

Yuma County Needs Assessment
2009

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County Profile

History and Description

The 5,522 square miles that make up Yuma County contains portion of the Mojave and Sonoran Deserts with mountains spread throughout. The Colorado River feeds several river valley regions within the county making the land very fertile. The Colorado and the Gila River are known as very historical water sources in the great Southwest.

Names after an Indian tribe, the land that comprises Yuma County has a rich heritage, which began as far back as 1540. Hernando de Alarcon was the first European explorer to set foot on the land that is now called the City of Yuma. The strategic location of this city near the Colorado River has been providential in the development of Yuma County. The large river served as transportation for people and supplies until the mid 1870's. Stagecoaches were also used to carry goods and mail throughout this region. The year of 1870 brought about much change for this area due to the beginnings of the Southern Pacific Railroad. In 1983, the Territorial Legislature split Yuma County into two separate counties. LaPaz County took the Northern portion of land, while Yuma County remained in the South.¹

This fertile area of land is home to many industries including farming, cattle raising, tourism, and hunting. The military has a strong presence in Yuma County including the US Marine Corp Air Station and the US Army Yuma Proving ground. Yuma County is also home multiple lakes, a wildlife refuge and the Kofa Mountain Range. Each year, visitors travel to the county to visit the historical Territorial Prison and Yuma Crossing Historical Park.¹

I-8 and I-95 run through Yuma County passing through many of the major communities located there. Welton, Somerton, San Luis and Yuma are the four major communities, with many rural populations scattered throughout the area. Yuma County is also know for its tourism and an increased number of wintertime visitors. Yuma County is home to many snowbirds, and therefore has a larger need for increased medical care during the winter months.²



Figure 1: Counties in Arizona



Figure 2: Location of Yuma County in Arizona

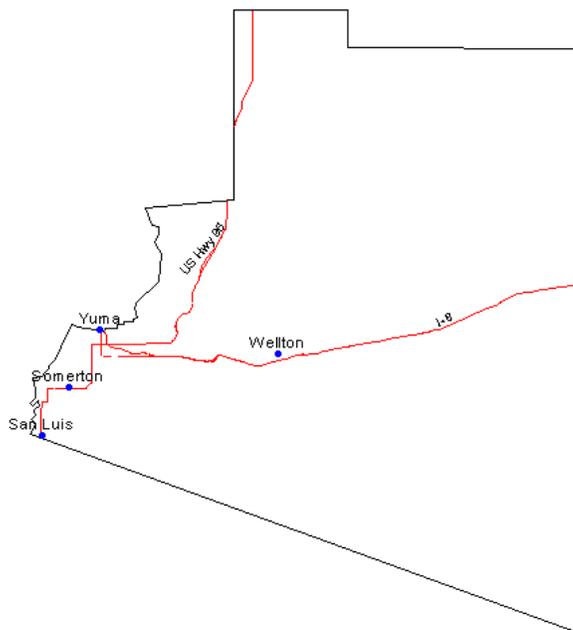


Figure 3: Major Communities in Yuma County

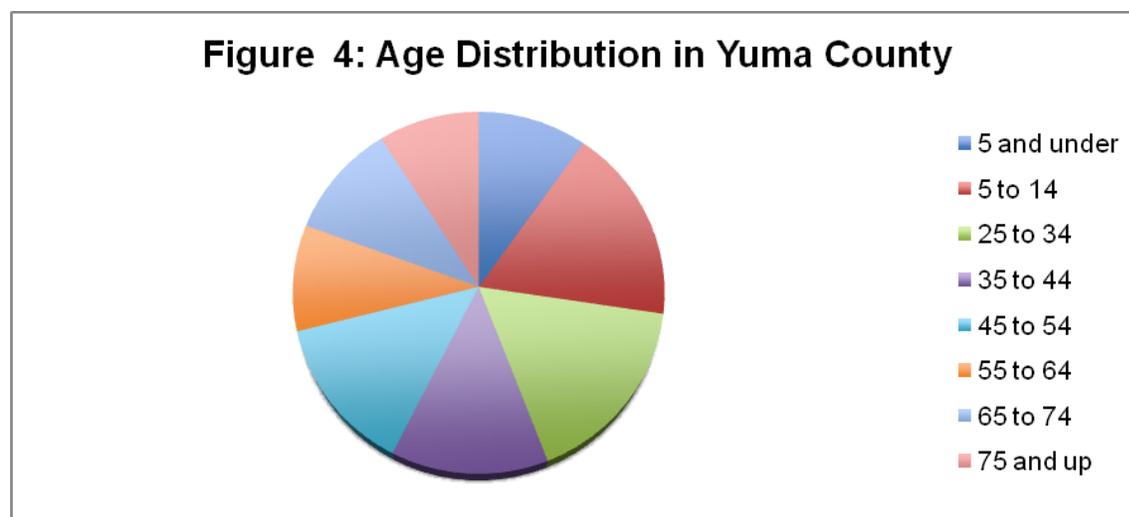
Demographic Indicators

The estimated population for Yuma County in 2008 was 194,322, which accounts for approximately 3% of the total population of Arizona.³ Yuma is the largest city in the county, containing over 40% of the population. The following table compares the population of Arizona, Yuma County and the City of Yuma over the past 15 years.

	Arizona	Yuma County	The City of Yuma
2008	6,500,180	194,322	87,423
2000	5,130,632	160,026	77,515
1990	3,665,228	106,895	56,966

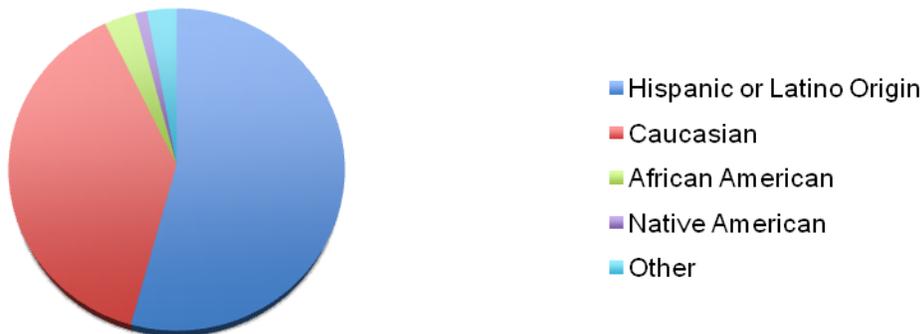
Table 1: Comparative Population Growth in Yuma County.⁴

The gender breakdown is quite even in Yuma County with approximately 97,743 females and 96,579 males in 2008.² Comparatively, Arizona also has an almost even split between genders with 49.9% females and 50.1% males in the 2008.³ The median age of the population in Yuma is 32.9, which suggests that the workforce is young and many educators will be needed to provide education for these young families and their children.



The US Census report in 2008 estimates that over 50% of the population in Yuma County is of Hispanic or Latino origin with approximately 108,043 people. The remaining racial composition consists of 39.5% Caucasian, 3.2% African American, 1.2% Native American, and less than 3% of other origins. Of these populations, over 24% are reportedly foreign born. Due to the proximity of the Mexican border, this demographic breakdown is expected.

Figure 5: Race Distribution in Yuma County



The majority of the population speaks English or Spanish due to the large Hispanic and Latino population. 45.5% of the people in Yuma County speak a language other than English in their homes and over 30% are bilingual.³

Marital Status

Yuma County had a higher rate of married individuals than did Arizona in 2008.³ The divorce rate in the state was significantly higher than that present in Yuma County as well. Males had a higher prevalence of having been married than females.

Figure 6: Marital Status in Yuma County 2008

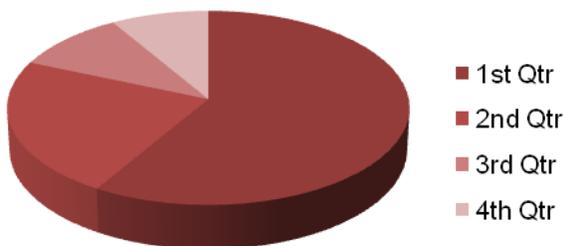
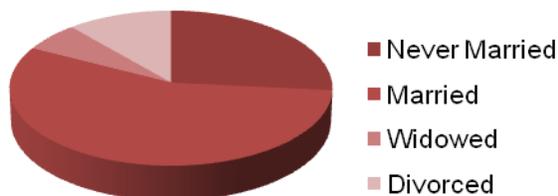


Figure 7: Marital Status in Arizona 2008



Economic Indicators

Yuma County has a multitude of industries, largely consisting of farming and agriculture. In addition to a large agribusiness industry are two large defense bases and a large regional medical center. The most common employment for men in this county includes public administration, agriculture and farming, and construction.⁵ Female occupations include educational services, food services, and health care.⁵ The median income Yuma County according to the 2007 census was \$39,781 compared to the median income in the state of Arizona of \$49,923.³ There was an average of 2.86 members per household in Yuma County, while Arizona averaged at 2.64. The poverty level is quite high in Yuma County due the large amount of migrant workers and lower paying industries. There were over 17% of families living at or below the poverty line in Yuma County in 2008, whereas Arizona had a poverty rate of 14.1%.³

The unemployment rates vary throughout the county, but are much higher than Arizona's overall unemployment rate.² The more urban city of Yuma has a higher employment rate than the rest of the county due to increased industrial and employment opportunities and higher education rates.

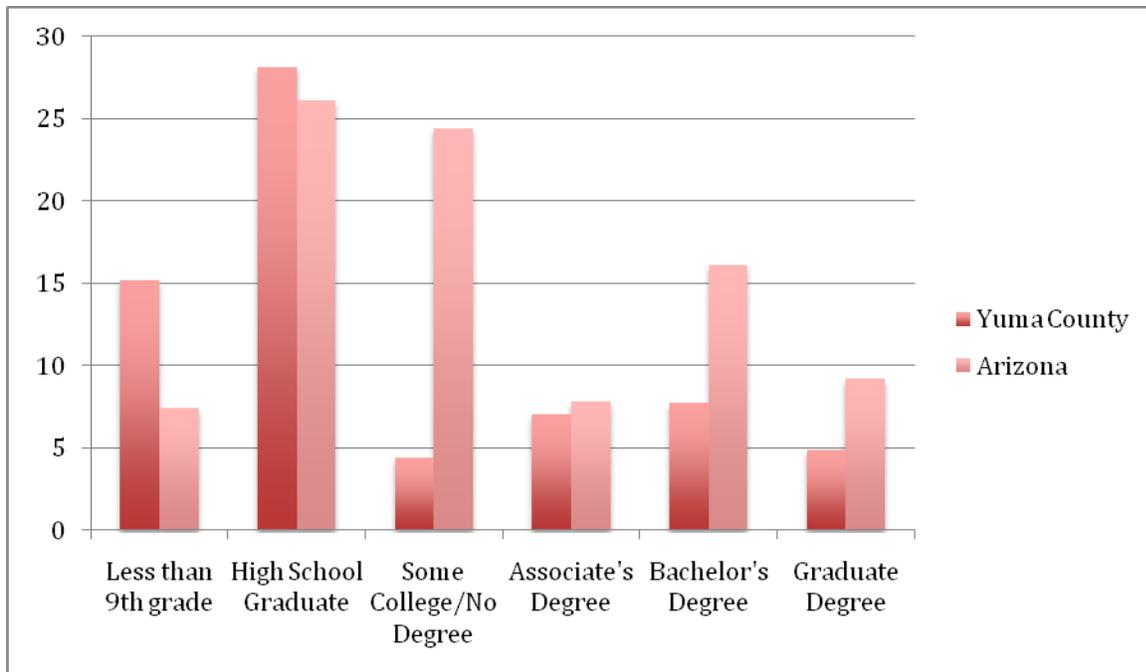
	City of San Luis	City of Somerton	City of Yuma	Town of Wellton	Yuma County	Arizona
Labor Force	6,480	3,848	44,202	776	81,031	2,387,139
# of Employed	4,282	2,925	39,001	644	68,556	2,233,004
# of Unemployed	2,148	9,23	5,201	132	12,475	133,368
Unemployment Rate	33.4%	24%	11.8%	17%	15.4%	5.6%

Table 2: Employment Statistics throughout Yuma County and Arizona.

Education

Yuma County has much lower educational attainment rates than that of the rest of the state. There is a much larger portion of teenagers that drop out before graduating from high school. Those in Yuma County are much less likely to attend and graduate from college with a bachelors or graduate degree.

