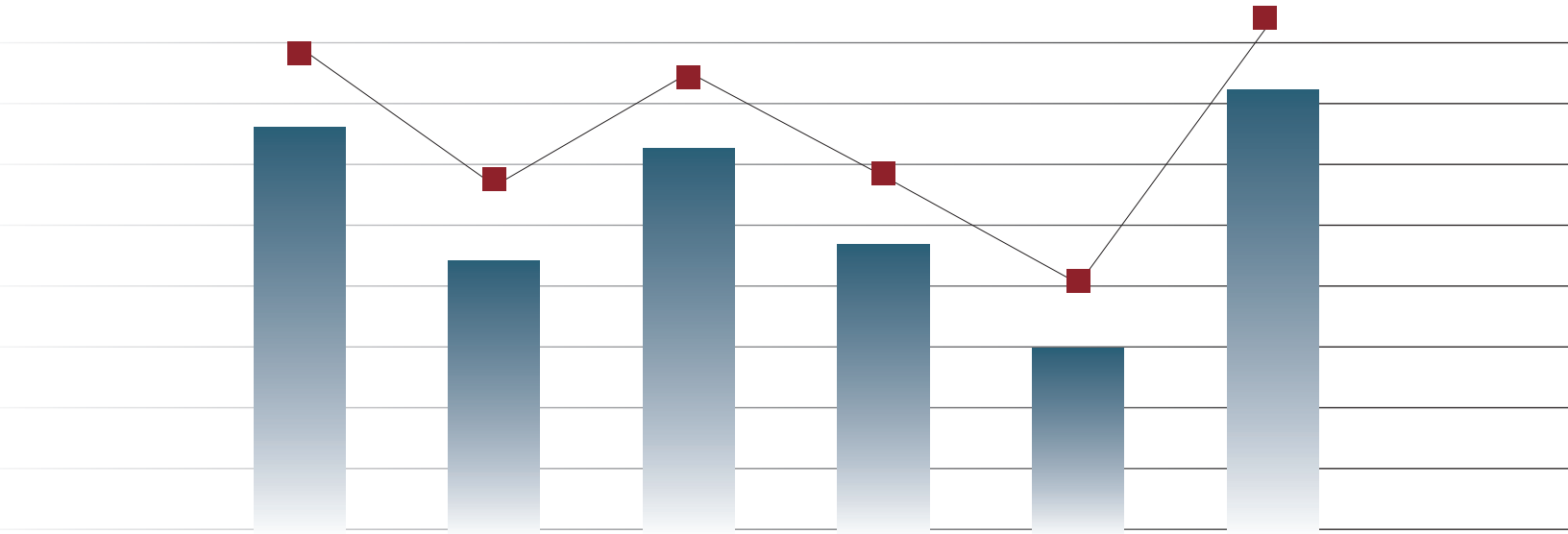


# 2010 Quick Facts



New Mexico  
Health Policy Commission

December  
**2009**





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## **DISCLAIMER**

The New Mexico Health Policy Commission (HPC) utilizes various sources, both state and national, to produce its annual Quick Facts report. Different sources use different methodologies and reporting periods, which are reflected in this report. Quick Facts is meant to serve as a reference guide only, and includes the most up-to-date information available regarding health care access, financing, delivery and outcomes in the state.

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# ***STATE DEMOGRAPHICS***





## NEW MEXICO DEMOGRAPHICS<sup>1</sup>

According to the U.S. Census Bureau, from 2005-2007, NM had a total population of 1.9 million. Approximately, 984,000 (51%) of the population were female and 959,000 (49%) were male. The median age was 35.6 years. Twenty-six percent of the population was under 18 years and 13% were 65 years and older.

For New Mexicans reporting one race alone:

- 69% were White;
- 2% were Black;
- 9% were American Indian and Alaska Native;
- 1% were Asian;
- Less than 0.5% were Native Hawaiian and Other Pacific Islander; and
- 15% were some other race.

As indicated on the table below, 3% of New Mexicans reported two or more races. Forty-four percent of New Mexicans were Hispanic or Latino. The Census Bureau considers race and Hispanic origin to be two separate and distinct concepts. People of Hispanic origin may be of any race. Hispanic or Latino is defined as “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.”

**Demographic Estimates**

	NM Estimate	NM Percent	U.S. Percent
Total Population	1,942,847		
Male	959,161	49.4	49.2
Female	983,686	50.6	50.8
Median Age (years)	35.6	(X)	36.4
Under 5 Years	140,458	7.2	6.9
18 Years and Over	1,445,152	74.4	75.3
65 Years and Over	242,552	12.5	12.5
One Race	1,882,520	96.9	97.9
White	1,335,326	68.7	74.1
Black	42,492	2.2	12.4
American Indian and Alaska Native	178,333	9.2	0.8
Asian	26,545	1.4	4.3
Native Hawaiian and Other Pacific Islander	1,362	0.1	0.1
Some Other Race	298,462	15.4	6.2
Two or More Races	60,327	3.1	2.1
Hispanic or Latino (of any race)	858,878	44.1	14.7

Source: U.S. Census Bureau, 2005-2007 American Community Survey

<sup>1</sup> U.S. Census Bureau. 2005-2007 American Community Survey. Retrieved October 2, 2009 from [http://factfinder.census.gov/servlet/ADPTable?\\_bm=y&-geo\\_id=04000US35&-qr\\_name=ACS\\_2007\\_3YR\\_G00\\_DP3YR5&-ds\\_name=ACS\\_2007\\_3YR\\_G00\\_&-\\_lang=en&-\\_sse=on](http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=04000US35&-qr_name=ACS_2007_3YR_G00_DP3YR5&-ds_name=ACS_2007_3YR_G00_&-_lang=en&-_sse=on)

## Population Estimates<sup>2</sup>

The U.S. Census Bureau reports NM population estimates from 2000 to 2008 as shown on the following table. As of July 1, 2008, the population estimate for the state was 1,984,356. This is a 9% increase from the July 1, 2000 estimate. Bernalillo had the largest population by county at 635,139 followed by Dona Ana County at 601,203 and Santa Fe County at 143,937. Harding County had the smallest population at 684 followed by De Baca County at 1,907 and Catron County at 3,405.

**Population Estimates by County, New Mexico, 2000-2008**

County	Population Estimates at July 1 <sup>st</sup> each year									Estimates Base April 1 2000	Census 2000 April 12000
	2008	2007	2006	2005	2004	2003	2002	2001	2000		
New Mexico	1,984,356	1,964,402	1,937,916	1,912,884	1,889,266	1,867,909	1,848,986	1,828,330	1,820,704	1,819,041	1,819,046
Bernalillo	635,139	627,785	618,048	606,502	593,734	582,378	573,387	562,388	557,133	556,002	556,678
Catron	3,405	3,414	3,405	3,300	3,368	3,380	3,451	3,464	3,566	3,543	3,543
Chaves	63,060	62,460	61,498	61,189	60,722	60,680	60,433	60,792	61,279	61,382	61,382
Cibola	27,285	27,230	26,976	27,157	27,161	26,971	26,688	26,629	25,645	25,595	25,595
Colfax	12,962	13,183	13,324	13,492	13,668	13,767	14,045	14,055	14,208	14,189	14,189
Curry	43,755	45,007	45,538	45,792	45,733	44,959	44,648	44,631	44,895	45,044	45,044
De Baca	1,907	1,903	1,912	1,996	1,982	2,067	2,114	2,151	2,214	2,240	2,240
Dona Ana	201,603	198,048	193,455	189,330	185,045	182,264	178,574	176,536	174,992	174,682	174,682
Eddy	51,360	50,960	50,638	50,173	50,803	50,700	50,805	50,676	51,414	51,658	51,658
Grant	29,844	29,688	29,363	29,264	29,032	29,482	30,182	30,704	30,890	31,002	31,002
Guadalupe	4,346	4,416	4,395	4,437	4,514	4,696	4,662	4,715	4,684	4,680	4,680
Harding	684	716	736	740	770	754	740	780	803	810	810
Hidalgo	4,910	4,913	4,847	4,938	5,022	5,129	5,280	5,448	5,755	5,932	5,932
Lea	59,155	57,992	56,793	55,990	55,608	55,225	55,375	54,841	55,148	55,508	55,511
Lincoln	20,793	20,702	20,802	20,638	20,405	20,070	19,591	19,425	19,531	19,411	19,411
Los Alamos	18,150	18,497	18,673	18,543	18,531	18,490	18,126	17,650	18,272	18,344	18,343
Luna	27,227	26,805	26,427	26,010	25,561	25,337	25,051	24,840	24,978	25,015	25,016
McKinley	70,724	69,979	70,457	70,541	71,420	71,484	72,879	74,412	74,583	74,798	74,798
Mora	5,052	5,053	5,048	5,041	5,098	5,176	5,177	5,183	5,202	5,180	5,180
Otero	62,776	62,768	62,539	63,119	63,225	62,201	61,478	61,373	62,216	62,299	62,298
Quay	8,929	8,950	9,004	9,136	9,326	9,573	9,684	9,849	10,083	10,156	10,155
Rio Arriba	40,692	40,707	40,652	40,454	40,574	40,607	40,888	40,981	41,236	41,188	41,190
Roosevelt	18,889	19,126	18,878	18,774	18,616	18,558	18,521	18,292	17,984	18,018	18,018
Sandoval	122,298	117,583	111,855	105,625	101,206	98,335	95,632	93,134	91,247	90,584	89,908
San Juan	122,500	122,239	121,620	121,843	120,817	119,742	118,256	115,128	114,042	113,801	113,801
San Miguel	28,558	28,629	28,783	29,053	29,097	29,171	29,484	29,699	30,072	30,124	30,126
Santa Fe	143,937	142,369	140,648	139,190	137,767	136,275	134,390	131,563	129,822	129,295	129,292
Sierra	12,437	12,252	12,373	12,561	12,754	12,999	12,884	13,086	13,243	13,268	13,270
Socorro	18,180	18,082	18,102	18,115	18,015	18,068	17,844	17,977	18,052	18,078	18,078
Taos	31,546	31,508	31,295	31,142	31,112	30,883	30,572	30,094	30,063	29,979	29,979
Torrance	16,269	16,529	16,678	16,672	17,200	16,883	16,534	16,673	16,938	16,910	16,911
Union	3,777	3,762	3,756	3,780	3,769	3,820	3,954	4,029	4,158	4,174	4,174
Valencia	72,207	71,147	69,398	68,347	67,611	67,785	67,657	67,132	66,356	66,152	66,152

Source: US Census Bureau, Population Estimates Program

<sup>2</sup> U.S. Census Bureau. (July 2008). New Mexico Population Estimates. Retrieved September 30, 2009 from [http://factfinder.census.gov/servlet/GCTTable?\\_bm=y&-geo\\_id=04000US35&-\\_box\\_head\\_nbr=GCT-T1&-ds\\_name=PEP\\_2008\\_EST&-lang=en&-format=ST-2&-\\_sse=on](http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=04000US35&-_box_head_nbr=GCT-T1&-ds_name=PEP_2008_EST&-lang=en&-format=ST-2&-_sse=on)

## Education<sup>3</sup>

As indicated on the table below, the U.S. Census Bureau reports that in NM from 2005-2007, 28% of people 25 years and over had at least graduated from high school. Twenty-five percent had a bachelor's degree or higher. Eighteen percent were dropouts - not enrolled in school and had not graduated from high school.

**Educational Attainment, New Mexico, 2005-2007**

	Estimate	Percent
Population 25 years and over	1,240,342	100%
Less than 9th grade	102,144	8.20%
9th to 12th grade, no diploma	125,385	10.10%
High school graduate (includes equivalency)	350,856	28.30%
Some college, no degree	266,121	21.50%
Associate's degree	86,825	7.00%
Bachelor's degree	177,875	14.30%
Graduate or professional degree	131,136	10.60%

Source: U.S. Census Bureau, 2005-2007 American Community Survey

## Unemployment Rates<sup>4</sup>

According to the NM Department of Workforce Solutions, as of August 2009, NM had an unemployment rate of 7.6%. As indicated on the table below, Luna County had the highest unemployment rate at 12.8% followed by Guadalupe and Mora counties at 12.5%. Los Alamos County had the lowest unemployment rate at 3.5%.

<sup>3</sup> U.S. Census Bureau. *2005-2007 American Community Survey*. Retrieved October 2, 2009 from [http://factfinder.census.gov/servlet/ADPTable?\\_bm=y&-geo\\_id=04000US35&-qr\\_name=ACS\\_2007\\_3YR\\_G00\\_DP3YR5&-ds\\_name=ACS\\_2007\\_3YR\\_G00\\_-\\_lang=en&-\\_sse=on](http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=04000US35&-qr_name=ACS_2007_3YR_G00_DP3YR5&-ds_name=ACS_2007_3YR_G00_-_lang=en&-_sse=on)

<sup>4</sup> New Mexico Department of Workforce Solutions, NM LASER. (August 2009). Labor Force Employment and Unemployment. Retrieved September 30, 2009 from [http://laser.state.nm.us/analyzer/qslabforcedata.asp?cat=LAB&session=LABFORCE&su\\_bsession=99&areaname=](http://laser.state.nm.us/analyzer/qslabforcedata.asp?cat=LAB&session=LABFORCE&su_bsession=99&areaname=)

## Employment and Unemployment by County, New Mexico, August

County	Civilian Labor Force	Employment	Unemployment	Unemployment Rate (%)
New Mexico	960,757	888,196	72,561	7.6
Bernalillo	314,642	290,701	23,941	7.6
Catron	1,781	1,642	139	7.8
Chaves	28,376	26,368	2,008	7.1
Cibola	12,622	11,764	858	6.8
Colfax	7,594	7,086	508	6.7
Curry	21,400	20,404	996	4.7
De Baca	901	855	46	5.1
Dona Ana	89,072	82,602	6,470	7.3
Eddy	29,391	27,671	1,720	5.9
Grant	12,555	10,983	1,572	12.5
Guadalupe	1,774	1,629	145	8.2
Harding	429	405	24	5.6
Hidalgo	2,934	2,715	219	7.5
Lea	31,003	28,439	2,564	8.3
Lincoln	11,901	11,270	631	5.3
Los Alamos	9,682	9,346	336	3.5
Luna	14,687	12,800	1,887	12.8
McKinley	27,154	24,711	2,443	9.0
Mora	2,176	1,904	272	12.5
Otero	26,184	24,382	1,802	6.9
Quay	4,253	3,990	263	6.2
Rio Arriba	21,235	19,661	1,574	7.4
Roosevelt	9,224	8,729	495	5.4
Sandoval	54,775	49,903	4,872	8.9
San Juan	57,720	52,877	4,843	8.4
San Miguel	13,249	12,186	1,063	8.0
Santa Fe	79,240	74,140	5,100	6.4
Sierra	6,505	6,183	322	5.0
Socorro	9,657	9,123	534	5.5
Taos	17,985	16,430	1,555	8.6
Torrance	7,166	6,522	644	9.0
Union	2,299	2,184	115	5.0
Valencia	31,191	28,591	2,600	8.3

Source: New Mexico Department of Workforce Solutions LAUS unit in conjunction with US Bureau of Labor Statistics

# ***HEALTH CARE COVERAGE***





## HEALTH INSURANCE COVERAGE

Statistics on insured and uninsured populations often vary among publications based on specific populations and time periods studied. The health insurance coverage information presented in this report is taken from the U.S. Census Bureau, published September 2009.

### Types of Health Insurance Coverage<sup>5</sup>

The Census Bureau broadly classifies health insurance coverage as either private (non-government) or government-sponsored.

Private health insurance is coverage by a health plan provided through an employer or union or purchased by an individual from a private health insurance company. Types of private coverage include:

- Employment-based plans - coverage offered through one's own employment or a relative's. It may be offered by an employer or by a union.
- Own Employment-based plans - coverage offered through one's own employment and only the policyholder is covered by the plan.
- Direct-purchase plans - coverage through a plan purchased by an individual from a private company.

