

# FY2017/FY2019 Title V Maternal and Child Health Needs Assessment Update Summary



Office of Assessment and  
Evaluation

Bureau of Women's and Children's  
Health

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ARIZONA DEPARTMENT  
OF HEALTH SERVICES

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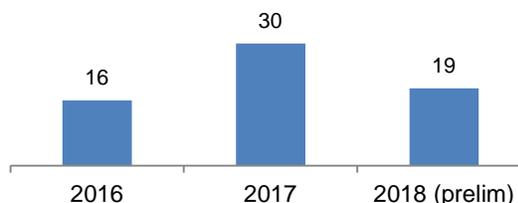
## Title V Needs Assessment Update Summary FY2017/FY2019

To keep abreast of emerging issues and any changes in the health status of Arizonans, bureau epidemiologists and evaluators reviewed and analyzed data from a variety of sources, such as state birth and death certificate data, hospital discharge data along with national datasets such as the National Survey for Children's Health, the Behavioral Risk Factor Surveillance System (BRFSS), amongst others. These findings were the basis of understanding the current health needs and status of Arizona's women and children. Findings were organized by HRSA priority population. Only emerging issues were highlighted in this report. For demographic descriptors of the state refer to section III. B Overview of the State.

A combined analysis of the state's BRFSS data for year 2014 and 2016 showed that amongst women of **reproductive** age (18-45 years) who have not been pregnant only 1 in 10 women receive advice from a doctor, nurse, or healthcare worker about the ways to prepare for a healthy pregnancy.<sup>1</sup> A majority of women (68%) indicate wanting a pregnancy however further analysis on pregnancy timing showed that most women want a pregnancy within 5 or more years (47%) followed by 2-5 years (28%).<sup>1</sup> The most common contraceptives used to prevent a pregnancy in Arizona are birth control pills (43%); male condoms (33%); and IUDs (10%).

Preliminary 2017/2018 data identified an emerging trend in **congenital syphilis** – maternal characteristics of the cases involve a mother that had late or no prenatal care (21%), were not tested in time (22%) of mothers initially tested negative and later tested positive, could not be located for treatment (15%) and reinfections of syphilis (13%).

**Figure 1. Confirmed Cases of Congenital Syphilis, Arizona 2016-2017 YTD**



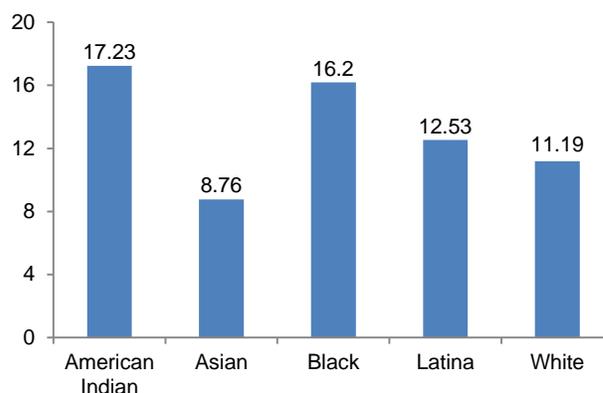
In Arizona, the rate of **Severe Maternal Morbidity (SMM)** for women with a live birth in 2016 was 1.1 per 100 deliveries, but showed disparities among racial/ethnic groups.<sup>2</sup> The rate of SMM is highest among American Indian mothers at 3.3 compared to 1.1 among Whites.<sup>2</sup>

<b>Figure 2. Severe Maternal Morbidity Among Hypertension Cases- All 2016 Deliveries</b>		
<b>Race/Ethnicity</b>	<b>Deliveries</b>	<b>SMM Overall Rate per 100 deliveries</b>
White	38281	1.1
Black	4529	1.7
Latina	31529	1.7
Native American/American Indian	3080	3.3
Asian/Pacific Islander	3086	1.6

In 2017; 80,750 singleton births occurred in Arizona with 43% of the births to White mothers followed by 41.44% to Latina mothers.<sup>3</sup> In terms of **birth spacing**, 63% of these women had a previous live birth and 12.36% of all women giving gave birth less than 18 months apart.<sup>3</sup>