Throughout the 10 school districts in Yuma County, a 3% increase in enrollment was seen in 2008. It is expected that these numbers will increase at First Things First Grants are in place and funding for more educators is applied.² In 2000, Proposition 203 was passed in Arizona, mandating that only English be taught in public schools.⁶ This proposition was quite impactful in Yuma County due to the majority of the population's Spanish speaking background.



Figure

8: Percentage Rates of Educational Attainment in Yuma County and Arizona

General Health Indicators

Hospitalization

In 2005, a community assessment of Yuma County was completed by the Arizona Department of Health Services to differentiate hospital admissions and hospitalization rates. 5,774 hospital admissions occurred in Yuma County accounting for 5.6% of all admissions in the state of Arizona. The top reasons for hospitalization in Yuma County were asthma, diabetes mellitus, stroke, heart attack, non-fatal injuries ages 1-19, ambulatory care sensitive conditions ages 1-19, and traumatic brain injuries. The largest number of the hospital admissions in Yuma County were for ambulatory care sensitive conditions for children between the ages of 1-14.

Domestic Violence

In 2007, over 11,000 people in Arizona sought out a shelter, with over 47% of these people classified as age 15 and under. Yuma County only account for a little over 2% of these domestic violence situations. Catholic Community Services provides a Safe house in the city of Yuma for those seeking assistance. Only 1.2% of the domestic violence hotline calls made in Arizona in 2007 were placed in Yuma County.⁸ Other services located within the county for victims of domestic violence include Anderly's Place and Yavapai Family Advocacy Center. Information about these services can be located in the appendices of this report.

Reportable Diseases

Yuma County only accounts for a small proportion of reportable diseases in the State of Arizona. 4% of all salmonella cases in Arizona originated in Yuma County, along with over 2% of all streptococcus pneumonia cases. The following table lists the reportable diseases in Yuma County and Arizona in 2008.

Notifiable Diseases	Yuma County	Arizona
Measles	0	1
Mumps	0	10
Rubella	0	0
Pertussis	1	210
Haemophilus influenzae type B	0	3
Central Nervous System		
Aseptic Meningitis	2	632
Meningococcal	1	13
Viral Encephalitis	1	14
Enteritides		
Amebiasis	0	13
Campylobacteriosis	17	962
Cholera	0	1
Cryptosporidiosis	0	53
Shiga Toxin producing E. Coli	0	106
Giardiasis	0	192
Salmonellosis	44	997
Salmonella Paratyphi A	0	1
Salmonella Paratyphi B	0	2
Salmonella Paratyphi C	0	1
Shigellosis	15	557
Typhoid Fever	0	7
Mycosis		
Valley Fever	13	4,832
Hepatitis		
Hepatitis A	7	152
Hepatitis B (acute)	8	180
Hepatitis B (perinatal)	0	4
Hepatitis C (acute)	0	0
Hepatitis D	0	3
Zoonoses/Vectorborne		
Brucellosis	0	4
Colorado Tick Fever	0	0
Dengue	1	8
Ehrlichiosis	0	0
Hantavirus Pulmonary Syndrome	0	6
Rabies	0	0
Lyme Disease	0	3
Malaria	0	12
Plague	0	2
Relapsing Fever/Tickborne	0	0
Rocky Mountain Spotted Fever	0	10
Tularemia	0	3
West Nile Virus	0	98
Botulism	0	1
Legionellosis	0	40
Listeriosis	0	12
Methicillin-Resistant Staph Aureus (MRSA)	5	1,305
Reyes Syndrome	0	0
Streptococcal Group A	3	208
Streptococcal Group B	0	59
Streptococcus pneumoniae	19	923
Toxic Shock Syndrome	0	5
Vancomycin Resistant Enterococcus (VRE)	30	2,494
Vibrio	0	11
Yersiniosis	0	8

Table 3: Reportable Diseases in Yuma County and Arizona 2008⁷

Maternal and Perinatal Child Health Indicators

Prenatal care use and duration

In 2008, the highest number of births occurred after 9-12 prenatal visits in Yuma County and Arizona. Table 5 below shows that more women began prenatal care in the 1st trimester in Yuma County and in Arizona compared to the 2nd or 3rd trimester.

	None	1-4	5-8	9-12	13+
Yuma	123	170	722	1586	756
Arizona	1755	3563	16571	47506	29701

Table 4: Births by Number of Prenatal Visits 2008¹⁰

	No care	1st Trimester	2nd Trimester	3rd Trimester	Unknown	Total
Yuma County	123	2300	672	264	3	3362
Arizona	1755	78738	15084	3531	107	99215

Table 5: Births by Trimester of Pregnancy that Prenatal Care Began¹⁰

Birth rates by age and ethnicity

Table 6 shows that in 2008, women between the ages of 25 and 29 had the highest number of births in Arizona. Women between the ages of 20 to 24 had the highest number of births in Yuma County. In Table 7, the Hispanic or Latino ethnicity had the highest number of births in Yuma County. In Arizona, White (non-Hispanic) and Hispanic or Latino women had the highest number of births. Figure 9 demonstrates that Yuma County has a higher birth rate of females 19 years or younger compared to the United States and Arizona.

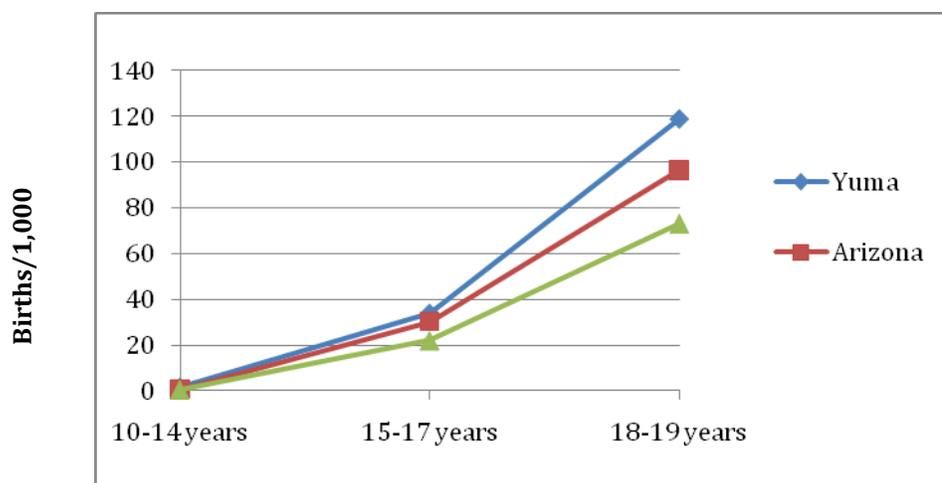


Figure 9: Birth Rates of Females 19 years or Younger for Yuma County and Arizona 2008 and for United States 2006^{10, 11}

	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Unknown
Yuma County	14	163	354	1,024	959	545	245	57	1	0
Arizona	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5

Table 6: Births by Age Group 2008¹⁰

	White (non-Hispanic)	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Other/unknown
Yuma County	782	2,424	53	51	51	1
Arizona	41,925	42,639	4,301	6,362	3,425	563

Table 7: Births by Ethnicity 2008¹⁰

Birth outcomes and Complications of Labor and Delivery

In 2008, Yuma County had 18 fetal deaths. Vaginal deliveries were the most common method of delivery for Yuma County and Arizona as shown in Table 9. Table 10 demonstrates that there was a high rate of birth to unmarried mothers in both Yuma County and Arizona.. There were a total of 8 maternal deaths in Arizona however, data were not available for Yuma County.

	Births	Abortions	Fetal Death
Yuma County	3,362	74	18
Arizona	99,215	10,396	544

Table 8: Pregnancies by Pregnancy Outcomes 2008¹⁰

	Yuma	Arizona
Vaginal	2,422	71,075
Vaginal after C-Section	12	818
Primary C-Section	510	15,170
Repeat C-Section	418	12,151
Forceps	0	456
Vacuum	33	3,085

Table 9: Method of Delivery in Yuma County and Arizona 2008¹⁰

	Yuma	Arizona
Births with complications of labor and/or delivery reported	22.7	27.4
Births with medical risk factors reported	6.4	32.1
Preterm births (gestational age < 37 weeks)	8.4	10.2
Births with abnormal conditions reported	6.1	6.6
Low birth weight births (<2,500 grams)	6.6	7.1
Very low birth weight births (<1,500 grams)	1.3	1.2
Births with congenital anomalies reported	.4	.9
Tobacco use during pregnancy	.9	4.9
Alcohol use during pregnancy	.3	.5
Birth to unmarried mothers	43.5	45.1

Table 10: Rates of Occurrence for Selected Characteristics of Newborns and Mothers Giving Birth in Yuma County and Arizona per 100 births 2008¹⁰

	Yuma County	Arizona
Febrile	13	1,496
Meconium	112	4,501
Rupture of membrane	42	1,838
Abruptio placenta	14	480
Placenta previa	10	313
Other excessive bleeding	1	414
Seizures during labor	1	30
Precipitous labor	55	1,224
Prolonged labor	12	874
Dysfunctional labor	0	1,400
Breech malpresentation	100	3,095
Cephalopelvic disproportion	5	563
Cord prolapse	1	271
Anesthetic complications	0	52
Fetal distress	195	4,451
Other	353	13,192
Total	764	27,173

Table 11: Complications of Labor and/or Delivery 2008¹⁰

Low Birthweight Births

According to Figure 10, Yuma County had a lower rate of low birth weight babies compared to the United States and Arizona. The Hispanic and Latino population had the majority of low birth weight babies in Yuma County.

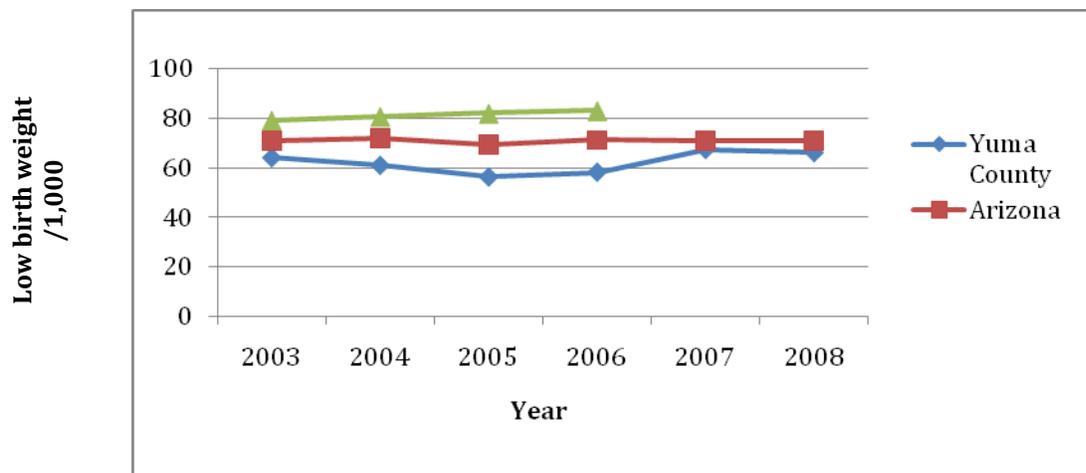


Figure 10: Low Birth Weight Ratios in Yuma County, Arizona, and the United States¹⁰

