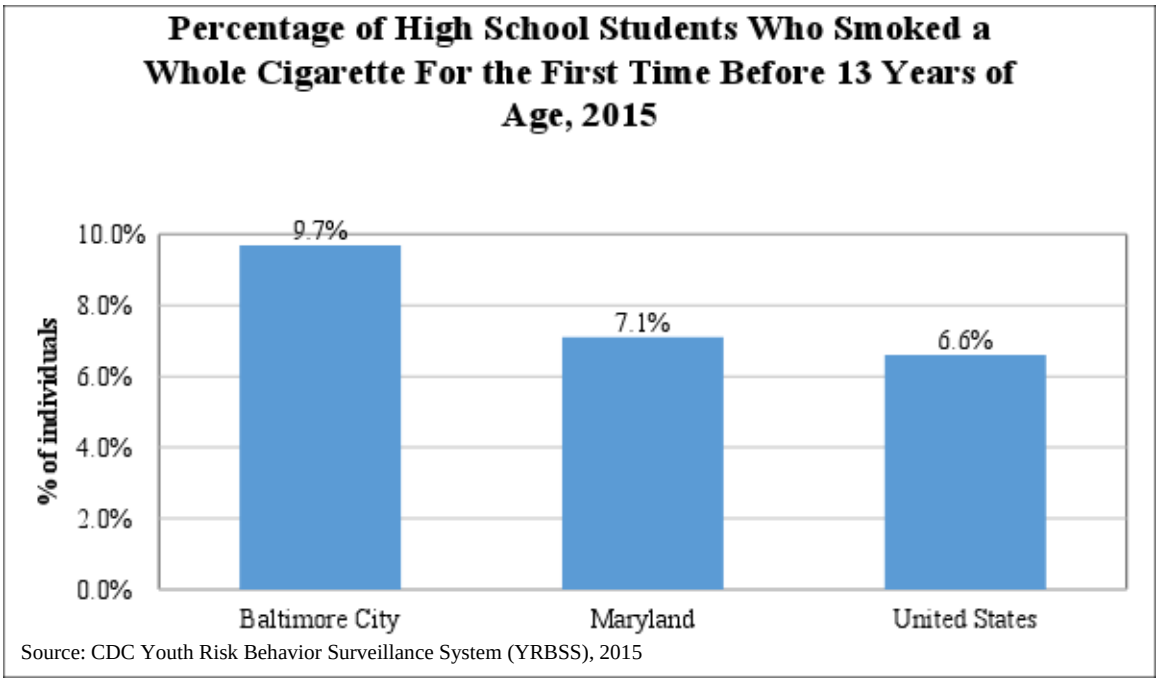


*On at least 1 day during the 30 days before the survey



Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015

*Who smoked cigarettes on 20 or more of the past 30 days



Source: CDC Youth Risk Behavior Surveillance System (YRBSS), 2015

3. PUBLIC BEHAVIORAL HEALTH SYSTEM UTILIZATION

Unless otherwise specified, the data presented in this section of the report are behavioral health (mental health and substance related disorders) service utilization and Outcome Measurement System (OMS) data collected by the Administrative Services Organization (ASO) for Maryland's fee-for-service public behavioral health system (PBHS). These data are collected and reported separately, precluding an analysis of the extent to which individuals utilize both mental health and substance related disorders services.

The mental health utilization data describe the use of mental health services and associated expenditures for children and adults in FY 17, and the OMS data describe point-in-time outcomes of various dimensions of wellness from the most recent observation for each consumer in FY 17. Data reports include claims submitted through September 30, 2017 (three months after the end of FY 17).

The substance use disorders (SRD) utilization data describe the use of SRD services and associated expenditures for children and adults in FY 17, and the OMS data describe point-in-time outcomes of various dimensions of wellness from the most recent observation for each consumer in FY 17. Data reports include claims submitted through September 30, 2017 (three months after the end of FY 17). It is important to note that FY 16 and FY 17 represent the first two full years of SRD service utilization data included in the ASO. FY 15 included only six months of SRD data (from January 1, 2015 thru June 30, 2015). These data include only SRD ambulatory services (outpatient, intensive outpatient and opioid maintenance therapy (OMT)). While SRD providers were required to report utilization of residential services to the ASO, it is anticipated that this data may be less accurate due to inconsistencies in reporting. Residential services will be reimbursed through the ASO beginning in FY 18, which will provide a more comprehensive picture of the public SRD services for Baltimore City.

MENTAL HEALTH UTILIZATION

As in previous years, the most recent data reported (FY 17) is incomplete, as claims may be submitted up to 12 months after the date of service delivery. Therefore, the data for FY 17 does not reflect all the claims for services rendered to Baltimore City individuals, while the data for previous years, to which it is being compared, represents 100% of claims for those years. This needs to be kept in mind when comparing FY 17 data to FY 16 and FY 15 data for trends over time. When comparisons with previous years show increases in FY 17, it is likely that the actual increase is somewhat greater. Conversely, decreases in FY 17 compared to previous years will be somewhat offset by the missing claims data. This artifact of the PBHS is more pronounced for expenditures and service data and less for numbers of consumers served, since most consumers served have a severe mental illness or emotional disorder and receive services for a significant duration.

This is the seventh year that OMS data for mental health disorders is included in this document. The OMS data is gathered through interviews with individuals, ages 6-64, who are receiving outpatient mental health treatment services. Interviews are conducted at the commencement of treatment and then every six months in licensed outpatient mental health clinics, federally qualified health centers, and hospital-based clinics. Consumers who are Medicare recipients or dual recipients of Medicaid and Medicare are not included.

The mental health service utilization tables present summary data from the past three fiscal years for Baltimore City and the past fiscal year for Maryland. It should be noted that previously reported data for the three fiscal years prior to FY 17 has been updated to include claims that were paid after September 30th following the respective fiscal year and may, therefore, differ from data reported in previous BHSB annual reports. The OMS data tables compare outcomes for Baltimore City and the State for FY 17 only.

Furthermore, it should be noted that the data presented here does not provide a complete picture of the utilization of publicly funded mental health services, since services funded by Medicare are not included, nor are services funded through grant-funded contracts.

Overall, there are several striking observations from the FY 17 data on mental health service utilization in the PBHS:

- The mental health system continues to serve a significant number of individuals in Baltimore City: 53,497 people in the last year (representing almost 1 out 10 City residents), and 26.6 % of the total people served in Maryland.
- It served a full age-continuum of the population, with the majority (61.7%) being adults.
- Outpatient is the most common service type, with more than 49,000 consumers served in the past year.
- There has been a total of 20,561 people identified as dually diagnosed, representing 38.4% of the total people served in FY 17.
- The average expenditure per consumer in Baltimore City was $5,244 in FY17.
- The most expensive service type per person served was residential treatment ($58,100)
- The average cost per person from Baltimore City served for residential treatment was substantially less ($58,100) than for the State ($81,784).

Consumers Served

While Baltimore City represents almost 10.3% of the State's population, it represented 26.6% of those who utilized mental health services in FY 17. The data presented in the Baltimore City Demographics section help explain this disparity. The conditions in which people are born, grow, live, work and age have a significant impact on health, and the prevalence of high ACE

scores in Baltimore City increases the likelihood of chronic illnesses, including behavioral health conditions.[32]

During the past three fiscal years, the number of City residents served has remained stable, with relatively minor variations among the age groups except for the elderly (65 and older), which showed an increase of 23% in the past fiscal year. Over the last three years, service utilization decreased 6.7% for early childhood (0-5).

Expenditures

Total expenditures of $280,556,459 for Baltimore City account for almost 30% of the State's total expenditures on public mental health services in FY 17. Expenditures for the City increased by 0.5% in the last fiscal year.

The average cost per person served during FY 17 was $5,244, with the adolescents having the highest cost per person at $6,273. The increase of over $13 million in mental health services expenditures in Baltimore City is largely due to variations associated with the following service types: increases in psychiatric rehabilitation program ($11.6 million) and outpatient services ($6.9 million).

There were decreases of 31.5% in the residential treatment ($3.6 million) and capitation ($1.5 million) service lines. It is important to note that one of the two capitation providers experienced claims denials during a five-month period of FY 17, from February through June. This was resolved during the fall of 2017, but the payments were made after September 30, 2017, which is the claims paid-through date used to run reports for this document.

Insurance Coverage

The main source of health insurance coverage for public mental health services is Medicaid, including Medicaid State-funded.[33]

Between FY 16 and FY 17, Medicaid expenditures increased by 5.9%, Medicaid State-funded by 1.1%, and the uninsured (Medicaid-ineligible individuals who meet criteria to qualify for some specific services) decreased by 29.3%. It is notable that while the number of Medicaid and Medicaid State-funded individuals served increased by 0.4% and 8.9%, respectively, the uninsured population decreased by 47.3%. The decreases in uninsured expenditures and number served can be partially explained by the expansion of Medicaid coverage to individuals who

[32] Maryland Behavioral Risk Factor Surveillance System (2017). "Adverse Childhood Experiences (ACEs) in Maryland: Data from the 2015 Maryland BRFSS Data Tables Only." https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

[33] Medicaid State-funded expenditures are state-only funds (versus those with a federal match) for State programs for individuals who are eligible based on certain income and assets criteria.

were previously uninsured, which increases the proportion of federal dollars funding services for this population.

The below tables present overall data for Baltimore City and the State of Maryland. It should be noted that statewide data include data from Baltimore City, which, as previously stated, comprises 26.6% of all consumers served in Maryland and 29.8% of State expenditures.

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	Persons Served By Age Group*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Early Child (0-5)	2,170	2,149	-1.0%	2,024	-5.8%
Child (6-12)	9,299	9,184	-1.2%	9,198	0.2%
Adolescent (13-17)	6,126	6,072	-0.9%	5,975	-1.6%
Transitional (18-21)	2,648	2,604	-1.7%	2,498	-4.1%
Adult (22 to 64)	32,574	32,875	0.9%	33,024	0.5%
Elderly (65 and over)	576	633	9.9%	778	22.9%
TOTAL	**53,393**	**53,517**	**0.2%**	**53,497**	**0.0%**

**Based on claims paid through September 30, 2017*

	Persons Served By Service Type*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Case Management	1,175	1,217	3.6%	1,226	0.7%
Crisis	645	622	-3.6%	660	6.1%
Inpatient	5,161	4,757	-7.8%	4,762	0.1%
Mobile Treatment	1,220	1,169	-4.2%	1,224	4.7%
Outpatient	50,092	50,162	0.1%	49,854	-0.6%
Partial Hospitalization	699	675	-3.4%	661	-2.1%
Psychiatric Rehabilitation	9,857	11,124	12.9%	12,854	15.6%
Residential Rehabilitation	1,073	1,060	-1.2%	1,088	2.6%
Residential Treatment	196	172	-12.2%	136	-20.9%
Respite Care	56	45	-19.6%	42	-6.7%
Supported Employment	418	497	18.9%	516	3.8%
BMHS Capitation	328	332	1.2%	334	0.6%
Emergency Petition	8	16	100.0%	2	-87.5%
Purchase of Care	0	3	#DIV/0!	6	100.0%
PRTF Waiver	0	6	#DIV/0!	10	66.7%
****TOTAL**	**53,393**	**53,517**	**0.2%**	**53,497**	**0.0%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

	Persons Served By Coverage Type*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Medicaid	51,061	51,183	0.2%	51,405	0.4%
Medicaid State Funded	5,459	5,561	1.9%	6,055	8.9%
Uninsured	3,457	3,223	-6.8%	1,697	-47.3%
****TOTAL**	**53,393**	**53,517**	**0.2%**	**53,497**	**0.0%**
Dually Diagnosed	**18,771**	**19,899**	**6.0%**	**20,561**	**3.3%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	Expenditures By Age Group*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Early Child (0-5)	$7,134,263	$6,368,721	-10.7%	$6,247,987	-1.9%
Child (6-12)	$47,755,096	$46,346,577	-2.9%	$48,773,371	5.2%
Adolescent (13-17)	$38,946,008	$38,081,876	-2.2%	$37,480,037	-1.6%
Transitional (18-21)	$11,935,096	$11,847,381	-0.7%	$13,012,254	9.8%
Adult (22 to 64)	$156,698,539	$159,788,263	2.0%	$170,232,487	6.5%
Elderly (65 and over)	$4,627,441	$4,665,322	0.8%	$4,810,323	3.1%
TOTAL	**$267,096,443**	**$267,098,140**	**0.0%**	**$280,556,459**	**5.0%**

**Based on claims paid through September 30, 2017*

	Expenditures By Service Type*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Case Management	$1,837,439	$2,170,110	18.1%	$2,465,933	13.6%
Crisis	$2,455,449	$2,422,772	-1.3%	$2,553,378	5.4%
Inpatient	$67,487,839	$65,978,807	-2.2%	$65,511,091	-0.7%
Mobile Treatment	$10,950,085	$10,828,929	-1.1%	$11,168,641	3.1%
Outpatient	$112,821,895	$107,788,314	-4.5%	$114,779,236	6.5%
Partial Hospitalization	$4,013,134	$4,694,829	17.0%	$4,280,661	-8.8%
Psychiatric Rehabilitation	$46,236,307	$50,934,658	10.2%	$62,622,918	22.9%
Residential Rehabilitation	$1,670,946	$1,639,882	-1.9%	$1,688,777	3.0%
Residential Treatment	$10,763,627	$11,527,521	7.1%	$7,901,636	-31.5%
Respite Care	$69,040	$59,544	-13.8%	$52,419	-12.0%
Supported Employment	$706,804	$871,326	23.3%	$805,130	-7.6%
BMHS Capitation	$8,081,393	$8,159,721	1.0%	$6,622,267	-18.8%
Emergency Petition	$2,485	$9,191	269.9%	$1,233	-86.6%
Purchase of Care	$0	$1,539	#DIV/0!	$53,840	3398.4%
PRTF Waiver	$0	$10,997	#DIV/0!	$49,296	348.3%
****TOTAL**	**$267,096,443**	**$267,098,140**	**0.0%**	**$280,556,456**	**5.0%**

**Based on claims paid through September 30, 2017*

	Expenditures By Coverage Group*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Medicaid	$241,977,680	$242,189,636	0.1%	$256,492,343	5.9%
Medicaid State Funded	$21,224,492	$21,245,419	0.1%	$21,475,221	1.1%
Uninsured	$3,894,269	$3,663,085	-5.9%	$2,588,893	-29.3%
****TOTAL**	**$267,096,441**	**$267,098,140**	**0.0%**	**$280,556,457**	**5.0%**
Dually Diagnosed	**$131,763,231**	**$135,815,087**	**3.1%**	**$142,602,182**	**5.0%**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	Persons Served: Child / Adolescent (Age 0 – 17 Years) *				
	FY 2015	FY 2016	% Change	FY 2017	% Change
Case Management	87	192	120.7%	249	29.7%
Crisis	4	2	-50.0%	4	100.0%
Inpatient	932	885	-5.0%	894	1.0%
Mobile Treatment	139	133	-4.3%	166	24.8%
Outpatient	17,156	16,911	-1.4%	16,654	-1.5%
Partial Hospitalization	358	337	-5.9%	327	-3.0%
Psychiatric Rehabilitation	4,660	5,187	11.3%	5,372	3.6%
Residential Rehabilitation	4	2	-50.0%	4	100.0%
Residential Treatment	189	164	-13.2%	129	-21.3%
Respite Care	56	45	-19.6%	42	-6.7%
Supported Employment	1	1	0.0%	6	500.0%
BMHS Capitation	0	0	#DIV/0!	0	#DIV/0!
Emergency Petition	1	0	-100.0%	0	#DIV/0!
Purchase of Care	0	0	#DIV/0!	1	#DIV/0!
PRTF Waiver	0	6	#DIV/0!	10	66.7%
****TOTAL**	**17,595**	**17,405**	**-1.1%**	**17,197**	**-1.2%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

	Expenditures: Child / Adolescent (Age 0 – 17 Years) *				
	FY 2015	FY 2016	% Change	FY 2017	% Change
Case Management	$96,710	$308,992	219.5%	$625,998	102.6%
Crisis	$10,851	$5,148	-52.6%	$11,253	118.6%
Inpatient	$13,939,395	$13,924,308	-0.1%	$14,079,989	1.1%
Mobile Treatment	$979,526	$890,842	-9.1%	$978,504	9.8%
Outpatient	$52,864,026	$46,992,871	-11.1%	$49,567,810	5.5%
Partial Hospitalization	$2,366,334	$2,644,392	11.8%	$2,407,861	-8.9%
Psychiatric Rehabilitation	$13,040,456	$14,872,298	14.0%	$17,315,837	16.4%
Residential Rehabilitation	$529	$270	-49.0%	$707	162.3%
Residential Treatment	$10,468,002	$11,087,074	5.9%	$7,392,965	-33.3%
Respite Care	$69,040	$59,544	-13.8%	$52,419	-12.0%
Supported Employment	$439	$439	0.0%	$7,974	1716.1%
BMHS Capitation	$0	$0	0.0%	$0	0.0%
Emergency Petition	$57	$0	-100.0%	$0	0.0%
Purchase of Care	$0	$0	0.0%	$10,778	0.0%
PRTF Waiver	$0	$10,997	0.0%	$49,296	348.3%
****TOTAL**	**$93,835,366**	**$90,797,175**	**-3.2%**	**$92,501,394**	**1.9%**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	Persons Served: Adult (Age 18+ Years) *				
	FY 2015	FY 2016	% Change	FY 2017	% Change
Case Management	1,088	1,025	-5.8%	977	-4.7%
Crisis	641	620	-3.3%	656	5.8%
Inpatient	4,229	3,872	-8.4%	3,868	-0.1%
Mobile Treatment	1,081	1,036	-4.2%	1,058	2.1%
Outpatient	32,936	33,251	1.0%	33,200	-0.2%
Partial Hospitalization	341	338	-0.9%	334	-1.2%
Psychiatric Rehabilitation	5,197	5,946	14.4%	7,482	25.8%
Residential Rehabilitation	1,069	1,058	-1.0%	1,084	2.5%
Residential Treatment	7	8	14.3%	7	-12.5%
Respite Care	0	0	#DIV/0!	0	#DIV/0!
Supported Employment	417	496	18.9%	510	2.8%
BMHS Capitation	328	332	1.2%	334	0.6%
Emergency Petition	7	16	128.6%	2	-87.5%
Purchase of Care	0	3	#DIV/0!	5	66.7%
PRTF Waiver	0	0	#DIV/0!	0	#DIV/0!
****TOTAL**	**35,798**	**36,112**	**0.9%**	**36,300**	**0.5%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

