

A. Pregnant Women, Mothers and Infants

1. Women/Mothers

Access to Care

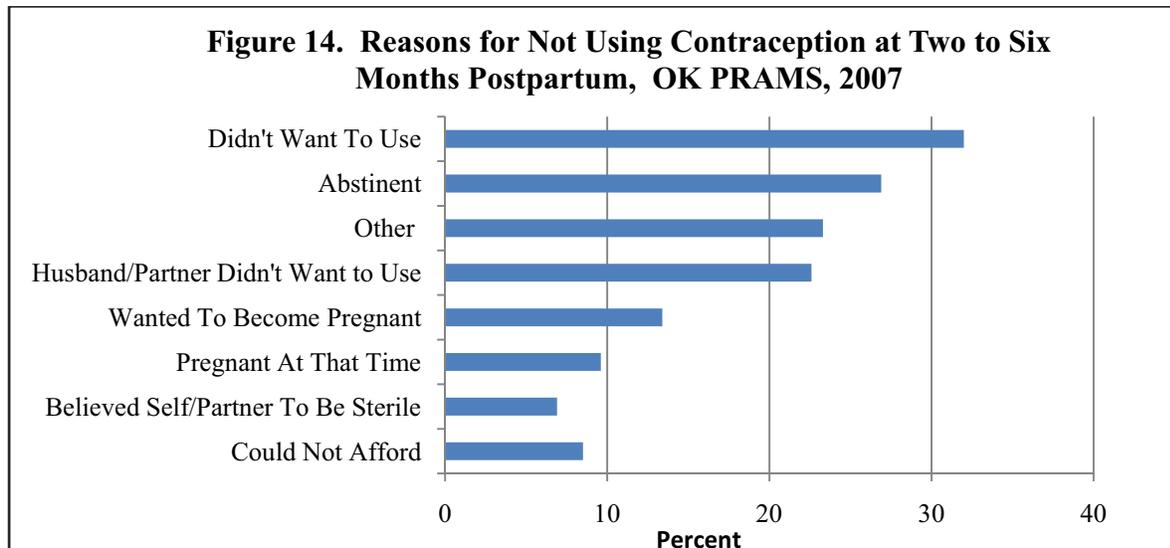
According to 2007 OK PRAMS data, 47.1% of females had non-SoonerCare health insurance prior to their most recent pregnancy resulting in a live birth. This has declined since 2000, when 56.2% of females indicated non-SoonerCare health insurance before pregnancy. American Indian/Alaska Native females were the least likely to have insurance prior to pregnancy (26.5%), compared to 42.7% of African American/Black females and 50.8% of white females. In 2000, 34.5% of American Indian/Alaska Native females, 50.8% of African American/Black females and 59.5% of white females had non-SoonerCare coverage.

Data from the 2008 BRFSS indicate that over one-fourth (26.7%) of females aged 18-44 needed a doctor during the previous year, but the cost was too high. Of those females who reported that they needed a doctor, but the cost was too high, 75.2% reported they were in excellent, very good, or good health compared to 92.2% of those females for whom cost was not a barrier. In addition, over one-fourth (26.7%) of females aged 18-44 did not have any health care coverage. Of those females who reported to have some form of health care coverage, 91.2% stated they were in excellent, very good, or good health compared to 82.2% of those with no health care coverage.

African American/Black females were more likely to report SoonerCare coverage prior to pregnancy than other females (22.3% vs. 8.9% white and 10.7% American Indian/Alaska Native). The number of females reporting SoonerCare coverage prior to pregnancy has not changed significantly since 2000.

One important aspect for females of childbearing age is planning for pregnancy, and using preventative measures to delay an unwanted or mistimed pregnancy until the female and her partner are ready. Contraceptives and other methods of birth control play an important role in delaying unplanned pregnancies for many females.

In 2007, 87.1% of females with a recent live birth delivery indicated they were using some method of birth control from two to six months postpartum. This has not significantly changed since 2000. Among females not using a current method of birth control, the majority stated it was because they did not want to use birth control (32.0%). The least common response was “I don’t think I can get pregnant (sterile)” at 6.9% (Figure 14). Almost one in four females not using birth control postpartum in Oklahoma were either pregnant or wanting to become pregnant, again two to six months postpartum. Of those females who had recently lost their baby, this number increased to 69%.



- **Reproductive Health**

- **Women in Need of Contraceptive Services and Supplies**

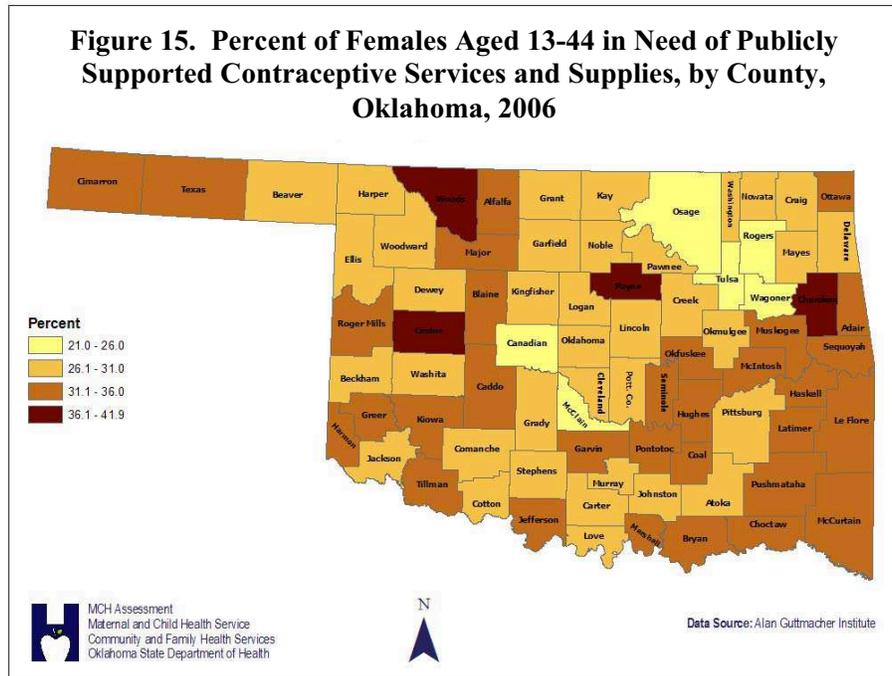
As defined by the Alan Guttmacher Institute (AGI), females are “in need of contraceptive services and supplies” during a given year if they are age 13-44 and meet the following criteria:

