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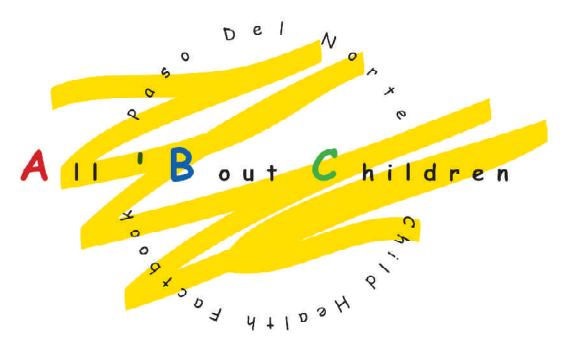
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All 'Bout Children: Children's Health and Well-being in the Paso Del Norte Region: Updated with U.S. Census 2000 Data

April 2003

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#### I. EXECUTIVE SUMMARY

The ABC Factbook covers eighteen health status indicators of overall children's well-being in the Paso Del Norte Region. Included are a range of demographic indicators. For example, the size of the child population, poverty, and income inequality are compared with a range of health and disease indicators. In order to determine if children in this area are disproportionately at risk compared to children elsewhere, an effort was made to analyze the findings for the Paso Del Norte region against national and state data. This region, in actuality the entire Texas-Mexico border, is considered a poor region compared to the rest of the United States; however, this region is considered prosperous when compared to Central and Southern Mexico. In determining how children in the Paso del Norte Region compare to other areas of the U.S. and Mexico on each of the measures, equivalent data was sought for the respective states of Chihuahua, Mexico, New Mexico, Texas, and for the United States and Mexico as a whole.

The demographic and poverty data for children clarify a well-known fact concerning U.S. counties on the border: there are larger percentages of poor children and families in the Paso del Norte region than the rest of Texas, New Mexico, and the United States. On the other hand, the border states municipios¹ of Mexico are among the most prosperous in the nation. Though there is dramatic disparity in household income when U.S. border counties are compared to the Municipio of Ciudad Juárez, the economic development of the northern Mexican states over the past several decades has increased income levels to heights not equaled in other regions of Mexico, with the exception of the Federal District of Mexico City.

The population of this region is relatively young in that a large proportion the population is made up of children under 18 in U.S. counties and children under 15 in Ciudad Juárez. With the exception of Otero County in New Mexico, the proportion of children living in the U.S. Paso Del Norte region is higher than in the United States, Texas, and New Mexico. The child population is larger still in Ciudad Juárez than in bordering U.S. counties; however, the child population is smaller than Mexico as a whole.

Texas and New Mexico fall behind the nation for a number of indicators affecting children; the data collected indicates that Paso Del Norte counties fall behind even their respective states. Conversely, Ciudad Juárez fares better for a number of indicators than Mexico as a whole; however, conditions are usually better in the bordering U.S. counties than in Ciudad Juárez. For example, the annual median household income is lower and the percentage of the child population living in poverty is higher for the four Paso Del Norte counties than for the United States, Texas, and New Mexico. A greater per-

centage of the population in Ciudad Juárez is earning higher wages, although those wages are lower than bordering U.S. county incomes, than in the State of Chihuahua and Mexico.

Both Texas and New Mexico lead the nation for the number of children without health insurance. The percentage of children without health insurance is greater in El Paso and Hudspeth Counties than in Texas as a whole. More of the Ciudad Juárez population is entitled to health services than the rest of the country; however, children are less likely to be entitled to health services than adults.

Living with a single parent is one leading predictor in determining whether a child is at risk for living below the poverty threshold. In spite of higher child poverty rates in the Paso Del Norte region, El Paso County is the only county in the region that has a higher percentage of female-headed households with no spouse present than in the United States and Texas. Hudspeth and Otero Counties have lower percentages of female-headed households than the United States as a whole. The percentage of male-headed households in this region is about the same as the nation, Texas, and New Mexico. Ciudad Juárez has a higher proportion of female-headed households than bordering U.S. counties.

The children of this region also fare worse for a number of health indicators. Two important indicators that affect the health and well-being of infants are the teen birth rate and prenatal care received by the mother. The percentage of births to teenagers is higher in El Paso and Hudspeth Counties than in Texas as a whole. While Doña Ana and Otero Counties have lower teen birth rates than New Mexico, this rate is still higher than the national teen birth rate. The percentage of adolescent pregnancies is also high in Ciudad Juárez.

The percentage of pregnant women seeking no or late prenatal care (care not received until the third trimester) is lower in the four Paso Del Norte counties than in the nation. (Doña Ana and Otero Counties have lower percentages than New Mexico. Texas and Hudspeth Counties have higher percentages than Texas.) Nationally, both teen mothers and mothers who receive late or no prenatal care are more likely to have low birth weight infants and infants with health complications. The infant mortality rate is also higher among these two groups. Despite the fact that the Paso Del Norte region has a higher teen birth rate and a higher percentage of women not receiving adequate prenatal care, the percentage of low birth weight infants born in the four counties is lower than in the nation and respective states. Except for Doña Ana County, the infant mortality rate for this region is lower than in the United States, Texas, and New Mexico as well.

The infant mortality rate is quite high in Ciudad Juárez. In fact, the

infant mortality rate is three to four times higher in Ciudad Juárez than in bordering U.S. counties in spite of the fact that the rate has declined over the past decade.

Sexually transmitted diseases are most common among adolescents ages 15-19. The percentage of reported chlamydia, gonorrhea, and syphilis cases among El Paso and Hudspeth County adolescents is lower than national and state percentages. The percentage of reported chlamydia cases to adolescents in Doña Ana County is about the same as the national percentage; however, the percentage of reported gonorrhea cases to Doña Ana adolescents was lower. A higher proportion of chlamydia and gonorrhea cases affexted adolescents in Otero County. This region has a lower incidence of congenital syphilis than the nation and Texas. The incidence of HIV/AIDS is also lower in the entire Paso Del Norte region when compared to the United States.

Tuberculosis is a major health concern along the Texas-Mexico border; however, there are not as many reported pediatric tuberculosis cases in this region as adult cases. Surprisingly, the percentage of child tuberculosis patients is lower in this region than national and state percentages. The disease rate for tuberculosis is lower in Ciudad Juárez than in the rest of the State of Chihuahua.

Congenital anomalies, or birth defects, are the leading cause of infant mortality in the United States. Some studies on the incidence of certain birth defects, such as neural tube defects, have been conducted in this region; however, no significant data has shown that a particular birth defect is more common in this region. Infant deaths due to congenital anomalies are higher in Ciudad Juárez than in Mexico and bordering U.S. counties. Infant deaths due to congenital anomalies are slightly higher in El Paso County and slightly lower in Doña Ana County than in the United States as a whole.

Two health indicators that affect the long-term health of children in this region are the high incidence of diabetes and childhood obesity. While more common in adults than in children, diabetes is quite common among the Hispanic population in both U.S. Paso Del Norte counties and Ciudad Juárez. Childhood obesity/overweight is also common in this region to the point of many health care providers arguing that it is becoming an epidemic.

Child mortality rates are much higher in Mexico than in the United States. In general, child mortality rates are lower in Ciudad Juárez than in Mexico and the State of Chihuahua as a whole; however, child mortality rates due to accidents and violence are slightly higher in Ciudad Juárez than the rest of Mexico. The child death rate is lower in U.S. counties of the region than in Ciudad Juárez, the United States, and Texas and New Mexico; and generally, child death rates due to accidents are lower as well. Doña Ana

County is the only Paso Del Norte County with a higher child death rate due to accidents or violence. El Paso County has a very low infant and child death rate due to homicide compared to Ciudad Juárez and Doña Ana County.

<sup>1</sup> The municipality or *municipio* in Mexico is both a territorial and political division of the state. As a territorial division, it is like the county in the United States in that it covers both urban and rural areas. As a political entity it is different from the county. U.S. counties vary in size and function; the governmental structures of all of Mexico's 2,412 municipios are similar and each is governed by the *ayuntamiento* that is made up of both elected and appointed officials. The municipio is considered to be the "basic cell" of Mexican political and administrative organization. In function and organization it is closest to the mayor-city council form of government of many U.S. cities. Victoria E. Rodríguez (1997). *Decentralization in Mexico: From Reforma Municipal to Solidaridad to Nuevo Federalismo*. Boulder, CO: Westview Press, pp. 27.29.

Figure 1 Map of the Paso Del Norte Region **New Mexico** Otero Doña Ana El Paso Cd. Juárez Hudspeth Texas Chihuahua

#### II. PURPOSE OF STUDY

The All 'Bout Children Factbook, developed through a partnership between the Institute for Policy and Economic Development at the University of Texas at El Paso and the Paso Del Norte Health Foundation, represents a first effort in gathering baseline data on the current status of children in this area in regard to health and well-being. It is intended to be a tool for health care advocates and policy makers in the border region. Coverage of the factbook includes two New Mexico counties, Doña Ana and Otero; two Texas counties, El Paso and Hudspeth; and Ciudad Juárez, Chihuahua. The information provided is the most current data accessible within the limits of our exploratory effort.

While some studies pertaining to the well-being of children have been published, such as the *Kids Count Data Book* published by the Annie E. Casey Foundation, none have investigated the unique socioeconomic and health problems that exist for children along the U.S.-Mexico border. In order to present a clear picture of the conditions that exist in the Paso Del Norte region, indicators integrated into this model are representative of the conditions within the U.S.-Mexico border area. The 2001 ABC Factbook also illustrates how a child's socioeconomic background affects overall child health and well-being. The Institute hopes in the future to cover, in greater detail, the education and safety status of children in the region. The Factbook will be updated on its website location once the 2000 Census is available.

#### III. METHODOLOGY

The indicators for the All 'Bout Children Factbook were collected from a variety of available reports, published data, and websites from government and private institutions. Unpublished data was also requested from the New Mexico Department of Health and the El Paso City-County Health and Environmental District. While an effort was made to collect the most current data available, data pertaining to children's health is not systematically collected and/or reported.

When possible, the various indicators for the Paso Del Norte region were compared to national and state data; however, data is not always compatible when conducting comparisons across jurisdictions. For example, most U.S indicators include children under the age of 18. In Mexico, those indicators include those under the age of 15. Therefore, in many cases true comparisons of the U.S. Paso Del Norte counties and Ciudad Juárez could not always be made. In addition, on some indicators there may have been better or more current data available for one locale but not another; therefore, the most current data available for all locales was used unless otherwise noted.

# IV. NATIONAL DATA: DEMOGRAPHIC BACKGOUND AND HEALTH INDI-CATORS OF THE PASO DEL NORTE REGION

#### 1. Child Population

The population of children under the age of 18 is disproportionately higher in the U.S. Paso Del Norte Region than in the United States, Texas, and New Mexico. According to the U.S. Census 2000, children account for 31.9 percent of the population in El Paso County, 34.2 percent in Hudspeth County, 29.7 percent in Doña Ana County, and 29.5 percent in Otero County. Comparatively, the proportions of children in the United States, Texas, and New Mexico are 25.6 percent, 28.2 percent, and 27.9 percent, respectively (See Figure 2 and Table 1).1

New Mexico and Texas have both seen population growth since 1980, and demographers expect this growth to continue. The population along the Texas-Mexico border is growing at a greater rate due in part to immigration and a high birth rate (Border Low Income Housing Coalition, 1998a). In 1998, the birth rate in El Paso County was 19.7 per 1,000 population compared to 17.4 in Texas as a whole. While higher than the state rate, the birth rate in El Paso County decreased from the previous year (20.2 in 1997). Interestingly, the birth rate in El Paso County is lower than the birth rate for Hispanics in Texas (25.7 in 1998). The birth rate is higher in Doña Ana County than in the rest of New Mexico; 11 percent of all births in New Mexico are in Doña Ana County (Homedes, 2001).

According to Texas state demographers, the child population is expected to continue to grow. By 2030, the Texas child population is expected to increase 47 percent; however, the child population is projected to become a slightly smaller proportion of the total population (The Texas Kids Count Project, 2000).

# Ciudad Juárez, Chihuahua

Ciudad Juárez, Chihuahua has a very young population when compared to adjacent U.S. counties across the border. This is also true for the entire Republic of Mexico. The child population, birth to age 14, makes up over 32 percent of the total population compared to approximately the same percentage for the broader birth to age 18 group in New Mexico and Texas counties (See Figure 3 and Table 2). The profile of the child population, both in terms of percent of total population and breakdown by age bracket, is exactly the same for the State of Chihuahua and the Municipio of Ciudad Juárez. (See Figure 4). The median age of the population of the state and municipio in 1995 was 22 years. In addition, young people between the ages of 15 and 29 make up almost

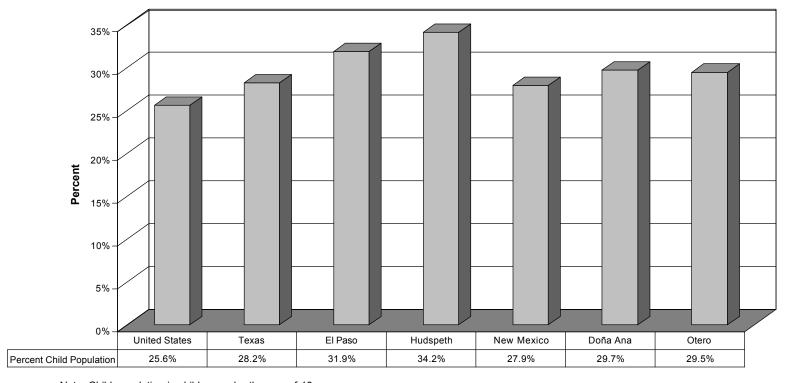
another one-third of total inhabitants (Instituto Nacional de Estadística [INEGI], 1998).

In the last decade, population growth in Mexico has slowed due largely to declining fertility rates. Fertility in the Republic has declined from 7.0 children per woman in 1960 to 2.5 in 1998 (UACJ, 1999). Fertility rates in Ciudad Juárez in 1998 stood at 86.1 births per 1,000 women of child-bearing age, compared to rates of 145 to 230 for surrounding rural municipios (UACJ, 1999). Fertility rates are generally higher in rural areas of the State.

As Figure 5 shows, there has been a steady increase in the number of births in the State of Chihuahua and Ciudad Juárez since 1994. If the preliminary figures for the number of births in 1999 are accurate, this represents an average annual growth rate of births between 1994 and 1999 of 4.7 percent for Chihuahua and 5.6 percent for Ciudad Juárez. Looking also at the shorter period 1995 to 1998, the number of births has grown faster than the growth of total population (See Figure 6).

<sup>&</sup>lt;sup>1</sup> The figures for child population as a percent of total population are within a percentage point of the estimates made by the U.S. Census Bureau prior to the 2000 census, with the exception of Hudspeth County. The prior estimate of percent child population for Hudspeth County was 31.9 percent compared to the Census 2000 figure of 34.2 percent.

Figure 2 Child Population as Percent of Total Population: 2000 United States, Texas, New Mexico, and Paso Del Norte Counties



Note: Child population is children under the age of 18. Source: U.S. Census Bureau, Census 2000 Summary File 3-Sample Data.

Table 1 **Total Population and Child Population by Area: 2000** United States, Texas, New Mexico, and Paso Del Norte Counties

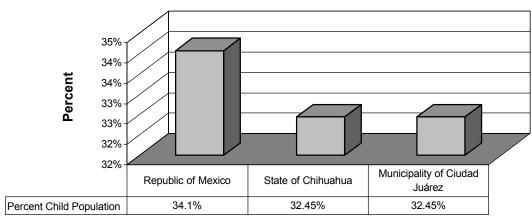
	<b>United States</b>	Texas	El Paso	Hudspeth	New Mexico	Doña Ana	Otero
Total Population	281,421,906	20,851,820	679,622	3,344	1,819,046	174,682	62,298
Child Population	72,142,757	5,873,930	216,851	1,142	507,568	51,831	18,351

Note: Child population is children under the age of 18.

Sources: U.S. Census Bureau, Population Estimates Program, 2000. National and State: http://census.gov/population/estimates/state/St-99-

09.txt. County: http://www.census/population/estimates/county/co-ca.html

Figure 3 **Child Population as Percent of Total Population** Republic of Mexico and State of Chihuahua: 2000; Ciudad Juarez: 1998



Area

Note: Child population is children ages 0-14

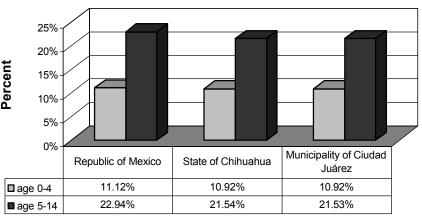
Source: INEGI 2000 Census and Consejo Nacional de Poblacion, 1999.

Table 2 Number of Total and Child Population by Area Republic of Mexico and State of Chihuahua: 2000; Ciudad Juarez: 1998

	Republic of Mexico	State of Chihuahua	Municipality of Ciudad Juárez
Total Population	97,014,867	3,037,366	1,137,174
Child Population	33,050,963	1,001,413	369,051

Note: Child population is children ages 0-14 Source: INEGI 2000 Census and Consejo Nacional de Poblacion, 1999.

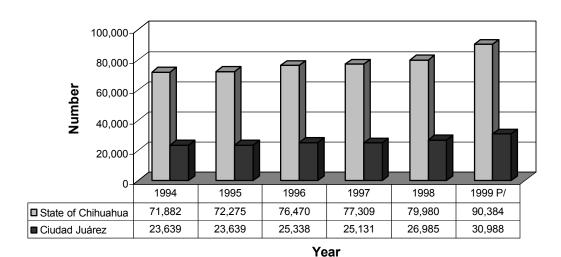
Figure 4
Child Population by Age Group: Percent of Total Population
Republic of Mexico: 2000; State of Chihuahua and Ciudad Juárez: 1998



Area

Source: Mexico: INEGI 2000 Census. State and City: Consejo Nacional de Población (CONAPO), 1999.

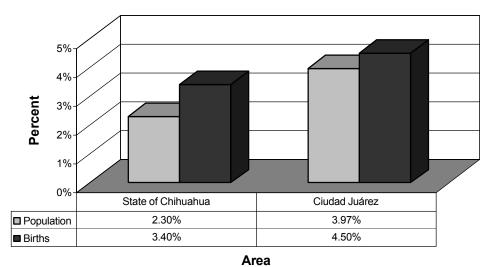
Figure 5 Number of Births: 1994-1999 State of Chihuahua and Municipio of Ciudad Juárez



Note: P/ Data for 1999 is preliminary. Source: UACJ, 1999. *Diagnóstico de Salud del Municipio de Juárez 1998*, p. 36; INEGI, 2000, *Anuario Estadístico* 

Chihuahua Edición 2000, Cuadros 3.9 and 3.14.

Figure 6
Average Annual Growth of Population and Births: 1995-1998
State of Chihuahua and Ciudad Juárez



Source: INEGI, 2000. Anuario Estadístico Chihuahua Edición 2000.

# 2. Children in Poverty

Poverty is perhaps the most important indicator of child well-being due to the fact that it is associated with a number of negative outcomes. For instance, poor children are less likely to have health insurance and current immunizations; consequently, these children are more likely to have health problems. Poor children are more likely to live in unsafe neighborhoods and attend schools with inadequate resources. Children who live in poverty have a greater chance of dropping out of school as teenagers and becoming teen parents (The Texas Kids Count Project, 2000). Other factors associated with poverty, such as inadequate nutrition, exposure to environmental toxins, and abuse and neglect negatively impact a child's emotional and cognitive development (National Center for Children in Poverty, 1997).

In the United States, children living in single-parent households, especially female-headed households, are more likely to be poor than children living with two parents. In Texas, 48.7 percent of female-headed families are living in poverty (The Texas Kids Count Project, 2000). Minorities are also disproportionately affected by poverty. The poverty rates for Hispanics and African-Americans in Texas in 1998 were 25.5 percent and 23.3 percent, respectively, compared to 6.9 percent for Anglos (Center for Public Policy Priorities [CPPP], n.d.c.). Children of immigrants are also more likely to be living in poverty, especially in Texas. In 1999, 36 percent of Texas children of immigrants were living in poverty versus 24 percent nationwide (Dunkelberg and Hagert, 2001).

The U.S. Census Bureau's poverty definition is: a range of income cutoffs or thresholds adjusted by such factors as family size, sex of the family head, number of children under 18 years old, and farm-nonfarm residence...The poverty thresholds are increased each year by the same percentage as the annual Consumer Price Index (Dalaker and Proctor, 2000, p. A-2).

Individuals living below their income threshold are considered to be living in poverty. Current federal guidelines set the poverty threshold for a family of four at \$18,400 (U.S. Bureau of the Census, February 2003).

The number of children under 18 living in poverty in the United States is far greater than in any other developed nation (The Annie E. Casey Foundation, 2000), and the proportion of children living in poverty in Texas, New Mexico, and the four U.S. counties in the Paso Del Norte region greatly exceeds the national percentage. Figure 7 compares the percentages of children living in poverty in the United States, Texas, New Mexico, and the four U.S. Paso Del Norte counties. In 1999, 16.6 percent of U.S. children were living in poverty while 20.5 percent of Texas children and 25 percent of New Mexico children were living in

poverty. The percentages of children living in poverty in El Paso, Hudspeth, Doña Ana, and Otero counties surpass the high rates of Texas and New Mexico with percentages of 31.7 percent, 41.4 percent, 34.6 percent, and 28.4 percent, respectively. The economic prosperity of the last 1990s produced a slight decline in the percentages of children living in poverty in the region. The percent of children living in poverty declined in the United States, Texas and New Mexico from 1997 to 1999 by from 2.5 to 3.3 percentage points. In the Paso Del Norte area, the percent of children living in poverty declined in all counties except Otero where it increased from 25.8 percent to 28.4 percent. The greatest decrease occurred in El Paso County where the percent of children living in poverty declined from 38.6 percent in 1997 to 31.7 percent in 1999 (Figure 7). It is possible that the levels of child poverty have again increased with the economic slowdown of the past two years.