	Expenditures: Adult (Age 18+ Years) *				
	FY 2015	FY 2016	% Change	FY 2017	% Change
Case Management	$1,740,729	$1,861,118	6.9%	$1,839,935	-1.1%
Crisis	$2,444,598	$2,417,624	-1.1%	$2,542,125	5.1%
Inpatient	$53,548,443	$52,054,499	-2.8%	$51,431,102	-1.2%
Mobile Treatment	$9,970,559	$9,938,087	-0.3%	$10,190,137	2.5%
Outpatient	$59,957,868	$60,795,443	1.4%	$65,211,426	7.3%
Partial Hospitalization	$1,646,799	$2,050,437	24.5%	$1,872,800	-8.7%
Psychiatric Rehabilitation	$33,195,851	$36,062,360	8.6%	$45,307,080	25.6%
Residential Rehabilitation	$1,670,417	$1,639,613	-1.8%	$1,688,070	3.0%
Residential Treatment	$295,625	$440,448	49.0%	$508,671	15.5%
Respite Care	$0	$0	#DIV/0!	$0	#DIV/0!
Supported Employment	$706,364	$870,887	23.3%	$797,155	-8.5%
BMHS Capitation	$8,081,393	$8,159,721	1.0%	$6,622,267	-18.8%
Emergency Petition	$2,428	$9,191	278.5%	$1,233	-86.6%
Purchase of Care	$0	$1,539	#DIV/0!	$43,062	2697.3%
PRTF Waiver	$0	$0	#DIV/0!	$0	#DIV/0!
****TOTAL**	**$173,261,075**	**$176,300,965**	**1.8%**	**$188,055,063**	**6.7%**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	State and County Comparisons Persons Served*			
	STATE*		COUNTY	
AGE	**Number**	**Per Cent**	**Number**	**Per Cent**
Early Child	7,246	3.6%	2,024	3.8%
Child	35,876	17.8%	9,198	17.2%
Adolescent	25,996	12.9%	5,975	11.2%
Transitional	11,653	5.8%	2,498	4.7%
Adult	117,878	58.6%	33,024	61.7%
Elderly	2,356	1.2%	778	1.5%
TOTAL	**201,005**	**100.0%**	**53,497**	**100.0%**
SERVICE TYPE				
Case Management	6,111	3.0%	1,226	2.3%
Crisis	2,121	1.1%	660	1.2%
Inpatient	19,534	9.7%	4,762	8.9%
Mobile Treatment	4,143	2.1%	1,224	2.3%
Outpatient	189,144	94.1%	49,854	93.2%
Partial Hospitalization	2,408	1.2%	661	1.2%
Psychiatric Rehabilitation	32,350	16.1%	12,854	24.0%
Residential Rehabilitation	4,675	2.3%	1,088	2.0%
Residential Treatment	542	0.3%	136	0.3%
Respite Care	346	0.2%	42	0.1%
Supported Employment	3,702	1.8%	516	1.0%
BMHS Capitation	372	0.2%	334	0.6%
Emergency Petition	268	0.1%	2	0.0%
Purchase of Care	28	0.01%	6	0.0%
PRTF Waiver	49	0.02%	10	0.0%
TOTAL	**201,005**		**53,497**	
COVERAGE TYPE				
Medicaid	192,795	95.9%	51,405	96.1%
Medicaid State Funded	27,709	13.8%	6,055	11.3%
Uninsured	6,581	3.3%	1,697	3.2%
TOTAL	**201,005**		**53,497**	
DUALLY DIAGNOSED INDIVIDUALS				
All with DD #	**63,927**	**31.8%**	**20,561**	**38.4%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	State and County Comparisons Expenditures*			
	STATE*		COUNTY	
AGE	**Number**	**Per Cent**	**Number**	**Per Cent**
Early Child	$17,712,103	1.9%	$6,247,987	2.2%
Child	$158,195,873	16.8%	$48,773,371	17.4%
Adolescent	$144,788,864	15.4%	$37,480,037	13.4%
Transitional	$48,139,953	5.1%	$13,012,254	4.6%
Adult	$555,270,818	59.0%	$170,232,487	60.7%
Elderly	$16,982,896	1.8%	$4,810,323	1.7%
TOTAL	**$941,090,507**	**100.0%**	**$280,556,459**	**100.0%**
SERVICE TYPE				
Case Management	$11,796,488	1.3%	$2,465,933	0.9%
Crisis	$9,886,915	1.1%	$2,553,378	0.9%
Inpatient	$233,847,519	24.8%	$65,511,091	23.4%
Mobile Treatment	$33,825,429	3.6%	$11,168,641	4.0%
Outpatient	$363,398,810	38.6%	$114,779,236	40.9%
Partial Hospitalization	$10,783,064	1.1%	$4,280,661	1.5%
Psychiatric Rehabilitation	$204,087,243	21.7%	$62,622,918	22.3%
Residential Rehabilitation	$11,509,587	1.2%	$1,688,777	0.6%
Residential Treatment	$44,326,803	4.7%	$7,901,636	2.8%
Respite Care	$1,081,514	0.1%	$52,419	0.0%
Supported Employment	$8,773,352	0.9%	$805,130	0.3%
BMHS Capitation	$7,275,450	0.8%	$6,622,267	2.4%
Emergency Petition	$61,276	0.007%	$1,233	0.000%
Purchase of Care	$256,540	0.027%	$53,840	0.019%
PRTF Waiver	$180,517	0.019%	$49,296	0.018%
TOTAL	**$941,090,507**	**100.0%**	**$280,556,456**	**100.0%**
COVERAGE TYPE				
Medicaid	$842,086,185	89.5%	$256,492,343	91.4%
Medicaid State Funded	$87,129,142	9.3%	$21,475,221	7.7%
Uninsured	$11,875,181	1.3%	$2,588,893	0.9%
TOTAL	**$941,090,508**	**100%**	**$280,556,457**	**100%**
DUALLY DIAGNOSED INDIVIDUALS				
All with DD #	**$425,456,012**	**45.2%**	**$142,602,182**	**50.8%**

**Based on claims paid through September 30, 2017*

***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

	State and County Comparisons Cost Per Person Served*			
	State	**County**	**Difference**	**Index^**
AGE				
Early Child	$2,444	$3,087	$643	126.3
Child	$4,410	$5,303	$893	120.3
Adolescent	$5,570	$6,273	$703	112.6
Transitional	$4,131	$5,209	$1,078	126.1
Adult	$4,711	$5,155	$444	109.4
Elderly	$7,208	$6,183	-$1,025	85.8
TOTAL	**$4,682**	**$5,244**	**$562**	**112.0**
SERVICE TYPE				
Case Management	$1,930	$2,011	$81	104.2
Crisis	$4,661	$3,869	-$793	83.0
Inpatient	$11,971	$13,757	$1,786	114.9
Mobile Treatment	$8,164	$9,125	$960	111.8
Outpatient	$1,921	$2,302	$381	119.8
Partial Hospitalization	$4,478	$6,476	$1,998	144.6
Psychiatric Rehabilitation	$6,309	$4,872	-$1,437	77.2
Residential Rehabilitation	$2,462	$1,552	-$910	63.0
Residential Treatment	$81,784	$58,100	-$23,684	71.0
Respite Care	$3,126	$1,248	-$1,878	39.9
Supported Employment	$2,370	$1,560	-$810	65.8
BMHS Capitation	$19,558	$19,827	$269	101.4
Emergency Petition	$229	$617	$388	269.6
Purchase of Care	$9,162	$8,973	-$189	97.9
PRTF Waiver	$3,684	$4,930	$1,246	133.8
TOTAL	**$4,682**	**$5,244**	**$562**	**112.0**
COVERAGE TYPE				
Medicaid	$4,368	$4,990	$622	114.2
Medicaid State Funded	$3,144	$3,547	$402	112.8
Uninsured	$1,804	$1,526	-$279	84.5
TOTAL	**$4,682**	**$5,244**	**$562**	**112.0**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

VETERANS RECEIVING MENTAL HEALTH SERVICES IN FY 2015-2017 (PERSONS SERVED)

COUNTY	FY 2015	FY 2016	FY 2017
Allegany	130	142	142
Anne Arundel	234	237	237
Baltimore City	1,403	1,395	1,372
Baltimore County	513	515	507
Calvert	64	71	66
Caroline	49	45	53
Carroll	102	95	94
Cecil	104	102	108
Charles	95	84	81
Dorchester	61	54	48
Frederick	151	133	134
Garrett	28	36	28
Harford	163	154	148
Howard	97	103	107
Kent	16	15	17
Montgomery	277	265	280
Prince George's	269	273	281
Queen Anne's	34	27	28
St. Mary's	75	33	37
Somerset	33	27	58
Talbot	41	36	33
Washington	210	236	224
Wicomico	150	146	139
Worcester	83	70	76
Statewide	**4,131**	**4,168**	**4,149**

Note: 1. The total consumer count is unduplicated across counties and therefore, may not equal to the sum of the individual county counts.

2. County is the consumer's county of residence.

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

VETERANS RECEIVING MENTAL HEALTH SERVICES IN FY 2015-2017 (EXPENDITURES)

COUNTY	FY 2015	FY 2016	FY 2017
Allegany	$864,459	$724,021	$747,317
Anne Arundel	$2,167,634	$2,200,736	$2,266,540
Baltimore City	$11,298,190	$10,584,193	$10,776,453
Baltimore County	$4,811,956	$4,490,451	$4,818,220
Calvert	$350,508	$298,551	$297,053
Caroline	$176,811	$353,256	$330,085
Carroll	$887,235	$875,208	$955,286
Cecil	$731,593	$409,412	$854,562
Charles	$461,289	$346,917	$492,979
Dorchester	$408,924	$417,077	$436,345
Frederick	$1,126,054	$1,285,442	$1,440,234
Garrett	$110,908	$210,089	$190,582
Harford	$947,282	$1,220,288	$1,239,781
Howard	$831,762	$975,215	$1,058,222
Kent	$111,681	$75,095	$87,964
Montgomery	$3,682,077	$3,502,100	$3,080,370
Prince George's	$3,376,331	$3,080,283	$3,322,512
Queen Anne's	$177,176	$105,092	$100,111
St. Mary's	$450,580	$433,307	$505,748
Somerset	$160,776	$176,665	$213,622
Talbot	$260,320	$156,681	$150,589
Washington	$1,045,630	$1,184,773	$1,303,981
Wicomico	$1,227,126	$1,136,467	$938,133
Worcester	$266,933	$141,782	$158,261
Statewide	**$35,933,238**	**$34,383,103**	**$35,764,950**

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

FY 17 Medicaid Mental Health Penetration Rate

		Accessing the Public Behavioral Health System			
COUNTY	**Total County Population***	**Average MA Eligible**	**% of County MA Eligible**	**MA Served In MH/PBHS**	**Penetration Rate**
Allegany	72,528	21,671	29.9%	4,579	**21.1%**
Anne Arundel	564,195	90,463	16.0%	14,502	**16.0%**
Baltimore County	831,128	190,778	23.0%	28,610	**15.0%**
Calvert	90,595	14,130	15.6%	2,534	**17.9%**
Caroline	32,579	11,761	36.1%	1,804	**15.3%**
Carroll	167,628	23,158	13.8%	4,233	**18.3%**
Cecil	102,382	26,411	25.8%	4,698	**17.8%**
Charles	156,118	30,775	19.7%	3,536	**11.5%**
Dorchester	32,384	12,825	39.6%	2,382	**18.6%**
Frederick	245,322	39,065	15.9%	6,414	**16.4%**
Garrett	29,460	8,768	29.8%	1,240	**14.1%**
Harford	250,290	43,410	17.3%	7,492	**17.3%**
Howard	313,414	43,873	14.0%	4,991	**11.4%**
Kent	19,787	4,973	25.1%	870	**17.5%**
Montgomery	1,040,116	182,775	17.6%	15,960	**8.7%**
Prince George's	909,535	221,180	24.3%	18,577	**8.4%**
Queen Anne's	48,904	8,564	17.5%	1,375	**16.1%**
St. Mary's	111,413	22,494	20.2%	3,026	**13.5%**
Somerset	25,768	8,778	34.1%	1,568	**17.9%**
Talbot	37,512	8,312	22.2%	1,443	**17.4%**
Washington	149,585	43,083	28.8%	7,896	**18.3%**
Wicomico	102,370	33,725	32.9%	5,378	**15.9%**
Worcester	51,540	13,414	26.0%	2,479	**18.5%**
Baltimore City	621,849	262,827	42.3%	51,405	**19.6%**
Statewide	**6,006,402**	**1,367,211**	**22.8%**	**192,795**	**14.1%**

*Data Source: Maryland Vital Statistics Est. Md. Population July 1, 2015

Data Source: Average MA Eligible supplied by UMBC Hilltop Institute. Data through September 2017.

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

POPULATION IN POVERTY (%), 2015

Jurisdiction	All	Children 0-17	Ranking Total Population in Poverty
United States	14.7	20.7	
Allegany	20	27.1	3
Anne Arundel	6	8.1	22
Baltimore	9.1	11.9	14
Calvert	5.9	8.1	23
Caroline	14.4	22.9	7
Carroll	6.2	7.2	21
Cecil	10	14.8	12
Charles	7.1	10.4	20
Dorchester	18.1	29.8	4
Frederick	7.4	9	18
Garrett	13.6	19.3	8
Harford	7.8	10.3	16
Howard	5.2	6.5	24
Kent	14.8	21.6	5
Montgomery	7.5	10.5	17
Prince George's	9.5	14.2	13
Queen Anne's	7.2	10.5	19
St. Mary's	8.7	12.7	15
Somerset	25.8	35.9	1
Talbot	10.4	15.9	11
Washington	12	17.8	9
Wicomico	14.7	21.7	6
Worcester	11.3	20.7	10
Baltimore City	22.7	33.9	2
Statewide	9.9	13.2	

http://www.ers.usda.gov/data-products/county-level-data-sets/poverty.aspx

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 16

Outcome Measurement System State and County Comparisons Point In Time Observations - FY 2016 *	Child and Adolescent			Adults	
	STATE	COUNTY		STATE	COUNTY
	Percent	Percent		Percent	Percent
Homeless in last 6 months	2.6%	3.0%		12.1%	17.0%
Arrested in last 6 months	3.4%	3.1%		5.5%	4.3%
Problems from your drinking/drug use in the last month					
- Often	N/A	N/A		3.4%	4.4%
- Always	N/A	N/A		4.4%	7.3%
Drink any alcohol during the past month	5.7%	4.0%		N/A	N/A
Smoke any marijuana or hashish during the past month	8.6%	8.8%		N/A	N/A
Use anything else to get high during the past month	1.4%	0.8%		N/A	N/A
Employed now or last 6 months	N/A	N/A		33.1%	21.1%
Adults Served in PBHS Supp. Employment	N/A	N/A		2.9%	1.4%
Cigarette smokers**	4.3%	3.9%		41.0%	40.3%
Use tobacco products in the past month					
- Cigars	0.9%	1.4%		3.6%	4.2%
- Smokeless Tobacco	0.2%	0.0%		1.0%	0.5%
- Electronic Cigarettes	1.6%	0.3%		4.7%	2.2%
- Pipes	0.3%	0.2%		0.6%	0.5%
- Other Tobacco Product	0.4%	0.5%		2.0%	2.4%
Problems with School Attendance	13.4%	11.8%		N/A	N/A
Suspended from school in last 6 months	12.2%	12.4%		N/A	N/A
General Health Status					
Excellent	25.5%	24.3%		6.1%	5.8%
Very Good	36.3%	35.1%		18.0%	16.0%
Good	30.5%	33.2%		36.4%	36.0%
Fair	6.8%	6.6%		30.1%	33.2%
Poor	0.9%	0.8%		9.3%	9.0%

* Most recent observation for each Mental Health consumer in FY 2016;
provisional data which may change slightly as Datamart refinement continues

** For children and adolescents, only those ages 11 to 17

***First administered in January 2015; for Children and Adolescents, data represents only those ages 14 and over

Data Source: http://maryland.valueoptions.com/services/OMS_Welcome.html

Most Recent Interview Only, FY 2016

BALTIMORE CITY PUBLIC MENTAL HEALTH SYSTEM UTILIZATION FY 17

Outcome Measurement System State and County Comparisons Point In Time Observations - FY 2017 *	Child and Adolescent			Adults	
	STATE	COUNTY		STATE	COUNTY
	Percent	Percent		Percent	Percent
Homeless in last 6 months	2.2%	2.6%		12.0%	16.8%
Arrested in last 6 months	3.0%	3.0%		5.5%	4.4%
Problems from your drinking/drug use in the last month					
- Often	N/A	N/A		3.7%	4.7%
- Always	N/A	N/A		4.1%	6.6%
Drink any alcohol during the past month	5.3%	3.3%		N/A	N/A
Smoke any marijuana or hashish during the past month	9.3%	9.0%		N/A	N/A
Use anything else to get high during the past month	1.1%	0.5%		N/A	N/A
Employed now or last 6 months	N/A	N/A		34.9%	22.4%
Adults Served in PBHS Supp. Employment	N/A	N/A		2.8%	1.4%
Cigarette smokers**	3.5%	3.1%		39.9%	40.2%
Use tobacco products in the past month					
- Cigars	1.0%	1.6%		3.5%	4.1%
- Smokeless Tobacco	0.2%	0.0%		0.9%	0.5%
- Electronic Cigarettes	1.1%	0.3%		4.1%	1.9%
- Pipes	0.2%	0.1%		0.6%	0.4%
- Other Tobacco Product	0.4%	0.5%		2.0%	2.6%
Problems with School Attendance	14.4%	12.9%		N/A	N/A
Suspended from school in last 6 months	12.8%	13.1%		N/A	N/A
General Health Status					
Excellent	24.6%	24.8%		6.7%	6.7%
Very Good	36.8%	34.6%		18.7%	16.4%
Good	30.7%	33.8%		35.9%	35.2%
Fair	6.9%	6.2%		29.8%	32.9%
Poor	0.9%	0.7%		8.9%	8.8%

* Most recent observation for each Mental Health consumer in FY 2017;
provisional data which may change slightly as Datamart refinement continues

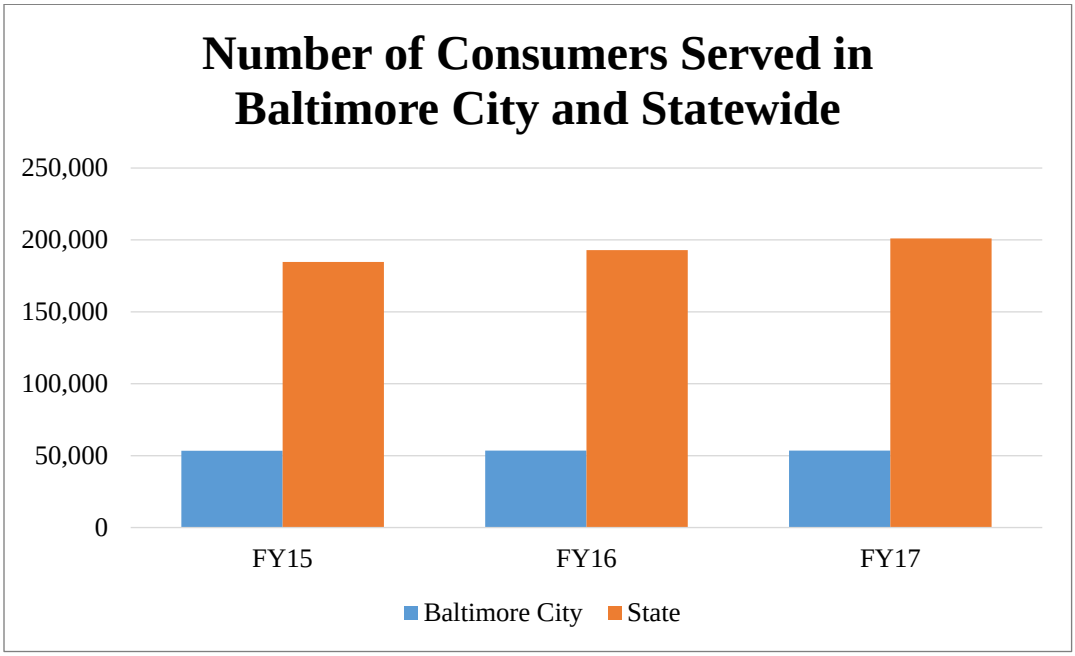
** For children and adolescents, only those ages 11 to 17