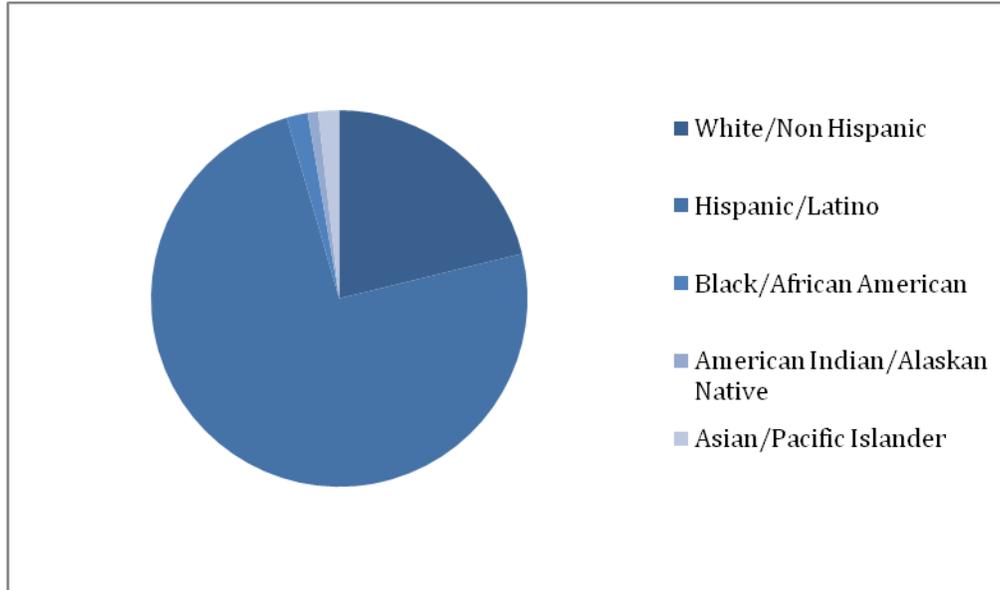


Figure 11: Low Birth Weight Births by Mother's Race/Ethnicity Yuma County 2008¹⁰

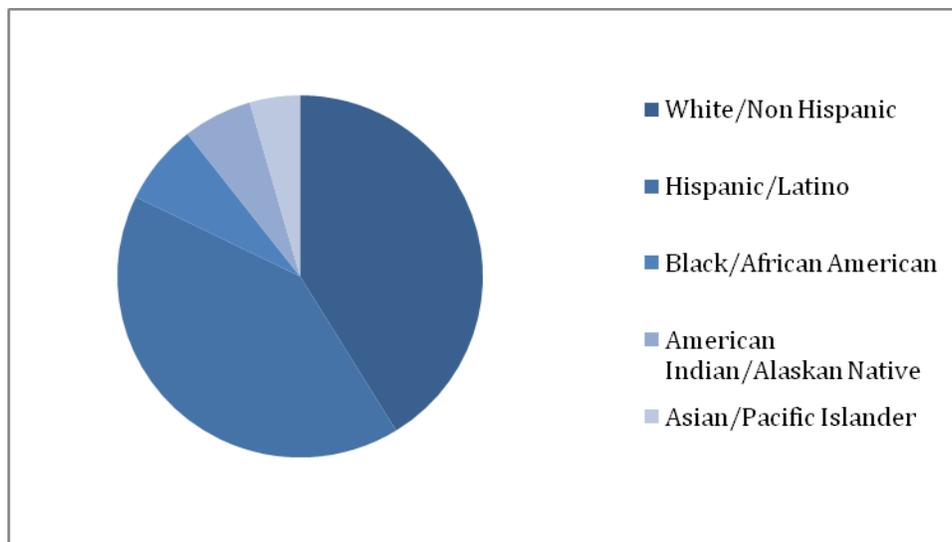


Figure 12: Low Birth Weight Births by Mother's Race/Ethnicity Arizona 2008¹⁰

Service Utilization

In 2008, AHCCCS was the payee for the majority of births in Yuma County. Private insurance and AHCCCS were the payees for the majority of births in Arizona. Yuma County had a higher percentage of children living in families that received TANF and free or reduced lunches compared to Arizona. The reliance on public funding in Yuma County is a representation of the economic status of the community.

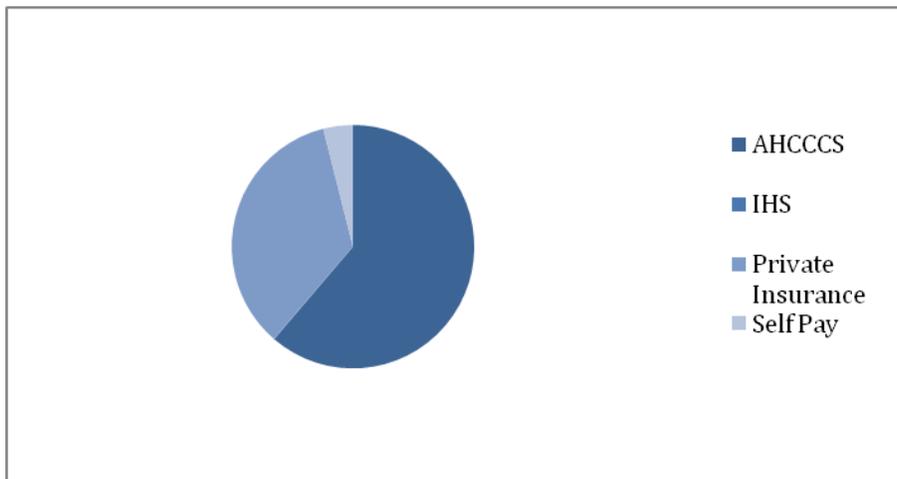


Figure 13: Payee of Births in Yuma County 2008¹⁰

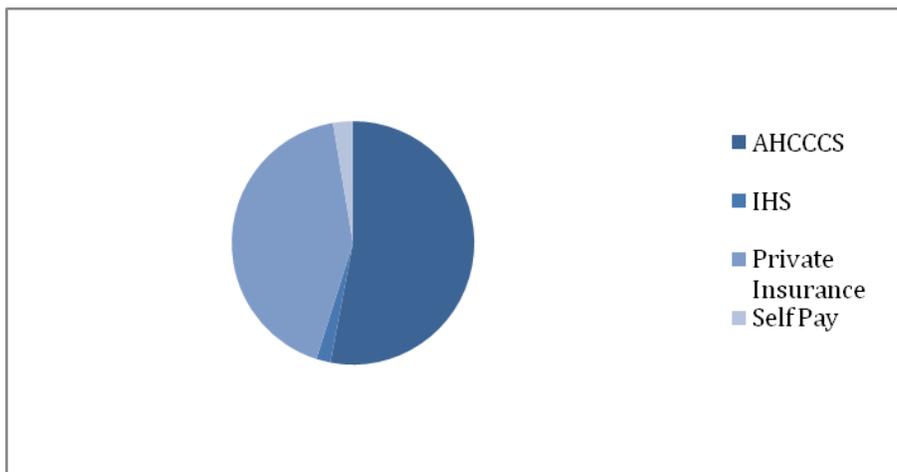


Figure 14: Payee of Births in Arizona 2008¹⁰

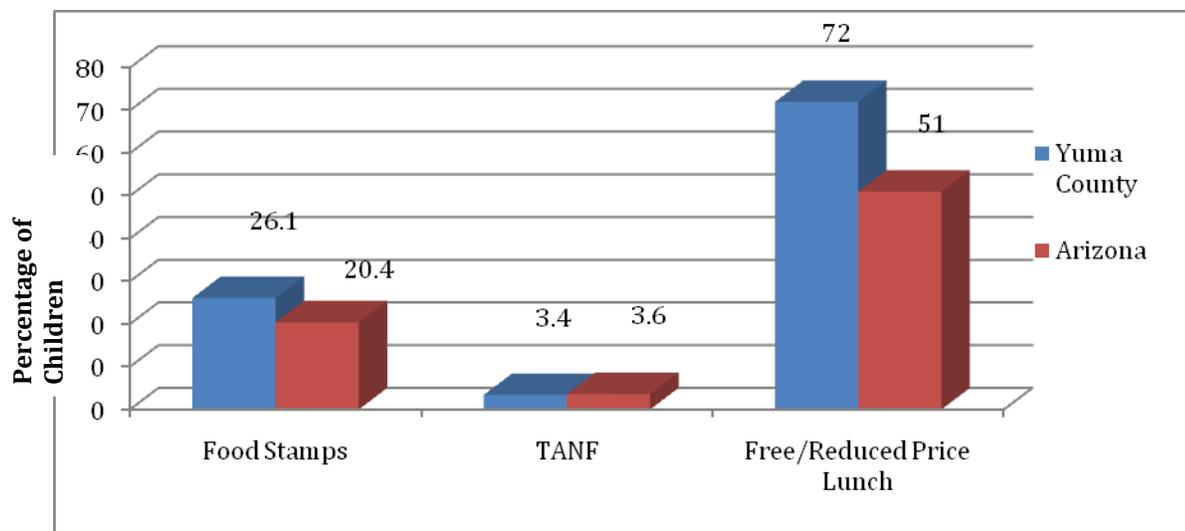


Figure 15: Percentage of Children in Families Receiving Public Assistance in Yuma County and Arizona 2008¹²

Newborn Intensive Care Program

The High Risk Perinatal Program/Newborn Intensive Care Program is a comprehensive, statewide system of services dedicated to reducing maternal and infant mortality and morbidity. The program provides a safety net for Arizona families, to ensure the most appropriate level of care surrounding birth as well as early identification and support for the child's developmental needs.¹³ In 2008, 6% of infants were admitted to newborn intensive care units in Arizona. 11.2% of infants were admitted in Yuma County. Yuma County had the highest rate of infants admitted to a NICU in Arizona.

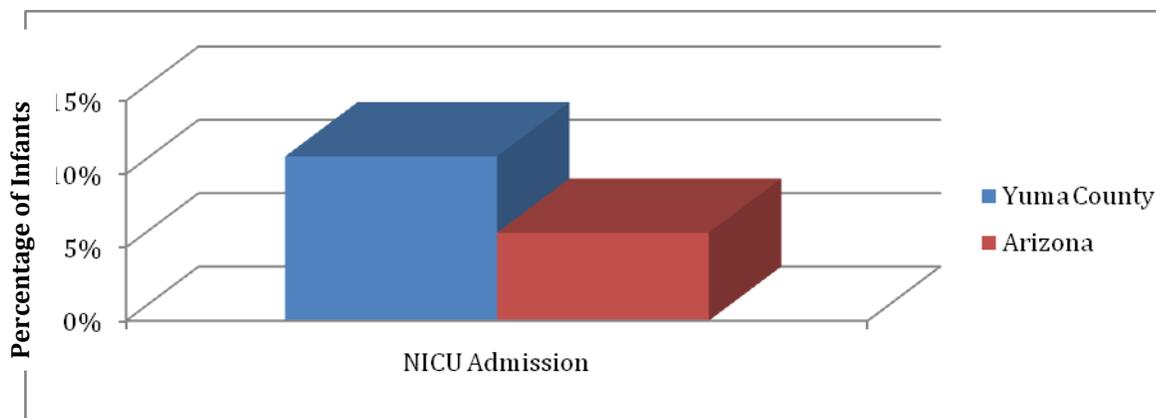


Figure 16: Percentage of Infants Admitted to Newborn Intensive Care Units¹⁴

	Preterm < 37 weeks		37 weeks or more	
	<2,500 grams	2,500+ grams	<2,500 grams	2,500+ grams
Yuma	132	54	16	174
Arizona	2,688	819	175	2,246

Table 12: Newborns Admitted to Newborn Intensive Care Units by Gestational Age and Birth Weight 2008¹⁰

Maternal and Neonatal Transport Services

Maternal and Neonatal Transport Services provide medical consultation and case management related to treatment, stabilization and maternal and neonatal transport to available higher levels of care. The toll free number is 1-800-552-5252. This number is used to connect an attending physician with the HRPP on-call perinatologist or neonatologist in the specific geographic area. Infant transport back to the community hospital near the family after the acute hospitalization allows families to visit and learn to care for their baby.¹³

Infant and Child Health Indicators

Infant Deaths

In 2008, the highest number of infant deaths for Yuma County were due to short gestation and low birth weight. In Arizona, congenital malformations were the highest cause of infant death. The leading causes of death in children 1-14 years of age in Yuma County and Arizona were accidents or unintentional injuries as shown in Table 14. In Table 15 both Yuma County and Arizona show highest rates of deaths in adolescents were due to accidental poisoning and assault.