A trend that has developed in Texas and New Mexico over the past few years is an increase in the proportion of children living in "near poor" families (100-200% of their poverty threshold) who depend on earned income rather than welfare as a major source of income. In Texas, 72.2 percent of poor families cite earnings as the majority of their income compared to 57 percent in the United States. Conversely, only 11.1 percent of poor Texas families depend on welfare as their major source of income compared to 24.2 percent of U.S. families who cite welfare as their major source of income (CPPP, n.d.c.). New Mexico has also experienced an increase in the number of children living in working poor families (New Mexico Advocates for Children and Families [NMACF], 2000).

The percentage of children who qualify for free or reduced-priced lunches reflects the high number of children living at near poverty in the Paso Del Norte region and can serve as an indicator of poverty. In order to qualify for the free lunch program, a child's family income must not exceed 130 percent of the poverty threshold. A child is eligible for the reduced-price lunch program if his or her family income is between 130 and 185 percent of the poverty threshold (Texas Kids Count, 1997). In the 1997-98 school year, 70.5 percent of El Paso County students, 83.4 percent of Hudspeth County students, 69.5 percent of Doña Ana County students, and 42.3 percent of Otero County students received free or reduced-price lunches. Except for Otero County, all counties had higher percentages of students participating in the school lunch program than their respective states as a whole (See Figure 8).

Despite the fact that poverty rates have remained stable in both Texas and New Mexico, the percentage of children receiving Food Stamps has declined over the past few years. In order to be eligible for Food Stamps, family income must not exceed 130 percent of the poverty threshold (The Texas

Kids Count Project, 2000). The percentage of eligible Texans receiving Food Stamps declined from 67 percent in 1995 to 35 percent in 1999 (CPPP, n.d.c.). El Paso County saw a decline in the number of children in families receiving food stamps from 78,669 in 1994 to 75,058 (32.5% of the population under 18) in 1999 while Hudspeth County experienced a slight increase from 211 in 1994 to 299 (35.2% of the population under 18) in 1999 (The Texas Kids Count Project, 2000; Texas Kids Count, 1997). New Mexico has also seen a decline in the number children receiving Food Stamps. In Doña Ana County, the percentage of the total population receiving Food Stamps fell from 7 percent in 1994 to 4.8 percent in 1999. Otero County's Food Stamp participation fell from 3.8 percent of the population in 1994 to 2.5 percent in 1999 (NMACF, 2000). This decrease in the number of Food Stamp recipients may not necessarily be the result of successful welfare reform. "Confusing eligibility requirements and excessive administrative requirements" have been cited as reasons for the declining rolls (The Texas Kids Count Project, 2000). This decline in the number of participants receiving Food Stamps is of much concern in that many families may not be receiving the assistance they need.

## Ciudad Juárez, Chihuahua

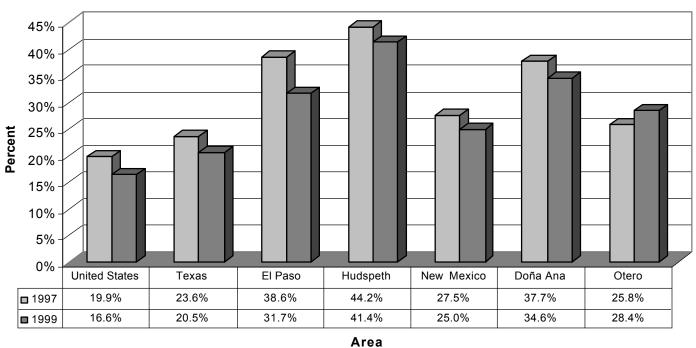
Unlike the United States, the Mexican government does not establish poverty thresholds by family size and income. The World Bank classifies Mexico as an "upper middle income" country, one of fifteen Latin American economies with gross national product (GNP) per capita in the range of \$2,996 to \$9,265 (World Bank, 2000, pp. 334-335). GNP per capita was \$4,400 in 1999, approximately \$12 per day. The majority of the Mexican people live on much less per day than this figure would suggest. A 1995 World Bank survey of poverty in Mexico found that 17.9 percent of the population lived on less than \$1.00 per day and 42.5 percent lived on less than \$2.00 per day.

The northern Mexican states are, nonetheless, the most prosperous in the country; and Ciudad Juárez and four other municipalities in the State of Chihuahua are in the top tier of political entities in terms of their social and economic development. Based on the 2000 census, the Mexican Census Institute (INEGI) analyzed the economic and social conditions in all of the nation's municipalities and classified them by level of well-being (niveles de bienestar). The seven-level classification system is based on thirty-six variables covering population, educational attainment, employment, housing, and health conditions. Seven of the nine federal states in level six, the second highest level, are on the border with the United States. The Federal District (Mexico City) is the only state-level political entity in the seventh stratum, the highest level.

The classification by municipality places Ciudad Juárez and four other municipios in the State of Chihuahua in the highest stratum. These five municipios include 70.19 percent of the population of the state. A sample of the variables studied demonstrates the higher level of development of these municipios compared to the State of Chihuahua and Mexico as a whole (See Table 3). The population is more urban and more educated; there are higher rates of labor force participation, better housing conditions, and fewer people not entitled to health care than in the state and nation. These comparisons, which place Ciudad Juárez among the most developed municipalities in the Mexico, do not erase the large differences among families and households within the municipality nor the income differential that exists with Texas and New Mexico counties across the border.

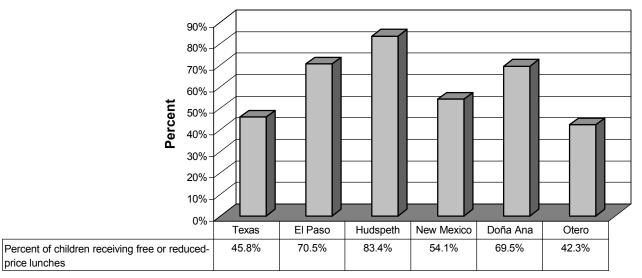
<sup>&</sup>lt;sup>1</sup> World Bank international poverty lines.

Figure 7
Percent of Children Under Age 18 Living in Poverty: 1997 & 1999
United States, Texas, New Mexico, and Paso Del Norte Counties



Source: U.S. Census Bureau, Small Area Income and Poverty Estimates 2000 (1997 data), Census 2000 Summary File 3-Sample Data (1999 data).

Figure 8
Percent of Children Receiving Free or Reduced-Price Lunches: 1997-1998
Texas, New Mexico, and Paso Del Norte Counties



Area

Sources: Texas: The Texas Kids Count Project, 2000. New Mexico: New Mexico Advocates for Children and Families, 2000.

Table 3
Chihuahua Municipios in the Highest Stratum of Socio-economic Well-being:
Sample of Variables from 2000 Census
(Municipios in Stratum 7: Chihuahua, Delicias, Hidalgo del Parral, Juárez & Nuevo Casas Grandes)

Variable	Municipios in Stratum 7	State of Chihuahua	Mexico
Population:			
Percent urban population	96.6%	74.8%	60.7%
Percent of resident population born in another state	24.7%	19.2%	18.5%
Education:			
Percent of population age 6-14 that is literate	92.6%	90.6%	87.3%
Percent of population age 15-19 that attends school	48.0%	42.9%	46.5%
Average years of schooling	8.4	7.7	7.5
Employment:			
Percent of population in the labor force	56.1%	52.5%	49.3%
Percent of working population that works less than 33 hours per week	14.1%	16.0%	18.3%
Housing:			
Percent of dwellings with dirt floors	2.3%	6.1%	13.2%
Percent of dwellings with drainage	94.3%	85.2%	78.1%
Percent of dwellings with piped water	96.7%	93.6%	88.8%
Percent of dwellings with one room	7.8%	8.1%	9.5%
Percent of dwellings without private bath	5.3%	8.6%	13.5%
Percent of dwellings without refrigerator	6.8%	13.8%	30.6%
Health:			
Percent of population not entitled to health care	31.1%	40.4%	58.0%

Source: INEGI, 2000. Niveles de Bienestar. http://inegi.gob.mx/difusion/espanol/niveles.

# 3. Income Inequality

Household income provides a measure of the capacity to meet the costs of raising children. Comparing household incomes of the Paso Del Norte region to national and state household incomes is a complex issue. When comparing the four U.S. Paso Del Norte counties to national and state median incomes, it should not be surprising that the annual median household incomes for this region are significantly lower than national and state median incomes. In general, the workforce along the border has a lower level of formal educational attainment than the rest of the state; therefore, many jobs in this region are low-skill, low-wage jobs. The high number of immigrant workers in the region may also have an impact on the low incomes. The Texas Comptroller's Office reports that "immigration ensures a ready supply of less skilled labor in the Border region, which can depress average earnings for all lower-skilled persons in the region-immigrant or native-born" (Sharp, 1998, pp. 24-25). Finally, the unemployment rate along the border is higher than in the rest of the state (Sharp, 1998). Conversely, household incomes in Ciudad Juárez, while very low compared to the United States, are higher than in the State of Chihuahua due in large part to the industrial development of the municipality and a lower unemployment rate.

According to the U.S. Census Bureau, in 1999 the annual median household income in the United States was \$41,994. Figure 9 shows that median income levels were lower in Texas (\$39,927) and New Mexico (\$34,133), and lower still in the four Paso Del Norte counties: El Paso County, \$31,051; Hudspeth County, \$21,045; Doña Ana County, \$29,808; and, Otero County, \$30,861.

Ethnicity and race are strongly associated with socioeconomic level in the United States. In 1999, the median annual income reported for Anglos was \$49,023 compared to \$29,608 for Hispanics and \$29,404 for African-Americans. In Texas, 64 percent of all African-American and 63.5 percent of all Hispanic households reported annual incomes of less than \$25,000 compared to 39.5 percent for Anglo households in 1990. Anglos accounted for 91.7 percent of all Texas households reporting annual incomes over \$100,000 compared to 2 percent for African-American households and 4.4 percent for Hispanic households (Murdock, et al., 1997).

Perhaps the most dramatic example of the income disparity along the Texas-Mexico border is in the income of *colonia* residents. *Colonias*, subdivisions built in unincorporated areas, are established primarily because of a lack of low-income housing in this region. Residents of the *colonias* "lack such basic services as potable water, sewage connections, and electricity" (Sharp, 1998, p. 92). In Texas *colonias*, the median annual household

income ranges from \$7,000 to \$11,000. Of the approximately 1,500 *colonias* on the U.S. side of the border, 97 percent are in Texas (Sharp, 1998).

Because of the poor living conditions and crowding in the *colonias*, it is not surprising that there is a high incidence of health problems. Children living in the *colonias* are especially vulnerable to Third World diseases such as dysentery. These health problems prevent many *colonia* children from attending school regularly (Border Low Income Housing Coalition, 1998b).

#### Ciudad Juárez, Chihuahua

Because of the manufacturing base of the economy, which includes the maquiladora industry, there are higher rates of labor force participation and lower rates of open unemployment in Ciudad Juárez than for the State of Chihuahua. In 1995, 63 percent of the Ciudad Juárez population over age 12 was in the labor force, 3.1 percentage points higher than for the State of Chihuahua and an increase from 1990 (51.4%).¹ Of the 37 percent not in the labor force ("inactivas"), 52.62 percent were engaged in housework and 31.3 percent were students. The remainder were retired or disabled (INEGI, 1998).

A much larger portion of the working population of Ciudad Juárez is employed in industry and as merchants or businessmen than in the State of Chihuahua. This difference is due mainly to the fact that Chihuahua is a large agricultural state and the amount of agricultural work taking place in the Municipio of Ciudad Juárez is now very small by comparison (See Figure 10).

In Mexico income is measured in multiples of the official minimum wage for the area (See Table 4). Figure 11 indicates that more workers in Ciudad Juárez receive income in the range of one to five multiples of the minimum wage than in the State of Chihuahua, but this is still a very low wage when considered in dollars. A smaller percentage of the Ciudad Juárez population receives no income or less than one minimum wage than in the State. The minimum daily wage at the end of 1995 was 20.15 pesos for an eighthour workday or \$0.40 per hour compared to a minimum wage of \$4.50 per hour in the United States (UACJ, 1999). In January 2000, the minimum daily wage for Ciudad Juárez was 37.90 pesos, approximately \$4.00.

A 1997 survey of household income for the State of Chihuahua found a reduction between 1995 and 1997 from 5.7 to 3.7 percent in the percent of households that receive no income, and an increase from 14.5 to 17.1 percent in the proportion of households that receive income in the range of one to two minimum salaries. The proportion of households in the two highest income groups (two to five and over five minimum monthly salaries) remained approximately the same at 37 percent and 34 percent.

Nevertheless, on measures of income inequality, the study found that the first five deciles of households (44.7% of the population) receive only

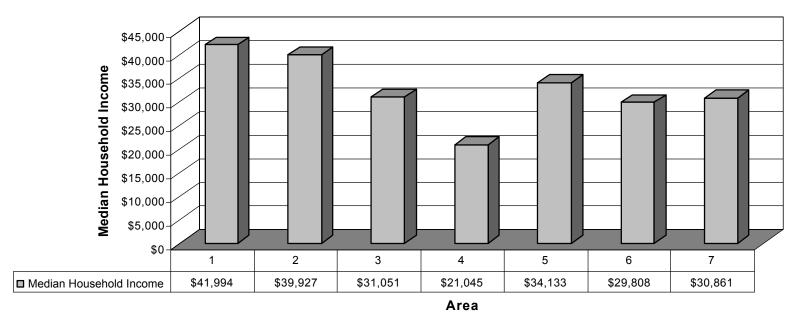
15.1 percent of total income from work and the top 10 percent of households (11% of the population) receive 39.2 percent of income from work. Income distribution is still somewhat more equitable in Chihuahua than in the Republic of Mexico as a whole where the first five deciles receive 13 percent of income from work and the top decile, 42.6 percent (INEGI, 1999).

As far as housing conditions for families and children in Ciudad Juárez are concerned, the vast majority of private dwellings have water, electricity and drainage connections. According to the 1995 Census, 80 percent have piped water in the home, another 14.49 percent have piped water on the property(See Figure 12); 98.7 percent of dwellings have electric power (See Figure 13), and 86 percent are connected to a public drainage system (See Figure 14). This represents a higher level of public services than for the State of Chihuahua as a whole, but lower than for Ciudad Chihuahua, the capital of the state, and a city that is not growing as fast as Ciudad Juárez. There remained in 1995, however, 4.31 percent of dwellings without piped water and 9 percent with no drainage (See Figure 15).

<sup>&</sup>lt;sup>1</sup> Economically active population (población económicamente activa). Eighty percent of men and 46.7 percent of women were in the labor force in 1995 in Ciudad Juárez.

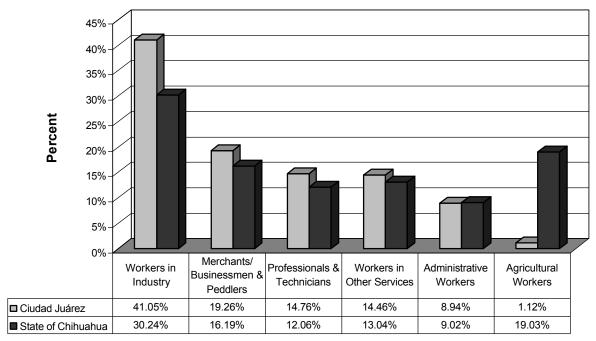
Figure 9

Median Household Income: 1999
United States, Texas, New Mexico, and Paso Del Norte Counties



Source: U.S. Census Bureau, Census 2000 Summary File3-Sample Data, Table P53. Median Household Income in 1999 (dollars).

Figure 10
Principal Occupations of the Working Population
Percent Employed by Category: 1995
Ciudad Juárez and State of Chihuahua



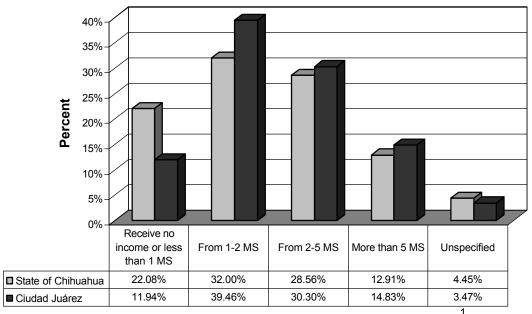
# **Category of Worker**

Source: INEGI, 1998. Cuidad de Juárez, Chihuahua, Perfil Sociodemográfico, Conteo de Población y Vivienda 1995, p. 27.

Figure 11

Percent Distribution of the Working Population by Income Group: 1995

State of Chihuahua and Ciudad Juárez



Income Groups (Multiples of the Minimum Salary): 1995

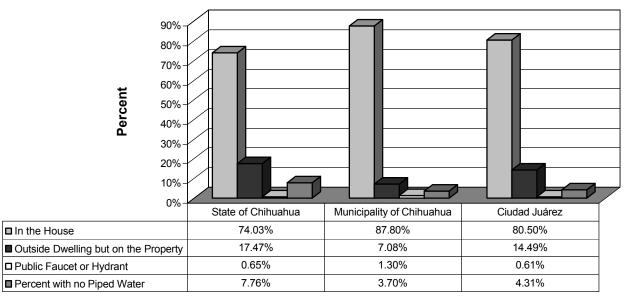
Notes: 1) Ranges in minimum monthly salary from INEGI, *Anaurio Estadístico Chihuahua, Edición 1997*; exchange rate from INEGI, *Estadísticas del Comercio Exterior de Mexico*, Indicadores Macroeconomicos, p. IX.
Source: INEGI, 1998. *Cuidad Juárez, Chihuahua, Perfil Sociodemográfico, Conteo de Población y Vivienda 1995*, p. 31.

Table 4 Income Groups (Multiples of the Minimum Salary): 1995

Income Groups (multiples of the minimum salary) 1)	Approximate Range in Dollars per Day 2)
Receive no income or less than 1 MS	\$ 0-2.85
From 1-2 MS	\$2.85-5.70
From 2-5 MS	\$5.70-14.25
More than 5 MS	more than \$14.25
Unspecified	

Notes:1) Ranges in minimum monthly salary. 2) Minimum daily salary from INEGI, *Anaurio Estadístico Chihuahua, Edición 1997;* exchange rate from INEGI, *Estadísticas del Comercio Exterior de Mexico*, Indicadores Macroeconomicos, p. IX. Source: INEGI, 1998. *Cuidad Juárez, Chihuahua, Perfil Sociodemográfico, Conteo de Población y Vivienda 1995*, p. 31.

Figure 12
Availability of Piped Water in Private Dwellings: 1995
State of Chihuahua, Municipality of Chihuahua, and Ciudad Juárez



# Jurisdiction

Figure 13

Availability of Electricity in Private Dwellings: 1995

State of Chihuahua, Municipality of Chihuahua, Ciudad Juárez

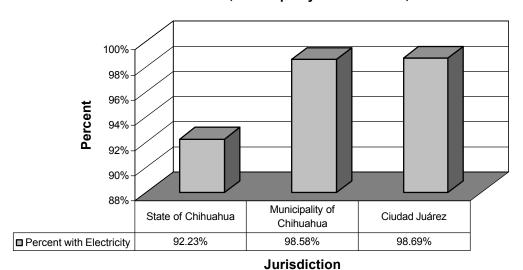
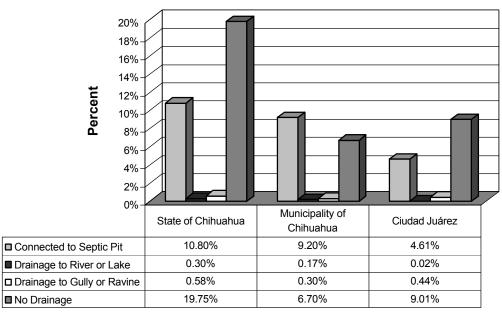


Figure 14

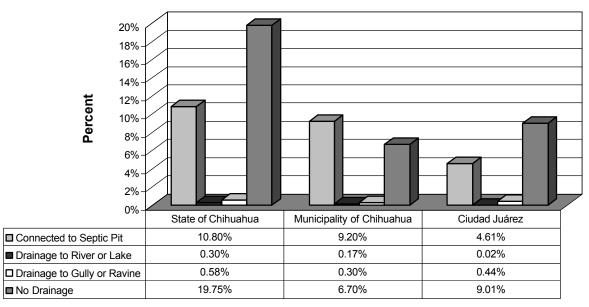
Availability of Public Drainage Systems in Private Dwellings: 1995

State of Chihuahua, Municipality of Chihuahua, Ciudad Juárez



#### Jurisdiction

Figure 15
Availability of Drainage in Inhabited Dwellings: 1995
State of Chihuahua, Municipality of Chihuahua, Ciudad Juárez



# Jurisdiction

### 4. Head of Household

The U.S. Census Bureau defines family households as households maintained by "a group of two or more people related by birth, marriage, or adoption who reside together" and includes "any unrelated people (unrelated subfamily members and/or secondary individuals) who may be residing there" (Dalaker and Proctor, 2000, p. A-1). The householder is the person "in whose name the home is owned or rented" (Dalaker and Proctor, 2000, p. A-1).

