

## CHAPTER IV. PHYSICAL HEALTH.. ERROR! BOOKMARK NOT DEFINED.

BEHAVIORAL RISK FACTORS AND POSITIVE BEHAVIORS .....	2
DEATHS .....	3
INFECTIOUS DISEASES .....	8
CHRONIC DISEASES.....	15
<i>ASTHMA</i> .....	15
<i>DIABETES</i> .....	16
ANEMIA/IRON DEFICIENCY.....	18
CANCER.....	19
AMBULATORY CARE SENSITIVE CONDITIONS.....	21
OBESITY .....	22
ORAL HEALTH.....	23

### **Tables**

Table IV - 1 Behaviors Affecting Health Outcomes .....	2
Table IV - 2 Wic Client Risk Factors By Ethnicity And Race .....	3
Table IV - 3 Top Five Causes of Death by School District (1996-2000) .....	6
Table IV - 4 New Mexico Resident Deaths, Sandoval County and New Mexico, 1992-2005.....	8
Table IV - 5 Infectious Diseases.....	8
Table IV - 6 Age Adjusted Cancer Incidence for Females 20 Years Old and Older.....	20
Table IV - 7 Cancer Incidence Among Males – Sandoval County and New Mexico.....	21

### **Figures**

Figure IV - 1 Leading Causes of Death for Sandoval County Men and Women.....	4
Figure IV - 2 Lead Causes of Compared to Nation and State .....	5
Figure IV - 3 Age Adjusted Death Rates.....	7
Figure IV - 4 Campylobacteriosis.....	12
Figure IV - 5 Pertusis.....	12
Figure IV - 6 Tuberculosis .....	13
Figure IV - 7 Chlamydia.....	13
Figure IV - 8 Gonorrhea .....	13
Figure IV - 9 Diabetes and Asthma by Ethnicity.....	15
Figure IV - 10 Children's Asthma Prevalence by Geographic Area.....	16
Figure IV - 11 Diabetes Death Rates by Ethnicity.....	16
Figure IV - 12 Pueblo Mothers with Diabetes During Pregnancy .....	18
Figure IV - 13 Ambulatory Care Sensitive Conditions.....	22
Figure IV - 14 Frequency of dental visits for children over age 3 .....	24
Figure IV - 15 Frequency of Dental Visits .....	24
Figure IV - 16 Impact of Oral Health on Work and School Attendance.....	25

## BEHAVIORAL RISK FACTORS AND POSITIVE BEHAVIORS

**Overview.** Risk factors identified by Sandoval County respondents to the 2002 NM Behavioral Risk Factor Surveillance System are presented in Table IV-9. The data identifies risk factors as well as positive behaviors. DOH client data identifies risk factors for Sandoval County mothers enrolled in the WIC program (Table IV-1). 54% of the mothers were either obese or overweight, 13% reported illegal drug use, and 15% reported that they smoke.

Risk Factor	Sandoval County	New Mexico
No health care coverage	17%	17%
Did not get medical care in past year because of cost	10%	8%
Did not engage in physical activities in the past 30 days	18%	23%
Overweight and obese (BMI more than 25)	60%	56%
Did not eat 5 or more servings of fruits and vegetables per day	76%	78%
Did not visit a dentist or dental clinic in the past year	32%	33%
No flu shot in the past year (ages 65 and older)	47%	33%
No pneumococcal vaccine ever (ages 65 years and older)	32%	37%
Current smoking	20%	21%
Binge drinking	10%	14%
Heavy drinking	4%	5%
Always wear seatbelts	91%	87%
No mammogram (ages 45 years and older) within past 2 years)	20%	30%
No pap smear within past 3 years	21%	16%
No blood stool test (ages 50 years and older) within past 2 years	79%	76%
Never had a sigmoidoscopy or colonoscopy (ages 50 years and older)	53%	56%
Never been tested for HIV (ages 64 years and younger)	50%	44%
Firearms kept in or around home	45%	40%

Table IV - 2 Wic Client Risk Factors By Ethnicity And Race All Clients on 3/25/04					
Source: Data provided by New Mexico Department of Health WIC Program					
	Total Clients	Alcohol and Illegal Drug Use	Overweight	Pregnancy at a young age	Smoking
Hispanic	355	12%	53%	10%	14%
Non-hispanic	226	15%	55%	4%	19%
Total*	581	13%	54%	8%	15%

\*Native Americans are included in non-Hispanic total

## DEATHS

**Top Five Causes of Death.** The death rate from all causes in the United States was 832.7 per 100,000 residents in 2003. In 2004, the death rate in New Mexico was 764.7 and 708.7 in Sandoval County. These lower death rates are probably a result of a relatively young population in the County.

From 1996 to 2004, malignant tumors and heart disease were the two leading causes of death in Sandoval County, followed by accidents, strokes, and chronic lower respiratory diseases (Table IV - 3 Top Five Causes of Death by School District (1996-2000)). Heart disease is the leading cause of death in both the State and the U.S.; malignant neoplasms is the leading cause in Sandoval County. Sandoval County's death rate from unintentional injuries (accidents) and from diabetes mellitus is lower than the States' rate, but they are still considerably above the national rates.

There are noteworthy differences in the cause of death for men and women (Figure IV - 2 Lead Causes of Death for Men and Women compared to Nation and State). The death rates for women are lower in all of the leading causes. However, the leading causes of death for women include other diseases that are not in the overall numbers. For instance, cerebrovascular disease is the fourth leading cause of death for women, although it is not in the top five overall. For U.S. women, the death rate from this disease is 52.3 per hundred thousand in 2003. For New Mexico women, the rate was 36.2 and for Sandoval County, the rate was 31.4.

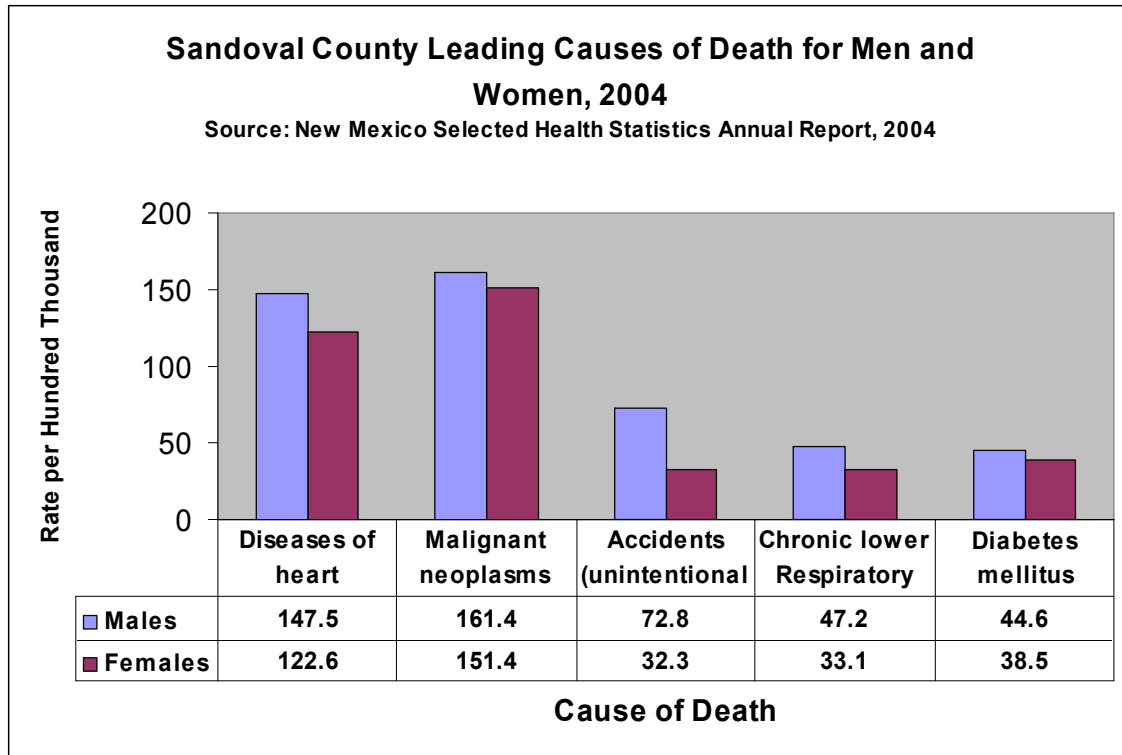


Figure IV - 1 Leading Causes of Death for Sandoval County Men and Women 2004

Sandoval County men have fewer deaths due to heart disease and malignant neoplasms than men in the United States and New Mexico. Death due to accidents is higher than the U.S. rate and lower than the New Mexico rate. Death attributed to diabetes is higher for Sandoval County men than for the U.S. or New Mexico men.

Sandoval County women have fewer deaths due to heart disease than women in the United States and New Mexico, but more deaths due to malignant neoplasms than the State average. Consistent with the statistics for Sandoval County men, death attributed to diabetes is higher for Sandoval County women than for U.S. or New Mexico women.

