Frederick County 2017 Interim Community Health Assessment

Frederick Memorial Hospital and Frederick County Health Department



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Sexually Transmitted Diseases (STDs)	1
HIV	1
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Substance Use	3
Alcohol	3
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Alcohol	7
Tobacco	0
Other Substances4	2
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Introduction

This Community Health Assessment Interim Report is provided as a yearly update of key data for Frederick County, Maryland to the comprehensive assessment that was completed in 2016. Data included in this interim report reflect areas of interest in the report year, datasets of interest to the Local Health Improvement Plan workgroups, and areas that routinely capture and report annual data. The intent of this report is to provide a consolidated grouping of updated data for the community and planning partners.

Methodology

All data was gathered prior to August 31, 2017. The analysis of community health status described in this report is derived from the following sources:

- Drug and Alcohol Intoxication Deaths in Maryland, 2016
- Frederick Memorial Hospital http://www.fmh.org/
- Healthy People 2020 <u>https://www.healthypeople.gov/</u>
- Maryland Behavioral Risk Factor Surveillance System (BRFSS) <u>www.marylandbrfss.org</u>
- Maryland Cancer Reports https://phpa.health.maryland.gov/cancer/Pages/surv_data-reports.aspx
- Maryland Department of Health Vital Statistics Annual Reports <u>https://health.maryland.gov/vsa/pages/reports.aspx</u>
- Maryland Youth Risk Behavior Survey (YRBS) <u>https://phpa.health.maryland.gov/ccdpc/Reports/Pages/yrbs.aspx</u>
- U.S. Census Bureau: State and County Quick Facts http://www.census.gov/quickfacts/table/PST045215/24021
- Maryland State Health Improvement Process (SHIP) <u>http://ship.md.networkofcare.org/ph/</u>
- Maryland Department of Labor, Licensing & Regulations http://www.dllr.state.md.us/lmi/laus/

Frederick Memorial Hospital Data

Primary quantitative data was collected by Frederick Memorial Hospital from their primary and secondary diagnosis codes for all Emergency Department, Observation and Inpatient Admissions. Hospital data is limited to those receiving services at Frederick Memorial Hospital.

Frederick Memorial Hospital data was collected in June and July 2017 from primary diagnosis codes all Emergency Department, Observation, and Inpatient Admissions, as well as from medical record notes. Calendar year 2015 and 2016 data was collected for all areas of interest on age, gender, race, ethnicity, payer and area of the county.

Frederick County Demographics

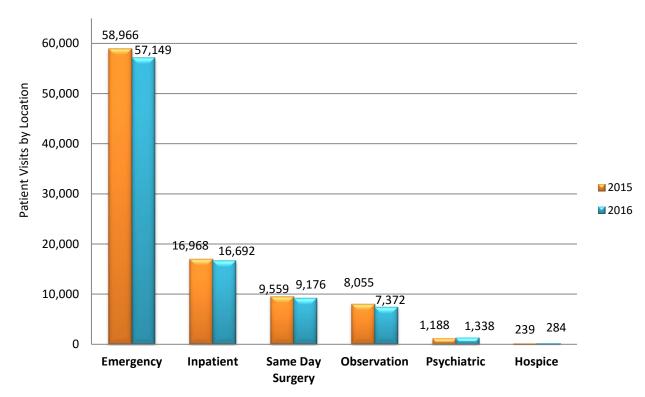
The Frederick County, MD population has increased 6.1% from 2010 to 2016. The White population has decreased from 77.8% in 2010 to 74.4% in 2013. The Black population has increased from 8.6% to 9.8% and the Hispanic population has increased from 7.3% to 9.1%.

Population estimates, July 1, 2016	Frederick County		United States
Total Population	247,591	6,016,447	323,127,513
Gender			
Females	50.7%	51.6%	50.8%
Males	49.3%	48.4%	49.2%
Race			
White, non-Hispanic (NH)	74.4%	51.5%	61.3%
Black, NH	9.8%	30.7%	13.3%
Hispanic or Latino	9.1%	9.8%	17.8%
Asian, NH	4.7%	6.6%	5.7%
American Indian and Alaska Native, NH	0.5%	0.6%	1.3%
Two or More Races	2.9%	2.8%	2.6%
Ages			
Under 5 Years Old	5.9%	6.1%	6.2%
Under 18 Years Old	23.6%	22.4%	22.8%
65 Years and Over	13.7%	14.6%	15.2%
Household and Economic Indicators			
Median Household Income (2011-2015)	\$83,700	\$74,551	\$53 <i>,</i> 889
Owner-occupied housing unit rate (2011-2015)	73.9%	66.8%	63.9%
Persons per household (2011-2015)	2.68	2.67	2.64
Language other than English spoken at home, percent age 5+ (2011-2015)	12.6%	17.2%	21.0%
High school graduate or higher, percent of persons age 25+ (2011-2015)	92.4%	89.4%	86.7%
Bachelor's degree or higher, percent of persons age 25+ (2011-2015)	39.1%	37.9%	29.8%
Persons in Poverty (2011-2015)	7.4%	9.7%	13.5%
Unemployment Rate, July 2017*	3.7%	4.2%	4.3%
Persons without health insurance (under age 65)	5.7%	7.0%	10.1%

Data Source: U.S. Census Bureau: State and County Quick Facts; 2016 Population Estimates; 2016 American Community Survey 1-year Estimates; United States Department of Labor; Bureau of Labor Statistics (*not seasonally adjusted preliminary unemployment rates)

FREDERICK MEMORIAL HOSPITAL DATA

There were 94,975 patient visits at Frederick Memorial Hospital including all their locations in 2015 compared to 92,011 in 2016. 62% of all patient visits were to the Emergency Department in both 2015 and 2016.



FMH All Patient Visits by Patient Location 2015 and 2016

Total patient visits at FMH decreased from 2015 to 2016. 60% of this decrease was from the Emergency Department, some of which may be attributed to the opening of the Dental Clinic. See <u>Oral Health section</u>.

In general, the FMH patient population mirrors the Frederick County population, with the exception of a higher percentage of FMH patients identifying as Black (14.8%) as opposed to only 9.8% in the county.

FMH General Statistics	2015	2016	FC Population*
Total patient visits at FMH	94,975	92,011	
Gender			
Male	42.4%	43.3%	49.3%
Female	57.6%	56.7%	50.7%
Age			
0-17 years	18.9%	18.8%	
18-39 years	30.7%	30.4%	
40-59 years	25.1%	24.7%	
60-79 years	17.9%	18.6%	
80+ years	7.4%	7.5%	
Race			
White	75.2%	74.9%	74.4%
Black	14.8%	14.3%	9.8%
Other	8.6%	9.1%	
Asian	1.6%	1.6%	4.7%
American Indian	0.1%	0.1%	0.5%
Ethnicity			
Not Hispanic or Latino	89.3%	88.5%	
Hispanic or Latino	8.0%	8.4%	9.1%
Unknown	2.7%	3.1%	

*FC Population values taken from the demographics table on the previous page where comparisons were available. Source: Frederick Memorial Hospital primary diagnosis codes for all Emergency Department, Observation and Inpatient Admissions, January 1, 2015 through December 31, 2016.

FMH staff identified the following areas as possible Barriers to Care for the Frederick County population:

1. Affordability:

Socioeconomic status. Fixed incomes make it a challenge to afford multiple co-pays for visits, copays for medications, understanding the more ill a patient is the more copays they can incur which can lead to being dismissed from primary care practices.

2. <u>Environment/Affordability</u>:

People who need help with bathing, housekeeping, shopping, and companionship and can't afford private duty. The waitlist for Social Services or Dept. of Aging personal care is months long, including Meals on Wheels for some areas. There are limited resources to support eating healthy, paying for health insurance, primary care physician copayments. High copays, donut hole for expensive medications for things like COPD and diabetes.

3. <u>Health Care Literacy</u>:

There is often a lack of understanding/education on the importance of managing, individual health care and setting it as a priority in everyday life. This includes:

- budgeting for healthcare expenditures and understanding the ramifications and long term consequences of poor health care choices.
- following what we consider "simple" instructions such as reading a prescription label (i.e. do not understand twice daily, do not understand taking 2 pills at one time).
- not having refills or not realizing that they need to continue to take medication, perhaps due to a lack of understanding of disease or due to being unable to navigate the system to get more refills.
- the importance of well check-ups and testing and how doing these things can affect their health in the long run.
- 4. Health Insurance:

Secondary coverage to Medicare is very expensive. There are a lot of folks in a gray area that don't qualify for Qualified Medicare Beneficiary program or Specified Low-Income Medicare Beneficiary program (QMB/SLMB) but also don't have the income to afford a secondary insurance. They can be hesitant to see specialists or have testing because they don't want another medical bill.