Government health insurance includes plans funded by federal, state, or local governments. The major categories of government health insurance are Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), military health care, state plans, and Indian Health Services (IHS).

- Medicare is the federal program which helps pay health care costs for people 65 and older and for certain people under 65 with long-term disabilities.
- Medicaid is a joint state and federal program, that provides medical assistance to families with dependent children, the elderly and persons with certain disabilities who are in financial need are eligible for Medicaid. Medicaid may be known by different names in different states.
- State Children's Health Insurance Program is a federal program administered at the state level that provides health care to low-income children whose parents do not qualify for Medicaid. SCHIP may be known by different names in different states.
- Military Health Care - Military health care includes:
  - TRICARE is a military health care program for active duty and retired members of the uniformed services, their families, and survivors.
  - CHAMPVA is a medical program through which the Department of Veterans Affairs (VA) helps pay the cost of medical services for eligible veterans, veteran's dependents, and survivors of veterans.

<sup>5</sup> U.S. Census Bureau. Current Population Survey Health Insurance Definitions. Retrieved October 5, 2009 from <http://www.census.gov/hhes/www/hlthins/hlthinstypes.html>

### Quick Facts 2010

- VA - The VA provides medical assistance to eligible veterans of the Armed Forces.
- State-Specific Plan - Some states have their own health insurance programs for low-income uninsured individuals. These health plans may be known by different names in different states.
- IHS is a health care program through which the Department of Health and Human Services (HHS) provides medical assistance to eligible American Indians at IHS facilities. In addition, the IHS helps pay the cost of selected health care services provided at non-IHS facilities. The Census Bureau counts people with no coverage other than access to the IHS as uninsured.

## National Health Insurance Coverage<sup>6</sup>

According to the U.S. Census Bureau, in the U.S.:

- The number of uninsured increased to 46.3 million (15.4%) in 2008, from 45.7 million (15.3%) in 2007.
- The number of people with health insurance increased to 255.1 million in 2008, up from 253.4 million in 2007.
- The number of people covered by private health insurance decreased to 201 million in 2008, down from 202 million in 2007.
- The number of people covered by government health insurance increased to 87.4 million, up from 83 million in 2007.
- The number of people covered by employment-based health insurance decreased to 176.3 million in 2008, from 177.4 million in 2007.
- The percentage of people covered by private health insurance was 66.7% in 2008, down from 67.5% in 2007.
- The percentage of people covered by employment-based health insurance decreased to 58.5% in 2008, from 59.3% in 2007.
- The percentage of people covered by government health insurance programs increased to 29% in 2008, from 27.8% in 2007.
- The percentage and the number of people covered by Medicaid increased to 14.1% and 42.6 million in 2008, from 13.2% and 39.6 million in 2007.
- The percentage and number of people covered by Medicare increased to 14.3% and 43 million in 2008, from 13.8% and 41.4 million in 2007.
- In 2008, the percentage and number of children under 18 without health insurance were 9.9% and 7.3 million, lower than they were in 2007 at 11% and 8.1 million.
- The uninsured rate and the number of uninsured children are the lowest since 1987, the first year that comparable health insurance data were collected.
- Although the uninsured rate for children in poverty decreased to 15.7% in 2008, from 17.6% in 2007, children in poverty were more likely to be uninsured than all children.
- The uninsured rate and number of uninsured for non-Hispanic Whites increased in 2008 to 10.8% and 21.3 million, from 10.4% and 20.5 million in 2007.
- The uninsured rate and number of uninsured for Blacks in 2008 were not statistically

<sup>6</sup> U.S. Census Bureau. (September 2009). Health Insurance Coverage: 2008. Retrieved October 5, 2009 from <http://www.census.gov/hhes/www/hlthins/hlthin08/hlth08asc.html>

different from 2007, at 19.1% and 7.3 million.

- The percentage of uninsured Hispanics decreased to 30.7% in 2008, from 32.1% in 2007.

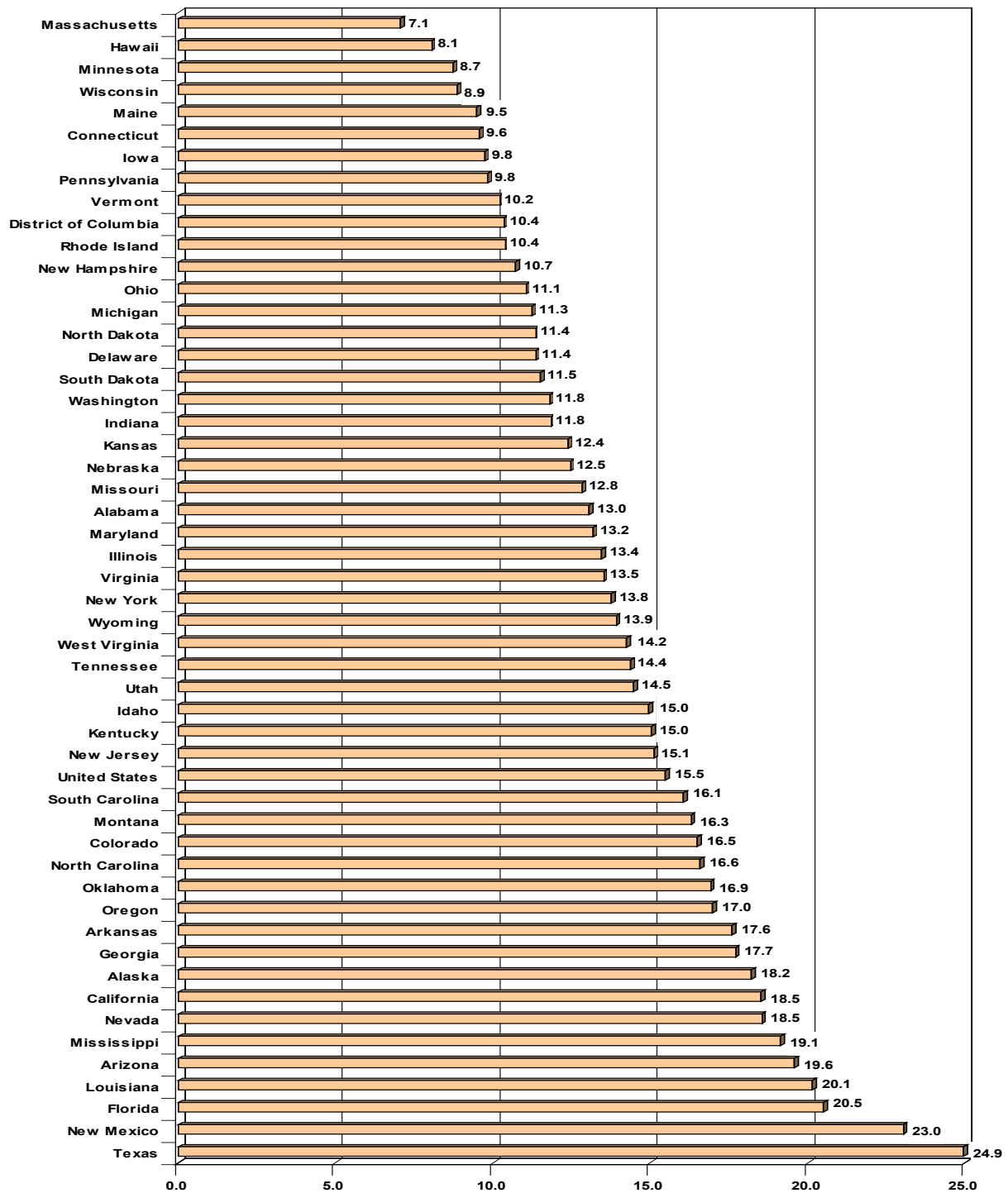
## **New Mexico Health Insurance Coverage<sup>7</sup>**

As shown on the chart on the following page, 23% of New Mexicans were uninsured in 2008. New Mexico's uninsured rate was above the national rate of 15.4% for 2008. NM had the second highest uninsured rate in the nation preceded only by Texas at 24.4%.

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<sup>7</sup> U.S. Census Bureau. (September 2009). Comparison of Uninsured Rates Between States Using 3-Year Averages: 2006 to 2008. Retrieved October 5, 2009 from <http://www.census.gov/hhes/www/hlthins/hlthin08/statecomp08.xls>

Comparison of Uninsured Rates Between States  
3-Year Average: 2006-2008



## Trends in Health Insurance Coverage

The following tables compare national and NM health insurance coverage by source of coverage from 2000 to 2008. The tables include coverage of the following populations:

- All populations;
- Children under 18 years of age; and
- All populations under 65 years of age.

**Health Insurance Coverage by Type for All People: 1999-2008<sup>1</sup>**

Year	Percent Uninsured		Percent Insured		Percent Insured by Source of Coverage									
					Private Health Insurance				Government Health Insurance				Military Health Care	
	Employment Based		Direct Purchase		Medicaid		Medicare							
	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM
2008	15.4	23.7	84.6	76.3	58.5	46.6	8.9	7.5	14.1	16.4	14.3	14.3	3.8	6.3
2007	15.3	22.5	84.7	77.5	59.3	47.9	8.9	6.1	13.2	15.8	13.8	13.0	3.7	6.0
2006	15.8	22.9	84.2	77.1	59.7	49.6	9.1	6.7	12.9	15.9	13.6	14.1	3.6	5.9
2005	15.3	20.3	84.7	79.7	60.2	51.2	9.2	6.0	13.0	17.0	13.7	15.2	3.8	5.8
2004	14.9	19.8	85.1	80.2	60.5	51.7	9.5	8.7	13.0	17.3	13.6	14.0	3.7	5.7
2003	15.1	21.9	84.9	78.1	61.0	49.1	9.3	6.1	12.4	19.3	13.7	15.0	3.5	4.8
2002	14.7	20.6	85.3	79.4	61.9	51.8	9.4	7.1	11.6	17.0	13.4	16.0	3.5	4.7
2001	14.1	20.2	85.9	79.8	63.2	50.3	9.3	7.5	11.2	17.5	13.5	16.1	3.4	4.2
2000	13.7	23.7	86.3	76.3	64.2	51.3	9.6	7.4	10.6	14.4	13.5	13.8	3.3	4.7
1999	14.0	24.1	86.0	75.9	63.9	52.1	10.0	6.8	10.3	13.4	13.3	14.5	3.1	3.9

Health Insurance Coverage by Type for Children Under 18: 1999-2008<sup>2</sup>

Year	Percent Uninsured		Percent Insured		Percent Insured by Source of Coverage									
					Private Health Insurance				Government Health Insurance				Military Health Care	
	Employment Based		Direct Purchase		Medicaid		Medicare							
	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM
2008	9.9	16.1	90.1	83.9	58.9	44.4	5.1	6.1	30.3	33.9	0.8	2.3	3.0	3.9
2007	11.0	15.5	89.0	84.5	59.5	45.2	5.3	3.1	28.1	38.2	0.7	0.6	2.8	4.0
2006	11.7	17.9	88.3	82.1	59.7	47.5	5.3	3.5	27.1	36.4	0.6	0.3	2.8	5.2
2005	10.9	20.0	89.1	80.0	60.9	48.0	5.5	1.8	26.7	37.4	0.7	0.3	3.1	3.1
2004	10.5	14.6	89.5	85.4	61.4	48.7	5.8	2.8	27.0	41.2	0.7	1.2	2.8	2.9
2003	11.0	13.2	89.0	86.8	61.6	45.7	5.3	2.2	26.4	46.0	0.7	4.2	2.7	3.9
2002	11.2	14.4	88.8	85.6	63.4	50.1	5.3	2.5	23.9	39.5	0.7	1.1	2.9	2.4
2001	11.3	14.0	88.7	86.0	64.4	46.5	5.0	4.2	22.7	41.1	0.6	1.7	3.3	1.6
2000	11.6	17.7	88.4	82.3	65.9	49.9	5.0	4.9	20.9	32.9	0.7	1.5	3.5	1.9
1999	12.5	26.1	87.5	73.9	65.2	50.0	5.7	2.2	20.3	27.8	0.5	1.8	2.9	1.1

Health Insurance Coverage by Type for Persons Under 65: 1999-2008<sup>3</sup>

Year	Percent Uninsured		Percent Insured		Percent Insured by Source of Coverage									
					Private Health Insurance				Government Health Insurance				Military Health Care	
	Employment Based		Direct Purchase		Medicaid		Medicare							
	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM	U.S.	NM
2008	17.3	26.5	82.7	73.5	61.9	48.5	6.3	5.9	14.9	17.0	2.9	3.5	3.3	5.6
2007	17.1	25.3	82.9	74.7	62.9	49.3	6.5	5.3	13.8	17.1	2.7	2.2	3.2	5.3
2006	17.8	26.0	82.2	74.0	62.9	52.0	6.6	5.7	13.4	17.0	2.5	2.6	3.0	5.6
2005	17.2	23.2	82.8	76.8	63.5	53.7	6.7	4.7	13.4	18.2	2.5	3.1	3.3	5.1
2004	16.8	22.5	83.2	77.5	63.9	53.5	6.9	6.1	13.5	18.2	2.5	2.7	3.2	5.3
2003	17.0	24.9	83.0	75.1	64.4	50.2	6.6	3.8	12.8	20.7	2.4	4.2	3.1	4.9
2002	16.6	23.6	83.4	76.4	65.7	54.6	6.6	4.4	11.9	17.9	2.3	3.5	3.1	3.5
2001	15.9	23.3	84.1	76.7	67.0	52.3	6.4	5.5	11.4	18.4	2.2	3.2	3.0	3.6
2000	15.5	26.6	84.5	73.4	68.3	53.7	6.5	5.5	10.7	15.1	2.2	3.2	3.1	3.9
1999	15.8	27.5	84.2	72.5	67.8	54.8	7.1	4.2	10.5	14.2	2.0	2.5	3.0	3.6

## MEDICAID

Medicaid is a joint state and federal program that provides medical assistance to families with dependent children and persons with disabilities who are in financial need may be eligible for Medicaid. Eligibility for Medicaid is usually determined by the Income Support Division (ISD) of the NM Human Services Department (HSD), and in some cases, by the Children, Youth and Families Department (CYFD), the Social Security Administration (SSA), or the Premium Assistance programs.

### National Medicaid Enrollment<sup>8</sup>

According to the Kaiser Commission on Medicaid and the Uninsured, at the beginning of FY09, Medicaid enrollment was projected to grow on average by 3.6% over the fiscal year. However, the worsening economy contributed to increasing poverty and an average increase in Medicaid enrollment of 5.4% for this period. In FY09 Medicaid enrollment increased in every state and the District of Columbia (DC). The 5.4% growth in FY09 was the highest rate of growth in Medicaid enrollment since 2003.

In FY10, Medicaid enrollment growth is expected to continue to accelerate. On average, the number of persons enrolled in Medicaid is projected to increase by 6.6% in FY10. This would be the highest annual rate of growth in the Medicaid caseload since the 9.3% annual increase that occurred in FY02 at the height of the last recession. Every state projects enrollment to increase in FY10.

### New Mexico Medicaid Enrollment<sup>9</sup>

As of October 5, 2009, the HSD reported that 464,942 or 23.4% of the NM population was enrolled in Medicaid. Over 67% of all Medicaid recipients in NM are under the age of 21. The following tables indicate Medicaid enrollment by county.

<sup>8</sup> The Kaiser Commission on Medicaid and the Uninsured. (September 2009). *The Crunch Continues: Medicaid Spending, Coverage and Policy in the Midst of a Recession*. Retrieved October 6, 2009 from <http://www.kff.org/medicaid/7985.cfm>.