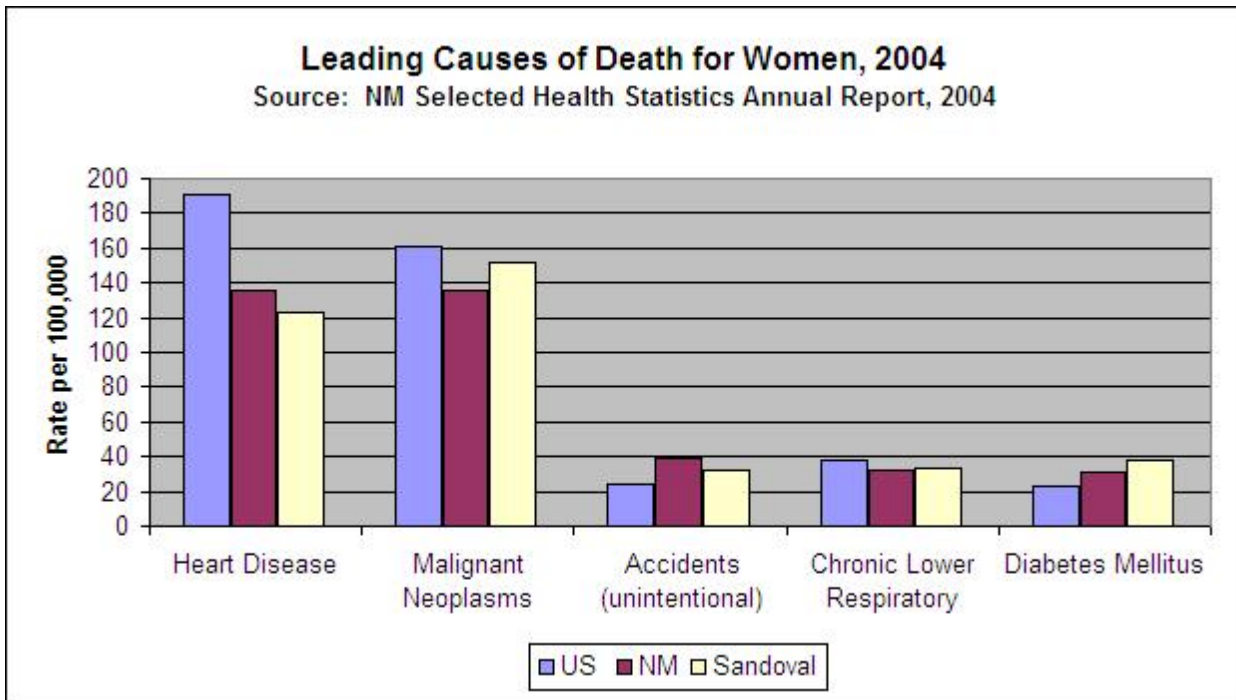
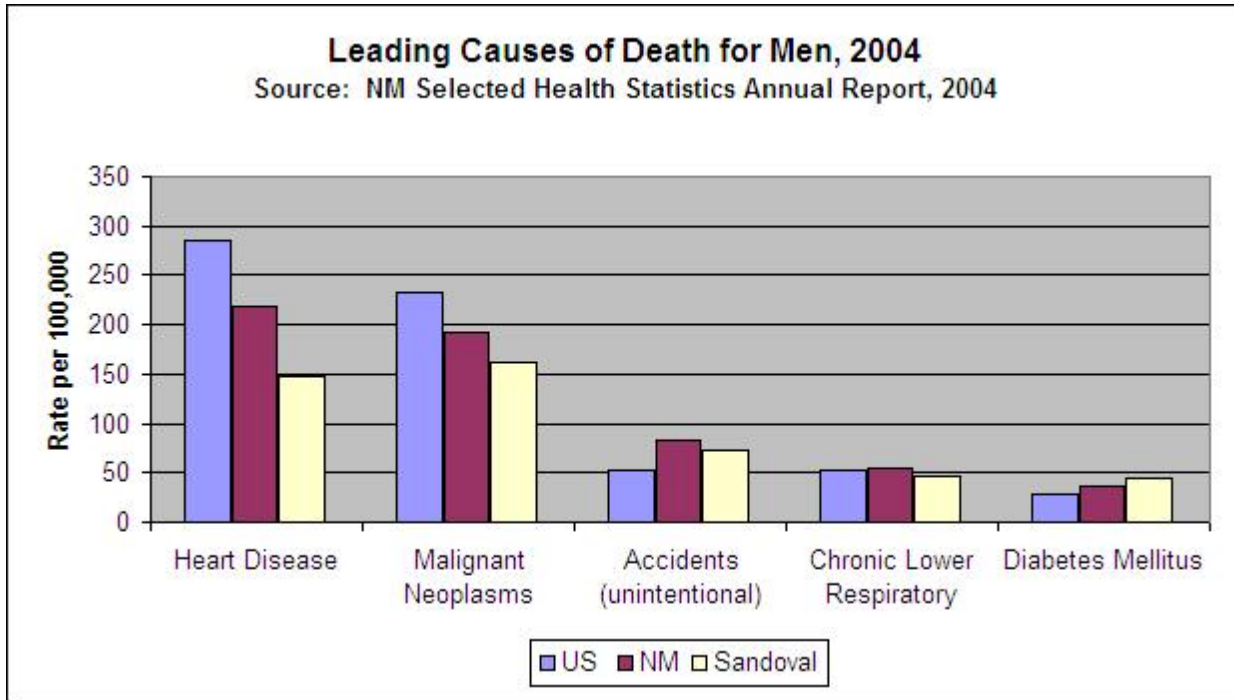


Figure IV - 2 Lead Causes of Death for Men and Women compared to Nation and State

Data from 1996-2000 show that there are substantial variations within the County (Table IV – 3). Further epidemiological analyses by age, ethnicity, and other demographic factors are necessary to understand these differences. Some preliminary findings include:

- The percent of deaths as a result of heart disease differs substantially within the county, ranging from 25% in the urban area (Rio Rancho and Corrales) to 13% in the Jemez Valley.
- The percent of deaths as a result of malignant tumors differs substantially within the County, ranging from 26% in the urban area to 14% in the Jemez Valley.
- Deaths as a result of accidental injury are higher in the rural areas than in the urban area. This difference is particularly striking in the Cuba School District where 19% of the deaths are a result of an accidental injury, compared to 7% for the County as a whole.
- The percent of deaths as a result of strokes ranges from 4% in the Bernalillo School District to 9% in the Jemez Valley.

Table IV - 3 Top Five Causes of Death by School District (1996-2000)

TOP FIVE CAUSES OF DEATH	POPULATION WITHIN SCHOOL DISTRICTS				
	Bernalillo	Cuba	Jemez	Rio Rancho & Corrales	County
Total Deaths 1996-2000	568	188	105	1675	2536
Malignant tumors	19%	15%	14%	26%	23%
Heart disease	23%	14%	13%	25%	23%
Accidents (unintentional injury)	8%	19%	8%	5%	7%
Cerebrovascular diseases (strokes)	4%	6%	9%	6%	6%
Chronic lower respiratory diseases (COPD)	3%	3%	2%	6%	5%
ALL OTHER CAUSES*	42%	43%	54%	32%	36%
	100%	100%	100%	100%	100%

Source: New Mexico Department of Health Vital Health Statistics, data was aggregated into school districts using DOH supplied zip code level data

Total County death statistics for 1992 – 2002 are presented in Figure IV-? and Table IV-?. Age specific death rates are available in the DOH Sandoval County 2003 Profile.

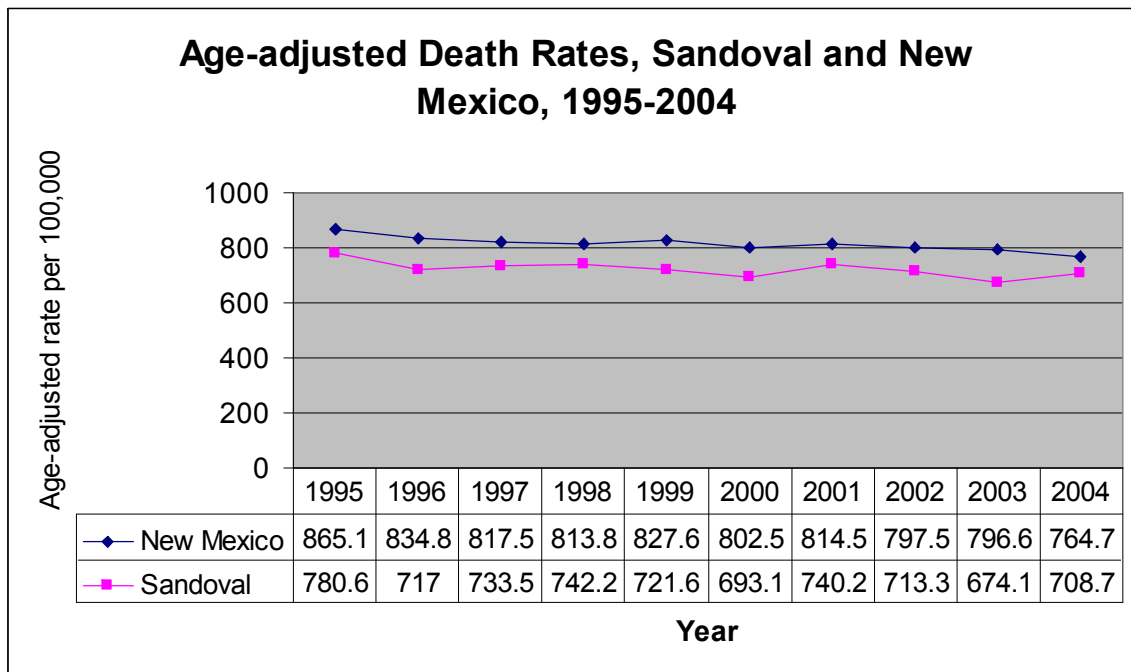


Figure IV - 3 Age Adjusted Death Rates  
 Source: New Mexico Selected Health Statistics Annual Report, 2004, Bureau of Vital Records and Health Statistics, July, 2005