- a. They are sexually active, meaning, they have ever had intercourse;
- b. They are fecund, meaning that neither they nor their partner have been contraceptively sterilized, and they do not believe that they are infecund for any other reason; and,
- c. During at least part of the year, they are neither intentionally pregnant nor trying to become pregnant. (Guttmacher Institute, 2009-2010)

Additionally, females are defined as in need of publicly funded contraceptive services and supplies if they meet the above criteria and have a family income under 250% of the FPL. Due to either their personal incomes meeting this level or because of their heightened need of confidentiality, all females less than 20 years of age who need contraceptive services are assumed to be in need of publicly supported care.

In 2006, estimates for Oklahoma indicated that more than half (52.4%) of females age 13-44 were in need of contraceptive services and supplies, a 9.6% increase from 2002. Of those

females in need of contraceptive services and supplies in 2006, more than half (54.7%, n=221,210) were in need of publicly supported contraceptive services and supplies. Figure 15 shows the percent of females aged 13-44 who were in need of publicly supported contraceptive services and supplies by county. Seventy-one of 77 counties indicate that more than 26% of their female population aged 13-44 was in need of publicly supported contraceptive supplies. The four counties with the highest percentage of females in need of publicly supported contraceptive services and supplies were Cherokee, Custer, Woods, and Payne at 36.4%, 37.3%, 37.4%, and 41.9%, respectively.



When assessing females in need by race, minor differences were observed. The percent of white and African American females aged 13-44 in need of contraceptive services and supplies were 46.4% and 48.1%, respectively (data not shown). More than half (50.4%) of females of Hispanic origin were in need of contraceptive services and supplies. Of the 404,670 females in need, 38.3% were 30-44 years of age, 46.9% were 20-29 years of age, 8.3% were 18-19 years of age, and 6.5% were 18 and under. Of those females aged 20-44 in need of contraceptive services and supplies, 53.2% were at or above 250% of the FPL, 13.0% were between 185-249% of the FPL, and 33.8% were below 185% FPL.

○ Family Planning

The Title X Family Planning Program was enacted in 1970 as Title X of the Public Health Service Act. Title X is the only federal grant program dedicated solely to providing individuals with comprehensive family planning and related preventive health services. Family planning is a service offered to males and females of reproductive age to assist them in making informed decisions about pregnancy planning, appropriate spacing of births, prevention of unintended pregnancy, being healthy, and making good lifestyle choices. The Oklahoma Family Planning Program (OFPP) is offered at 90 county health department service sites and 10 contractor sites. The OFPP provides family planning services in 70 of the 77 counties in Oklahoma. In 2008, the

OFPP served 75,623 family planning clients. Estimates indicated between 26,000 and 27,000 additional family planning clients were served by other providers in the state.

- **Oral Health**

BRFSS data for 2008, indicate that 39.7% of females aged 18-44 did not have a dental visit within the past twelve months.

Table 3. Receipt of a Dental Visit at Least One Year Prior to Pregnancy by Maternal Demographics, OK PRAMS, 2006-2007				
Maternal Characteristics	Yes		No	
	Prevalence (%)	95%CI	Prevalence (%)	95%CI
Race				
White	39.74	36.89, 42.66	60.26	57.34, 63.11
African American/Black	36.67	28.33, 45.91	63.33	54.09, 71.67
American Indian/Alaska Native	33.96	26.92, 41.80	66.04	58.20, 73.08
Other	42.43	22.27, 65.47	57.57	34.53, 77.73
Ethnicity				
Non-Hispanic	41.85	39.14, 44.61	58.15	55.39, 60.86
Hispanic	16.37	11.46, 22.83	83.63	77.17, 88.54
Age				
<20	40.77	33.28, 48.72	59.23	51.28, 66.72
20-24	30.93	26.76, 35.44	69.07	64.56, 73.24
25-29	36.51	32.07, 41.18	63.49	58.82, 67.93
30-34	50.34	44.33, 56.33	49.66	43.67, 55.67
35+	49.13	40.81, 57.49	50.87	42.51, 59.19
Education				
<High School	13.00	5.94, 26.13	87.00	73.87, 94.06
High School	21.18	15.11, 28.86	78.82	71.14, 84.89
>High School	42.64	39.84, 45.50	57.36	54.50, 60.16
Marital Status				
Married	45.09	41.90, 48.33	54.91	51.67, 58.10
Other	29.09	25.25, 33.27	70.91	66.73, 74.75
Medicaid				
Yes	28.52	25.46, 31.80	71.48	68.20, 74.54
No	54.01	50.04, 57.94	45.99	42.06, 49.96
Previous Live Birth				
Yes	35.74	32.61, 38.99	64.26	61.01, 67.39
No	42.93	38.83, 47.14	57.07	52.86, 61.17

Oral health can impact the health of a pregnancy and infant. Preterm birth has been linked in research studies to gum disease. Routine dental care has the potential to prevent and reduce that risk (Offenbacher, et al., 2006). However, only 40% of females saw a dentist during the 12 months before pregnancy in Oklahoma (Table 3). No differences existed between racial groups; however, Hispanic females (16.4%) were far less likely to have dental care prior to pregnancy than non-Hispanic females (41.9%). Females over the age of 30 were more likely to have had a