	Yuma County	Arizona
Congenital Malformations	4	145
Short Gestation and Low Birth Weight	7	91
Maternal Complications	5	53
Sudden Infant Death Syndrome	2	21
Accidents	0	19
Newborn Bacterial Sepsis	0	17
Complications of placenta, cord and membrane	1	31
Influenza and Pneumonia	0	4

Table 13: Number of Infant Deaths for Selected Causes¹⁰

Leading Causes of Child Death (1-14 years)

	Yuma County	Arizona
Unintentional Injuries	6	77
Motor Vehicle Accident	2	35
Accidental Drowning and Submersion	1	24
Septicemia	1	8
Malignant Neoplasms	0	30
Assault	0	14
Total Causes of Deaths	10	262

Table 14: Leading Causes of Death Among Children (1-14 years)¹⁰

Leading Causes of Adolescent Death (15-19 years)

	Yuma County	Arizona
Unintentional Injuries	4	101
Accidental Poisoning	2	76
Motor Vehicle Accident	0	14
Accidental Drowning and Submersion	0	2
Assault (homicide)	3	62
By discharge of firearms	2	50
By other means	1	12
Intentional self-harm (suicide)	2	56
By discharge of firearms	0	24
By other means	2	32
Malignant Neoplasms	1	21
Congenital Malformations	0	4
Disease of the Heart	0	3
Total Causes of Deaths	11	297

Table 15: Leading Causes of Death Among Adolescents (15-19 years)¹⁰

Abuse

Yuma County accounts for 2.1% of the total number of reports of suspected child abuse received in Arizona from October 2008 to March 2009.⁹ These reports are further categorized by high, moderate, low and potential risk for child abuse. Over half of Yuma County's reports for this time period fell in the low risk category. The majority of reports of child abuse in the county fell under the category of neglect. Yuma County had a higher reportable rate of neglect than Arizona.

Yuma County has a Child Abuse Prevention Council that works on prevention efforts and community awareness about its hotline and various community resources.

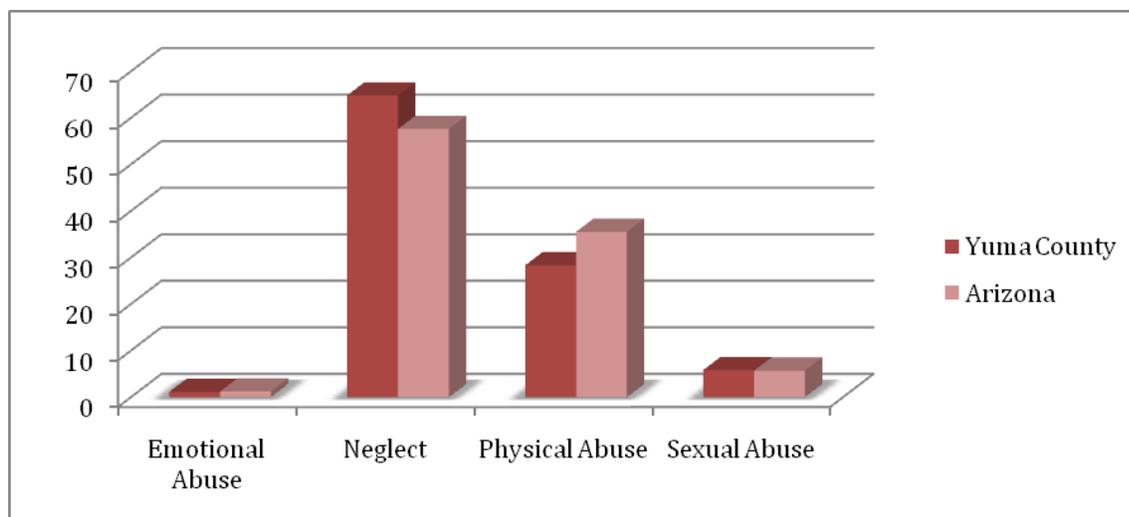


Figure 17: Percentages of Total Child Abuse Reports Categorized by Type of Abuse 2008.⁹

Asthma

Asthma is a large problem among children and adults in the United States. The National Health Interview survey estimates that over 7 million children under the age of 18 suffer from asthma, which is approximately 10% of children.¹⁰ Over 2,800 children in Yuma County receive treatment for asthma each year. According to the National Institute of Health, asthma has increased over 72% in the last 15 years in the United States. Asthma is a common respiratory disorder that causes airway tightening brought on by certain triggers. These triggers are usually environmental and include dust mites, cigarette smoke, cockroach allergens, outdoor air pollutants, pets, and mold.¹⁸

Yuma County accounted for 6.2% of all asthma related hospital discharges in Arizona in 2008.¹⁸ Since 2005, the number of patients diagnosed with asthma under the age of 18 has increase each year in Yuma County. In 2008, there were 581 cases of asthma in children under the age of 18 in Yuma County alone according to Arizona Depart of Health Services. There were 1,017 emergency room visits with an asthma diagnosis in Yuma County in 2008.

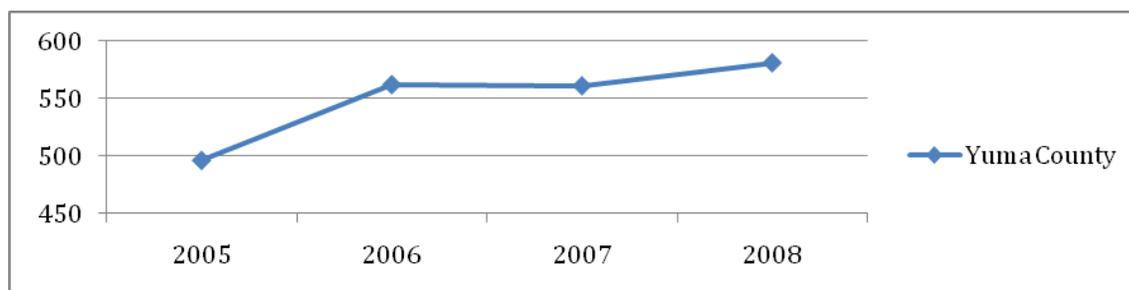


Figure 18: Annual Number of Cases of Asthma in Children <18 years of Age in Yuma County.¹⁸

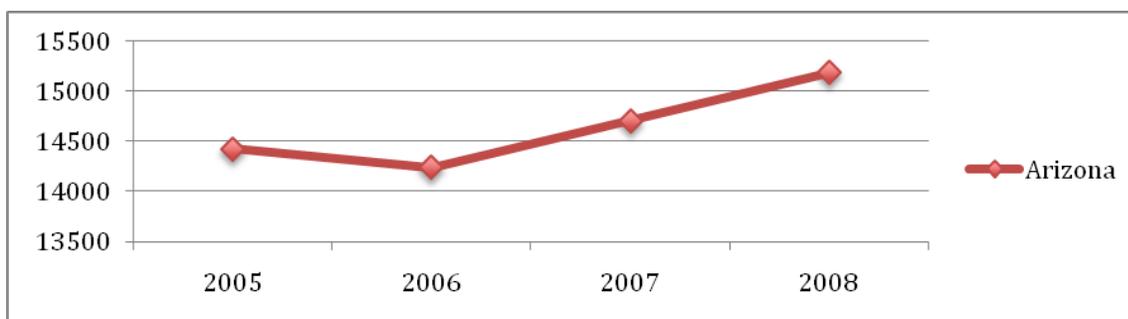


Figure 19: Annual number of cases of asthma in children <18 years of age in Arizona.¹⁸

There are multiple programs in Yuma County that exist primarily to address the problem of childhood asthma. These programs emphasize the importance of tobacco cessation and the decrease of environmental pollutants around residential areas.

Immunizations

Arizona has a comprehensive immunization program entitled Arizona State Immunization Information System that uses the nationwide performance measures to guide their requirements and recommendations. The state average for immunizations in children under the age of five is 78% according to 2008 statistics.¹³ The goal for 2010, in accordance with Healthy People 2010, is 90% compliance with childhood immunization requirements. The current vaccination recommendations follow the 4:3:1:3:3 schedule. This includes 4 or more doses of dTaP, 3 doses of IPV, one or more doses of MMR, 3 or more doses of Hib, and 3 doses of the Hepatitis B vaccine.¹⁶

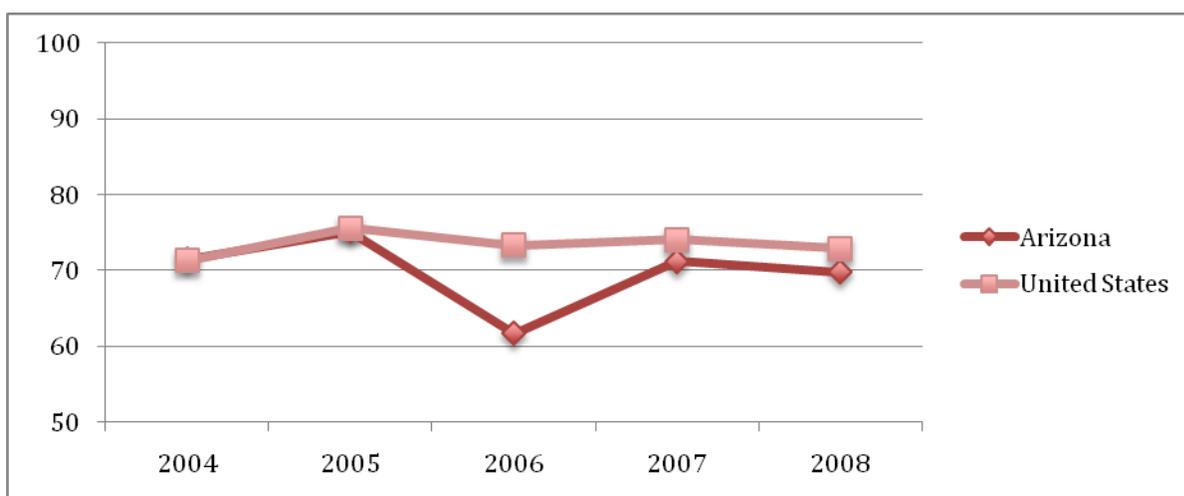


Figure 20: Estimated Coverage (%) with 4:3:1:3:3:1 by 24 months of Age According to the National Immunization Survey¹⁶

It was difficult to locate recent statistics regarding Yuma's immunization rates. In 2002 and 2003, >90% of 2 year olds were reportedly compliant with all of their immunizations.⁹ This is slightly increased from the state average. Yuma County has done an excellent job of ensuring consistency of immunizations throughout the county through various government funded clinics and programs. The Vaccinations for Children Program (VFC) partners with the CDC to provide immunizations to children who are Medicaid eligible, uninsured, underinsured or are of a Native American or Alaskan American descent.¹⁶

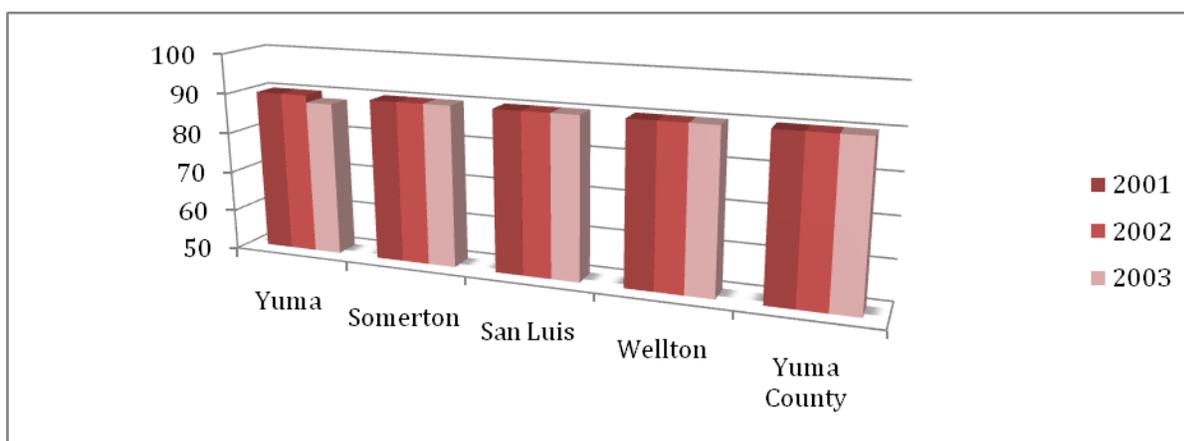


Figure 21: Average Immunization Percentage Rates for 2 year olds Throughout Yuma County.⁹

Injury

Accidental injury was the leading cause of death in children ages 1-18 in Yuma County in 2008 according to the Arizona Department of Health Services. Many of these deaths were caused by motor vehicle accidents, much like the injury rates of Arizona.