<sup>9</sup> New Mexico Human Services Department, Medical Assistance Division. (October 2009). Medicaid Eligibility Reports. Retrieved October 16, 2009 from <http://www.hsd.state.nm.us/mad/RMedicaidEligibility.html>

## All Clients Enrolled in Medicaid by County, New Mexico, October 2009

County	Population Estimate as of 7/1/08 <sup>4</sup>	Enrollment as of 10/5/09 <sup>5</sup>	Percent of Population Enrolled
Bernalillo	635,139	128,080	20.2%
Catron	3,405	465	13.7%
Chaves	63,060	18,872	29.9%
Cibola	27,285	7,595	27.8%
Colfax	12,962	2,649	20.4%
Curry	43,755	12,182	27.8%
De Baca	1,907	466	24.4%
Dona Ana	201,603	59,628	29.6%
Eddy	51,360	13,067	25.4%
Grant	29,844	7,062	23.7%
Guadalupe	4,346	1,225	28.2%
Harding	684	63	9.2%
Hidalgo	4,910	1,221	24.9%
Lea	59,155	15,053	25.4%
Lincoln	20,793	4,078	19.6%
Los Alamos	18,150	440	2.4%
Luna	27,227	8,354	30.7%
McKinley	70,724	28,536	40.3%
Mora	5,052	988	19.6%
Otero	62,776	10,765	17.1%
Quay	8,929	2,486	27.8%
Rio Arriba	40,692	12,823	31.5%
Roosevelt	18,889	4,653	24.6%
Sandoval	122,298	22,606	18.5%
San Juan	122,500	30,529	24.9%
San Miguel	28,558	8,181	28.6%
Santa Fe	143,937	21,872	15.2%
Sierra	12,437	2,978	23.9%
Socorro	18,180	4,835	26.6%
Taos	31,546	7,305	23.2%
Torrance	16,269	5,555	34.1%
Union	3,777	798	21.1%
Valencia	72,207	19,052	26.4%
Unknown		480	
<b>New Mexico</b>	<b>1,984,356</b>	<b>464,942</b>	<b>23.4%</b>

## Children Under 21 Enrolled in Medicaid by County, New Mexico, October 2009

County	Population Estimate as of 7/1/08 <sup>6</sup>	Enrollment as of 10/5/09 <sup>7</sup>	Percent of Population Enrolled	Percent of Total Medicaid Enrollment
Bernalillo	635,139	87,215	13.7%	68.1%
Catron	3,405	273	8.0%	58.7%
Chaves	63,060	12,701	20.1%	67.3%
Cibola	27,285	5,282	19.4%	69.5%
Colfax	12,962	1,665	12.8%	62.9%
Curry	43,755	8,127	18.6%	66.7%
De Baca	1,907	278	14.6%	59.7%
Dona Ana	201,603	41,517	20.6%	69.6%
Eddy	51,360	8,635	16.8%	66.1%
Grant	29,844	4,560	15.3%	64.6%
Guadalupe	4,346	704	16.2%	57.5%
Harding	684	25	3.7%	39.7%
Hidalgo	4,910	790	16.1%	64.7%
Lea	59,155	10,785	18.2%	71.6%
Lincoln	20,793	2,817	13.5%	69.1%
Los Alamos	18,150	274	1.5%	62.3%
Luna	27,227	5,615	20.6%	67.2%
McKinley	70,724	18,065	25.5%	63.3%
Mora	5,052	469	9.3%	47.5%
Otero	62,776	7,216	11.5%	67.0%
Quay	8,929	1,500	16.8%	60.3%
Rio Arriba	40,692	8,163	20.1%	63.7%
Roosevelt	18,889	3,201	16.9%	68.8%
Sandoval	122,298	16,043	13.1%	71.0%
San Juan	122,500	20,356	16.6%	66.7%
San Miguel	28,558	4,412	15.4%	53.9%
Santa Fe	143,937	15,416	10.7%	70.5%
Sierra	12,437	1,611	13.0%	54.1%
Socorro	18,180	2,919	16.1%	60.4%
Taos	31,546	4,579	14.5%	62.7%
Torrance	16,269	3,897	24.0%	70.2%
Union	3,777	496	13.1%	62.2%
Valencia	72,207	13,054	18.1%	68.5%
Unknown		480		100.0%
<b>New Mexico</b>	<b>1,984,356</b>	<b>313,140</b>	<b>15.8%</b>	<b>67.4%</b>

## MEDICARE<sup>10</sup>

Established in 1965, Medicare provides health and financial security for individuals age 65 and older and for younger people with permanent disabilities. Prior to 1965, roughly half of all seniors lacked medical insurance; today, virtually all seniors have health insurance under Medicare. Medicare provides health insurance coverage to 45 million people – approximately 38 million people age 65 and older and another 7 million people with permanent disabilities who are under age 65. Individuals contribute payroll taxes to Medicare throughout their working lives and generally become eligible for Medicare when they reach age 65, regardless of their income or health status.

Medicare consists of the following four parts, which cover different benefits:

- Medicare Part A is the Hospital Insurance (HI) program, which covers inpatient hospital services, skilled nursing facilities, home health care, and hospice care. Part A is funded by a dedicated tax of 2.9% of earnings paid by employers and employees (1.45% each). In 2008, Part A accounted for approximately 40 % of Medicare benefit spending. An estimated 44.5 million people were enrolled in Part A in 2008.
- Medicare Part B is the Supplementary Medical Insurance (SMI) program, which helps pay for physician, outpatient, home health care, and preventive services. Part B is funded by general revenues and beneficiary premiums (\$96.40 per month in 2009). In 2008, Part B accounted for 27% of benefit spending. Medicare beneficiaries who have higher annual incomes (over \$85,000 per individual; \$170,000 per couple in 2009) pay a higher income-related monthly premium. An estimated 41.6 million people were enrolled in Part B in 2008.
- Medicare Part C is the Medicare Advantage program, which allows beneficiaries to enroll in a private plan, such as a health maintenance organization (HMO), preferred provider organization (PPO), or private fee-for-service (PFFS) plan. These plans receive payments from Medicare to provide Medicare-covered benefits, including hospital and physician services, and in most cases, prescription drug benefits. Part C is not separately financed and accounted for 21% of benefit spending in 2008. As of October 2008, 10.2 million beneficiaries were enrolled in Medicare Advantage plans.
- Medicare Part D is the outpatient prescription drug benefit delivered through private plans that contract with Medicare - either stand-alone prescription drug plans (PDPs) or Medicare Advantage prescription drug (MA-PD) plans. Part D plans are required to provide a “standard” benefit (or one that is equivalent) and may provide enhanced benefits. Individuals with modest income and assets are eligible for additional assistance with premiums and cost-sharing amounts. Part D is funded by general revenues, beneficiary premiums, and state payments, and accounted for 11 % of benefit spending in 2008. As of October 2008, nearly 26 million beneficiaries were enrolled in a Part D plan. Of this total, two-thirds (67%) were enrolled in PDPs. This includes more than 6 million dual eligibles, (individuals who are entitled to Medicare Part A and/or Part B and are eligible for some form of

10 The Henry J. Kaiser Family Foundation. (January 2009). Medicare: A Primer. Retrieved October 19, 2009 from <http://www.kff.org/medicare/upload/7615-02.pdf>

Medicaid benefit), many of whom were automatically enrolled in PDPs. Almost a quarter of all Medicare beneficiaries (10.2 million) continue to receive prescription drug coverage from an employer or union plan. As of January 2008, approximately 1 in 10 beneficiaries lack a known source of creditable drug coverage.

## Characteristics of Medicare Beneficiaries in the United States<sup>11</sup>

Medicare covers a population with diverse needs and circumstances. According to the Henry J. Kaiser Family Foundation:

- Nearly half of all Medicare beneficiaries (46%) have an income below 200% of poverty, and 16% have an income below 100% of the poverty level.
- More than one-third (38%) of all Medicare beneficiaries live with three or more chronic conditions. Among the most common conditions are hypertension and arthritis.
- More than a quarter (29%) of all Medicare beneficiaries have a cognitive or mental impairment that limits their ability to function independently. Approximately 17% of beneficiaries have multiple functional limitations (two or more limitations in activities of daily living such as eating or bathing).
- The majority of the Medicare population is age 65 and over; however, 16% are under age 65 and permanently disabled. About 40% of these individuals are dually eligible for both Medicare and Medicaid.
- Most Medicare beneficiaries live at home; however, 5% live in long-term care settings such as nursing homes or assisted living facilities. Two-thirds of beneficiaries living in long-term care settings are women.

## New Mexico Medicare Enrollment

The following table indicates the number of beneficiaries enrolled in the Medicare program by county in FY09. Sierra County had the highest proportionate percentage of Medicare enrollment (32.6%) while McKinley County had the lowest (11.7%). Approximately 313,329 or 15.8 % of New Mexicans were enrolled in the Medicare program as of June 30, 2009.

11 The Henry J. Kaiser Family Foundation. (January 2009). Medicare: A Primer. Retrieved October 19, 2009 from <http://www.kff.org/medicare/upload/7615-02.pdf>

## Medicare Enrollment by County and Entitlement, New Mexico, July 1, 2008 to June 30, 2009

County	Population Estimate as of 7/1/08 <sup>8</sup>	Part A and/or Part B <sup>9</sup>	Part A <sup>10</sup>	Part B <sup>11</sup>	Part A and/or Part B Enrollees as Percent of Population
Bernalillo	635,139	95,693	94,560	87,182	15.1%
Catron	3,405	1,050	1,046	953	30.8%
Chaves	63,060	11,468	11,333	10,946	18.2%
Cibola	27,285	3,406	3,362	3,056	12.5%
Colfax	12,962	3,043	3,027	2,889	23.5%
Curry	43,755	6,927	6,869	6,601	15.8%
De Baca	1,907	542	538	527	28.4%
Dona Ana	201,603	29,561	28,919	27,844	14.7%
Eddy	51,360	9,303	9,219	8,932	18.1%
Grant	29,844	7,202	7,148	6,883	24.1%
Guadalupe	4,346	906	875	865	20.8%
Harding	684	207	205	195	30.3%
Hidalgo	4,910	971	967	916	19.8%
Lea	59,155	8,292	8,160	7,952	14.0%
Lincoln	20,793	4,701	4,679	4,474	22.6%
Los Alamos	18,150	2,716	2,707	2,529	15.0%
Luna	27,227	6,021	5,898	5,717	22.1%
McKinley	70,724	8,267	7,744	7,154	11.7%
Mora	5,052	1,121	1,097	1,040	22.2%
Otero	62,776	10,065	9,989	9,494	16.0%
Quay	8,929	2,306	2,292	2,186	25.8%
Rio Arriba	40,692	6,872	6,759	6,296	16.9%
Roosevelt	18,889	2,758	2,724	2,641	14.6%
Sandoval	122,298	16,036	15,823	14,665	13.1%
San Juan	122,500	16,135	15,858	14,895	13.2%
San Miguel	28,558	5,713	5,566	5,318	20.0%
Santa Fe	143,937	23,844	23,635	22,009	16.6%
Sierra	12,437	4,060	4,039	3,817	32.6%
Socorro	18,180	2,750	2,689	2,529	15.1%
Taos	31,546	6,090	5,996	5,671	19.3%
Torrance	16,269	2,461	2,442	2,221	15.1%
Union	3,777	908	898	864	24.0%
Valencia	72,207	11,782	11,677	10,678	16.3%
Unknown		152	151	140	
<b>New Mexico</b>	<b>1,984,356</b>	<b>313,329</b>	<b>308,891</b>	<b>290,079</b>	<b>15.8%</b>

The majority of Medicare beneficiaries are aged 65-69, representing 25.09% of beneficiaries. The following table indicates the number of beneficiaries enrolled in the NM Medicare program by age group.

**Medicare Enrollment by Age Group and Entitlement, New Mexico,  
July 1, 2008 to June 30, 2009<sup>12</sup>**

Age Group	Part A and/ or Part B	Part A	Part B	Part A and Part B	Part A and/or Part B Enrollment as Percent of Total Enrollment
0-18	18	18	17	17	0.01%
19-24	902	902	862	862	0.29%
25-29	1,886	1,886	1,757	1,757	0.60%
30-34	2,395	2,395	2,206	2,206	0.76%
35-39	3,174	3,174	2,915	2,915	1.01%
40-44	4,771	4,770	4,353	4,352	1.52%
45-49	7,339	7,337	6,638	6,636	2.34%
50-54	9,596	9,596	8,640	8,640	3.06%
55-59	11,898	11,897	10,518	10,517	3.80%
60-64	13,850	13,850	12,169	12,169	4.42%
65-69	78,629	77,754	68,978	68,103	25.09%
70-74	61,661	60,604	58,430	57,373	19.68%
75-79	47,862	46,916	45,778	44,832	15.28%
80-84	34,995	34,210	33,894	33,109	11.17%
85-89	21,856	21,390	21,314	20,848	6.98%
90+	12,497	12,192	11,610	11,305	3.99%
<b>Total</b>	<b>313,329</b>	<b>308,891</b>	<b>290,079</b>	<b>285,641</b>	<b>100.00%</b>



# ***CHILD & ADOLESCENT HEALTH***





## ASTHMA

Asthma is a chronic inflammatory disease of the airways characterized by wheezing, coughing, breathlessness, and chest tightness. Asthma symptoms can be triggered by allergens (substances that cause an allergic response) or irritants (substances that irritate the nose or airways provoking asthma symptoms), such as animal dander, air pollution, pollen, exercise, cold air, or stress.<sup>12</sup> Although there is no cure for asthma, it can be controlled. Asthma is the most common long-term disease of children; however, adults may also experience the disease long-term.<sup>13</sup>

According to the Centers for Disease Control and Prevention (CDC), in 2008:<sup>14</sup>

- 16.4 million American adults had asthma.
- 7 million American children had asthma.
- 10.6 million visits to office-based physicians regarding asthma-related symptoms.
- 444,000 hospital discharges with asthma as the first-listed diagnosis.
- 3.2 days was the average length of stay for asthma diagnosis.
- 3,613 deaths occurred as a result of asthma (rate of 1.2 per 100,000 population).

### Children with Asthma in the United States<sup>15</sup>

Asthma is one of the leading chronic health conditions among children in the U.S. In 2007, 5.6 million school-aged children and youth (5-17 years old) were reported to currently have asthma; and 2.9 million had an asthma episode or attack within the previous year. On average, in a classroom of 30 children, about three are likely to have asthma.

- Asthma is one of the leading causes of school absenteeism. In 2003, an estimated 12.8 million school days were missed due to asthma among the more than 4 million children who reported at least one asthma attack in the preceding year.
- Low-income populations, minorities, and children living in inner cities experience more emergency department visits, hospitalizations, and deaths due to asthma than the general population
- Estimates from 2005-2007 indicate that Puerto Rican and Non-Hispanic Black children had higher prevalence rates compared to non-Hispanic White children.
  - Puerto Rican – 15.6%
  - Non-Hispanic Black – 9.4%
  - Non-Hispanic White – 7.7%
- The estimated cost of treating asthma in those under 18 is \$3.2 billion per year.
- Asthma is the third-ranking cause of hospitalization among children under 15.
- Asthma attacks, also referred to as episodes, can be caused by tobacco smoke,

<sup>12</sup> Centers for Disease Control and Prevention. (n.d.). *Health effects: Asthma*. Atlanta, GA: National Environmental Public Health Tracking Network. Retrieved November 25, 2009 from <http://ephtracking.cdc.gov/showAsthmaEnv.action>

<sup>13</sup> Centers for Disease Control and Prevention. (2007). *National asthma control program: America breathing easier 2007* NCEH Publication No. 99-8923). Atlanta, Georgia: National Center for Environmental Health. Retrieved November 25, 2009 from <http://www.cdc.gov/asthma/pdfs/aag07.pdf>

<sup>14</sup> Centers for Disease Control and Prevention. (2009) *Asthma: FastStats* (updated, May 15). Atlanta, GA. Retrieved November 25, 2009 from <http://www.cdc.gov/nchs/fastats/asthma.htm>

<sup>15</sup> Centers for Disease Control and Prevention. (2009). *Healthy Youth! Health Topics: Asthma* (updated, August 14). Atlanta, GA. Retrieved November 25, 2009 from <http://www.cdc.gov/HealthyYouth/asthma/>

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dust mites, furred and feathered animals, certain molds, chemicals, and strong odors.