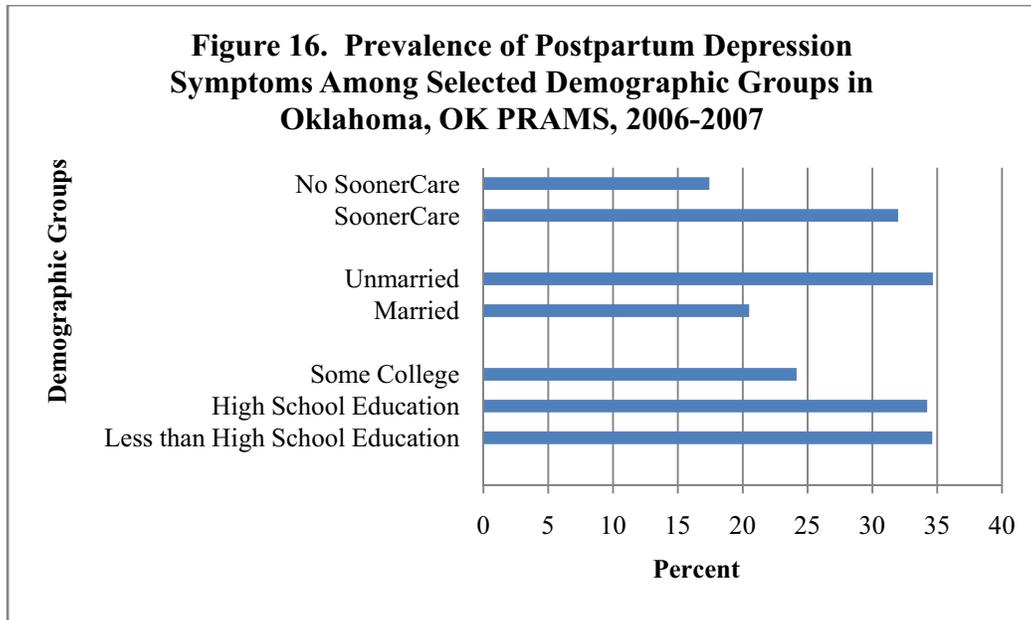
dental visit prior to pregnancy compared to females ages 20-29. Having a high school education or less was also associated with lack of dental care. Only one in five females (21.1%) with a high school education and one in eight females (13.0%) with less than a high school education received a dental checkup or visit, compared to almost half of females with more than a high school education (42.6%). Marital status, SoonerCare status during pregnancy, and parity also impacted the likelihood of getting dental care prior to pregnancy.

- **Mental Health**

BRFFS data for 2008, showed that nearly half (44.6%) of females aged 18-44 in Oklahoma experienced poor mental health within the last month of pregnancy. More specifically, 30.9% reported to have had 15 or less mentally unhealthy days, while 13.7% reported to have had more than 15 mentally unhealthy days in the last month.

Postpartum depression (PPD) can be disabling for a new mother. PPD is a moderate to severe level of depression that a females experiences after giving birth. The symptoms of PPD may occur at any time after delivery up to one year postpartum; however, most new mothers experiencing PPD, will show symptoms within the first four weeks after delivery. PPD has the potential to negatively impact a mother's health and her ability to care and nurture her infant (Horwitz, Briggs-Gowan, Storfer-Isser, & Carter, 2007). Data from OK PRAMS 2006-2007, showed that approximately one in four Oklahoma mothers suffered from key symptoms of postpartum depression between two and six months postpartum. The presence of maternal depression symptoms after delivery was assessed by asking "In the months after your delivery did you ever feel sad or hopeless almost every day for at least 2 weeks in a row that you stopped doing some usual activities?" Several demographic groups in Oklahoma were at an elevated risk for reporting symptoms of PPD (Figure 16). These included mothers under the age of 20 (34.4%), mothers with a high school education (34.2%) or less (34.6%), unmarried mothers (34.7%) and mothers with SoonerCare coverage (32.0%).

This finding was reinforced by other reports that have found high rates of mental illness in Oklahoma. According to the Oklahoma Governor's and Attorney General's Blue Ribbon Task Force, Oklahoma has the highest rate of severe mental illness in the nation at 10.4% (Oklahoma Governor's and Attorney General's Blue Ribbon Task Force: Mental Health, Substance Abuse and Domestic Violence., 2006).



Physical Activity

Physical activity, which aids in weight maintenance and reduction, is an important part of overall health and well-being for women across the lifespan. However, many women in Oklahoma do not meet the recommended Healthy People 2010 guidelines of 30 minutes of moderate activity five or more days per week or 20 minutes of vigorous activity three or more days a week (U.S. Department of Health and Human Services, 2000). Physical activity levels for women of reproductive age are measured by BRFSS. In Oklahoma, females of childbearing age were more likely to meet the Healthy People 2010 objectives for physical activity if they were aged 18-24, almost 60% of women in this age group reported participating in the recommended levels for moderate or vigorous activities in a usual week. The women in the older reproductive age group, those 35-44, were least likely (45.6%) to participate at recommended levels (data not shown).

Multivitamin Consumption

Consumption of folic acid, prior to pregnancy is important for the prevention of certain birth defects, such as neural tube defects, and may positively impact other areas of health and wellness for females. Because a female may be pregnant several weeks before she is aware of the pregnancy, particularly if the pregnancy is unintended, folic acid supplement consumption is recommended for all females of child-bearing age who may become pregnant (March of Dimes, 2010). Although state data are not available on how many females consume folic acid supplements prior to and during pregnancy, OK PRAMS does collect information on the consumption of a multivitamin or prenatal vitamin prior to pregnancy, most of which are fortified with the recommended 400 mcg of folic acid.

OK PRAMS 2007 data show that only 27.3% of pre-pregnant females consumed a multivitamin prior to pregnancy. No differences were found between females of different racial or ethnic groups; however, age and education were significantly associated with preconception vitamin use (Table 4). The association with age and education may be artifacts of pregnancy planning, as females who were older and had higher levels of education were also more likely to have been

trying to get pregnant, a factor significantly associated with increased consumption of a multivitamin prior to pregnancy. Among females trying to get pregnant, 43.8% took a vitamin prior to pregnancy. For those females not trying to get pregnant (but who had a live birth) only 16.4% consumed a multivitamin preconceptionally. Parity was also not found to be significant.