5. Lack of access to Primary/Specialty Care:

Patients may be ineligible for health care insurance products or not being able to afford to pay outof-pocket due to lacking insurance.

6. <u>Patient engagement</u>:

Major challenge for patients to be willing to change habits that are causing poor health and will guarantee continued poor health.

7. <u>Social/support network or caregiver</u>:

Lack of support network or caregiver, no in home assistance or resources

8. Transportation:

Transit is a good resource but some seniors that live outside of Frederick City are hesitant to use this and are not comfortable with the wait times or a bus. Time frame for scheduling doesn't allow them to get help with acute appointments so some may not schedule these visits because they know they have no transportation. Other patients need a companion to go to appointments and are therefore unable to utilize Transit. Many cannot get to a pharmacy for medication refills.

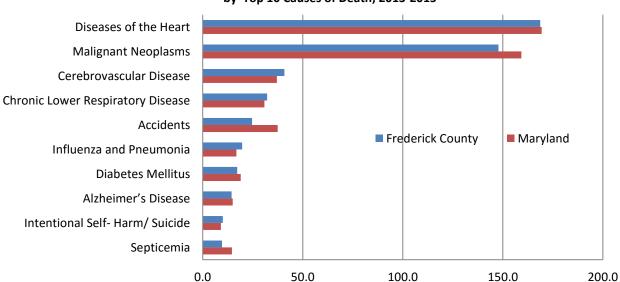
Death

Leading Causes of Death

Heart disease and cancers (malignant neoplasms) remain the top two causes of death in Frederick County and in Maryland, although both areas continue to decrease.

2013-2015: Age-adjusted Mortality Rates per 100,000		
Indicator	Frederick County	Maryland
All Causes	664.7	703.1
1. Diseases of the Heart	168.7	169.4
2. Malignant Neoplasms	147.8	159.3
3. Cerebrovascular Disease	40.8	37.1
4. Chronic Lower Respiratory Disease	32.2	30.8
5. Accidents	24.7	37.5
6. Influenza and Pneumonia	19.7	16.8
7. Diabetes Mellitus	17.2	19.0
8. Alzheimer's Disease	14.4	15.0
9. Intentional Self- Harm/ Suicide	10.0	9.1
10. Septicemia	9.6	14.6

*Age-adjusted death rates not calculated for jurisdictions with fewer than 20 deaths per category Source: Maryland Vital Statistics



Mortality Rates for Frederick County and Maryland by Top 10 Causes of Death, 2013-2015

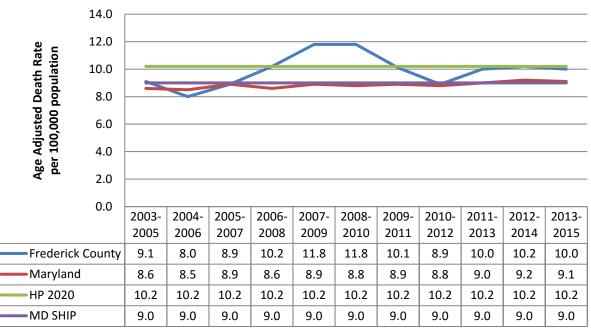
Source: Maryland Vital Statistics

Intentional Self- Harm/ Suicide

- Maryland 2017 Goal: Reduce suicide rate to 9.0 per 100,000 population.
- Healthy People 2020 Goal MHMD-1: Reduce the suicide rate to 10.2 suicides per 100,000 population.

The death rate for suicide in Frederick County has been decreasing since a peak in 2007. For the last several years, the Frederick County death rate has remained around 10.0, still consistently higher than the Maryland death rate.

Frederick County has met the Healthy People 2020 Goal, but has NOT met the Maryland 2017 Goal.



Suicide Rates

Frederick County and Maryland Trends 2003-2015

Source: Maryland Department of Health and Mental Hygiene Vital Statistics Annual Reports; Healthy People 2020 MHMD-1. * Adjusted to the standard U.S. 2000 population by the direct method. These rates should only be compared with other rates age-adjusted to the same population.

Overdose Deaths

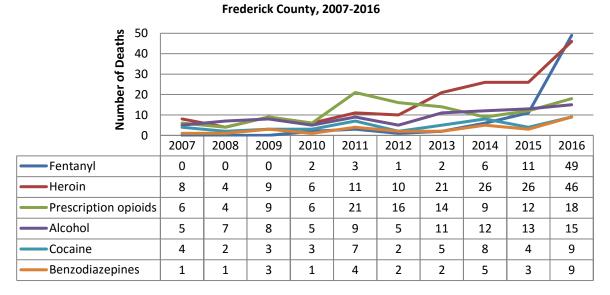
Fentanyl deaths more than quadrupled and surpassed heroin-related deaths in Frederick County, rising from 11 in 2015 to 49 in 2016. Heroin deaths almost doubled, going from 26 in 2015 to 46 in 2016. Alcohol-related deaths continue to increase since 2012 in Frederick County. Overdose death in Frederick County for cocaine, benzodiazepine, and oxycodone all increased from 2015 to 2016, while deaths related to methadone decreased.

The current <u>Local Health Improvement Plan Behavioral Health Work Group</u> is focused on goals related to this topic. For more information, see their action plan and progress.

Overdose Deaths in Frederick County and Maryland, 2016 (ranked by Frederick County)

2016	Frederick County	Maryland
Total Overdose Deaths	88	2089
Fentanyl	49	1119
Heroin	46	1212
Prescription Opioids	18	317
Alcohol	15	582
Cocaine	9	463
Benzodiazepine	9	126
Oxycodone	7	157
Methadone	3	197

Source: Drug and Alcohol Intoxication Deaths in Maryland, 2016.



Overdose Deaths by Substance

Source: Drug and Alcohol Intoxication Deaths in Maryland, 2016.

Adverse Childhood Experiences (ACEs)

Childhood experiences, both positive and negative, have a tremendous impact on future violence victimization and perpetration, and lifelong health and opportunity. As such, early experiences are an important public health issue.

Adverse Childhood Experiences have been linked to:

- risky health behaviors
- chronic health conditions
- low life potential
- early death

As the number of ACEs increases, so does the risk for these outcomes.

2015 was the first year that questions related to ACEs were included in the Maryland Behavioral Risk Factor Surveillance Survey and data specific to Frederick County became available. Frederick County has higher rates than Maryland for many of the ACE categories.

The current <u>Local Health Improvement Plan ACEs Work Group</u> is focused on goals related to this topic. For more information, see their action plan and progress.

2015	Frederick County	Maryland
Household Challenges		
Household mental illness	18.5%	15.0%
Household substance abuse	30.2%	24.9%
Incarcerated household member	*	7.6%
Parental separation or divorce	30.5%	27.5%
Intimate partner violence	*	17.4%
Abuse		
Emotional abuse	40.9%	31.2%
Physical abuse	*	16.9%
Sexual abuse	*	11.1%
Number of ACEs		
Zero	40.8%	40.2%
1 to 2	32.0%	35.7%
3 or more	27.2%	24.1%

Source: Maryland Behavioral Risk Factor Surveillance System (BRFSS)

* Suppressed due to denominator < 50 or relative standard error >= 30.0%.

Cancer

- ✤ Maryland 2017 Goal: Reduce overall cancer death rate to 147.42 per 100,000.
- Healthy People 2020 C-1: Reduce the overall cancer death rate to 160.6 deaths per 100,000 population.

Frederick County saw a 30% decrease in mortality rates for all cancers in last ten years (2004-2013), and a 13% decrease since the last reporting year. The mortality rate for Frederick County men decreased from 17% from 2012 to 2013 but still remains higher than the rates for women. For the second year in a row, Frederick County Blacks have a lower mortality rate than Whites, while Maryland Blacks consistently have a higher rate than Maryland Whites.

Frederick County has met the Maryland 2017 Goal for all groups except men.