- Asthma can be controlled with proper diagnosis, appropriate asthma care, and management activities.

## Children with Asthma in New Mexico<sup>16</sup>

Asthma is a leading cause of missed school days, emergency department visits, and hospital admissions in NM. While asthma affects people of all ages, it disproportionately affects young people. Approximately 64,000 children in NM currently have asthma. Asthma prevalence rates did not differ significantly by region; however, the state's southeast region had significantly higher asthma hospital inpatient discharge rates and emergency department discharge rates (see below).

### Asthma Hospitalizations

The primary asthma hospitalization rate for 2004-2006 for ages under 15 in NM was 21.7 per 10,000 population. All NM regional rates were below the state rate except for the southeast region, where the rate was more than twice the state rate at 58. The southeast region includes: Harding, Quay, Curry, DeBaca, Roosevelt, Chaves, Lea, and Eddy counties. All other state regions had rates ranging from 12.5 to 19.1.

- The highest hospitalization rate was in Lea County with a rate of 118.2 discharges per 10,000 population, which is more than five times higher than the state rate of 21.7.
- Curry County has the second highest rate at 63.3, followed by Eddy County (46.5) and Roosevelt County (42.9).
- Other counties with high rates include: McKinley County (38.2), Taos County (33.1), and San Juan County (26.8).
- The southeast region also had the highest rate of asthma hospitalizations among all other age groups.

The average number of primary asthma hospital discharges per person for those under age 15 in NM from 2001 through 2006 was 1.3 discharges per person. This number was significantly higher in the state's southeast region (1.4), meaning that this region had more repeat hospital visits compared to all others.

- The state's southwest region had a significantly lower average number of discharges per person (1.2) compared to the state number.
- The average length of stay for a primary asthma hospitalization for those under 15 in NM was 2.4 days.

16 Whorton, B. (2009). High child asthma rates in southeastern New Mexico. *New Mexico Epidemiology*, 2009(4), 1-4. Retrieved November 25, 2009 from [http://www.health.state.nm.us/ERD/HealthData/Asthma/Epi%20Report%2003\\_17\\_2009.pdf](http://www.health.state.nm.us/ERD/HealthData/Asthma/Epi%20Report%2003_17_2009.pdf)

## Asthma Emergency Department Visits

The state's primary asthma emergency room discharge rate for those under 15 was 45.4 per 10,000 population. The southeast region rate (89.1) was approximately two times higher than the state rate, while the northwest and northeast regions as well as Bernalillo County had rates that ranged from 35 to 39.4. The rate for the state's southwest region (45.9) was similar to the state's rate.

Five of the top seven counties for asthma emergency department rates for those under 15 years were in southeastern NM:

- Roosevelt County had the highest rate (144), which was three times higher than the state rate;
- Quay County had a rate of 135.6;
- Socorro County had a rate of 104.2;
- Eddy County had a rate of 95.3;
- Otero County had a rate of 80.1; and
- Lea County had a rate of 76.3.

## YOUTH ALCOHOL AND DRUG USE<sup>17</sup>

According to the CDC, alcohol is used by more young people in the U.S. than tobacco or illicit drugs. Excessive alcohol consumption is associated with approximately 75,000 deaths per year. Alcohol is a factor in approximately 41% of all deaths from motor vehicle crashes. Among youth, the use of alcohol and other drugs has also been linked to unintentional injuries, physical fights, academic and occupational problems, and illegal behavior. Long-term alcohol misuse is associated with liver disease, cancer, cardiovascular disease, and neurological damage as well as psychiatric problems such as depression, anxiety, and antisocial personality disorder.

The Youth Risk Behavior Surveillance System (YRBSS) monitors priority health-risk behaviors among youth and young adults. The YRBSS includes a national school-based survey (Youth Risk Behavior Survey) conducted by the CDC and state, territorial, tribal, and local surveys conducted by state, territorial, and local education and health agencies and tribal governments.

The CDC indicates that marijuana is the most commonly used illicit drug among youth in the U.S. Current marijuana use decreased from 27% in 1999 to 20% in 2007. Current cocaine use increased from 2% in 1991 to 4% in 2001 and then remained steady from 2001 (4%) to 2007 (3%). Lifetime (ever in lifetime) inhalant use decreased from 20% in 1995 to 12% in 2003 and then remained steady from 2003 (12%) to 2007 (13%). Lifetime use of ecstasy among high school students decreased from 11% in 2003 to 6% in 2007. Lifetime use of methamphetamines decreased from 9% in 1999 to 4% in 2007. Lifetime heroin use did not change from 1999 (2.0%) to 2007 (2%). Hallucinogenic drug

<sup>17</sup> Centers for Disease Control and Prevention (2008, August). *Health topics: Alcohol and drug use*. Retrieved November 6, 2009 from <http://www.cdc.gov/HealthyYouth/alcoholdrug/index.htm>

use decreased from 13% in 2001 to 8% in 2007.

While illicit drug use has declined among youth, rates of non-medical use of prescription and over-the-counter (OTC) medication remain high. Prescription medications most commonly abused by youth include pain relievers, tranquilizers, stimulants, and depressants. In 2006, 2.1 million teens abused prescription drugs. Research has also found that teens misuse OTC cough and cold medications, which contain the cough suppressant dextromethorphan (DXM).

## Alcohol Use among Youth in the United States

The 2007 YRBS indicates the following alcohol use among U.S. youth:<sup>18</sup>

- 75% had at least one drink of alcohol on at least one day during their life;
- 44.7% had at least one drink of alcohol on at least one day during the 30 days before the survey;
- 26% had five or more drinks of alcohol in a row or within a few hours (binge drinking) on at least one day during the 30 days before the survey;
- 23.8% drank alcohol (other than a few sips) for the first time before age 13;
- 5.2% who currently drank alcohol obtained the alcohol by buying it from a store; and
- 4.1% drank at least one drink of alcohol on school property on at least one day during the 30 days before the survey.

## Marijuana Use among Youth in the United States

The 2007 YRBS indicates the following marijuana use among U.S. youth:<sup>19</sup>

- 38.1% used marijuana one or more times during their life;
- 19.7% used marijuana one or more times during the 30 days before the survey;
- 8.3% tried marijuana for the first time before age 13; and
- 4.5% used marijuana on school property one or more times during the 30 days before the study.

## Other Drug Use among Youth in the United States

The 2007 YRBS indicates the following drug use among U.S. youth:<sup>20</sup>

- 7.2% used any form of cocaine, including powder, crack, or freebase one or more times during their life;
- 3.3% used any form of cocaine one or more times during the 30 days before the

18 Centers for Disease Control and Prevention (2008, June). Youth Risk Behaviors Surveillance System. *Youth online: Comprehensive results, Alcohol and Other Drug Use* [data file]. Retrieved November 6, 2009 from <http://apps.nccd.cdc.gov/yrbss/CategoryQuestions.asp?Cat=3&desc=Alcohol and Other Drug Use>

19 Centers for Disease Control and Prevention (2008, June). Youth Risk Behaviors Surveillance System. *Youth online: Comprehensive results, Alcohol and Other Drug Use* [data file]. Retrieved November 6, 2009 from <http://apps.nccd.cdc.gov/yrbss/CategoryQuestions.asp?Cat=3&desc=Alcohol and Other Drug Use>

20 Ibid.

survey;

- 13.3% sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life;
- 2.3% used heroin one or more times during their life;
- 4.4% used methamphetamines one or more times during their life;
- 5.8% used ecstasy one or more times during their life;
- 3.9% took steroid pills or shots without a doctor's prescription one or more times during their life;
- 2% of students used a needle to inject any illegal drug into their body one or more times during their life; and
- 22.3% of students were offered, sold or given an illegal drug by someone on school property during the 12 months before the survey.

## Alcohol Use among Youth in New Mexico<sup>21</sup>

The following statistical information is provided by the DOH 2007 NM Youth Risk and Resiliency Survey (YRRS).

- The prevalence of lifetime alcohol use increased by grade level from 35.3% (6<sup>th</sup> grade) to 55.5% (8<sup>th</sup> grade); and from 61.7% (9<sup>th</sup> grade) to 76.6% (11<sup>th</sup> grade) and 75% (12<sup>th</sup> grade).
  - This represents a 57% increase in prevalence from 6<sup>th</sup> to 8<sup>th</sup> grade, and a 24% increase in prevalence from 9<sup>th</sup> to 11<sup>th</sup> grade.
  - The greatest increase in prevalence from one grade to the next grade was from 6<sup>th</sup> (35.3%) to 7<sup>th</sup> (49.4%) grade.
- There was an 87% increase in the prevalence of current drinking (alcohol use within the past 30 days) by grade level from 6<sup>th</sup> (15.6%) to 8<sup>th</sup> grade (29.2%), and a 28% increase from 9<sup>th</sup> (31.5%) to 12<sup>th</sup> grade (49%).
  - The greatest difference in prevalence between consecutive grades was from 6<sup>th</sup> (15.6%) to 7<sup>th</sup> (24.9%).
- The prevalence of binge drinking (5 or more drinks in a row or within a couple of hours, within the past 30 days) increased by 114% over the middle school years, 6<sup>th</sup> (9%), and 8<sup>th</sup> (19.3%) grade and by 47% over the high school years, 9<sup>th</sup> (21.3%), and 12<sup>th</sup> (31.4%) grade.
  - The greatest increase in prevalence between consecutive grades was from 6<sup>th</sup> to 7<sup>th</sup> grade (16.1%).

## Marijuana Use among Youth in New Mexico<sup>22</sup>

The following statistical information is provided by the DOH 2007 YRRS.

- Lifetime marijuana use increased in prevalence by 112% over the middle school years, from 13.9% for 6<sup>th</sup> grade and 29.4% for 8<sup>th</sup> grade. The prevalence increased

<sup>21</sup> Green, D. (2009, May). Alcohol, tobacco, and drug use by grade level among middle school and high school students in the 2007 New Mexico youth risk and resiliency survey (YRRS). *New Mexico Epidemiology*, 2009(5), 1-4. Retrieved November 6, 2009 from <http://nmhealth.org/epi/pdf/ER%20YRRS%20050809.pdf>

<sup>22</sup> Ibid.

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by 27% over the high school years, from 41.5% for 9<sup>th</sup> grade and 52.5% for 12<sup>th</sup> grade.

- The greatest increase from one grade to the next was from 8<sup>th</sup> to 9<sup>th</sup> grade (12.1%).
- There was an 89% increase in current marijuana use (use within the past 30 days) by grade level from 6<sup>th</sup> (8.9%) to 8<sup>th</sup> grade (16.8%), and a 15% increase in prevalence from 9<sup>th</sup> (22.6%) to 11<sup>th</sup> (25.9%) grade. The prevalence for 12<sup>th</sup> grade (25.4%) was slightly lower than for 11<sup>th</sup> grade (25.9%).
  - The greatest increase in prevalence from one grade to the next was from 8<sup>th</sup> (16.8%) to 9<sup>th</sup> grade (22.6%).

## Other Drug Use among Youth in New Mexico<sup>23</sup>

The following statistical information is provided by the DOH 2007 YRRS.

- The prevalence of lifetime cocaine use increased by 84% between 6<sup>th</sup> and 8<sup>th</sup> grades (from 3.2% to 5.9%) and by 68% from 9<sup>th</sup> to 11<sup>th</sup> grades (from 9% to 15.1%). The prevalence in 12<sup>th</sup> grade was 13.6%.
  - The greatest increase in prevalence from one grade to the next was from 10<sup>th</sup> to 11<sup>th</sup> grade.

## YOUTH SUICIDE

### Youth Suicide in the United States

In 2006, suicide was the third leading cause of death for individuals 10 to 24 years of age.

- There were 4,405 deaths by suicide.
- Firearms was the most common means of suicide (46.3%) followed by suffocation (37.4%) and poisoning (8%).
- Suicide rates for children and adolescents increased with age:
  - 216 deaths by suicide for individuals 10 to 14 years of age;
  - 1,555 deaths by suicide for individuals 15 to 19 years of age; and
  - 2,634 deaths by suicide for individuals 20 to 24 years of age.
- Females attempted suicide more often than males; however, males were more successful at suicide completion.
  - 3,679 males aged 10 to 24 years died by suicide; and
  - 726 females aged 10 to 24 years died by suicide.

23 Green, D. (2009, May). Alcohol, tobacco, and drug use by grade level among middle school and high school students in the 2007 New Mexico youth risk and resiliency survey (YRRS). *New Mexico Epidemiology*, 2009(5), 1-4. Retrieved November 6, 2009 from <http://nmhealth.org/epi/pdf/ER%20YRRS%20050809.pdf>

## Suicide-Related Behaviors among United States High School Students<sup>24</sup>

In 2007, high school students in grades 9<sup>th</sup> – 12<sup>th</sup> participated in a national YRRS. The following are the suicidal-related behaviors among U.S. high school students:

- Approximately 14.5% of students indicated that they had seriously considered suicide in the previous 12 months (18.7% of females and 10.3% of males).
- 6.9% of students reported that they had actually attempted suicide one or more times in the previous 12 months (9.3% of females and 4.6% of males).
- 2% of students reported making at least one suicide attempt in the previous 12 months that required medical attention (2.4% of females and 1.5% of males).
- Hispanic females reported a higher percentage of suicide attempts (14%) than White, non-Hispanic females (7.7%) or Black, non-Hispanic females (9.9%).

## Youth Suicide in New Mexico<sup>25</sup>

NM youth suicide trends are similar to national trends. In 2006, suicide was the second leading cause of death for individuals 10 to 24 years of age.

- There were 68 deaths by suicide.
- Firearms was the most common means of suicide (52.9%) followed by suffocation (29.4%) and poisoning (13.2%).
- Suicide rates for children and adolescents increased with age:
  - 3 deaths by suicide for individuals 10 to 14 years of age;
  - 30 deaths by suicide for individuals 15 to 19 years of age; and
  - 35 deaths by suicide for individuals 20 to 24 years of age.
- Females attempted suicide more often than males; however, males were more successful at suicide completion.
  - 57 males aged 10 to 24 years died by suicide; and
  - 11 females aged 10 to 24 years died by suicide.
- Suicide rates for American Indian youth are two times higher than suicide rates for White, Black, and Asian/Pacific Islander youth.
  - The American Indian youth suicide rate was 2.6 per 1,000.
  - The Asian/Pacific Islander youth suicide rate was 1.83 per 1,000.
  - The White youth suicide rate was 1.48 per 1,000.
  - The Black youth suicide rate was 1.38 per 1,000.

NOTE: Suicide rates were derived using 2006 U.S. projected population estimates from the University of NM, Bureau of Business and Economic Research (BBER) and 2006 NM suicide counts for 10 to 24 year olds from the CDC.

<sup>24</sup> Centers for Disease Control and Prevention (2008, June 6). Youth risk behavior surveillance – U.S. 2007. *Morbidity and Mortality Weekly Report*, 57(SS-4), 1-136. Retrieved October 15, 2009 from [http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07\\_mmwr.pdf](http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07_mmwr.pdf)

<sup>25</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS) New Mexico Fatal Injuries: Leading Causes of Death Reports, Data 2006. Retrieved October 15, 2009 from <http://webappa.cdc.gov/sasweb/ncipc/leadcaus10.html>

## Suicide-Related Behaviors among New Mexico High School Students<sup>26</sup>

In 2007, high school students in grades 9<sup>th</sup> – 12<sup>th</sup> participated in a statewide YRRS. The following are the suicidal-related behaviors among NM high school students:

- Approximately 19.3% of students indicated that they had seriously considered suicide in the previous 12 months (23% of females and 15.4% of males).
- 14.3% of students reported that they had actually attempted suicide one or more times in the previous 12 months (15.2% of females and 13.3% of males).
- 4.8% of students reported making at least one suicide attempt in the previous 12 months that required medical attention (4.9% of females and 4.7% of males).
- Approximately 15.1% of students made a suicide plan within the past 12 months (17% of females and 13% of males).