	Sandoval	New Mexico
1992	364	11,130
1993	468	11,689
1994	427	12,106
1995	471	12,500
1996	452	12,456
1997	496	12,613
1998	523	12,858
1999	597	13,433
2000	539	13,384
2001	604	14,016
2002	618	14,114
2003	625	14,493
2004	670	14,197
2005	687	14,866

Sources: NM Department of Health, Office of New Mexico Vital Records and Health Statistics:  
 2005 Vital Statistics Summary, Bureau of Vital Records...., October, 2006  
 NEW Mexico Selected Health Statistics Annual Report, 2004  
 NEW Mexico Selected Health Statistics Annual Report, 2003  
 Sandoval County Profiles, 2003

## INFECTIOUS DISEASES

Data on infectious diseases is presented in Table IV – 5 and Figures IV – 4 to IV – 8.

Table IV - 5 Infectious Diseases

<b>INFECTIOUS DISEASES - 2000 - 2005 (rates/100,000)</b>				
	Sandova I County Cases	Sandov al County Rate	New Mexic o Rate	Comment
Campylobacterio sis				
2000 - 2002	75			The rates of Campylobacter infections in Sandoval county are consistently higher than the State rates.
2003	24	24.2	16.2	
2004	26	25.3	17.9	
2005	34	32	17.8	
Salmonellosis				
2000 - 2002	47			
2003	17	17.1	16	
2004	14	13.6	14.6	

<b>INFECTIOUS DISEASES - 2000 - 2005 (rates/100,000)</b>				
	Sandova l County Cases	Sandov al County Rate	New Mexic o Rate	Comment
2005	11	10.7	13	
<b>Shigellosis</b>				
2000 - 2002	16			
2003	27	27.2	15.1	
2004	2	1.9	7.3	
2005	7	7.8	7.1	
<b>Hepatitis A, acute</b>				
2000 - 2002				
2003	0		1.3	
2004	1	1	1.2	
2005	0		1.5	
<b>Hepatitis B acute</b>				
2000 - 2002				
2003	3	3	1.8	
2004	0		1	
2005	1	0.9	1	
<b>Hepatitis B, chronic</b>				
2003	2	2	7.4	
2004	5	4.9	10.3	
2005	7	6.6	7.7	
<b>Aids - Reported cases (including previously diagnosed with HIV that has progress to AIDS)</b>				
2000 - 2002	9			Between 2003 and 2005, there were 420 new diagnosis of HIV in New Mexico.[i] 54% of those diagnosed were Hispanic, 34% White, 9% American Indian, and 3% African American. Between 2003 and 2005, there were 15 reported cases of HIV/AIDS. In 2006, there were an estimated 6 cases. HIV/AIDS cases are new diagnoses of HIV, regardless of AIDS status. There were 9 reported cases of AIDS between 2000 and 2002 in Sandoval County, and 9 between 2003 and 2005. The estimate for 2006 is 2. Reported AIDS

<b>INFECTIOUS DISEASES - 2000 - 2005 (rates/100,000)</b>				
	Sandoval County Cases	Sandoval County Rate	New Mexico Rate	Comment
				cases refer to all cases of AIDS, including those who were previously diagnosed with HIV that has progressed to AIDS. <sup>[ii]</sup>
2003 - 2005	9			
2006	2			
<b>Pertusis</b>				
2000 - 2002	13			
2003	0		4.1	
2004	7	6.8	8.2	
2005	13	12.2	10	
<b>Tuberculosis</b>				
2000 - 2002	6			Between 1997 and 2002, there were 6 cases of Tuberculosis in Sandoval County. In 2005, there were 2 cases. The County rate for Tuberculosis was 1.8 per 100,000, compared to the State rate of 1.98 and the U.S. rate of 4.8.
2003	2	2.8	2.64	
2004	0	0	2.2	
2005	2	1.8	1.98	
<b>Chlamydia</b>				
1999			257.6	Chlamydia is the most frequently reported bacterial sexually transmitted disease in United States. Underreporting is also substantial; symptoms are mild or absent, particularly in women. However, it can cause serious damage to women's reproductive organs, and can result in infertility. <sup>[iii][iv]</sup>
2003		230.4		The rate of Chlamydia cases per 100,000 has risen from 257.6 in 1999 to 438.7 in 2005 in New Mexico. The U.S. rate has also risen from 247.2 in 1999 to 321.1 in 2005. For 2004 and 2005, New Mexico's rates were the fourth highest in the nation for this disease. Sandoval County's rates for 2003 was 191.5, for 2004, 230.4, and for 2005, 226.1. Although these rates are lower than both the nation and the State, there appears to be an upward trend, and the number of reported

<b>INFECTIOUS DISEASES - 2000 - 2005 (rates/100,000)</b>				
	Sandoval County Cases	Sandoval County Rate	New Mexico Rate	Comment
				cases has increased from 1999-2005
2004		191.5		
2005		226.1	438.7	
<b>Gonorrhea</b>				
2000 - 2002	6			The rate of Gonorrhea has decreased from 129.3 to 113.3 between 1999 and 2005 in the United States. The New Mexico rate has increased from 52.1 to 80.7. Although this remains well below the U.S. rate, the trend is a matter of concern. Sandoval County's rates have decreased from 47.4 in 2003 to 24.3 in 2004 and 20.7 in 2005
2003	2	47.4		
2004	0	24.3		
2005	2	20.7		
<p>[i] New Mexico Department of Health HIV and Hepatitis Epidemiology Program, report prepared for the Sandoval County Health Profile by Monica Olkowski, 505-827-0074., May, 2006.</p> <p>[ii] HIV/AIDS and Women in New Mexico, New Mexico Department of Health, Winter Quarterly Report, January, 2007.</p> <p>[iii] CDC Fact Sheet: Chlamydia, <a href="http://www.cdc.gov/std/Chlamydia/chlamydia.pdf">http://www.cdc.gov/std/Chlamydia/chlamydia.pdf</a>.</p>				

Figure IV - 4 Campylobacteriosis

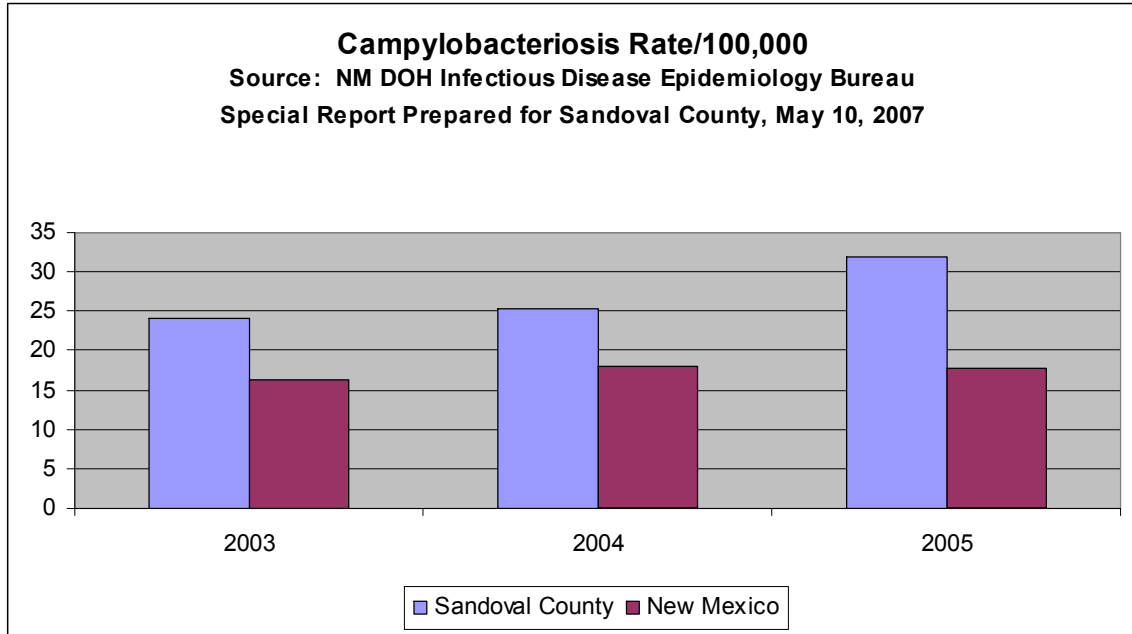
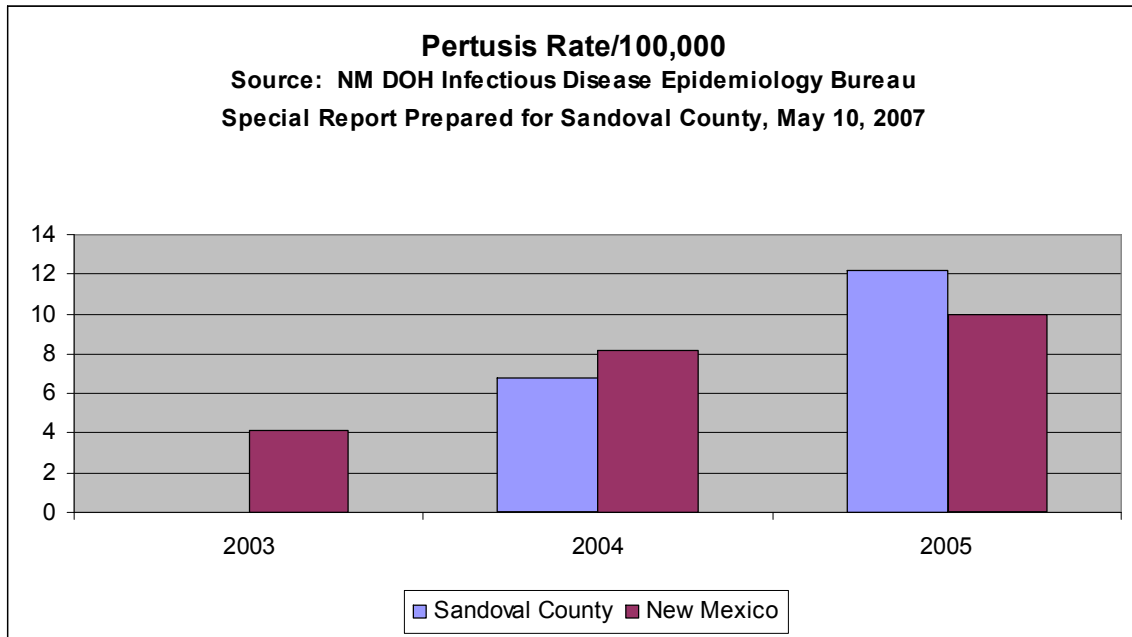