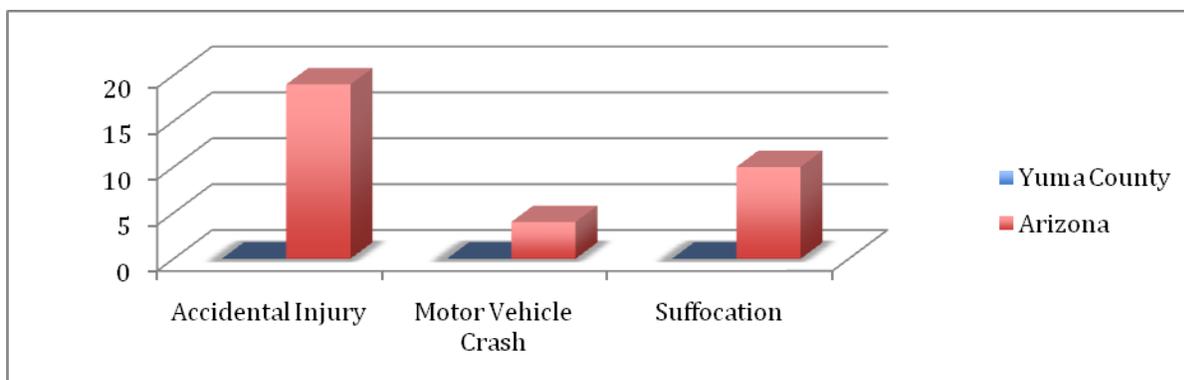


Figure 22: Injury cases in Yuma County and Arizona in Infants 2008. (AZDES)

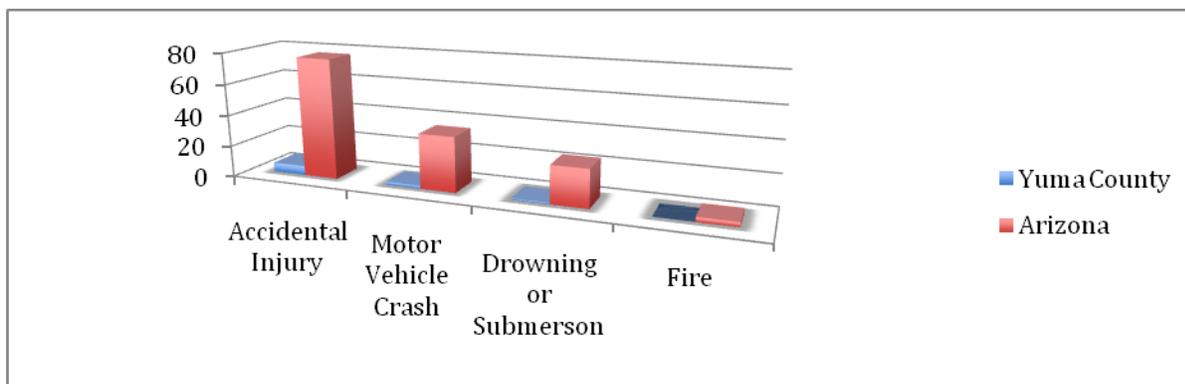


Figure 23: Injury Cases in Yuma County and Arizona in Children ages 1-14 2008.⁹

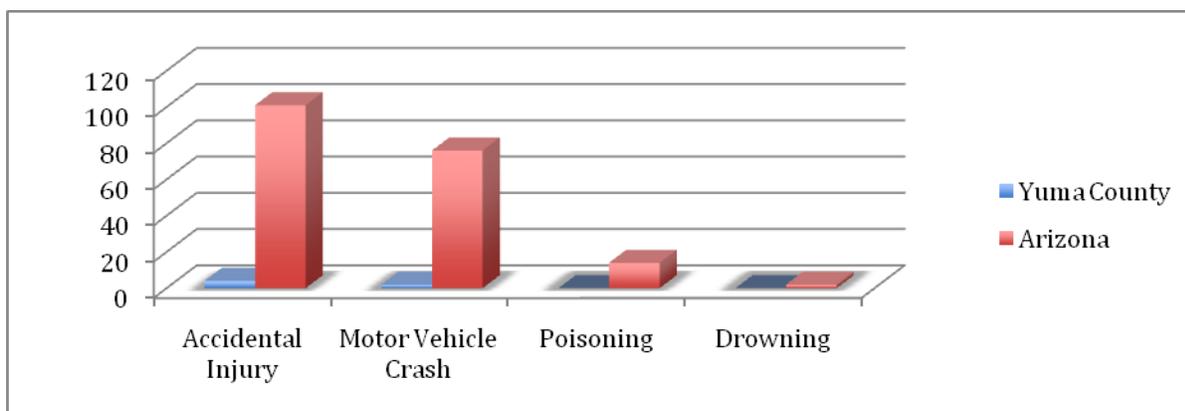


Figure 24: Injury Cases in Yuma County and Arizona in Children ages 15-18 2008.⁹

Oral Health

Yuma County had higher rates of tooth decay, treated and untreated, than Arizona and the national average in 2005 according to Arizona Department of Health Services.⁹ More recent data was not available for county comparison. On average, each child in Yuma County needs over 5 fillings due to tooth decay.

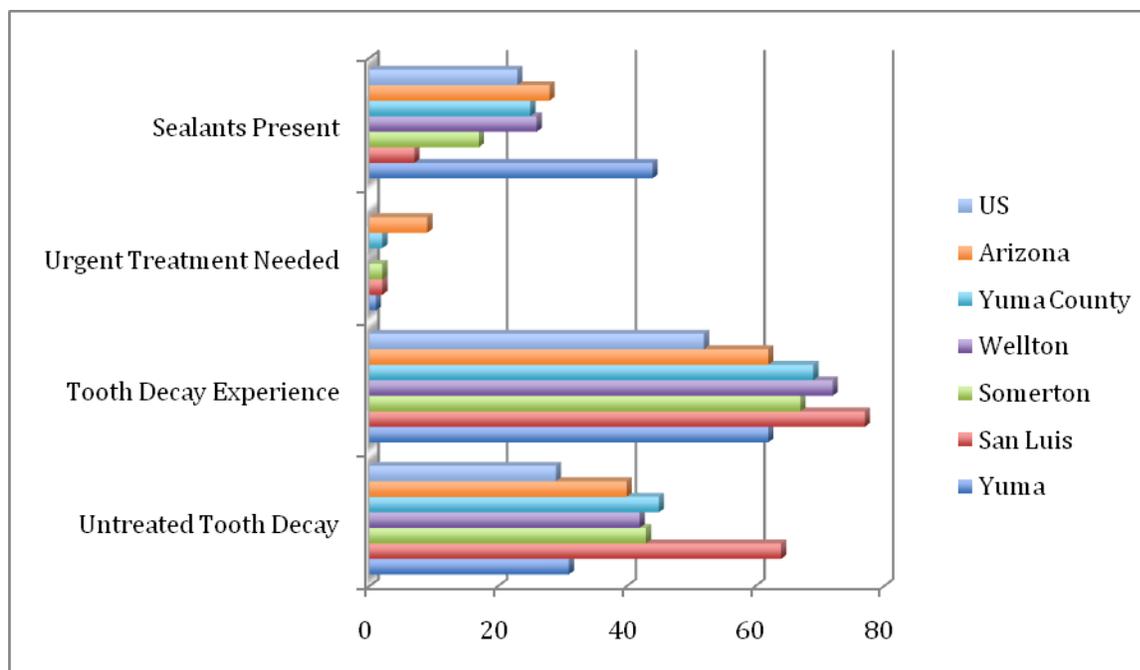


Figure 25: Percentages of Oral Health Indicators in Children Ages 6-8 Throughout Arizona 2005⁹

Lead Poisoning

Yuma County, according to 2007 statistics, has a much higher percentage of housing units with high-risk levels of lead content than that of Arizona and the United States.¹⁶ It was difficult to locate information regarding location of lead poisonings in specific parts of Arizona.

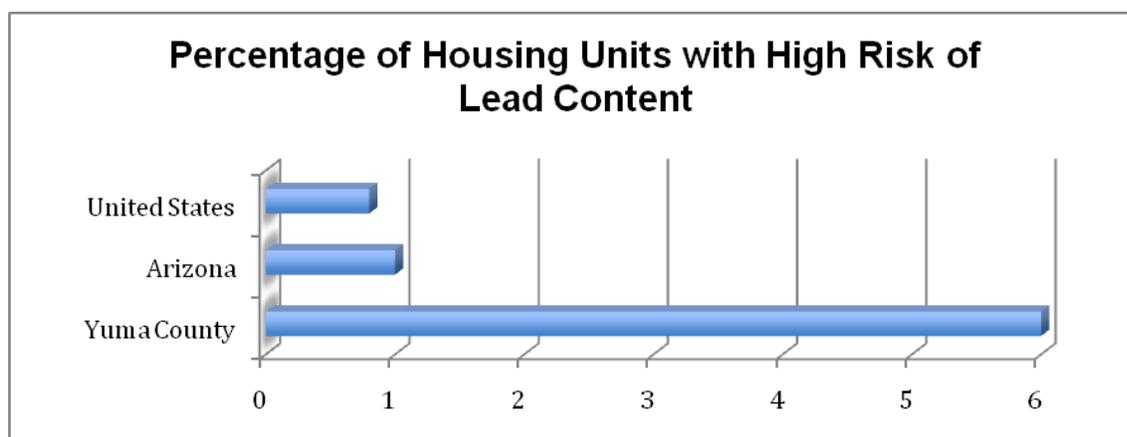


Figure 26: Comparative Percentages of Households with High Lead Content in 2007¹⁶

Children With Special Health Care Needs

Current county data concerning children with special health care needs was not available. The National Survey of Children with Special Health Care Needs collected statewide data in 2005-2006 regarding special needs children. According to this survey, 12.5% of children in Arizona have special health care needs, as compared to the national average of 13.9%.²⁰ Females accounted for 10% of the children with special needs in Yuma County, while males accounted for 14.9%. 24.8% of children with special needs were African American, while 15.8% were Caucasian. Over twenty percent of parents claimed that they had inadequate insurance coverage to provide services for their special needs children. Almost 30% of parents reported needing a referral and having difficulties acquiring one.²⁰

Healthy People 2010

Healthy People 2010 is a comprehensive set of disease prevention and health promotion objectives for the United States to reach by the year 2010. These objectives were developed through collaborations among federal agencies using scientific data and public input. Healthy People 2010 identifies a wide range of public health priorities and specific, measurable objectives. The two overarching goals are to increase life expectancy and quality of life and to eliminate health disparities. A total of 28 focus areas were developed within these 2 main goals. Each focus area has a goal statement and several objectives enabling programs to target specific health needs in the communities.²²

The Arizona State Health Department has developed the Healthy Arizona 2010 to address the unique health needs of communities in Arizona. It is based upon the national Healthy People 2010 agenda. Healthy Arizona 2010 is a comprehensive prevention plan for personal and community health goals. This plan focuses on twelve areas which health experts and communities themselves have agreed are of priority.²³

Due to the location of Yuma county along the U.S.- Mexico border, the county also participates in the Healthy Border 2010. This initiative was established by the U.S.- México Border Health Commission. It is a binational agenda of health promotion and disease prevention. The Healthy Border 2010 consists of 10-year objectives for health promotion and disease prevention for people living on both sides of the border. Healthy People 2010 and Mexico's National Health Indicators were used to develop 11 focus areas. Since both countries have their own data collection systems and service administration, they also keep their own objectives.²⁴