A recent trend that impacts the well-being of children in the United States is the growing number of single parent families and the decrease in the number of married couple families. The number of single-parent families increased 13 percent from 1990 to 1997. Figure 16 provides projections for the number of families with children under the age of 18 in the United States in the years 2000, 2005, and 2010. By 2010, the total number of families with children is expected to decline by 2.8 percent (See Table 5). The number of married couples with children under 18 is also expected to decrease by 6.3 percent. Conversely, the number of families headed by a single parent is projected to increase by 6.7 percent for female-headed households and 11.5 percent for male-headed households. The number of female-headed families with children in Texas is projected to increase by more than 400,000 from 1990 to 2030 (Murdock, et al., 1997).

Studies indicate that U.S. children living with a single parent, especially a single mother, fare worse than children raised by two parents. According to the U.S. Census, six of ten children living with single mothers were living at or below the poverty level (O'Connell, 1997). Children born to single mothers are less likely to receive the emotional and financial resources necessary to become well-adjusted adults. These children are twice as likely to drop out of high school, twice as likely to have a child before the age of twenty, and one and one-half times as likely to be "idle"--out of school and out of work-in their late teens and early twenties (The Annie E. Casey Foundation, 2000).

In 1996, New Mexico ranked fifth in the nation for births to unmarried women (41.7% compared to 32.4% in the United States). By 1998, the percentage of births to single mothers in New Mexico had increased to 44 percent (NMACF, 2000). The percentage of births to single women in Doña Ana and Otero Counties was 40.4 percent and 29.1 percent, respectively (New Mexico Department of Health, 1999). In 1990, 19.7 percent of El Paso County children, 15.9 percent of Hudspeth County children, and 18.3 percent of Texas children were living in single parent families (The Texas Kids Count Project, 2000).

Figure 17 compares the percentages of married couple family households with children, female-headed family households with children (and no spouse present), and male-headed family households with children (and no spouse present) in the Paso Del Norte region based on 2000 census data. Texas has a higher percentage of family households headed by a married couple (39.2%) and New Mexico a slightly lower percentage (34.8%) than the United States as a whole (35.5%). Important for the well-being of children in the region, all four Paso Del Norte counties have higher percentages of family households headed by a married couple than the respective states or nation: El Paso (41.8%), Hudspeth (47.8%), Doña Ana (36.9%), and Otero (37.3%). At the same time, both Texas (10.4%) and New Mexico (11.6%) and all four counties in the region have higher percentages of female-headed family households than the United States average (10.2%). El Paso County (12.9%) and Doña Ana County (13.3%) have the highest percentages of female-headed family households in the region. Family households headed by a male, with no spouse present, are much less common. They make up only 3.0 percent of United States households with children under age 18; and the rates are the same or lower in Texas (3.0%), El Paso (2.5%), and Hudspeth (2.5%) counties. Conversely, the percentages family households headed by a male are higher than the national average in New Mexico (4.6%), Doña Ana County (3.9%), and Otero County (3.5%).

# Ciudad Juárez, Chihuahua

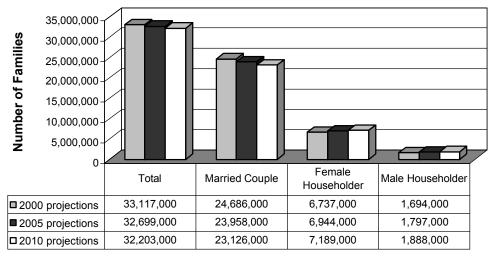
There are a larger percentage of female-headed households in Ciudad Juárez than in bordering U.S. Paso Del Norte counties. In both the Republic of Mexico and the State of Chihuahua there has been a slight increase in female-headed households from 17.8 percent of all households in 1995 to 18.8 percent in 1997 (INEGI, 1999).

The Mexican Census Institute (INEGI) also compiles data on household size and births by civil state of the mother. The overwhelming majority of children in the State of Chihuahua are born to mothers who are married or in common-law unions. Over half of the children born in the State of Chihuahua are born to mothers who are married at the time of the birth; another 29.1 percent of births are to women in common-law unions. An average of only 11.3 percent of births in 1997 and 1998 were to single mothers (See Figure 18). All of the situations into which children are born, including the common-law unions, may provide a stable or unstable economic setting for the raising of children, depending on family income and the availability of extended-family support. In general, children in single-parent families face an increased risk of poverty; however, there is no data for Ciudad Juárez on the incomes of single-parent families.

In the State of Chihuahua, most households have from two to four

members, 57.3 percent in 1997; and in the decade of the 1990s, the percent of households of this size has been increasing. The percent of family households with five or more members has been declining (See Figure 19). At the same time, there has been an increase in the proportion of family households that are "extended families"; that is they include a nuclear family and other relatives. Between 1990 and 1997, the percent of family households that were "nuclear" (household head, spouse and children) declined from 79.7 percent to 75.3 percent in the State of Chihuahua; the proportion of extended families increased from 17.7 percent to 23.4 percent (INEGI, 1999). This may reflect economic pressures and the sharing of costs among related family members, and it may relate to a shortage of housing and the need to share dwelling space.

Figure 16
Projections of the Number of Families with Children Under 18 by Type: 2000, 2005, 2010
United States



Type of Family Household

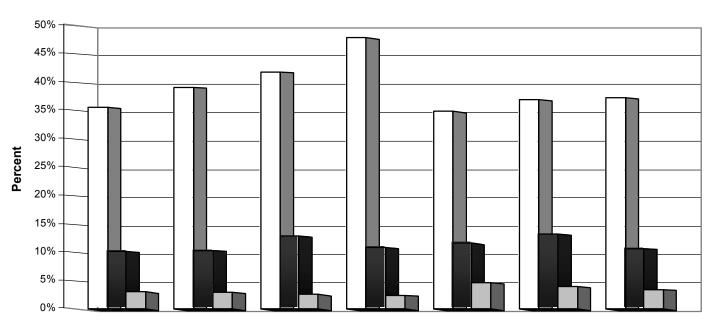
Source: U.S. Census Bureau, 1998. Statistical Abstract of the United States, http://www.census.gov/prod/www/statistical-abstract-us.html.

Table 5
Percent Change in Family Type from 2000 to 2010 in the United States

	Total	Married Couple	Female Householder	Male Householder
Percent Change from 2000-2010	-2.8%	-6.3%	6.7%	11.5%

Source: U.S. Census Bureau, 1998. Statistical Abstract of the United States, http://www.census.gov/prod/www/statistical-abstract-us.html.

Figure 17
Percent Family Households by Type: Married-Couple, Female-Headed, Male-Headed, 2000
United States, Texas, New Mexico, and Paso Del Norte Counties

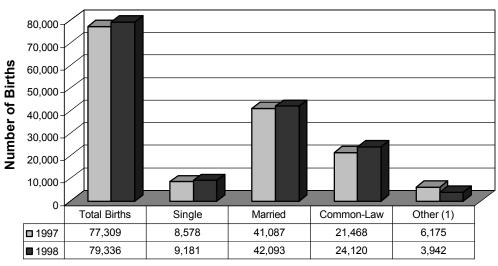


	United States	Texas	El Paso	Hudspeth	New Mexico	Doña Ana	Otero
■ Married Couple	35.5%	39.2%	41.8%	47.8%	34.8%	36.9%	37.3%
■ Female-Headed	10.2%	10.4%	12.9%	10.9%	11.6%	13.3%	10.8%
■ Male-Headed	3.0%	3.0%	2.5%	2.5%	4.6%	3.9%	3.5%

# **AREA**

Note: Female- or male-headed households without a spouse present. Source: U.S. Census Bureau, Census 2000 Summary File 3-Sample Data. Table P15 Family type by presence of own children under 18 years by age of own children.

Figure 18
Births by Civil State of the Mother: 1997 and 1998
State of Chihuahua



# **Civil State of Mother**

Note: (1) Includes: separated, divorced, widowed, and unspecified.

Source: INEGI y Gobierno del Estado de Chihuahua, Anuario Estadístico del Estado de Chihuahua: Edición

1999, Cuadro 3.1.11.

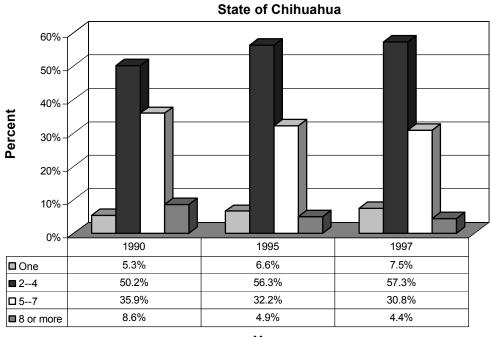
Table 6
Percent of Births by Civil State of Mother: 1997 and 1998

	Total Births	Single	Married	Common-Law	Other (1)
Percent of Births (1997 & 1998)	100.0%	11.3%	53.1%	29.1%	6.5%

Note: (1) Includes: separated, divorced, widowed, and unspecified.

Source: INEGI y Gobierno del Estado de Chihuahua, Anuario Estadístico del Estado de Chihuahua: Edición 1999, Cuadro 3.1.11.

Figure 19
Percent Distribution of Households by Number of Members (Integrantes): 1990, 1995, 1997



Year

Source: INEGI, 1999. Encuesta Nacional de la Dinámica Demográfica 1997, Panorama Sociodemográfico Chihuahua, p. 68

#### 5. Race, Ethnicity, and Immigration

Race, ethnicity, and immigration issues are framed and understood in different contexts on the United States and Mexico sides of the border. The ethnic diversity of the U.S. Paso Del Norte region is unique and does not reflect that of the nation as a whole because of its majority Hispanic population. With the exception of Otero County, the proportion of the population that is Hispanic surpasses national and state percentages. Figure 20 compares the racial and ethnic composition of the United States, Texas, New Mexico, and the four Paso Del Norte counties in 2000. Anglos (non-Hispanic whites) are the clear majority in the United States, making up 69.1 percent of the population, while Hispanics are 12.5 percent and African-Americans are 12.0 percent of the total population. The Hispanic population is larger in Texas and New Mexico; however, the Anglo population is still the majority in each state. In Texas, 32.0 percent of the population is Hispanic; 52.4 percent of the population is Anglo; and, 11.3 percent of the population is African-American. In New Mexico, 42.1 percent of the population is Hispanic; 44.7 percent is Anglo; and 1.6 percent is African-American. The Other race/ethnic category in New Mexico is 11.6 percent of the population and includes the members of the many Native American tribes in the state. El Paso County has the largest Hispanic population in the region; Hispanics make up 78.3 percent of the population versus 17.0 percent for Anglos and 2.7 percent for African-Americans. Hispanics make up 75.4 percent of the Hudspeth County population and Anglos 23.1 percent. The Doña Ana County population is 63.4 percent Hispanic, 32.5 percent Anglo, and 1.1 percent African-American. The racial and ethnic composition of Otero County, although a New Mexico county, is closer to that of Texas as a whole than the other Paso Del Norte counties: 32.1 percent Hispanic, 55.2 percent Anglo and 3.3 percent African-American.

Much of the population growth in Texas and New Mexico can be attributed to the rapid growth of minority populations. Between 1980 and 1990, the Hispanic population increased 45.4 percent in Texas (Murdock, et al., 1997). This growth of the minority population is expected to continue. From 1990 to 2030, the Anglo population is projected to grow by only 20.4 percent, while the black population would increase by 62.0 percent, the Hispanic population by 257.6 percent, and the other population by 648.4 percent (Murdock, et al., 1997, p. 19).

The rapid growth of minority populations, specifically the Hispanic population, is due to immigration and a higher birth rate among these populations. Figure 21 provides the percent of immigrants<sup>1</sup> from Mexico admitted to the United States, Texas, New Mexico, and the El Paso Metropolitan Statistical

Area (MSA) in 2000 and 2001. While the percent of legal immigrants to the United States from Mexico declined slightly from 2000 to 2001, from 20.5 percent to 19.4 percent, in the Paso Del Norte region, the majority of legal immigrants are from Mexico. The percent of legal immigrants from Mexico increased from 2000 to 2001 for Texas (from 48.9% to 50.4%), New Mexico (from 68.4% to 68.7%), and the El Paso MSA (from 92.0% to 93.7%). The total numbers of immigrants and immigrants from Mexico also increased in the United States and the region, as shown in Table 7. While data is not available for Hudspeth, Doña Ana, and Otero counties, in 2000 and 2001, respectively, 3,608 and 5,938 immigrants from Mexico settled in El Paso.

The percent of live births by race and ethnicity for 1997 and 2000 is shown in Figure 22. The number of births to Hispanics is now higher than for any other minority group in the United States. In the United States, the percent of all live births to mothers of Hispanic origin increased from 18.3 percent in 1997 to 20.1 percent in 2000. The percent of all live births to Anglo and Black/African-American mothers was 60.1 percent and 15.5 percent, respectively, in 1997, and decreased very slightly to 58.2 percent and 15.3 percent in 2000. The percent of births was higher among Hispanics than for any other group, including Anglos, in Texas and New Mexico in both years. In Texas, 43.9 percent (1997) and 45.9 percent (2000) of all births were to mothers of Hispanic origin. In New Mexico, 49.6 percent (1997) and 51.2 percent (2000) of all births were to Hispanic mothers.

#### Ciudad Juárez, Chihuahua

As far as the racial and ethnic diversity of the population of Ciudad Juárez is concerned, the vast majority of the population of the State of Chihuahua is mestizo (a mixture of Indian and Spanish over many generations); the indigenous population is very small. Only 2.8 percent of the population of the State over five years of age speak an indigenous language, 67,930 people, according to the 1995 census; and 88.13 percent of this group speak the Tarahumara language. Just 15.04 percent of those who speak an indigenous language speak no Spanish at all (1995). Indigenous-language speakers in Chihuahua are concentrated in a few municipios of historic settlement in the Sierra. Only 3.32 percent of the State's indigenous-language speakers live in Ciudad Juárez (INEGI, 1997).

Rapid population growth due to immigration from other parts of Mexico is a greater concern to the Municipio of Ciudad Juárez in the provision of adequate health, education, and infrastructure services to families and children. A 1992 INEGI survey found that 35.9 percent of all Mexicans were immigrants, "migrantes permanents." Sixty percent had changed domicile from one federal state to another; 35 percent had moved between municipios

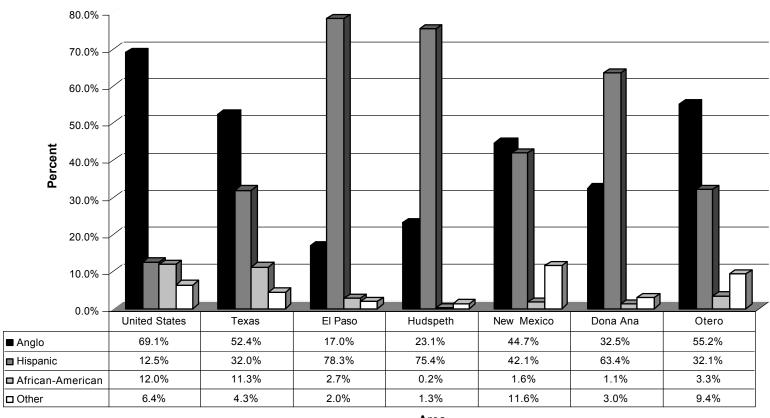
of the same state. It also noted that there has been an increase in immigration to intermediate-sized cities in Mexico and especially cities on the northern frontier such as Ciudad Juárez. Border cities are particularly attractive to immigrants because of the industrial development that began in the 1960s and continues. In general, Mexico's northern states have higher levels of socio-economic development than the states in other parts of the country; and border cities have increased in population at rates higher than the state or the nation. Ciudad Juárez grew at an average annual rate of 3.3 percent between 1995 and 1998. This represents a decrease from an average annual growth rate of 4.3 percent between 1990 and 1995. Of the six largest border municipios, only Tijuana grew at a faster pace in that period, an average annual rate of 5.1 percent (UACJ, 1999). The 2000 Census indicates that 40 percent of the population of the State of Chihuahua now lives in Ciudad Juárez. The city is also experiencing increased crowding; the population density increased from 166 persons per square kilometer in 1990 to 215 persons in 1998 (UACJ, 1999).

Based on place of birth, more than one-third of Ciudad Juárez's residents in 1995 were born in another jurisdiction or country, 17.7 percentage points higher than for the State of Chihuahua. (In 1990, 30.7 percent were born in another place.) Most of the residents who are immigrants are over age 50; a higher proportion of the young were born in the municipality, 78.13 percent of children under age 15² (See Figure 23). It is also worth noting that in 1995 a large portion of the immigrant population in Ciudad Juárez was resident in the municipio for five years or less (37%); 7.5 percent was resident for less than one year (INEGI, 1998). This high rate of immigration places a heavy burden on all levels of the Mexican government to maintain infrastructure and provide enough public health, water, sewer and housing services, and to build enough schools and hire enough teachers.

<sup>&</sup>lt;sup>1</sup> Immigrants are defined as persons who are lawfully admitted for permanent residence in the United States (Immigration and Naturalization Service, 2001).

<sup>&</sup>lt;sup>2</sup> The INEGI survey, Encuesta Nacional de la Dinámica Demográfica 1997, indicates that 55% of residents born outside the State of Chihuahua came from the states of Durango (27.0%), Coahuila (18.1%), and Zacatecas (9.9%).

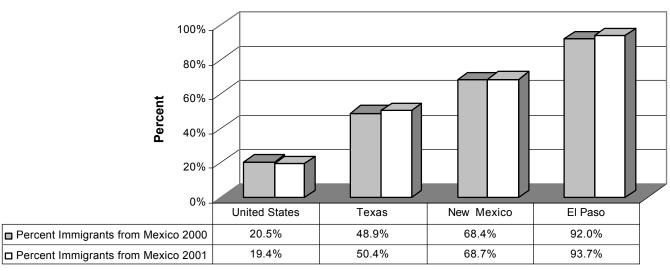
Figure 20
Percent Distribution by Race and Ethnicity: 2000
United States, Texas, New Mexico, and Paso Del Norte Counties



#### Area

Source: U.S. Census Bureau, Census 2000 Summary File 3, Table P7 Hispanic or Latino by Race.

Figure 21
Percent of Legal Immigrants from Mexico: 2000 & 2001
United States, Texas, and New Mexico



Area

Note: El Paso Metropolitan Statistical Area (MSA); no data available for Hudspeth, Dona Ana & Otero counties. Source: U.S. Immigration and Naturalization Service, Statistical Yearbook, 2000 & 2001.

Table 7

Total Number and Number of Immigrants from Mexico: 2000 & 2001

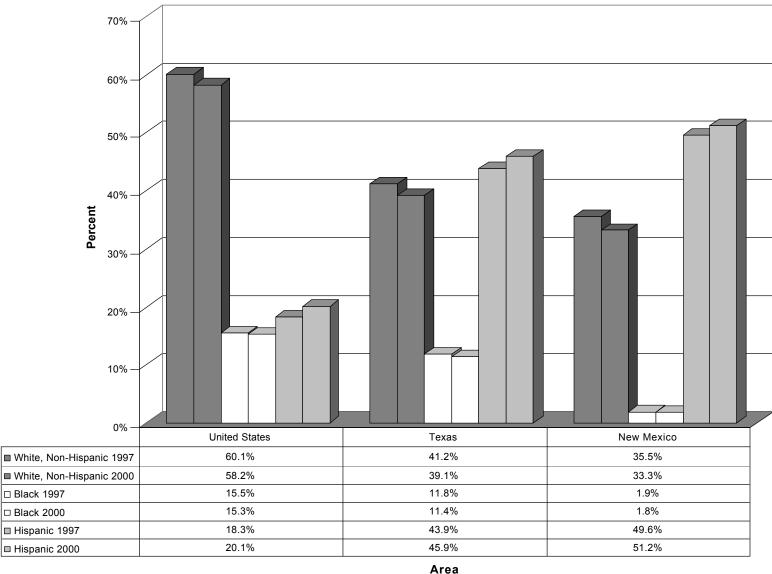
	United States	Texas	New Mexico	El Paso*
Total Number of Immigrants 2000	849,807	63,840	3,973	3,922
Total Number of Immigrants 2001	1,064,318	86,315	5,207	6,340
Immigrants from Mexico 2000	173,919	31,211	2,717	3,608
Immigrants from Mexico 2001	206,426	43,524	3,575	5,938

Note: \* El Paso Metropolitan Statistical Area (MSA); no data available for Hudspeth, Dona Ana & Otero counties. Source: U.S. Immigration and Naturalization Service, *Statistical Yearbook*, 2000 & 2001.

Percent Immigrants from Mexico 2000	20.5%	48.9%	68.4%	92.0%
Percent Immigrants from Mexico 2001	19.4%	50.4%	68.7%	93.7%

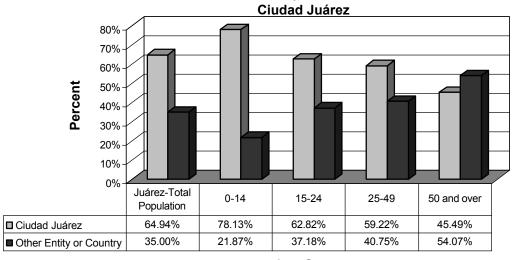
Note: \* El Paso Metropolitan Statistical Area (MSA); no data available for Hudspeth, Dona Ana & Otero counties. Source: U.S. Immigration and Naturalization Service, *Statistical Yearbook*, 2000 & 2001.