Individual Cancer Sites have specific Healthy People 2020 goals, which are listed in the table below. Frederick County has NOT met the Healthy People 2020 goals for all cancer mortality rates for all sites.

All Cancers (2013)	Frederick County	Maryland	HP2020	Met Goal?
Total	141.8	162.9		Yes
Male	167.3	194.9		No
Female	124.5	141.6	↓ 160.6	Yes
White	145.9	161.6		Yes
Black	133.2	182.0		Yes
Lung and Bronchus Can	cer Mortality (2009-	2013)		
Total	40.4	44.5	↓ 45.5	Yes
Colorectal Cancer Mort	ality (2009-2013)			
Total	16.0	14.9	↓ 14.5	No
Breast Cancer Mortality	(2009-2013)			
Total (Female only)	20.7	23.1	↓ 20.6	No
Prostate Cancer Mortal	ity (2009-2013)			
Total	21.7	21.3	↓ 21.2	No
Cervical Cancer Mortali	ty (2009-2013)			
Total	*	2.1	↓ 2.2	N/A
Oral Cancer Mortality (2009-2013)			
Total	*	2.4	↓ 2.3	N/A
Melanoma Cancer Mortality (2009-2013)				
Total	2.9	2.6	↓ 2.4	No

Cancer Mortality Rates

Source: Maryland Cancer Report. Rates are per 100,000 and are age-adjusted to 2000 US standard population. *Rates based on case counts of 1-19 are suppressed per MDH/MCR Data Use Policy and Procedures

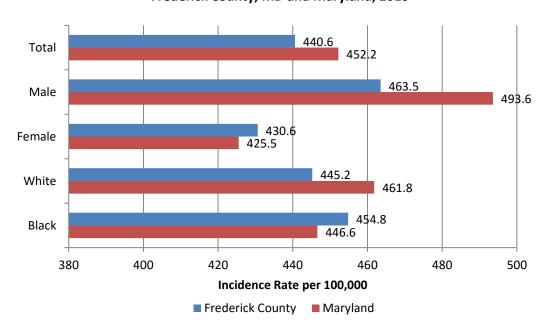
Cancer Incidence Rates – All Cancers

Frederick County saw a 24% decrease in incidence rates for all cancers in last ten years (2004-2013), and a 2% increase since the last reporting year. There has been a 27% decrease since the peak in 2005.

Cancer incidence rates increased for every category from 2012 to 2013. Males continue to have a higher incidence rate than females in both Frederick County and Maryland. Incidence rates in Frederick County Blacks increased 19% from 2012 to 2013 and are now higher than the rates in Frederick County Whites and Maryland Blacks.

All Cancers (2013)	Frederick County	Maryland
Total	440.6	452.2
Male	463.5	493.6
Female	430.6	425.5
White	445.2	461.8
Black	454.8	446.6
Other	210.6	259.7

Source: Maryland Cancer Report. Rates are per 100,000 and are age-adjusted to 2000 US standard population.



Incidence Rates for All Cancers Frederick County, MD and Maryland, 2013

Source: Maryland Cancer Report. Rates are per 100,000 and are age-adjusted to 2000 US standard population.

Cancer Incidence Rates – By Type, 2009-2013

Cancer Incidence Rates per 100,000 are provided in the tables below, with gender and race data included as available. In all categories where gender was reported, males have higher cancer incidence than females. Blacks have higher incidence rates than whites for lung & bronchus cancers and prostate cancer, but Whites have higher incidence for colorectal cancer and dramatically higher for female breast cancer, due to the Black breast cancer incidence rate decreasing from 109.5 to 86.3.

Lung & Bronchus Cancer Incidence

	Frederick County	Maryland
Total	50.7	57.2
Male	55.5	65.6
Female	47.6	51.0
White	52.0	59.2
Black	46.4	55.8

Colorectal Cancer Incidence

	Frederick County	Maryland
Total	43.8	36.8
Male	53.4	41.8
Female	36.2	33.0
White	43.6	35.4
Black	47.9	41.2

Breast Cancer Incidence

	Frederick	
	County	Maryland
Total (Female only)	121.3	128.5
White	122.5	129.0
Black	110.6	127.4

Prostate Cancer Incidence

	Frederick County	Maryland
Total	111.5	130.9
White	103.1	112.6
Black	231.2	188.7

Oral Cancer Incidence

	Frederick County	Maryland
Total	10.0	10.4
Male	15.2	16.0
Female	5.6	5.8
White	10.0	11.6
Black	*	7.7

Melanoma Cancer Incidence

	Frederick County	Maryland
Total	22.0	21.0
Male	27.9	27.8
Female	17.1	16.3
White	24.3	29.8
Black	0.0	0.9

Cervical Cancer Incidence

	Frederick County	Maryland
Total	5.4	6.5
White	5.8	5.9
Black	*	7.8

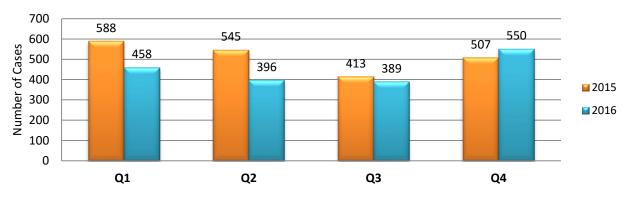
Source: Maryland Cancer Report. Rates are per 100,000 and are age-adjusted to 2000 US standard population. *Rates based on case counts of 1-19 are suppressed per MDH/MCR Data Use Policy and Procedures

Chronic Disease

Chronic Obstructive Pulmonary Disease (COPD)

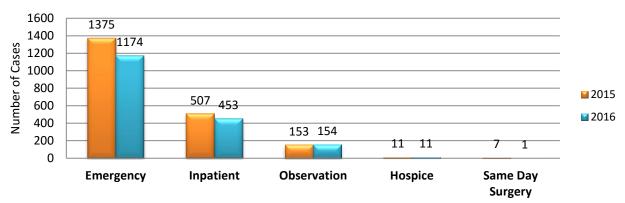
FREDERICK MEMORIAL HOSPITAL DATA

There were 2,053 cases of COPD in 2015 which decreased to 1,793 in 2016. The decrease was most noticeable in the first half of 2016, but 4th quarter of 2016 was higher than 4th quarter of 2015. Two-thirds of the cases of COPD were seen in the Emergency Department.



COPD Cases Over Time 2015 and 2016

COPD Cases by Location 2015 and 2016

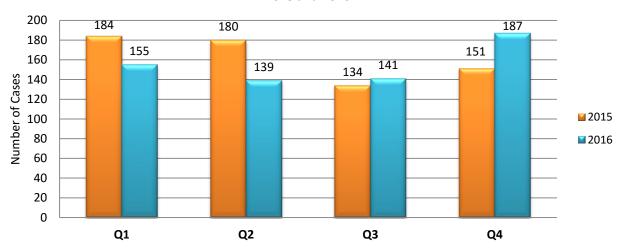


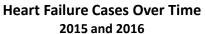
2016 1,793 43.9% 56.1% 22.3% 19.1% 25.7%
43.9% 56.1% 22.3% 19.1%
56.1% 22.3% 19.1%
56.1% 22.3% 19.1%
22.3% 19.1%
19.1%
19.1%
25.7%
25.1%
7.8%
70.8%
20.9%
7.5%
0.8%
0.0%
0.1%
90.1%
7.2%
2.7%

Heart Failure

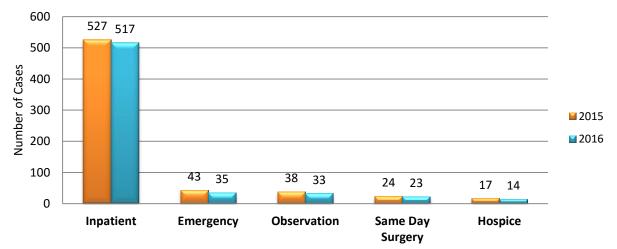
FREDERICK MEMORIAL HOSPITAL DATA

There were 649 cases of Heart Failure in 2015 which decreased to 622 in 2016. The decrease was most noticeable in the first half of 2016, but the second half of 2016 was higher than the second half of 2015. Eight out of ten of the cases of heart failure were admitted as inpatients.