Figure IV - 5 Pertusis



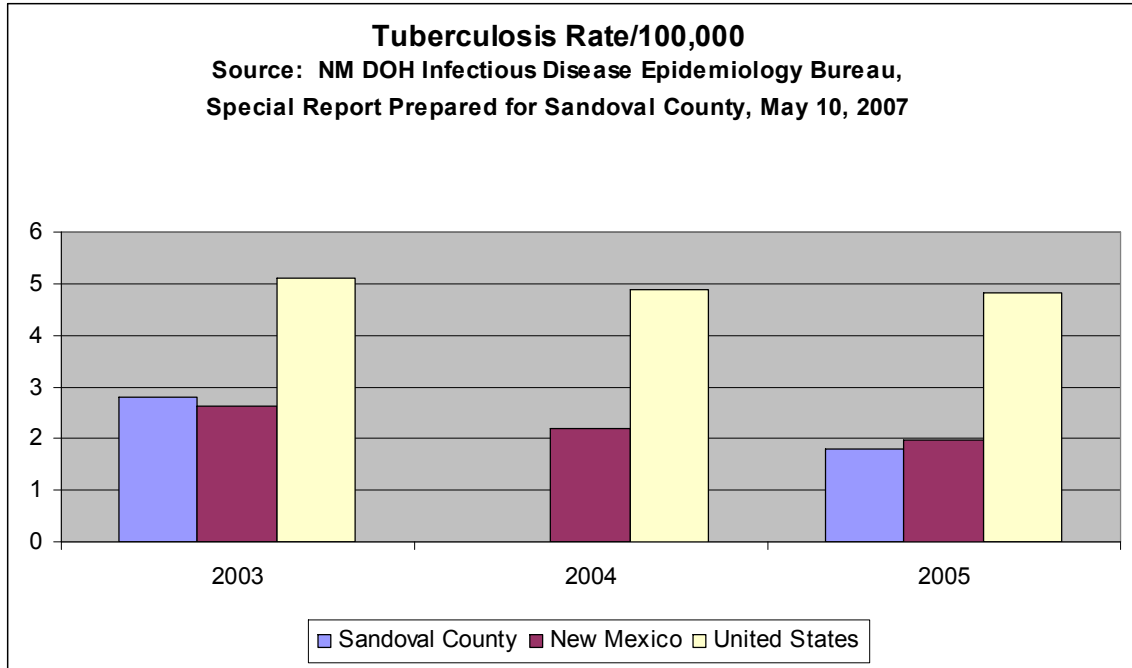
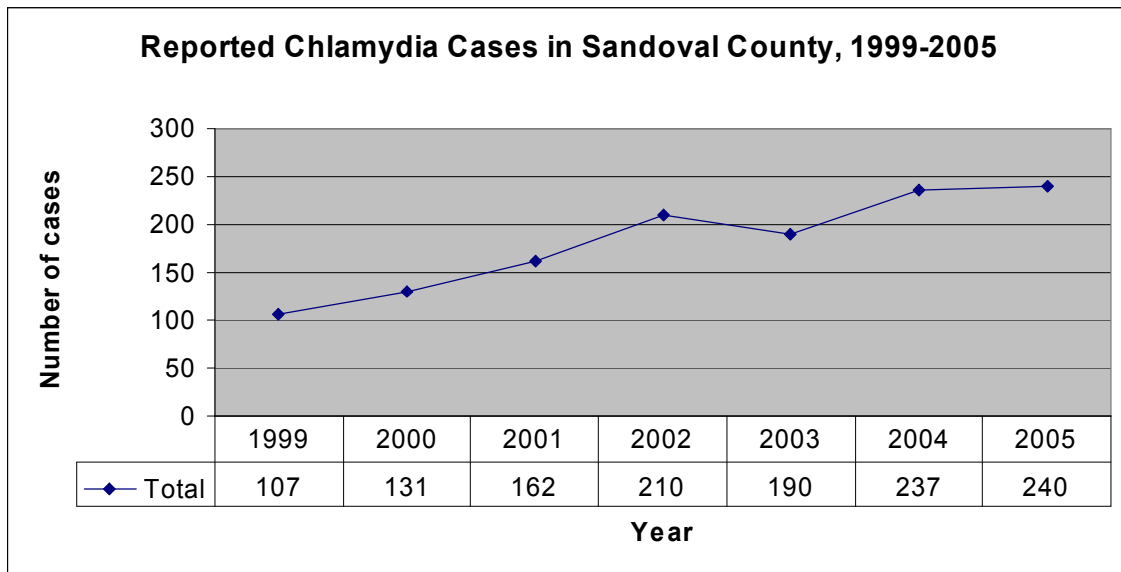


Figure IV - 6 Tuberculosis

Figure IV - 7 Chlamydia



Source: The New Mexico Department of Health Sexually Transmitted Diseases Program, <http://www.health.state.nm.us/std.html>

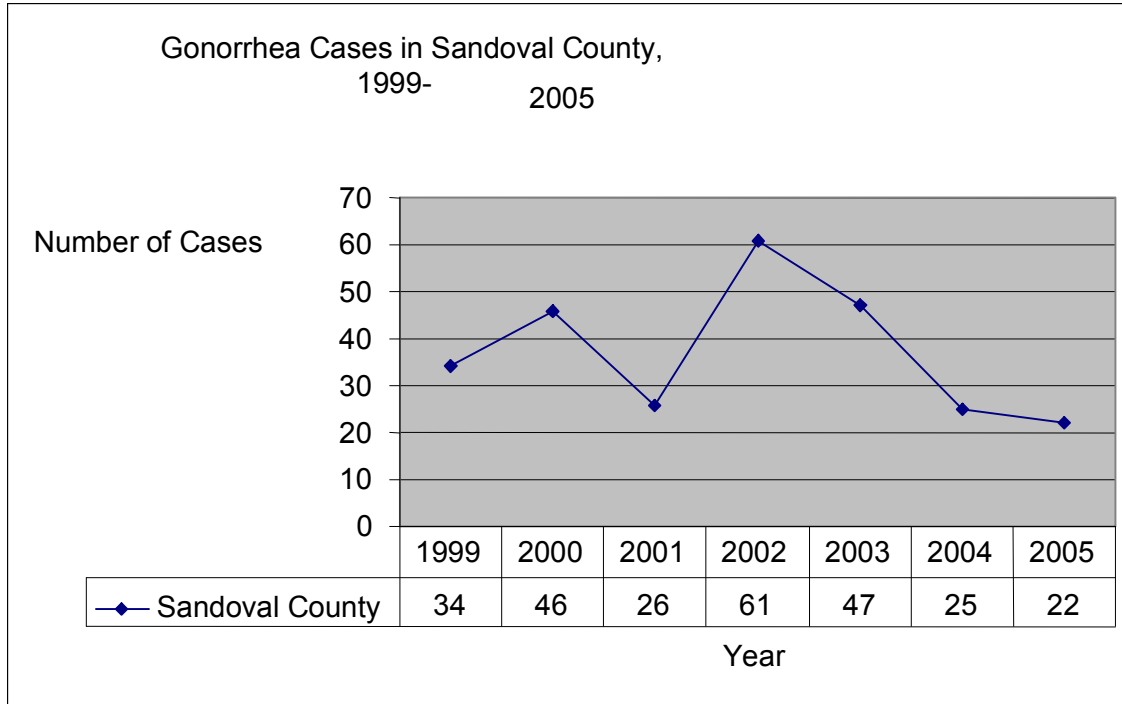


Figure IV - 8 Gonorrhea Cases

Source: The New Mexico Department of Health Sexually Transmitted Diseases Program, <http://www.health.state.nm.us/std.html>.