Figure 22 Percent Live Births by Race/Ethnicity and State of Birth: 1997 & 2000 United States, Texas, and New Mexico



Note: Hispanic origin of the mother is reported independently of race; a person of Hispanic origin may be of any race. Source: U.S. Census Bureau, Statistical Abstract of the United States, 1999 and 2002.

Figure 23
Percent Distribution of the Resident Population by Place of Birth and Age
Group: 1995



Age Group

Source: INEGI, 1998. Cuidad de Juárez, Chihuahua, Perfil Sociodemográfico, Conteo de Población y Vivienda. Cuadro 2.2.

#### 6. Health Insurance

Adequate health insurance coverage for children is an important issue in the United States, Mexico, and especially the Paso Del Norte region. Because lack of health insurance decreases access to medical care, uninsured children are at a greater risk of experiencing serious health problems. In fact, children without health insurance are six times less likely to seek medical care when needed than children with private insurance, and parents are five times more likely to delay seeking care for their uninsured children. These children are less likely to receive care for recurrent health conditions such as earaches and asthma that require treatment. Additionally, children who sustain injuries are less likely to obtain much needed medical attention if they are uninsured (CPPP, n.d.a.).

Texas and New Mexico lead the United States in the number of children who lack health insurance. In 1999, 24.1 percent of Texas children and 27.7 percent of New Mexico children were not insured compared to 13.9 percent nationally. As Figure 24 demonstrates, this situation is even bleaker in U.S. Paso Del Norte counties. The estimated percentage of uninsured children in El Paso and Hudspeth Counties in 1999 was 30.6 percent and 29.1 percent, respectively. (Data on uninsured children in Doña Ana and Otero Counties is currently unavailable. The Covering Kids Program in Las Cruces, New Mexico is working on data.) While poverty does play a large role in the high number of uninsured children in Texas, New Mexico, and the border region, other reasons do exist. Fewer people in Texas and New Mexico are covered or participate in employer-sponsored health insurance programs. In the years 1994-95, 58 percent of Texans and 50 percent of New Mexicans lacked employer-sponsored insurance compared to 33.9 percent nationwide. Restrictive Medicaid requirements have also contributed to the high number of uninsured in Texas (Wiener, et al., 1998; Wallin, 1998). Despite the fact that children below the poverty line (annual income of \$17,050 for a family of 4 in the year 2000) are eligible for Texas Medicaid, approximately 590,000 eligible children remain uninsured (CPPP, n.d.d.). Because of changes affecting government programs since welfare reform became law, many families do not realize they are still eligible for Medicaid. Despite this fact, counties along the border rely more on Medicaid than private insurance (Sharp, 1998). In 1998, 29.6 percent of El Paso County children under 18 and 28.4 percent of Hudspeth County children were eligible for Medicaid compared to 18.5 percent in Texas (The Texas Kids Count Project, 2000). Finally, both states rely heavily on counties to provide health care to the indigent: "Texas by means of public hospitals funded by local property taxes and New Mexico by means of county indigent health care programs funded by local sales taxes" (Wiener, et al., 1998; Wallin, 1998).

Many children without health insurance are from low-income families not receiving governmental aid. In the United States, four-fifths of all uninsured children are living above the poverty line. In addition, the increase in the number of children without insurance seems to be linked to the loss of government coverage.

From 1995 to 1996, the number of children covered under Medicaid fell from 16.5 million to 15.5 million, the largest drop in any coverage category both in percentage and absolute numbers (Bennefield, 1998).

Texas children without health insurance are in a similar situation. More than 350,000 Texans lacking insurance have recently left the welfare system and are not receiving employer-provided health insurance (CPPP, n.d.a.).

Ethnicity and citizenship status are also strong indicators for children without insurance in the United States. Hispanic children are less likely to be insured than Anglo and African-American children, especially in Texas. Of the uninsured children in Texas, 56 percent are Hispanic compared to 14 percent African-American and 28 percent Anglo (CPPP, n.d.a). The percentage of naturalized citizens and non-citizens without insurance in Texas in 1997 was 33 percent and 53 percent, respectively (Texas Department of Health and Human Services Commission, 1999). A large proportion of U.S. born children of immigrants are uninsured as well, primarily because parents believe their immigration status will be jeopardized if they try to enroll their children in Medicaid. In 1999, 40 percent of Texas children of immigrants were uninsured (Dunkelberg and Hagert, 2001).

Efforts are in place to increase the number of insured children in Texas and New Mexico. Federal and state resources are now provided for outreach efforts to increase the enrollment of uninsured children in Medicaid and other government insurance plans (Kenney, et al., 1999). Also, the Texas Legislature is currently considering a number of bills proposing to simplify the application process for Texas Medicaid. Currently, parents must appear for a face-to face interview at the Department of Human Services and document family income and assets to enroll their children in Medicaid. Changes in family income must be reported, and increases in income could result in loss of coverage. Children covered by Medicaid must be recertified every six months (Dunkelberg, 2001).

The Children's Health Insurance Program (CHIP) has been available for children who do not qualify for Medicaid and whose families cannot afford private insurance since 1997. Children in families with incomes at or below 200 percent the federal poverty level (\$33,400 for a family of four in 2000) are eligible for Texas CHIP. The CHIP eligibility standard for New Mexico

families is 235 percent the federal poverty level (Heath Care Financing Administration (HCFA), n.d.). Families enrolled in CHIP pay as little as \$15 a year to as much as \$15 to \$18 month, depending on family income, for health coverage for all children in the family. Co-payments for office visits range from \$2 to \$5 per visit, and co-payments for prescriptions range from \$1 to \$10 (CPPP, n.d.b.). The number of children enrolled in Texas CHIP increased from 50,878 in 1999 to 130,519 in 2000. In New Mexico, the number of children enrolled in CHIP was 4,500 in 1999 and 6,106 in 2000 (HCFA, n.d.). According to the El Paso Times (February 15, 2000), 62 percent of El Paso County children eligible for CHIP were enrolled as of February 2000. While this increase in El Paso County CHIP enrollment is encouraging, this may not guarantee better access to health care for these children. The El Paso Times (March 4, 2000) also reported that many pediatricians are turning away new CHIP and Medicaid patients due to the low reimbursements received for treating these patients. Physicians in El Paso are reimbursed only half of what those in Houston and other Texas cities are reimbursed for treating CHIP and Medicaid patients (Manley, 2001).

Access to medical care along the border is further hampered because it is considered a "medically underserved area (MUA)." Counties are designated as MUAs if there is:

a shortage of personal health services for local residents. The federal government determines a county's qualification for such a designation by comparing its percentage of aged residents, poverty rate, infant mortality rate, and ratio of primary care physician per 1,000 residents to national averages (Sharp, 1998, p. 110).

In 1998, 31 Texas border counties were designated as MUAs. El Paso County was designated as a partial MUA. As of July 1998, portions of Doña Ana and Otero counties were experiencing shortages of physicians (New Mexico Vital Records and Health Statistics, 1999a and b).

It should also be noted that many people, both those with and without health insurance, on the U.S. side of the border utilize health services in Mexico. Some companies along the border offer health insurance that covers medical services received in Mexico. Since 1997, Mexican nationals and those of Mexican origin who live in the United States can purchase insurance through the Mexican social security system; however, services must be obtained in Mexico (Sharp, 1998).

# Ciudad Juárez, Chihuahua

Unlike the United States, health care is a constitutional right in Mexico. The Mexican government operates most hospitals and health care facilities, including the health care system for the uninsured. A majority of Mexicans

receive their health care through the social security system to which they belong. The Mexican system of care is highly pluralistic, with services of uneven quantity and quality for different worker and population groups (Romer 1991, p. 346). The two largest programs are the Mexican Social Security Institute (IMSS), founded in 1942, and the Government Workers Social Security Institute (ISSSTE), founded in 1960. The IMSS covers almost all private industry or "formal sector" workers and their families. ISSSTE provides health services to federal government workers and their families. The National Defense Secretariat, the Navy Secretariat, and PEMEX also have their own health programs, as well each of the states, e.g., the program for employees of the State of Chihuahua (Pensiones Civiles del Estado de Chihuahua). IMSS is funded by employee, employer, and government contributions; the remaining programs are funded by employee and government contributions. The largest portion of social security income is spent on health services, but the benefits of all of the programs have been expanded to include old-age pensions and other family services.

It is estimated that just over 50 percent of the national population is covered by one of these social insurance programs; and over 80 percent of this "socially insured" population is entitled to health care through the IMSS system. The remaining 50 percent of the population, called the "open population", receives health care from an array of government agencies. Primary responsibility for services to the open population and the entire health care system is housed in the central government Health Secretariat (SSA) and to varying degrees in "coordinated" federal-state and decentralized health services. In the State of Chihuahua the responsible entity is the Chihuahua State Health Services or SSC (Servicios de Salud de Chihuahua). Some Mexicans, approximately 30 percent, "opt for private health care, often in addition to their guaranteed public benefits" (Sharp, 1998).

Adequate health insurance for children is an important problem in Mexico and Ciudad Juárez. In the Republic of Mexico only 36.61 percent of the child population is entitled to health services, less than for the population in general (40.83%). In the State of Chihuahua a larger percentage of children are covered under some system, 55.47 percent, but still less than for the population in general (58.43%; see Figure 25). In both cases more adults than children are entitled to health services. In Chihuahua and especially in Ciudad Juárez, there is more employment in the manufacturing and business sectors and more people are therefore covered. Only 16.09 percent of the population in Mexico's most rural areas (population of 2,500 or less) is entitled to health care.

Most persons entitled to health care in Chihuahua are covered by the Mexican Social Security System, 87.55 percent of the eligible Chihuahua population. According to the amplified questionnaire administered with the 2000 Mexican Census, 47.19 percent of children receiving health services in Chihuahua

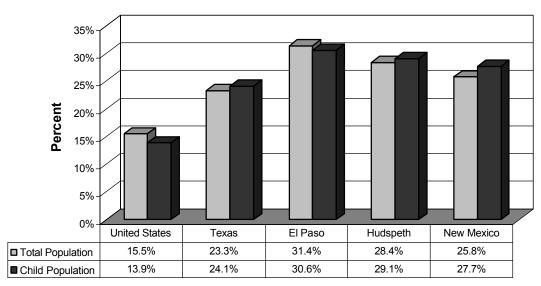
are attended at IMSS facilities (See Table 8). After the IMSS, children receive health care most frequently in private institutions (31.24%), including from private physicians.

An even higher proportion of the Ciudad Juárez population is covered by some health service than in the State of Chihuahua. A 1998 survey of Ciudad Juárez medical institutions by the students in the Autonomous Universidad of Ciudad Juárez (UACJ) Masters of Public Health Program found 76.89 percent of the population entitled to health care. The entitled had the right to services in the following programs: 71.42 percent were covered under the IMSS, 3.13 percent by the ISSSTE, 1.19 percent by State Civil Pensions (Pensiones Civiles del Estado), 1.14 percent by Medical Services for Municipal Employees. The percent of the total population covered has fluctuated in the 1990s from a high of 79.1 percent in 1990 to a low of 61.6 percent in 1994. Families not covered by these plans seek medical care from the Chihuahua State Health Service, the Red Cross, FEMAP (Mexican Federation of Private Health and Community Development Associations), and other private providers. The UACJ report concludes that the needs of the population continue to be much greater than the capacity of the health systems available. The demand and cost of health services are increasing and public health expenditures are declining (UACJ, 1999).

The Diagnosis of Health in Ciudad Juárez prepared by the UACJ Master of Public Health Program faculty and students also documents the increasing use of IMSS health services in the decade of the 1990s. The percent of the entitled population making use of IMSS services has increased from 77.5 to 83.13 percent between 1990 and 1998 (See Figure 26). The report suggests that this increased utilization may be related to an increase in available services; however, it also may be due to the economic crisis of the 1990s that has restrained the use of private medical services by Ciudad Juárez families (UACJ, 1999).

Just as many U.S. citizens seek medical services in Mexico, many Mexican citizens seek services on the U.S. side of the border. A large percentage of primary care physicians in counties bordering Mexico report seeing Mexican citizens as patients. Most of these patients reportedly pay for services in cash. Mexican citizens may also purchase private insurance that will cover health services obtained in the United States (Sharp, 1998).

Figure 24
Percent of Total and Child Population Without Health Insurance: 1999
United States, Texas, New Mexico, and Paso Del Norte Counties

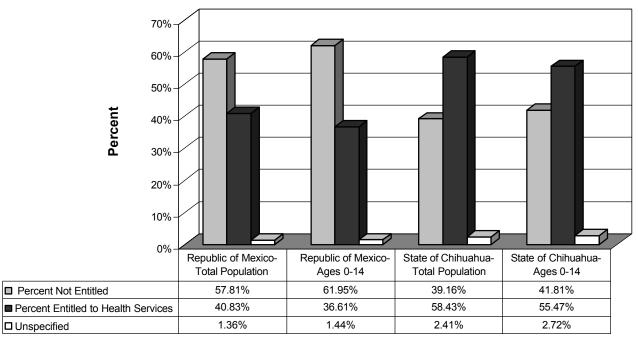


#### Area

Source: National and State: U.S. Census Bureau, 1999. Current Population Survey, 1987-1999, http://www.census.gov/hhes/hlthins/historic/index.html.

County: Texas Health and Human Services Commission, 1999, http://www.hhsc.state.tx.us/cons\_bud/dssi/cntyunin99.htm.

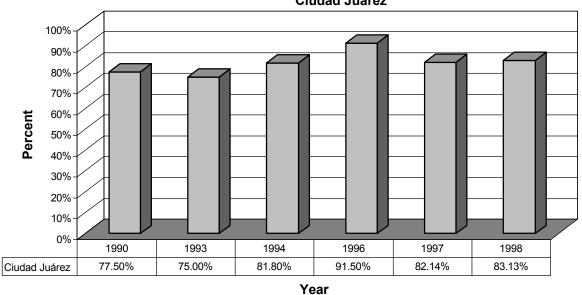
Figure 25
Percent Distribution of Total and Child Population Entitled to Health Services: 2000
Republic of Mexico and State of Chihuahua



# **Population**

Source: INEGI, 2000. Estados Unidos Mexicanos: XII Censo General de Población y Vivienda 2000, Tabulados de las muestra censal, Cuestionario Ampliado, p. 124 &127.

Figure 26 Users of IMSS Health Services as Percent of IMSS Entitled: 1990-1998 Ciudad Juárez



Note: IMSS: Mexican Social Security Institute. Source: UACJ, Instituto de Ciencias Sociales y Administración, Maestría en Salud Pública (1999), *Diagnóstico de Salud del* 

Municipio de Juárez 1998.

Table 8

Percent Distribution of the Population by Health Service Used: 2000

Republic of Mexico and State of Chihuahua

	republic of moxico and otate of offinialities								
	Republic of Mexico	Republic of Mexico	State of Chihuahua	State of Chihuahua					
	Total Population	Ages 0-14	Total Population	Ages 0-14					
Percent of Population Using a Service	96.35%	96.43%	95.42%	95.36%					
IMSS	30.77%	27.92%	49.32%	47.19%					
ISSSTE	5.25%	4.58%	4.09%	3.57%					
Pemex, Defense	1.07%	0.89%	0.26%	0.22%					
SSA	23.23%	28.29%	8.52%	9.96%					
IMMS Solidaridad	3.69%	4.62%	3.19%	4.02%					
Other Public	1.80%	1.96%	3.59%	3.70%					
Other Private	34.20%	31.74%	31.09%	31.34%					

Notes: Institutions: IMSS: Mexican Social Security Institute; ISSSTE: Federal Government Workers' Social Security Institute: Permex, Defense or Navy health services; SSA (Secretaría de Salud) and IMSS Solidaridad are public programs for the population with no entitlement. Other: state government social security institutions and other public and private health institutions.

Source: INEGI (2000), Estados Unidos Mexicanos: XII Censo General de Población y Vivienda 2000, Tabulados de la Muestra Censal, Cuestionario ampliado, p. 135.

# 7. Women, Infants, and Children (WIC)

In the United States, the percent of eligible women, children, and infants participating in The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is an additional indicator of child health and well-being. WIC, administered by the U.S. Department of Agriculture (USDA) since the early 1970s, is an important program in that it insures adequate nutrition for eligible low-income pregnant women, and their infants and children, thereby decreasing their risk of developing nutrition-based health complications. WIC provides supplementary food vouchers, nutritional education, and access to health care to eligible pregnant and postpartum women, infants, and children ages 1 to 5. The food vouchers can be used to purchase approved WIC food, which includes milk, cereal, eggs, peanut butter, cheese, juices, beans, and infant formula. Infants and children enrolled in WIC also receive free immunizations for Diphtheria, Whooping Cough, Tetanus, Hepatitis B, Polio, Meningitis, Measles, Mumps, and Rubella. WIC also refers clients to other health and social programs, such as school lunch programs, Medicaid, and Head Start.

Participants must meet three eligibility guidelines: 1) their family income must be at or below 185 percent of the poverty level (annual gross income of \$31,543 for a family of four in the year 2000); 2) they must have proof of state residency; and, 3) they must demonstrate nutritional risk through a health screening by a health professional. Nutritional risks fall into two categories: 1) medically-based risks, which include anemia, underweight, history of pregnancy complications; and, 2) diet-based risks (U.S. Department of Agriculture [USDA], n.d.a.).

Children account for more than half of national WIC participants. Studies indicate that WIC children are more economically disadvantaged than other non-eligible low-income children. More than 50 percent of WIC children are living in poverty and almost 25 percent are considered "extremely poor" (under 50% of poverty level). WIC children are more likely to be receiving other benefits such as Food Stamps. They are also more likely to be living in subsidized housing and to be living with a single mother (USDA, n.d.b.).

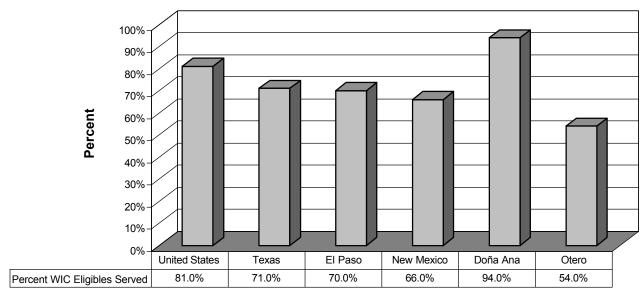
Studies indicate that WIC children have more health and developmental problems. Mothers of WIC children were more likely to have had pregnancy complications during their pregnancies and were more likely to have abused alcohol, illegal drugs, or smoked cigarettes during pregnancy. As a result, their children were at risk for health complications such as low birth weight (USDA, n.d.b.).

Despite these disadvantages, WIC children are as well off as non-

eligible low-income children in the areas of nutrition and access to health care. Because WIC food is high in essential nutrients, the dietary intake of WIC children is similar or better than other low-income children. These children are more likely to have health insurance through Medicaid and to have current immunizations (USDA, n.d.b.).

WIC is not an entitlement program; therefore, it cannot serve all eligible women, infants, and children. In the United States, 7,367,397 women, infants, and children were served by WIC in 1998. The program estimates that approximately 81 percent of those eligible are served by WIC. The Texas Department of Health estimates that approximately 71 percent of WIC eligible Texans are being served by the program. El Paso County served 45,633 participants in 1998 (70% of those eligible), and Hudspeth County served 237 (See Table 9). In the same year, New Mexico served 66.0 percent of those eligible; Dona Ana County served 11,679 (94% of those eligible); and, Otero County served 2,098 (54% of those eligible) (See Figure 27).

Figure 27
Percent WIC Eligibles Served: 1998
United States, Texas, New Mexico, and Paso Del Norte Counties



Area

Source: National and Texas: U.S. Department of Agriculture, n.d. El Paso and Hudspeth: Homedas, 2001, unpublished data; Texas Department of Health, 1998. Selected Facts for El Paso/Hudspeth County. New Mexico: New Mexico Advocates for Children and Families, 2000.

Table 9
Women, Infants, and Children (WIC) Participation: 1998

	United States	Texas	El Paso	Hudspeth	New Mexico	Dona Ana	Otero
Number of WIC Cases	7,367,397	691,292	45,633	237	56,183	11,679	2,098

Source: National and Texas: U.S. Department of Agriculture, n.d. El Paso and Hudspeth: Homedas, 2001, unpublished data; Texas Department of Health, 1998. Selected Facts for El Paso/Hudspeth County. New Mexico: New Mexico Advocates for Children and Families, 2000.

### 8. Adolescent Pregnancy

Adolescent childbearing diminishes the opportunities for both the child and the mother. Many teenage mothers, especially those under 18, are more likely to be high school dropouts. In addition, most teenage mothers are unmarried. In 1998, 11 percent of all births in Texas and 13.2 percent of all births in El Paso County were to single teenagers between the ages of 13 and 19. Between 1994 and 1998 the single teen birth rate increased for both Anglo and Hispanic young women in Texas (The Texas Kids Count Project, 2000).

In many cases, adolescent mothers do not have a stable job or career and are unlikely to receive child support payments from the fathers, increasing the likelihood of the mother and child living below the poverty level. In fact, in 1995 only 3 percent of mothers between the ages of 15 and 19 in the United States received child support payments (The Annie E. Casey Foundation, 2000).