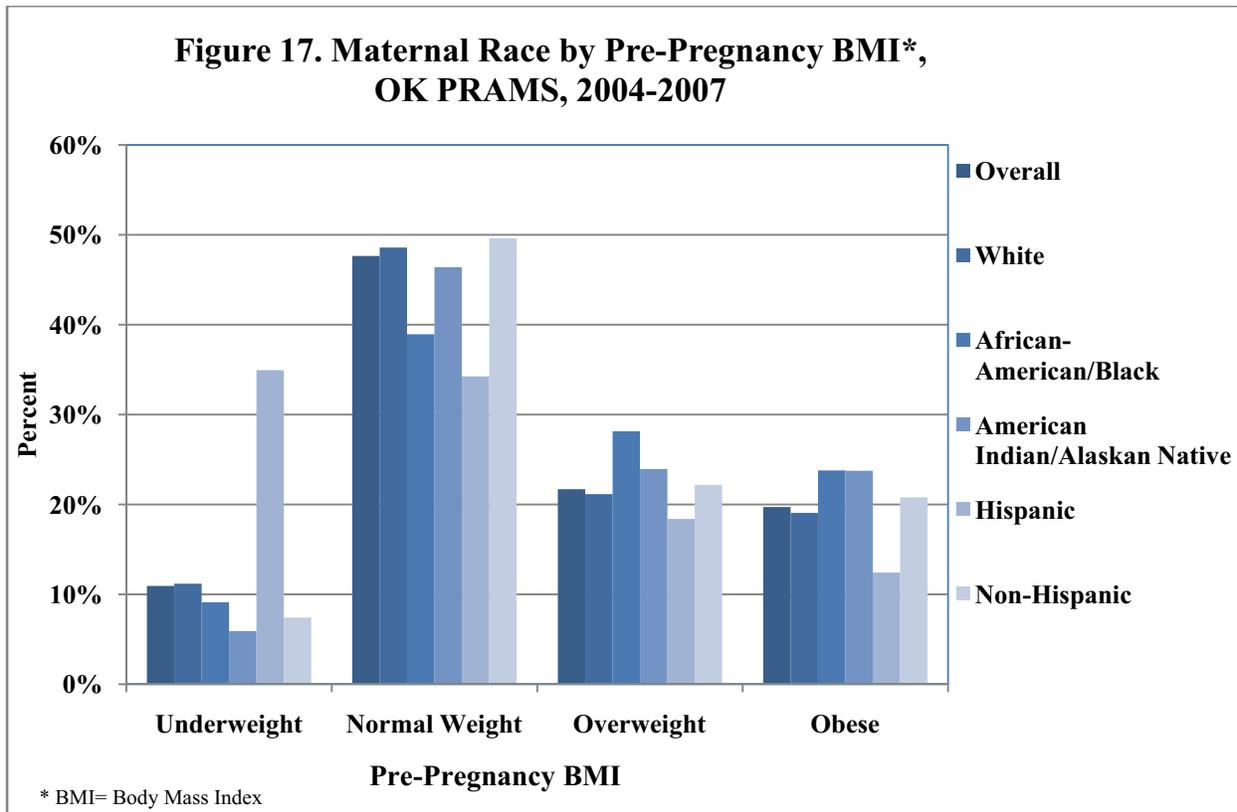
Table 4. Percent of Females Regularly Consuming Multivitamins Preconceptionally by Maternal Demographics, OK PRAMS, 2007		
Characteristic	Consumed Multivitamin	
	%	95% CI
Age		
< 20	9.4	4.8-17.8
20-24	18.2	13.6-23.8
25-34	35.9	30.9-41.2
35 or older	45.6	33.9-57.8
Race		
White	28.2	24.6-32.1
Black	19.3	10.6-32.4
AI/AN	22.3	14.5-32.8
Ethnicity		
Hispanic	26.1	16.9-37.9
Non-Hispanic	27.6	24.3-31.2
Education		
< 12 years	11.7	7.3-18.2
12 years	21.7	17.0-27.2
> 12 years	40.8	35.4-46.3
Previous Live Birth		
No	25.0	20.3 – 30.3
Yes	28.9	24.7 – 33.4
WIC During Pregnancy		
No	38.9	33.8-44.3
Yes	18.2	14.6-22.5
Trying to get Pregnant		
No	16.4	13.0-20.4
Yes	43.8	38.2-49.5

Morbidity

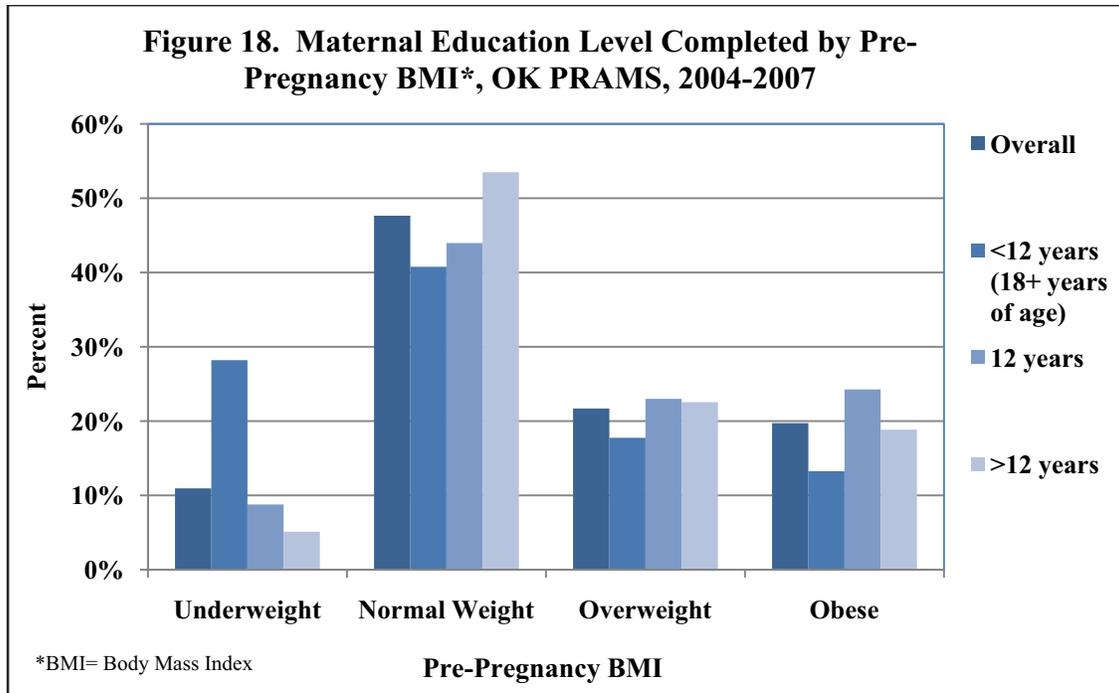
BRFSS data for 2008, show that 11.9% of females aged 18-44 reported their general health to be fair or poor. Stratified by race, African American/Black females and females of multiple races had the highest prevalence of fair or poor health at 21.5% and 21.9%, respectively. Hispanics fared only slightly better with 19.9% of females indicating fair or poor health. Whites had the lowest percent with fair or poor health at 9.1% followed by American Indian/Alaska Native at 12.2% (Oklahoma State Department of Health Center for Health Statistics, Vital Records Division, 2009).