Among 10-19 year old residents of Arizona that gave birth during 2014-2017, 34.03% received inadequate or no **prenatal care**, compared to 19.3% among women giving birth between 31-35 years of age.<sup>4</sup> Out of all American Indian women giving birth during 2014-2017, 31.92% received inadequate or no prenatal care compared to 18.74% of White women.<sup>4</sup> Of women with private insurance as their method of delivery, only 15.01% received inadequate or no prenatal care compared to 37.42% and 37.55% of women that paid for their delivery themselves or by IHS respectively.<sup>4</sup>

**Figure 3. Percent of women giving birth <18 mos. apart by racial group, 2017**



**Figure 5. Prenatal care characteristics for residents of Arizona that gave birth between 2014-2017**

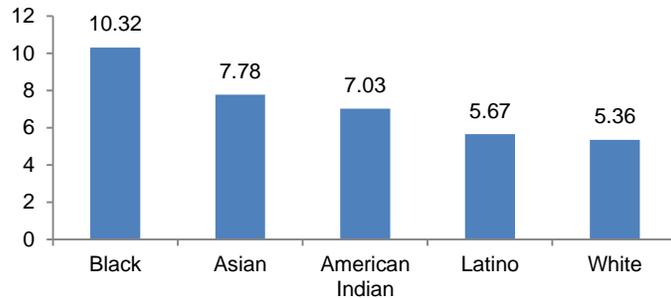
Race/Ethnicity	No care	Inadequate	Intermediate	Adequate	Adequate Plus
American Indian or Alaska Native	6.80%	25.12%	16.73%	34.82%	16.53%
Asian or Pacific Islander	7.32%	12.91%	9.07%	44.08%	26.61%
Black or African American	8.08%	19.75%	12.56%	35.94%	23.67%
Latina	8.36%	18.22%	11.97%	38.23%	33.22%
White	7.74%	11.05%	9.63%	45.19%	26.39%
<b>Total</b>	<b>7.93%</b>	<b>15.3%</b>	<b>11.13%</b>	<b>41.24%</b>	<b>24.39%</b>

The **Maternal Mortality Rate (MMR)** is increasing in Arizona with 1.8 per 10,000 live births in 2013 to 2.4 in 2015.<sup>5</sup> The majority of maternal deaths come from Latina women, but the MMR among American Indian women (28.4) is 3 times the rate among Latina women (9.0) and 4 times the rate among White women (7.0).<sup>5</sup>

Arizona reports 9.1% of **preterm births** in 2016. This trend has been declining since 2007 when the preterm birth percentage was reported at 10.3%.<sup>6</sup> Preterm birth rate among Black births is 37% higher than the rate among all other women with a 12.2% of live births in 2013-2015 that are preterm.<sup>6</sup> Latino and American Indian births were second highest with percentage of live births that are preterm at 9.2% and 9.4% respectively.<sup>6</sup>

In 2017, 91.2 % of **low birth weight** babies were born in a level II or higher.<sup>7</sup> Approximately 89.4% of very low birth weight babies were born in a Level II-E or higher hospital in Arizona.<sup>7</sup> The percentage of births with low birth weight, fewer than 2500 grams, in Arizona is 5.96%.<sup>7</sup>

**Figure 6. Low Birth Weight Percentages by Racial Group, 2017**



In 2016, approximately 84.3% of children ages 0-5 years were **breastfed** or fed breast milk in Arizona compared to 78.7% nationwide.<sup>8</sup> Black children reported the lowest percent of children 0-5 years that were ever breastfed or fed breast milk in Arizona at 68.8% compared to other groups.<sup>8</sup> Children who are of Latino/a/Latino origin reported lower percentages at 81.3% compared to non-Latino/a/Latino children at 84.7%.<sup>8</sup> Approximately 28.2% of children completely stopped breastfeeding when the child was less than 1 month followed by 9.01% at 5 months and 10.4% at 11 months.<sup>8</sup>