Heart Failure Cases by Location 2015 and 2016



FMH Heart Failure Case Statistics	2015	2016
Total patient visits at FMH	649	622
Gender		
Male	53.7%	53.7%
Female	46.3%	46.3%
Age		
0-17 years	2.5%	1.1%
18-39 years	14.8%	14.8%
40-59 years	38.1%	45.3%
60-79 years	44.7%	38.8%
80+ years	2.5%	1.1%
Race		
White	81.5%	82.6%
Black	14.0%	13.0%
Other	3.4%	2.9%
Asian	0.9%	1.1%
American Indian	0.2%	0.0%
Ethnicity		
Not Hispanic or Latino	96.0%	94.1%
Hispanic or Latino	2.3%	3.1%
Unknown	1.7%	2.9%

Maternal, Infant, Child Health

Birth Rate

Birth rates in Frederick County remained the same from 2014 to 2015 and remain lower than Maryland in all race groups except for White Non-Hispanic.

Birth Rates by Race, per 1,000 population.

2015	Frederick County	Maryland
All births **	11.5	12.2
White Non-Hispanic	10.5	10.2
Black Non-Hispanic	13.0	13.0
Asian/Pacific Islander	10.8	13.3
Hispanic***	19.6	20.5

Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH

**Includes races categorized as 'unknown' or 'other'.

***Includes all persons of Hispanic origin of any race.

Teen Birth Rate

The teen birth rate for 15-17 year old's in Frederick County decreased from 6.8 births per 1,000 in 2014 to 5.1 births per 1,000 in 2015. The teen birth rate in Frederick County remains lower than Maryland in all race groups except for Hispanic 15-17 year old population.

Teen Birth Rates by Race, per 1,000 population (maternal age under 20 years).

2015	Frederic	k County	Mary	land
Maternal Age:	15-17	18-19	15-17	18-19
All births	5.1	20.9	8.4	29.6
White Non-Hispanic	1.6	14.2	3.4	17.3
Black Non-Hispanic	*	32.4	11.8	39.7
Hispanic**	36.4	52.3	24.3	69.5

Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH

*Rates based on <5 events in the numerator are not presented since such rates are subject to instability.

**Includes all persons of Hispanic origin of any race.

Cesarean Section Births

33% of infants born in Frederick County in 2015 were delivered by cesarean delivery. The percentage of infants delivered by cesarean section has increased by 14% over the past decade.

C-Section Rates by Race, per 1,000 population

2015	Frederick County	Maryland
All births	33.3%	34.9%
White Non-Hispanic	32.5%	32.6%
Black Non-Hispanic	41.5%	39.5%
Hispanic*	29.3%	30.7%

Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH *Includes all persons of Hispanic origin of any race.

Early Prenatal Care

- MD 2017 Goal: Increase the percent of pregnant women receiving early prenatal care to 66.9%
- Healthy People 2020 MICH-10.1: Increase the proportion of pregnant women who receive early and adequate prenatal care to 77.9%

The percentage of pregnant women in Frederick County who have received early prenatal care increased from 75.8% in 2014 to 77.5% in 2015, but remains consistently higher than the Maryland percentage. A racial breakdown of early prenatal care shows disparity, particularly in the Hispanic and Black Non-Hispanic populations, both of which saw a decrease from 2014 to 2015 in Frederick County. **Frederick County has met the MD 2017 Goal for all races, White Non-Hispanic, and Asian/Pacific Islander populations, but NOT for Black Non-Hispanic or Hispanic populations. Frederick County has met the Healthy People 2020 Goal only for the White Non-Hispanic and Asian/Pacific Islander populations.**

Early Prenatal Care (begins in 1st trimester of pregnancy)

2015	Frederick County	Maryland
All races	77.5%	66.9%
White Non-Hispanic	83.2%	77.9%
Black Non-Hispanic	64.4%	60.4%
Asian/Pacific Islander	80.8%	68.3%
Hispanic	59.9%	48.1%

Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH; Healthy People 2020. *Rates based on <5 deaths are not presented since rates based on small numbers are statistically unreliable.

Infant Mortality

- MD 2017 Goal: Reduce rate of infant deaths to 6.3 deaths per 1,000 live births
- Healthy People 2020 MICH-1.3: Reduce rate of infant deaths to 6.0 deaths per 1,000 live births

Frederick County's infant mortality rate increased slightly from 3.6 deaths per 1,000 live births in 2014 to 3.9 in 2015, but remains consistently lower than the Maryland infant mortality rate. **Frederick County has met the Maryland 2017 Goal and the Healthy People 2020 Goal.**

Infant Mortality (per 1,000 live births)

2015	Frederick County	Maryland
All races	3.9	6.7
White	2.5	4.3
Black	*	11.2

Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH; Healthy People 2020.

*Rates based on <5 deaths are not presented since rates based on small numbers are statistically unreliable.

Low Birth Weight

- **MD 2017 Goal: Reduce low birth weight births to 8.0% of births**
- Healthy People 2020 MICH-8.1: Reduce low birth weight births to 7.8% of births

Frederick County's infant mortality rate decreased slightly from 7.5% of births in 2014 to 7.4% in 2015, but remains consistently lower than the Maryland infant mortality rate. A racial breakdown of low birth weight shows disparity, particularly in the Black Non-Hispanic population, which saw an increase from 10.5% in 2014 to 13.4% in 2015 in Frederick County. **Overall for all races except for Black Non-Hispanic, Frederick County has met the Maryland 2017 Goal and the Healthy People 2020 Goal.**

Low Birth Weight (less than 2500 grams at birth)

2015	Frederick County	Maryland
All races	7.4%	8.6%
White Non-Hispanic	6.4%	6.7%
Black Non-Hispanic	13.4%	11.9%
Asian/Pacific Islander	3.1%	4.0%
Hispanic	7.4%	7.2%

Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH; Healthy People 2020.

*Rates based on <5 deaths are not presented since rates based on small numbers are statistically unreliable.

Preterm Birth

Healthy People 2020 MICH-9.1: Decrease preterm births to 11.4% of live births

The percentage of preterm births in Frederick County increased from 9.2% in 2014 to 10.4% in 2015, and is now slightly higher than the Maryland percentage. **Frederick County has met the Healthy People 2020 Goal for all populations except for Black Non-Hispanic and Hispanic.**

Preterm birth (live birth <37 weeks gestation).

2015	Frederick County	Maryland
All races	10.4%	10.0%
White Non-Hispanic	9.6%	8.8%
Black Non-Hispanic	13.1%	12.5%
Asian/Pacific Islander	10.6%	8.5%
Hispanic	11.9%	9.1%

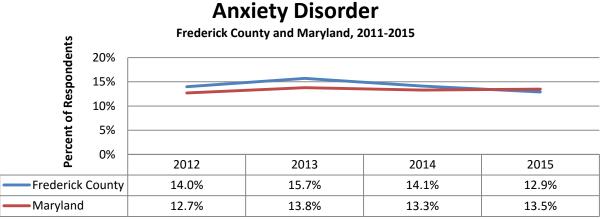
Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland MDH; Healthy People 2020

*Rates based on <5 deaths are not presented since rates based on small numbers are statistically unreliable.

Mental Health

Anxiety

- The percent of Frederick County adults reporting that they have an anxiety disorder has decreased from 15.7% in 2013 to 12.9% in 2015.
- Frederick County adults reported having an anxiety disorder at a slightly lower rate percentage than Maryland adults for the first time in 2015.



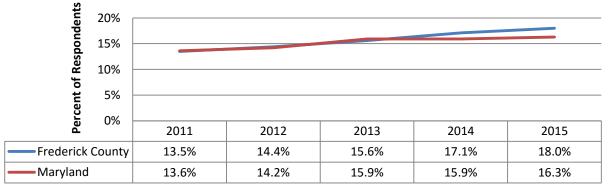
Source: BRFSS Data, Question: ANXIETY DEPRESSION: HAS A DOCTOR EVER TOLD YOU THAT YOU HAD AN ANXIETY DISORDER (INCLUDING ACUTE STRESS, ANXIETY, OBSESSIVE-COMPULSIVE, PANIC, PHOBIA, PTSD, OR SOCIAL ANXIETY)?

Depressive Disorder

- The percent of Frederick County adults reporting that they have a depressive disorder diagnosed by a doctor has continued to rise and is now at 18% in 2015.
- Frederick County adults report having a depressive disorder diagnosed by a doctor at a higher percentage than Maryland adults, 18.0% in Frederick County and 16.3% in Maryland in 2015.