## CHRONIC DISEASES

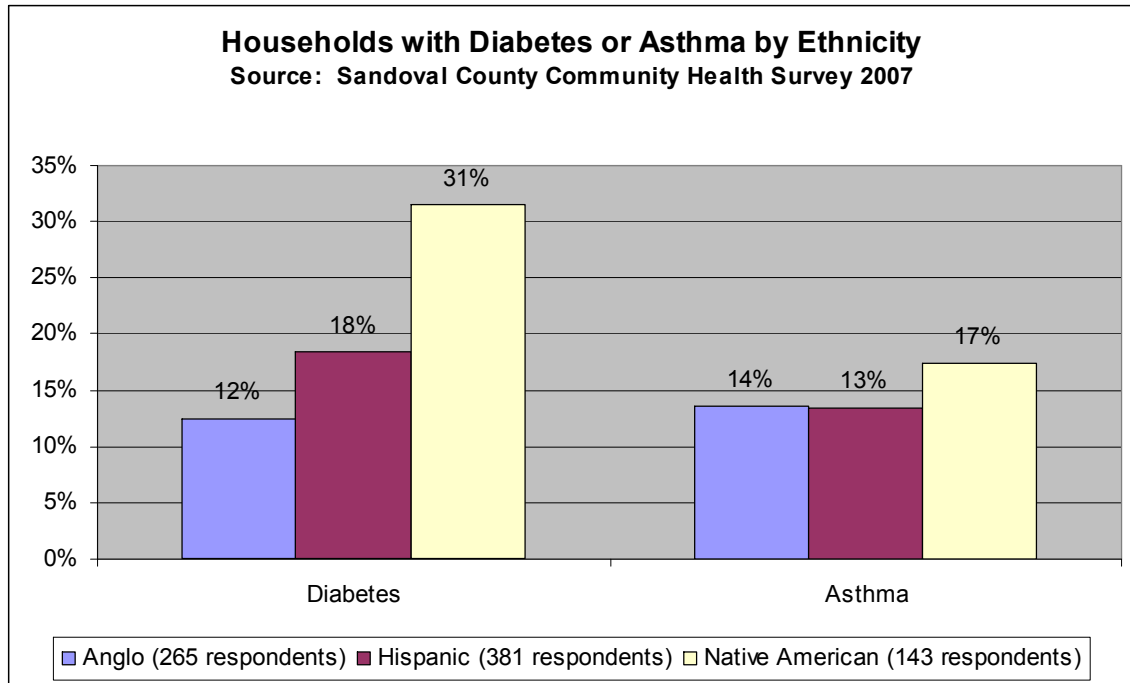


Figure IV - 9 Households with Diabetes and Asthma by Ethnicity, 2007

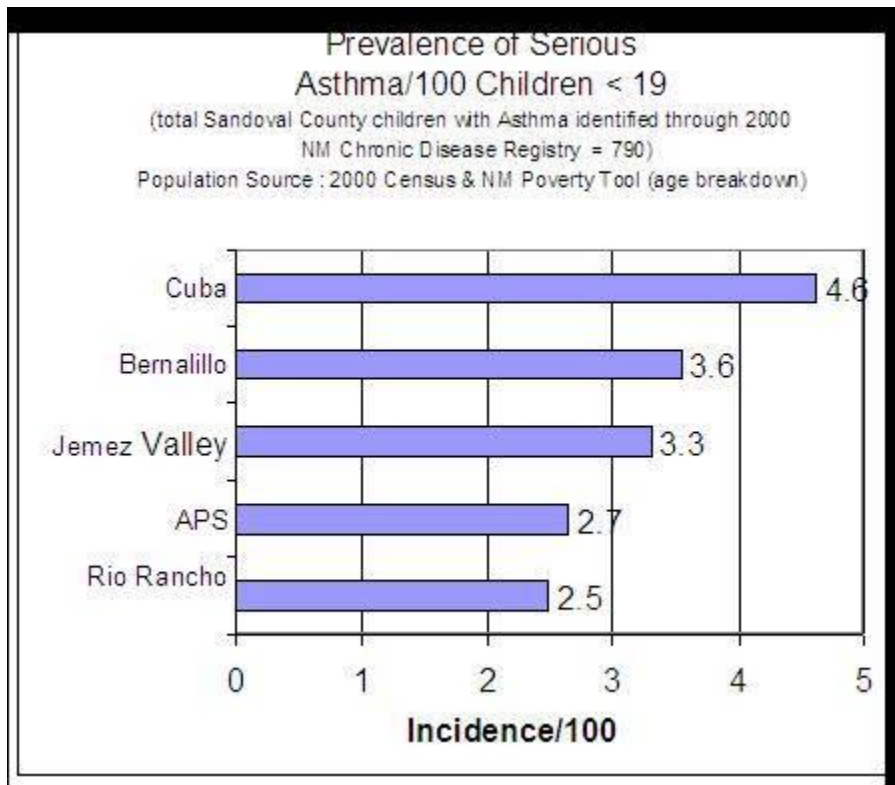
### Asthma

Asthma is a chronic inflammatory disease of the airways characterized by wheezing, coughing, breathlessness and chest tightness. Asthma is a leading cause of missed days from school and can lead to missed days of work, visits to the hospital and emergency room, interrupted sleep, and limited physical activity. While asthma cannot be cured, it can be controlled through adequate disease management.

Based on the 2002 BRFSS, the percent of adults with asthma in Sandoval County is consistent with the State rate. Based on 2000 data in the NM Chronic Disease Registry (Figure IV – 10), the prevalence of childhood asthma in the Cuba area, the most rural and poorest area of the County, is almost twice as high as in Rio Rancho. Per the Sandoval County Community Health Alliance Survey, the percent of households with one or more household members with asthma ranges from 13%, and 14% for Anglo and Hispanic households to 17% for Native American households.

In April 2007, the Sandoval County Community Health Alliance began a partnership with “Asthma Allies” to provide monthly workshops for families dealing with Asthma at the Sandoval County Health Commons. The feasibility of extending the workshops to the County’s rural areas through teleconferencing is being explored.

Figure IV - 10 Prevalence of Serious Asthma in Sandoval County Children by Geographic Area



## Diabetes

The diabetes morbidity rate varies substantially by race/ethnicity of County residents (Figure IV – 9). Based on the 2007 Alliance survey, the percent of households with one or more household members with diabetes ranges from 12% in Anglo families, 18% in Hispanic families, and 31% in Native American families. The estimated diabetes prevalence among New Mexico adults in 2004 was 9.2%, and 10.1% in Sandoval County.<sup>ii</sup> American Indians are about 3 times more likely to have diagnosed diabetes than non-Hispanic Whites and Hispanics are about two times more likely to have diagnosed diabetes than non-Hispanic Whites. Deaths for Diabetes mellitus is far more common among American Indians and Hispanics than among Whites (Figure IV – 11 ). The diabetes death rate per 100,000 population is 20 for White non-Hispanics, 45 for Hispanics, and 84 for Native Americans. Given the high percentage of Native Americans and Hispanic residents in the County's rural areas, the rural rate is probably substantially higher than the overall County rate.