## TEEN PREGNANCY

### Teen Pregnancy in the United States<sup>27</sup>

In 2007, there were 445,045 births to mothers aged 15 to 19 years in the U.S., a birth rate of 42.5 per 1,000 women in this age group. The majority of teen births are unintended (occurred sooner than desired or were not wanted at any time). Nearly two thirds of mothers under the age of 18 years and more than half of mothers aged 18 to 19 years have unintended pregnancies.<sup>28</sup> In the U.S., teen pregnancy, birth, and abortion rates are considerably higher than most other developed countries.<sup>29</sup>

The birth rate for U.S. teenagers rose approximately 1% in 2007 (preliminary data). The rate in 2007 was 42.5 births per 1,000 teenagers 15 to 19 years, up from 41.9 in 2006 and 40.5 in 2005. The teenage birth rate increased 5% between 2005 and 2007, with most of the increase occurring from 2005 to 2006. The recent increases have interrupted the 34% decline that extended from the peak in 1991 to 2005.

- Among teenagers (under 20 years of age), the birth rate for the youngest group, 10 to 14 years of age, was unchanged at 0.6 births per 1,000. The number of births to this age group decrease by 3%, reflecting the declining number of females aged 10 to 14 years.
- The birth rate for teenagers 15 to 17 years of age increased about 1% to 22.2 per 1,000. This rate rose 4% from 2005–2007, interrupting the 45% decline reported for 1991–2005. The number of infants born to this age group rose to 140,640 in 2007, up 1% from 2006 and 5% from 2005.

<sup>26</sup> Centers for Disease Control and Prevention (2008, June 6). Youth risk behavior surveillance – U.S. 2007. *Morbidity and Mortality Weekly Report*, 57(SS-4), 1-136. Retrieved October 15, 2009 from [http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07\\_mmr.pdf](http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07_mmr.pdf)

<sup>27</sup> Hamilton, B.E., Martin, J.A., & Ventura, S.J. (2009, March). Births: Preliminary data for 2007. *National Vital Statistics Reports* 57(12), 1-23. Hyattsville, MD: National Center for Health Statistics. Retrieved November 18, 2009 from [http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\\_12.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_12.pdf)

<sup>28</sup> Centers for Disease Control and Prevention. (2009). *Preventing teen pregnancy: An update in 2009* (updated, August 10). Atlanta, GA. Retrieved November 18, 2009 from <http://www.cdc.gov/reproductivehealth/AdolescentReproHealth/AboutTP.htm>

<sup>29</sup> Ibid.

- The birth rate for older teenagers 18 to 19 years of age rose 1% in 2007, to 73.9 per 1,000 aged 18 to 19 years. The 2007 rate was 6% higher than in 2005; these increases mark a halt, at least temporarily, in the long-term decline of 26% from 1991 to 2005.
- Among race/ethnic groups, the largest single-year increase was reported for American Indian/Alaska Native (AIAN) teenagers. The birth rate for this group rose 7% during 2006–2007, to 59 per 1,000 aged 15 to 19 years. This rate increased 12% from 2005–2007. The birth rates for non-Hispanic White and Black teenagers, and Asian/Pacific Islander teenagers each increased 1 to 2%. The rate for Hispanic teenagers was the only one to decline in 2007 to 81.7 per 1,000 aged 15 to 19 years (2% less than in 2006).

### **The Economic Consequences of Teen Pregnancy in the United States<sup>30</sup>**

According to the CDC, teen pregnancy and childbearing bring substantial social and economic costs through immediate and long-term impacts on teen parents and their children. Teenage childbearing in the U.S. costs taxpayers (federal, state, and local) approximately \$9.1 billion per year. Teen mothers face higher rates of preterm birth, and their infants have higher rates of low birth weight, and infant death. The costs of teen childbearing are associated with the negative consequences that children of teen mothers face, including increased costs for health care, foster care, and incarceration.<sup>31</sup>

In a comparison with women who delay childbearing until age 20 to 21 years, teenage mothers (aged 19 and younger) are more likely to:<sup>32</sup>

- Drop out of high school.
- Be and remain single parents.

In addition, the children of teenage mothers are more likely to:<sup>33</sup>

- Score lower in math and reading into adolescence.
- Repeat a school grade.
- Be in poor health (as reported by the mother).
- Be taken to emergency rooms for care as infants.
- Be victims of abuse and neglect.
- Be placed in foster care and spend more time in foster care.
- Be incarcerated at some point during adolescence or their early 20s.

30 Centers for Disease Control and Prevention. (2009). *Preventing teen pregnancy: An update in 2009* (updated, August 10). Atlanta, GA. Retrieved November 18, 2009 from <http://www.cdc.gov/reproductivehealth/AdolescentReproHealth/AboutTP.htm>

31 The National Campaign to Prevent Teen Pregnancy. (2006). *By the numbers: The public costs of teen childbearing*. Washington, D.C.: Hoffman, S. Retrieved November 18, 2009 from [http://www.thenationalcampaign.org/costs/pdf/report/BTN\\_National\\_Report.pdf](http://www.thenationalcampaign.org/costs/pdf/report/BTN_National_Report.pdf)

32 Centers for Disease Control and Prevention. (2009). *Preventing teen pregnancy: An update in 2009* (updated, August 10). Atlanta, GA. Retrieved November 18, 2009 from <http://www.cdc.gov/reproductivehealth/AdolescentReproHealth/AboutTP.htm>

33 Ibid.

## Teen Pregnancy in New Mexico<sup>34</sup>

The NM birth rate for individuals 10 to 14 years of age decreased 10% from 2003–2007. In 2007, the birth rate for teenagers 15 to 19 years of age was 5.6% lower than the rate in 2003. The rates for teenagers 15 to 17 years of age decreased 25.4% between 1980 and 2007, from 44.1 births per 1,000 aged 15 to 17 years to 32.9 births per 1,000. Birth rates for older teenagers age 18 to 19 years decreased by 18.9% since 1980. The teen birth rate in NM is 57% higher than the national rate.<sup>35</sup>

**2007 Numbers and Rates of Births by Mother's Age, U.S. and New Mexico**

U.S.			NM		
Age	Number of Births	Rate per 1000	Age	Number of Births	Rate per 1000
10-14 Years	6,218	0.6	10-14 Years	72	0.9
15-19 Years	445,045	42.5	15-19 Years	4,721	57.7
15-17 Years	140,640	22.2	15-17 Years	1,605	32.9
18-19 Years	304,405	73.9	18-19 Years	3,116	94.3

**2007 Numbers, Rates, and Percentages of Births by Mother's Age and Race/Ethnicity, New Mexico**

Mother's Race/ Ethnicity	10-14 Years			15-17 Years			18-19 Years			15-19 Years Total		
	#	Rate per 1000	%	#	Rate per 1000	%	#	Rate per 1000	%	#	Rate per 1000	%
American Indian/ Alaska Native	6	0	0.2	695	55.9	17.7	226	30.3	5.8	469	94.4	12
Asian/Pacific Islander	0	0.3	0	16	12	3.1	4	5	0.8	12	22.3	2.4
Black	2	0.7	0.3	118	46.4	18.4	35	22.8	5.5	83	82.5	13
Hispanic	55	1.5	0.3	3,054	80.9	18.4	1,108	49.2	6.7	1,946	127.9	11.7
White	8	0.3	0.1	821	29.6	9.3	229	13.9	2.6	592	52.3	6.7
<b>Total</b>	<b>72</b>	<b>0.9</b>	<b>0.2</b>	<b>4,721</b>	<b>57.7</b>	<b>15.4</b>	<b>1,605</b>	<b>32.9</b>	<b>5.2</b>	<b>3,116</b>	<b>94.3</b>	<b>10.2</b>

Fertility rates are births to all NM mothers per 1,000 women ages 15-44. Age-specific rates are births per 1,000 women in specified age category. Rates or percents based on fewer than 20 events may be statistically unreliable and should be interpreted with caution. Percentage reflects the mother's age distribution within the racial/ethnic category.

Notes: The Hispanic category does not include American Indian, Asian or Pacific Islander or Black mothers. Other and unknown races or ages, if any, are included in the "All Races" and "All Ages" categories.

Population Source: Bureau of Business and Economic Research (BBER) Population Estimates, University of New Mexico. Released 2007. <http://www.unm.edu/~bber/>.

U.S. Data Source: CDC, National Center for Health Statistics, NVSR Vol. 57, No. 7, January 7, 2009. \*2007 U.S. data not available at time of publication. For U.S. data only, the age group 10-14 is presented as age less than 15.

<sup>34</sup> New Mexico Department of Health. (2009, October). *New Mexico selected health statistics annual report volume 1: Birth, fetal death, abortion 2007*. Santa Fe, NM: Epidemiology and Response Division and The State Center for Health Statistics Bureau of Vital Record and Health Statistics. Retrieved November 18, 2009 from [http://www.health.state.nm.us/VitRecHealthStats/documents/2007\\_AR\\_Volume1MLok\\_111209awgraphs.pdf](http://www.health.state.nm.us/VitRecHealthStats/documents/2007_AR_Volume1MLok_111209awgraphs.pdf)

<sup>35</sup> New Mexico Department of Health. (2008). *Racial and ethnic health disparities report card*. Santa Fe, NM.

## The Economic Consequences of Teen Pregnancy in New Mexico<sup>36</sup>

According to the DOH, teen pregnancy imposes costs on teenage mothers, children born to teenagers, and society. Teenage mothers can expect to earn, after tax, between \$50,000 and \$120,000 less over a lifetime compared to mothers who delay childbearing until at least age 20. Children born to teenagers in any one year earn \$100 million less over their lifetime. It is approximated that the annual extra cost of welfare services for these children is between \$1 million and \$2 million. Overall, the economic impact on society is \$170,000 for each teenage mother, for a total of nearly \$590 million for all new mothers each year in NM.

### 2007 Numbers, Rates, and Percentages of Births by Mother's Age of Mother, New Mexico Counties

County	10-14 Years			15-17 Years			18-19 Years			15-19 Years Total		
	#	Rate	%	#	Rate	%	#	Rate	%	#	Rate	%
Bernalillo	30	1.4	0.3	1,230	55.5	12.5	413	31.5	4.2	817	90	8.3
Catron	0	0	0	1	8.6	5.3	0	0	0	1	21.7	5.3
Chaves	3	1.2	0.3	200	69.3	18.3	73	43.8	6.7	127	104.1	11.6
Cibola	0	0	0	95	84.3	20.7	33	49.5	7.2	62	134.8	13.5
Colfax	1	1.9	0.6	27	53	16.3	7	22.4	4.2	20	101.5	12
Curry	2	1.1	0.2	155	82.1	18.3	62	56.1	7.3	93	118.9	11
De Baca	0	0	0	4	40.4	22.2	0	0	0	4	105.3	22.2
Dona Ana	14	1.9	0.4	632	75.1	18.3	241	49.1	7	391	111.3	11.3
Eddy	2	1	0.3	165	73.1	20.9	54	40.5	6.8	111	120.1	14.1
Grant	2	1.9	0.6	62	52.6	17.1	23	33.1	6.3	39	80.6	10.7
Guadalupe	0	0	0	10	50.3	25	3	24	7.5	7	94.6	17.5
Harding	0	0	0	0	0	0	0	0	0	0	0	0
Hidalgo	0	0	0	15	60.7	22.7	3	20.5	4.5	12	118.8	18.2
Lea	2	1	0.2	259	108.8	21.1	97	69	7.9	162	166.3	13.2
Lincoln	0	0	0	34	42.6	14.5	13	26.6	5.5	21	67.7	8.9
Los Alamos	0	0	0	9	13.2	4.8	1	2.3	0.5	8	33.6	4.3
Luna	1	0.7	0.2	115	91.8	25.3	42	54.8	9.3	73	150.2	16.1
McKinley	2	0.4	0.1	234	54	16.7	73	26.7	5.2	161	100.7	11.5
Mora	0	0	0	5	17.5	11.9	1	6.1	2.4	4	33.1	9.5
Otero	0	0	0	122	40.6	14.1	37	20.1	4.3	85	73	9.8
Quay	0	0	0	24	63.5	24.5	6	27.4	6.1	18	113.2	18.4
Rio Arriba	1	0.5	0.2	95	53.1	17.3	31	27.5	5.6	64	97.1	11.7
Roosevelt	3	4.4	0.9	65	75.3	19.8	18	38.5	5.5	47	118.7	14.3
San Juan	1	0.2	0	376	60.2	16.8	131	36.4	5.8	245	92.5	10.9
San Miguel	2	1.6	0.6	56	46.1	15.6	17	22.7	4.7	39	83.7	10.9
Sandoval	0	0	0	159	27.4	9.9	53	15.6	3.3	106	44.1	6.6
Santa Fe	1	0.2	0.1	261	53.4	14.1	87	29	4.7	174	92.5	9.4
Sierra	0	0	0	16	35.8	14.5	4	14.8	3.6	12	68.2	10.9
Socorro	2	2.5	0.8	44	56.3	18.2	18	39.2	7.4	26	80.5	10.7
Taos	1	0.9	0.3	53	46	14.1	15	21.1	4	38	86.6	10.1
Torrance	0	0	0	31	37.1	15.5	5	9.4	2.5	26	85	13
Union	0	0	0	5	23.6	12.2	1	8.1	2.4	4	4439	9.8
Valencia	2	0.6	0.2	162	48.4	15.5	43	20.9	4.1	119	92.5	11.4
<b>New Mexico</b>	<b>72</b>	<b>0.9</b>	<b>0.2</b>	<b>4,721</b>	<b>57.7</b>	<b>15.4</b>	<b>1,605</b>	<b>32.9</b>	<b>5.2</b>	<b>3,116</b>	<b>94.3</b>	<b>10.2</b>

36 New Mexico Department of Health. (n.d.). *Teen Pregnancy*. Santa Fe, NM: Family Planning Program Retrieved November 18, 2009 from [http://www.health.state.nm.us/phd/fp/teen\\_pregnancy.htm](http://www.health.state.nm.us/phd/fp/teen_pregnancy.htm)



# ***DISEASES AND CONDITIONS***





## IMMUNIZATIONS<sup>37</sup>

Vaccines prevent disease in the people that receive them and protect those that come into contact with unvaccinated individuals. Vaccines help prevent infectious diseases and can save lives. Vaccines are responsible for the control of many infectious diseases that were once common in the U.S., including polio, measles, diphtheria, pertussis (whooping cough), rubella (German measles), mumps, tetanus, and *Haemophilus influenzae* type b (Hib).

Each child is born with a full immune system composed of cells, glands, organs, and fluids that are located throughout his or her body to fight invading bacteria and viruses. The immune system recognizes germs that enter the body as “foreign” invaders, or antigens, and produces protein substances called antibodies to fight against the antigens. A normal, healthy immune system has the ability to produce millions of antibodies that protect the body from harmful antigens. Many antibodies disappear once they have destroyed the invading antigens, but the cells involved in antibody production remain and become “memory cells.” Memory cells remember the original antigen and then defend against it when the antigen attempts to re-infect a person, even after many decades. This protection is called immunity.

Vaccines contain the same antigens or parts of antigens that cause diseases, but the antigens in vaccines are either killed or greatly weakened. When they are injected into fatty tissue or muscle, vaccine antigens are not strong enough to produce the symptoms and signs of the disease, but are strong enough for the immune system to produce antibodies against them. The memory cells that remain prevent re-infection when they encounter that disease in the future. Vaccines work to safeguard children from illnesses and death caused by infectious diseases. Vaccines protect children by helping prepare their bodies to fight often serious and potentially deadly diseases.