Depressive Disorder

Frederick County and Maryland, 2011-2015



Source: BRFSS Data, Question: ANXIETY DEPRESSION: HAS A DOCTOR EVER TOLD YOU THAT YOU HAVE A DEPRESSIVE DISORDER (INCLUDING DEPRESSION, MAJOR DEPRESSION, DYSTHYMIA, OR MINOR DEPRESSION)?

Days Mental Health Not Good

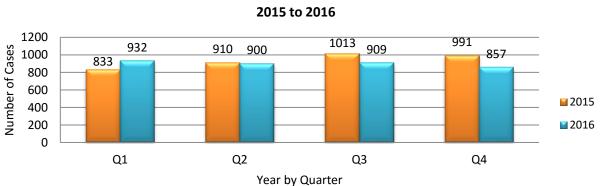
- In 2015, approximately two-thirds of Frederick County adults (65.3%) reported that they have not had any days in which their mental health was not good in the past 30 days.
- One in five Frederick County adults (19.4%) reported that their mental health was not good in 7 of the past 30 days.
- More than 10% of Frederick County adults reported that their mental health was not good in 15 or more of the past 30 days.

2015	Frederick County	Maryland
None	65.3%	66.7%
1-7 Days	19.4%	19.8%
8-14 Days	4.6%	3.5%
15+ Days	10.8%	9.9%

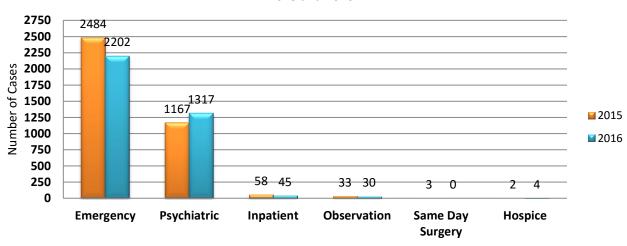
Source: BRFSS Data, Question: HEALTH STATUS: NUMBER OF DAYS MENTAL HEALTH NOT GOOD IN PAST 30 DAYS

FREDERICK MEMORIAL HOSPITAL DATA

There were 3,747 mental health cases in 2015 which decreased to 3,598 in 2016. Almost two-thirds of the mental health cases were seen in the Emergency Department (66.2% in 2015 and 61.2% in 2016). 30% of these cases were Psychiatric cases in 2015, which increased to 36.6% in 2016.



Mental Health Case Volume



Mental Health Cases by Patient Type 2015 and 2016

Source: Frederick Memorial Hospital primary diagnosis codes for all Emergency Department, Observation and Inpatient Admissions, January 1, 2015 through December 31, 2016

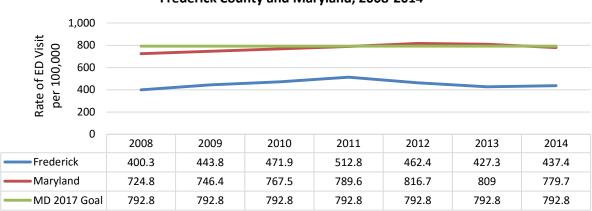
FMH Mental Health Statistics	2015	2016
Total patient visits at FMH	3,747	3,598
Gender		
Male	46.8%	43.8%
Female	53.2%	56.2%
Age		
0-17 years	19.5%	16.5%
18-39 years	45.3%	50.1%
40-59 years	24.0%	23.8%
60-79 years	8.4%	7.6%
80+ years	2.9%	2.1%
Race		
White	78.3%	76.6%
Black	14.0%	14.7%
Other	6.3%	6.5%
Asian	1.2%	2.2%
American Indian	0.2%	0.1%
Ethnicity		
Not Hispanic or Latino	92.3%	91.6%
Hispanic or Latino	5.4%	5.6%
Unknown	2.3%	2.8%

Oral Health

• Maryland 2017 Goal: Decrease the Emergency Department visit rate for dental care to 792.8 per 100,000.

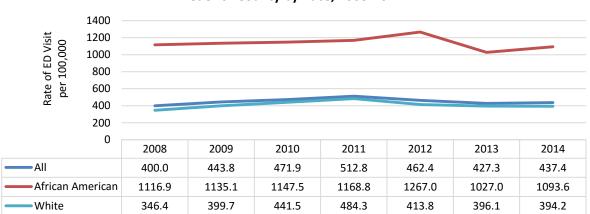
Frederick County continues to have a lower rate of Emergency Department (ED) visits for dental care than Maryland, although a slight increase was seen from 2013 to 2014. In Frederick County, African Americans report the highest rate of ED use for dental care, which is more than twice as high as Frederick County Whites.

Frederick County is meeting the Maryland 2017 Goal overall, but not among its African American population.



Emergency Department Visit Rate for Dental Care Frederick County and Maryland, 2008-2014

Source: Maryland Health Services Cost Review Commission (HSCRC), Research Level Statewide Outpatient Data Files



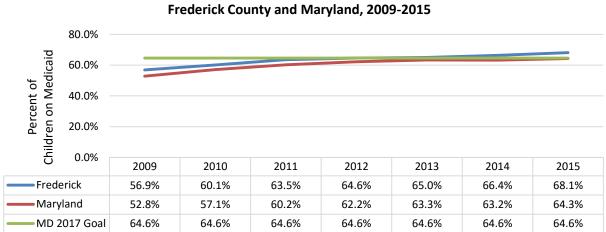
Emergency Department Visit Rate for Dental Care Frederick County by Race, 2008-2014

Source: Maryland Health Services Cost Review Commission (HSCRC), Research Level Statewide Outpatient Data Files

• Maryland 2017 Goal: Increase the percent of children receiving dental care to 64.6%.

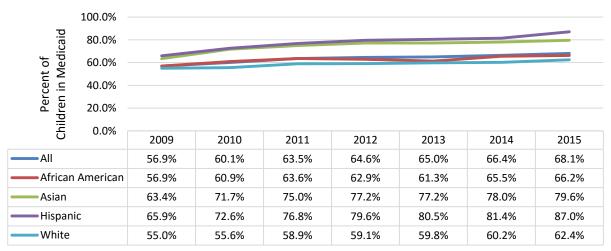
Dental care for children continues to increase in both Frederick County among all race populations and Maryland. In Frederick County, over two-thirds (68.1%) of children enrolled in Medicaid reported having a dental visit in the past year in 2015. This has increased 20% since 2009. Frederick County continues to have higher rates than Maryland.

Frederick County continues to meet the Maryland 2017 Goal for all race populations except for White children.



Children in Medicaid Receiving Dental Care in Last Year Frederick County and Maryland, 2009-2015

Children in Medicaid Receiving Dental Care in Last Year Frederick County by Race, 2009-2015

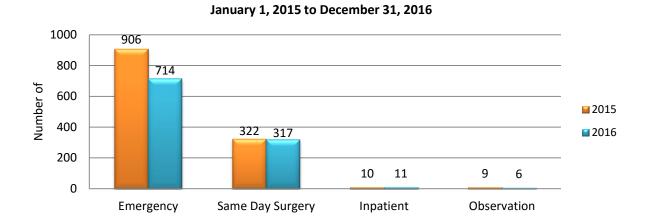


Source: Maryland Medicaid Service Utilization from Maryland State Health Improvement Plan (SHIP). This indicator shows the percentage of children (aged 0-20 years) enrolled in Medicaid (320+ days) who had a dental visit during the past year. http://frederick.md.networkofcare.org/ph/ship-detail.aspx?id=md_ship38

FREDERICK MEMORIAL HOSPITAL DATA

The majority of patients coming to Frederick Memorial Hospital for dental issues come to the Emergency Department (ED). This has remained consistent from 2015 to 2016, but a decrease was seen in dental cases in the ED in 2016.