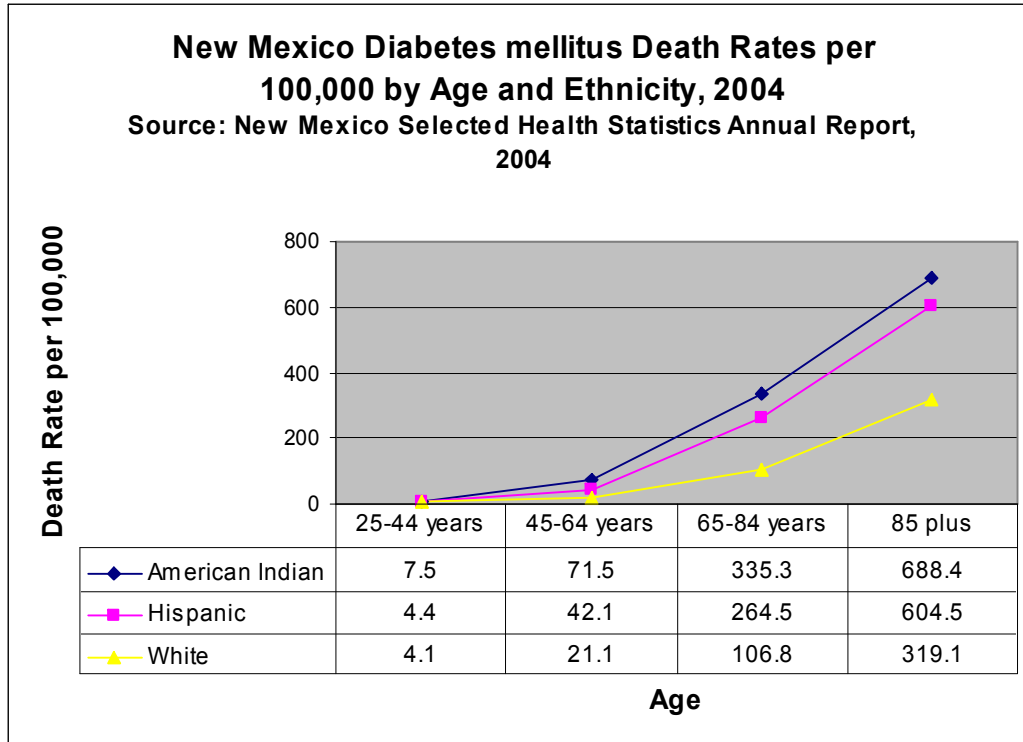
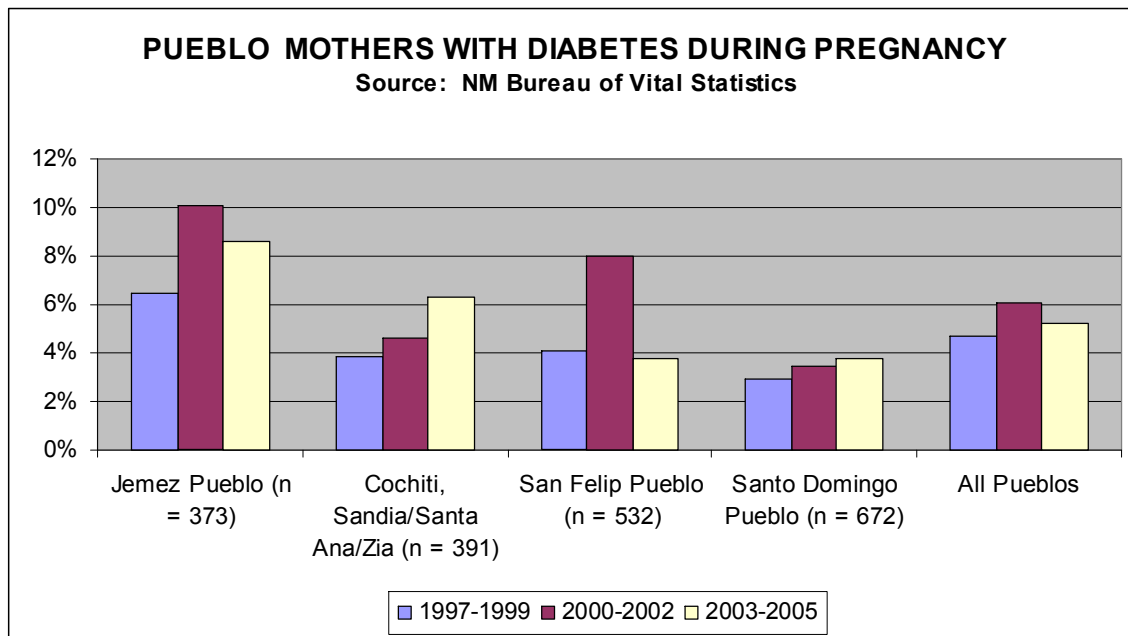


Figure IV - 11 NM Diabetes Death Rates by Ethnicity

Figure IV - 12 presents diabetes in Pueblo women during pregnancy between 1999 and 2005. There is an increase between the periods 1997 – 1999 and 2003 – 2005. Further analysis is required to explain the relatively high reported rate of diabetes between 2000 and 2002.

Figure IV - 12 Pueblo Mothers with Diabetes During Pregnancy, 1997 - 2005



The Health Alliance is partnering with NM Takes on Diabetes, a consortium of health care providers, in an effort to obtain funding for implementing Diabetes' screening, prevention, and support services at the Family Support Program located at the Sandoval County Health Commons/Public Health Office. The focus is on obesity prevention, gestational diabetes prevention and management, and diabetes' screening.

## ANEMIA/IRON DEFICIENCY

Iron deficiency is the most prevalent hematologic disorder in childhood and is highest among low socio-economic groups. In a recent review of the prevalence of iron deficiency in the United States, 9% of toddlers were iron-deficient. The association of iron deficiency anemia with lower mental and motor developmental test scores in early childhood is well-described.<sup>iii</sup> "The current 'screen and treat' recommendations of the American Academy of Pediatrics for iron deficiency anemia in toddlers have been largely unsuccessful.<sup>iv</sup> The possibility of long-lasting mental and psychomotor impairment associated with iron deficiency in this vulnerable age group makes prevention an extremely important public health problem. The New Mexico WIC programs screen all toddlers for anemia, and records their screening outcomes in the WIC electronic patient record system. Virtually all children diagnosed with anemia can be successfully treated with iron supplements. However, due to the fragmented health care system, there are insufficient resources to assess why many children do not have "normal" hemoglobin readings in WIC follow-up visits.

In a 2007 review of iron-deficient infants and children enrolled in Sandoval County WIC programs (non-tribal programs only) 12% of the infants and children were anemic. In Spring 2007, the UNM College of Nursing partnered with the Sandoval County WIC program to survey 144 WIC infants and children at the Cuba and Sandoval County

Health offices diagnosed with iron deficiency. The nurses surveyed 49 of the 144 families with anemic children. Major findings included:

- 88% of the parents surveyed reported that they were told that their child had a low iron level at the last visit.
- Of these parents, 61% thought they understood why this condition is a problem for children's growth and development.
- 98% of the interviewees reported that they had met with a nutritionist at their last WIC appointment and received either written, spoken or both forms of information regarding diet modification to support building the iron levels for their children.
- 88% reported taking some type of action within the home to address the issue.
- 20% of families reported that a WIC nutritionist recommended they have follow up iron screenings with a health care provider or clinic.

The FSP and UNM College of Nursing are exploring next steps to establish anemia follow-up protocols with WIC families.

## **CANCER**

The incidence of all cancers has declined in New Mexico from 489.7 in the combined years of 1991-2000 to 381.0 in 2000-2003. Cancer incidence has also declined in Sandoval County from 524.9 to 444.8, but Sandoval County's rate remains above the state's rate. (See tables IV – 6 and IV - 7).

Nationally, for New Mexico, and for Sandoval County, breast cancer affects more woman than any other cancer. The rates of breast, colorectal, and lung/bronchus cancers are lower for the years 2000-2003 in both New Mexico and Sandoval County than the 1991-2000 period. These differences appear to be statistically significant, with the exception of lung/bronchus in Sandoval County. Although these differences are statistically significant, is important to note that the latter period covers only three years, while the former period covers 10 years. In addition, there is one year overlap, 2000, between the comparison years.

For men, the incidence of all cancers has increased in both Sandoval County and New Mexico, and these differences are statistically significant. Prostate cancer affects the largest percent of the population. From 1994 to 2000 Cancer incidence among males in Sandoval County was 137 per 100,000 population.. The rate of prostate cancer has increased to 158.0 in Sandoval County and to 152.2 in New Mexico. Both of these differences appear to be statistically significant. The differences in the rates of other forms of cancer are not statistically significant.

Table IV - 6 Age Adjusted Cancer Incidence for Females 20 Years Old and Older New Mexico				
CANCER SITE	1991-2000		2000-2003	
	Rate	95% CI	Rate	95% CI
Breast	161.5	158.3 - 164.8	115.0	112.0-118.1
Colorectal	50.0	48.3 - 52.0	35.2	33.6-36.9
Lung & Bronchus	49.9	48.1 - 51.8	36.8	35.1-38.5
Melanoma of the Skin	16.2	15.2 - 17.3	13.8	12.7-14.9
Cervix	13.9	13.0 - 14.9	8.2	7.4-9.1
All Cancer Sites Combined	489.7	484.1 - 495.4	381.0	381.0-399.1
INTERPRETATION:				
SOURCE: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Incidence - SEER 9 Regs Public-Use, Nov 2002 Sub (1973-2000), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2003, based on the November 2002 submission. SEER*Stat 5.2.0-beta.				
NOTES: Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard, and include malignant behavior only.				

	Sandoval County			New Mexico		
	1994-2000	200-2003	95% CI	1994-2000	2000-2003	
	Rate	Rate		Rate	Rate	95%CI
Prostate	137.2	158.0	140.3-177.7	145.5	152.2	148.3 - 156.1
Lung and Bronchus	52.9	62.9	51.8 - 76.1	62.2	60.1	57.7 - 62.7
Colon and Rectum	53.0	60.0	49.3-72.7	50.4	52.0	49.7-54.3
Urinary Bladder	35.7	36.3	28.0-46.7	27.4	28.7	27.0-30.5
Non-Hodgkins Lymphomas	22.0	24.5	17.7-33.5	17.8	17.9	16.7-40.4
Kidney and Renal Pelvis	20.8	16.4	11.3-23.5	14.3	15.6	14.4-16.9
All Cancers	471.7	531.4	498.5-566.3	468.7	485	478.2 - 492.0
SOURCE: (1) Sandoval County Profile, New Mexico Department of Health. (2) National Cancer Institute, State Cancer Profiles, <a href="http://statecancerprofiles.cancer.gov">http://statecancerprofiles.cancer.gov</a>						
NOTES: Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard, and include malignant behavior only; (2) Confidence intervals are not available for 1994-2000 data.						