Table 16: Healthy People 2010 Maternal Child Health Objectives^{10, 25, 26}

Objective	HP 2010 Target	US Baseline (1997)	Arizona	Yuma County	Yuma County Status
9-7 Reduce Pregnancies Among Adolescent Females aged 15 to 17 years					
	25	N/A	34.6	35.4	Above
16-1 Reduce fetal and infant deaths					
a. Fetal deaths at 20 or more weeks of gestation	4.1	6.8	5.5	5.3	Above
b. Fetal and infant deaths during perinatal period (28 weeks of gestation to 7 days or more after birth)	4.5	7.5	6.4	8.9	Above
c. All infant deaths (within 1 year)	4.5	7.2	6.3	7.7	Above
d. Neonatal deaths (within the first 28 days of life)	2.9	4.8	4.2	6.8	Above
e. Postneonatal deaths (between 28 days and 1 year)	1.2	2.4	2.1	.9	Below
f. All birth defects	1.1	1.6	N/A	N/A	N/A
g. Congenital heart defects	0.38	0.53	N/A	N/A	N/A
h. Reduce deaths from sudden infant death syndrome (SIDS).	0.25	0.72	.2	N/A	N/A
16-2 Reduce the rate of child deaths (rate per 100,000)					
a. Children aged 1 to 4 years	18.6	34.6	31.8	N/A	N/A
b. Children aged 5 to 9 years	17.7	12.3	14.2	N/A	N/A
16-3 Reduction in deaths of Adolescents and Young Adults (rate per 100,000)					
a. Adolescents aged 10 to 14 years	16.8	22.1	14.7	N/A	N/A
b. Adolescents aged 15 to 19 years	39.8	70.6	65.7	27.1	Below
c. Young adults aged 20 to 24 years	49.0	95.3	101.1	N/A	N/A
16-4 Reduce Maternal Deaths					
a. Reduce Maternal Deaths	3.3	7.1	7.8	N/A	N/A
16-5 Reduce maternal illness and complications due to pregnancy					

a. Maternal complications during hospitalized labor and delivery	24	31.1	N/A	N/A	N/A
b. Ectopic pregnancies	N/A	N/A	N/A	N/A	N/A
c. Postpartum complications, including postpartum depression ^s	N/A	N/A	N/A	N/A	N/A
16-6 Increase the proportion of pregnant women who receive early and adequate prenatal care.					
a. Care beginning in first trimester of pregnancy	90%	83	79.4	68.4	Below
b. Early and adequate prenatal care	90%	74	68	N/A	N/A
16-7 Increase the proportion of pregnant women who attend a series of prepared childbirth classes					
	N/A	N/A	N/A	N/A	N/A
16-8 Increase the proportion of very low birth weight (VLBW) infants born at level III hospitals or subspecialty perinatal centers.					
	90%	73%	N/A	N/A	N/A
16-9 Reduce cesarean births among low-risk (full term, singleton, vertex presentation) women.					
a. Women giving birth for the first time	15%	18%	N/A	N/A	N/A
b. Prior cesarean birth	63%	72%	N/A	N/A	N/A
16-10 Reduce low birth weight (LBW) and very low birth weight (VLBW)					
a. Low birth weight (LBW)	5.0	7.6	7.1	6.6	Above
b. Very low birth weight (VLBW)	0.9	1.4	1.2	1.3	Above
16-11 Reduce preterm births					
a. Total preterm births	7.6	11.6	10.3	8.4	Above
b. Live births at 32 to 36 weeks of gestation	6.4	9.6	11.3%	N/A	N/A
c. Live births at less than 32 weeks of gestation	1.1	2.0	1.9%	N/A	N/A
16-12 Increase the proportion of mothers that achieve a recommended weight gain during their pregnancies					
	N/A	N/A	N/A	N/A	N/A
16-13 Increase the percentage of healthy full-term infants who are put down to sleep on their backs					
	70	35	N/A	N/A	N/A
16-14 Reduction in Developmental Disabilities in Children (rate per 10,000)					
a. Mental retardation	131.0	124.5	N/A	N/A	N/A
b. Cerebral palsy	33.3	31.6	N/A	N/A	N/A

c. Autism spectrum disorder (reduction in age of identification)	50	48	N/A	N/A	N/A
d. Epilepsy	N/A	N/A	N/A	N/A	N/A
16-15 Reduce the occurrence of spina bifida and other neural tube defects.					
Cases per 10,000 live births	3	6	3.03	N/A	N/A
16-16 Increase the proportion of pregnancies begun with optimum folic acid level					
a. Consumption of at least 400 µg of folic acid each day from fortified foods or dietary supplements by nonpregnant women aged 15 to 44 years	80	21	N/A	N/A	N/A
b. Median RBC folate level among nonpregnant women aged 15 to 44 years	220	160	N/A	N/A	N/A
16-17 Increase in Reported Abstinence in Past Month From Substances by Pregnant Women (women aged 15-44)					
a. Alcohol	95	90	95	97	Above
b. Binge drinking	100	96	N/A	N/A	N/A
c. Cigarette smoking	99	87 (1998)	95.1	99.1	Above
d. Illicit drugs	100	96 (1995-97)	N/A	N/A	N/A
16-18 Reduce the occurrence of fetal alcohol syndrome (FAS).					
Rate per 1,000 births	0.1	0.4 (1995-97)	N/A	N/A	N/A
16-19 Increase the proportion of mothers who breastfeed their babies.					
a. In early post-partum period	75%	64	60.1	55.1	Below
b. At 6 months	50	29	30.9	26.2	Below
c. At 1 year	25	64	20.4	18.7	Below
d. Exclusively through 3 months ⁺	60	43 (2002)	6.9	1.4	Below
e. Exclusively through 6 months ⁺	25	13 (2002)	2.4	2.4	Below
16-20 Ensure appropriate newborn bloodspot screening, and follow-up testing.					
a. Ensure that all newborns are screened at birth for conditions mandated by their State-sponsored newborn	N/A	N/A	N/A	N/A	N/A

screening programs, by matching the number screened by the State to birth certificate information.					
b. Ensure that follow up testing for screened positives is performed within an appropriate time period by monitoring the period from time of birth to initial diagnosis.*	N/A	N/A	N/A	N/A	N/A
c. Ensure that infants with diagnosed disorders are enrolled in appropriate service interventions within an appropriate time period.	N/A	N/A	N/A	N/A	N/A
16-21 Reduce hospitalization for sickle cell disease among children aged 9 years and under.*					
Per 100,000 children ≤9	33	41.3	N/A	N/A	N/A
16-22 Increase the proportion of children with special health care needs who have access to a medical home.*					
	100	53 (2002)	N/A	N/A	N/A
16-23 Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems.					
	100	35 (2001)	N/A	N/A	N/A

N/A = not available

Title V Block Grant Performance Measures

The National Maternal and Child Health (MCH) Block Grant performance and outcome measures are nationally developed goals to measure progress along priorities for maternal and child health. Each state develops its own goals and objectives for the measures as well as a plan to meet those goals. Reporting on progress made to reach these goals is done by the state to the Health Resources Service Administration. Listed below are the MCH Block Grant measures, the Arizona Fiscal Year 2013 goal, the 2008 intermediary objective to reach that goal, and Arizona's performance as reported to HRSA in 2009. Attempts are also made to report Yuma County's statistics; however, several of these measures do not currently have data accessible at the county level.

National MCH Block Grant Performance Measures²⁷

(1) The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their state-sponsored newborn screening programs.

The Arizona state goal for 2013 is 100% and in the year 2008 100% of newborns received timely follow up to definitive diagnoses. There were no data for Yuma County.

(2) The percent of children with special health care needs age 0 to 18 whose families' partner in decision-making at all levels and are satisfied with the services they receive. (CSHCN Survey)

The Arizona 2013 goal for family partnership in decision making is 58%. The 2008 intermediary objective was 54%. In 2008, Arizona failed to meet the 2008 objective and the 2013 goal with 53.6% of all families partnering in the decision-making process with satisfaction. Arizona needs to continue to work in this area in order to ensure greater family participation and satisfaction when working with CSHCN's and their families by 2013. No data were reported for Yuma County.

(3) The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)

The Arizona FY 2013 goal for coordinated, ongoing and comprehensive care within a medical home is 43%, with a 2008 intermediary objective of 41%. Arizona reported that 40.4% of CSHCN received these services. Arizona is below the 2008 indicator and needs to make some improvements in order to meet the goals. No data were reported for Yuma County.

(4) The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)

The Arizona Fiscal Year 2013 goal is for 59% of children with special health care needs to have adequate insurance for needed services. The 2008 objective was also 59%. Arizona reported a level of 58.1% insured children with special health care needs. This is very close to meeting the 2013 goal. No data were available for Yuma County.

(5) The percent of children with special health care needs age 0 to 18 whose families report the community-based service systems are organized so they can use them easily. (CSHCN Survey)

The Fiscal Year 2013 goal is 89% of families reporting ease of use with organization of community-based service systems. The 2008 objective level was 87% and Arizona reported that 86.5% were able to use services easily due to their organization, a percentage very close to the goal. Continued attention in this area will help ensure that Arizona meets this measure. No data were available for Yuma County.

(6) The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence. (CSHCN Survey)

The 2013 Fiscal Year goal for transitions services for youth with special health care needs is 43%. The 2008 intermediary objective was 39% and Arizona reported that 39.4% of its youth are receiving services to make transitions in life. Arizona met the intermediary objective and with continued effort in this area is on track to meet the 2013 goal. No data were available for Yuma County.

(7) Percent of 19 to 35 month olds who have received the full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B.

The fiscal year 2013 goal for full immunization is 80% and the 2008 objective was also 80%. Arizona reported a rate of 76.7% toddlers receiving immunizations in 2008, below that objective's levels. This is a very important objective which needs work in Arizona. No data was available for Yuma County.

(8) The rate of birth (per 1,000) for teenagers aged 15 through 17 years.

The Arizona FY 2013 goal is 32 births (per 1,000) for teenagers aged 15 through 17 years. The 2008 objective was 33 births per 1,000 and Arizona reported a birth rate per 1,000 teens aged 15 through 17 of 30.3 per 1,000 in 2008. According to the most up-to-date statistics, Arizona met its 2008 objective and is on target to meet the FY2013 goal of 32 per 1,000. In Yuma County, there were 71.8 teen births per 1,000 females age 15 to 19 years old in 2007. That number is the highest in any county, and 12.2 teens more than the state rate of 59.6.²⁹

(9) Percent of third grade children who have received protective sealants on at least one permanent molar tooth.

The Arizona FY 2013 goal is 37% of third graders with protective sealant on at least one molar tooth, the 2008 objective was 36.5%. Arizona reported that 36.2% of third graders had protective sealant on at least one tooth. This number, while close to the objective, is still below the set levels and continued efforts in expansion of dental services for children should be made. There were no data available for Yuma County, however due to the rural nature of much of this border county and the poverty level, the county is at risk for having high levels of tooth decay and low levels of access to care.

(10) The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.

The FY2013 goal for the state of Arizona is 3.5 or less deaths per 100,000 children aged 14 years and younger in motor vehicle collisions. The 2008 objective was set at 4 deaths per 100,000 and based on provisional data provided by Arizona to HRSA, Arizona met that objective in 2008 with only 2.7 deaths per 100,000 children.

(11) The percent of mothers who breastfeed their infants at 6 months of age.

The Arizona state goal for 2013 as well as 2008 is 50% of mothers breastfeeding their infants at 6 months of age. In 2008 48.2% of mothers reported breastfeeding their infant at 6 months of age, a number very close to the goal. There were no data for Yuma County.

(12) Percentage of newborns who have been screened for hearing before hospital discharge.

The Arizona state goal for 2013 is 99% and the 2008 goal was 97%. In 2008 98.3% of newborns were screened for hearing before hospital discharge, which exceeds the goal for that year. There were no data for Yuma County.

(13) Percent of children without health insurance.

The FY 2013 goal for the state of Arizona is 15.7% (or less) of children without health insurance, with an intermediary 2008 objective of 16.3% of children lacking health insurance. According to provisional data provided by Arizona to HRSA in 2008, the state exceeded that goal with only 13.8% of the state's children not having health insurance.

(14) Percentage of children, ages 2 to 5 years, receiving WIC services who have a Body Mass Index (BMI) at or above the 85th percentile.

The FY 2013 goal is for no more than 34% of children aged 2-5 receiving WIC services to have a BMI over the 85th percentile, the cut-off point for overweight. Arizona failed to meet the 2008 objective of 34.5% with 37.3% of children classified as overweight or obese. No data was available for Yuma County.

(15) Percentage of women who smoke in the last three months of pregnancy.

The Arizona FY 2013 goal was to have only 4% of women smoke in the last 3 months of pregnancy, with a 2008 goal of 4.5%. In 2008, Arizona reported 4.9% of women smoking in the last 3 months of pregnancy. This is an area which should be prioritized in Arizona in order to reach the 2013 goal.

(16) The rate (per 100,000) of suicide deaths among youths 15-19.

The Arizona FY 2013 goal for the rate of suicide deaths among 15-19 is 10 per 100,000, with a 2008 objective of 13. Arizona met this goal with a rate of 12.4 per 100,000 teens committing suicide in 2008. There were no data available for Yuma County.

(17) Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.

The Arizona state goal for 2013 is 84% with a 2008 intermediary objective of 82.5% of low birth weight infants being delivered at high-risk facilities. The reported rate for 2008 was 76.4%, failing to meet the goal. This is a definite area of need for Arizona and rural communities within the state specifically.

(18) Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.