FMH Dental Cases by Patient Location



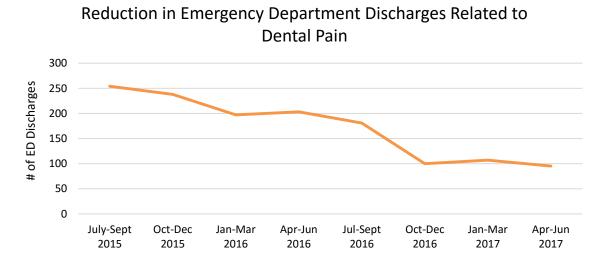
FMH Dental Statistics	2015	2016
Total patient visits at FMH	1,247	1,048
Gender		
Male	46.7%	46.3%
Female	53.3%	53.7%
Age		
0-17 years	22.7%	23.5%
18-39 years	52.7%	51.2%
40-59 years	19.4%	18.6%
60-79 years	4.4%	5.3%
80+ years	0.8%	1.4%
Race		
White	70.5%	73.4%
Black	21.3%	17.8%
Other	6.6%	7.4%
Asian	1.4%	1.2%
Ethnicity	2015	2016
Not Hispanic or Latino	92.4%	91.3%
Hispanic or Latino	5.8%	7.3%
Unknown	1.8%	1.4%

The Monocacy Health Partners Dental Clinic opened in August 2016. This clinic was opened as a resource for uninsured and underinsured adults.

Outcomes:

- Successfully reduced Emergency Department (ED) related dental visits by 43% in comparing July 2015 through December 2015 and July 2016 through December 2016. Consistent reduction in ED visits from 44% in January 2017 thru March 2017.
- Identified patients with multiple comorbidities and referred to Primary Care settings for chronic disease management.

FMH Dental Clinic Services	8/16 (open) to 5/31/17
Non-emergent Services	142
Denture Related Services	33
Emergency Evaluations	511
Extractions	716
X-ray Services	681



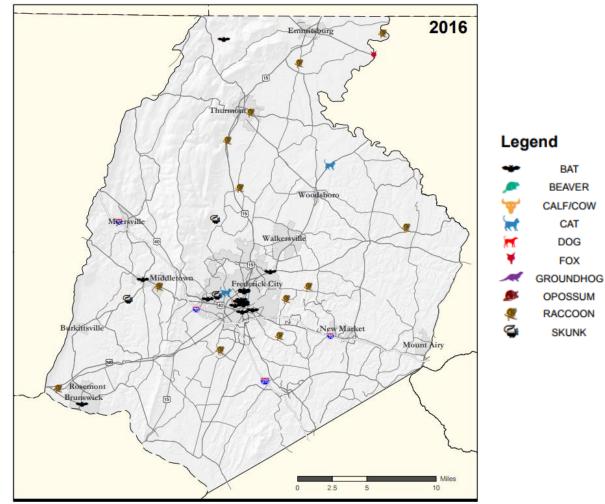
Source: Frederick Memorial Hospital primary diagnosis codes for all Emergency Department, July 1, 2015 through June 30, 2017

Rabies

Rabies is a virus that can affect both domesticated (dogs and cats) and non-domesticated animals (groundhogs, skunks, cows, bats, opossums, etc.). The rabies virus is transmitted through the saliva of an infected animal. Rabies is a serious disease because it is almost always fatal in humans and animals. Fortunately, there is a vaccine for humans that can be administered after exposure that is highly successful in preventing the disease if administered promptly, in general within 6 days of infection.

2016 (calendar year)	Frederick County	Notes
# of Bite Reports	591	FC accounted for 10% of positive
# of Animals Tested Positive	35	animals in Maryland (337)

Source: Frederick County Health Department, Environmental Health data



Rabid Animals in Frederick County in 2016 (calendar year):

Click on map to see larger version and maps of previous years. http://health.frederickcountymd.gov/DocumentCenter/Home/View/1913

Sexually Transmitted Diseases (STDs)

HIV

- Thirteen new cases of HIV were diagnosed in Frederick County in 2015 and 12/13 were linked to care.
- 320 adults and adolescents are living with HIV/AIDS in Frederick County.

	Frederick County	Notes	
# Adult/Adolescent AIDS diagnoses in 2015	13	12 were linked to care	
# Adult/Adolescent HIV Cases living without AIDS on 12/31/2015	168		
# Adult/Adolescent HIV Cases living with AIDS on 12/31/2015	152	 Adult/Adolescent population is defined as 13 years and older at 	
Total # of adults/adolescents living with HIV/AIDS on 12/31/2015	320	HIV diagnosis.	
# Pediatric HIV cases as of	6	Pediatric cases are less than 13	
12/31/2015		years at HIV diagnosis	

Source: Western Region HIV Annual Epidemiological Profile, 2015. Maryland Department of Health, Prevention and Health Promotion Administration. Link to report.

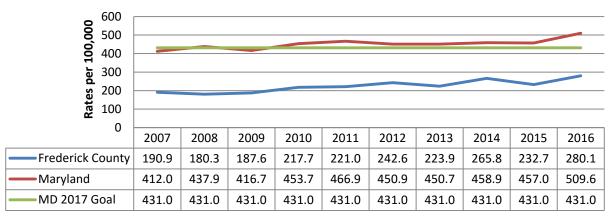
Chlamydia

MD 2017 Goal: Reduce chlamydia rates to 431 per 100,000

Rates of chlamydia are in an upward trend in Frederick County with an all-time high of 280.1 per 100,000 in 2016, which is a 20% increase since 2014. Frederick County chlamydia rates continue to be much lower than rates in Maryland. **Frederick County continues to meet the Maryland 2017 Goal.**

Chlamydia Rates in Frederick County

Frederick County and Maryland Trends 2005-2015



Source: Maryland Department of Health and Mental Hygiene, Center for Sexually Transmitted Infection Prevention (CSTIP) <u>http://phpa.dhmh.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx</u>

Gonorrhea

• Rates of gonorrhea in Frederick County continue to rise overall. In 2016, the rate was 40.2 per 100,000 which was an increase of 16% from 2014.

Gonorrhea Rates

• Frederick County continues to have lower gonorrhea rates than Maryland.

Frederick County and Maryland Trends 2005-2015 180 160 **Rates per 100,000** 140 120 100 80 60 40 20 0 2007 2013 2016 2008 2009 2010 2011 2012 2014 2015 Frederick County 29.4 19.4 24.5 24.9 27.1 25.9 32.3 36.2 34.6 40.2 120.5 128.4 110.8 Maryland 118.3 112.2 96.6 101.0 102.2 114.2 158.3

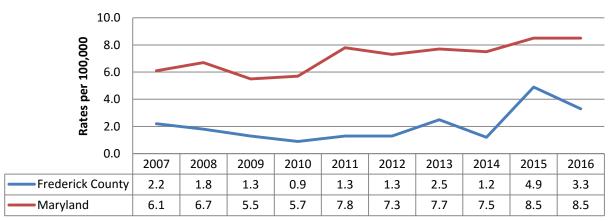
Source: Maryland Department of Health and Mental Hygiene, Center for Sexually Transmitted Infection Prevention (CSTIP) http://phpa.dhmh.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

Syphilis

- Rates of syphilis in Frederick County are low but continue to rise. In 2016, the rate was 3.3 per 100,000 which was more than double the 2014 rate.
- Frederick County continues to have lower syphilis rates than Maryland.

Primary and Secondary Syphilis Rates

Frederick County and Maryland Trends 2005-2015



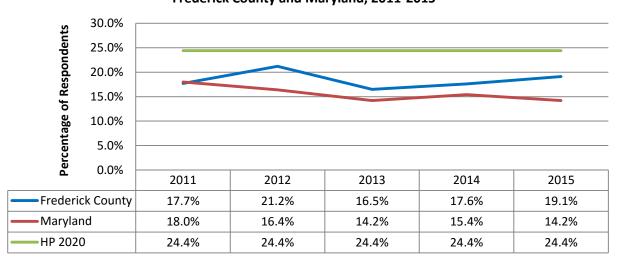
Source: Maryland Department of Health and Mental Hygiene, Center for Sexually Transmitted Infection Prevention (CSTIP) http://phpa.dhmh.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

Substance Use

Alcohol

Healthy People 2020: Reduce the proportion of persons engaged in binge drinking during the past 30 days to 24.2%.