The increases in cancer rates in New Mexico and in Sandoval County require further investigation. Analyzing data by race/ethnicity, gender, and age may help identify possible interventions.

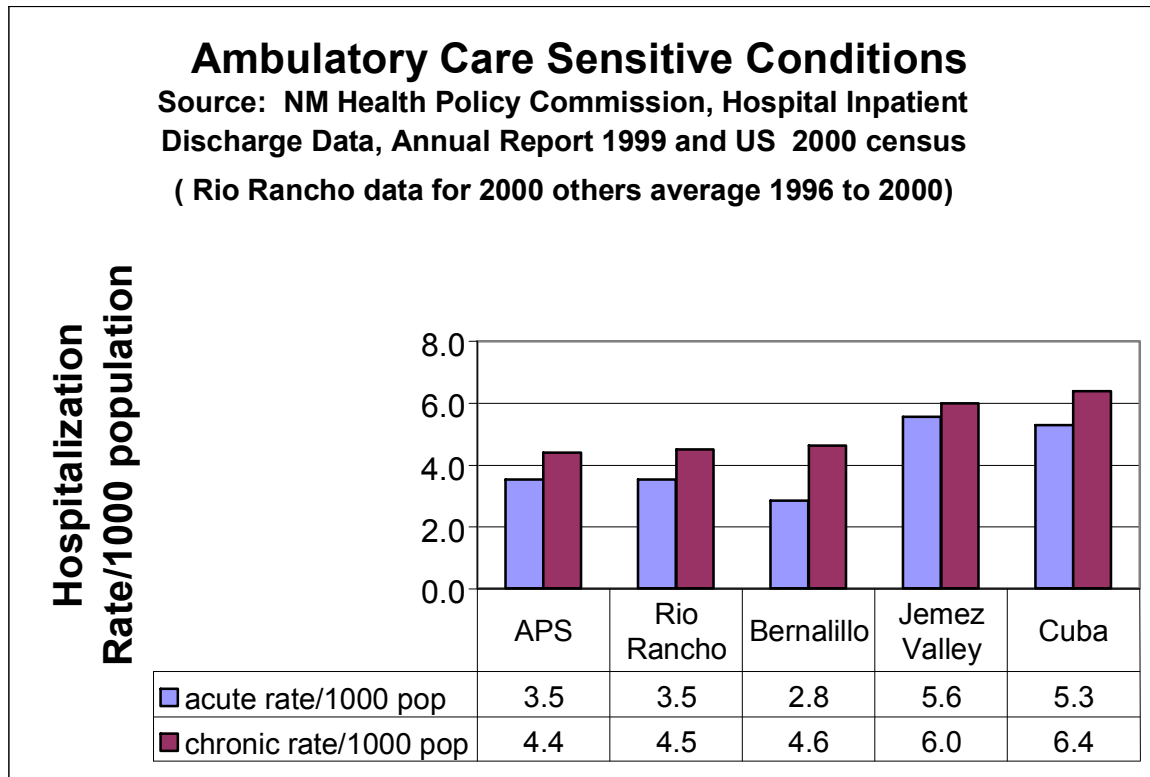
## AMBULATORY CARE SENSITIVE CONDITIONS.

Ambulatory care sensitive conditions (ACSC) are acute and chronic hospital diagnoses potentially affected by the level of outpatient care received. The Department of Health collects hospital inpatient discharge data from all New Mexico hospitals (Hospital Inpatient Discharge Database - HIDD), excluding Native American hospitals, to document hospitalizations by diagnoses. Although many Native Americans receive services in non-Indian hospitals, lack of data from Native American facilities obviously results in undercounting of Native American hospitalizations. In addition, the HIDD reports have not been updated since 2000

ACSC chronic conditions include asthma, congestive heart failure, hypertension, angina, diabetes, hypoglycemia and epilepsy. The Cuba area, the most remote and lowest income area of Sandoval County, has the highest rate of hospitalization – at non-Indian hospitals - for chronic diseases categorized as ambulatory care sensitive conditions (Figure IV-13). In 2000 the rate was approximately 42% higher than for residents of Rio Rancho or Corrales, relatively high-income, urban area communities.

Among the ACSC acute diseases are tuberculosis, congenital syphilis, pneumonia, cellulites, gastroenteritis, severe ENT (Ears, Nose, Throat) infections, and immunization preventable diseases. Acute conditions resulting in hospitalizations are 51% higher in Cuba than in Rio Rancho and Corrales. Residents of the Jemez Valley area, the second most remote area of the county, also experience rates of hospitalization for acute and chronic ambulatory care sensitive conditions which are substantially higher than the urban area. The relatively low reported rate of hospitalizations in the Bernalillo School District is in part due to the fact that the many Pueblo residents use the Santa Fe Indian Health Hospital, which is not included in the DOH hospitalization database.

Figure IV - 7 Ambulatory Care Sensitive Conditions



## OBESITY

During the past twenty years, obesity among adults has risen significantly in the U.S. The latest data from the National Center for Health Statistics show that 30% of US adults 20 years of age and older are obese. The percentage of young people who are overweight has more than tripled since 1980. Among children and teens aged 6 – 19 years of age, 16% are considered overweight. According to the Kaiser Foundation, in 2005 58% of New Mexico adults were overweight or obese. NM was ranked 29<sup>th</sup> in the nation for overweight and obesity rates.<sup>v</sup>

Based on the 2003 New Mexico Behavioral Risk Factor Surveillance System, 54% of Sandoval County residents are overweight or obese, compared to 60% of all New Mexicans. Of the 581 WIC mothers enrolled in Sandoval County in March 2004, 54%

were overweight or obese. In New Mexico in 2004, 18% of non-Hispanic white adults and 25% of Hispanic adults were obese.

## ORAL HEALTH

Poor oral health affects children in many ways including pain, missed school days, inadequate sleep, and inability to learn. Untreated periodontal disease is associated with preclampsia, low birth weight, and infant tooth decay (PRAMS). In Sandoval County focus groups conducted by the Statewide Systems Development Initiative Advisory Group as well as by the CHA, participants identified inadequate dental services as a problem. New research is linking oral health with diabetes, heart disease, and pre-term pregnancies. Dental caries is the most prevalent chronic childhood disease<sup>vi</sup>. Children from families with low-incomes are more likely to have dental caries. <sup>vii</sup> Dental care is the least utilized core pediatric health service for low-income children.<sup>viii</sup> Poor dental health results in eating sleeping and speech difficulties and increases in consumption of pain medication.<sup>ix</sup>

New Mexico ranks 49 out of 50 states in per capita dentists. The average age of dentists in in the mid-50's, which may indicate that the situation may worsen in the coming years.<sup>x</sup> 24 of 33 NM Counties are classified as full or partial dental health shortage areas. 13% of pregnant women had dental problems, 56% of these had dental care. (PRAMS).

One of the Alliance priorities is Oral Health care and a dental clinic is scheduled to open at the Sandoval County Health Commons in summer 2007. The services will focus on preventive care for pregnant women and children 0 – 5. Services will include oral health education, exams, cleanings, fluoride varnish and periodontal work for pregnant women. Restorative work will be referred to other dentists in the community by the Health Commons' dentist, who will also be responsible for establishing a network of dentists willing to accept Medicaid and uninsured patients referred by the Health Commons.

A number of questions regarding oral health care were included in the 2007 County Community Health Survey. A complete analysis of the data will be included in the Survey Report, currently being prepared. Preliminary findings include:

- The percent of children 3 – 5 receiving dental services the recommended two times per year ranges from 55% in the Rio Rancho School District to 34% in the Cuba School District (Figure IV – 14).
- More children that are enrolled in Medicaid receive dental services every six months (58%) than children who are not enrolled in Medicaid (46%) (Figure IV – 15).
- 16% of the respondents reported that a child in the household had missed school due to a dental problem (Figure 16).
- 23% of adults reported that an adult in the household missed work due to a dental problem.
- There appears to be a strong relationship between adults missing work due to dental problems and their children missing school due to dental problems.