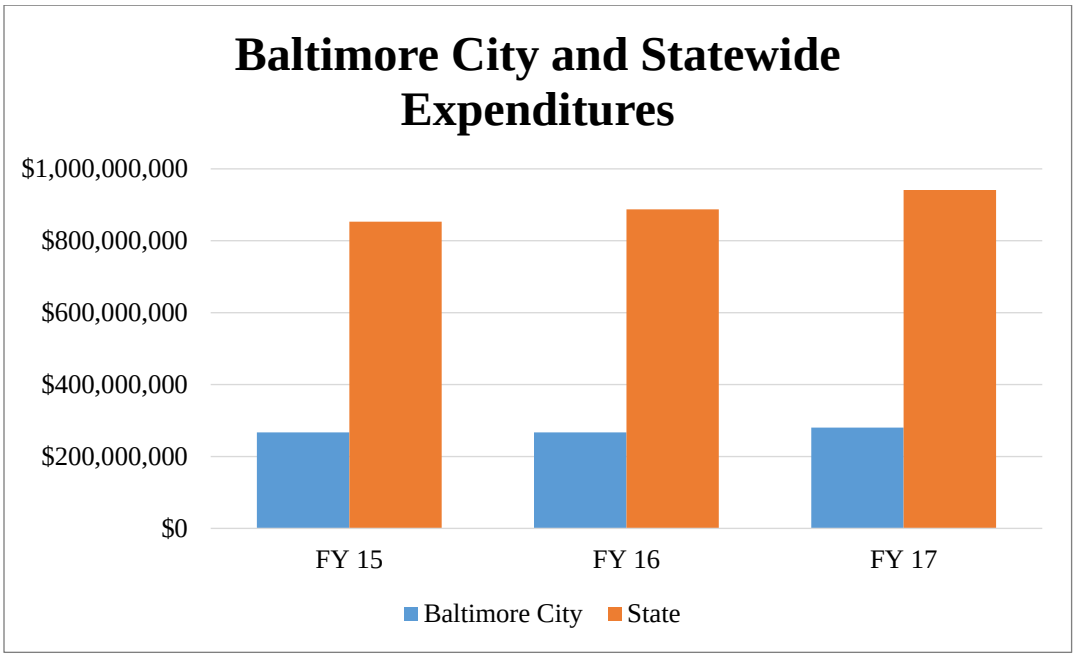
***First administered in January 2015; for Children and Adolescents, data represents only those ages 14 and over

Data Source: http://maryland.valueoptions.com/services/OMS_Welcome.html

Most Recent Interview Only, FY 2017

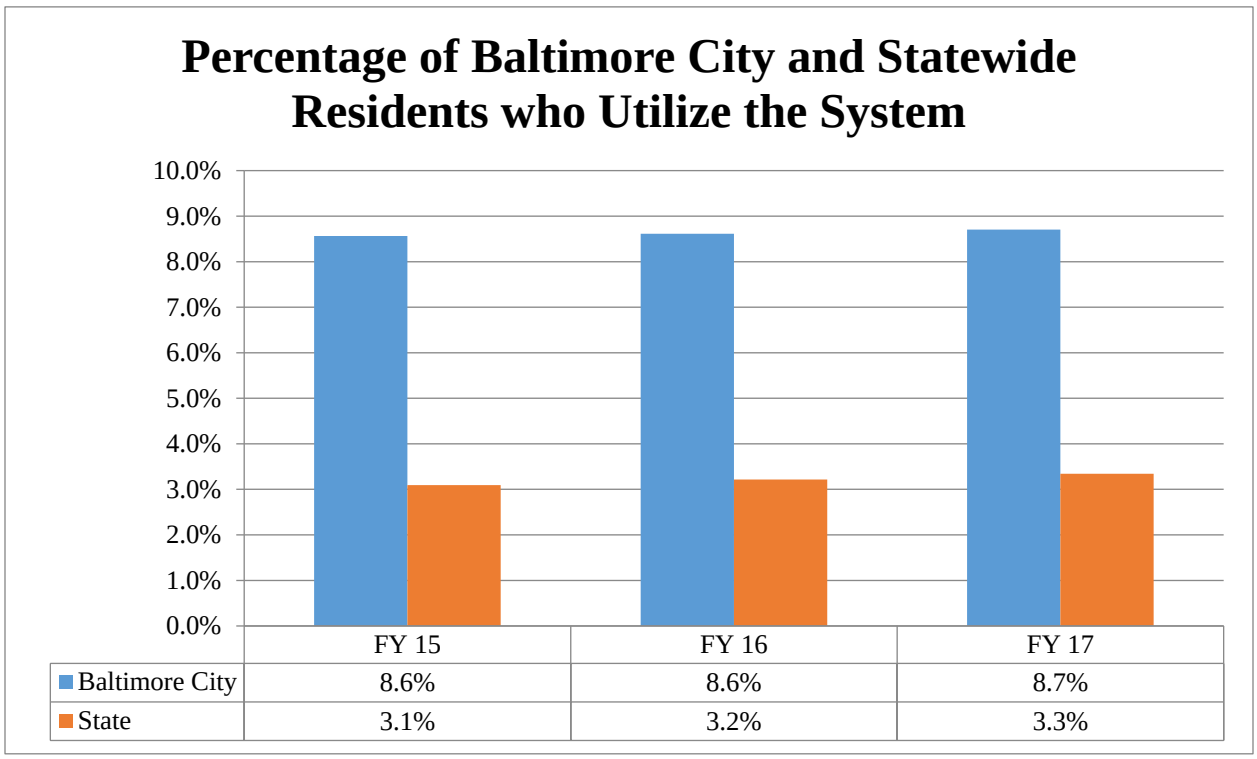
Baltimore City residents comprised 26.6% of all mental health consumers served in the State, and 29.8% of total expenditures for public mental health services.





Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Compared to the State, Baltimore City residents had a higher rate of utilization of mental health services during FY 17, almost 9% of the City population, compared to the State's 3%. This is likely related to the prevalence of high ACE scores and other social, economic and educational structures that increase the likelihood of chronic illnesses, including behavioral health conditions.

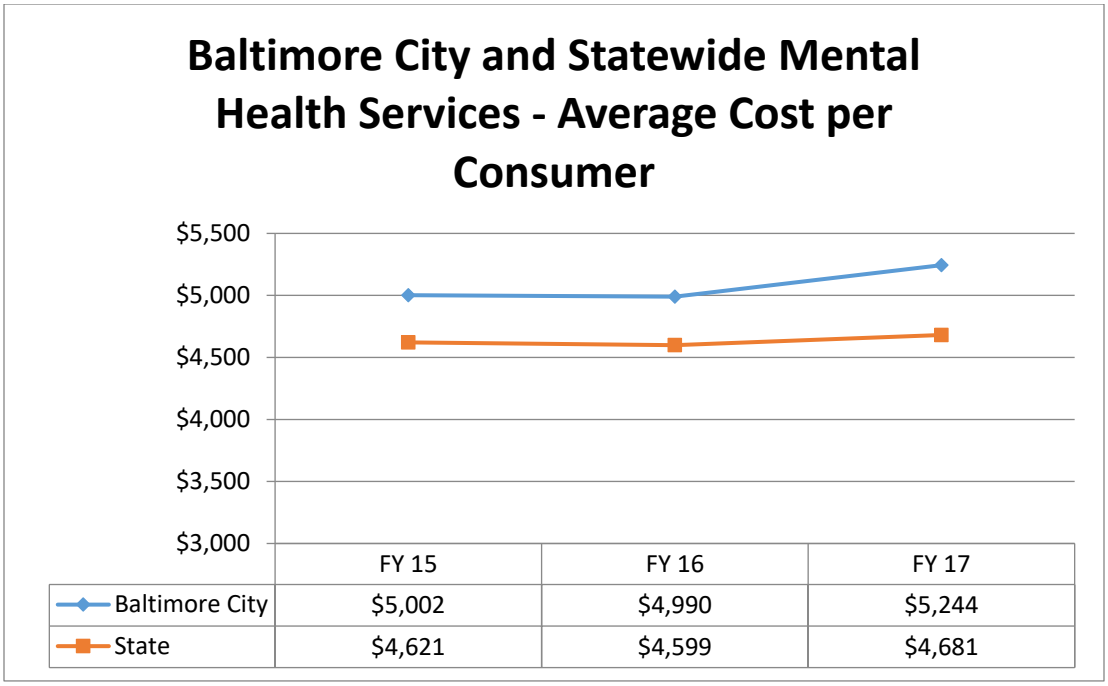


	FY 15	FY 16	FY 17
Baltimore City	8.6%	8.6%	8.7%
State	3.1%	3.2%	3.3%

Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Average Cost Per Consumer

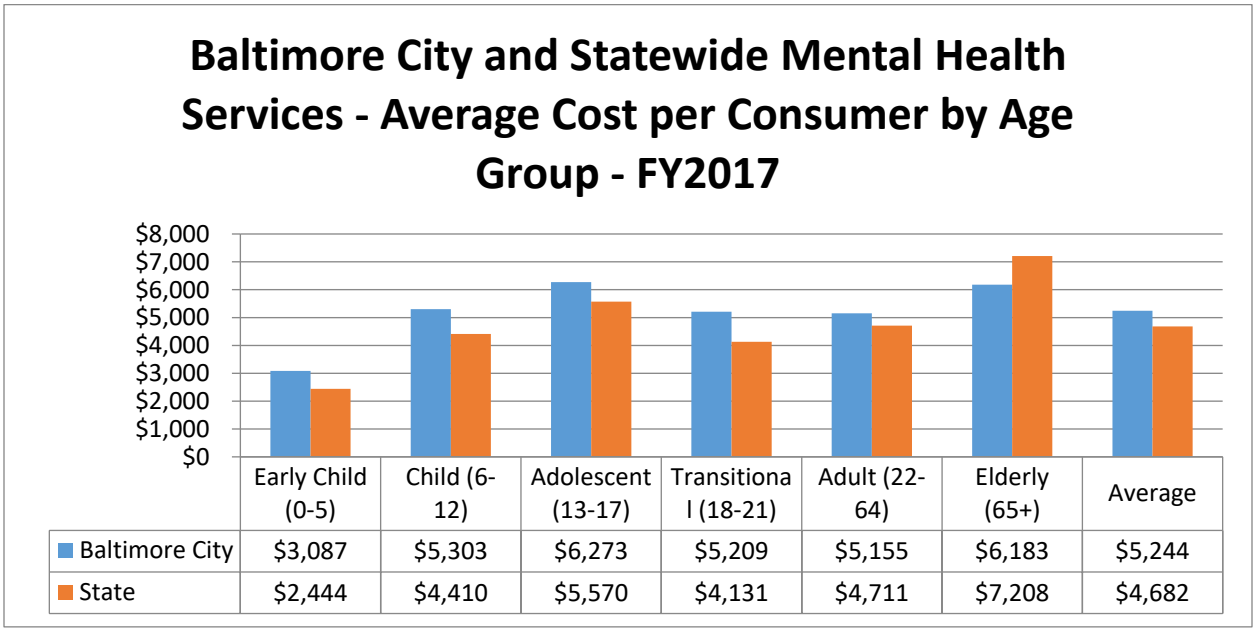
For the last three years, Baltimore City has had a higher overall cost per consumer than the State. Both Baltimore City and the State saw an increase (4.8% and 1.3%) respectively, in the average cost per consumer between FY 15 thru FY 17.



	FY 15	FY 16	FY 17
Baltimore City	$5,002	$4,990	$5,244
State	$4,621	$4,599	$4,681

Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

The chart below indicates that the cost per consumer is higher in Baltimore City for every age group except the elderly.

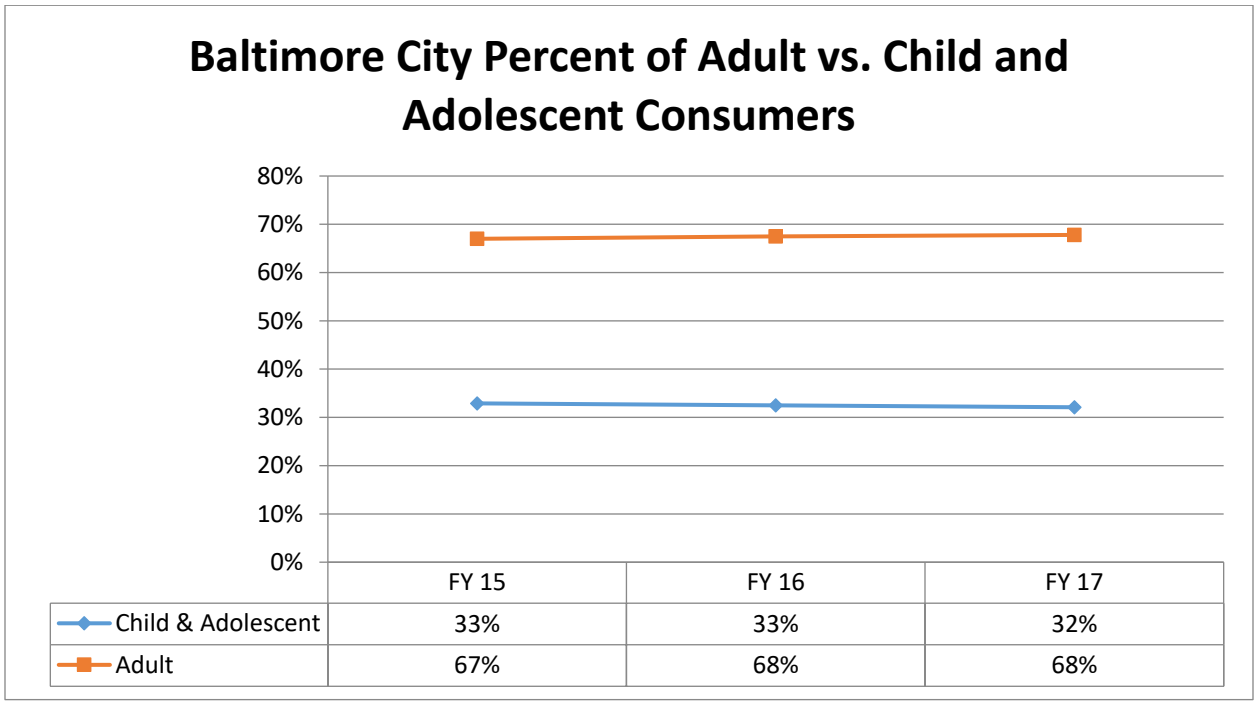


	Early Child (0-5)	Child (6-12)	Adolescent (13-17)	Transitional (18-21)	Adult (22-64)	Elderly (65+)	Average
Baltimore City	$3,087	$5,303	$6,273	$5,209	$5,155	$6,183	$5,244
State	$2,444	$4,410	$5,570	$4,131	$4,711	$7,208	$4,682

Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Adult versus Child

The gap between the proportion of adult and youth consumers receiving public mental health services continues from FY 15 thru FY 17, as roughly two out of three consumers are adults, and one out of three are children/adolescents. Maryland's public behavioral health treatment system is heavily adult-oriented. BHSB's Child and Family team collaborates with BHA and other state and local partners to address this disparity.

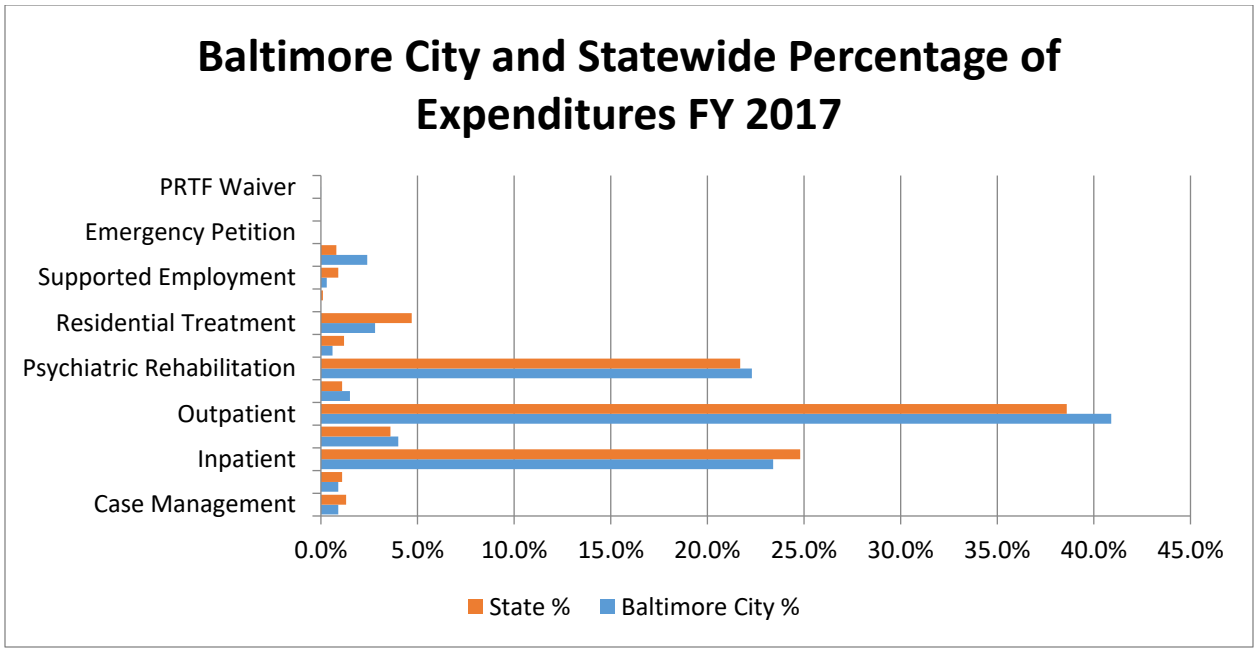


	FY 15	FY 16	FY 17
Child & Adolescent	33%	33%	32%
Adult	67%	68%	68%

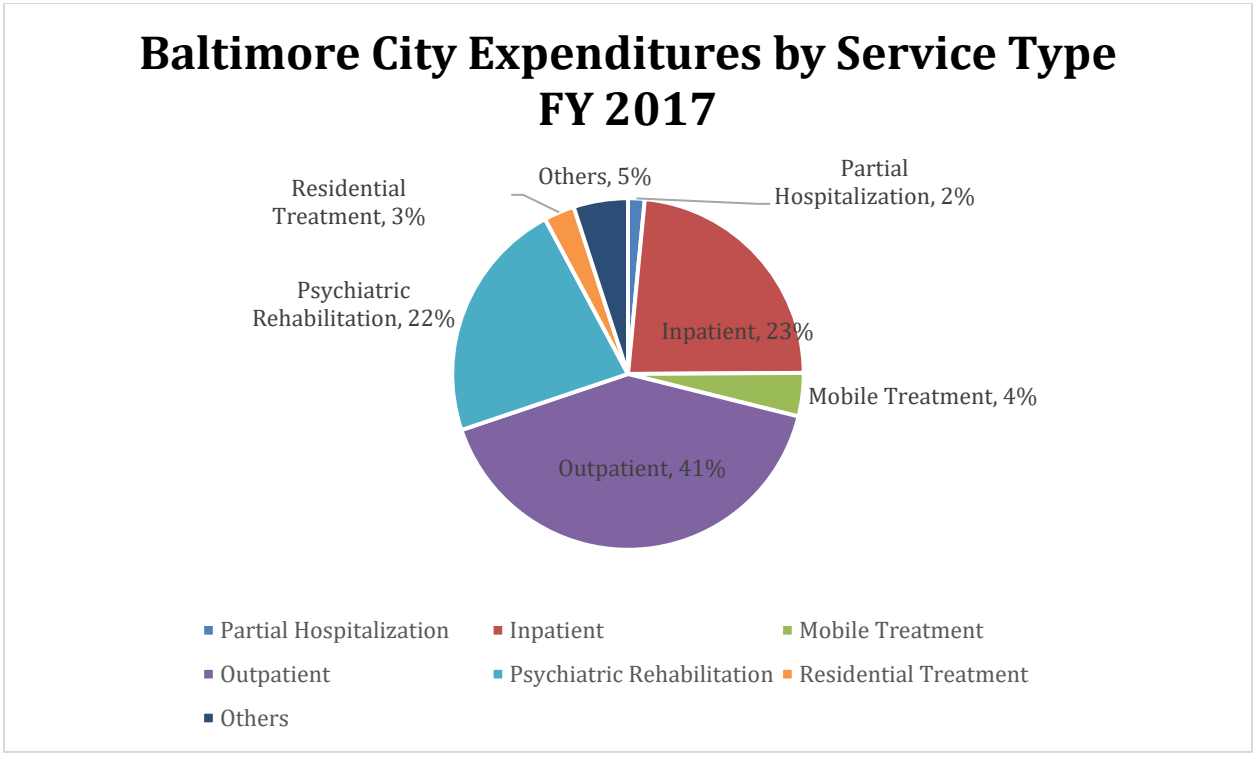
Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Expenditures