Binge drinking in Frederick County has increased to 19.1% of adults saying they engaged in binge drinking in the past month in 2015, from 17.6% in 2014. Frederick County maintains a higher rate of binge drinking than Maryland. **Frederick County continues to meet the Health People 2020 goal.**



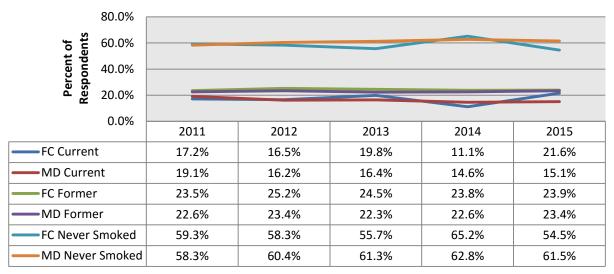
Binge Drinking Frederick County and Maryland, 2011-2015

Source: BRFSS Data, Question: ALCOHOL: BINGE DRINKERS (MALES HAVING FIVE OR MORE AND FEMALES HAVING FOUR OR MORE DRINKS ON ONE OCCASION IN THE PAST MONTH, Healthy People 2020 objective SA-14.3: Reduce the proportion of persons engaging in binge drinking during the past 30 days – adults age 18 years and older – to 24.4%.

Tobacco

- **Maryland 2017 Goal: Reduce the percent of adults who are current smokers to 15.5%.**
- **Healthy People 2020: Reduce cigarette smoking by adults to 12%.**

Smoking in Frederick County has increased to 21.6% of adults saying they are current smokers in 2015, which was an increase from 11.1% in 2014. The percent of current smokers in Frederick County is now higher than in Maryland. Almost one in four Frederick County adults (23.9%) say that they are a former smoker but only half (54.5%) of Frederick County adults say they have never smoked. **Frederick County is NOT meeting the Maryland 2017 goal or the Health People 2020 goal.**



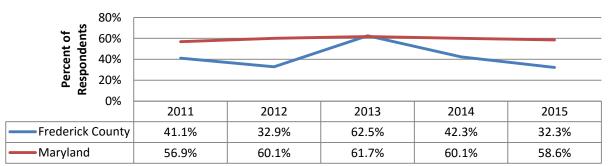
Smoking Status

Frederick County and Maryland, 2011-2015

Source: BRFSS Data, Question: TOBACCO: SMOKING STATUS. Maryland 2017 Goal: Reduce the % of adults who are current smokers to 15.5%. HP2020 TU-1.1: Reduce cigarette smoking by adults to 12%

Fewer Frederick County adults (32.3%) report trying to quit smoking in the last 12 months than in 2014 (42.3%) or compared to Maryland adults (58.6%) in 2015.

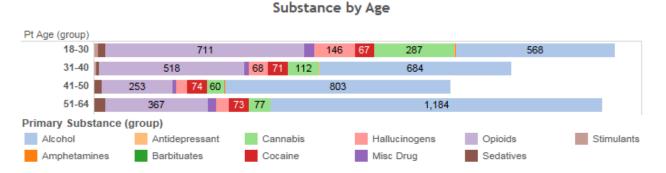
Tried to Quit in Last 12 Months Frederick County and Maryland, 2011-2015



Source: BRFSS Data, Question: DURING THE LAST 12 MONTHS, HAVE YOU STOPPED SMOKING FOR 1 DAY OR LONGER BECAUSE TRYING TO QUIT SMOKING?

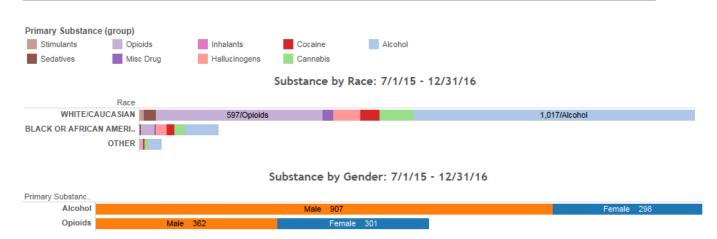
FREDERICK MEMORIAL HOSPITAL DATA

- Alcohol is the primary concern.
- Opioids/Heroin is second concern at 40% less than Alcohol.
- Younger persons and adults prior to Medicare eligibility are largest age groups affected.
- Low occurrence age groups omitted in graph for privacy reasons,
- Counts represent visits not unique persons.

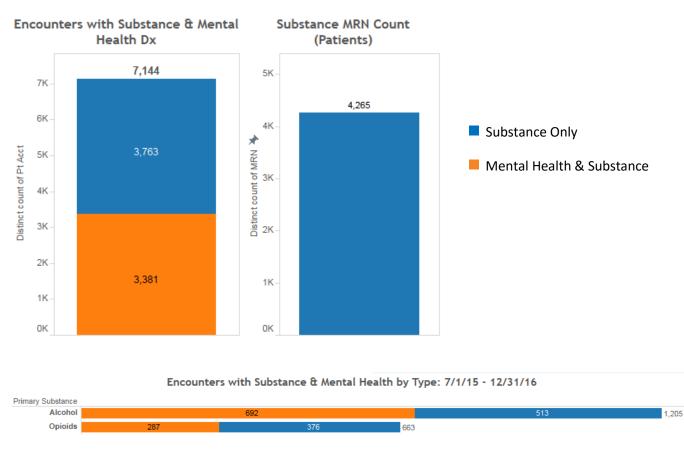


Source: Frederick Memorial Hospital primary and secondary diagnosis codes for all Emergency Department, Observation and Inpatient Admissions, January 1, 2015 through December31, 2016.

- Caucasians are primary population of focus.
- Males are predominant except with Opioids.
- Opioids split 50/50 between genders.
- Smaller substance populations excluded in this view for privacy reasons.
- Counts are visits not unique persons.



Almost 50% of Substance Use encounters also have Mental Health diagnoses.
 Smaller substance populations excluded in this view for privacy reasons.



Youth

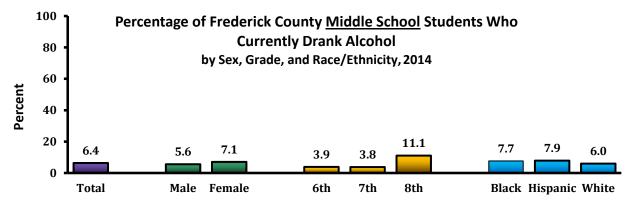
Selected topics from the Youth Risk Behavior Survey are provided in this report. Additional Frederick County data is available <u>here</u>. Special highlight topics include:

- Gay, Lesbian, and Bisexual Students: Bullying and Violence
- Opioid Use in Middle and High Schools

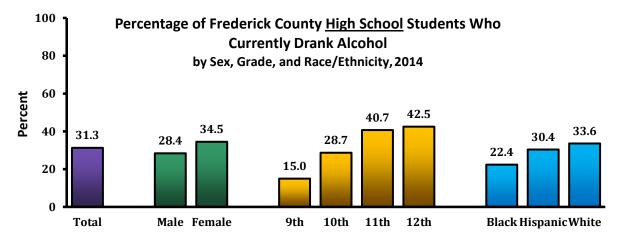
For youth dental information, see the Oral health section of this report.

Alcohol

- 6.4% of Frederick County Middle School students report having at least one drink of alcohol in the last month in 2014. This is lower than Maryland (7.9%).
- Almost one in three (31.3%) of Frederick County High School students report having at least one drink of alcohol in the last month in 2014. This is higher than Maryland (26.1%).

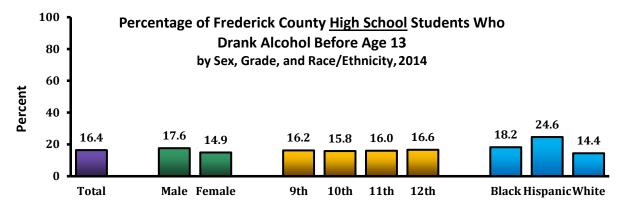


Source: YRBS Data, Question: Percentage of students who currently drank alcohol (at least one drink of alcohol on at least 1 day during the 30 days before the survey)



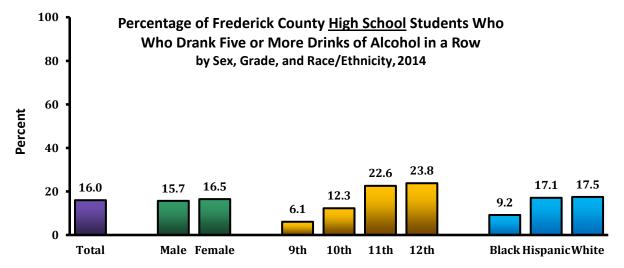
Source: YRBS Data, Question: Percentage of students who currently drank alcohol (at least one drink of alcohol on at least 1 day during the 30 days before the survey)

• In 2014, 16.4% of Frederick County High School students reported that they drank alcohol before they were 13 years old. This is slightly higher for boys than girls, and for Hispanic students.