Teenage childbearing impacts the health of the child as well. Pregnant teenagers are less likely to receive prenatal care than older women. Teenage mothers are also more likely to smoke and are less likely to gain an adequate amount of weight during pregnancy. These factors lead to poor birth outcomes such as preterm delivery, low birth weight, and infant mortality (Ventura, et al., 2000).

According to the Centers for Disease Control and Prevention, the teenage pregnancy rate in the United States decreased from 1991 to 1998 (Ventura, et al., 2000). In 1998, the birth rate in the United States was 51.1 per 1,000 live births for women aged 15-19 compared to 62.1 in 1991. Despite this positive trend, teenage pregnancy and childbearing is still a concern. While teen birth rates have decreased in Texas (78.9 per 1,000 live births in 1991 versus 70.9 in 1998) and New Mexico (79.8 in 1991 versus 67.7 in 1998) as well, both states still lead the nation in teen births. The birth rates for teens 15-19 years old in Doña Ana and Otero Counties in 1998 were slightly lower than the New Mexico state rate at 65.8 and 63.9, respectively (See Figure 28).

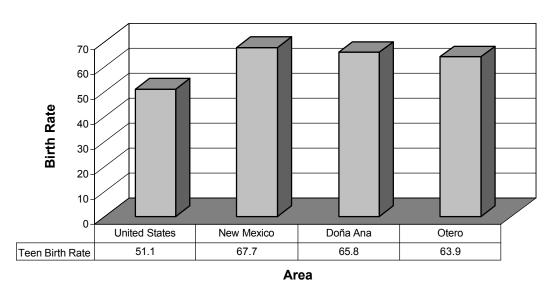
In Texas<sup>1</sup>, 6.4 percent of live births in 1998 were to adolescents less than 18 years of age. The percentage of births to adolescents less than 18 in El Paso and Hudspeth Counties were 6.6 percent and 13.0 percent, respectively (See Figure 29). When this group is expanded to include 18 and 19 year olds the percentages increase dramatically. In fact, 16.1 percent of all 1998 births in Texas were to teen girls (13-19 years old), regardless of marital status. In El Paso County, 16.7 percent of all births were to teens aged 13-19 in 1998 (The Texas Kids Count Project, 2000).

#### Ciudad Juárez, Chihuahua

The percentage of births to adolescent mothers is also high in Ciudad Juárez. In the largest population centers of the State of Chihuahua, Ciudad Juárez and Ciudad Chihuahua, 17.1 percent of births are to mothers between the ages of 15 and 19. There is a lower rate of births to mothers under age 15 in these two cities and a slightly lower rate among mothers age 15 to 19 than in the State of Chihuahua as a whole (See Figure 30).

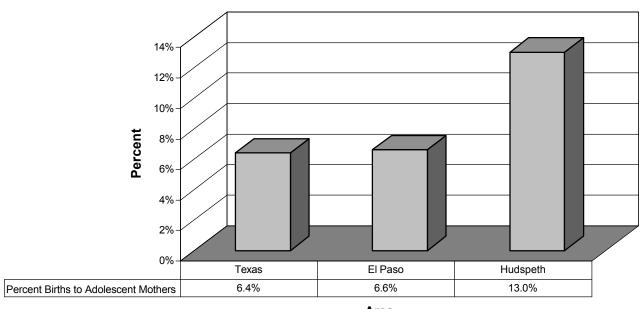
<sup>&</sup>lt;sup>1</sup> Adolescent pregnancies are defined differently in Texas than in the United States and New Mexico in that they include live births to young women 18 years of age and younger.

Figure 28 Adolescent (ages 15-19) Birth Rate per 1,000 Live Births: 1998 United States, New Mexico, Doña Ana County, Otero County



Source: National: Ventura, et al., 2000. New Mexico: New Mexico Advocates for Children and Families, 2000.

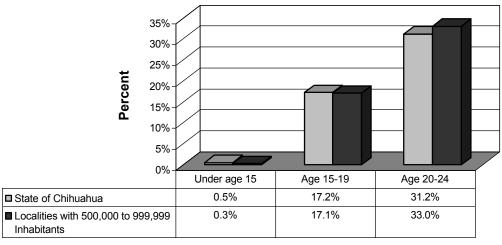
Figure 29
Percent of Births to Adolescent Mothers (under 18 years): 1998
Texas, El Paso County, and Hudspeth County



Area

Source: Texas Department of Health, 1998. Selected Facts for El Paso/Hudspeth County.

Figure 30
Percent of Births to Teen Mothers: 1997 and 1998
State of Chihuahua and Localities of 500,000 to 999,999
Inhabitants (Ciudad Juárez & Ciudad Chihuahua)



**Age Group of Mother** 

Source: INEGI y Gobierno del Estado de Chihuahua, *Anuario Estadístico del Estado de Chihuahua: Edición* 1999, Cuadro 3.1.10.

#### 9. Prenatal Care

Prenatal care is defined as health care received by women throughout pregnancy, labor, and delivery. Late prenatal care is defined as prenatal care beginning in the third trimester of pregnancy (Martin, et al., 1999). A strong relationship exists between failure to receive adequate prenatal care and serious health problems for both the mother and the child. For example, women who receive no or late prenatal care are more likely to have pregnancy complications, and their children are at an increased risk for health complications. The percentage of infant deaths increases by 10 percent if care is not received until the third trimester (The Texas Kids Count Project, 2000).

Prenatal care offers education as well as health care to parents. New parents receive information about parenting. Prenatal care can also link new parents to necessary social services. Mothers receiving prenatal care are more likely to obtain preventative care, such as immunizations, for their infants (The Texas Kids Count Project, 2000).

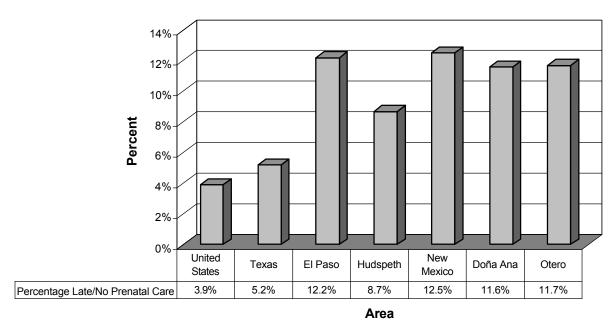
The national percentage of mothers receiving no or late prenatal care was 3.9 percent in 1998. Figure 31 demonstrates that these percentages are much higher in Texas (5.2%) and New Mexico (12.5%). The percentages are also higher in the Paso del Norte region with El Paso County at 12.2 percent, Hudspeth County at 8.7 percent, Doña Ana County at 11.6 percent, and Otero County at 11.7 percent.

The higher number of people without health insurance may offer one explanation for the higher percentage of women receiving late or no prenatal care in this region, as women without health insurance are less likely to obtain adequate prenatal care (The Annie E. Casey Foundation, 2000). Finally, Hispanics may be less likely to obtain early prenatal care. In Texas, the percentage of Hispanic women receiving late or no prenatal care in 1998 was 7.4 percent, which was higher than the percentages for Anglos (2.7%) and African-Americans (5.9%) (The Texas Kids Count Project, 2000).

# Ciudad Juárez, Chihuahua

Currently, no data on prenatal care in Ciudad Juárez is available.

Figure 31
Percent of Late/No Prenatal Care: 1998
United States, Texas, New Mexico, and Paso Del Norte Counties



Source: National: Martin, et al, 1999. Texas: The Texas Kids Count Project, 2000. New Mexico: New Mexico Advocates for Children and Families, 2000.

# 10. Low Birth Weight

Birth weight is an important indicator of infant health and development. Infants weighing less than 2,500 grams (5.5 lbs.) at birth are described as low birth weight (LBW). These infants enter into the world with considerable disadvantages. A strong relationship exists between LBW and infant mortality. In the United States, two thirds of neonatal deaths are attributed to LBW. LBW infants are also at a greater risk for neurological problems, mental retardation, and lower respiratory tract conditions (Kiely, et al., 1994).

Since 1990, the prevalence of LBW infants has increased in every state in the United States. Many demographic risk factors increase the possibility of delivering a low birth weight infant. African-American women are more likely to deliver LBW infants than Anglo and Hispanic women. In 1997, 13.1 percent of live births to African-American women were LBW. The percentage of births to Anglos and Hispanics was 6.5 percent and 6.4 percent, respectively (The Annie E. Casey Foundation, 2000). Studies have shown that women who are from a low socioeconomic background, have a low level of education, and are unmarried are at increased risk of delivering a LBW infant. Finally, women over the age of 34 and adolescents under the age of 17 are more likely to deliver a LBW infant (Kiely, et al., 1994).

Absence of adequate prenatal care also increases the likelihood of delivering a LBW infant and may explain why teen mothers and women living in poverty are at an increased risk of delivering LBW infants. Women in these categories are less likely to have health insurance and are probably less likely to seek prenatal care (The Annie E. Casey Foundation, 2000). Medical risk factors, such as diabetes and poor obstetric history, and environmental risk factors, such as smoking, illicit drug use, heavy alcohol consumption, and poor nutrition, are also associated with LBW (Kiely, et al., 1994).

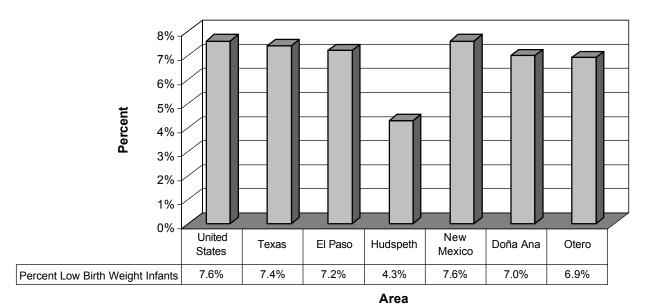
The prevalence of LBW in the Paso del Norte region in 1998 is consistent with, or a little better, than national and state percentages despite the fact that these counties have a higher teen birth rate and a higher number of women receiving little or no prenatal care. Figure 32 demonstrates that the percentage of LBW infants born in El Paso and Hudspeth Counties was 7.2 percent and 4.3 percent, respectively. (Hudspeth County reported only 23 live births in 1998 to Texas Department of Health in 1998). The percent of LBW infants was 7.4 percent in Texas and the 7.6 percent in the United States. Figure 32 also shows that 7.6 percent of births in New Mexico from 1996-1998 were LBW; 7.0 percent of births in Doña Ana County were LBW; and, 6.9 percent of births in Otero County were LBW.

## Ciudad Juarez, Chihuahua

A Mexican Census Institute (INEGI) study of births in the four-year period 1994 to 1997 found that nationwide 8.1 percent of newborns *that were weighed* were LBW infants, 7.3 percent in the State of Chihuahua (INEGI, 1999). The statistics in the Mexican Health Secretariat (Secretaria de Salud) database for 1999 are somewhat higher (Table 10). Looking at births attended in public health and private medical facilities, 9.44 percent of births in Mexico in 1999 were LBW, and 9.33 percent of births in the State of Chihuahua were LBW. There is a difference in the percent of LBW infants between those born in public/or governmental medical facilities and those born in private facilities, especially for the State of Chihuahua (See Figure 33). A smaller proportion of infants born in private medical facilities are LBW; in 1999 only 5.72 percent of Chihuahua births in private medical facilities were LBW.

The figures for births in public health facilities include those births to women "entitled" to health care under one of the government health insurance programs and those born in medical facilities for the "unentitled." Nationwide 82.9 percent of births attended in medical facilities are attended in public institutions and 17.1 percent in private medical facilities (See Table 11). The percent of births attended in private facilities is slightly higher in Chihuahua at 21 percent. Data specifically for Ciudad Juarez was not readily available.

Figure 32
Percent of Low Birth Weight Infants
United States, Texas, and Texas Counties: 1998; New Mexico and
New Mexico Counties: 1996-98

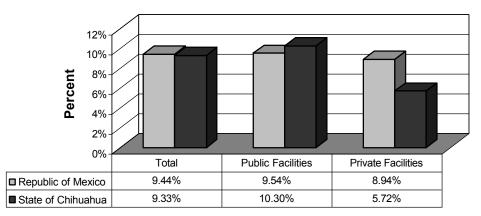


Source: National: Martin, et al, 1999. Texas: Texas Department of Health, Selected Facts for El Paso/Hudspeth County, 1998. New Mexico: New Mexico Advocates for Children and Families, 2000.

Figure 33

Percent Low Birth Weight Infants Attended in Public Health Institutions and
Private Medical Facilities: 1999

Republic of Mexico and State of Chihuahua



### Institution

Source: La Situacion de la Salud Chihuahua, Tables: Servicios Otorados por Instituciones que Proporcionen Servicios Medicos Chihuahua 1999; and Servicios Otorgados en Unidades Medicas Privades con Hospitalizacion segun Tipo de Establecimiento.

Table 10

Number of Live Births Attended in Public Health Institutions and Private Medical Facilities: 1999

		Republic of Me	xico	State of Chihuahua			
	Total	Public Facilities	Private Facilites	Total	Public Facilities	Private Facilites	
Number of Live Births	1,731,675	1,436,286	295,389	61,833	48,828	13,005	
Percent of Live Births	100%	82.9%	17.1%	100%	79.0%	21.0%	

Source: La Situacion de la Salud Chihuahua, Tables: Servicios Otorados por Instituciones que Proporcionen Servicios Medicos Chihuahua 1999; and Servicios Otorgados en Unidades Medicas Privades con Hospitalizacion segun Tipo de Establecimiento.

# 11. Infant Mortality

Infant mortality refers to deaths to infants under one year of age. The three most common causes of infant death in the United States are congenital anomalies, complications arising from low birth weight and/or short gestation, and Sudden Infant Death Syndrome (SIDS). In 1997, infant mortality rates were highest for African-American mothers for all three causes than for any other racial or ethnic group. In the same year, the mortality rate for infants born with congenital anomalies was 17 percent higher among Mexican American mothers than for Anglo mothers; however, the SIDS rate and the rate of low birth weight complications were each one-third lower for Mexican American mothers than for Anglo mothers. Overall, infant mortality rates were highest for infants of African American mothers (13.7 per 1,000 live births). Infant mortality rates for infants born to Anglo and Mexican American mothers were 6.0 and 5.8, respectively (MacDorman and Atkinson, 1999).

Two of the most important indicators for infant mortality are birth weight and length of gestation. Infants born weighing less than 5.5 pounds at birth and/or delivered before term (37-42 weeks of gestation) are more likely to encounter serious health complications before their first birthday. In fact, 65 percent of all infant deaths in 1997 were low birth weight infants. The infant mortality rate was four times higher among pre-term infants (born at 32-36 weeks of gestation) than for full-term infants.

The absence of adequate prenatal care is also linked to infant mortality. The infant mortality rate is higher among women who received prenatal care either after the first trimester or not at all. In 1997, the infant mortality rate decreased for women who began receiving prenatal care during the first trimester of their pregnancy. This decrease may be attributed to earlier detection of pregnancy complications (MacDorman and Atkinson, 1999).

Maternal age is another indicator for infant mortality. Infant mortality rates are higher among teenage mothers under 17 years and mothers 40 years and over. Socioeconomic factors may also play a role in the infant mortality rate for teen mothers in that these mothers are more likely to have low formal educational levels and are more likely to be living in poverty, decreasing the possibility of receiving adequate prenatal care (MacDorman and Atkinson, 1999).

Teen mothers are also more likely to smoke during and after their pregnancies. According to the Centers for Disease Control and Prevention, the percentage of teen mothers who smoke has increased since 1994 (Ventura, 2000). In 1997, the infant mortality rate for mothers who smoked was almost 60 percent higher than the rate for mothers who did not smoke. Smoking during pregnancy exposed the developing fetus to considerable risks and can

lead to poor birth outcomes such as low birth weight, pre-term delivery, and infant mortality (MacDorman and Atkinson, 1999).

Infants born to families living in poverty are at an increased risk of experiencing serious health complications. In fact, the national infant mortality rate for children living in poverty may be as high as 50 percent greater than the mortality rate for infants in families living above the poverty line (The Annie E. Casey Foundation, 2000).

In the United States, the infant mortality rate in 1997 was 7.2 per 1,000 live births. Figure 34 shows that the infant mortality rates were lower for Texas, New Mexico, and the four Paso Del Norte counties for the years 1996-1998. The infant mortality rates were 6.4 for Texas; 6.5 for New Mexico; 5.2 for El Paso County; 6.9 for Doña Ana County; and 6.4 for Otero County. Hudspeth County reported no infant deaths for the years 1996-1998.

#### Ciudad Juárez, Chihuahua

The principal contribution to increased life expectancy in Mexico since 1930 has been the decline in deaths of infants and children under 5 years old (UACJ, 1999). Figure 35 and Table 11 show that the infant mortality rate has declined in Ciudad Juárez in the decade of the 1990s; however, it is still three to four times higher than in its sister border counties in Texas and New Mexico. The infant mortality rate was 22.76 per 1000 inhabitants or 21.75 per 1,000 live births in 1998 in Ciudad Juárez. The infant mortality rate for the Republic of Mexico was 16.45 deaths per 1,000 live births in 1998. This reduction in infant mortality may be attributed to increased health coverage in birth and postpartum attention (UACJ, 1999). The marginalized population and those without access to social security programs do have higher infant mortality rates. For example, in 1998 the infant mortality rate among those who received health services through the Mexican Social Security System (IMSS) was 13.4 per 1,000 live births compared to 21.75 for the municipality.

An analysis conducted by the Pan American Health Organization (PAHO) compared the infant mortality rates and causes of infant death in Mexico, the United States, and the U.S.-Mexico border region for the years 1995-1997. Figure 36 shows the dramatic difference between the infant mortality rates (per 100,000 population) on the Mexican side of the border and the U.S. side of the border. The infant mortality rates are much higher in Mexico, especially Ciudad Juárez, than in the United States, including the Paso Del Norte border counties.

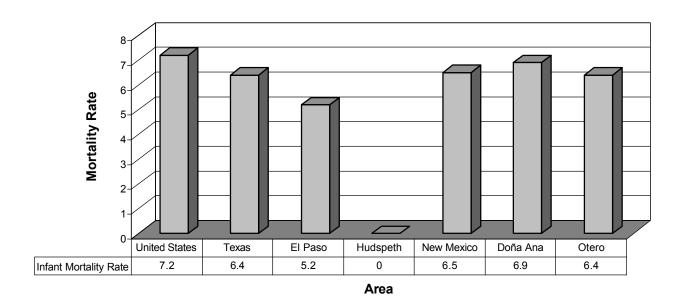
Table 12 lists the most common causes of infant mortality. The infant mortality rates are much higher in Mexico, especially in Ciudad Juárez, for all causes except Sudden Infant Death Syndrome, which seem to be much more common in the United States. While obstetric and perinatal complications (or

conditions originating in the perinatal period) was the leading cause of infant mortality in all border areas, these rates were much higher in Mexico, Chihuahua, and Ciudad Juárez. The mortality rates due to communicable diseases and other diseases¹ were also much higher on the Mexican side of the border. It should also be mentioned that many Mexican women deliver their babies in U.S. border hospitals and then return to Mexico. Deaths to these U.S.-born infants are reported to Mexican Vital Statistics, and "this pattern may explain the lower infant mortality rate on the U.S. border (compared to the rest of the U.S.) and the higher infant mortality rate on the Mexican border (compared to the rest of Mexico)" (Homedes, 2001).

It is also interesting to note that the mortality rates for male infants are generally higher than for females for all causes in both countries, all three states, and all three localities. The only notable exception is in El Paso County for diseases of the circulatory system and external causes, where the mortality rates are higher for female infants (See Figure 36).

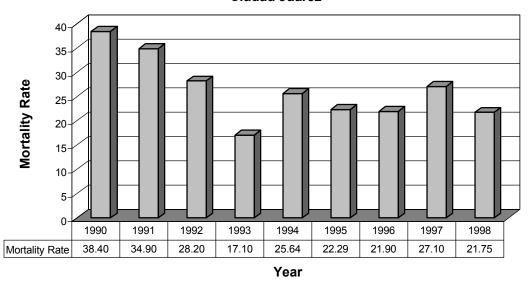
<sup>&</sup>lt;sup>1</sup> Other diseases include congenital anomalies, which will be discussed in a later section.

Figure 34
Infant Mortality Rate per 1,000 Live Births
United States: 1997; Texas and New Mexico: 1996-98



Source: National: National Vital Statistics Report, Vol. 47, No. 23, 1999. Texas: Texas Department of Health, Selected Facts for El Paso/Hudspeth County, 1996-1998. New Mexico: New Mexico Advocates for Children and Families, 2000.

Figure 35
Infant Mortality Rate per 1,000 Live Births: 1990-1998
Ciudad Juárez



Source: UACJ/MSP (1999), Diagnóstico de Salud del Municipio de Juárez 1998, p. 1000, Cuadro 3.

Table 11

Number of Infant Deaths in the Municipio of Ciudad Juárez: 1990-1998

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Deaths	714	647	587	419	510	539	564	681	556

Source: UACJ/MSP (1999), Diagnóstico de Salud del Municipio de Juárez 1998, p. 1000, Cuadro 3.