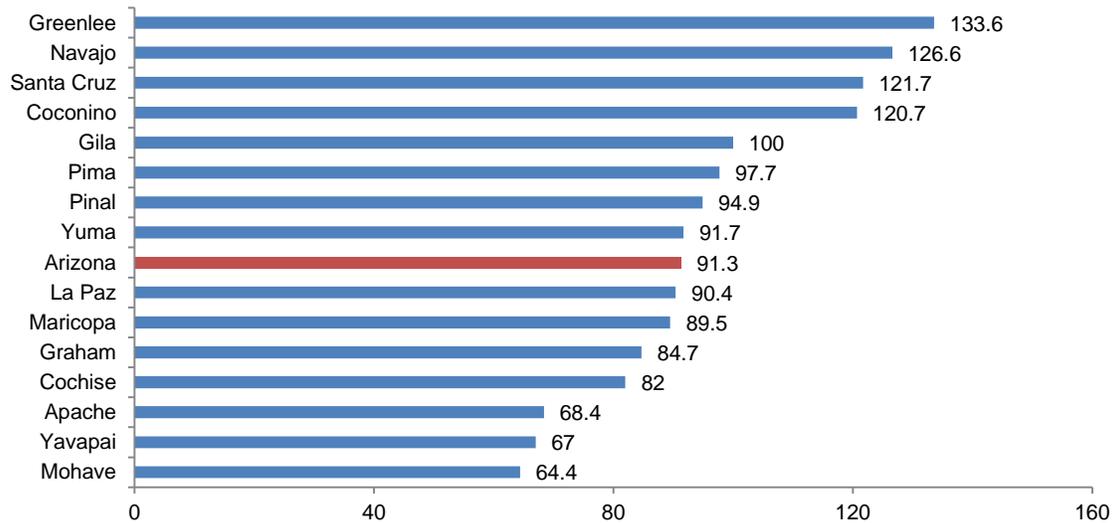
**Figure 7. Percentage of children who stopped breastfeeding by age in mos. and racial/ethnic group**

	<1 Month	5 Months	11 Months
White	24.5%	9.6%	10.9%
Black	37.0%	11.1%	7.4%
American Indian	38.6%	18.2%	9.1%
Other	30.4%	12.1%	7.0%
	<1 Month	5 Months	11 Months
Latino/a, Latino	32.9%	9.1%	7.7%
Non-Latino/a	27.7%	9.0%	10.7%

Between 2017-2018 (preliminary) 774 babies were born experiencing possible drug-withdrawal symptoms.<sup>9</sup> Approximately 47% of mothers of **NAS** cases were being medically supervised while taking opioids while pregnant.<sup>9</sup> This is reflected of the ongoing Opioid epidemic in Arizona where a total of 8,204 possible overdoses and deaths amongst youth and adults were reported with the highest proportion of overdoses and deaths occurring amongst individuals 25-34 years of age; 41% female and 59% male; with a majority of overdoses without fatality being reported from primary care areas in Central Phoenix, Yuma, and South Tucson.<sup>9</sup>

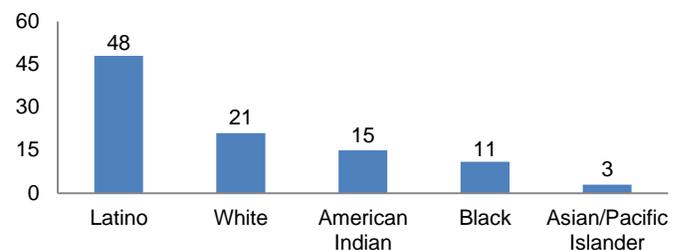
**Birth defects** are one of the leading causes of infant deaths. Nationally, 20% of deaths in infants are caused by a birth defect.<sup>10</sup> A combined analysis of the data for years 2012-2016 showed that 44% of infant deaths in Arizona were due to birth defects.<sup>10</sup> The majority of birth defect cases in Arizona are: orofacial clefts (37%), followed by Down syndrome (27%), and pulmonary valve atresia and stenosis (13%).<sup>10</sup> The overall rate of birth defects in Arizona measure 91.3 per 10,000 live births.<sup>10</sup> Disparities across geography are apparent with half of Arizona's counties reporting higher rates than the state average.

**Figure 8. Rates of birth defects in Arizona by county, 2008-2012, per 10,000 live births**



Arizona's **infant mortality** rate has generally been decreasing across the past decade. The infant mortality rate for Arizona decreased from 5.5 deaths per 1,000 live births in 2015 to 5.4 deaths per 1,000 live births in 2016.<sup>11</sup> Disparities in infant mortality rates are evident by race and ethnicity. In 2016, the highest infant mortality rates were among African American infants (13.2) followed by American Indian infants (7.2) any then be Latino/a infants (6.0).<sup>11</sup> Arizona's percentage of low birth weight babies and preterm births remained stable from 2014 to 2015. In 2016, there were 80 **SUIDs** in Arizona, with 99% associated with unsafe sleep environments.<sup>11</sup> The mortality rate for SUID increased from 0.92 deaths per 1,000 live births in 2015 to 0.94 deaths per 1,000 live births in 2016.<sup>11</sup> Racial disparities are also evident in SUID deaths, with Latino/a, American Indian and African American infants bearing a disproportionately higher burden.