The Arizona state goal for 2013 is 80% and was 79% for 2008. In 2008 79.4% of infants were born to women receiving prenatal care, exceeding the intermediary objective and putting Arizona on Target for the 2013 goal.

National MCH Block Grant Outcome Measures²⁸

(1) The infant mortality rate per 1,000 live births.

The Arizona state goal for 2008 was 6.2 and in 2008 Arizona provisionally reported 6.3 infants per 1000 live births died before age 1. Yuma County reported only 5.4 infants per 1000 dying before the age of 1.

(2) The ratio of the black infant mortality rate to the white infant mortality rate.

The Arizona state goal for 2013 is a ratio of 1.8 black infant mortalities to 1 white infant death. For 2008 a rate of 3.5 to 1 was reported. This is obviously a major need area. There were no data for Yuma County.

(3) The neonatal mortality rate per 1,000 live births.

The Arizona state goal for 2013 is 4 mortalities per 1000 live births and in 2008 4.2 infants per 1000 died during the neonatal period.

(4) The post-neonatal mortality rate per 1,000 live births.

The Arizona state goal for 2013 is 2 mortalities per 1000 live births during the post-neonatal period. In 2008 2.1 infants per 1000 died during the post-neonatal period.

(5) The perinatal mortality rate per 1,000 live births plus fetal deaths.

The Arizona state goal for 2013 is 5.8 infant mortalities during the perinatal period plus fetal deaths and the 2008 objective was 6. In 2008, 6.4 babies per 1,000 accounted for deaths during the perinatal period plus fetal deaths.

(6) The child death rate per 100,000 children aged 1 through 14.

The Arizona state goal for 2013 is a rate of 22 child deaths per 100,000 children aged 1 through 14. In 2008, Arizona reported to HRSA a death rate of 19.5 children per 100,000. Yuma County reported a child death rate of 22.6, one of the highest in the state.³⁰

State Performance Measures³¹

The state performance measures are similar to the national performance measures but they are formulated at the state level and apply only to Arizona. Below is the reporting on the eight state performance measures with information about Yuma County when applicable.

(1) Proportion of low-income women who receive reproductive health/family planning services.

The Arizona state goal for 2013 is 51% and in 2008 47.4% of low-income women received reproductive health/family planning. There were no data for Yuma County.

(2) The percent of high school students who are overweight or at-risk for overweight.

The Arizona state goal for 2013 is 24% and in 2008 25.9% of high school students were overweight or at risk for being overweight. There were no data for Yuma County.

(3) The percent of preventable fetal and infant deaths out of all fetal and infant deaths.

The Arizona state goal for 2013 is 31% and in 2008 29% of all fetal and infant deaths were due to preventable causes. There were no data available for Yuma County.

(4) Emergency department visits for unintentional injuries per 100,000 children age 1-14.

Arizona FY 2013 goal is 7476 children, and the 2008 number was 6835.2, which exceeds the goal. No data were available for Yuma County.

(5) The percent of women entering prenatal care during their first trimester in underserved primary care areas.

The Arizona state goal for 2013 is 45% and in 2008 50.4% of women in underserved areas received prenatal care in their first trimester. This is well beyond the goal and Arizona seems to be doing well in this area.

(6) Percent of Medicaid enrollees age 1-18 who received at least one preventative dental service within the last year.

The Arizona 2013 goal is 44.5% of all enrollees aged 1-18 receiving at least one preventative dental service. Arizona fell well short of this goal with only 37.9% of Medicaid enrollees receiving this level of care. No data were available for Yuma County.

(7) Percent of children and youth with special health care needs who have access to service.

The Arizona 2013 goal is 0.2% of children with special health care needs having access to service, with children and youth defined as anyone under the age of 21. Arizona has an estimated 232,545 children and youth under 21 with special health care needs. Arizona reported 13.5% of children having access to services in 2008. No data were available for Yuma County.

(8) Percentage of state MCH programs that formally incorporate screening for behavioral health issues.

The Arizona state goal for 2013 is 50% and in 2008 36.8% of MCH programs incorporated screening for behavioral health issues. This area could be much improved in Arizona. There were no data for Yuma County.

Survey: Prenatal Care in Yuma County

Prenatal Care: Access, Utilization, and Barriers

After obtaining all readily available information about Yuma County, the next step in the needs assessment process was to contact the maternal and child health division of the Yuma County Health Department and find out what area they see as most in need and what information they would be most interested in obtaining. Prenatal care is high on the current list of priorities, specifically barriers to it and gaps in the current services being offered. The team identified a staff partner, conducted an interview, and developed a survey with the topic of prenatal care in Yuma County. Results, while limited by the number of responses received, brought some important maternal and child health issues to light.

Methods

Interview

Information about Yuma County was obtained from an employee of the Yuma County Health Department, Diana Gomez. Ms. Gomez works within the maternal and child health division of the department of public health and offered a wealth of information about the county's unique characteristics and challenges. From this electronic discussion, the team identified several topics of interest to Yuma County public health professionals and areas relevant to this needs assessment:

- Why don't at-risk groups access the available prenatal care early on?
- What are the barriers to accessing care?
- Does the public know which services are available?
- Are there cultural, lingual, social, literacy, or financial issues preventing access to prenatal care?
- Are providers and the general public aware of agencies that offer sliding fee or free prenatal classes and care?
- What can we, as health care providers, do to make prenatal care and education more accessible?

Survey

In order to further explore reasons for low utilization of early prenatal care and barriers to accessing care, a survey was developed using the information obtained in the interview with Ms. Gomez about her and fellow colleagues' perceptions of need. The finished product was sent out to Yuma County providers by e-mail, mail, and the web service "Survey Monkey". When there were few responses via all of these methods, some unsuccessful efforts were made to contact providers by phone in order to get their feedback. Surveys were sent to 50 providers with the organizations below:

- Sunset Community Health Center
- Regional Center for Border Health
- Associates for Women's Health
- Sunset Women's Medical Group
- Women's Health Specialists
- Zia OB/GYN Ltd.
- Yuma Regional Medical Center
- Yuma County Pediatric Services
- Cactus Kids
- Pediatric Associates of Yuma County
- Sunset Community Health Pediatric Clinic
- Yuma Children's Clinic P.C.
- Yuma Pediatrics Ltd.

Results

Given that there were only four surveys returned to us, the results varied greatly. Two surveys acknowledged barriers to care and gaps in the current prenatal health services offered in Yuma, but the other two explicitly denied any barriers to care or gaps in services. The same two were split down the middle concerning if patients know about the services available to them, with two agreeing on "most of the time," and the other two agreeing that this is true only "sometimes". All four disagreed about if the public is aware of agencies offering free or sliding-fee scale prenatal classes and care. Answers ranged from yes, to sometimes, to pointing out that these services could be better advertised. Other interesting and useful results are as follows:

Common problems seen as a result of a lack of prenatal care:

- Unknown Group B Strep Status
- Unknown maternal Hepatitis B status
- Undiagnosed gestational diabetes
- Pregnancy-induced hypertension
- Pre-term infants
- Low-birth weight infants

Barriers to accessing prenatal care for patients:

- Lack of awareness of special programs
- Financial and insurance issues
- Cultural
- Literacy
- Transportation
- Teen pregnancy leading to shame and hiding of the pregnancy
- Health education
- Resident status

Gaps or disconnects in prenatal care services:

- Prenatal care is stalled while waiting for AHCCCS paperwork to clear
- Rural communities continue to be underserved
- Underdeveloped training materials and resources for clinic classes
- No breastfeeding or Lamaze classes

Activities health care providers can engage in to make prenatal care and education more accessible:

- Advocate Medicare for all
- Educate the public (at churches, schools, offices, etc.)
- Offer prenatal classes for teen mothers
- Offer centering classes

Limitations

While 50 surveys went out in a variety of formats, only four were returned (two electronically and two by mail). This leads to a very small sample size, which is of course not viable for generalization or replication, but the results are interesting nonetheless. It would be beneficial in the future to set up face-to-face meetings with individual providers and/or focus groups at each of the organizations to obtain answers to the survey questions. This was not possible in the time following the small turnout of the survey, however. There was such variation in the surveys received that it would be very interesting to see what other providers in the county think about the issues presented in the survey.

Conclusion

The prenatal health care utilization and barriers survey in Yuma County brought about a few interesting conclusions. It was enlightening to discover the span of perceptions of the system among just four prenatal health care providers from the same county. It is clear that there are financial barriers to accessing care in many forms (transportation, insurance, etc.), as well as other barriers such as language and education level issues. It is also clear that late or no prenatal care caused by situations such as undiagnosed medical issues and unacknowledged teen pregnancies can cause premature and low-

birth weight infants. These birth outcomes can lead to immediate infant health problems as well as those health issues occurring later in life, and even death.

Some valid recommendations for positive change also came from this survey. It seems that some providers recognize the need for and are willing to assist with things such as advocating for healthcare reform, planning education programs for the greater community, and initiating new projects within their own clinics. Important public health programs mentioned included group teen prenatal classes and breastfeeding/Lamaze courses. The potential for change is there in many of these organizations, initiative just needs to be taken and the resources within these providers need to be tapped. It should be public health professionals' goal to find out how to do this and make it happen.

Summary

The majority of the population of Yuma County is of Hispanic or Latino descent. Just under a quarter of the total population is foreign born and 45% speak a language other than English in the home. Due to the fact that much of Yuma County is agriculturally based, employment occurs in rural areas with many migrant workers. The unemployment rate in Yuma County is substantially higher than the average for the state.

Through studying the available data on Yuma County, we found several areas that deserve special attention including increased neonatal intensive care unit admission, teenage pregnancy, prevalence of lead in the home, children in poverty, and child deaths. While there were no statistically significant findings, our survey results suggested that lack of access to prenatal care and healthcare in general could be an underlying cause of the aforementioned problem areas. The added burden of living in a rural community creates further barriers to accessing healthcare at all.

Recommendations

Based on the most current statistics for Yuma County and the survey results from health care providers, the following recommendations have been developed.

- Provide transportation vouchers in the form of bus passes or taxi vouchers for patients travelling to and from prenatal care visits.
- Health care system reform is needed for patients to access early prenatal care. Patients should be able to begin prenatal care when they initiate the process for medical assistance through AHCCCS.
- Programs focusing on teenagers should include public awareness campaigns in the high schools about the importance of early pregnancy detection and where to access care. Centering Pregnancy programs that include mandatory prenatal classes would also be beneficial for teenagers.
- Culturally competent care must be provided that focuses on the Hispanic and Latino women of the community. Availability of translators and providers bilingual in Spanish and English are needed for prenatal care and during hospitalization.
- Education through public awareness about the importance of early detection of pregnancy and prenatal care could be advertised in the media. Undocumented citizens, teenagers and the Hispanic/Latino populations should be targeted through these campaigns. Bus stops and busses could have advertisements about the importance of early prenatal care and outcomes of newborns with low birth weight in the NICU. Radio and television advertisements could also convey these messages and provide information on how to access prenatal care.
- Undocumented citizens crossing the border or working in seasonal positions could be accessed by having a temporary mobile clinic at border crossings and at workplaces. This clinic could offer free pregnancy screenings, information about the importance of prenatal care and where to access prenatal care.
- Since Yuma County has 6-times the rate of homes with high levels of lead than the state of Arizona and the U.S., an intervention dealing with making an effort to lower lead levels in Yuma County homes seems necessary. This may involve offering some sort of a financial incentive to families for having their homes tested and cleared of lead if necessary. A basic awareness campaign about the risks associated with lead in the home might be enough to get families who are financially able to pay for the service to comply, but most at-risk homes are older and belong to or are being rented to lower SES families. A government-subsidized lead removal program for homeowners and a tax incentive for landlords may be a way to address this problem.
- Due to high child death rates and high rates of teenage pregnancy, rural communities need health resources and community strategies to keep kids safe and to give them the hope and the possibility of a better future.

Appendix A

Surveys

Appendix B

Title V Block Grant

Title V Block Grant – State of Arizona Performance Measures

State of Arizona Performance Measures	
1	The percentage of newborns who are screened and confirmed with conditions mandated by their state-sponsored newborn screening programs who receive appropriate follow-up as defined by their state.
2	The percent of children with special health care needs ages 0-18 years whose family partners in decision making at all levels and are satisfied with the services they receive.
3	The percent of children with special health care needs ages 0-18 years who receive coordinated, ongoing, comprehensive care within a medical home.
4	The percent of children with special health care needs ages 0-18 years whose families have adequate private and/or public insurance to pay for the services they need.
5	The percent of children with special health care needs ages 0-18 years whose families report the community-based service system are organized so they (families) can use them easily.
6	The percent of youth with special health care needs who received the services necessary to make transition in all aspects of adult life.