### Vaccination Coverage among Children and Adolescents in the United States

#### Children Aged 19 to 35 Months<sup>38</sup>

*Healthy People 2010* established vaccination coverage targets of 90% for individual vaccines in the 4:3:1:3:3:1 vaccine series and 80% for the series. The vaccine series consists of:

- 4 DTaP (Diphtheria, Tetanus, and Pertussis)
- 3 Polio
- 1 MMR (Measles, Mumps, and Rubella)
- 3 Hib (*Haemophilus Influenzae* type b)

<sup>37</sup> Centers for Disease Control and Prevention. (2009). *Basics and common questions: How vaccines prevent disease* (updated, August 7). Atlanta, GA. Retrieved November 30, 2009 from <http://www.cdc.gov/vaccines/vac-gen/howvdpd.htm>

<sup>38</sup> Molinari, N., Darling, N., & McCauley, M. (2009, August 28). National, state, and local area vaccination coverage among children aged 19-35 months: U.S., 2008. *MMWR* 58(33), 921-926. Retrieved November 30, 2009 from [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5833a3.htm?s\\_cid=mm5833a3\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5833a3.htm?s_cid=mm5833a3_e)

### Quick Facts 2010

- 3 Hepatitis B
- 1 Varicella

During 2008, coverage estimates for all individual vaccines in the vaccine series exceeded 90%, except coverage with  $\geq 4$  doses of DTaP, which was 84.6%. In 2008, 4:3:1:3:3:1 series coverage was 76.1% for children aged 19 to 35 months as compared to 77.4% in 2007. Coverage with  $\geq 3$  doses of *Haemophilus influenzae* type b vaccine (Hib) decreased from 92.6% to 90.9%. National coverage for  $\geq 2$  doses of HepA was 40.4%. HepB dose coverage increased to 55.3%, compared with 53.2% in 2007. The percentage of children receiving no vaccinations by age 19 to 35 months remained at 0.6%.

Estimated vaccination coverage varied substantially among states and local areas. State coverage for the 4:3:1:3:3:1 series ranged from 59.2% (Montana) to 82.3% (Massachusetts) and among local areas from 68.5% (northern California counties) to 80.9% (Santa Clara County, California). Among states, hepatitis B dose coverage ranged from 19.1% (Vermont) to 81.4% (Arizona).

### Adolescents Aged 13 to 17 Years<sup>39</sup>

The Advisory Committee on Immunization Practices (ACIP) has recommended three newly licensed vaccines: meningococcal conjugate vaccine (MCV4; 1 dose); tetanus, diphtheria, acellular pertussis vaccine (Tdap; 1 dose); and (for girls) quadrivalent human papillomavirus vaccine (HPV4; 3 doses). ACIP also recommends that adolescents receive recommended vaccinations that were missed during childhood: measles, mumps, rubella vaccine (MMR; 2 doses); hepatitis B vaccine (HepB; 3 doses); and varicella vaccine (VAR; 2 doses).

Vaccination coverage for the three most recently recommended adolescent vaccinations and one childhood vaccination increased from 2007 to 2008:

- MCV4 (from 32.4% to 41.8%);
- Tdap (from 30.4% to 40.8%);
- $\geq 1$  dose of HPV4 (from 25.1% to 37.2%); and
- $\geq 2$  doses of VAR among those without disease history (from 18.8% to 34.1%).

Among adolescents aged 13 to 17 years:

- Vaccination coverage with  $\geq 1$  dose of tetanus, diphtheria toxoid vaccine (Td) or Tdap after age 10 years remained stable at 72.2%; however, coverage with  $\geq 1$  dose of Tdap increased from 30.4% in 2007 to 40.8% in 2008.
- Vaccination coverage with  $\geq 1$  dose of MCV4 increased from 32.4% in 2007 to 41.8% in 2008.
- Vaccination coverage for HPV4, 37.2% of adolescent females had initiated the vaccination series ( $\geq 1$  dose) in 2008, compared with 25.1% in 2007, and 17.9%

39 Stokley, S., Dorell, C., & Yankey, D. (2009, September 18). National, state, and local area vaccination coverage among adolescents aged 13-17 years: U.S., 2008. *MMWR* 58(36), 997-1001. Retrieved November 30, 2009 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5836a2.htm>

of females had received  $\geq 3$  doses. Among adolescent females who initiated the HPV4 series, 79.4% had received their first dose (at least 24 weeks before the interview date – the minimum period in which to complete the series); of these, 59.6% had received  $\geq 3$  doses.

- Vaccination coverage with  $\geq 2$  doses of MMR and  $\geq 3$  doses of HepB remained steady compared with 2007.
- Fewer adolescents had a reported history of varicella disease in 2008 (59.8%) compared with 2007 (65.8%), and more adolescents had received  $\geq 1$  dose and  $\geq 2$  doses of VAR.

For the first time, the *Healthy People 2010* target of 90% coverage among adolescents aged 13 to 15 years was met for MMR and HepB.

## Vaccination Coverage among Children in New Mexico<sup>40</sup>

### Children Aged 19 to 35 Months

During 2008, coverage estimates for all individual vaccines in the vaccine series exceeded 90%, except coverage with  $\geq 4$  doses of DTaP (82.5%) and  $\geq 1$  doses of VAR (89.3%). In 2008, 4:3:1:3:3:1 series coverage was 77% for children aged 19 to 35 months.

The following are the 2008 vaccination coverage estimates for NM:

- 82.5% for vaccination coverage with  $\geq 4$  doses of DTaP.
- 91.3% for vaccination coverage with  $\geq 3$  doses of Polio.
- 90.6% for vaccination coverage with  $\geq 1$  doses of MMR.
- 89% for vaccination coverage with  $\geq 3$  doses of Hib.
- 91.3% for vaccination coverage with  $\geq 3$  doses of HepB.
- 89.3% for vaccination coverage with  $\geq 1$  doses of VAR.

## INFLUENZA<sup>41 42</sup>

According to the CDC, influenza (the flu) is a contagious respiratory illness caused by influenza viruses. There are three types of influenza viruses: A, B and C. Human influenza A and B viruses cause seasonal epidemics of disease in the U.S. each year. Influenza type C infections cause a mild respiratory illness and are not thought to cause epidemics. The emergence of a new and very different influenza virus that infects people can cause an influenza pandemic.

Influenza A viruses are divided into subtypes based on two proteins on the surface of the virus: the hemagglutinin (H) and the neuraminidase (N). There are 16 different

40 Centers for Disease Control and Prevention. (updated, 2009, October 2). *2008 table data: Coverage with individual vaccines and vaccination series* [Data file]. Retrieved November 30, 2009 from [http://www.cdc.gov/vaccines/stats-surv/nis/data/tables\\_2008.htm](http://www.cdc.gov/vaccines/stats-surv/nis/data/tables_2008.htm)

41 Centers for Disease Control and Prevention. (2009). *Seasonal influenza: The disease* (updated, September 8). Atlanta, GA. Retrieved November 16, 2009 from <http://www.cdc.gov/flu/about/disease/>

42 Centers for Disease Control and Prevention. (2009). *Types of influenza viruses* (updated, August 26). Atlanta, GA. Retrieved November 16, 2009 from <http://www.cdc.gov/flu/about/viruses/types.htm>

hemagglutinin subtypes and nine different neuraminidase subtypes. Influenza A viruses can be further broken down into different strains. Recurrent outbreaks of influenza A viruses result from periodic antigenic shifts in the two outer membrane glycoproteins (H and N) of the virus (i.e., from H1N1 to H2N2 in 1957 and from H2N2 to H3N2 in 1968); thus, introducing a new virus into a population that has no protective serum antibody.<sup>43</sup>

For example, H5N1 (Bird) flu is an influenza A virus subtype that is highly contagious among birds. Rare human infections with the H5N1 (Bird) flu virus have occurred. The CDC notes that the majority of confirmed cases have occurred in Asia, Africa, the Pacific, Europe, and the Near East.<sup>44</sup> Currently, the U.S. has no confirmed human H5N1 (Bird) flu infections.

Current subtypes of influenza A viruses found in people are influenza A (H1N1) and influenza A (H3N2) viruses. In the spring of 2009, a new influenza A (H1N1) virus emerged to cause illness in people. This new virus was first detected in people in the U.S. in April 2009. The new 2009 H1N1 virus is very different from regular human influenza A (H1N1) viruses and it has caused an influenza pandemic. 2009 H1N1 was originally referred to as the “swine flu” as a result of laboratory tests showing that many of the genes in this new virus were very similar to influenza viruses that normally occur among pigs (swine) in North America. However, further study has shown that this new virus is significantly different from what normally circulates in North American pigs. It has two genes from flu viruses that normally circulate among pigs in Europe and Asia, and bird (avian) genes and human genes. Scientists refer to this as a “quadruple reassortant” virus.

Influenza B viruses are not divided into subtypes; however, influenza B viruses can be further broken down into different strains. Influenza B viruses cause the same spectrum of disease as influenza A; however, influenza B viruses do not cause pandemics. This property may be a consequence of the limited host range of the virus (humans and seals), which limits the generation of new strains by reassortment.<sup>45</sup> The virus causes significant morbidity. For example, in 2008, approximately one-third of all laboratory confirmed cases of influenza in the U.S. were caused by influenza B.<sup>46</sup> Consequently, the seasonal trivalent influenza vaccine contains an influenza B virus component.

Influenza is spread from person-to-person and can cause mild to severe illness, and in some cases, can lead to death. Certain sectors of the population, such as those age 65 and older, children younger than two years of age, and individuals with chronic medical conditions (i.e., asthma, diabetes, or heart disease), are at higher risk for serious complications from seasonal flu illness.

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43 Small, P.A. & Bender, B.S. (2001). *Influenza A to B* (updated, December 11). Gainesville, FL: University of Florida. Retrieved November 20, 2009 from <http://cme.ufl.edu/media/flu/index.html>

44 Flu.gov.(n.d.). *About the flu*. Washington, DC. Retrieved November 16, 2009 from <http://pandemicflu.gov/individualfamily/about/index.html>

45 Racaniello, V. (2009, September 22). *The A, B, and C influenza virus*. New York, NY. Retrieved November 20, 2009 from <http://www.virology.ws/2009/09/22/the-a-b-and-c-of-influenza-virus/>

46 Ibid.

Each year in the U.S.:

- Approximately 5% to 20% of the population gets the flu;
- More than 200,000 individuals are hospitalized from flu-related complications; and
- About 36,000 people die from flu-related causes.

## 2009-2010 Seasonal Influenza<sup>47</sup>

In the U.S., yearly outbreaks of seasonal flu usually occur from late fall through early spring. In past years, seasonal flu activity did not reach its peak until January or February; however, the 2009 H1N1 virus caused illness, hospitalizations, and deaths in the U.S. during the summer months when influenza is very uncommon.<sup>48</sup>

Two strains of influenza, seasonal flu and 2009 H1N1 virus are currently circulating in the U.S.<sup>49</sup> This year, the 2009 H1N1 virus may cause a more dangerous flu season with a significant increase of ill people, hospitalizations, and deaths as compared to a regular flu season. 2009 H1N1 is a new virus first seen in the U.S. It is contagious and spreads from person-to-person. Similar to the seasonal flu, illness in people with 2009 H1N1 can vary from mild to severe. Regular influenza A (H1N1), influenza A (H3N2), and influenza B viruses are included in each year's seasonal influenza vaccine.<sup>50</sup> The seasonal flu vaccine does not protect against influenza C viruses and this year's seasonal vaccine will not protect against the 2009 H1N1 virus. However, during this flu season, there is a 2009 H1N1 vaccine.

The CDC produces weekly influenza surveillance reports. During the 45<sup>th</sup> week of the year (November 8-14, 2009), influenza activity decreased slightly in the U.S.<sup>51</sup>

- 3,106 (28.8%) specimens tested by the U.S. World Health Organization (WHO), and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories were positive for influenza.
- Over 99% of all subtype influenza A viruses being reported to CDC were 2009 influenza A (H1N1) viruses.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold for the seventh consecutive week.
- Twenty-one influenza-associated pediatric deaths were reported. Fifteen of these deaths were associated with the 2009 influenza A (H1N1) virus infection, six were associated with influenza A virus for which the subtype was undetermined, and one was associated with an influenza B virus infection.

47 Flu.gov. (n.d.). *About the flu*. Washington, DC. Retrieved November 16, 2009 from <http://pandemicflu.gov/individualfamily/about/index.html>

48 Flu.gov. (n.d.). *Seasonal flu*. Washington, DC. Retrieved November 16, 2009 from <http://pandemicflu.gov/individualfamily/about/seasonalfiu/index.html>

49 Flu.gov. (n.d.). *About the flu*. Washington, DC. Retrieved November 16, 2009 from <http://pandemicflu.gov/individualfamily/about/index.html>

50 Centers for Disease Control and Prevention. (2009). *Types of influenza viruses* (updated, August 26). Atlanta, GA. Retrieved November 16, 2009 from <http://www.cdc.gov/flu/about/viruses/types.htm>

51 Centers for Disease Control and Prevention. (2009, November 20). 2009-2010 influenza season week 45 ending November 14, 2009. *FluView*. Retrieved November 20, 2009 from <http://www.cdc.gov/flu/weekly/>

## Quick Facts 2010

- The proportion of outpatient visits for influenza-like illness (ILI) was 5.5%, which is significantly above the national baseline of 2.3%. All 10 regions reported ILI above region-specific baseline levels.
- Forty-three states reported geographically widespread influenza activity; seven states reported regional influenza activity; and Washington, D.C. reported local influenza activity.

## H1N1<sup>52</sup>

As of November 8, 2009, WHO indicates that more than 206 countries and overseas territories or communities have reported laboratory confirmed cases of pandemic influenza 2009 H1N1, including over 6,250 deaths.<sup>53</sup>

The CDC estimates that in the U.S.:<sup>54</sup>

- Between 14 million and 34 million cases of 2009 H1N1 occurred between April and October 17, 2009. The mid-level in this range is about 22 million people infected with 2009 H1N1.
- Between 63,000 and 153,000 2009 H1N1-related hospitalizations occurred between April and October 17, 2009. The mid-level in this range is about 98,000 H1N1-related hospitalizations.
- Between 2,500 and 6,000 2009 H1N1-related deaths occurred between April and October 17, 2009. The mid-level in this range is about 3,900 2009 H1N1-related deaths.

**CDC Estimates of U.S. 2009 H1N1 Cases and Related Hospitalizations and Deaths from April-October 17, 2009, By Age Group**

2009 H1N1	Mid-Level Range*	Estimated Range*
<b>Cases</b>		
0-17 Years	8 million	5 million to 13 million
18-64 Years	12 million	7 million to 18 million
65 Years and Older	2 million	1 million to 3 million
<b>Cases Total</b>	22 million	14 million to 34 million
<b>Hospitalizations</b>		
0-17 Years	36,000	23,000 to 57,000
18-64 Years	53,000	34,000 to 83,000
65 Years and Older	9,000	6,000 to 14,000
<b>Hospitalizations Total</b>	98,000	63,000 to 153,000
<b>Deaths</b>		
0-17 Years	540	300 to 800
18-64 Years	2,920	1,900 to 4,600
65 Years and Older	440	300 to 700
<b>Deaths Total</b>	3,900	2,500 to 6,100

52 Centers for Disease Control and Prevention. (2009). *2009 H1N1 flu ("swine flu") and you* (updated, November 5). Atlanta, GA. Retrieved November 16, 2009 from <http://www.cdc.gov/h1n1flu/qa.htm>

53 World Health Organization. (2009). *Pandemic (H1N1) 2009 – update 74* (update, November 13). Geneva, Switzerland. Retrieved November 16, 2009 from [http://www.who.int/csr/don/2009\\_11\\_13/en/index.html](http://www.who.int/csr/don/2009_11_13/en/index.html)

54 Centers for Disease Control and Prevention. (2009). *CDC estimates of 2009 H1N1 influenza cases, hospitalizations and deaths in the U.S., April-October 17, 2009* (updated, November 12). Atlanta, GA. Retrieved November 16, 2009 from [http://www.cdc.gov/h1n1flu/estimates\\_2009\\_h1n1.htm](http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm)

## New Mexico H1N1 Cases<sup>55</sup>

Each week DOH analyzes information regarding influenza disease activity in New Mexico and publishes findings of key flu indicators.