- **Obesity**

Less than half of females in Oklahoma were at a normal weight (Body Mass Index [BMI] between 18.5 and 24.9) before pregnancy according to OK PRAMS data. Being overweight (BMI between 25 and 29.9) and being obese (BMI between 30 and above) are risk factors for a variety of unhealthy outcomes for mother and infant (e.g., preterm birth, placenta problems, high blood pressure, and diabetes). Disparities existed between maternal groups in BMI categories. Among white, African American/Black, and American Indian/Alaska Native mothers all BMI categories were disparate (Figure 17). Hispanic mothers also exhibited a higher risk of having an underweight pre-pregnancy BMI compared with non-Hispanic mothers.



Disparities also exist, as depicted in Figure 18, between education levels. Females with lower levels of education were more likely to be underweight and less likely to be at a normal weight. Females with 12 or more years of education were more likely to be overweight or obese.



- **Sexually Transmitted Diseases (STDs)**

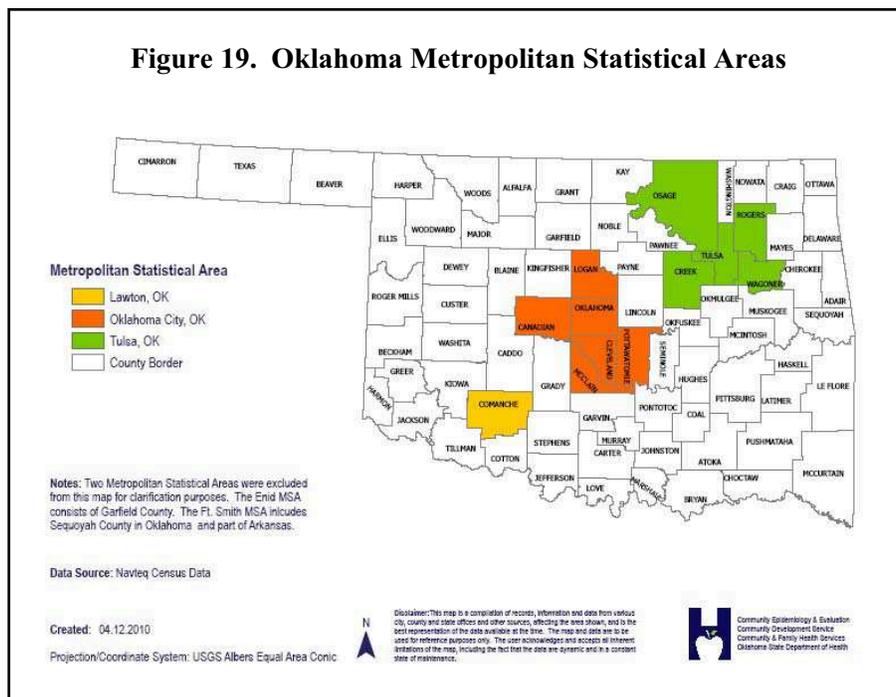
STDs are infections that can be spread from person to person through sexual contact. Prevention of STDs is especially important for pregnant females or females who might become pregnant. For females who are not pregnant, untreated STDs can develop into pelvic inflammatory disease (PID) which in turn can cause infertility. PID can increase the risk of having a tubal or ectopic pregnancy which is fatal for the fetus and at times life-threatening to the mother. Chlamydia and gonorrhea are the STDs most commonly associated with PID. In addition, untreated infections can pass from the mother to the baby before, during, and even after the baby’s birth. Infections in pregnant females can cause premature rupture of membranes (PROM), premature labor, low birth weight of the infant, and numerous other complications. Fortunately, chlamydia and gonorrhea are preventable and easily treatable.

The following table (Table 5) shows 2008 STD rates for females aged 15-44 in Oklahoma. The overall chlamydia infection rate for this age group was 1,510 cases per 100,000 females aged 15-44. Females aged 15-19 had the highest rate at 3,649 cases per 100,000 females, followed by females aged 20-24 at 3,261 cases per 100,000 females. As age increases, chlamydia rates appear to decrease; females age 25-29 have half the rate of females aged 15-24.

Table 5. Chlamydia and Gonorrhea Infection Rates* by Age-group, Females Aged 15-44, Oklahoma, 2008		
Age Group	Chlamydia Rate	Gonorrhea Rate
15 to 19 years	3649	881
20 to 24 years	3261	853
25 to 29 years	1169	348
30 to 34 years	412	158
35 to 39 years	181	74
40 to 44 years	51	29
Total	1510	405

*Rates are number of cases per 100,000 females aged 15-44
 Source: Oklahoma State Department of Health, HIV/STD Service

Oklahoma has three MSA's which are defined as communities, suburbs, and/or commuter towns with a population of at least 1,000 persons (Figure 19). The Oklahoma City MSA is currently ranked 45th in the U.S. with a total 2008 estimated population of 1,275,758 persons. The Oklahoma City MSA is comprised of eight counties; Canadian, Cleveland, Grady, Lincoln, Logan, McClain, Oklahoma, and Pottawatomie, and is situated in the central part of the state. In comparison, the Tulsa MSA shows a 2008 estimated population of 1,035,755 persons within roughly 6,240 square miles. Tulsa MSA consists of Tulsa, Rogers, Wagner, Okmulgee, Creek Pawnee, and Osage counties, all primarily located in North, Northeast Oklahoma. Oklahoma's third MSA consists of one county, Comanche, whose principal city is Lawton reporting a 2008 estimated population of 111,772 throughout the county.