Table 12
Infant Mortality per 100,000 Population, by Cause: 1995-1997
Males

	Mexico	United States	Chihuahua	New Mexico	Texas	Ciudad Juárez	Doña Ana County	El Paso County
Communicable Diseases	441.6	40.4	335.1	48.7	37.4	475.1	65.3	30.5
Conditions Originating in the Perinatal Period	859.8	369.3	951.4	272.8	276.9	1409.6	348.4	200.6
Diseases of the Circulatory System	28.1	26.2	32.1	21.9	28.5	26.2	0.0	4.4
External Causes	57.1	32.1	88.5	43.8	29.7	149.6	43.5	0.0
All Other Diseases	462.5	218.4	375.0	216.8	223.6	475.1	239.5	183.2

### **Females**

	Mexico	United States	Chihuahua	New Mexico	Texas	Ciudad Juárez	Doña Ana County	El Paso County
Communicable Diseases	355.9	31.0	300.5	20.0	32.1	391.5	0.0	27.4
Conditions Originating in the Perinatal Period	608.4	301.1	666.0	192.7	224.5	1015.3	134.1	155.5
Diseases of the Circulatory System	21.6	22.9	25.3	15.0	24.1	27.0	0.0	18.3
External Causes	45.6	27.5	69.5	27.5	28.6	116.1	22.4	9.1
All Other Diseases	400.8	190.1	298.7	192.7	191.6	388.8	134.1	224.1

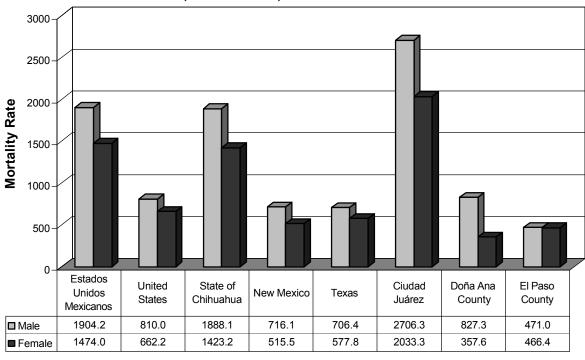
### **Both Sexes**

	Mexico	United States	Chihuahua	New Mexico	Texas	Ciudad Juárez	Doña Ana County	El Paso County
Sudden Infant Death Syndrome	9.6	80.9	12.4	71.6	76.3	9.3	44.1	35.7

Notes: Definitions: Communicable Diseases include: intestinal infectious diseases, tuberculosis, acute respiratory infections, Human Immunodeficiency Virus infection, and other infectious and parasitic diseases including meningitis. Conditions originating in the perinatal period include: obstetric complications affecting fetus or newborn and birth trauma, respiratory conditions of fetus or newborn, and other conditions originating in perinatal period. External causes include: motor vehicle accidents, accidents such as falls and drowning, suicide, and homicides. Congenital anomalies are included in "all other diseases" and will be addressed in a later chapter.

Source: Pan American Health Organization (PAHO), 2000.

Figure 36
Infant Mortality Rates per 100,000 Population: 1995-1997
Mexico, United States, and Border States and Localities



Area

Source: Pan American Health Organization (PAHO), 2000.

#### 12. Sexually Transmitted Diseases

Negative long-term effects of sexually transmitted diseases (STDs) primarily affect women and infants. Gonorrhea and chlamydia infections in women can lead to serious reproductive complications such as pelvic inflammatory disease, ectopic pregnancy, and tubal factor infertility. These two infections can also lead to adverse pregnancy outcomes, such as neonatal ophthalmia and neonatal pneumonia (Division of STD Prevention, 1998).

The acute form of syphilis is characterized by "primary lesions (ulcer or chancre at the site of infection) followed by secondary infection (manifestations that include rash, mucocutaneous lesions, and adenopathy)" (Bureau of Epidemiology, 1998). Syphilis also has adverse pregnancy outcomes as the disease can be transmitted to the fetus in utero. Congenital syphilis results in physical or mental developmental disabilities in the infant or fetal death (Division of STD Prevention, 1998).

Because of the negative birth outcomes associated with STDs, screening for these three diseases is important. Most congenital syphilis cases can be prevented if the disease is detected and treated early in the pregnancy. In 1999, there were 556 reported cases of congenital syphilis in the United States (rate of 14.3 per 100,000 live births). The rate of congenital syphilis was higher in Texas (20.4) with 68 cases. New Mexico reported no cases of congenital syphilis from 1995-1999 (Division of STD Prevention, 2000). El Paso County had only one reported case of congenital syphilis in 1999 (El Paso City-County Health and Environmental District, 1999).

The majority of chlamydial and gonococcal infections are asymptomatic and are usually detected through screening programs (Division of STD Prevention, 1998). Females account for the majority of reported chlamydia cases primarily because they are more likely to be screened for this disease during clinical exams. In Texas, females accounted for 83 percent of all reported chlamydia cases in 1998 (Bureau of Epidemiology, 1998b). In New Mexico the rate for reported chlamydia cases for females was 473.4 per 100,000 females in 1999. In the same year, the rate for reported gonorrhea cases for females was 59.8 and for reported syphilis cases was 0.3 (New Mexico Commission on the Status of Women, 2001).

In general, STDs are more common among minorities in the United States. The Division of STD Prevention at the Centers for Disease Control and Prevention states that:

race and ethnicity in the United States are risk markers that correlate with other more fundamental determinants of health status such as poverty, access to quality health care, health care seeking behavior, illicit drug use, and living in communities with high prevalence of STDs (Division of STD)

Prevention, 1998, p. 51).

Chlamydia and syphilis rates are higher among African American and Hispanic populations. Gonorrhea rates are much higher for African Americans than for Hispanics and Anglos. In 1997, the gonorrhea rate for African Americans was 807.9 cases per 100,000 population compared to 69.4 for Hispanics and 26.0 for Anglos (Division of STD Prevention, 1998).

The rate of STDs is highest for adolescents (ages 15-19) and young adults (ages 20-24). Again, STD rates are more common among African Americans and Hispanic adolescents and young adults than Anglo adolescents and young adults. These two age groups are more likely:

To have multiple (sequential or concurrent) sexual partners rather than a single, long term relationship; they may be more likely to engage in unprotected intercourse; and they may select partners at higher risk...In addition, the higher prevalence of STDs among adolescents reflects multiple barriers to quality STD prevention services, including lack of insurance or other ability to pay, lack of transportation, discomfort with facilities and services designed for adults, and concerns about confidentiality (Division of STD Prevention, 1998, p. 45).

The number of reported chlamydia cases far exceeds the number of gonorrhea cases; however, adolescents, especially adolescent females, account for a large proportion for both diseases. As seen in Figure 37 and Table 13, El Paso County fares slightly better regarding the proportion of reported adolescent STD cases. Adolescents ages 15-19 accounted for 39.8 percent of all reported chlamydia cases in the United States in 1999 and 40.0 percent in Texas in 1998 compared to 36.6 percent in El Paso County in 1999. Adolescents accounted for 29.0 percent of all reported gonorrhea cases in the United States (1999) and 32.0 percent in Texas (1998) compared to 17.8 percent in El Paso County (1999). Hudspeth County reported no cases of chlamydia or gonorrhea in 1999. Adolescents make up a smaller proportion of the number of syphilis cases. In the United States, 7.9 percent of all reported syphilis cases were adolescents in 1999. In 1998, 11.2 percent of all reported primary and secondary syphilis cases in Texas were adolescents. In 1999, 2.5 percent of all reported syphilis cases were adolescents in El Paso County. Hudspeth County reported no cases of syphilis in 1999.

The percentage of reported adolescent (females only) chlamydia and gonorrhea cases in New Mexico in 1999 was 40.1 percent and 44.6 percent, respectively. There were only 3 total syphilis cases reported in New Mexico in 1999. The percentage of reported chlamydia cases for adolescents (both sexes) in Doña Ana County was 39.7 percent in 2000 while the percentage of reported gonorrhea cases for adolescents (17.9%) was lower than the national percentage. Otero County reported a very high percentage of chlamy-

dia and gonorrhea for adolescents in 2000, 43.7 percent and 41.7 percent, respectively. Both New Mexico counties reported no syphilis cases for adolescents in this year.

While many health conditions are worse along the Texas-Mexico border than the rest of the state, the mortality rate for AIDS is considerably lower in the border region than in Texas as a whole. In 1995, the mortality rate for AIDS in border counties was 9.4 per 100,000 population compared to 14.8 in Texas (Sharp, 1998). Figure 38 and Table 14 show the percentages of reported HIV/AIDS cases for women and children under the age of 13 in the United States, Texas, New Mexico, and El Paso County. (Since the mode of transmission for the majority of pediatric HIV/AIDS cases is by a mother who is at risk or has been diagnosed with the HIV or AIDS; the percentage of women diagnosed with HIV or AIDS is reported here). In the United States 18.8 percent of all HIV/AIDS cases are women and 1.2 percent are children under the age of 13. In Texas, 11.7 percent are women and 1.2 percent are children; in El Paso County, 9.6 percent are women and 1.0 percent are children; and, in New Mexico, 8.2 percent are women and 0.3 percent are children. In the Southwest region of New Mexico, which includes Doña Ana and Otero counties, 261 cumulative HIV/AIDS cases had been reported as of December 2000. In the year 2000, 21 new HIV/AIDS cases were reported in Doña Ana County: 5 were female and none were children under 13. In the same year, 4 new HIV/AIDS cases were reported in Otero County: 1 was female and none were children under 13 (New Mexico Department of Health, 2001, unpublished data).

# Ciudad Juárez, Chihuahua

The Mexican Health Secretariat reported the following overall rates for sexually transmitted diseases in the State of Chihuahua in 1999 (See Table 16). Data are not available on cases and disease rates for children, with the exception of congenital syphilis for which the rate is 0.2 per 100,000 inhabitants.

There were 46 cases of HIV seropositives in Ciudad Juárez in 1998, a rate of 4.05 per 100,000, almost the same rate as for the State as a whole in 1999 (UACJ, 1999). Mexico has lower rates of HIV infection than the United States or Central America. In total cases reported, the rate in the most affected population (age 15-44) is 0.29 percent compared to 0.61 percent for the U.S., 1.38 percent for Guatemala and 1.92 percent for Honduras. The first case of AIDS in Mexico was diagnosed in 1983. From the mid 1980s to the early 1990s the number of cases grew rapidly but has now leveled off at around 4,100 new cases per year (1994-1999). The Mexican Health Secretariat estimates that there are currently 64,000 cases in the country and ap-

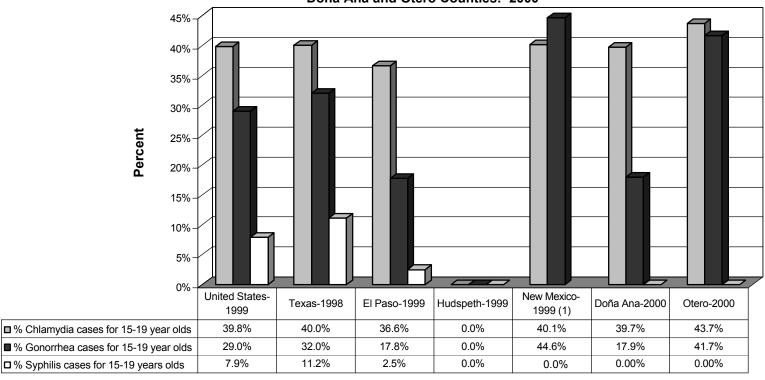
proximately 150,000 persons infected with HIV. AIDS is in 16<sup>th</sup> place among the causes of death with a rate of 4.2 per 100,000 inhabitants. It is the fourth leading cause of death in males and seventh in females (SSA, 2000). Table 16 presents data from cumulative deaths from AIDS and rate (per 100, 000) in the Paso del Norte region in years 1995, 1996 and 1997 up to age forty-four.

In Mexico as a whole, 2.4 percent of AIDs cases are among children age 15 or less. In this age group, the principal means of contagion is perinatal transmission (68.7% of cases). Mexico has a national policy of free treatment that intends to cover 100 percent of pregnant women and all children under 18 years of age. It has been able to keep the HIV infection rate in pregnant women at the low level of 0.09 percent. In the year 2000 there were only 14 diagnosed cases of perinatal infection (SSA, 2000).

In the Paso Del Norte region, as in both the United States and Mexico, the population most affected is the adult population age 25-44. The death rate is highest for this age group in all localities (see Table 15). In the child age groups, Ciudad Juárez has the highest AIDs death rate for infants in the region for the period 1995 to 1997 (2.7 per 100,000), but no reported deaths for the 1-4 and 5-14 age groups. The death rates are higher for all localities in the region for young adults age 15-24, except for New Mexico. The rate for Ciudad Juárez (age 15-24) is 1.6 per 100,000 inhabitants, about the same as for Texas but higher than for EI Paso. 6. A note of caution, for age brackets where there is only one death or very few deaths reported, the rates may not be reliable since small changes in the numbers can produce large changes in the resulting rates.

Figure 37
Percent of Sexually Transmitted Diseases for Adolescents
(Ages 15-19)

United States: 1999; Texas: 1998; El Paso and Hudspeth Counties: 1999; New Mexico: 1999; Doña Ana and Otero Counties: 2000



Area

Note: (1) New Mexico STD data includes female adolescents only.

Source: National: Division of STD Prevention, Centers for Disease Control and Prevention, 2000. Texas: Bureau of Epidemiology, Texas Department of Health, 1999. New Mexico: New Mexico: New Mexico Commission on the Status of Women, 2001. El Paso: El Paso City-County Health and Environmental District, 1999, unpublished data. Hudspeth: Office of Policy and Planning, Texas Department of Health, 1999. Doña Ana and Otero: STD Program, New Mexico Department of Health, 2001, unpublished data.

Table 13

Total Number of Reported Sexually Transmitted Diseases for Adolescents Ages 15-19: United States: 1999;

Texas: 1998; El Paso and Hudspeth Counties: 1999; New Mexico: 1999;

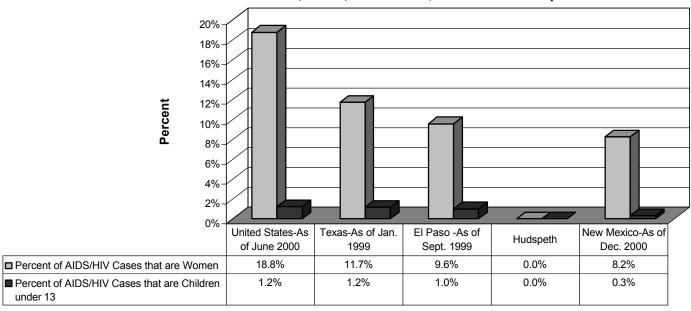
Doña Ana and Otero Counties: 2000

	United States-1999	Texas-1998	El Paso-1999	Hudspeth-1999	New Mexico-1999 (1)	Doña Ana-2000	Otero-2000
Chlamydia	231,999	24,327	643	0	1673	149	60
Gonorrhea	104,336	10,385	27	0	235	6	5
Syphilis	524	48	2	0		0	0

Note: (1) New Mexico STD data includes female adolescents only.

Source: National: Division of STD Prevention, Centers for Disease Control and Prevention, 2000. Texas: Bureau of Epidemiology, Texas Department of Health, 1999. New Mexico: New New New New New New N

Figure 38
Percent of Total HIV/AIDS Cases that are Women and Children
United States, Texas, New Mexico, El Paso and Hudspeth Counties



Area

Source: United States and Texas: Divisions of HIV/AIDS Prevention, 2000. New Mexico: New Mexico Department of Health, 2000. El Paso: El Paso City-County Health and Environmental District, 2000.

Table 14
Cumulative Number of Reported HIV/AIDS Cases and Number of AIDS Deaths

	United States	Texas	El Paso	New Mexico
	As of June 2000	As of Jan. 1999	As of Sept. 1999	As of Dec. 2000
Cumulative Number of Reported HIV/AIDS Cases	856,342	57,188	983	2,650
Number of Reported HIV/AIDS Cases-Women	160,686	6,697	94	218
Number of HIV/AIDS Cases-Children Under Age 13	10,391	660	10	9
Number of Total Deaths of AIDS	438,795	7,261	486	1072

Source: United States and Texas: Divisions of HIV/AIDS Prevention, 2000. New Mexico: New Mexico Department of Health, 2000. El Paso: El Paso City-County Health and Environmental District. 2000.

Table 15
Sexually-Transmitted Diseases in the State of Chihuahua 1999: Number of New Cases and Rate per 100,000

Disease	Number of Cases	Rate per 100,000
genital herpes	207	6.9
gonorrhea	224	7.4
syphilis	124	4.1
congenital syphilis	7	0.2
HIV seropositives	121	4.0
AIDs	36	1.2

Source: Secretaría de Salud, Mexico (2000), La Situación de la Salud Chihuahua. http://www.ssa.gob.mx

Table 16
Cumulative Deaths from AIDs and Rate per 100,000: 1995-1997,
Paso Del Norte Border Region

	Total Pop.		Under Age		Age 1-4		Age 5-14		Age 15-24		Age 25-44	
Area			1									
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Mexico	12610	4.5	74	0.9	63	0.2	92	0.1	1081	1.8	8786	11.4
United States	90,761	11.4	115	1.0	411	0.9	468	0.4	1318	1.2	63505	25.3
State of Chihuahua	277	3.2	2	0.9	1	0.1	1	0.1	21	1.2	200	8.0
New Mexico	282	5.5	0	0.0	0	0.0	0	0.0	0	0.0	210	13.5
Texas	6041	10.7	9	0.9	23	0.6	34	0.4	139	1.7	4487	24.5
Ciudad												
Juárez	144	4.6	2	2.7	0	0.0	0	0.0	11	1.6	111	11.9
Doña Ana												
County	18	3.7	0	0.0	0	0.0	0	0.0	0	0.0	14	10.2
El Paso	156	7.6	0	0.0	1	0.6	1	0.3	2	0.6	118	19.2
County												

Source: Pan American Health Organization (PAHO), Table 9, p. 252.

## 13. Tuberculosis

Tuberculosis (TB) is a bacterial disease that "primarily infects the lungs and is transmitted from person to person by inhalation of droplet nuclei containing the bacteria" (Texas Department of Health, 2000, p. 1). The most common type of tuberculosis is pulmonary TB. Common symptoms of pulmonary TB include fever, night sweats, weight loss, difficulty breathing, and coughing. Risk factors associated with TB are homelessness, substance abuse, and incarceration. Living in a community with a high prevalence of TB is considered a risk factor, and TB rates are highest in large cities. Those with medical conditions such as HIV and diabetes are at an increased risk of contracting tuberculosis (Texas Department of Health, 2000).

Tuberculosis is more common among males and older age groups. A majority of reported TB cases are among low-income racial or ethnic populations. In 1998, 72.2 percent of TB patients in Texas were Hispanic or African American. TB incidence among foreign-born persons is also high (37.7%) (Bureau of Epidemiology, 1998c).

Texas reported the third highest incidence of TB in the United States in 1998 (Division of Tuberculosis Elimination, 1999), and the rate of tuberculosis cases along the Texas-Mexico border is higher than the rate in Texas (See Table 17). In fact, TB is considered to be a serious health concern in the border communities of El Paso County and Ciudad Juárez, Chihuahua (Texas Department of Health, 2000). In 1997, the rate (per 100,000 estimated population) of tuberculosis cases in Texas border counties was 15.2 while the Texas tuberculosis rate was 10.3 (Tuberculosis Elimination Division, n.d.). The movement of people back and forth across the border is the primary cause of the higher TB rate along the border (Sharp, 1998).

Figure 39 shows the percentages of reported TB cases to children under age 14 in the United States, Texas, New Mexico, and El Paso and Hudspeth Counties in 1998, and in Doña Ana County in 2000. The percentage of child TB cases in Texas, 7.4 percent, surpassed the national and New Mexico percentages of 5.9 percent each. The percentages of child TB cases in the Paso Del Norte counties are lower than the national and state percentages: 3.7 percent in El Paso County, and no reported child TB cases in Hudpeth and Doña Ana Counties. In the years 1995-1997, no deaths to children under the age of 15 due to TB were reported in any of the four Paso Del Norte counties (Pan American Health Organization, 2000).

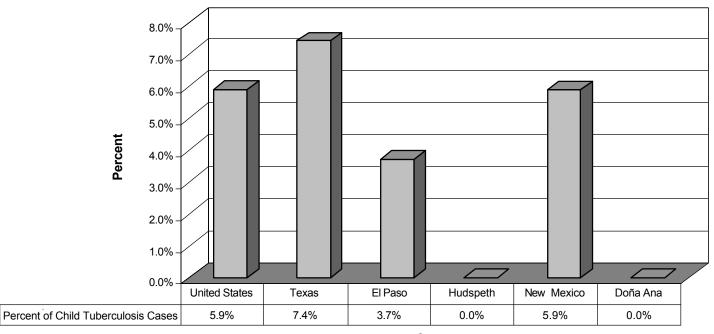
# Ciudad Juárez, Chihuahua

Tuberculosis ranks 19th among the leading causes of death in Mexico with 3,229 TB deaths in 1999 (rate of 3.3 per 100,000). The disease rate in

Chihuahua is three times the rate in Texas border counties, 46.5 per 100,000 in 1999. The rates for pulmonary TB, meningeal TB, and all other forms were 19.0, 0.5, and 2.6 per 100,000, respectively (SSA, 2000). The disease rate in Ciudad Juárez is lower than for the State; it has fluctuated in the 1990s from a high of 33.55 in 1994 to a low of 17.32 in 1998. The highest rate is among the population 65 and older, 39.79 per 100,000 (UACJ, 1999).