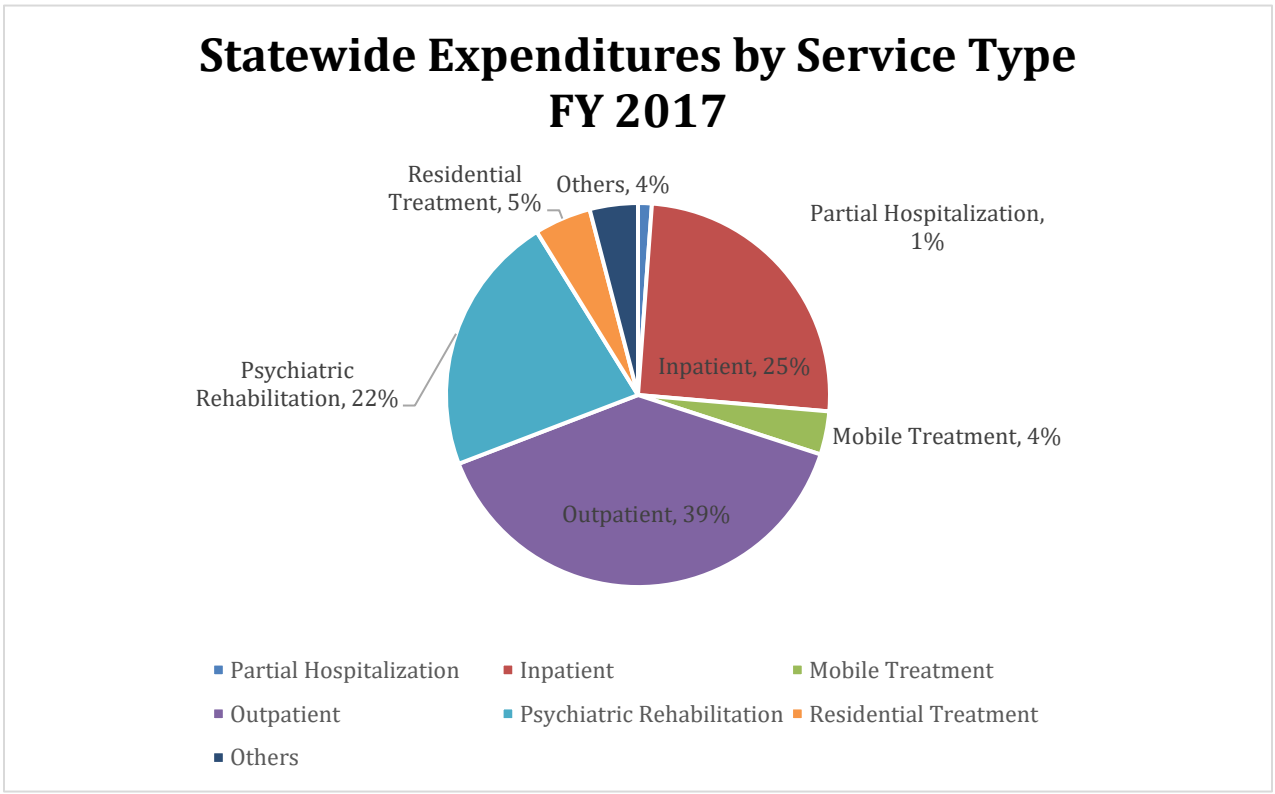
For both Baltimore City and the State, expenditures are highest for outpatient, inpatient and psychiatric rehabilitation services. However, the charts below show that the distribution of expenditures by service type in Baltimore City differs in several respects from that of the State. A higher percentage of expenditures are for outpatient and psychiatric rehabilitation services in Baltimore City, whereas the State has a higher percentage for residential treatment, inpatient and case management services. Of note, despite being a Baltimore City program, the capitation project serves residents of other jurisdictions who are willing to be relocated as Baltimore residents.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017



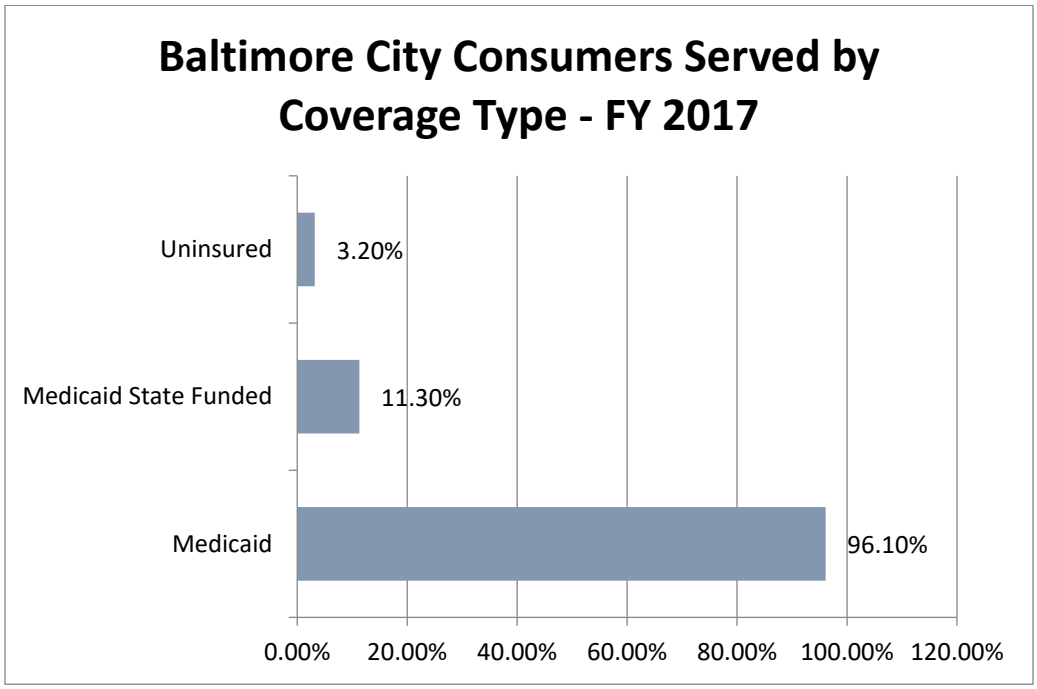
Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017
Others: Case Management, Crisis, Residential Rehabilitation, Respite Care, Supported Employment, BMHS Capitation, Emergency Petition, Purchase of Care, PRTF Waiver



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017
Others: Case Management, Crisis, Residential Rehabilitation, Respite Care, Supported Employment, BMHS Capitation, Emergency Petition, Purchase of Care, PRTF Waiver

Insurance Coverage

Most (96%) of the individuals who received public mental health services were covered by Medicaid (including Medicaid State-funded).[34]



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

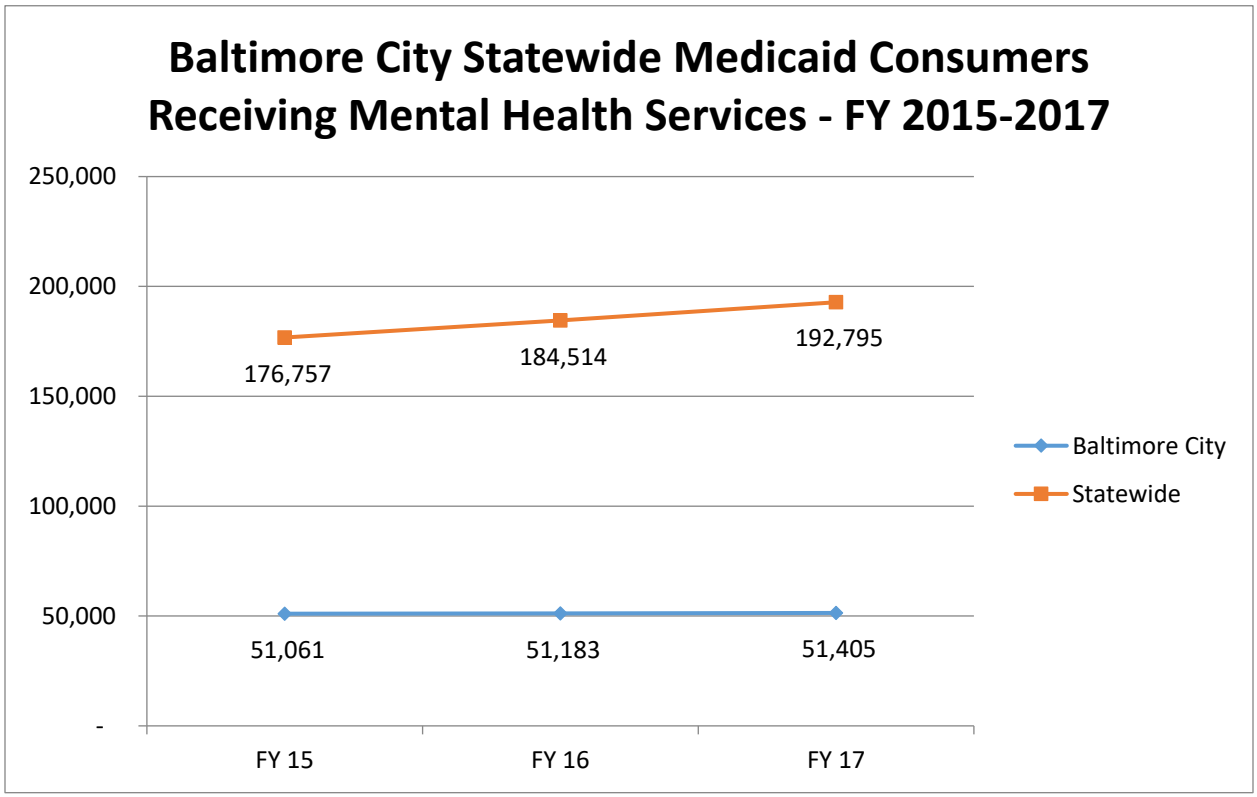
Medicaid has the highest cost in mental health services per consumer of the three coverage types. This is likely due to restrictions in the set of services that were eligible for uninsured coverage. There were less costly than full range of services covered thru Medicaid.

Baltimore City Cost per Consumer by Coverage Type			
	Medicaid	Medicaid State-Funded	Uninsured
FY 15	$4,739	$3,888	$1,126
FY 16	$4,732	$3,820	$1,137
FY 17	$4,990	$3,547	$1,525

[34] Many people use services in more than one category. As a result, the sum of the percentage of people served across service categories and across insurance statuses will exceed 100%.

FY 15 – 17 % Change	5%	-8%	35%

Over the last three years, the number of Medicaid consumers receiving mental health services has been relatively stable in the City, while there has been a 9% increase in the State.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Veterans

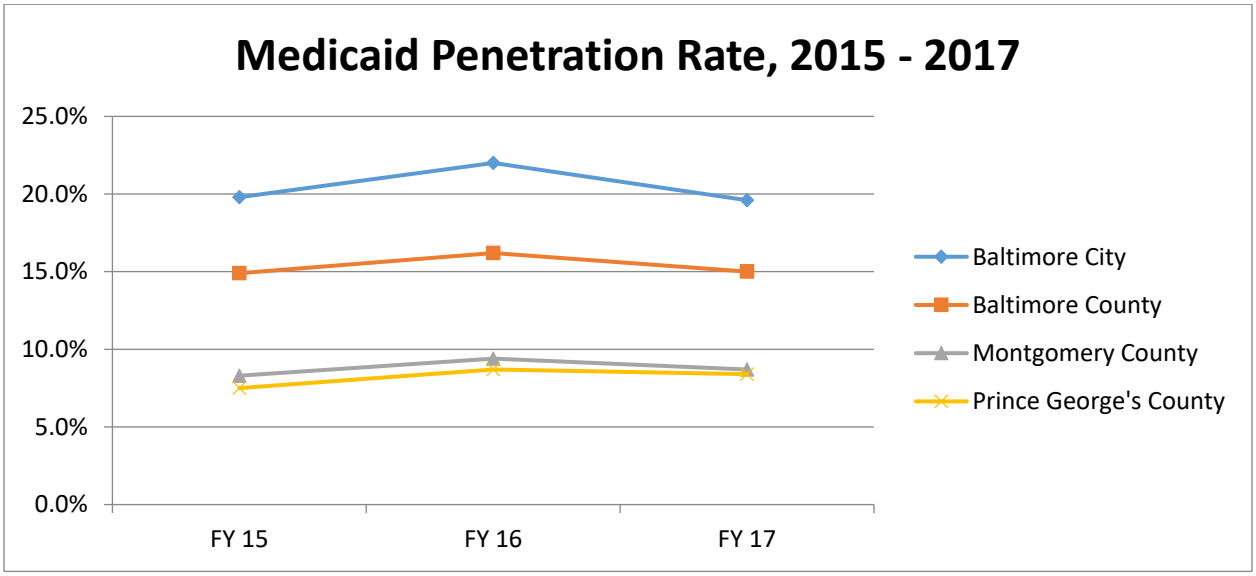
Baltimore City veterans comprised about 33% of all Maryland veterans receiving mental health services, and about 30% of total expenditures for veterans in Maryland.

Average Veteran's Cost Per Consumer

The average cost per veteran consumer was above $8,500 per year. This cost is 1.7 higher than for non-veterans, with a minimal cost variation over time ($400). This highlights the high-priority needs of this population for mental health services.

Medicaid Penetration

The City's Medicaid penetration rate, or the percentage of Medicaid enrollees accessing mental health services, increased from FY 15 to FY 16 and decreased from FY 16 to FY 17. Baltimore City continues to have the highest Medicaid penetration rate of the State's four largest jurisdictions, although the trend is similar in recent years across the jurisdictions. With Medicaid expansion in 2014, the eligibility criteria are broader. In prior years, individuals were determined to be eligible based on disability, whereas the criteria now include income as well, with the result that more people are enrolled in Medicaid who do not have a behavioral health disorder but may need some type of treatment.



Data Source: Average MA Eligible supplied by UMBC Hilltop Institute. Data through September 2017.

SUBSTANCE RELATED DISORDER UTILIZATION

As noted above, both FY 16 and FY 17 represented full years of SRD service utilization data. Claims may be submitted up to 12 months after the date of service delivery, so the data for FY 17 does not reflect all the claims for services rendered to Baltimore City individuals. It is also important to note that FY 15 included only six months of data, from January 1, 2015 thru June 30, 2015, which important to note when comparing FY 16 and FY 17 data to FY 15 data.

This is the second year that OMS data for SRD disorders is included in this document. The OMS data is gathered through interviews with individuals who are receiving outpatient SRD treatment services and includes the most recent observation for each consumer in FY 17.

The SRD service utilization tables present summary data from the past three fiscal years for Baltimore City and the past fiscal year for Maryland. The OMS data tables compare outcomes for Baltimore City and the State for FY 17 only.

Overall, there are several striking observations from the FY 17 data on SRD service utilization in Baltimore City:

- The public SRD system served 32,513 individuals during FY 17.
- Expenditures totaled $130,080,209 during FY 17.
- The most common levels of care were the ambulatory services that were reimbursed by the ASO: outpatient, methadone maintenance, and intensive outpatient.
- Labs represented 24.5% of the total expenditures for FY 17.
- Uninsured individuals represented only 9.8% of those served in FY 17.
- The average expenditure per consumer in Baltimore City was $4,001 in FY 17.
- The most expensive service type, SUD invitation for bids, which is substance use disorder services for special populations, ($13,895), was substantially less than the State average ($16,486), followed by residential ICFA ($6,006) and inpatient ($3,407).
- The three ambulatory services (intensive outpatient, methadone and outpatient) were above the State's average cost per consumer.
- Medicaid costs in Baltimore City were above the State average.

Consumers Served

While Baltimore City represents almost 11% of the State's population, it represented 31.5% of those who utilized public SRD services in FY 17, with a total of 32,513 consumers served. This is likely related to the prevalence of high ACE scores and other social, economic and educational structures that increase the likelihood of chronic illnesses, including behavioral health conditions. [35]

Expenditures

Total expenditures of $130,080,209 for Baltimore City account for 41.3% of the State's total expenditures on public SRD services in FY 17. The average cost per person for the city was $4,001, which is significantly higher than the statewide cost per person, $3,051. Research shows that a high proportion of individuals receiving substance use disorder treatment services have a history of high ACE scores and trauma exposure.[36] The prevalence of high ACE scores in Baltimore City is likely a contributing factor to the high proportion of statewide expenditures that are attributed to Baltimore City and the higher cost per person served.

[35] Maryland Behavioral Risk Factor Surveillance System (2017). "Adverse Childhood Experiences (ACEs) in Maryland: Data from the 2015 Maryland BRFSS Data Tables Only." https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

[36] Funk, R. R., McDermeit, M., Godley, S. H., and Adams, L. (2003). Maltreatment issues by level of adolescent substance abuse treatment: The extent of the problem at intake and relationship to early outcomes. Child Maltreat, 8(1), 36-45.

Insurance Coverage

The main source of health insurance coverage for public SRD services was Medicaid, including Medicaid State-funded.[37] In FY 17 the number of uninsured individuals represented less than 10%.

The below tables present overall data for Baltimore City and the State of Maryland. It should be noted that statewide data include data from Baltimore City, which, as previously stated, comprises almost 32% of all consumers served in Maryland and 41% of State expenditures.

[37] Medicaid State-funded expenditures are state-only funds (versus those with a federal match) for State programs for individuals who are eligible based on certain income and assets criteria.