**Figure 9. Percent of MVC Fatalities by Race/Ethnicity Group, Arizona, 2016**



The 2016 **Child Fatality** Report found that there was a 10% decrease in **drowning** deaths, with the mortality rate from drowning in children, ages 0-17, in Arizona being 1.7 per 100,000.<sup>11</sup> **Motor vehicle crashes** were the most common cause of preventable death among children 5 through 14 years old and the mortality rate of children, ages 0-17, was 4.4 per 100,000 in 2016.<sup>11</sup>

Ten percent of Arizona child fatalities in 2016 were due to **maltreatment**. From 2015 to 2016 the mortality rate due to maltreatment decreased 6%. Males represent 54% of the maltreatment deaths. Seventy-six percent of children who died due to maltreatment

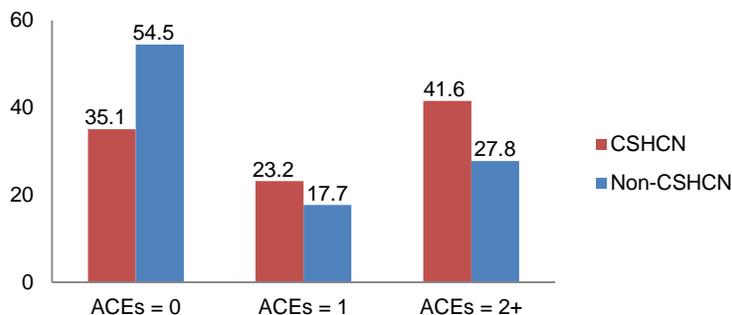
were less than 5 years old.

In 2016, children in Arizona reported a lower proportion of no **adverse childhood experiences (ACEs)** (49.3%) when compared to the National average (53.3%).<sup>12</sup>

When examining race/ethnicity for children who have experienced two or more ACEs, children of other, non-Latino race were highest (45.6%), followed by Latino (32.7%) and White (23.7%).<sup>12</sup>

A higher proportion children with special healthcare needs (CSHCN) in Arizona report higher incidences of ACEs compared to Non-CSHCN.<sup>12</sup>

**Figure 10. Percentage of ACE Scores by CSHCN Status, 2016**



Among the children aged between 0 – 17 years, 14.6% have had one or more dental problems like toothache, bleeding gums or decayed teeth or cavities in the past 12 months and 85.4% did not have **oral health** problem in past 12 months.<sup>12</sup> Children who reported to have one or more health problems in Arizona are Latino with highest percentage (20%) compared to nationwide distribution (16%) whereas the percentage of White children who reported to have dental problem in Arizona was 8% less than national the national average of 11%.<sup>12</sup>

Among the children aged between 0 – 17 years, 19.7% children between the age of 0 – 17, met the criteria for having a **special health care need**.<sup>12</sup>

Among the children aged between 0 – 17 years who are currently insured, 73.3% have **adequate insurance** for their needs.<sup>12</sup> Children with private health insurance reported to have inadequate insurance status (37%) at higher proportions compared to those with public health insurance (12%).<sup>12</sup> The percentage of CSHCN where the current insurance was reported to be adequate was 71% versus non-CSHCN being 74%.<sup>12</sup>

Among the children aged between 0 – 17 years, 44.6% children received health care which met a **Medical home** criteria.<sup>12</sup> In Arizona, 57% of males reported that they did not receive coordinated, ongoing care within a medical home as compared to 51% nationwide.<sup>12</sup> In Arizona, the racial group proportion for care not meeting the medical home criteria is 70% Latino, 42% White, Asian 66% and 52% other.<sup>12</sup> Approximately 67% of children with household income between 0 – 99% FPL, reported to have care that did not meet the medical home criteria.<sup>12</sup>