The following table (Table 6) presents chlamydia and gonorrhea infection rates for each MSA compared to the statewide rate. Comanche county had the highest rate of the three MSA’s for chlamydia at 2,551 cases per 100,000 females aged 15-44. Oklahoma county had the highest gonorrhea infection rate of the three MSA’s at 777 cases per 100,000 females aged 15-44.

Table 6. Chlamydia and Gonorrhea Infection Rates* by Metropolitan Statistical Areas, Females Aged 15-44, Oklahoma, 2008		
	Chlamydia Rate	Gonorrhea Rate
Oklahoma County	2200	777
Tulsa County	2086	745
Comanche County	2551	635
State Total	1510	405
*Rates are number of cases per 100,000 females aged 15-44 Source: Oklahoma State Department of Health, HIV/STD Service		

Racial disparities exist for STDs in Oklahoma. Although African American/Black females aged 15-44 comprise only 8% of the overall population of females aged 15-44, they account for 28.9% of reported chlamydia cases and nearly half (48.8%) of all reported gonorrhea cases. In 2008, African American/Black females reported chlamydia infections rates at more than eight times that of Asian/Pacific Islanders, five times the rate of white females, and more than twice the rate of the next closest racial group, American Indian/Alaska Native (Table 7). Similar racial disparities exist for gonorrhea rates. In 2008, African American/Black females in Oklahoma had reported gonorrhea infection rates several times that of all other race groups at 2,083 per 100,000 females aged 15-44, compared to American Indian/Alaska Natives at 310, whites at 169, and Asian/Pacific Islanders at 39 per 100,000 females aged 15-44.

Table 7. Chlamydia and Gonorrhea Infection Rates* by Race, Females Aged 15-44, Oklahoma, 2008				
	Chlamydia		Gonorrhea	
	Cases	Rate	Cases	Rate
White	4672	830	4672	830
African American/Black	3152	4571	3152	4571
American Indian/Alaska Native	1280	1763	1280	1763
Asian/Pacific Islander	102	570	102	570
*Rates are number of cases per 100,000 females aged 15-44 Source: Oklahoma State Department of Health, HIV/STD Service				

- **Cancer**

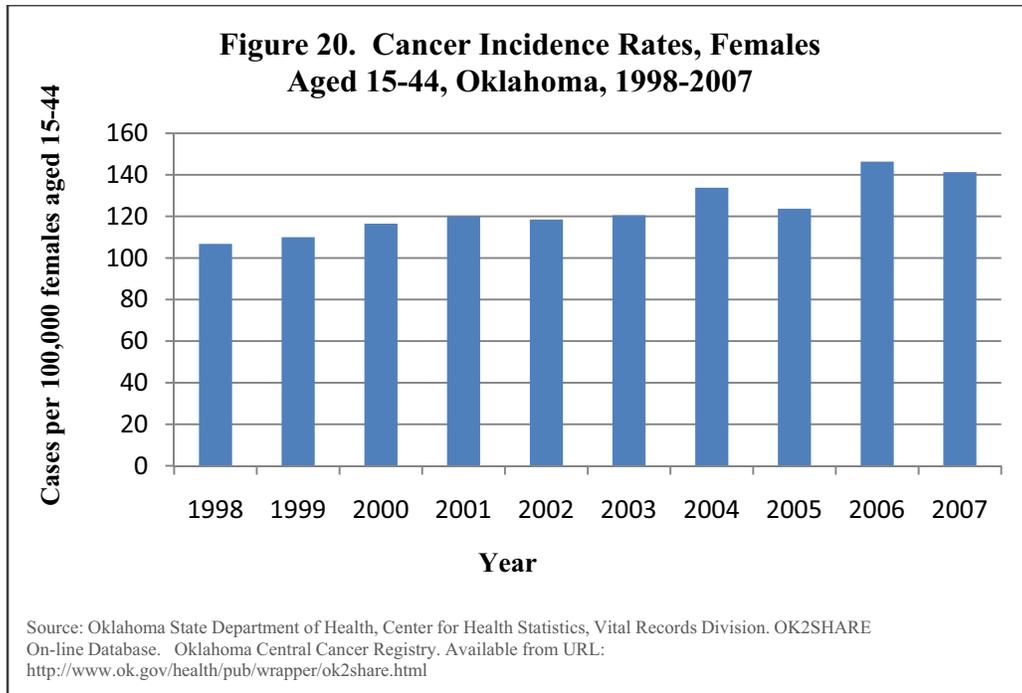
Cancer is a major health burden on the state of Oklahoma due to its lengthy and chronic nature; it is the second leading cause of death for Oklahomans and claims more than 7,000 lives each year. The Oklahoma Central Cancer Registry was implemented on January 1, 1997, and is the central database for information on all cancers diagnosed or treated in Oklahoma. Since the implementation of the cancer registry, the number of new cancer cases diagnosed each year has increased from 16,227 in 1997 to 18,969 in 2007 (Oklahoma State Department of Health, 2009).

While advances in medical technology have significantly improved the early detection, treatment, and survival rates for persons with cancer, prevention still proves to be the greatest challenge in the battle against cancer. In 2006, the most recent year national data are available, Oklahoma was higher than the national average in eight of the top 10 cancer sites for females of all ages; however, only three are statistically significant (Table 8).

Comparing overall incidence rates among females to the U.S. and surrounding states, Oklahoma’s 2006 rate of 430.8 cases per 100,000 females was higher than the U.S. (407.9), Kansas (420.2), Missouri (413.7), Arkansas (385.1), Texas (381.6), Colorado (376.7), and New Mexico (353.8) (data not shown).