During the week ending November 14, 2009:

- There was a continuous decrease (third consecutive week) in visits to health care providers for influenza-like illness; a decrease from approximately 6.2% from the previous week to 5.8%. However, visits to health care providers were still higher than would be expected for this time of year.
- There were 36 deaths related to 2009 H1N1 influenza in the state. DOH reported seven 2009 H1N1-related deaths in the past week.
- There were 909 hospitalizations related to novel H1N1 influenza. During this week, DOH reported 71 new hospitalizations.

**Cumulative Laboratory-Confirmed Influenza Deaths from April 15, 2009 to November 14, 2009 by County of Residence in New Mexico**

County	Number	County	Number
Bernalillo	11	Roosevelt	1
Chaves	3	San Juan	3
Colfax	1	Sandoval	2
Dona Ana	3	Santa Fe	3
Eddy	1	Sierra	1
Lea	1	Socorro	1
Los Alamos	1	Valencia	2
McKinley	2	<b>Total</b>	<b>36</b>

<sup>55</sup> New Mexico Department of Health. (2009). H1N1 *Flu in New Mexico* (updated, November 18). Santa Fe, NM. Retrieved November 16, 2009 from [http://www.nmhealth.org/H1N1/situation\\_update.shtml](http://www.nmhealth.org/H1N1/situation_update.shtml)

**Cumulative Laboratory-Confirmed Influenza Hospitalizations from April 15, 2009 to November 14, 2009 by County of Residence in New Mexico**

County	Number	County	Number
Bernalillo	229	Otero	27
Catron	1	Quay	5
Chaves	13	Rio Arriba	15
Cibola	12	Roosevelt	10
Colfax	20	San Juan	52
Curry	56	San Miguel	5
Dona Ana	106	Sandoval	35
Eddy	28	Santa Fe	43
Grant	12	Sierra	8
Guadalupe	1	Socorro	14
Lea	24	Taos	21
Lincoln	6	Torrance	2
Los Alamos	4	Union	1
Luna	13	Valencia	31
McKinley	67	Unknown	47
Mora	1	<b>Total</b>	<b>909</b>

## CANCER<sup>56</sup>

Cancer is a term for diseases in which abnormal cells divide without control. Cancer cells can invade nearby tissues and can spread to other parts of the body through the blood and lymph systems. The main types of cancer are:

- Carcinoma is cancer that begins in the skin or in tissues that line or cover internal organs;
- Sarcoma is cancer that begins in bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue;
- Leukemia is cancer that starts in blood-forming tissue such as the bone marrow, and causes large numbers of abnormal blood cells to be produced and enter the blood;
- Lymphoma and multiple myeloma are cancers that begin in the cells of the immune system; and
- Central nervous system cancers are cancers that begin in the tissues of the brain and spinal cord.

<sup>56</sup> National Cancer Institute, *Dictionary of Cancer Terms*. Retrieved August 3, 2009 from [http://www.cancer.gov/templates/db\\_alpha.aspx?expand=C](http://www.cancer.gov/templates/db_alpha.aspx?expand=C)

## New Cancer Cases and Deaths<sup>57</sup>

According to the American Cancer Society (ACS), the most frequently diagnosed cancer among men is prostate cancer, and the most frequently diagnosed cancer among women is breast cancer. Lung & bronchus and colon & rectum cancers are the second and third, respectively, most commonly diagnosed cancers in both men and women, although men have much higher incidence rates than do women.

Approximately 1,479,350 new cancer cases are expected to be diagnosed in 2009. Of those, 766,130 (51.8%) will affect men and approximately 713,220 (48.2%) will affect women. The chart below provides 2009 ACS estimates of new cancer cases.

Leading Sites of New Cancer Cases: 2009 U.S. Estimates*			
Male		Female	
Prostate	192,280	Breast	192,370
Lung & bronchus	116,090	Lung & bronchus	103,350
Colon & rectum	75,590	Colon & rectum	71,380
Urinary bladder	52,810	Uterine corpus	42,160
Melanoma of the skin	39,080	Non-Hodgkin lymphoma	29,990
Non-Hodgkin lymphoma	35,990	Melanoma of the skin	29,640
Kidney & renal pelvis	35,430	Thyroid	27,200
Leukemia	25,630	Kidney & renal pelvis	22,330
Oral cavity & pharynx	25,240	Oral cavity & pharynx	21,550
Pancreas	21,050	Pancreas	21,420
All sites	766,130	All sites	713,220

\*Excludes basal and squamous cell skin cancers and in situ carcinoma except urinary bladder.

In 2009, about 562,340 Americans are expected to die from cancer, more than 1,500 people a day. Cancer is the second most common cause of death in the U.S., exceeded only by heart disease. In the U.S., cancer accounts for nearly 1 of every 4 deaths. The chart below provides the 2009 ACS estimates for cancer deaths.

Leading Sites Cancer Deaths: 2009 U.S. Estimates			
Male		Female	
Lung & bronchus	88,900	Lung & bronchus	70,490
Prostate	27,360	Breast	40,170
Colon & rectum	25,240	Colon & rectum	24,680
Pancreas	18,030	Pancreas	17,210
Leukemia	12,590	Ovary	14,600
Liver & intrahepatic bile duct	12,090	Non-Hodgkin lymphoma	9,670
Esophagus	11,490	Leukemia	9,280
Urinary bladder	10,180	Uterine corpus	7,780
Non-Hodgkin lymphoma	9,830	Liver & intrahepatic bile duct	6,070
Kidney & renal pelvis	8,160	Brain & other nervous system	5,590
All sites	292,540	All sites	269,800

57 American Cancer Society. (2009) *Cancer Facts & Figures 2009*. Retrieved September 25, 2009 from [www.cancer.org/downloads/STT/500809web.pdf](http://www.cancer.org/downloads/STT/500809web.pdf)

## Cancer Disparity<sup>58</sup>

The causes of health disparities are complex and interrelated, but likely arise from:

- Socioeconomic disparities in work, wealth, income, education, housing and overall standard of living;
- Economic and social barriers to high-quality cancer prevention, early detection, and treatment services; and
- The impact of racial and ethnic discrimination.

Recent immigrants may also have other risk factors related to their country of origin, and may also face cultural barriers. Biologic or inherited differences associated with race are thought to make only a minor contribution to the disparate cancer burden between different racial/ethnic groups.

## Race/Ethnicity<sup>59</sup>

### New cases (per 100,000)

Between 2001 and 2005, cancer rates for men in the U.S. were:

- Black men at 632.9;
- White men at 551.2;
- Hispanic men at 433.7;
- Asian/Pacific Islander men at 337.2; and
- American Indian/Alaska Native men at 308.3.

During the same time period, cancer rates for women in the U.S. were:

- White women at 419.5;
- Black women at 388.3;
- Hispanic women at 327.7;
- Asian/Pacific Islander women at 274.3; and
- American Indian/Alaska Native women at 253.

### Deaths (per 100,000)

During this 5-year period, cancer rates for men in the U.S. were:

- Black men at 313;
- White men at 230.7;
- Hispanic men at 158.9;
- American Indian/Alaska Native men at 151.5; and

58 American Cancer Society. (2009) *Cancer Facts & Figures 2009*. Retrieved September 25, 2009 from [www.cancer.org/downloads/STT/500809web.pdf](http://www.cancer.org/downloads/STT/500809web.pdf)

59 U.S. Cancer Statistics Working Group. *U.S. Cancer Statistics: 1999–2005 Incidence and Mortality Web-based Report*. Atlanta (GA): Department of Health and Human Services, Centers for Disease Control and Prevention, and National Cancer Institute; 2009. Available at: <http://www.cdc.gov/uscs>.

- Asian/Pacific Islander men at 138.8.

During this same period, cancer rates for women in the U.S. were:

- Black women at 186.7;
- White women at 159.2;
- American Indian/Alaska Native women at 111.8;
- Hispanic women at 105.1; and
- Asian/Pacific Islander women at 95.9.

## Cancer Prevention<sup>60</sup>

The number of new cancer cases can be reduced, and many cancer deaths can be prevented by:

- Adopting a healthy lifestyle;
- Avoiding tobacco use;
- Getting the human papillomavirus (HPV) vaccine;
- Increasing physical activity;
- Achieving and maintaining optimal weight;
- Improving nutrition;
- Avoiding sun exposure; and
- Receiving regular screening tests that can detect cancer early when treatment is likely to work best.

## New Cancer Cases and Deaths in Children<sup>61</sup>

In 2009, an estimated 10,730 new cases of cancer are expected to occur among children aged 0 to 14 years. Childhood cancers are rare, representing less than one % of all new cancer diagnoses.

In 2009, an estimated 1,380 deaths related to cancer are expected to occur among children aged 0 to 14 years. About one-third of these will be from leukemia. Although uncommon, cancer is the second leading cause of death in children, exceeded only by accidents. Mortality rates for childhood cancer have declined by 50% since 1975. The substantial progress in pediatric cancer survival rates is attributable largely to improved treatments and the high proportion of patients participating in clinical trials.

Early symptoms in children are usually nonspecific. It is recommended that children receive regular medical checkups, and that parents and health care providers be alert to any unusual symptoms that persist such as:

- An unusual mass or swelling;

<sup>60</sup> Center for Disease Control and Prevention (CDC) 2009. Retrieved August 3, 2009 from <http://www.cdc.gov/cancer/dcp/ prevention/index.htm>

<sup>61</sup> American Cancer Society. (2009) *Cancer Facts & Figures 2009*. Retrieved September 25, 2009 from [www.cancer.org/downloads/STT/500809web.pdf](http://www.cancer.org/downloads/STT/500809web.pdf)

### *Quick Facts 2010*

- An unexplained paleness or loss of energy;
- A sudden tendency to bruise;
- A persistent, localized pain;
- A prolonged, unexplained fever or illness;
- Frequent headaches, often with vomiting;
- Sudden eye or vision changes; and/or
- Excessive, rapid weight loss.

According to the International Classification of Childhood Cancer, childhood cancers include:

- Leukemia (32.7 of all childhood cancers), which may be recognized by bone and joint pain, weakness, bleeding, and fever;
- Brain and other nervous system cancers (20.7%), which in early stages may cause headaches, nausea, vomiting, blurred or double vision, dizziness, and difficulty in walking or handling objects;
- Neuroblastoma (6.9%), a cancer of the sympathetic nervous system that usually appears as a swelling in the abdomen;
- Wilms tumor (4.8%), a kidney cancer that may be recognized by a swelling or lump in the abdomen;
- Non-Hodgkin lymphoma (4.3%) and Hodgkin lymphoma (3.6%), which affect lymph nodes but may spread to bone marrow and other organs and may cause weakness and fever and/or swelling of lymph nodes in the neck, armpit, or groin;
- Rhabdomyosarcoma (3.5%), a soft tissue sarcoma that can occur in the head and neck, genitourinary area, trunk, and extremities, and may cause pain and/or a mass or swelling;
- Retinoblastoma (2.7%), an eye cancer that usually occurs in children younger than 4 years;
- Osteosarcoma (2.7%), a bone cancer that often has no initial pain or symptoms until local swelling begins; and
- Ewing sarcoma (1.4%), another type of cancer that usually arises in bone and most often occurs in adolescents.

Childhood cancers can be treated by a combination of therapies (surgery, radiation, and chemotherapy) based on the type and stage of cancer.

### **New Mexico's New Cancer Cases and Deaths<sup>62</sup>**

In NM, an estimated 8,000 individuals were diagnosed with cancer in 2007. (These estimates do not include non-melanoma skin cancer and carcinoma in situ (noninvasive cancer) for sites other than the bladder.)

As is true for the entire U.S., breast, colorectal, lung and prostate cancer account for more than half of New Mexico's cancer burden. In the five-year period from 2000 to 2004, these four cancers accounted for nearly 19,974 (52.4%) of the 38,106 newly diagnosed cases

62 New Mexico Department of Health. (2007). New Mexico Cancer Facts & Figures, 2007. Retrieved August 3, 2009 from [http://hsc.unm.edu/SOM/nmtr/NMCFE\\_Facts-figures07.pdf](http://hsc.unm.edu/SOM/nmtr/NMCFE_Facts-figures07.pdf).

of cancer and 7,066 (47.1%) of the 14,997 cancer deaths in NM.

The incidence and mortality findings for leading cancer sites in NM are consistent with national patterns. Prostate cancer is the most commonly diagnosed cancer among NM males, followed by lung cancer, and colorectal cancer. Breast cancer is the most commonly diagnosed cancer among NM women, followed by lung cancer and colorectal cancer.

In NM, men are more likely than women to develop and die from cancer. Lung cancer is the leading cause of cancer death for men. The second and third leading causes of cancer death among men are prostate cancer and colorectal cancer. For women, lung cancer is the leading cause of cancer death. The second and third leading causes of cancer death among women are breast cancer and colorectal cancer.

## Age<sup>63</sup>

Age is also associated with cancer burden and type. According to the DOH, 5862 (76.9%) of NM residents diagnosed with cancer from 2000 to 2004 were age 55 and older, and 4233 (55.5%) were age 65 and older. Among adults, the occurrence of cancer and the risk of dying from cancer increase significantly with advancing age.

## Race/Ethnicity/Gender<sup>64 65</sup>

Cancer incidence and mortality data for 2000 to 2004, demonstrate racial/ethnic disparities in the leading cancer diagnoses and causes of cancer deaths. The following table indicates cancer diagnosis among different racial/ethnic groups in NM.

**Average Annual Incidence and Mortality Rates for All Cancers by Race/Ethnicity, New Mexico, 2000-2004**

Race	Incidence		Mortality	
	Rate	Average Annual Count	Rate	Average Annual Count
White	477.7	5,135	176.8	1,943
Hispanic	359.5	2,064	162.7	864
American Indian	221.3	266	128	136
Black	353.9	104	185.7	51
Other	418.4	7,621	173	2,999

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population. Incidents includes in-situ bladder, all other in in-situ cases excluded.

As shown in the charts on the following page, prostate cancer was the most frequently diagnosed cancer among all New Mexican men. Lung cancer was the second most common cancer for White and Black men, and colorectal cancer was the second most common cancer for Hispanic and American Indian men. There were some similarities

63 New Mexico Department of Health. (2007). New Mexico Cancer Facts & Figures, 2007. Retrieved August 3, 2009 from [http://hsc.unm.edu/SOM/nmtr/NMCFE\\_Facts-figures07.pdf](http://hsc.unm.edu/SOM/nmtr/NMCFE_Facts-figures07.pdf).

64 New Mexico Department of Health. (2007). *The New Mexico Cancer Plan 2007-2011*. Retrieved August 3, 2009 from [http://www.cancernm.org/cancercouncil/pdf/2007\\_NMCancerPlanforWeb.pdf](http://www.cancernm.org/cancercouncil/pdf/2007_NMCancerPlanforWeb.pdf)

65 New Mexico Department of Health. (2007). New Mexico Cancer Facts & Figures, 2007. Retrieved August 3, 2009 from [http://hsc.unm.edu/SOM/nmtr/NMCFE\\_Facts-figures07.pdf](http://hsc.unm.edu/SOM/nmtr/NMCFE_Facts-figures07.pdf).

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in the third, fourth, and fifth leading cancer diagnoses for New Mexican men; however, melanoma of the skin was not among the five most frequently diagnosed cancers among men for any racial/ ethnic group other than Whites and stomach cancer was one of the five most frequently diagnosed cancers only among American Indian men.

Also shown in the charts on the following page, lung cancer was the leading cause of cancer deaths among New Mexican men from all racial/ethnic groups; prostate cancer was ranked second for White, American Indian, and Black men but was third for Hispanic men. Although colorectal cancer was ranked among the top five causes of cancer deaths, it appeared second for Hispanic men, third for White and Black men, and fourth for American Indian men. Other differences in cancer mortality among New Mexican men from different racial/ ethnic groups were that pancreatic cancer was ranked among the five most frequent causes of cancer deaths for all but American Indian men, and liver cancer was among the five most frequent causes of cancer deaths for all but White men. Stomach cancer only appeared among the five most frequent causes of cancer deaths for American Indian men and leukemia was one of the five most frequent causes of cancer deaths among White men.