**Immunization** rates in Arizona have decreased across age groups from 2012-2017. Non-medical exemption rates are highest in charter schools (9.1%), followed by private

(7.45%) and public schools (4.4%) in 2017.<sup>13</sup> Approximately 7,066 children in Arizona were exempt from every school-required vaccine in 2017.<sup>13</sup>

**Figure 11. Most frequently exempt vaccine by school setting, 2016.**

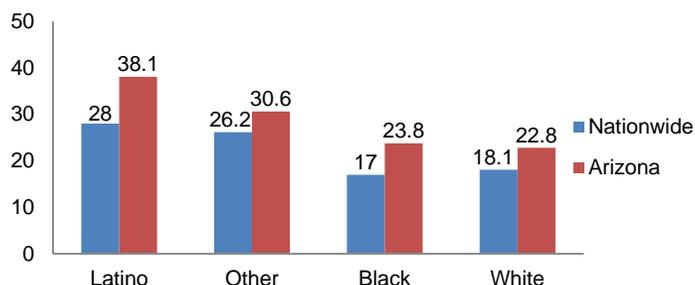
Child Care	Kindergarten	6 <sup>th</sup> Grade
Hepatitis A	MMR	MVMVC
Hepatitis B	DTAP	TDAP
HIB	Polio	MMR
DTAP	Hepatitis B	Polio

Of CSHCN aged 12-17 in Arizona, 76.9% of them reported that they did not receive the services necessary for **transition to adult health care**, lower than the national percentage of 83.5%.<sup>12</sup> Among non-CSHCN, a higher percentage of males reported they did not receive the services necessary for transition to adult health care (90.5%) than females (87.1%).<sup>12</sup> Latino and Other, non-Latino adolescents without special health care needs reported the highest percentage of not receiving transitional care services (91.7% and 86.0%), whereas White non-CSHCN reported 86.0%.<sup>12</sup>

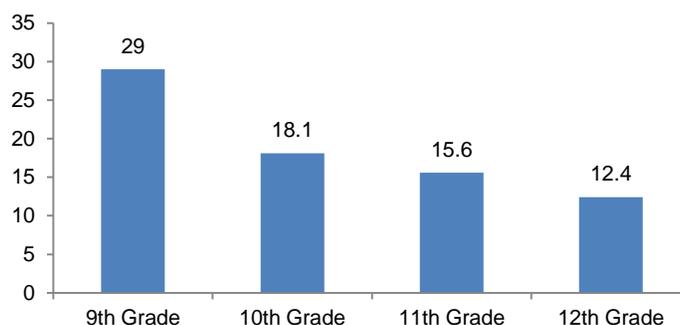
Thirty percent of Arizona adolescents, age 12-17 years of age, had no **preventive medical visit** in the past year, as compared to the national average of 21.1%.<sup>12</sup> Females had a higher percentage of having no preventative medical visits (34.5%) than males (25.2%).<sup>12</sup> Children whose family income was 400% FPL or higher had the lowest percentage (35.3%) of no preventative medical visit in the past year and children whose family income was 200-399% FPL had the highest percentage (35.3%).<sup>12</sup>

In 2017, 19.2% of high school students reported being bullied on school property in the last 12 months.<sup>14</sup> Females suffered from **bullying** at higher rate (23.0%) than males (14.8%).<sup>14</sup> Bullying decreased from 9<sup>th</sup> grade to 12<sup>th</sup> grade as depicted in the graph. 36.4% of high school students who felt sad or hopeless (almost every day for  $\geq 2$  weeks in a row so that they stopped doing some usual activities) sometime in the 12 months, 40.2% of which were Latino/a and 35.3% of which were White.<sup>14</sup> Nine

**Figure 12. Percent of children (12-17 years) with no preventative medical visit in the past 12 mos. by Race/Ethnicity**



**Figure 13. Percent of high school students bullied on school property in the past 12 mos.**



percent of high school students reported that they bullied others on school property, with the percentage of males being 9.0% and females being 8.6%.<sup>14</sup> Seven percent of high school students reported being electronically bullied through texting, Instagram, Facebook, or other social media in the last 12 months, with the gender breakdown being 6.5% for males and 7.3% for females.<sup>14</sup>