Source: YRBS Data, Question: Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips).

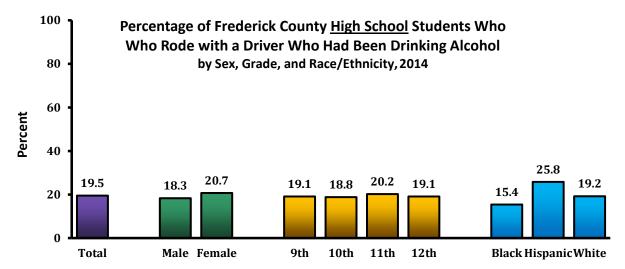
• 16% of Frederick County High School students reported that they drank five or more drinks of alcohol in a row, which is considered binge drinking. This is higher in higher grades and among Hispanic and White students than Black students.



Source: YRBS Data, Question: Percentage of students who drank five or more drinks of alcohol in a row (within a couple of hours on at least 1 day during the 30 days before the survey)

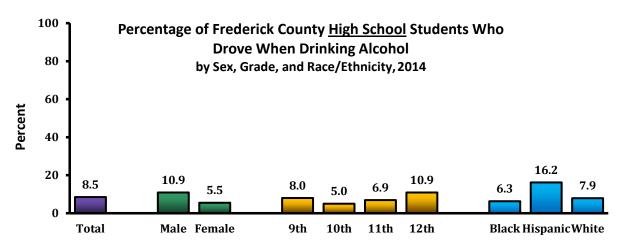
Frederick County, Maryland Community Health Assessment Interim Report, October 2017

• In 2014, almost one in five (19.5%) of Frederick County High School students reported that they rode in a car with a driver who had been drinking alcohol. This was slightly higher for girls than boys, relatively consistent across the grades, and higher for Hispanic students.



QN10: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle one or more times during the 30 days before the survey)

• In 2014, 8.5% of Frederick County High School students reported that they drove in a car after they had been drinking alcohol. This was higher for boys than girls, higher in 12th grade, and highest for Hispanic students.

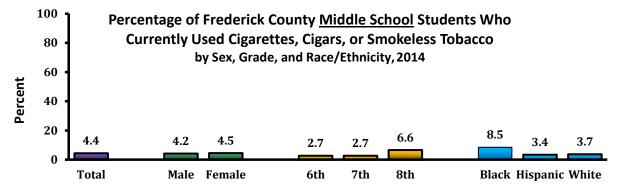


QN11: Percentage of students who drove when drinking alcohol (one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

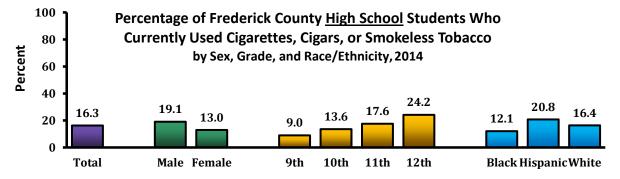
Frederick County, Maryland Community Health Assessment Interim Report, October 2017

Tobacco

- In 2014, 4.4% of Frederick County Middle School students reported that they currently used cigarettes, cigars, or smokeless tobacco, compared to 16.3% of High School students.
- This is higher in each higher grade, and for Black Middle School students and Hispanic High School students.

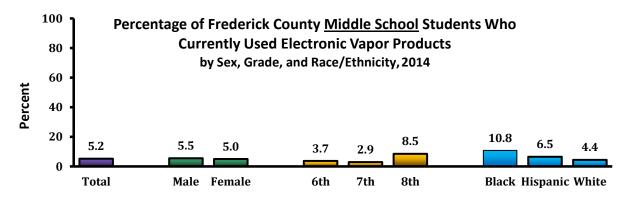


Source: YRBS Data, Question: Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)



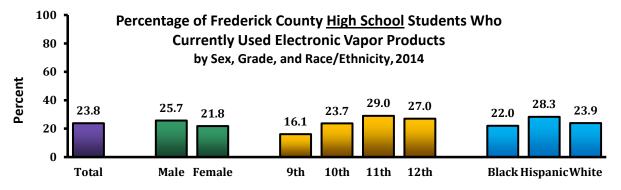
Source: YRBS Data, Question: Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)

• In 2014, 5.2% of Frederick County Middle School students reported currently using electronic vapor products. This was highest among 8th graders (8.5%) and among Black students (10.8%).



Source: YRBS Data, Question: Percentage of students who currently used electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens such as blu, NJOY, or Starbuzz on at least 1 day during the 30 days before the survey)

• Almost one in four (23.8%) of Frederick County High School students reported currently using electronic vapor products in 2014. This was higher among boys than girls, and among Hispanic students.



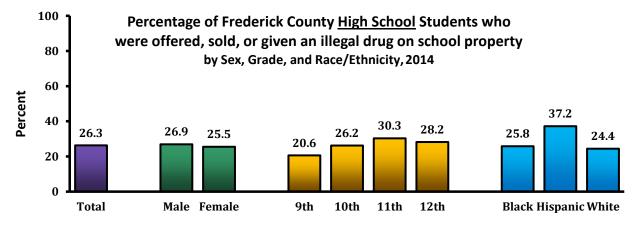
Source: YRBS Data, Question: Percentage of students who currently used electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens such as blu, NJOY, or Starbuzz on at least 1 day during the 30 days before the survey)

Other Substances

- In 2014, almost one third (32%) of Frederick County High School students had tried marijuana.
- One in five (19.3%) Frederick County High School students reported currently using marijuana in 2014.
- Among Frederick County High School students, every category listed below was higher among Hispanic students except for use of prescription drugs without a prescription.
- More than one in four (26.3%) of Frederick County High School students reported that they were offered, sold, or given an illegal drug on school property in 2014.

2014	Middle School	High School
Ever used marijuana	4.4%	32.0%
Currently use marijuana	3.7%	19.3%
Ever used cocaine (any form of cocaine, such as powder, crack, or freebase)	2.5%	4.8%
Ever used inhalants (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).	4.7%	7.4%
Ever used prescription drugs w/o prescription (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax)	4.5%	16.7%
Ever used heroin (smack, junk, China white)	1.8%	3.4%
Ever used methamphetamines (speed, crystal, crank, ice)	*	3.7%
Ever used ecstasy (MDMA)	*	5.6%
Ever used synthetic marijuana (spice, K2, fake weed, King Kong, Yucatan Fire, skunk, moon rocks)	*	9.8%

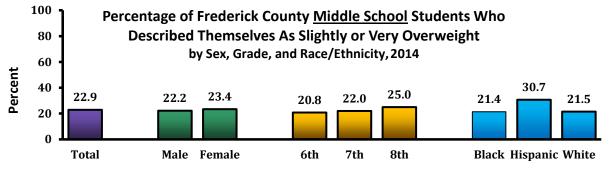
* Question not asked Source: YRBS Data



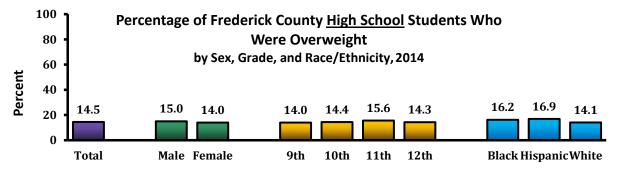
Source: YRBS Data, Question: Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)

Weight

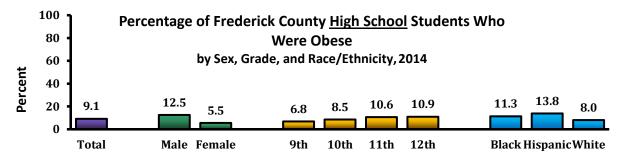
- In 2014, More than 1 in 5 (22.9%) of Frederick County Middle School students described themselves as slightly or very overweight. This was highest among 8th graders and Hispanic students.
- 14.5% of Frederick County High School students were overweight and 9.1% were obese in 2014. More boys than girls and slightly more Hispanic students were obese.



Source: YRBS Data, Question: Percentage of students who described themselves as slightly or very overweight



Source: YRBS Data, Question: Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)



Source: YRBS Data, Question: Percentage of students who were obese (>= 95th percentile for body mass index, based on sexand age-specific reference data from the 2000 CDC growth charts)