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	Persons Served by Age Group*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Early Child (0-5)	7	9	28.6%	6	-33.3%
Child (6-12)	37	38	2.7%	79	107.9%
Adolescent (13-17)	530	711	34.2%	768	8.0%
Transitional (18-21)	552	969	75.5%	1,033	6.6%
Adult (22 to 64)	19,612	27,411	39.8%	30,036	9.6%
Elderly (65 and over)	190	305	60.5%	591	93.8%
TOTAL	**20,928**	**29,443**	**40.7%**	**32,513**	**10.4%**

**Based on claims paid through September 30, 2017*

	Persons Served by Service Type*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
SUD Inpatient	696	1,267	82.0%	1,472	16.2%
SUD Outpatient	9,332	14,485	55.2%	21,061	45.4%
SUD Partial Hospitalization	586	1,111	89.6%	1,530	37.7%
SUD Labs	10,623	19,532	83.9%	22,280	14.1%
SUD MD Recovery Net	668	2,101	214.5%	1,613	-23.2%
SUD Methadone Maint.	10,154	11,788	16.1%	13,670	16.0%
SUD Residential ICFA	65	118	81.5%	130	10.2%
SUD Intensive Outpatient	2,544	4,194	64.9%	5,099	21.6%
SUD Invitation for Bid	0	185	#DIV/0!	195	5.4%
SUD Residential All Levels	0	0	#DIV/0!	0	#DIV/0!
SUD Residential Room/Board	0	0	#DIV/0!	0	#DIV/0!
****TOTAL**	**20,928**	**29,443**	**40.7%**	**32,513**	**10.4%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

	Persons Served by Coverage Type*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Medicaid	20,501	28,634	39.7%	30,557	6.7%
Medicaid State Funded	105	121	15.2%	790	552.9%
Uninsured	749	2,386	218.6%	3,180	33.3%
****TOTAL**	**20,928**	**29,443**	**40.7%**	**32,513**	**10.4%**
DUALLY Dx^			**#DIV/0!**		**#DIV/0!**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	Expenditures by Age Group*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Early Child (0-5)	$1,430	$2,543	77.8%	$1,055	-58.5%
Child (6-12)	$16,015	$27,819	73.7%	$32,311	16.1%
Adolescent (13-17)	$678,902	$1,072,363	58.0%	$1,182,173	10.2%
Transitional (18-21)	$734,690	$1,686,066	129.5%	$1,708,965	1.4%
Adult (22 to 64)	$40,021,876	$98,406,476	145.9%	$125,203,303	27.2%
Elderly (65 and over)	$408,797	$981,740	140.2%	$1,952,402	98.9%
TOTAL	**$41,861,710**	**$102,177,007**	**144.1%**	**$130,080,209**	**27.3%**

**Based on claims paid through September 30, 2017*

	Expenditures by Service Type*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
SUD Inpatient	$2,161,959	$5,038,762	133.1%	$5,328,084	5.7%
SUD Outpatient	$9,246,637	$19,605,477	112.0%	$23,277,771	18.7%
SUD Partial Hospitalization	$1,056,370	$2,374,264	124.8%	$3,496,769	47.3%
SUD Labs	$3,589,064	$18,112,543	404.7%	$31,895,930	76.1%
SUD MD Recovery Net	$498,426	$1,873,901	276.0%	$1,154,871	-38.4%
SUD Methadone Maint.	$17,809,520	$36,305,770	103.9%	$42,170,903	16.2%
SUD Residential ICFA	$353,797	$676,935	91.3%	$780,723	15.3%
SUD Intensive Outpatient	$7,145,939	$15,481,565	116.6%	$19,265,658	24.4%
SUD Invitation for Bid	$0	$2,707,789	#DIV/0!	$2,709,501	0.1%
SUD Residential All Levels	$0	$0	#DIV/0!	$0	#DIV/0!
SUD Residential Room/Board	$0	$0	#DIV/0!	$0	#DIV/0!
****TOTAL**	**$41,861,712**	**$102,177,006**	**144.1%**	**$130,080,210**	**27.3%**

**Based on claims paid through September 30, 2017*

	Expenditures by Coverage Group*				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
Medicaid	$41,042,452	$97,360,045	137.2%	$121,793,578	25.1%
Medicaid State Funded	$194,526	$199,978	2.8%	$2,126,965	963.6%
Uninsured	$624,732	$4,616,984	639.0%	$6,159,667	33.4%
****TOTAL**	**$41,861,710**	**$102,177,007**	**144.1%**	**$130,080,210**	**27.3%**
DUALLY Dx^			**#DIV/0!**		

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	Persons Served: Child / Adolescent (Age 0 – 17 Years) *				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
SUD Inpatient	6	11	83.33%	11	0.00%
SUD Outpatient	315	357	13.33%	436	22.13%
SUD Partial Hospitalization	12	14	16.67%	7	-50.00%
SUD Labs	424	588	38.68%	649	10.37%
SUD MD Recovery Net	0	1	#DIV/0!	0	-100.00%
SUD Methadone Maint.	3	2	-33.33%	1	-50.00%
SUD Residential ICFA	47	83	76.60%	92	10.84%
SUD Intensive Outpatient	102	136	33.33%	134	-1.47%
SUD Invitation for Bid	0	0	#DIV/0!	0	#DIV/0!
SUD Residential All Levels	0	0	#DIV/0!	0	#DIV/0!
SUD Residential Room/Board	0	0	#DIV/0!	0	#DIV/0!
****TOTAL**	**574**	**758**	**32.06%**	**853**	**12.53%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

	Expenditures: Child / Adolescent (Age 0 – 17 Years) *				
	FY 2015	**FY 2016**	**% Change**	**FY 2017**	**% Change**
SUD Inpatient	$1,078	$11,327	950.74%	$32,163	183.95%
SUD Outpatient	$146,324	$177,682	21.43%	$205,326	15.56%
SUD Partial Hospitalization	$21,152	$40,894	93.33%	$22,610	-44.71%
SUD Labs	$91,132	$170,809	87.43%	$237,963	39.32%
SUD MD Recovery Net	$0	$105	#DIV/0!	$0	-100.00%
SUD Methadone Maint.	$3,280	$1,600	-51.22%	$886	-44.63%
SUD Residential ICFA	$277,497	$445,373	60.50%	$531,854	19.42%
SUD Intensive Outpatient	$155,885	$254,935	63.54%	$184,738	-27.54%
SUD Invitation for Bid	$0	$0	#DIV/0!	$0	#DIV/0!
SUD Residential All Levels	$0	$0	#DIV/0!	$0	#DIV/0!
SUD Residential Room/Board	$0	$0	#DIV/0!	$0	#DIV/0!
****TOTAL**	**$696,348**	**$1,102,725**	**58.36%**	**$1,215,540**	**10.23%**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	Persons Served: Adults (Age 18+ Years) *				
	FY 2015	FY 2016	% Change	FY 2017	% Change
SUD Inpatient	690	1,256	82.03%	1,461	16.32%
SUD Outpatient	9,017	14,128	56.68%	20,625	45.99%
SUD Partial Hospitalization	574	1,097	91.11%	1,523	38.83%
SUD Labs	10,199	18,944	85.74%	21,631	14.18%
SUD MD Recovery Net	668	2,100	214.37%	1,613	-23.19%
SUD Methadone Maint.	10,151	11,786	16.11%	13,669	15.98%
SUD Residential ICFA	18	35	94.44%	38	8.57%
SUD Intensive Outpatient	2,442	4,058	66.18%	4,965	22.35%
SUD Invitation for Bid	0	185	#DIV/0!	195	5.41%
SUD Residential All Levels	0	0	#DIV/0!	0	#DIV/0!
SUD Residential Room/Board	0	0	#DIV/0!	0	#DIV/0!
****TOTAL**	**20,354**	**28,685**	**40.93%**	**31,660**	**10.37%**

**Based on claims paid through September 30, 2017*
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

	Expenditures: Adults (Age 18+ Years) *				
	FY 2015	FY 2016	% Change	FY 2017	% Change
SUD Inpatient	$2,160,882	$5,027,435	132.66%	$5,295,921	5.34%
SUD Outpatient	$9,100,313	$19,427,794	113.48%	$23,072,445	18.76%
SUD Partial Hospitalization	$1,035,218	$2,333,370	125.40%	$3,474,158	48.89%
SUD Labs	$3,497,932	$17,941,734	412.92%	$31,657,968	76.45%
SUD MD Recovery Net	$498,426	$1,873,796	275.94%	$1,154,871	-38.37%
SUD Methadone Maint.	$17,806,240	$36,304,170	103.88%	$42,170,017	16.16%
SUD Residential ICFA	$76,300	$231,562	203.49%	$248,869	7.47%
SUD Intensive Outpatient	$6,990,055	$15,226,631	117.83%	$19,080,920	25.31%
SUD Invitation for Bid	$0	$2,707,789	#DIV/0!	$2,709,501	0.06%
SUD Residential All Levels	$0	$0	#DIV/0!	$0	#DIV/0!
SUD Residential Room/Board	$0	$0	#DIV/0!	$0	#DIV/0!
****TOTAL**	**$41,165,366**	**$101,074,281**	**145.53%**	**$128,864,670**	**27.50%**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	State and County Comparisons Persons Served *			
	STATE		COUNTY	
AGE	**Number**	**Per Cent**	**Number**	**Per Cent**
Early Child	34	0.0%	6	0.0%
Child	262	0.3%	79	0.2%
Adolescent	3,216	3.1%	768	2.4%
Transitional	4,338	4.2%	1033	3.2%
Adult	94,413	91.5%	30036	92.4%
Elderly	866	0.8%	591	1.8%
TOTAL	**103,129**	100.0%	**32,513**	100.0%
SERVICE TYPE				
SUD Inpatient	3,381	3.3%	1,472	4.5%
SUD Outpatient	63,285	61.4%	21,061	64.8%
SUD Partial Hospitalization	5,277	5.1%	1,530	4.7%
SUD Labs	72,222	70.0%	22,280	68.5%
SUD MD Recovery Net	4,020	3.9%	1,613	5.0%
SUD Methadone Maint.	32,135	31.2%	13,670	42.0%
SUD Residential ICFA	430	0.4%	130	0.4%
SUD Intensive Outpatient	12,932	12.5%	5,099	15.7%
SUD Invitation for Bid	851	0.8%	195	0.6%
SUD Residential All Levels	0	0.0%	0	0.0%
SUD Residential Room/Board	0	0.0%	0	0.0%
****TOTAL**	**103,129**	100.0%	**32,513**	100.0%
COVERAGE TYPE				
Medicaid	98,997	96.0%	30,557	94.0%
Medicaid State Funded	1,497	1.5%	790	2.4%
Uninsured	7,736	7.5%	3,180	9.8%
TOTAL	**103,129**	100.0%	**32,513**	100.0%
DUALLY DIAGNOSED INDIVIDUALS				
All with DD ^		0.0%		0.0%

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	State and County Comparisons Expenditures *			
	STATE*		COUNTY	
AGE	**Number**	**Per Cent**	**Number**	**Per Cent**
Early Child	$14,210	0.00%	$1,055	0.00%
Child	$131,767	0.04%	$32,311	0.02%
Adolescent	$4,846,521	1.54%	$1,182,173	0.91%
Transitional	$8,679,011	2.76%	$1,708,965	1.31%
Adult	$298,386,594	94.84%	$125,203,303	96.25%
Elderly	$2,558,359	0.81%	$1,952,402	1.50%
TOTAL	**$314,616,462**	100.00%	**$130,080,209**	100.00%
SERVICE TYPE				
SUD Inpatient	$11,518,512	3.66%	$5,328,084	4.1%
SUD Outpatient	$55,659,756	17.69%	$23,277,771	17.9%
SUD Partial Hospitalization	$14,282,643	4.54%	$3,496,769	2.7%
SUD Labs	$72,461,772	23.03%	$31,895,930	24.5%
SUD MD Recovery Net	$3,024,859	0.96%	$1,154,871	0.9%
SUD Methadone Maint.	$97,908,903	31.12%	$42,170,903	32.4%
SUD Residential ICFA	$2,637,737	0.84%	$780,723	0.6%
SUD Intensive Outpatient	$43,092,853	13.70%	$19,265,658	14.8%
SUD Invitation for Bid	$14,029,426	4.46%	$2,709,501	2.1%
SUD Residential All Levels	$0	0.00%	$0	0.0%
SUD Residential Room/Board	$0	0.00%	$0	0.0%
****TOTAL**	**$314,616,461**	100.00%	**$130,080,210**	100.0%
COVERAGE TYPE				
Medicaid	$290,624,717	92.4%	$121,793,578	93.6%
Medicaid State Funded	$3,308,955	1.1%	$2,126,965	1.6%
Uninsured	$20,682,790	6.6%	$6,159,667	4.7%
TOTAL	**$314,616,462**	100.00%	**$130,080,210**	100.0%
DUALLY DIAGNOSED INDIVIDUALS				
All with DD ^		0.0%		0.0%

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

	State and County Comparisons Cost per Person Served *			
	State	**County**	**Difference**	**Index^**
AGE				
Early Child	$418	$176	-$242	42.1
Child	$503	$409	-$94	81.3
Adolescent	$1,507	$1,539	$32	102.1
Transitional	$2,001	$1,654	-$346	82.7
Adult	$3,160	$4,168	$1,008	131.9
Elderly	$2,954	$3,304	$349	111.8
TOTAL	**$3,051**	**$4,001**	**$950**	**131.1**
SERVICE TYPE				
SUD Inpatient	$3,407	$3,620	$213	106.2
SUD Outpatient	$880	$1,105	$226	125.7
SUD Partial Hospitalization	$2,707	$2,285	-$421	84.4
SUD Labs	$1,003	$1,432	$428	142.7
SUD MD Recovery Net	$752	$716	-$36	95.2
SUD Methadone Maint.	$3,047	$3,085	$38	101.3
SUD Residential ICFA	$6,134	$6,006	-$129	97.9
SUD Intensive Outpatient	$3,332	$3,778	$446	113.4
SUD Invitation for Bid	$16,486	$13,895	-$2,591	84.3
SUD Residential All Levels	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
SUD Residential Room/Board	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
****TOTAL**	**$3,050.71**	**$4,001**	**$950**	**131.1**
COVERAGE TYPE				
Medicaid	$2,936	$3,986	$1,050	135.8
Medicaid State Funded	$2,210	$2,692	$482	121.8
Uninsured	$2,674	$1,937	-$737	72.4
TOTAL	**$3,051**	**$4,001**	**$950**	**131.1**

**Based on claims paid through September 30, 2017*

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

PRIMARY SUBSTANCE AT ADMISSION (ALL AGES) STATEWIDE VS COUNTY FY15-17

	FY 2015		FY 2016		FY 2017	
	State	**County**	**State**	**County**	**State**	**County**
Alcohol	4,712	1,429	8,162	2,108	9,053	2,203
Amphetamines	48	9	110	27	169	32
Barbiturates	4	1	6	3	2	1
Benzodiazepines	188	52	412	120	445	148
Cocaine	1,193	546	1,974	771	2,615	1,008
Diphenylhydantoin (Dilantin)	0	0	0	0	1	0
GHB/GBL	1	1	0	0	0	0
Hallucinogens	12	3	59	7	72	12
Inhalants	5	0	8	2	11	1
Ketamine	4	2	17	6	24	7
Marijuana/Hashish	2,971	1,071	4,863	1,448	4,886	1,412
Meprobamate	4	2	8	2	5	2
Opiates	27,931	12,312	26,979	10,594	40,647	15,739
Over the Counter	26	5	36	7	46	14
PCP	142	4	270	11	294	13
Sedatives	8	2	25	11	30	7
Stimulants	39	12	83	27	67	14
Tranquilizers	0	0	2	0	2	0
Synthetic Cannabinoids	50	10	134	30	110	29
Other Substance	529	148	4,662	277	4,236	302
^None	5,142	459	991	390	985	394
TOTAL	**43,009**	**16,068**	**48,801**	**15,841**	**63,700**	**21,338**
Heroin (Opiates subset)	**22,408**	**11,135**	**21,145**	**9,403**	**31,567**	**13,887**

**Based on claims paid through September 30, 2017.*

Data Source: ASO Report 151172.1.01

^None=Not Available at the time of initial authorization of Admission. This data is updated.

Data for FY15 is for the second half the Fiscal Year-1/1/15-6/30/15.

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

HEROIN AS PRIMARY SUBSTANCE AT ADMISSION (ALL AGES) BY COUNTY FY15-17

	Number Admissions			% of Statewide Admissions		
COUNTY	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2015**	**FY 2016**	**FY 2017**
Allegany	350	431	607	1.56%	2.04%	1.92%
Anne Arundel	1,739	1,561	2,513	7.76%	7.38%	7.96%
Baltimore County	3,530	3,102	5,214	15.75%	14.67%	16.52%
Calvert	101	162	217	0.45%	0.77%	0.69%
Caroline	55	102	144	0.25%	0.48%	0.46%
Carroll	560	739	855	2.50%	3.49%	2.71%
Cecil	1,259	1,039	1,358	5.62%	4.91%	4.30%
Charles	110	152	308	0.49%	0.72%	0.98%
Dorchester	88	146	166	0.39%	0.69%	0.53%
Frederick	519	609	835	2.32%	2.88%	2.65%
Garrett	78	62	91	0.35%	0.29%	0.29%
Harford	713	718	1,125	3.18%	3.40%	3.56%
Howard	263	341	497	1.17%	1.61%	1.57%
Kent	63	63	115	0.28%	0.30%	0.36%
Montgomery	280	383	556	1.25%	1.81%	1.76%
Prince George's	216	217	427	0.96%	1.03%	1.35%
Queen Anne's	86	97	162	0.38%	0.46%	0.51%
St. Mary's	123	189	265	0.55%	0.89%	0.84%
Somerset	70	115	126	0.31%	0.54%	0.40%
Talbot	29	90	99	0.13%	0.43%	0.31%
Washington	564	707	1,163	2.52%	3.34%	3.68%
Wicomico	267	413	510	1.19%	1.95%	1.62%
Worcester	108	183	208	0.48%	0.87%	0.66%
Baltimore City	11,135	9,403	13,886	49.69%	44.47%	43.99%
Out of State	102	121	116	0.46%	0.57%	0.37%
Statewide	**22,408**	**21,145**	**31,567**	**100.0%**	**100.0%**	**100.0%**

**Based on claims paid through September 30, 2017.*

Data Source: ASO Report 151172.1.01

Data for FY15 is for the second half the Fiscal Year-1/1/15-6/30/15.

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

VETERANS RECEIVING SUBSTANCE RELATED DISORDER TREATMENT SERVICES IN FY 2015-2017 (PERSONS SERVED)

COUNTY	FY 2015*	FY 2016	FY 2017
Allegany	63	106	129
Anne Arundel	122	184	186
Baltimore City	858	1,260	4,135
Baltimore County	171	350	408
Calvert	24	38	49
Caroline	10	21	25
Carroll	55	82	86
Cecil	62	87	99
Charles	25	50	51
Dorchester	17	29	32
Frederick	52	82	90
Garrett	13	18	24
Harford	82	109	127
Howard	28	56	59
Kent	7	11	15
Montgomery	75	104	117
Prince George's	42	87	91
Queen Anne's	12	16	19
St. Mary's	13	27	34
Somerset	12	21	15
Talbot	8	11	21
Washington	81	137	154
Wicomico	53	91	112
Worcester	23	33	53
Statewide Total	**1,896**	**2,869**	**3,309**

**Based on claims paid through September 30, 2017.*

Data Source: ASO Report #152820.1.01

Veteran status is based on individual response to question, "Are you a Veteran?"

** Note: FY2015 data is for 6 months as the SRD services were not captured in the PBHS until January 1, 2015.*

Fiscal Year is based on date of service. County refers to an individual's county of residence.

Statewide Total is unduplicated and may not equal the sum of individual lines.

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

VETERANS RECEIVING SUBSTANCE RELATED DISORDER TREATMENT SERVICES IN FY 2015-2017 (EXPENDITURES)

COUNTY	FY 2015*	FY 2016	FY 2017
Allegany	$106,678	$271,710	$289,761
Anne Arundel	$224,299	$661,910	$691,238
Baltimore City	$2,051,067	$5,004,402	$6,828,849
Baltimore County	$416,716	$1,027,890	$1,472,277
Calvert	$18,280	$69,514	$94,916
Caroline	$7,524	$62,517	$60,269
Carroll	$86,158	$284,334	$327,394
Cecil	$97,984	$212,453	$247,730
Charles	$26,473	$116,152	$118,432
Dorchester	$44,900	$140,750	$140,607
Frederick	$123,539	$321,389	$463,712
Garrett	$7,535	$32,946	$38,830
Harford	$118,562	$270,369	$331,579
Howard	$69,544	$148,112	$262,093
Kent	$2,719	$18,793	$89,503
Montgomery	$154,093	$419,692	$461,982
Prince George's	$43,087	$160,905	$219,743
Queen Anne's	$18,952	$68,639	$68,837
St. Mary's	$13,756	$42,065	$85,218
Somerset	$16,061	$60,985	$55,200
Talbot	$22,395	$36,453	$75,916
Washington	$198,892	$443,549	$591,715
Wicomico	$103,988	$243,343	$410,908
Worcester	$13,641	$51,445	$108,524
Statewide Total	**$3,986,843**	**$10,170,317**	**$13,535,233**

**Based on claims paid through September 30, 2017.*

Data Source: ASO Report #152820.1.01

Veteran status is based on individual response to question, "Are you a Veteran?"

** Note: FY2015 data is for 6 months as the SRD services were not captured in the PBHS until January 1, 2015.*

Fiscal Year is based on date of service. County refers to an individual's county of residence.

Statewide Total is unduplicated and may not equal the sum of individual lines.

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

NUMBER OF OPIOID RELATED OVERDOSE DEATHS BY COUNTY

COUNTY	FY 2014	FY 2015	FY 2016	% Change FY14-16
Allegany	11	19	55	**400.0%**
Anne Arundel	88	87	169	**92.0%**
Baltimore City	275	365	628	**128.4%**
Baltimore County	146	196	305	**108.9%**
Calvert	16	21	25	**56.3%**
Caroline	7	2	9	**28.6%**
Carroll	29	36	44	**51.7%**
Cecil	23	26	28	**21.7%**
Charles	16	16	36	**125.0%**
Dorchester	0	1	5	**#DIV/0!**
Frederick	33	38	80	**142.4%**
Garrett	2	4	0	**-100.0%**
Harford	36	43	76	**111.1%**
Howard	18	25	40	**122.2%**
Kent	4	3	4	**0.0%**
Montgomery	52	60	84	**61.5%**
Prince George's	47	45	106	**125.5%**
Queen Anne's	8	4	6	**-25.0%**
St. Mary's	8	11	13	**62.5%**
Somerset	2	4	6	**200.0%**
Talbot	4	5	10	**150.0%**
Washington	35	58	63	**80.0%**
Wicomico	16	18	44	**175.0%**
Worcester	10	12	20	**100.0%**
Statewide Total	**886**	**1,099**	**1,856**	**109.5%**

These are deaths caused by an overdose of opioids.