Rank	Primary Site	Oklahoma Rate (C.I)	U.S. Rate (C.I)
1	Female Breast	120.1 (115.4-125.1)	119.3 (118.7-119.8)
2	Lung and Bronchus	67 (63.6-70.7)	55 (54.7-55.4)
3	Colon and Rectum	42.1 (39.3-45.0)	41.1 (40.8-41.4)
4	Corpus and Uterus, NOS	21.4 (19.4-23.5)	23.7 (23.4-23.9)
5	Non-Hodgkin Lymphoma	19 (17.1-21.0)	15.7 (15.5-15.9)
6	Melanomas of the Skin	15.3 (13.6-17.2)	15 (14.8-15.2)
7	Thyroid	14.6 (12.9-16.5)	16 (15.8-16.2)
8	Ovary	13.6 (12.0-15.3)	12.3 (12.1-12.5)
9	Leukemias	11.5 (10.1-13.1)	9.2 (9.0-9.3)
10	Kidney and Renal Pelvis	11.1 (9.7-12.7)	10.8 (10.6-10.9)

*Rates are number of cases per 100,000 females and are age-adjusted to the 2000 U.S. standard population.
C.I.- Confidence Interval
Source: U.S. Cancer Statistics Working Group. United States Cancer Statistics: 1999–2006 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2010. Available at: www.cdc.gov/uscs.



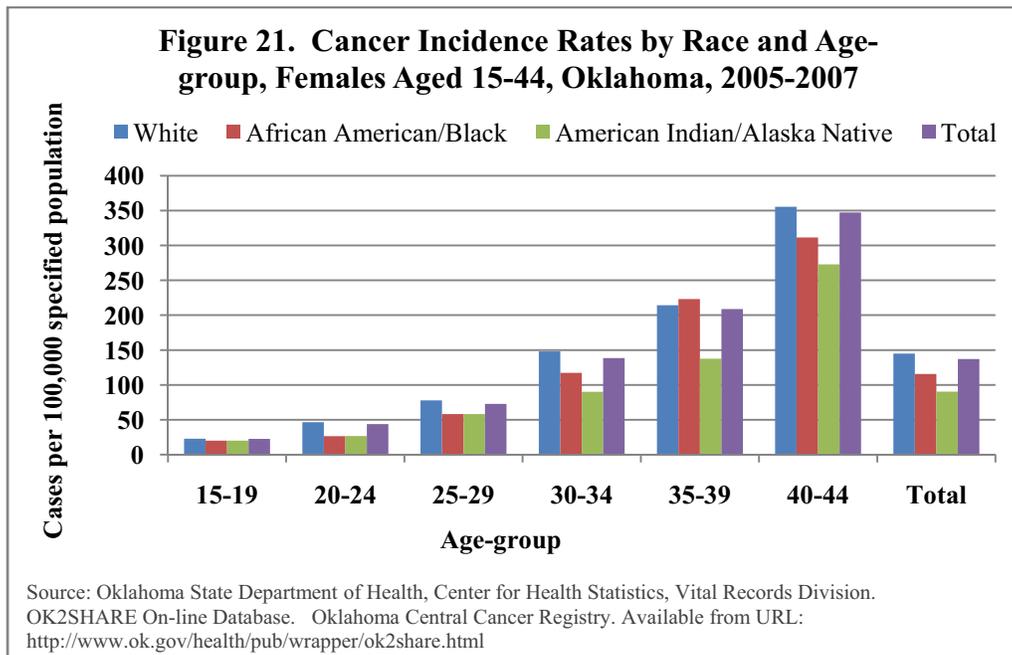
Oklahoma has seen a significant increase in cancer incidence rates from 1997-2006 for females aged 15-44 (Figure 20). Over the last ten years rates increased 32.3% from 106.8 per 100,000 females aged 15-44 in 1997 to 141.3 in 2007.

When examining by primary site of cancer (Table 9), breast cancer (excluding in situ) was the number one primary site with a rate of 35.0 cases per 100,000 females aged 15-44, which was more than twice as high as the second highest primary site of melanomas of the skin at 15.1 cases per 100,000 females aged 15-44. Breast cancers (excluding in situ) comprise 26.8% of all state cancer reported sites. When broken down by age-group, the most common site for females aged 15-29 is melanomas of the skin, while the most common site for females aged 30-44 is breast (excluding in situ).

Rank	Primary Site	Rate*
1	Breast (Excluding In Situ)	35.0
2	Melanomas of the skin	15.1
3	Thyroid	12.4
4	Cervix uteri	9.3
5	Breast (In Situ only)	6.0
6	Corpus uteri	5.0
7	Colon excluding rectum	4.4
7	Non-Hodgkin Lymphoma	4.4
9	Brain	3.9
10	Lung and bronchus	3.7

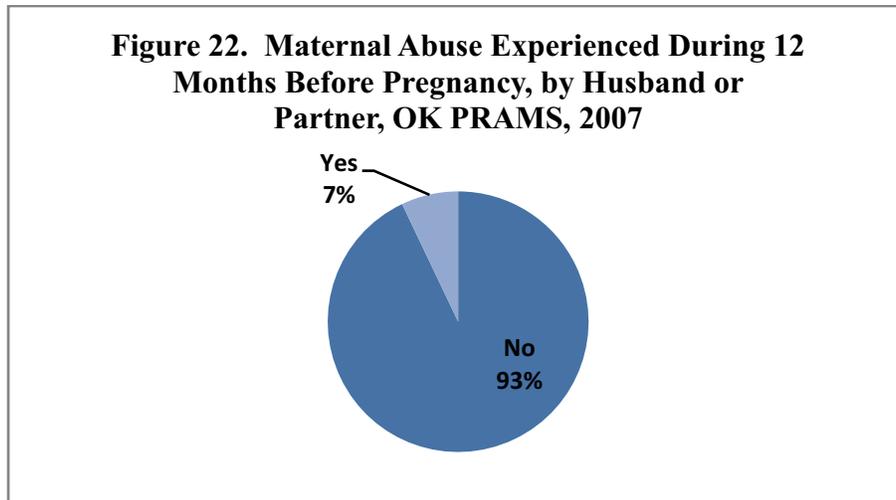
*Rates are number of cases per 100,000 females aged 15-44
 Source: Oklahoma State Department of Health, Center for Health Statistics, Vital Records Division. OK2SHARE On-line Database. Oklahoma Central Cancer Registry. Available from URL: <http://www.ok.gov/health/pub/wrapper/ok2share.html>