In 2016, 8.2% of high school students reported ever being physically **forced to have sexual intercourse** (when they did not want to).<sup>14</sup> The percentage for females was higher (11.5%) than males (4.5%).<sup>14</sup> Latinos reported a higher percentage (8.9%) of forced sex than White students (7.1%).<sup>14</sup> The percentage of high school students who were ever hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend in the past year was 9.6%, with the percentage of females being 10.4% and males being 8.8%.<sup>14</sup> For this behavior, the prevalence of **physical partner violence** increased from 9<sup>th</sup> to 12<sup>th</sup> grade.<sup>14</sup>

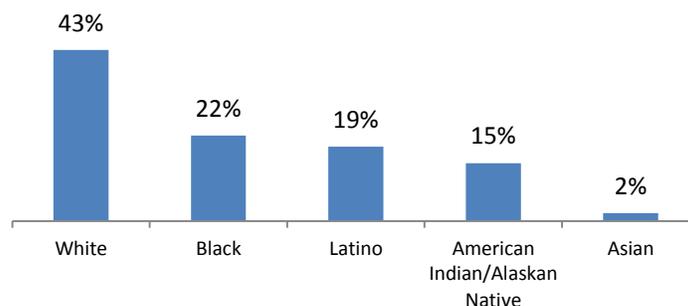
In 2016, adolescent males comprised 66% of the **suicide deaths** compared to 34% of suicide deaths among females.<sup>11</sup> White children made up 32% of the suicide deaths and Latino/a children accounted for an additional 34% of suicide deaths.<sup>11</sup> American Indian children were overrepresented compared to their population and accounted for approximately 21% of the suicide deaths.<sup>11</sup> Youth ages 15 through 17 years remained at highest risk for suicide death accounting for 74% of suicides deaths, while children 5 through 14 years of age made up 26% of suicide deaths.<sup>11</sup>

The 2016 data from the Centers for Disease Control and Prevention ranks Arizona 15th in the Nation for highest **teen birth** rates at 26.3 per 1,000 females, 15-19 years of age.<sup>15</sup> In 2016, Arizona's Medicaid program paid for 83.4 percent of deliveries to mothers 19 years of age or younger, and nearly half (47.9 percent); out of the group of 18-19 year olds 41.7% completed high school/GED program.<sup>15</sup>

	<b>2014</b>	<b>2015</b>	<b>2016</b>
White non-Latino/a	23.0	20.6	18.5
Latino/a or Latino	51.9	41.4	38.7
Black or African American	33.3	32.6	34.0
American Indian or Alaska Native	37.8	52.5	47.9
Asian or Pacific Islander	10.9	12.8	10.0
<b>ARIZONA</b>	31.8	31.98	29.82

In each year from 2007 to 2012, the total number of **sexually transmitted infections** (*chlamydia* and *syphilis*) among females aged 19 or younger exceeded 7,300, but fell to 6,723 in 2014, then increased to 6,872 in 2015, to 7,452 in 2016.<sup>15</sup> Among females 15-19 years, the rate of 2016 was also higher than 2015, but 1.5 percent lower than the rate of 2006.<sup>15</sup>

**Figure 15. Proportion of STIs (Chlamydia, Gonorrhea, Syphilis) in Adolescents (10-19 years) by Racial Group, 2017**



In 2017, the percentage of high school students who had at least one drink of **alcohol**, on at least 1 day during the past 30 days was 33.1%, comprising 30.2% of males and 36.4% of females.<sup>14</sup> Alcohol use increased by grade with 21.3% of 9<sup>th</sup> graders, 2.0% of 10<sup>th</sup> graders, 35.5% of 11<sup>th</sup> graders, and 47.8% of 12<sup>th</sup> graders.<sup>14</sup> The prevalence of binge drinking (4 or more drinks for females and 5 or more drinks for males within a couple of hours) in high school students was 17.9%.<sup>14</sup> There was the same trend for alcohol use, increasing by grade from 9<sup>th</sup> to 12<sup>th</sup>.<sup>14</sup>

In 2017, 15.4% of high school students in Arizona took **prescription pain medicine** without a doctor's prescription or differently than how a doctor told them to use it, including drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life.<sup>14</sup> Use was slightly higher among females (15.8%) than males (14.7%).<sup>14</sup> Tenth grade reported the highest percentage of use at 19.4%. There was no significant disparity between Latino/a students and White students (15.6% and 15.3%).<sup>14</sup>

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