Note: Numbers are based on location of occurrence, so all deaths may not reflect Maryland residents.

Data Source: Maryland Office of the Chief Medical Examiner (OCME)

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

FY 17 Medicaid Substance Related Disorders Penetration Rate

		Accessing the Public Behavioral Health System			
COUNTY	**Total County Population***	**Average MA Eligible**	**% of County MA Eligible**	**MA Served In SRD/PBHS**	**Penetration Rate**
Allegany	72,528	21,671	29.9%	2,725	**12.6%**
Anne Arundel	564,195	90,463	16.0%	9,298	**10.3%**
Baltimore County	831,128	190,778	23.0%	14,206	**7.4%**
Calvert	90,595	14,130	15.6%	1,723	**12.2%**
Caroline	32,579	11,761	36.1%	778	**6.6%**
Carroll	167,628	23,158	13.8%	2,510	**10.8%**
Cecil	102,382	26,411	25.8%	3,802	**14.4%**
Charles	156,118	30,775	19.7%	2,198	**7.1%**
Dorchester	32,384	12,825	39.6%	1,030	**8.0%**
Frederick	245,322	39,065	15.9%	3,045	**7.8%**
Garrett	29,460	8,768	29.8%	753	**8.6%**
Harford	250,290	43,410	17.3%	4,347	**10.0%**
Howard	313,414	43,873	14.0%	1,826	**4.2%**
Kent	19,787	4,973	25.1%	459	**9.2%**
Montgomery	1,040,116	182,775	17.6%	4,381	**2.4%**
Prince George's	909,535	221,180	24.3%	4,590	**2.1%**
Queen Anne's	48,904	8,564	17.5%	761	**8.9%**
St. Mary's	111,413	22,494	20.2%	2,206	**9.8%**
Somerset	25,768	8,778	34.1%	743	**8.5%**
Talbot	37,512	8,312	22.2%	576	**6.9%**
Washington	149,585	43,083	28.8%	4,618	**10.7%**
Wicomico	102,370	33,725	32.9%	2,750	**8.2%**
Worcester	51,540	13,414	26.0%	1,103	**8.2%**
Baltimore City	621,849	262,827	42.3%	30,557	**11.6%**
Statewide	**6,006,402**	**1,367,211**	**22.8%**	**98,997**	**7.2%**

*Data Source: Maryland Vital Statistics Est. Md. Population July 1, 2015

Data Source: Average MA Eligible supplied by UMBC Hilltop Institute. Data through September 2017.

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 16

Outcome Measurement System State and County Comparisons Point In Time Observations - FY 2016 *	Child and Adolescent			Adults	
	STATE	COUNTY		STATE	COUNTY
	Percent	Percent		Percent	Percent
Homeless in last 6 months	2.0%	2.7%		13.6%	22.4%
Arrested in last 6 months	31.9%	38.2%		22.3%	11.5%
Problems from your drinking/drug use in the last month					
- Often	N/A	N/A		11.5%	13.7%
- Always	N/A	N/A		9.8%	12.2%
Drink any alcohol during the past month	38.5%	21.8%		N/A	N/A
Smoke any marijuana or hashish during the past month	78.1%	79.1%		N/A	N/A
Use anything else to get high during the past month	13.0%	5.7%		N/A	N/A
Employed now or last 6 months	N/A	N/A		38.5%	24.0%
Cigarette smokers**	29.9%	22.1%		68.6%	68.4%
Use tobacco products in the past month					
- Cigars	13.1%	21.3%		6.9%	7.8%
- Smokeless Tobacco	1.5%	0.0%		2.1%	1.0%
- Electronic Cigarettes	7.4%	1.5%		6.9%	4.6%
- Pipes	1.5%	0.7%		0.4%	0.1%
- Other Tobacco Product	2.2%	1.5%		5.3%	5.6%
Problems with school attendance	37.7%	41.2%		N/A	N/A
Suspended from school in last 6 months	35.8%	27.2%		N/A	N/A
General Health Status					
Excellent	27.1%	34.9%		8.6%	7.9%
Very Good	32.1%	30.1%		27.2%	22.3%
Good	32.3%	28.9%		41.8%	42.6%
Fair	8.1%	4.8%		18.8%	23.6%
Poor	0.3%	1.2%		3.7%	3.6%

* Most recent observation for each Substance-Related Disorder consumer in FY 2016; provisional data which may change slightly as Datamart refinement continues

** For children and adolescents, only those ages 11 to 17

***First administered in January 2015; for Children and Adolescents, data represents only those ages 14 and over

Data Source: http://maryland.valueoptions.com/services/OMS_Welcome.html

Most Recent Interview Only, FY 2016

BALTIMORE CITY PUBLIC SUBSTANCE RELATED DISORDERS UTILIZATION FY 17

Outcome Measurement System State and County Comparisons Point In Time Observations - FY 2017 *	Child and Adolescent			Adults	
	STATE	COUNTY		STATE	COUNTY
	Percent	Percent		Percent	Percent
Homeless in last 6 months	3.2%	4.0%		13.3%	15.3%
Arrested in last 6 months	31.9%	34.9%		10.4%	5.9%
Problems from your drinking/drug use in the last month					
- Often	N/A	N/A		12.7%	13.6%
- Always	N/A	N/A		10.7%	11.6%
Drink any alcohol during the past month	38.5%	21.8%		N/A	N/A
Smoke any marijuana or hashish during the past month	78.1%	79.1%		N/A	N/A
Use anything else to get high during the past month	13.0%	5.7%		N/A	N/A
Employed now or last 6 months	N/A	N/A		38.5%	24.0%
Cigarette smokers**	30.9%	29.4%		69.7%	72.8%
Use tobacco products in the past month					
- Cigars	10.5%	24.6%		6.0%	7.0%
- Smokeless Tobacco	1.8%	0.0%		2.0%	1.3%
- Electronic Cigarettes	5.4%	1.6%		6.2%	3.9%
- Pipes	1.1%	1.6%		0.5%	0.3%
- Other Tobacco Product	3.0%	4.8%		6.8%	7.9%
Problems with school attendance	32.8%	34.9%		N/A	N/A
Suspended from school in last 6 months	31.5%	24.6%		N/A	N/A
General Health Status					
Excellent	31.0%	20.7%		5.5%	5.2%
Very Good	31.0%	27.6%		20.5%	17.7%
Good	31.3%	46.6%		44.2%	40.8%
Fair	6.2%	3.4%		25.3%	31.2%
Poor	0.4%	1.7%		4.5%	5.1%

* Most recent observation for each Substance-Related Disorder consumer in FY 2017; provisional data which may change slightly as Datamart refinement continues

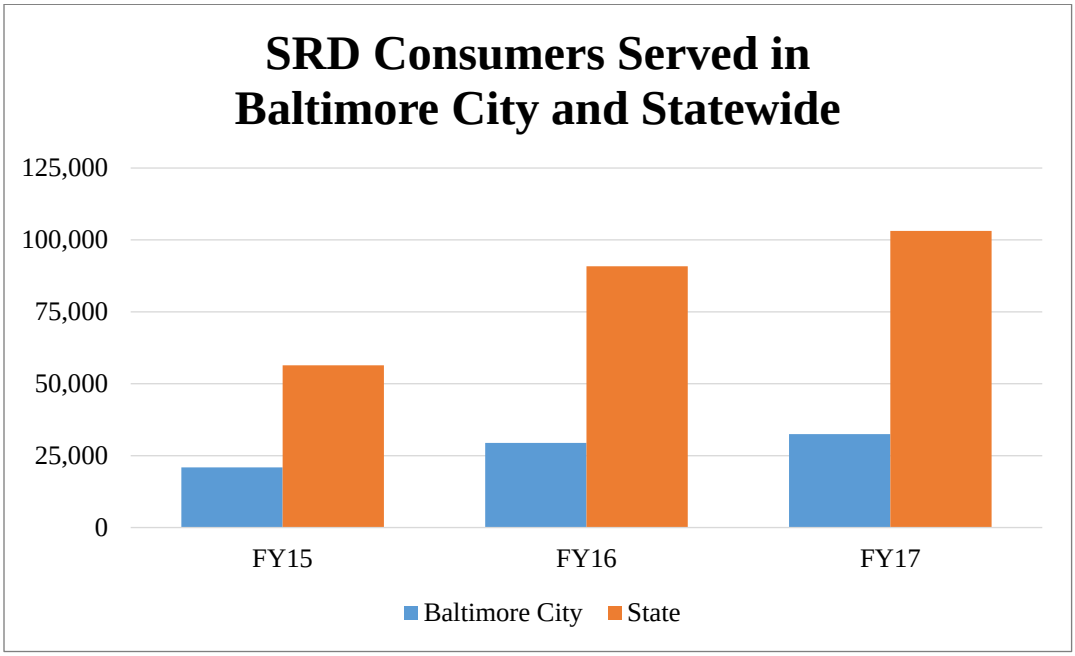
** For children and adolescents, only those ages 11 to 17

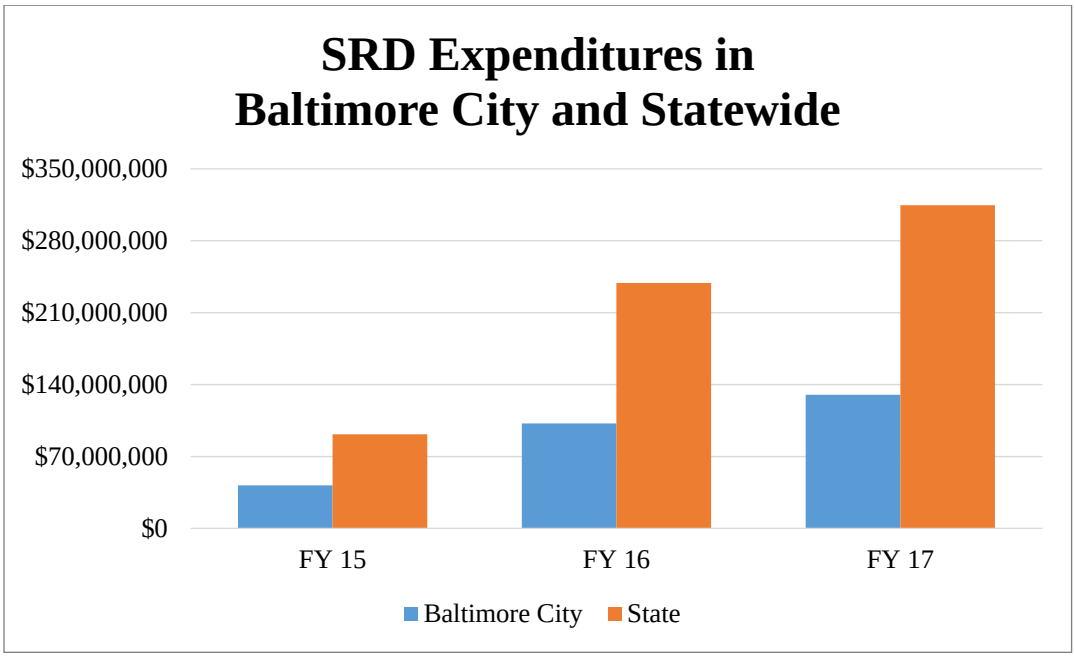
***First administered in January 2015; for Children and Adolescents, data represents only those ages 14 and over

Data Source: http://maryland.valueoptions.com/services/OMS_Welcome.html

Most Recent Interview Only, FY 2017

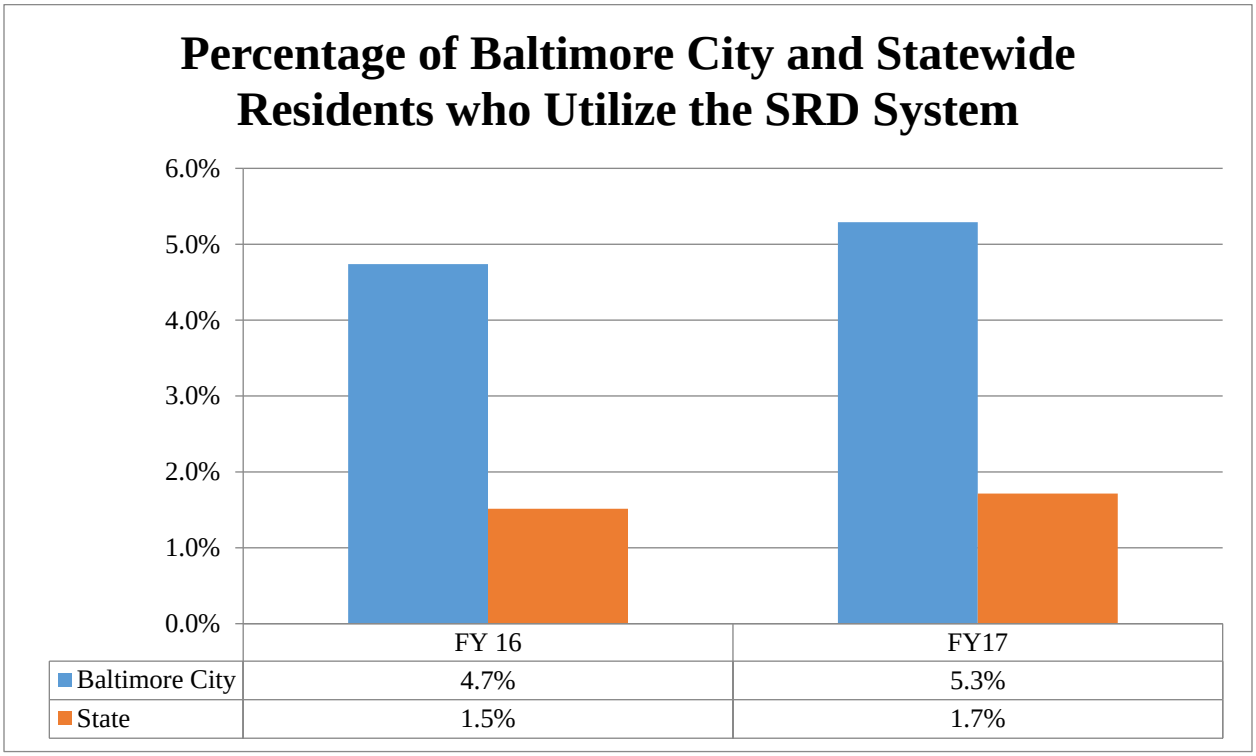
Baltimore City residents comprise 31.5% of all SRD consumers served in the State, and 41.3% of total expenditures for public SRD services.





Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

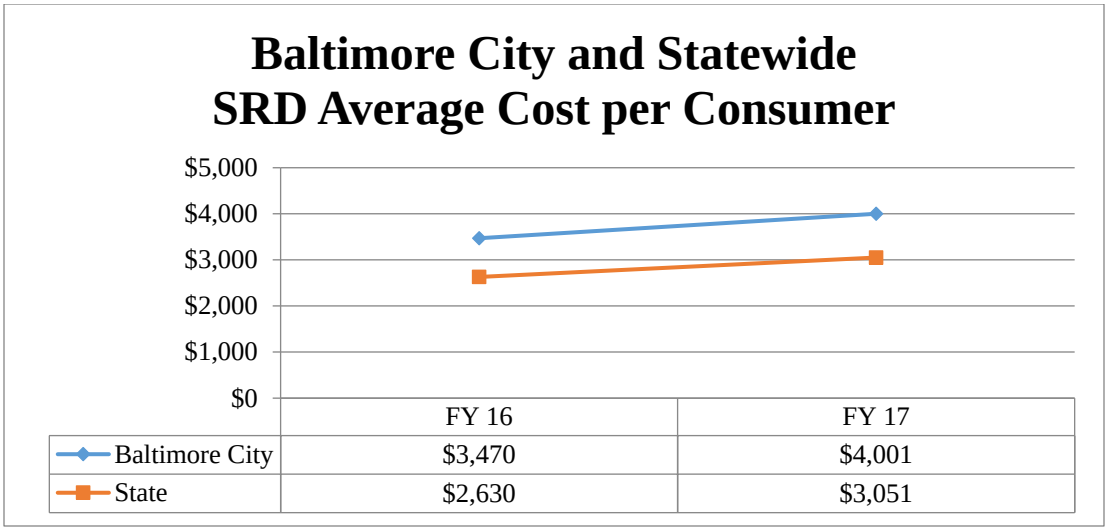
Compared to the State, Baltimore City residents utilized SRD services during FY 17 at a higher rate, 5.3% of the City population compared to the State's 1.7%.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

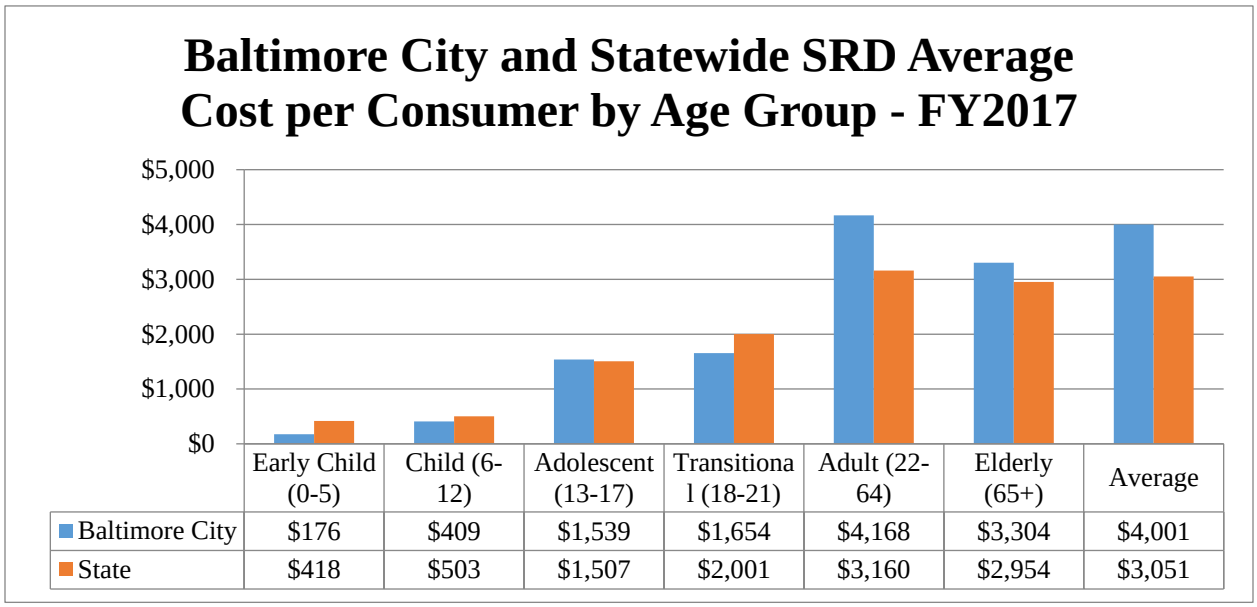
Average Cost Per Consumer

For the last two years, Baltimore City has had a higher SRD overall cost per consumer than the State. Both Baltimore City and the State saw an increase (15.3% and 15.9%, respectively) in the overall cost per consumer between FY 16 thru FY 17.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

The chart below indicates that while the cost per consumer is higher in Baltimore City for adults and the elderly, it is almost equal or lower for children, adolescents and transition age youth.