Appendix C

Healthy People 2010

Healthy People 2010

The two goals of Healthy People 2010 are:

1. Increase quality and years of healthy life.
2. Eliminate health disparities.

This national initiative includes 28 focus areas and 467 objectives targeted at these focus areas to attain the 2 aforementioned goals.

	Focus Areas
1	Access to quality health services
2	Arthritis, Osteoporosis, and Chronic Back Conditions
3	Cancer
4	Chronic Kidney Disease
5	Diabetes
6	Disability and Secondary Conditions
7	Education and Community Based Programs
8	Environmental Health
9	Family Planning
10	Food Safety
11	Health Communication
12	Heart Disease and Stroke
13	HIV
14	Immunization and Infectious Disease
15	Injury and Violence Prevention
16	Maternal, Infant and Child Health
17	Medical Product Safety
18	Mental Health and Mental Disorders
19	Nutrition and Overweight
20	Occupational Safety and Health
21	Oral Health
22	Physical Activity and Fitness
23	Public Health Infrastructure
24	Respiratory Diseases
25	Sexually Transmitted Diseases
26	Substance Abuse
27	Tobacco Use
28	Vision and Hearing

Leading Health Indicators
Physical Activity
Overweight and Obesity
Tobacco Use
Substance Abuse
Responsible Sexual Behavior
Mental Health
Injury and Violence
Environmental Quality
Immunization

Access to health care

Appendix D

Healthy Arizona 2010

Healthy Arizona 2010

<i>Focus Area</i>	<i>Objectives</i>
Physical Activity	<p>Objective #1: Increase the proportion of children who participate in cumulative intermittent physical activity for 60 minutes per day.</p> <p>Objective #2: Increase the proportion of adolescents who engage in either moderate or vigorous physical activity.</p> <p>Objective #3: Increase the proportion of adults who engage regularly, preferably daily, in moderate or vigorous physical activity.</p> <p>Objective #4: Reduce the proportion of adults who engage in no physical activity</p>
Nutrition	<p>Objective #1: Reduce iron deficiency anemia among infants, young children and females of childbearing age.</p> <p>Objective #2: Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit and at least three daily servings of vegetables, with at least one-third being dark green or deep yellow vegetables.</p> <p>Objective #3: Increase food security among AZ households, and in doing so, reduces hunger.</p> <p>Objective #4: Increase the proportion of children, adolescents and adults who are at a healthy weight. Gather data by age group.</p> <p>Objective #5: Increase the proportion of persons aged 2 years and older who meet dietary recommendations for calcium.</p>
Tobacco Use	<p>Objective #1: Reduce tobacco use by youth in 6th - 8th grades.</p> <p>Objective #2: Reduce tobacco use by adolescents in 9th - 12th grades.</p> <p>Objective #3: Reduce tobacco use by adults.</p>
Substance Abuse	<p>Objective #1: Reduce mortality related to alcohol use.</p> <p>Objective #2: Reduce mortality related to drug abuse.</p> <p>Objective #3: Increase the percentage of Junior High / Middle school students who abstain from substance use.</p> <p>Objective #4: Reduce the percentage of alcohol related traffic fatalities.</p>
Responsible Sexual Behavior	<p>Objective #1: Increase the proportion of adolescents who abstain from sexual intercourse.</p> <p>Objective #2: Increase the proportion of adolescents who use condoms if currently</p>

	<p>sexually active.</p> <p>Objective #3: Reduce pregnancies among adolescents 15 -17 years old.</p> <p>Objective #4: Reduce sexually transmitted diseases.</p> <p>Objective #5: Implement the Youth Risk Behavior Survey (YRBS) and the relevant modules of the Behavior Risk Factor Surveillance System (BRFSS).</p>
Mental Health	<p>Objective #1: Increase community knowledge and understanding of depression through collaboration with public and private agencies/businesses.</p> <p>Objective #2: Decrease the number of completed suicides for teens and older adults.</p> <p>Objective #3: Increase the number of individuals in AZ that are screened for depression and referred for treatment if needed.</p> <p>Objective #4: Increase access to services for persons with depressive disorders.</p>
Injury and Violence Prevention	<p>Objective #1: Reduce injury, disability and death caused by motor vehicle crashes.</p> <p>Objective #2: Reduce deaths due to homicide.</p> <p>Objective #3: Reduce deaths due to suicide.</p> <p>Objective #4: Reduce deaths due to drowning.</p> <p>Objective #5: Develop and/or enhance data systems for abusive behaviors (such as child abuse, elder abuse, intimate partner, family violence, rape and sexual assault).</p>
Environment Health	<p>Objective #1: Ensure that all air in Arizona achieves United States Environmental Protection Agency (USEPA) attainment status for criteria air pollutants by 2010.</p> <p>Objective #2: Reduce severe lead poisoning (Pb > 20 ug/dL) 75% by 2010. Reduce the prevalence of lead poisoning (Pb > 10 ug/dL) in Arizona by 50% by 2010.</p> <p>Objective #3: Reduce the prevalence of food borne illnesses in Arizona by reducing risk factors for food borne illness in restaurants and retail food establishments 25% by 2010.</p> <p>Objective #4: Improve indoor air quality in Arizona by eliminating environmental tobacco smoke in 100% of public buildings and 80% of semipublic buildings by 2010.</p>
Immunization and Infectious Disease	<p>Objective #1: Increase the proportion of non-institutionalized older adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.</p> <p>Objective #2: Reduce the rate of Hepatitis A.</p> <p>Objective #3: Reduce the rate of new invasive pneumococcal infections (e.g. otitis media, meningitis, pneumococcal pneumonia) both in children under 5 years of age and in adults aged 65 years and older.</p>

	<p>Objective #4: Increase the proportion of children 19 through 35 months of age who receive all of the following recommended vaccines: 4 DTaP, 3 polio, 1 MMR, 3 Hib and 3 hepatitis B.</p> <p>Objective #5: Reduce the number of courses of antibiotics for ear infections for young children.</p>
Access to Care	<p>Objective #1: Increase the proportion of persons with health insurance.</p> <p>Objective #2: Increase the proportion of persons who have a specific source of ongoing care (medical home).</p> <p>Objective #3: Increase the proportion of persons with access to clinical preventive services.</p> <p>Objective #4: Increase the cultural competency and cultural sensitivity of health care providers.</p> <p>Objective #5: Increase the proportion of persons with long term care needs who have access to the continuum of long term care services.</p>
Maternal and Infant Health	<p>Objective #1: Reduce Infant Mortality (Death Within First Year of Life).</p> <p>Objective #2: Increase the Proportion of Very Low Birth Weight⁽¹⁾ Infants Who Are Delivered At Level III Hospitals or Subspecialty Perinatal Centers.</p> <p>Objective #3: Increase the Proportion of Pregnancies Begun With an Optimum Folic Acid Level. (Consumption of at least 400 ug of folic acid each day from fortified foods or dietary supplements by non-pregnant women aged 15 to 44 years)</p> <p>Objective #4: Increase the proportion of mothers who breastfeed their babies.</p>
Oral Health	<p>Objective #1: Increase the proportion of children, adults, and older adults who receive dental care each year.</p> <p>Objective #2: Increase the proportion of residents with comprehensive dental insurance.</p> <p>Objective #3: Increase the proportion of residents served by community water systems with optimally fluoridated water.</p> <p>Objective #4: Reduce the proportion of children who have ever had tooth decay. (Measured at preschool and elementary levels)</p> <p>Objective #5: Reduce the proportion of children who currently have untreated tooth decay. (Measured at preschool and elementary levels)</p>

Appendix E

Healthy Borders 2010

Healthy Borders 2010

The Healthy Borders 2010 initiative is focused on improving the health of the populations at or near the United States and Mexico border. Its initiatives emphasize the need for:

1. Capacity building for Healthy Border teams
2. The expansion of partnerships
3. Continued identification of best practices

YEAR 2010 OBJECTIVES <i>Topic Areas</i>	<i>Mexico</i>	<i>United States</i>
Access to Care	Maintain at fewer than 5% of the population lacking access to basic health services.	Reduce by 25% the population lacking access to a primary health provider.
Cancer	Reduce female breast cancer death rate by 20%. Reduce cervical cancer death rate by 20%.	Reduce female breast cancer death rate by 20%. Reduce cervical cancer death rate by 30%.
Diabetes Mellitus	Reduce deaths due to diabetes by 10%. Keep hospitalization rate stable.	Reduce deaths by due to diabetes by 10%. Reduce hospitalizations by 25%.
Environmental Health	Reduce the proportion of households not connected to compliant public sewage systems or septic tanks. Maintain hospital admission rate for acute pesticide poisoning.	Reduce to zero the proportion of households without complete bathroom facilities. Reduce number of hospital admissions for acute pesticide poisoning by 25%.
HIV/AIDS	Keep HIV + incidence rate stable at current 3.1 per 100,000.	Reduce HIV + incidence rate by 50% from 8.4 to 4.2 per 100,000.
Immunizations and Infectious	Maintain current immunization	Raise immunization coverage

Diseases	<p>coverage of 95% for children under 1 year and 1-4.</p> <p>Reduce the incidence for all forms of Hepatitis by 50%.</p> <p>Reduce incidence rate for tuberculosis by 10%.</p>	<p>rate for children 19-35 months to 95%.</p> <p>Reduce the incidence of Hepatitis A and B by 50%.</p> <p>Reduce incidence rate for tuberculosis by 50%.</p>
Injury Prevention	<p>Reduce motor vehicle crash death rate by 20%.</p> <p>Reduce childhood death rate due to unintentional injuries by 50%.</p>	<p>Reduce motor vehicle crash death rate by 25%.</p> <p>Reduce childhood death rate due to unintentional injuries by 30%.</p>
Maternal, Infant and Child Health	<p>Reduce infant mortality rate by 50%.</p> <p>Reduce infant deaths from congenital abnormalities by 50%.</p> <p>Increase percent of mothers getting prenatal care in first and second trimesters to 70%.</p> <p>Reduce pregnancy rate in adolescence 10-19 years old by 20%.</p>	<p>Reduce infant mortality by 15%.</p> <p>Reduce infant mortality from congenital abnormalities by 30%.</p> <p>Increase proportion of mothers getting prenatal care in first trimester to 85%.</p> <p>Reduce pregnancy rate in adolescence 15-17 years old by 33%.</p>
Mental Health	<p>Reduce suicide mortality rate by 25%.</p>	<p>Reduce suicide mortality rate by 15%.</p>
Oral Health	<p>Ensure that 25% of the population uses oral health services annually.</p>	<p>Increase proportion of the population using oral health services to 75% per year.</p>
Respiratory Diseases	<p>Maintain asthma hospitalization rate.</p>	<p>Reduce asthma hospitalization rate by 40%.</p>

Appendix F

Yuma County Health Services

Yuma County Health Services**Yuma County Health Services District**

2200 W. 28th Street
Yuma, Az. 85364

Yuma Regional Medical Center

2400 S. Avenue A
Yuma, Arizona
85364

Associates for Women's Health

1945 W 24th St
Yuma, AZ 85364
(928)341-4650

Cactus Kids

1832 S 8th Avenue
Yuma, AZ 85364
(928)782-6830

Pediatric Associates of Yuma County

1073 W 23rd Street
Yuma, AZ 85364
(928)783-0148

Regional Center for Border Health

Contact: Frances Herrera, Program Coordinator
(928) 627-0190

Sunset Community Health Pediatric Clinic

2060 W 24th Ave
Yuma, AZ 85364
(928)344-5112

Sunset Women's Medical Group

2060 W 24th St
Yuma, AZ 85364
(928)726-5950

Women's Health Specialists
2911 S 8th Ave.
Yuma, AZ 85364
(928)783-3050

Yuma Children's Clinic, PC
2150 W 24th Street
Yuma, AZ 85364
(928)819-7000

Yuma Pediatrics Ltd.
2359 S 22nd Drive, Suite 2
Yuma AZ 85364
(928)344-4800

Zia OB/GYN Ltd.
2451 S Avenue A, Suite 8
Yuma, AZ 85364
(928)344-2728

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