Tuberculosis mortality rates are also very low for children in Ciudad Juárez. In the period 1995-1997, there were three deaths in the under 15 age group in Ciudad Juárez and 18 in the State of Chihuahua (Pan American Health Organization, 2000).

Figure 39
Percent of Pediatric (Children under 14) Tuberculosis Cases: 1998
United States, Texas, New Mexico, and Paso Del Norte Counties
(Doña Ana County: 2000)



Note: No Tuberculosis data was available for Otero County from the New Mexico Department of Health for the year 2000.

Source: National and State: Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, 1999. El Paso and Hudspeth Counties: Tuberculosis Elimination Division, Texas Department of Health, 1999. Child Data for El Paso County: Texas Department of Health, unpublished data. Dona Ana County: New Mexico TB Control Program, New Mexico Department of Health, 2001, unpublished data.

Table 17

Number of Total and Pediatric Reported Tuberculosis Cases: 1998

United States, Texas, New Mexico, and Paso Del Norte Counties

	United States	Texas	El Paso	Hudspeth	New Mexico	Doña Ana
Total Cases	18,361	1,820	81	0	68	6
Children under 14	1,082	135	3	0	4	0

Note: No Tuberculosis data was available for Otero County from the New Mexico Department of Health for the year 2000.

Source: National and State: Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, 1999. El Paso and Hudspeth Counties: Tuberculosis Elimination Division, Texas Department of Health, 1999. Child Data for El Paso County: Texas Department of Health, unpublished data. Dona Ana County: New Mexico TB Control Program, New Mexico Department of Health, 2001, unpublished data.

# 14. Congenital Anomalies

As mentioned earlier, congenital anomalies, or birth defects, are a leading cause of infant mortality in the United States. In the years 1995-1997, the infant mortality rate due to congenital anomalies was 163.8 per 100,000 population in the United States. These rates were slightly higher in Texas (165.0), New Mexico (165.4), and El Paso County (165.2). The infant mortality rate due to congenital anomalies was lower in Doña Ana County (See Figure 40 and Table 18).

The most common birth defects include defects of the heart, muscles and skeleton such as club foot or cleft lip/palate<sup>1</sup>, genital or urinary tract, eye or nervous system such as neural tube defects (NTD)<sup>2</sup>, and chromosomal disorders such as Down syndrome<sup>3</sup> (March of Dimes Birth Defects Foundation, 2001). The March of Dimes (2000) estimates that approximately 4 percent (approximately 150,000) of all infants are born with a birth defect annually. They estimate that approximately 13,359 infants in Texas and 1,075 infants in New Mexico are born with a birth defect each year.

The cause of two-thirds of birth defects is unknown; however, some birth defects such as fetal alcohol syndrome and congenital syphilis can be prevented. Research has demonstrated that the prevalence of neural tube defects such as spina bifida<sup>4</sup> and anencephaly<sup>5</sup> would decrease by approximately 50 percent "if women of childbearing age would consume 0.4 mg of folic acid daily" (Lynberg and Edmonds, 1994, p. 217).

As of December 1997, there were 1,584 children under 20 years old in the New Mexico Children's Chronic Conditions Registry. The New Mexico rate of those ages 20 and younger with congenital anomalies was 300.6 per 10,000 in the population. The rate of those with NTD was 7.7; with cleft lip/palate was 18.3; and with Down syndrome was 14.0. In Otero County the rate of those with congenital anomalies was 233.8: 9 had NTD (rate of 4.9); 389 had cleft lip/palate (rate of 20.7); and, 20 had Down syndrome (rate of 10.9). In Doña Ana County, the rate of those with congenital anomalies was 279.2: 37 had NTD (rate of 6.5); 82 had cleft lip/palate (rate of 14.5); and, 90 had Down syndrome (rate of 15.9) (New Mexico Vital Records and Health Statistics, 1999a and b).

In 1996-1997, the Texas Department of Health Birth Defects Registry conducted birth defect data collection in six Public Health Regions (PHRs) including PHR 10, which includes El Paso and Hudspeth counties. PHR 10 did not have significantly higher or lower rates of any particular birth defect. The Registry also compared the prevalence of birth defects among Anglos, African-Americans, and Hispanics. Nine birth defects were significantly higher for Hispanics: spina bifida without anencephaly, hydrocephaly, anotia or mi-

crotia, ventricular septal defect, atrial septal defect, patent ductus arteriosus, cleft lip with or without cleft palate, stenosis of atresia of large intestine, rectum, or anal canal, and reduction defects of upper limbs (Texas Birth Defects Monitoring Division, 2000).

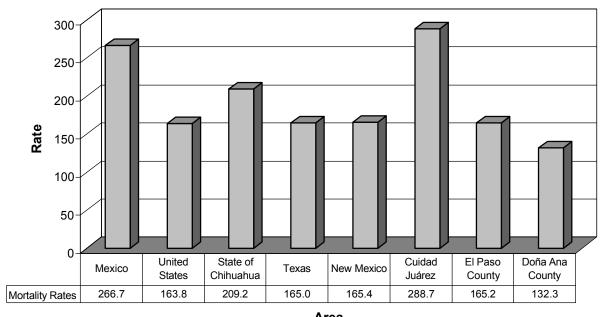
From January 1993 to September 1998, the Texas Department of Health conducted a study of neural tube defects in fourteen Texas-Mexico border counties, which included El Paso and Hudspeth counties. Surveillance data revealed that the border was an area with a high prevalence of neural tube defects. El Paso and Hudspeth counties were included in the study. More than 90 percent of the NTD cases occurred in the most populous counties, Cameron, Hidalgo, El Paso, and Webb; however, the number of NTD cases in El Paso County was significantly lower than the other border counties (Bureau of Epidemiology, 1998a).

#### Ciudad Juárez, Chihuahua

Congenital anomalies are the second most common cause of infant mortality in Mexico. In addition, the congenital anomaly death rate for infants is higher in Mexico than in the United States (See Figure 40 and Table 18). In the years 1995-1997, the infant mortality rate per 100,000 population due to congenital anomalies in Mexico was 266.7. The rate was lower in the State of Chihuahua (209.2 per 100,000), but higher in Ciudad Juárez (288.7 per 100,000).

- <sup>1</sup> Cleft palate: The congenital failure of the palate to fuse properly, forming a grooved depression or fissure in the roof of the mouth. Cleft lip: The congenital failure of the maxillary and median nasal processes to fuse, forming a groove or fissure in the lip. Congenital: Existing at or dating from birth (Texas Birth Defects Monitoring Division, 1997).
- <sup>2</sup> Neural Tube Defect (NTD): A general term a number of defects which are presumed to have a common origin in failure of the neural tube to develop properly during the embryonic stage. The major conditions include anencephalus, spina bifida, encephalecele (Texas Birth Defects Monitoring Division, 1997).
- <sup>3</sup> Down Syndrome (Trisomy 21): The chromosomal abnormality that is characterized by moderate to severe mental retardation, sloping forehead, small ear canals, flatbridged nose and short fingers, and toes (Texas Birth Defects Monitoring Division, 1997).
- <sup>4</sup> Spina bifida: The congenital defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude (Texas Birth Defects Monitoring Division, 1997).
- <sup>5</sup> Anencephaly: Congenital absence of the skull, with cerebral hemispheres completely missing or reduced to small masses attached to the base of the skull (Texas Birth Defects Monitoring Division, 1997.

Figure 40 Infant Mortality Rates per 100,000 population due to Congenital Anomalies: 1995-1997 Mexico, United States, and Border States and Localities



Source: Pan American Health Organization (PAHO), 2000.

Table 18 Number of Infant Deaths due to Congenital Anomalies: 1995-1997 Mexico, United States, and Border States and Localities

	Mexico	<b>United States</b>	State of Chihuahua	Texas	New Mexico	Cuidad Juárez	El Paso County	Doña Ana County
Number of Deaths	21,753	19,113	473	1,629	134	217	74	12

Source: Pan American Health Organization (PAHO), 2000.

#### 15. Diabetes

Diabetes mellitus describes a group of diseases in which high levels of blood glucose can result from insufficient insulin secretion or action. There are three common types of diabetes. Type 1 diabetes, or insulin-dependent diabetes, usually affects persons under 20 years and is usually treated with injections of insulin. Approximately 5 to 10 percent of all diagnosed diabetes cases are Type 1 (National Institute of Diabetes and Digestive and Kidney Diseases [NIDDK], 1999). Type 1 diabetes is the most common chronic disease among U.S. children. In fact, more new cases of Type 1 diabetes are seen each year than pediatric cancer and AIDS cases (LaPorte, et al., 1995).

Type 2 diabetes accounts for 90 to 95 percent of all diagnosed diabetes cases. Type 2 diabetes usually develops in adulthood and has various treatments, such as diet, exercise, medication, and insulin (NIDDK, 1999). The third type of diabetes, gestational diabetes, occurs in 2 to 5 percent of all pregnant women. Gestational diabetes disappears once the pregnancy is over; however, studies indicate that as many as 40 percent of women who developed gestational diabetes during pregnancy develop diabetes later in life. Serious health complications, such as heart disease, high blood pressure, stroke, blindness, and kidney disease, are associated with diabetes (National Center for Chronic Disease Prevention and Health Promotion, 1998). Despite the fact that diabetes is believed to be under-reported on death certificates, diabetes was the seventh leading cause of death in the United States (National Center for Chronic Disease Prevention and Health Promotion, 1998) and New Mexico in 1996 (New Mexico Vital Records and Health Statistics, 1999a). Diabetes was the sixth leading cause of death in Texas (Texas Diabetes Council, 1998). El Paso County has one of the highest diabetes mortality rates in Texas. The diabetes mortality rate per 100,000 in the population for El Paso County in 1998 was 24.9 compared to 17.8 in Texas (Office of Policy and Planning, 1998a).

Diabetes is a serious health concern for Hispanics. According to the El Paso Diabetes Association, one-fourth of all Hispanic adults over the age of 45 in El Paso have diabetes (El Paso Diabetes Association, 1999). In Doña Ana County, an estimated 62.9 percent of all diabetes cases were Hispanic in 1998 (New Mexico Vital Records and Health Statistics, 1999a).

The fact that diabetes is most common among Mexican Americans and Puerto Ricans is cause for concern in the Paso Del Norte region. The prevalence of diabetes is two to three times higher for Mexican American adults than for Anglos, and Mexican Americans seem to suffer more from complications of diabetes than Anglos (NIDDK, 1999).

Several of the risk factors associated with Type 2 diabetes are more

prevalent among Hispanics, especially Mexican Americans. One major risk factor is genetics. A person with a family history of diabetes is more likely to develop the disease in his or her lifetime. Studies show "that the prevalence of diabetes among Mexican Americans who have first-degree relatives (e.g. parents) with diabetes was twice as great as for those with no family history of diabetes" (NIDDK, 1999, p. 5). Other risk factors, such as impaired glucose tolerance, hyperinsulinemia, and insulin resistance, are more common among Mexican Americans than Anglos. Some risk factors, such as obesity and lack of physical activity, are preventable. Studies have shown that Mexican Americans, especially Mexican American women, have higher obesity rates than Anglos. Studies indicate that lack of exercise may also be a contributing factor to diabetes. In the Third National Health and Nutrition Examination Survey, "65 percent of Mexican American men and 74 percent of Mexican American women reported that they participated in little or no leisure-time physical activity" (NIDDK, 1999, p. 8).

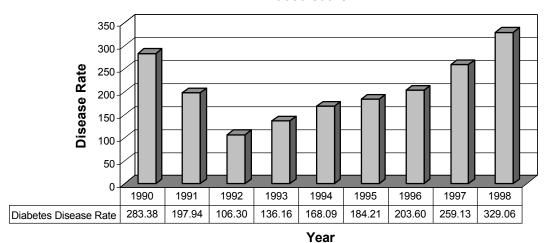
Diabetes is a serious health concern in the Paso Del Norte region. In fact, the prevalence of adults over the age of 18 with diabetes in El Paso was 15 percent compared to 6.3 percent in Texas in 1999. If this trend continues, children, especially Hispanic children, in this region are at considerable risk of developing diabetes over their lifetime. More must be done to educate children of the risk factors associated with diabetes and the benefits of healthy living. If children adopt healthy behaviors such as eating balanced diets and exercising regularly, some of the risk factors of diabetes can be prevented (El Paso Diabetes Association, 1999).

# Ciudad Juárez, Chihuahua

Diabetes Mellitus is an even greater health concern in Mexico and along its northern border (See Table 19). It is the third leading cause of death in Mexico and Chihuahua and the second leading cause in Ciudad Juárez, compared to the seventh in the United States (SSA, 2000). There were 630 diabetes deaths in Ciudad Juárez in 1998, only exceeded by deaths due to heart diseases. Diabetes claimed very few child lives. In the Juárez, Doña Ana, El Paso area, there were only three child deaths in the period 1995-1997 due to diabetes, and none of them were infant deaths (PAHO, 2000).

Diabetes disease rates are higher for the State of Chihuahua, 359.5 per 100,000 (Mexican Health Secretariat, 1999), than for Ciudad Juárez, 329.06 per 100,000 (1998); however, the number of cases has been on the rise in the 1990s (See Figure 41). In 1998 there were two infant cases, two in the 1-4 year age group, and 38 in the 5-13 age group, reported to the State of Chihuahua Health Service (UACJ, 1999).

Figure 41
Diabetes Disease Rates per 100,000 Inhabitants: 1990-1998
Ciudad Juárez



Source: Secretaría de Salud de México (ssa.gob.mx); UACJ/MSP, p 110.

Table 19
Diabetes Mortality Rates for Mexico, State of Chihuahua and Ciudad Juárez, 1999 (1998 for Ciudad Juárez): Deaths per 100,000 Inhabitants.

	Republic of Mexico	State of Chihuahua	Ciudad Juárez
Deaths per 100,000	46.5	46.5	55.4

Source: Secretaría de Salud de México (ssa.gob.mx); UACJ/MSP, p 110.

# 16. Childhood Obesity

The prevalence of obese and overweight individuals has increased over the past few decades and is considered to be a major health problem among adults, adolescents, and children in the United States. In fact, obesity is reported as the second most common cause of preventable death in adults in the United States. Major health risks associated with obesity include hypertension, Type 2 diabetes, stroke, osteoarthritis, sleep apnea, respiratory problems, and some cancers. Obesity also impacts individuals psychologically and socially. Depression and binge eating have been linked to obesity. Those who are obese and overweight are subjected to negative social prejudice. Obesity and overweight are two separate conditions. Obesity is defined as "excess adipose tissue" while overweight is defined as "excess weight for height" (Sherwood, 2000, p. 1).

Measuring obesity and overweight in children and adolescents is sometimes difficult because of "normal processes of growth, pubertal development and body composition changes" (Sherwood, 2000, p. 1). The most common measure of obesity in adults is Body Mass Index (BMI). BMI is calculated by dividing weigh in kilograms by height in meters squared (Gidding, 1996). Growth charts that measure BMI in relation to age and gender have been developed to determine obesity in youth. Children with a BMI "greater than the 95th percentile for age using national reference population data" are defined as overweight. A BMI between the 85th and 95th percentile indicates a high risk of becoming overweight. According to the National Health and Nutrition Examination Survey (1988-94), 14 percent of U.S. children between the ages of 6 and 11 are overweight, and 12 percent of U.S. adolescents ages 12-17 are overweight (Sherwood, 2000).

Of course, poor eating behaviors combined with lack of physical activity contribute to obesity; however, there are many more risk factors associated with the prevalence of obesity (Sherwood, 2000). Both genetic and environmental factors have been linked to obesity. Children with overweight or obese parents are more likely to be obese or overweight themselves (Anand, 1999). Children from low-income families, who live with single mothers, and whose parent/parents have low levels of education, are at an increased risk of being overweight or obese (Strauss, 1999).

The prevalence of obesity and overweight among minorities is higher than among Anglos across all age levels. Figure 42 compares the prevalence of overweight in Anglo, African-American, and Mexican-American boys and girls across two age groups, children 6-11 and adolescents 12-17. The prevalence of overweight in Mexican-American boys and girls and African-American girls in both age groups was highest. The prevalence of over-

weight in Mexican-American boys and girls ages 6-11 is 17.4 percent and 13.7 percent, respectively, compared to 10.3 for Anglo boys, 9.2 percent for Anglo girls, 11.9 percent for African-American boys, and 16.4 percent for African-American girls. The prevalence of overweight among adolescents ages 12-17 is 14.6 percent in Mexican-American boys, 13.7 percent in Mexican-American girls, 11.1 percent in Anglo boys, 8.5 percent in Anglo girls, 10.7 percent in African-American boys, and 15.7 percent in African-American girls (American Heart Association, 2000).

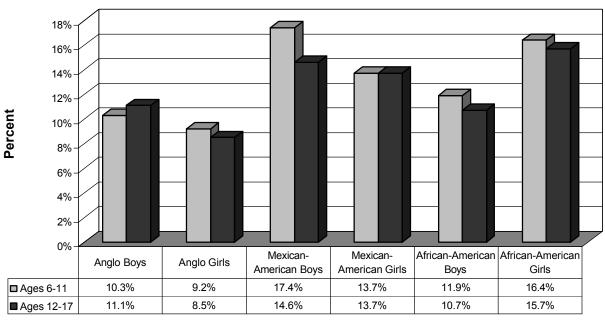
CATCH (The Child and Adolescent Trial for Cardiovascular Health) is a program that promotes long-term health in elementary schools in the Paso Del Norte region. This program collected baseline data on overweight children in selected El Paso elementary schools. According to the baseline data, the percentage of U.S. Anglo children who were overweight (85% BMI) in 1998 was 22 percent in boys and 23 percent in girls. The percentage was much higher in El Paso, 35 percent in boys and 29 percent in girls. The prevalence of obese children (95% BMI) in U.S. Anglo children was 11 percent among both girls and boys; however, 22 percent of El Paso boys and 15 percent of El Paso girls were obese (Coleman, n.d.).

Because of the high percentage of obese and overweight children in the Paso Del Norte region, programs aimed at obesity and overweight prevention in at-risk children are important. Studies indicate that overweight children have a greater chance of being overweight or obese as adults, and treating obesity in adults is difficult. School-based programs in physical education classes, health education classes, and food services could educate children on the importance of exercise and healthy eating behaviors (Story, 2000).

# Ciudad Juárez, Chihuahua

Data pertaining to childhood obesity is not readily available for Ciudad Juárez.

Figure 42
Percent of Overweight Children by Race/Ethnicity: 1988-1994
United States



Race/Ethnicity

Source: American Heart Association (www.americanheart.org).

#### 17. Child Death Rate

The number of deaths to U.S. children ages 1-14 has declined over the past few years. Advances in medical care and a decline in the number of child deaths due to motor vehicle accidents play a large part in the decreasing child death rate (The Annie E. Casey Foundation, 2000). Despite this decrease, a large proportion of child deaths are preventable. The leading cause for all child deaths in the United States is accidents followed by congenital anomalies, malignant neoplasms, homicide, diseases of the heart, and suicide (Murphy, 2000).

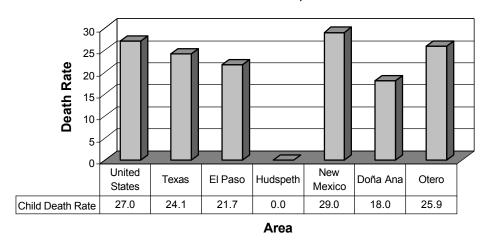
Figure 43 compares the child death rates for the United States, Texas, New Mexico, and the four Paso Del Norte counties. In 1998, the child death rate in the United States was 27 deaths per 100,000 children ages 1-14. The child death rate in Texas (24.1) and El Paso County (21.7) were lower than the national rate. In El Paso County, the number of child deaths was higher for Hispanic children (36 deaths) than for Anglo children (4 deaths) (The Texas Kids Count Project, 2000). Hudspeth County reported only one child death in 1998. In the same year, the child death rate in New Mexico, 29.0, was slightly higher than the national rate. The child death rates in Doña Ana and Otero Counties were 18 and 25.9, respectively, for the years 1996-98.

# Ciudad Juárez, Chihuahua

Child mortality has declined in Mexico as a whole, especially in the birth to age 5 age group. Increased health coverage, universal vaccination since 1990, and the control of diarrheal illness (health education and use of re-hydrating salts) and respiratory infections play a large role in the reduction in the number of deaths in Mexico. The six leading causes of child mortality in Ciudad Juárez in 1998 were accidents (37.4% of all child deaths), congenital anomalies (9.6%), pneumonia and influenza (4.3%), malignant tumors (14.8%), homicide (5.2%), and diabetes (1.7%) (UACJ, 1999).

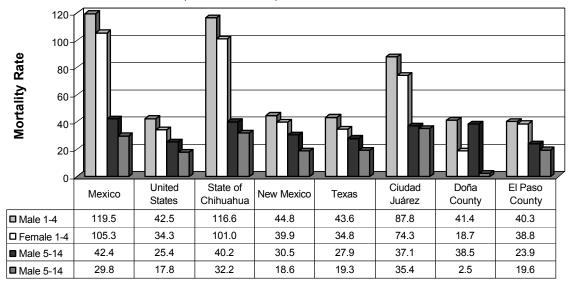
The Pan American Health Organization (2000) analyzed mortality rates and causes of death for children ages 1-4 and 5-14 in Mexico, the United States, and border states and localities. In the years 1995-1997, the child mortality rates for both age groups were higher in Mexico than in the United States. The child mortality rate was lower in Ciudad Juárez than Mexico as a whole; however, it is still higher than in the bordering counties of El Paso County and Doña Ana County (See Figure 44).