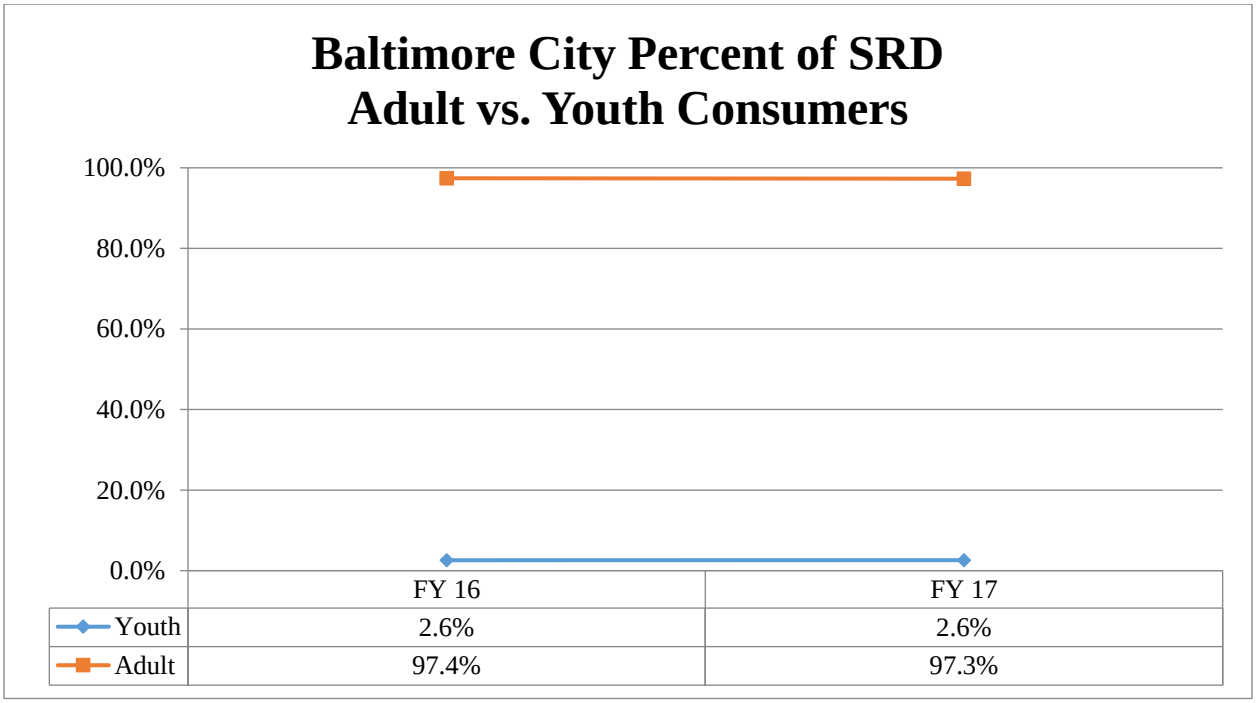


Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Adult versus Child

The gap between adult and youth consumers receiving public SRD services continues from FY 16 thru FY 17. Maryland's public behavioral health treatment system is heavily adult-oriented in terms of outreach, intervention models and system planning. BHSB continues to work to highlight the needs of youth and families in our jurisdiction and across the state through the establishment of a Child and Family Team. This team, in partnership with other youth-oriented teams at BHSB, coordinates work with BHA and other state and local partners to improve youth and family access to appropriate systems and services, while supporting the development of needed services.

Baltimore's numbers for youth consumers are consistent with the rest of the State. Relatively few youth have a history of usage that meets diagnostic criteria for a substance use disorder. Much of the investment in youth SRD services is in prevention and school-based services, which are grant funded.

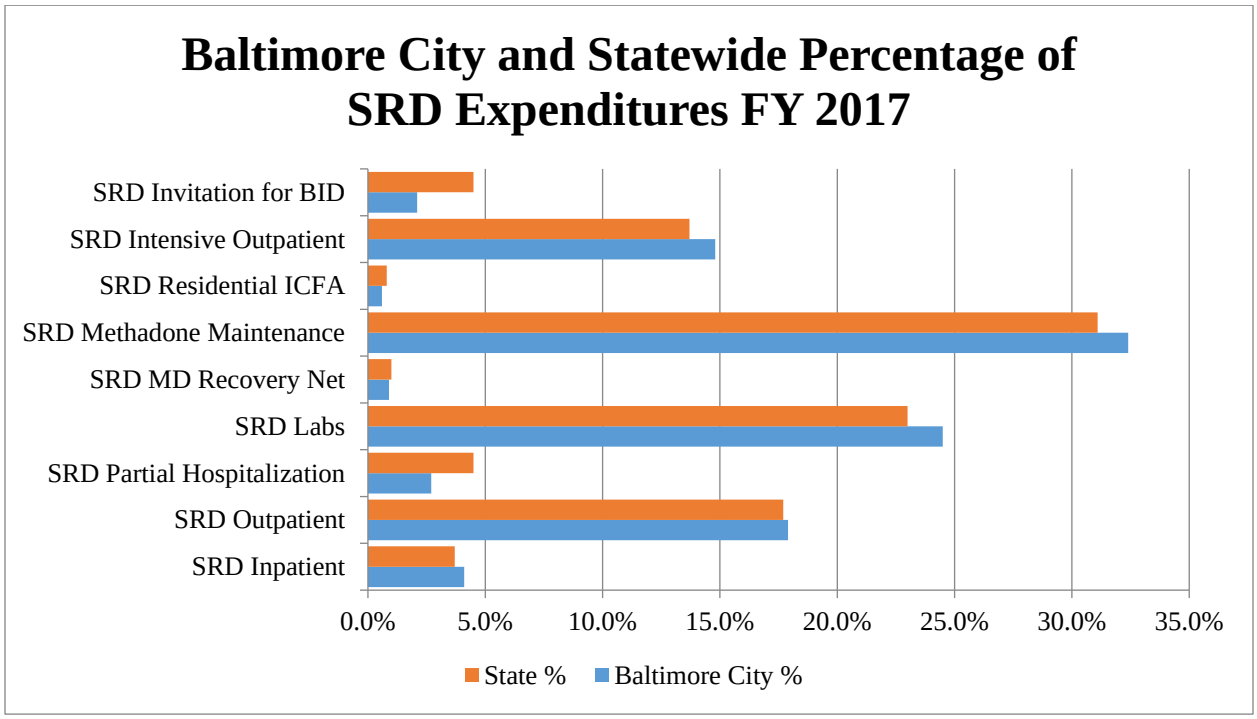


	FY 16	FY 17
Youth	2.6%	2.6%
Adult	97.4%	97.3%

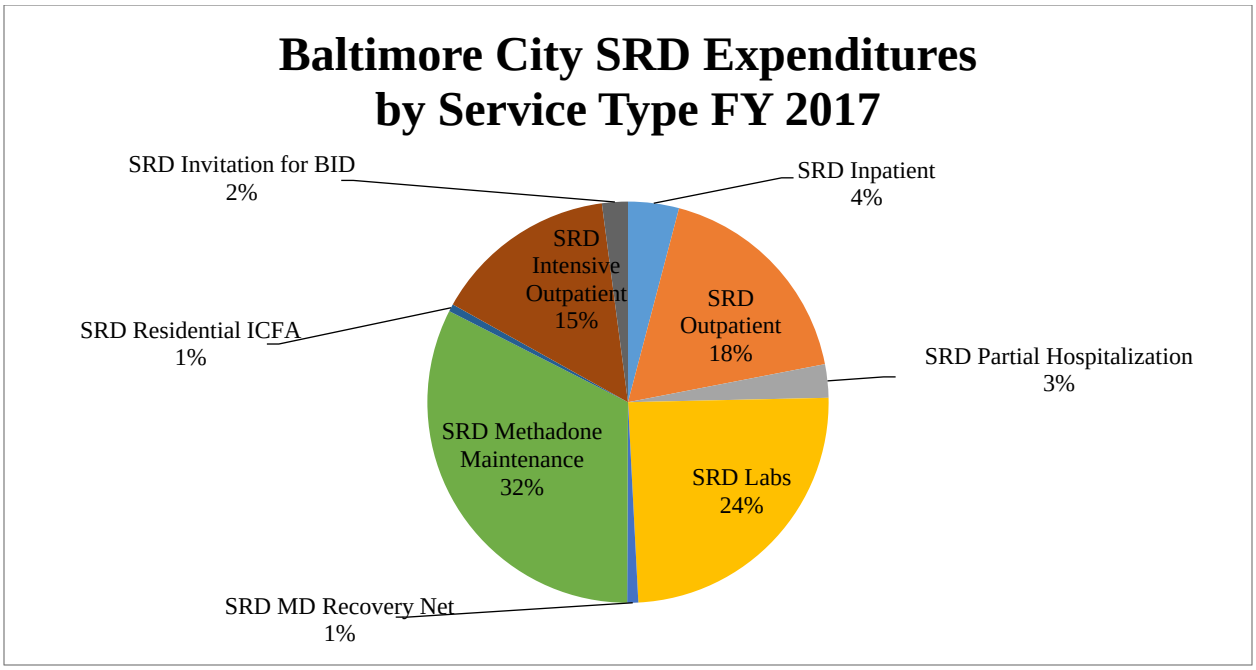
Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

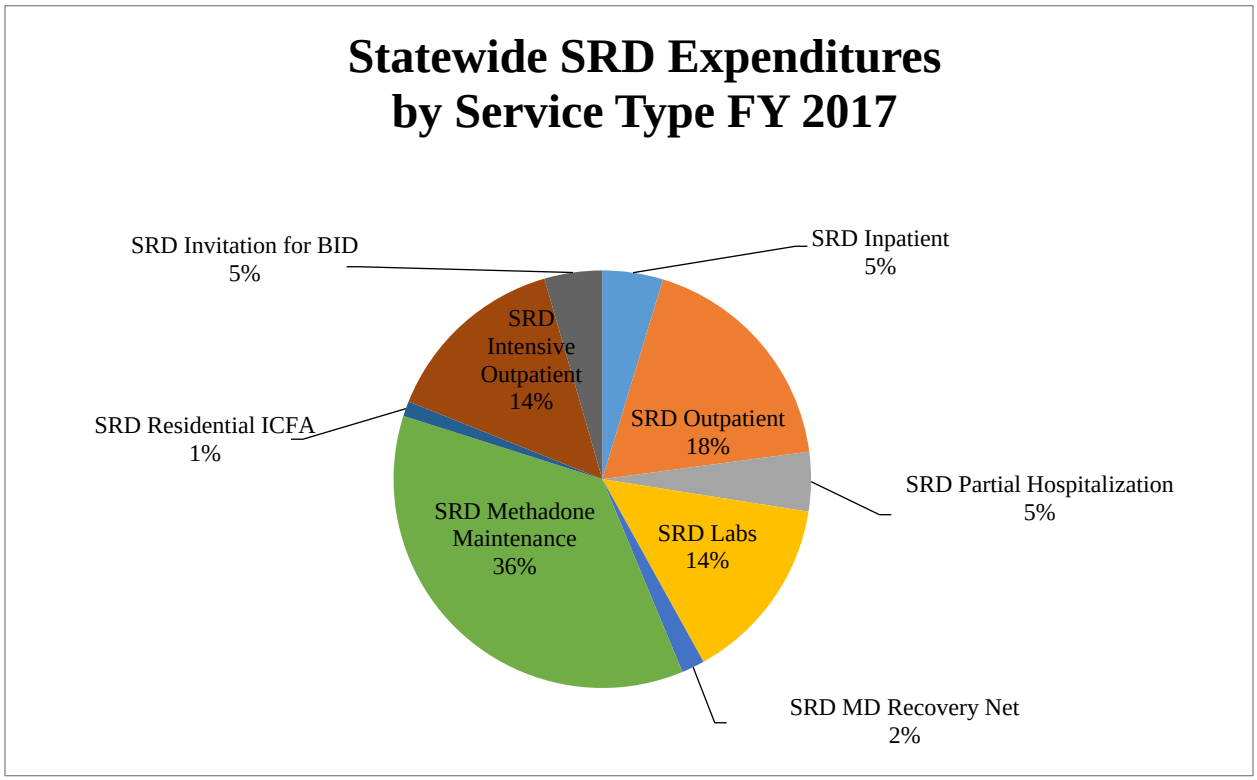
Expenditures

The charts below show that the percental distribution of SRD expenditures in Baltimore City is similar to the State. Baltimore City spent more in both ambulatory services (outpatient, methadone and intensive outpatient) and labs, while the State spent more in partial hospitalization and inpatient services. There are several possible explanations for the higher utilization of methadone maintenance in Baltimore City, one being the larger number of OMT programs. It is also possible that a higher percentage of the City's population of SRD consumers use opioids as their primary drug. In regard to partial hospitalization utilization, it is important to note that Baltimore has very few providers of this level of care.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

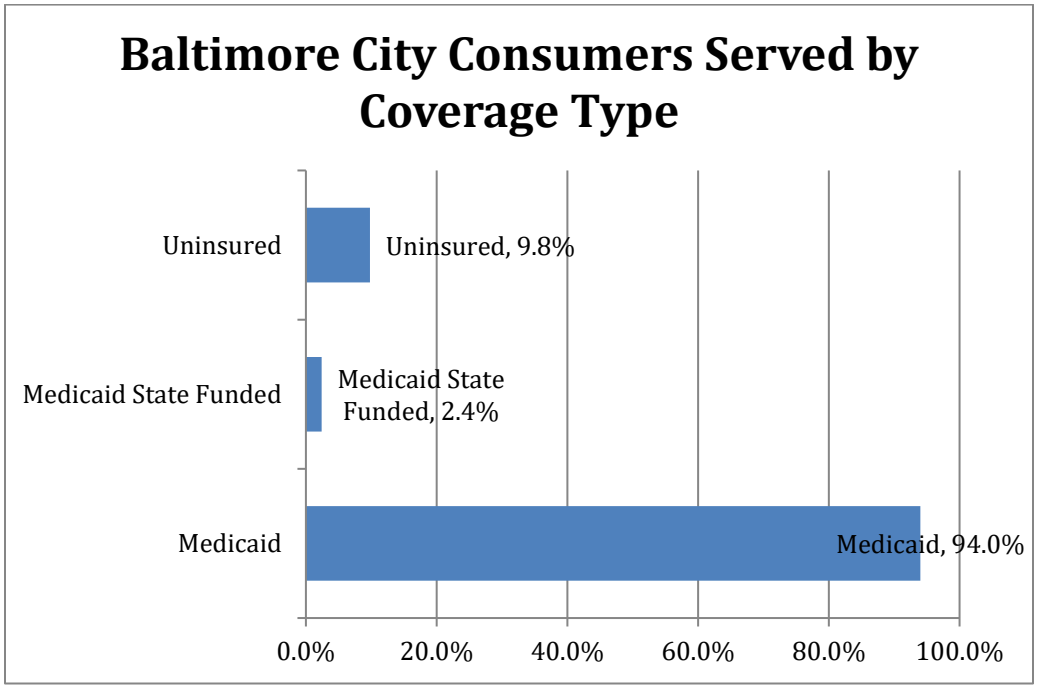




Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Insurance Coverage

Most (>90%) of the individuals being served by the public SRD system were covered by Medicaid (including Medicaid State-funded).[38] The uninsured population only represented 9.8% in FY 17.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017
***Note: Totals represent unduplicated counts and may not equal the sum of the individual lines*

The total number of uninsured consumers served in Baltimore City increased by 33.3% between FY 16 and FY 17. This was possibly related to the transition of SRD services from grant funding to the ASO. Funds were set aside to pay for coverage of uninsured consumers, which likely explains much of the increase.

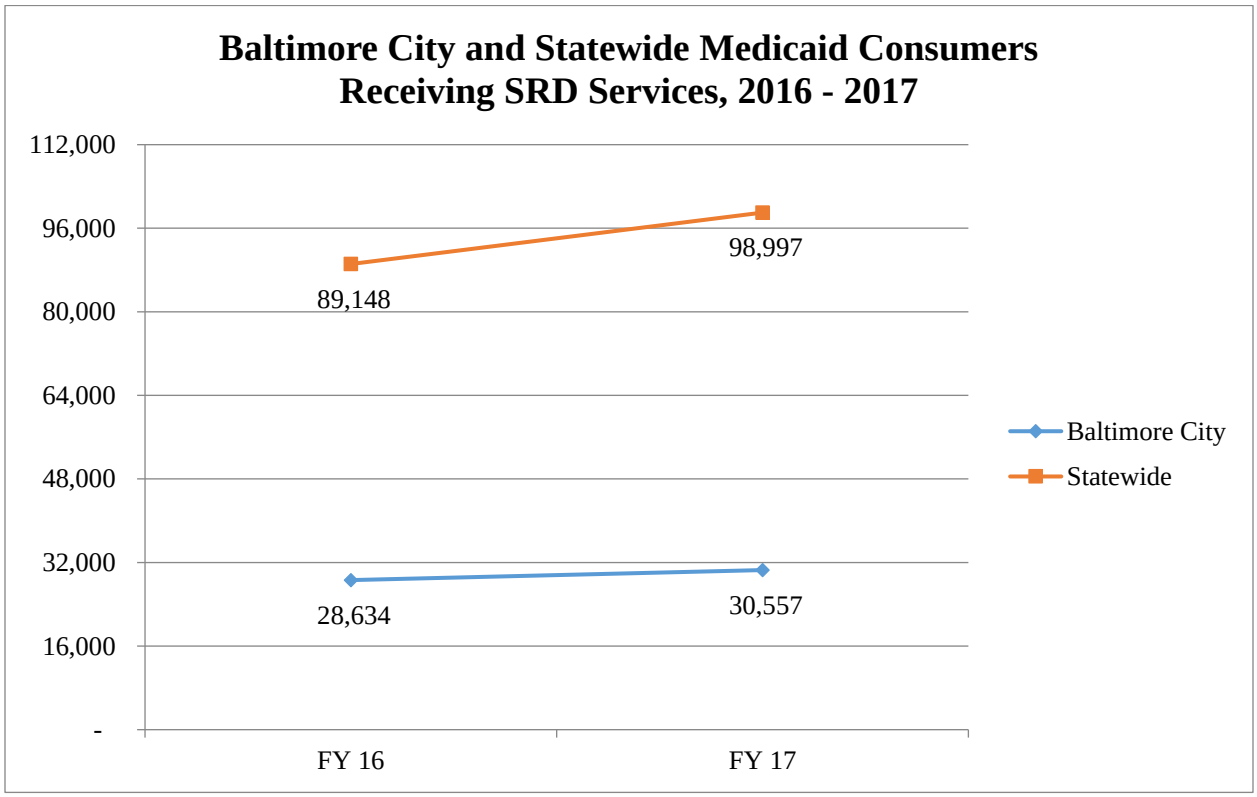
FY 16	FY 17	FY 16 – 17 Percent Change
2,386	3,180	33.3%

[38] Many people use services in more than one category. As a result, the sum of the percentage of people served across service categories and across insurance statuses will exceed 100%.

Medicaid has the highest cost per consumer of the three coverage types in the public SRD system. This is likely due to restrictions in access to care and services for uninsured individuals.

Baltimore City Cost per Consumer by Coverage Type			
	Medicaid	Medicaid State-Funded	Uninsured
FY 16	$3,401	$1,653	$1,935
FY 17	$3,986	$2,692	$1,937
FY 16 – 17 % Change	17%	62%	0%

Over the last two years, the number of Medicaid consumers receiving SRD services has increased both in the City and State, likely due to expanded access to care facilitated by the transition from grant-funded to ASO-funded services.



Source: Beacon Health Options
Based on claims paid through September 30, 2017
Run Date: October 18, 2017

Primary Substance at Admission (All Ages)

In Baltimore City, opiates are the most common primary substance at admission, representing more than two-thirds of total admissions during the past three years, jumping to almost three-quarters in FY 17. Heroin is the most common substance among the opiates, representing 88% of the total opiates as primary substance in the last three years.

The second most common primary substance is alcohol, representing around 10% of total admissions. The third and fourth most common are marijuana and cocaine, representing 6.6% and 4.7%, respectively.