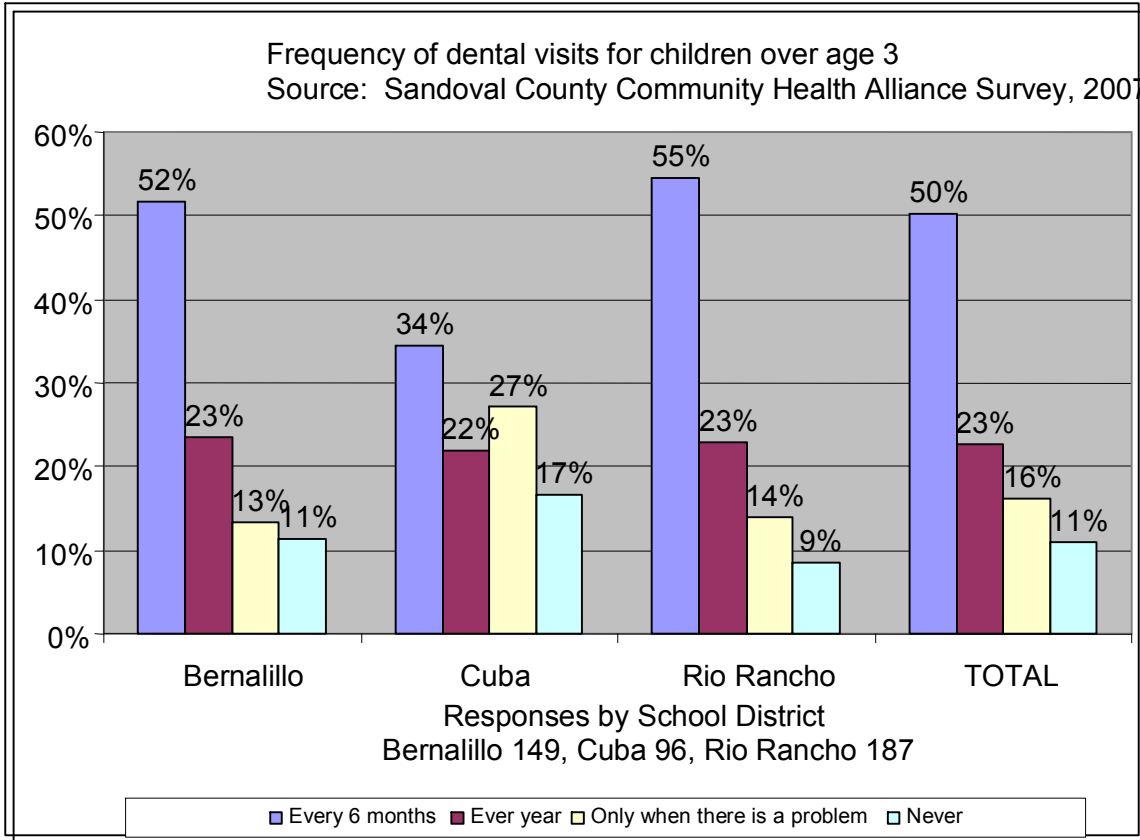


Figure IV - 8 Frequency of dental visits for children over age 3

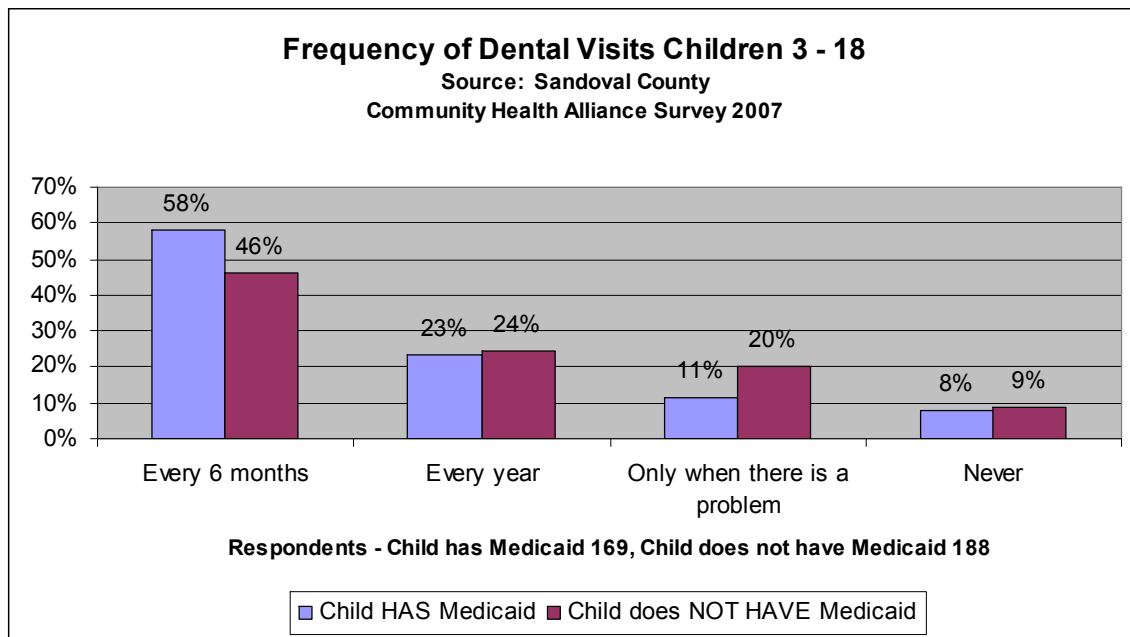
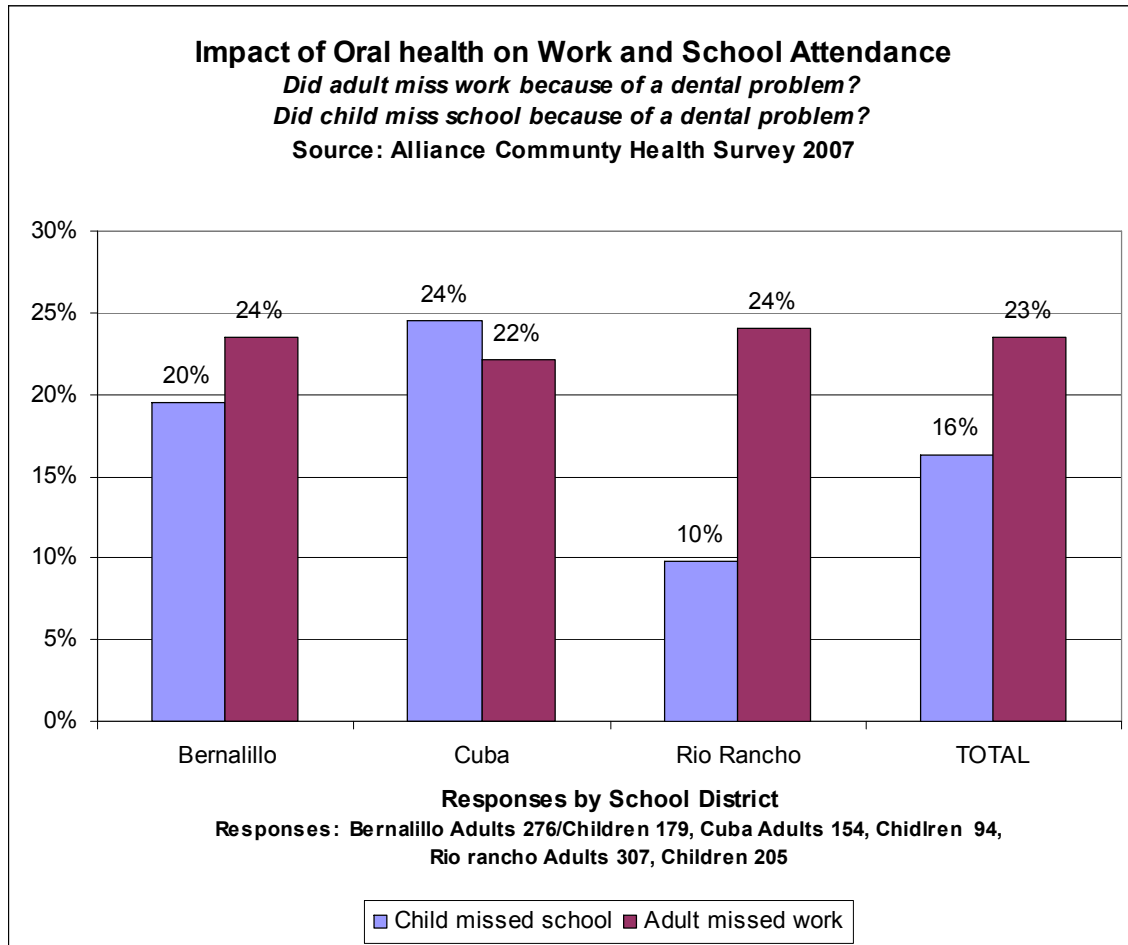


Figure IV - 9 Frequency of Dental Visits

Figure IV - 10 Impact of Oral Health on Work and School Attendance



<sup>i</sup> New Mexico Selected Health Statistics, 2004, New Mexico Department of Health, the State Center for Health Statistics Bureau of Vital Records and Health Statistics, July, 2006.

<sup>ii</sup> New Mexico Department of health Diabetes Prevention and Control Program web site, [www.diabetesnm.org](http://www.diabetesnm.org), June 21, 2007

<sup>iii</sup> Iron Deficiency and Cognitive Achievement Among School-Aged Children and Adolescents in the United States, Halterman, Jill S, et. Al, Pediatrics Vol. 108, June 2001

<sup>iv</sup> [www.edpeiatricnews.com](http://www.edpeiatricnews.com), September 2004, Iron Deficiency Still Goes unnoticed in Toddlers

<sup>v</sup> <http://hpc.state.nm.us/QuickFacts/quickfacts2007.pdf>

<sup>vi</sup> Third National Health and Nutrition Survey, from Fact Sheet, S. 1626 "Children's Dental Health Improvement Act of 2001".

<sup>vii</sup> Bruerd B. Jones C, Krise D. 1997. Preventing Baby Bottle Decay and Early Childhood Caries among AI/AN infancies and children. The HIS Primary Care Provider 23 (3):37-39.

<sup>viii</sup> Fact Sheet,

<sup>ix</sup> Katrina Magee, Assistant Professor UNM, Division of Dental Hygiene

<sup>x</sup> House Memorial 1: Dental Education Summit, Final Report and Recommendations, October 1, 2003.