Racial disparities for incidence of cancer do exist as rates for white females aged 15-44 were 25% higher than the African American/Black and 60% higher than the American Indian/Alaska Native rate, at 145.0, 115.7, and 90.4 per 100,000 specified population, respectively. Disparities also exist among age-groups with significantly increasing risks for cancer as age increases. Females aged 15-19 had the lowest cancer incidence rate at 23.7 per 100,000 population while females aged 40-44 had the highest rate at 331.7 per 100,000 population (Figure 21).



Domestic Abuse/Intimate Partner Violence (IPV)

Domestic abuse according to the Oklahoma State Bureau of Investigation is defined by law enforcement as “threatening, causing, or attempting to cause serious physical harm between family or household members.” (Oklahoma State Bureau of Investigation, 2008). Offenses such as assault, assault and battery, sex crimes, and murder are included in domestic abuse. Domestic abuse continues to be a serious problem in Oklahoma as 23,853 cases of domestic abuse were reported in 2008. This is a 12.5% increase from the number of reported abuse cases in 1999. From 2007-2008, there was an overall increase (1.9%) in reported domestic abuse.



Seven percent of females reported physical abuse by their husbands or partners during the 12 months prior to pregnancy in Oklahoma according to PRAMS data (Figure 22). The PRAMS question asked mothers if their husband or partner pushed, hit, slapped, kicked, choked, or physically hurt them in any other way. Physical abuse during pregnancy has been linked to miscarriage and an increased risk for low birth weight (March of Dimes, 2008).

Mortality

From 2004-2006 the leading cause of death for females aged 15-44 was accidents or unintentional injuries, comprising nearly one-third (32.8%) of all deaths for this age group. The mortality rate for this cause was 31.9 deaths per 100,000 females aged 15-44. According to Oklahoma Vital Records, the most frequent causes of death due to accidents were: motor vehicle accidents; accidental poisoning and exposure to noxious substances; accidental exposure to smoke, fire, and flames; falls; and accidental drowning and submersion. The second leading cause of death for females aged 15-44 was malignant neoplasm (cancer) at 19.3 deaths per 100,000 females aged 15-44, followed by diseases of the heart at 11.8 per 100,000 females aged 15-44 (Table 10). When broken down by age-group the top ten causes of death vary considerably.

While accidents remain the leading cause of death for 15-24 year olds and 25-34 year-olds, accidents become the second leading cause of death for 35-44 year olds. The number one cause of death for 35-44 year olds was malignant neoplasm at 45.3 deaths per 100,000 females aged 15-44. However, the mortality rate due to accidents for 35-44 year-olds as the second leading

cause of death is still higher than 15-24 and 25-34 year olds. Of particular concern for 15-24 year olds is intentional self-harm (suicide) and assault (homicide) which was the second and third leading causes of death, respectively, for this age-group.

As expected, deaths due to unnatural causes was highest for the youngest age-group, while deaths due to natural causes such as chronic disease and infections were highest for the older age-groups.

Age-group	15-44		15-24		25-34		35-44	
Cause of death	<u>Rank</u>	<u>Rate</u>	<u>Rank</u>	<u>Rate</u>	<u>Rank</u>	<u>Rate</u>	<u>Rank</u>	<u>Rate</u>
Accidents (unintentional injuries) (V01-X59,Y85-Y86)	1	31.9	1	28.8	1	27.1	2	39.9
Malignant neoplasms (C00-C97)	2	19.3	4	3.3	2	10	1	45.3
Diseases of heart (I00-I09,I11,I13,I20-I51)	3	11.8	6	2.4	4	5.9	3	27.6
Intentional self-harm (suicide) (X60-X84,Y87.0)	4	7.5	2	4.9	3	7.4	4	10.4
Assault (homicide) (X85-Y09,Y87.1)	5	4.2	3	3.5	5	4.9	8	4.3
Cerebrovascular diseases (I60-I69)	6	3.2	7	0.9	8	1.4	5	7.4
Diabetes mellitus (E10-E14)	7	3	8	0.8	6	2.5	7	5.7
Chronic liver disease and cirrhosis (K70,K73-K74)	8	2.4	-	-	-	-	6	6.6
Influenza and pneumonia (J10-J18)	9	1.8	-	-	9	1.4	10	3.8
Chronic lower respiratory diseases (J40-J47)	10	1.8	-	-	-	-	9	3.9

*Rates are number of deaths per 100,000 females aged 15-44
 Source: Oklahoma State Department of Health, Health Care Information, Vital Records Division

2. Pregnant Women

Access to Care

- **Prenatal Care**

Figure 23 displays the percent of live births with late (third trimester) or no prenatal care, by county. Of the Oklahoma’s 77 counties, 66 were at or below the 2006 national average of 7.9% for late or no prenatal care. Seven counties had between 8.0% and 15.0%, and two counties had between 15.1% and 25.0% of mothers who had a live birth enter into late prenatal care or had no prenatal care at all. Finally, two counties had more than one-fourth of their mothers who had a live birth enter into late or no prenatal care: Beckham at 38.4% and Roger Mills at 37.2%.

In 2006, 75.6% of mothers began prenatal care in the first trimester in Oklahoma, compared to 83.2% reported for the U.S. For this time period significant disparities existed between racial and ethnic groups, both in Oklahoma and in the U.S. Those least likely to have received first trimester prenatal care were Hispanic women in Oklahoma at 64.5%. With the introduction of “Soon-To-Be-Sooners”, this disparity is anticipated to decrease for some Hispanic females in Oklahoma.