From FY 15 to FY 17, Baltimore City residents represented between 44% to 50% of the total admissions in Maryland for which heroin was the primary substance (All Ages).

Opioid Related Overdose Deaths

Baltimore City showed an increase of 128.4% in opioid-related overdose deaths from FY 14 to FY16. This exceeds the increase for Maryland, which was 109.5% for the same period.

Veterans

Baltimore City veterans comprised about 43% of all Maryland veterans receiving SRD services, and about 50% of total expenditures for veterans in Maryland.

Average Veteran's Cost Per Consumer

The average cost per veteran consumer in Maryland was around $4,090 per year, whereas the average cost for Baltimore City was around $3,900 per year. It is important to note the increase (74.5%) in the number of people served over the last three years.

Planning Process

BHSB engaged in a strategic planning process during FY 16 that engaged staff, external stakeholders and the Board of Directors. The goal of the planning process was to develop specific goals, objectives and strategies that will guide the organization through the next few years (2017 - 2020) and ensure that its work is aligned with its mission and that the role BHSB serves is broader than the management of the existing treatment system.

BHSB contracted with Maryland Nonprofits to facilitate the strategic planning, which began with a Board of Directors retreat at which key priorities and themes were identified that informed and guided the process. The next phase was data collection, which included:

- Staff focus group meetings;
- Staff survey;
- External stakeholders survey and
- Key informant interviews.

The data was compiled, analyzed and presented to the strategic planning committee, which included staff members representing each of BHSB's divisions. The committee participated in several half-day retreats, as well as focused meetings for smaller groups, to develop strategic priorities, goals, objectives and measures. The Operations and Oversight Committee of the Board of Directors was tasked with collaborating with senior leadership to review and revise the plan prior to final review and approval by the full Board of Directors.

BHSB began implementation of the strategic plan during FY 17. The Operations and Oversight Committee reviews progress on a regular basis.

Three-Year Strategic Plan 2017-2020

As stated in the introduction of this document, this report replaces what was previously referred to as the Annual Plan and Report for Mental Health and the Local Drug and Alcohol Abuse Council Strategic Plan and Plan Update for substance use. Below is the strategic plan detailing priorities, goals and objectives for a three-year period, 2017-2020.

STRATEGIC PRIORITIES

I. Comprehensive and Quality Public Behavioral Health System
II. Prevention, Trauma and Resilience
III. Behavioral Health in All Policies
IV. Using Data to Support Practice
V. Organizational Development

STRATEGIC PRIORITY I COMPREHENSIVE AND QUALITY PUBLIC BEHAVIORAL HEALTH SYSTEM

GOAL 1: **Improve access to the public behavioral health system.**

Objective [1-a] Decrease in use of emergency rooms for mental health and substance use disorder services by establishing a pilot program for stabilization services.

Objective [1-b] Increase in outpatient provider visits/encounters.

Objective [1-c] Increase diversion from the criminal justice system.

Objective [1-d] Increase workforce development activities for providers.

GOAL 2: **Ensure that the public behavioral health system efficiently allocates resources.**

Objective [2-a] Increase in efficiency of system monitoring activities.

Objective [2-b] Improve coordination of care by leveraging technology for data sharing.

Objective [2-c] Decrease the cost per consumer for high utilizers.

GOAL 3: **Promote a robust, high quality provider network.**

Objective [3-a] Assure the provision of quality service delivery by developing a provider score card system to be used by BHSB, consumers and the community at large.

Objective [3-b] Strengthen quality standards for providers by partnering with the state and other stakeholders.

Objective [3-c] Increase well-being of consumers as measured by the Outcomes Measurement System (OMS).

STRATEGIC PRIORITY II PREVENTION, TRAUMA AND RESILIENCE

GOAL 4: **Promote a comprehensive behavioral health and wellness prevention strategy for the city.**

Objective [4-a] Strengthen collaboration among community and system partners through the development and implementation of a plan identifying shared goals and key needs for which resources should be sought.

GOAL 5: **Promote resilience and thriving communities.**

Objective [5-a] Increase provider and community member awareness of research linking exposure to adverse childhood experiences (ACEs) with increased rates of behavioral and somatic disorders, and advance understanding of the science of resilience that identifies the protective factors that support individual, family and community resilience.

Objective [5-b]	Improve access for families, youth and young adults to culturally-relevant resources, experiences and relationships that serve as protective factors supporting resilience.
Objective [5-c]	Increase participation and involvement in opportunities to develop community-based leadership capacity.

GOAL 6:	**Promote racial justice in all policies and practices.**
Objective [6-a]	Reduce the criminalization of behavioral health disorders by partnering with other systems and stakeholders to implement policies and practices that divert individuals with behavioral health disorders from the criminal justice system.
Objective [6-b]	Increase the number of conversations with stakeholders, other systems and providers on racial inequities and the adverse impact that experiences of racism have on behavioral health and wellness.
Objective [6-c]	Increase the dissemination of information with practice-based implications on racial inequalities to the public behavioral health network.

STRATEGIC PRIORITY III BEHAVIORAL HEALTH IN ALL POLICIES

Goal 7:	**Lead toward a more informed community around behavioral health and wellness.**
Objective [7-a]	Expand social and traditional media presence to advance priorities.
Objective [7-b]	Increase earned media on an annual basis to advance priorities.
Objective [7-c]	Reduce misconceptions related to mental illness and substance use disorders through the development of a city-wide anti-stigma campaign.
Objective [7-d]	Increase use of BHSB's website as a known and trusted source for information and resources.
Goal 8:	**Mobilize behavioral health providers and consumers to engage in advocacy to address policy priorities.**
Objective [8-a]	Engage the community in understanding behavioral health disorders by engaging a core group of consumers to speak about their lived experience.
Objective [8-b]	Create a behavioral health community council made up of consumers of public behavioral health services, individuals with lived experience, family members and community members to increase consumer engagement.
Objective [8-c]	Increase the amount of community, consumer and provider feedback into the annual policy priorities to develop a more inclusive process.
Objective [8-d]	Inform and influence policy makers at the local, state and federal level to advance BHSB's policy priorities on an annual basis.

STRATEGIC PRIORITY IV USING DATA TO SUPPORT PRACTICE

GOAL 9: **Promote a robust data-driven system.**

Objective [9-a] Increase providers' access to, knowledge of and ability to apply data and research to inform decision making.

Objective [9-b] Increase BHSB staff's knowledge of and ability to use data and research to promote practice, policy and system change.

Objective [9-c] Decrease the barriers to link and share data.

STRATEGIC PRIORITY V ORGANIZATIONAL DEVELOPMENT

GOAL 10: **Create an efficient and effective work environment.**

Objective [10-a] Improve the technological infrastructure.

Objective [10-b] Enhance staff's skills to use technology more effectively.

Objective [10-c] Identify and implement digital alternatives to paper-based processes.

Objective [10-d] Ensure that the workspace promotes synergy within and across teams.

Objective [10-e] Improve open dialogue and effective communication through the promotion of a multi-faceted communication strategy.

GOAL 11: **Build the collective ability to achieve the mission.**

Objective [11-a] Ensure equal opportunity for leadership, professional development, and career advancement.

Objective [11-b] Increase the number of opportunities for staff members to build their capacity to contribute to the organizational values and mission.

Objective [11-c] Ensure policies and procedures guide an efficient and equitable workplace.

GOAL 12: **Lead a strong organization with an effective and engaged Board of Directors.**

Objective [12-a] Increase the level of engagement of individual board members and the collective board.

Addendum A: Contract Monitoring

The following is a description of the processes used to hold providers accountable for the delivery of service detailed in the contractual agreement.

BHS Baltimore plays an important role in funding and improving the delivery of safe, high quality prevention, early intervention, treatment, and recovery services. Contractual performance is regularly monitored in a systematic way using a variety of methods and tools, including analysis of utilization data, site visits to providers (quarterly for substance use providers and annually for mental health providers) and technical assistance to improve performance. When site visits are conducted, client records and personnel records are reviewed to ensure compliance with the scope of service detailed in the contract, and interviews are conducted with both staff and clients. Other steps in the contracting process that assist in monitoring the quality of service delivery are:

- All provider contracts include a description of the service delivery expected
- All provider contracts include requirements to meet established performance benchmarks and selected contracts also include financial incentives for meeting utilization benchmarks
- General Conditions of Award are attached to all executed contracts that are funded by substance use disorder funding
- Contract meetings are held on a bi-weekly basis to facilitate communication and coordination amongst staff members who have assigned roles in monitoring the fiscal, administrative, programmatic, and clinical performance of contracts

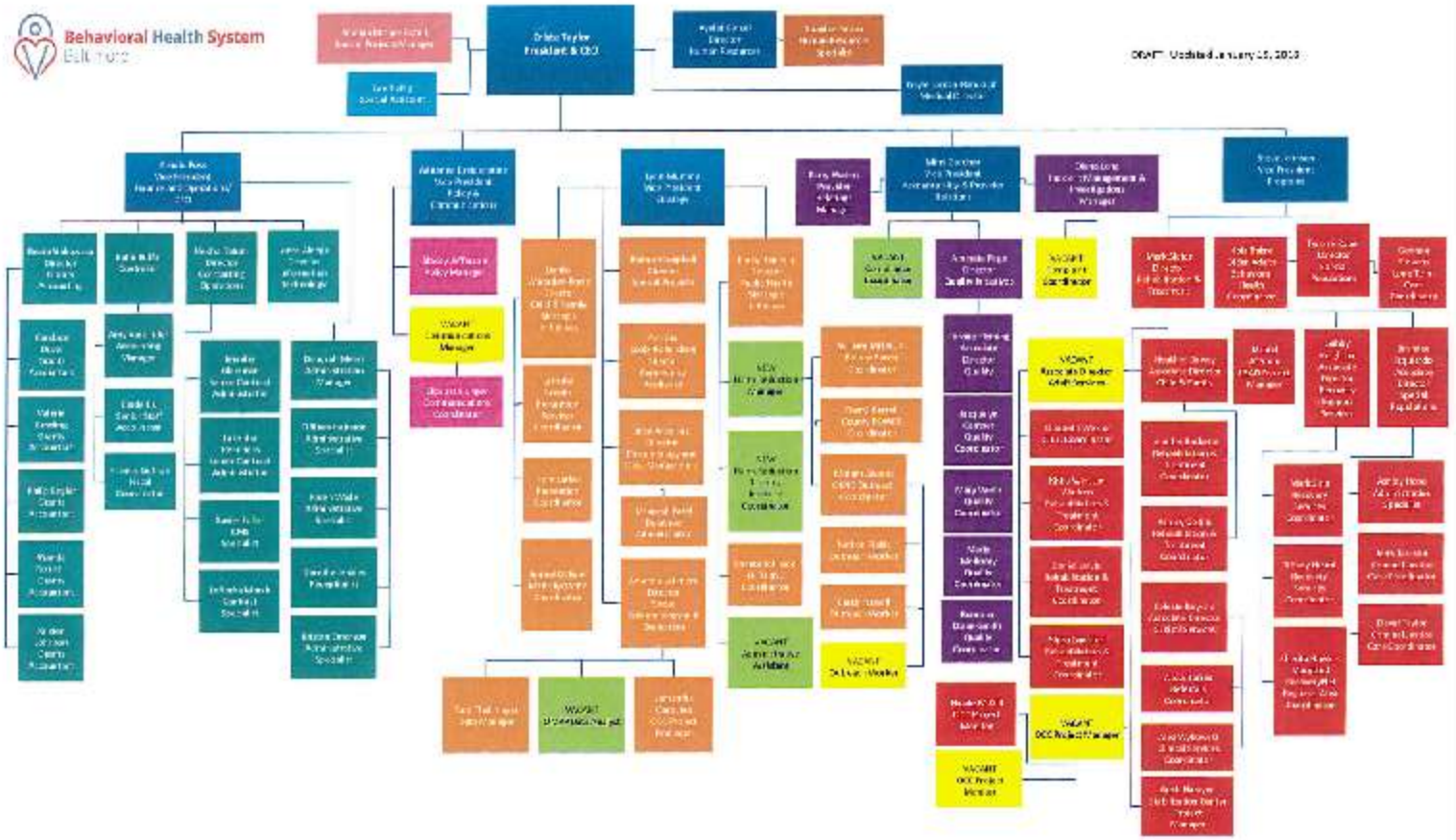
BHS Baltimore requires all funded substance use treatment providers to:

- Give priority in assessment, admission and placement to all federally-defined priority populations.
- Incorporate at least four of the following evidence-based practices into individualized care: cognitive behavioral treatment, motivational enhancement therapy, contingency management, harm reduction, 12-step facilitation, and pharmacotherapy.
- Provide didactic education on addiction and recovery, including psycho-educational programs that address core issues of human behavior and development associated with addiction and recovery in addition to individual counseling sessions and other therapeutic interventions
- Ensure treatment plans reflect on-going reassessments done with patients around their needs and goals
- Utilize an on-site licensed mental health provider or have a written memorandum of understanding with local mental health providers, to provide mental health consultation

and treatment services for patients with co-occurring substance abuse and mental health disorders

- Employ case management and care coordination strategies to ensure all bio-psycho-social areas of functioning are being addressed while the patient is in treatment
- Ensure involvement of family and/or key supporters as a part of the individual's recovery process
- Provide clinical supervision by professionals licensed under the Health Occupations Act or certified counselors approved as supervisors by the Board of Professional Counselors and Therapists
- Provide HIV risk assessments and education

Addendum B: Organization Chart


Behavioral Health System
Baltimore

Addendum C: BHSB Organizational Structure

BHSB ORGANIZATIONAL STRUCTURE

POLICY AND COMMUNICATIONS

Vice President: *Adrienne Breidenstine*

Policy and Communications uses advocacy and communications strategies to advance evidence-based practices, policy reforms, and mobilize community action. The department manages internal and external communications for BHSB, oversees government and community relations, and implements public education and advocacy campaigns to create positive change. BHSB participates on several coalitions and collaborates with a range of partners to advance policies that support behavioral health and wellness.

Opportunities for Partnership:

- *Sign Up for BHSB's E-mail List* to receive our quarterly newsletters, invitations to trainings and events, and policy alerts. Visit BHSB's website to sign up: http://www.bhsbaltimore.org/

- *Participate in Advocacy 101 Trainings* which are offered throughout the year and by request. BHSB provides this training to providers, peers, and community members on ways to advocate for policies and social change.

- *Distribute Crisis Information and Referral Line Materials* which raise awareness about Baltimore City's 24/7 crisis hotline, 410-443-5175. BHSB can provide posters, cards, and pens to promote this line at your request.

- *Follow BHSB on Twitter and like us on Facebook* to garner the power of social media.

ACCOUNTABILITY AND PROVIDER RELATIONS

Vice President: *Mimi Gardner*

Accountability and Provider Relations works collaboratively with behavioral health provider organizations to support high-quality behavioral health services in Baltimore City. This department provides support for providers in a variety of ways, including training and technical assistance, site visits, community relations, and a dedicated provider relations contact. The team also manages provider complaints, investigations, and sentinel events.

Opportunities for Partnership:

- *Ask for technical assistance to help improve quality within your program* by participating in the Quality Council which meets monthly at BHSB.

- *Attend BHSB's Quality Assurance Committee* to discuss quality improvement measures and review complaints and sentinel events. This committee will start meeting later this year.

STRATEGY

Vice President: *Lynn Mumma*

Strategy seeks to instill a social determinants of health lens into all facets of BHSB's internal and external work. The department supports this in a variety of ways, including synthesizing and analyzing data to inform decision making and monitor outcomes, expanding prevention efforts, and supporting communities toward developing capacity to mitigate toxic stress and improve resilience so that residents can thrive.

Opportunities for Partnership:

- *Participate in RecoveryStat* which meets quarterly to solicit input from providers on continuity of care, cost, outcomes and system capacity by reviewing Medicaid paid claims data and other data on publicly-funded behavioral health services.

- *Receive training on overdose response and naloxone* for you and others within your organization. The training provides information on how to recognize and respond to opioid-related overdoses and safely administer naloxone.

PROGRAMS

Vice President: *Steve Johnson*

Programs works to develop and manage a range of early intervention, treatment and recovery services for individuals and families with mental illness and/or substance use disorders. The department oversees services within the larger Medicaid fee-for-service system, as well as those directly funded by BHSB through private and public grants, including child and family services, peer support services, medication-assisted treatment, criminal justice diversion, and crisis services for youth and adults. The team collaborates with providers, city and state agencies, and other system partners to implement best practice programming and new or innovative pilots.

Opportunities for Partnership:

- *Participate in a Service Line Meeting* to learn what is happening in the system of care and collaborate with other providers in the city. Most meetings are quarterly and include meetings for outpatient, residential rehabilitation, psychiatric rehabilitation, supported employment, assertive community treatment, residential substance use disorder treatment, and veteran-serving providers.

- *Ask for training on how to better understand the system of care in Baltimore.* BHSB can provide this training upon request.

FINANCE AND OPERATIONS

Vice President and CFO: *Arnold Ross*

Finance and Operations manages the fiscal, contracting and administrative operations of the organization. The department provides oversight of private and public grantor funding awards, contracts issued to sub-vendors, grants accounting, and administrative support for organizational-wide work. Activities include oversight of procurements, issuance of letters of awards, monitoring of budgets and budget modifications, tracking of contract deliverables, and assurance that all funds are properly utilized and expended.

Opportunities for Partnership:

- *Participate in a Contract Management System (CMS) or Echo-Signature training* for sub-vendors. Dates and times for the trainings are posted on the BHSB website, under the "For Providers" tab, "FY 2018 Contract Processes".

Addendum D: BHSB 2018 Policy Priorities

2018 Policy Priorities

Promoting and Supporting Behavioral Health and Wellness

Prevention and Early Intervention

BHSB will promote policies and practices that strengthen and expand prevention and early interventions to reduce risk, mitigate the impact of trauma and toxic stress, increase community resilience, and improve behavioral health and wellness.

Policy Recommendations

- Ensure that Maryland's Youth Risk Behavior Survey (YRBS) collects Adverse Childhood Experiences (ACEs) module data starting in 2020

- Increase opportunities for community input into alcohol outlet locations and practices to reduce violence and create healthier communities

Treatment and Recovery Services

BHSB will advance policies, programs and practices that promote access to comprehensive, integrated community treatment and a full array of support services for people with mental illness and substance use disorders across the lifespan.

Policy Recommendations

- Advance the development of a comprehensive, integrated crisis response system to ensure 24/7 immediate access to a full continuum of crisis behavioral health services

- Ensure Maryland Medicaid has an appropriate rate structure for Targeted Case Management (TCM) to better support service delivery for persons with mental illness and substance use disorders

- Increase resources through Maryland Medicaid for youth Mental Health Case Management (formerly known as Targeted Case Management) to ensure the needs of youth and families impacted by mental illness are effectively supported

- Ensure Maryland Medicaid covers peer support services to assist individuals and their families with recovery from mental illness and substance use disorders

Criminal Justice System

BHSB will identify and promote criminal justice system reforms that redirect spending for corrections toward the behavioral health system and support interventions to improve access to treatment and recovery support services.

Policy Recommendations

- Invest in programs that divert persons in need of behavioral health services from the criminal justice system into community-based treatment and supports. Key diversion activities include:
    - Law Enforcement Assisted Diversion (LEAD) Program
    - Behavioral Health Crisis Response Teams (CRTs) that include a police officer and behavioral health clinician
- Expand re-entry services to assist returning citizens with mental illness and substance use disorders in their transition from incarceration to the community

Behavioral Health System Infrastructure

BHSB will advocate for policies and reforms that promote parity and strengthen the behavioral health system infrastructure and workforce.

Policy Recommendations

- Ensure reimbursement rate increases for community-based behavioral health providers established through the HOPE Act (HB1329) are included in the State's FY 2019 budget
- Build upon the local behavioral health authority (LBHA) model to support system planning and management and continue progress toward integration of behavioral health services in a more accountable system of care
- Establish a taskforce to examine the ability of the current behavioral health workforce to meet the needs for service and make recommendations for how to improve workforce capacity