Figure 43
Child Death Rate per 100,000 Children Ages 1-14
United States and Texas: 1998; New Mexico: 1996-98



Source: National: Murphy, 2000. Texas: The Texas Kids Count Project, 2000. New Mexico: New Mexico Advocates for Children and Families, 2000.

Figure 44
Child Mortality Rates per 100,000 Population: 1995-1997
Mexico, United States, and Border States and Localities



Source: Pan American Health Organization (PAHO), 2000.

# 18. Safety Issues

Another important indicator of child well-being is the safety of the community in which the child lives. As mentioned earlier, a majority of child deaths are preventable. Figure 45 provides data on the proportion of deaths to children ages 1-14 attributed to accidents, homicides, or suicides in 1998. In the United States, 48.9 percent of child deaths were due to accidents, homicide, or suicide. The proportion of these deaths was much larger in Texas (61.0%) and New Mexico (73.9%). The percentage of child deaths due to accidents, homicides, or suicide in Doña Ana County (61.9%) was also more than the national average. The percentages of these types of deaths were lower than state and national averages in the other three counties of the Paso Del Norte region: El Paso County, 30 percent, Hudspeth County, 0 percent, and Otero County, 30 percent. (Doña Ana County and Otero County data includes the years 1996-98.) Table 20 gives the actual number of total child deaths and number of child deaths due to accidents, homicides, or suicide in 1998.

Figure 46 compares the infant and child death rates due to external causes (accidents, poisonings, and violence) in Mexico, the United States, and the border states and localities in the years 1995-1997. The infant mortality rate due to external causes is higher than the 1-4 and 5-14 age groups in the United States, Texas, New Mexico, and Doña Ana County; however, the infant mortality rate due to external causes was lower than the other two age groups in El Paso County.

Figure 47 compares the infant and child death rates due to homicide for Mexico, the United States, and the border states and localities for the years 1995-1997. Once again, the infant mortality rates were higher for this cause than for the other two age groups in the United States, Texas, New Mexico, and El Paso and Doña Ana County. The infant and child death rates due to homicide were higher in the United States and U.S. border states and localities than in Mexico for all age groups except the 5-14 age group.

In the United States, Texas, and New Mexico, the leading cause of accidental death was motor vehicle accidents in 1998: 46.4 percent in the United States, 48.9 percent in Texas, and 50.5 percent in New Mexico (National Center for Injury and Prevention Control, n.d.). Motor vehicle accidents are also the primary cause of childhood injuries in the United States. Motor vehicle accidents accounted for approximately 43 percent of all injuries to children ages 1-14 in both Texas as a whole and El Paso County in 1998 (Texas Department of Health, n.d.b).

Intentional assault was the cause of a relatively small number of childhood injuries in Texas and El Paso County: 3.3 percent in Texas and 4

percent in El Paso County. Hudspeth County reported no child injuries in 1998 (Texas Department of Health, n.d.b.). In 1998, 90.9 percent of all reported childhood injuries in New Mexico were unintentional accidents while 9.1 percent were intentional injuries. In the same year, five childhood injuries were reported in Doña Ana County: 80 percent were unintentional and 20 percent were intentional injuries. Otero County reported only one childhood injury in 1998, and it was classified as intentional (NMACF, 2000).

Figure 48 demonstrates that the Paso Del Norte region's teen (ages 15-19) violent death rate is lower than state rates. In 1998, the teen violent death rates in Texas and New Mexico were 60.8 per 100,000 deaths and 77.7, respectively. The teen violent death rate for the four Paso Del Norte counties were 40.2 for El Paso County, 0 for Hudspeth County, 47.0 for Doña Ana County, and 46.1 for Otero County. In 1997, the U.S. rate was 58.

In 1998, Texas reported 44,465 confirmed victims of child abuse (a rate of 7.8 per 1,000 children under 18). El Paso County reported 1,586 confirmed child abuse victims (rate of 6.9) and Hudspeth County reported 11 confirmed victims. Both Texas and El Paso County saw a decrease in the number of confirmed child abuse cases between the years of 1994 and 1998 (The Texas Kids Count Project, 2000).

In 1998, there were 6,981 substantiated allegations of child abuse in New Mexico: 67.3 percent were neglect; 30 percent were physical abuse; and, 4.8 percent were sexual abuse. There were 1,672 alleged victims of child abuse in Doña Ana County, 487 (29.1%) of which were substantiated. There were 642 alleged victims of child abuse in Otero County, 181 (28.2%) of which were substantiated (New Mexico Vital Records and Health Statistics, 1999).

# Ciudad Juárez, Chihuahua

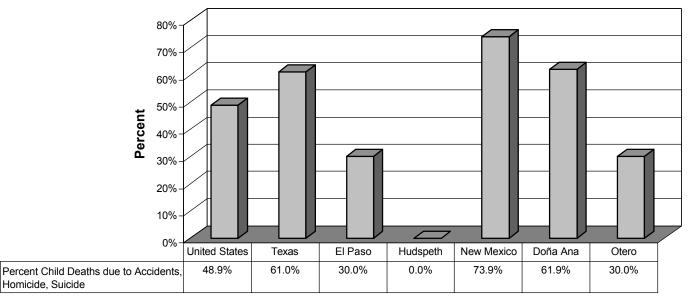
Accidents are also the leading cause of death for infants and children ages 1-14 in Mexico. The accidental infant and child death rates are higher in Mexico than in the United States; however, these rates are higher still for the State of Chihuahua and Ciudad Juárez. In fact, the infant death rate due to accidents was 133.1 per 100,000 population in the years 1995-1997 in Ciudad Juárez compared to 79.2 in the State of Chihuahua and 51.6 in Mexico as a whole (See Figure 46). The child death rates due to accidents are significantly lower than the accidental infant mortality rate and are about the same in Mexico, the State of Chihuahua, and Ciudad Juárez.

In the years 1995-1997, the child death rate due to motor vehicle accidents was about the same in Mexico (6.0 per 100,000 population for the 1-4 age group and 5.0 for the 5-14 age group) and the United States (5.2 for both age groups). However, this rate was much higher in the State of Chihua-

hua (11.9 per 100,000 population for the 1-4 age group and 6.9 for the 5-14 age group) and Ciudad Juárez (13.6 for the 1-4 age group and 7.8 for the 5-14 age group) (Pan American Health Organization, 2000).

As mentioned above, the infant and child death rates as a result of homicide are lower in Mexico than in the United States. Ciudad Juárez has higher rates for all three age groups than Mexico and the State of Chihuahua, especially in the 5-14 age group. These rates are also higher than in El Paso County, but lower than Doña Ana County in all age groups except the 5-14 age group (See Figure 46).

Figure 45
Percent of Total Child Deaths due to Accidents, Homicides, Suicides
United States, Texas, and New Mexico: 1998; New Mexico Counties: 1996-98



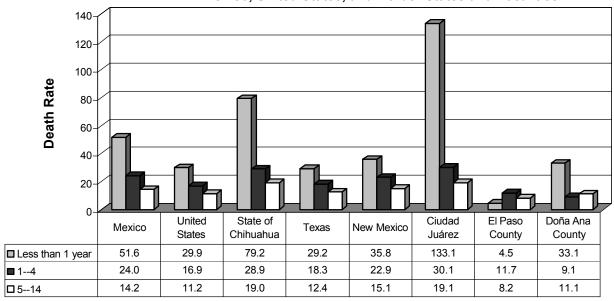
Source: National: Murphy, 2000. Texas: Texas Department of Health, Texas Health Data, http://www.soupfin.tdh.state.tx.us; The Texas Kids Count Project, 2000. New Mexico: New Mexico Department of Health, Office of the Medical Examiner, 1998; New México Advocates for Children and Families, 2000.

Table 20
Number of Total Child Deaths and Number of Child Deaths Due to Accidents, Homicides, or Suicide

	United States	Texas	El Paso	Hudspeth	New Mexico	Doña Ana	Otero
Total Deaths	13,042	1073	40	1	88	21	10
Accidents, Homicides, Suicides	6,372	655	12	0	65	13	3

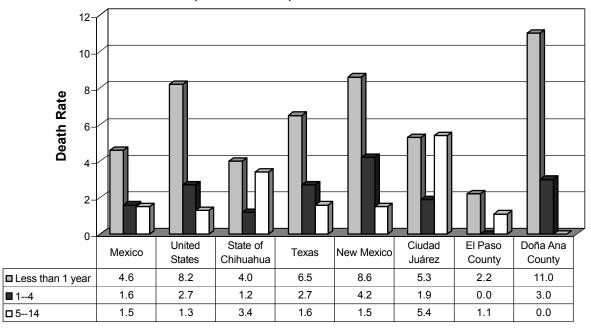
Source: National: Murphy, 2000. Texas: Texas Department of Health, Texas Health Data, http://www.soupfin.tdh.state.tx.us; The Texas Kids Count Project, 2000. New Mexico: New Mexico Department of Health, Office of the Medical Examiner, 1998; New México Advocates for Children and Families, 2000.

Figure 46
Infant and Child (Ages 1-14) Death Rates per 100,000 Population Due to External Causes: 1995-1997
Mexico, United States, and Border States and Localities



Note: External Causes include accidents, poisonings, and violence. Source: Pan American Health Organization (PAHO), 2000.

Figure 47
Infant and Child Death Rates per 100,000 Population Due to Homicide: 1995-1997
Mexico, United States, and Border States and Localities

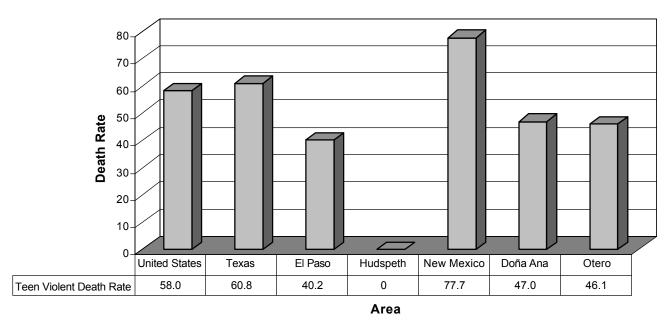


Note: Homicide includes homicide, legal intervention, and operations of war. Source: Pan American Health Organization (PAHO), 2000.

Figure 48

Teen (Ages 15-19) Violent Death Rate per 100,000

United States: 1997; Texas and New Mexico: 1998; New Mexico Counties: 1996-98



Source: National: The Annie E. Casey Foundation, 2000. Texas: The Texas Kids Count Project, 2000. New Mexico: New Mexico Advocates for Children and Families, 2000.

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# IX. APPENDIX A - LIST OF SERVICE PROVIDERS IN THE PASO DEL NORTE REGION

**Prenatal Care** 

Socorro Health Education Center

915-858-3081

Screening and treatment; prenatal and gynecological services

Eligibility: None required

Fees: sliding scale

Cliníca Guadalupaña

915-852-3328

Screening and treatment; prenatal and gynecological services

Eligibility: All, especially lower valley

Fees: sliding scale

Kellogg-Fabens Health Education Center

(915) 764-2180

Kellogg Montana Vista Health Education Center

(915) 855-3222

Kellogg San Elizario Health Education Center

(915) 851-4183

Screening and treatment; prenatal and gynecological services

Eligibility: Open

Fees: Eligible for discount for health care based on federal income guide-

lines. Medicaid, Medicare, & private insurance accepted.

**Birth Control/Pregnancy Testing** 

Planned Parenthood Center of El Paso

(915) 566-1613

Information on human sexuality; birth control; medical education, counsel-

ing; physical assessments, pregnancy testing

Eligibility: None required

Fees: Sliding scale

El Paso C/C Health District -Tillman Clinic

(915) 543-3560

Family planning; pregnancy testing; condom distribution;

**Eligibility:** Varies according to program **Fees:** Sliding scale or Medicaid accepted

Birthright of El Paso

(915) 533-1818

Help a woman carrying baby to full term; males may receive literature or educational programs; free pregnancy tests; maternity and infant clothing available.

Eligibility: None

Fees: Donations accepted. Services based upon funds available.

Reproductive Services, Inc.

(915) 544-2861

Women's health clinic; pregnancy testing and termination; male/female sterilization; morning after treatment in last 72 hours; adoption services; family planning; more.

Eligibility: Call for info.

Fees: Fixed or on a case-by-case basis; will accept Medicaid.

El Paso County Agricultural Extension Service

(915) 859-7725

Educational programs in agriculture, home economics, economic development, horticulture, entomology, fitness, health, finance planning, management training, teen pregnancy, death and dying, family violence

Eligibility/Fees: None

Lee & Beulah Moor Children's Home

(915) 544-8777

Residential foster care for children; unwed mother counseling; licensed adoption agency; in-home counseling for children and parents; many services for troubled and displaced children and their families.

Eligibility: Age 0-17, legal resident of U.S.

Fees: Sliding scale

Texas Tech University – Obstetrics/Gynecological Clinic

(915) 545-6730

Maternal-fetal medicine; gynecology specialties; gynecologic urology; family planning; climacteric gynecology; obstetrics- maternal-fetal medicine (High

Risk Pregnancy Clinic); more. **Eligibility:** Physician referral

Fees: None

# **Sexually Transmitted Diseases**

El Paso City-County Health Department (Tillman Clinic)

STD Clinic

Contact: Henry Rodriguez

(915) 543-3561

(HIV/AIDS, Chlamydia, Gonorrhea, Herpes (HSV), Syphilis)

Provides STD testing & treatment; HIV counseling

Fee: \$6 per visit

Eligibility: None required

Additional Comments: No identification necessary; brief client/family health

history required.

#### **AIDS**

Southwest AIDS Committee (SWAC)

AIDS education, patient services, bilingual information distribution, support,

peer HIV persons, early intervention clinic; hospice Eligilibility: HIV positive and special medical problems

Fees: None

# **Tuberculosis**

**Tuberculosis Clinic** 

Contact: Kendall Carnie, RN

(915) 543-3601

Screening, diagnosis, & treatment

Fee: \$3-screening, \$27-x-rays, & free treatment (includes instructional video/

classes)

Eligibility: None required

Reporting Hotline: 1.800.705.8868 TDH TB Elimination Division:

1-512-458-7447

TB Consultant-El Paso:

Manuel Rivera 915-545-6619

# **Health Insurance Coverage:**

Covering Kids

(505) 247-7440

Indentifies and enrolls eligible children not currently enrolled in Medicaid; identifies obstacles to enrollment; and develops recommendations to improve system.

# **Child Abuse:**

New Mexico Citizens Review Boards

(505) 842-9805

Reviews cases of children who are in the custody of the state of New Mexico due to abuse and neglect.

Advocacy Center for the Children of El Paso

(915) 545-5400

Collaboration of police, sheriff, DA, CA, and CPS working for children who are victims of abuse so that they may be interviewed by all agencies at one venue.

Eligibility: Age 0-17

Fees: None

Child Crisis Center of El Paso

(915) 562-7955

Parenting classes, support group; prevent child abuse and neglect; offer emergency shelter for children; if parent is in high stress or crisis; confidential referral services; respite care for special needs children.

Eligibility: Child at risk of abuse/neglect; parent/family crisis

Fees: None, except \$15 for parent class

Court Appointed Special Advocate Program (CASA)

(915) 545-5045

Expedite permanent placement of children in secure, stable living situation under court orders. Advocacy for abused and neglected children in the court-room.

Elibility: Referrals need to be made through County Courts, 65th District.

Fees: None.

Community Partners of El Paso/Rainbow Room

(915) 521-3925

Emergency resource room for CPS caseworkers to utilize for abused and neglected children in crisis situations; provides new items such as clothing, formula, diapers, car seats, coats, blankets, cleaning supplies, shoes, and personal hygiene products.

Elilgibility: CPS clients only

Fees: None

Department of Child Protective and Regulatory Services/Child Protective Services

(915) 542-4535

Receives and investigates reports of child abuse and neglect; works with families to resolve problems that put children at risk; administers foster care and adoption programs.

Eligibility: Abused/neglected children and families; foster and adoptive fami-

lies

Fees: None

El Paso Human Services

(915) 534-7227

Support Child Protective Services (CPS), Child Care Food Programs

Eligibility: Referral by Texas Department of Human Services

Fees: None

State of Texas-Children's Trust Fund of Texas

(512) 458-1281

State agency, provides leadership and technical assistance in the field of child abuse and neglect prevention.

Eligibility: Call for information Fees: Call for information

# **Health Care Facilities/Services**

La Fe Inc. Centro de Salud Familiar (915) 545-4550

Community health center for the medically indigent of South El Paso; other area residents not turned away if in medical emergency; primary health care, dental, lab, pharmacy, maternal/infant health; bilingual/bicultural staff

Elilgibility: Residents of El Paso

Fees: Sliding scale for South El Pasoans; all others full price

Socorro Health Education Center

(915) 858-3081

Medical care for adults and children; Early Periodic Screening and Diagnostic Treatment (EPSDT) exams; dental care; prenatal care and women's health services; postpartum exams and newborn screenings; counseling services; immunizations

State of Texas-Public Health Region 9/10

(915) 774-6258

Administrative office for various health programs; some direct services, child health population; health education; presentations, nutrition services

Eligibility: None Fees: None

El Paso City-County Health District-Northeast Health Center (915) 755-3775

Provides immunizations for all ages, child and adolescent health exams and primary care, adult health and cancer screening services

Eligibility: Unrestricted if resident of El Paso County

**Fees:** Sliding scale. Medicaid, non-insured, and private insurance accepted, services not denied.

El Paso City-County Health District-Ysleta Health Center (915) 833-0493

Provides immunizations for all ages, child and adolescent health exams and primary care, adult health and cancer screening services

Eligibility: Unrestricted if resident of El Paso County

**Fees:** Sliding scale. Medicaid, non-insured, and private insurance accepted, services not denied.

El Paso City-County Health and District Medical Case Management (915) 771-5740

Case management services assist eiligible recipients in gaining access to medically necessary and appropriate medical, social, educational, and other services. Services include screening, family assessment, identification of service needs, individual services plan development, service provision and coordination, and follow-up

**Eligibility:** Children 1-21 years on Medicaid/have health condition, risk, special care

Fees: None

El Paso City-County Health and Environment District (915) 534-2537

Provides immunizations for all ages, child and adolescent health exams and primary care, adult health and cancer screening services

Eligibility: Unrestricted if resident of El Paso County

**Fees:** Sliding scale. Medicaid, non-insured, and private insurance accepted, services not denied.

El Paso City-County Health and Environment District-Canutillo (915) 877-3164

Provides immunizations for all ages and child and adolescent health exams and primary care

Eligibility: Unrestricted if residents fo El Paso County, accepts TX/NM Medicaid

Fees: Medicaid, sliding scale, non-insured, dental insurance.

El Paso City-County Health and Environmental District Dental Care (915) 543-3580

Provide basic dental services such as cleaning, fillings, sealants, and composites for children ages 1-20.

**Eligibility:** Children ages 1-20. Register at clinic. Services will not be denied due to inability to pay

**Fees:** TX/NM Medicaid, sliding scale, private insurance. Need Medicaid letter/ dental insurance/ social security number.

El Paso City-County Health District-Personal Services

Administrative offices for case management, immunizations, child and adolscent health care, adult health and cancer screening program, and Anthony Health Education Program

**Eligibility:** Unrestricted if resident of El Paso County **Fees:** Medicaid, sliding scale, non-insured, private

Ben Archer Health Center (505) 382-9292

Provides primary medical and dental care to local residents and Spanish speaking migrant workers.

Otero County Health Care Services (505) 434-4902

Provides health care services through medical providers for indigent resi-

dents of Otero County; assists local and out of county medical providers with establishing eligibility for indigent claims.

# Safety

Providence Memorial Hospital-Infant Car Seat Program

(915) 577-6011

Sierra Medical Center-Infant Car Seat Program

(915) 747-4000

Provides infant car seats to any woman having a baby at Providence Memorial Hospital or Sierra Medical Center

Fees: None

# **Child Disabiltiy Services**

Border Children's Health Center

(915) 532-1156

Provides case management and interdisciplinary care to chronically ill children in eleven sub-specialty clinics

Eligibility: MD verification

Fees: None

El Paso Rehabilitation Center

(915) 544-8484

Pediatric outpatient rehabilitation services; El Papalote Daycare for developmentally delayed or disabled children. Programs include services for celebral palsy, communicative disorders, early childhood intervention, genetic screening

Eligibility: Under 3 years of age; varies by program, MD referral

Fees: Sliding scale

Spina Bifida Association of El Paso

(915) 821-2916

Serve needs of those born with spina bidifa and their families, hydrocephalus, spinal cord injuries; public and professional education; support, visitation; diapers

Eligibility: None

Fees: \$12 membership fee; membership not necessary to obtain services

Muscular Dystrophy (MD) Association

(915) 533-2632

Congenital MD, Duchenne MD, Emery-Dreifuss MD

Eligibility: U.S. Citizen; have MD or one of 40 diseases under MD heading

Fees: None

Cleft Palate and Craniofacial Abnormalities Clinic (915) 592-4184

Referral source for patients with cleft palate, craniofacial abnormalities; assist to obtain financial assistance; outling long range treatment plans, assist families in following through

Eligibility: Special medical problems

Fees: Sliding scale

Walter Hightower Foundation (915) 546-6515

Benefit children with disabilities; cover medically related costs including equipment for disabled children. Funds organizations that deal with disabled children.

Eligibility: Under age 21; legal resident

Fees: None