NM Male New Cases				NM Male Deaths			
White		2000 - 2004	% Total Cancer Cases	White		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	13,678	100%		All Cancer Cases	5,146	100%
1	Prostate	4,317	31.6%	1	Prostate	1,427	27.7%
2	Lung	1,751	12.8%	2	Lung	603	11.7%
3	Colorectal	1,287	9.4%	3	Colorectal	487	9.5%
4	Bladder	879	6.4%	4	Pancreatic	273	5.3%
5	Skin (Melanoma)	870	6.4%	5	Leukemia	233	4.5%

NM Male New Cases				NM Male Deaths			
Hispanic		2000 - 2004	% Total Cancer Cases	Hispanic		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	5,539	100%		All Cancer Cases	2,328	100%
1	Prostate	1,694	30.6%	1	Lung	490	21.0%
2	Colorectal	689	12.4%	2	Colorectal	292	12.5%
3	Lung	543	9.8%	3	Prostate	271	11.6%
4	Kidney	265	4.8%	4	Liver & Bile Duct	168	7.2%
5	Bladder	219	4.0%	5	Pancreatic	146	6.3%

NM Male New Cases				NM Male Deaths			
American Indian		2000 - 2004	% Total Cancer Cases	American Indian		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	617	100%		All Cancer Cases	357	100%
1	Prostate	134	21.7%	1	Lung	42	11.8%
2	Colorectal	83	13.5%	2	Prostate	39	10.9%
3	Kidney	47	7.6%	3	Stomach	32	9%
4	Stomach	37	6%	4	Colorectal	32	9%
5	Liver & Bile Duct	36	5.8%	5	Liver & Bile Duct	28	7.8%

NM Male New Cases				NM Male Deaths			
Black		2000 - 2004	% Total Cancer Cases	Black		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	310	100%		All Cancer Cases	158	100%
1	Prostate	118	38.1%	1	Lung	46	29.1%
2	Lung	49	15.8%	2	Prostate	30	19%
3	Colorectal	30	9.7%	3	Colorectal	19	12%
4	Kidney	9	2.9%	4	Liver & Bile Duct	8	5.1%
5	Non-Hodgkin Lymphoma	9	2.9%	5	Pancreatic	7	4.4%

As shown in the following charts, for New Mexican women, breast cancer was the most frequently diagnosed cancer across all racial/ethnic groups. Lung cancer was the second most common cancer for White women, third for Hispanic and Black women but was not ranked among the top five cancer diagnoses for American Indian women. For Hispanic, American Indian, and Black women, colorectal cancer was the second most frequently diagnosed cancer; it was third for White women. Although cancer of the uterine corpus (body of the uterus) was the fourth most common cancer among New Mexican women from all racial/ethnic groups, melanoma of the skin was not among the five most frequently diagnosed cancers among women for any race/ethnicity other than Whites; thyroid cancer was among the five most frequently diagnosed cancers for Hispanic and Black women, and ovarian and kidney cancers were among the five most frequent cancer diagnoses for American Indian women.

Also shown in the following charts, for New Mexican women, breast cancer was the leading cause of cancer deaths for Hispanic, American Indian, and Black women. Among White women, lung cancer was the leading cause of death, followed by breast cancer. Lung cancer was the second leading cause of cancer death for Hispanic and Black women, but ovarian cancer was second for American Indian women and was also among the five most frequent causes of cancer deaths for White, Hispanic, and Black women. Colorectal cancer was ranked third among cancer deaths for all New Mexican women, and pancreatic cancer was fourth for White, Hispanic, and Black women. Non-Hodgkin lymphoma was ranked among the five most frequent causes of cancer deaths for American

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Indian women, and cancer of the uterine corpus was one of the five most frequent causes of cancer deaths for Black women.

NM Female New Cases				NM Female Deaths			
White		2000 - 2004	% Total Cancer Cases	White		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	11,992	100.0%		All Cancer Cases	4,569	100.0%
1	Breast	3,793	31.6%	1	Lung	1,159	25.4%
2	Lung	1,468	12.2%	2	Breast	734	16.1%
3	Colorectal	1,147	9.6%	3	Colorectal	437	9.6%
4	Uterine	616	5.1%	4	Pancreatic	270	5.9%
5	Skin (Melanoma)	590	4.6%	5	Ovarian	269	5.9%

NM Female New Cases				NM Female Deaths			
Hispanic		2000-2004	% Total Cancer Cases	Hispanic		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	4,780	100.0%		All Cancer Cases	1,994	100.0%
1	Breast	1,461	30.6%	1	Breast	311	15.6%
2	Colorectal	508	10.6%	2	Lung	280	14.0%
3	Lung	344	7.2%	3	Colorectal	210	10.5%
4	Uterine	248	5.2%	4	Pancreatic	135	6.8%
5	Thyroid	241	5.0%	5	Uterine	111	5.6%

NM Female New Cases				NM Female Deaths			
American Indian		2000 - 2004	% Total Cancer Cases	American Indian		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	715	100.0%		All Cancer Cases	322	100.0%
1	Breast	162	22.7%	1	Breast	42	13.0%
2	Colorectal	69	9.7%	2	Lung	29	9.0%
3	Lung	54	7.6%	3	Colorectal	24	7.5%
4	Uterine	48	6.7%	4	Pancreatic	23	7.1%
5	Thyroid	42	5.9%	5	Uterine	23	7.1%

NM Female New Cases				NM Female Deaths			
Black		2000 - 2004	% Total Cancer Cases	Black		2000 - 2004	% Total Cancer Cases
	All Cancer Cases	212	100.0%		All Cancer Cases	95	100.0%
1	Breast	56	26.4%	1	Breast	17	17.9%
2	Colorectal	26	12.3%	2	Lung	16	16.8%
3	Lung	24	11.3%	3	Colorectal	10	10.5%
4	Uterine	10	4.7%	4	Pancreatic	^	^
5	Thyroid	10	4.7%	5	Uterine	^	^

## Cancer Prevention

Regular exercise, proper nutrition, maintaining a healthy weight and routine cancer screenings will reduce the cancer burden in NM. Routine screenings ensure that cancers can be prevented or diagnosed at their earliest stage when the disease is most curable. The American Cancer Society estimates that over 30% of the more than 14,000 lives lost to cancer in NM between 2000 and 2004 were attributable to tobacco use—primarily cigarettes. Approximately 3% of all cancer deaths were related to excessive alcohol use, frequently in combination with tobacco use.<sup>66</sup>

Cancer prevention has advanced on several important fronts that include clinical practice and research on risk factors, prophylactic drug treatments, the biology of tobacco- and obesity - related abnormal cell growth, and the behavioral and nutritional sciences. Emerging science in cancer prevention will help public health professionals to determine future directions for interventions to reduce the cancer burden in NM.<sup>67</sup>

## New Mexico's Cancer in Children<sup>68</sup>

Cancer remains the second leading cause of death (accidental death is number one) among NM children ages one through 14 years. A New Mexican's risk of being diagnosed with cancer before age 20 is about one in 285 (0.35%).

Between 1993 and 2002, cancer was diagnosed in almost 800 New Mexican children, adolescents, and young people under the age of 20. The number of newly diagnosed cases has exceeded 100 every year since 2001. Leukemia and brain tumors are common cancers across all ages under 20 years. Some of the cancers (e.g. neuroblastoma, retinoblastoma, hepatoblastoma, Wilms tumor) occur almost exclusively in the youngest (0-4 years) age group, and the cancers of epithelial origin (carcinomas) usually occur in the oldest (15-19 years) age group.

66 New Mexico Department of Health. (2007). New Mexico Cancer Facts & Figures, 2007. Retrieved August 3, 2009 from [http://hsc.unm.edu/SOM/nmtr/NMCFE\\_Facts-figures07.pdf](http://hsc.unm.edu/SOM/nmtr/NMCFE_Facts-figures07.pdf).

67 New Mexico Department of Health. (2007). *The New Mexico Cancer Plan 2007-2011*. Retrieved August 3, 2009 from [http://www.cancernm.org/cancercouncil/pdf/2007\\_NMCancerPlanforWeb.pdf](http://www.cancernm.org/cancercouncil/pdf/2007_NMCancerPlanforWeb.pdf)

68 New Mexico Department of Health. (2007). New Mexico Cancer Facts & Figures, 2007. Retrieved August 3, 2009 from [http://hsc.unm.edu/SOM/nmtr/NMCFE\\_Facts-figures07.pdf](http://hsc.unm.edu/SOM/nmtr/NMCFE_Facts-figures07.pdf).

Survival rates have improved over the last three decades for most childhood cancers due to high rates of participation by children in cancer clinical trials. Clinical trials are available to help improve the outcome for children with cancer, and must be considered in the evaluation of each child at the time of diagnosis. Children with cancer must be treated in institutions that provide the intensive treatment, supportive care, and psychosocial services required to achieve successful outcomes.

Numbers of Childhood Cancer Cases by Type and Age at Diagnosis					
New Mexico, 1993-2002					
Cancer	0 - 4 Years	5 - 9 Years	10 - 14 Years	15 - 19 Years	0 - 19 Years
Leukemia	92	55	44	50	241
Hodgkin lymphoma	^	5	10	20	36
Non-Hodgkin lymphoma	^	5	12	16	34
Central nervous system cancers	39	38	25	19	121
Neuroblastoma	29	^	^	^	31
Retinoblastoma	14	^	^	^	15
Renal cancers, Wilms	18	8	^	^	29
Hepatic cancers	10	^	^	^	14
Bone & joint cancers	^	9	29	18	57
Soft-tissue sarcomas	7	13	13	24	57
Germ-cell & gonadal cancers	^	^	13	37	55
Thyroid carcinoma	^	^	7	24	32
Malignant melanoma	^	^	^	20	25
Other cancers	^	10	9	20	42
All Sites Combined	218	148	166	257	789

Source: National SEER Program, 1993-2002, Division of Cancer Control and Population Sciences, NCI

^ Statistic not displayed due to fewer than 5 cases.

## OVERWEIGHT AND OBESITY (HEALTHY WEIGHT)

### Overweight and Obesity for Adults<sup>69</sup>

As defined by the CDC, overweight and obesity are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. These terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems.

For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the “body mass index” (BMI). BMI is used because, for most people, it correlates with their amount of body fat. While BMI is an accepted screening tool for the initial assessment, it is not a diagnostic measure. BMI is not a direct measure of body fatness.

<sup>69</sup> Center for Disease Control and Prevention (CDC) (2009). Overweight and Obesity. Defining Overweight and Obesity. Retrieved July 31, 2009 <http://www.cdc.gov/obesity/defining.html>

- An adult who has a BMI between 25 and 29.9 is considered overweight.
- An adult who has a BMI of 30 or higher is considered obese.

## Race/Ethnicity<sup>70</sup>

According to Behavioral Risk Factor Surveillance System (BRFSS) surveys, from 2006-2008 the differences in prevalence of obesity were:

- 25.6% of Blacks, Whites, and Hispanics were obese;
- 35.7% of Blacks had 51% greater prevalence of obesity;
- 28.7% of Hispanics had 21% greater prevalence, when compared with 23.7% of Whites.

This pattern was consistent across most U.S. states.

## National Prevalence<sup>71</sup>

As reported by the CDC, in 2008, only one state (Colorado) had a prevalence of obesity less than 20%. Thirty-two states had prevalence equal to or greater than 25%; six of these states (Alabama, Mississippi, Oklahoma, South Carolina, Tennessee, and West Virginia) had a prevalence of obesity equal to or greater than 30%.

2008 State Obesity Rates							
State	%	State	%	State	%	State	%
Alabama	31.4	Illinois	26.4	Montana	23.9	Rhode Island	21.5
Alaska	26.1	Indiana	26.3	Nebraska	26.6	South Carolina	30.1
Arizona	24.8	Iowa	26	Nevada	25.0	South Dakota	27.5
Arkansas	28.7	Kansas	27.4	New Hampshire	24.0	Tennessee	30.6
California	23.7	Kentucky	29.8	New Jersey	22.9	Texas	28.3
Colorado	18.5	Louisiana	28.3	New Mexico	25.2	Utah	22.5
Connecticut	21	Maine	25.2	New York	24.4	Vermont	22.7
Delaware	27	Maryland	26	North Carolina	29.0	Virginia	25
Washington DC	21.8	Massachusetts	20.9	North Dakota	27.1	Washington	25.4
Florida	24.4	Michigan	28.9	Ohio	28.7	West Virginia	31.2
Georgia	27.3	Minnesota	24.3	Oklahoma	30.3	Wisconsin	25.4
Hawaii	22.6	Mississippi	32.8	Oregon	24.2	Wyoming	24.6
Idaho	24.5	Missouri	28.5	Pennsylvania	27.7		

<sup>70</sup> Center for Disease Control and Prevention (CDC) (2009). MMWR weekly July 17, 2009/58(27);740-744. Retrieved September 29, from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5827a2.htm>

<sup>71</sup> Center for Disease Control and Prevention (CDC) (2009). Overweight and Obesity. Retrieved July 31, 2009 <http://www.cdc.gov/obesity/data/index.html>

## Health Consequences<sup>72</sup>

Research has shown that as weight increases to reach the levels referred to as “overweight” or “obesity,” the risks for the following conditions also increase:

- Coronary heart disease
- Type 2 diabetes
- Cancers (endometrial, breast, and colon)
- Hypertension (high blood pressure)
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Stroke
- Liver and Gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint)
- Gynecological problems (abnormal menses, infertility)

## Economic Consequences of Overweight and Obesity<sup>73</sup>

Health problems associated with overweight and obesity may involve direct and indirect costs. Direct medical costs may include preventive, diagnostic, and treatment services related to obesity. Indirect costs relate to morbidity and mortality costs. Morbidity costs are defined as the value of income lost from decreased productivity, restricted activity, absenteeism, and bed days. Mortality costs are the value of future income lost by premature death.

## Overweight and Obesity for Children and Adolescents<sup>74</sup>

A child’s weight status is determined based on an age- and sex-specific percentile for BMI rather than by the BMI categories used for adults. Classifications are age – and - sex specific because children’s body compositions vary as they age and vary between boys and girls. The BMI value is plotted on the CDC growth charts to determine the corresponding BMI-for-age percentile. BMI is the most widely accepted method used to screen for overweight and obesity in children and adolescents (aged 2–19 years), because the measurements are non-invasive and relatively easy to obtain. The following definitions are based on the 2000 CDC Growth Charts for the U.S.:

- Overweight is defined as a BMI at or above the 85<sup>th</sup> percentile and lower than the 95<sup>th</sup> percentile.
- Obesity is defined as a BMI at or above the 95<sup>th</sup> percentile for children of the same age and sex.

Data from National Health and Nutrition Examination Survey (NHANES) surveys (1976–

72 Center for Disease Control and Prevention (CDC) (2009). Overweight and Obesity. Health Consequences. Retrieved July 31, 2009 <http://www.cdc.gov/obesity/causes/health.html>

73 Ibid.

74 Center for Disease Control and Prevention (CDC) (2009). Overweight and Obesity. Defining Childhood Overweight and Obesity. Retrieved July 31, 2009 <http://www.cdc.gov/obesity/childhood/defining.html>

1980 and 2003–2006) show that the prevalence of obesity has increased during that time period:<sup>75</sup>

- For children aged 2–5 years, prevalence increased from 5% to 12.4%;
- For those aged 6–11 years, prevalence increased from 6.5% to 17%; and
- For those aged 12–19 years, prevalence increased from 5% to 17.6%.

### **Race/Ethnicity/Gender<sup>76</sup>**

The 2003–2006 NHANES data showed that for boys, aged 12–19 years, the prevalence rate of obesity was:

- 22.1% for Mexican-American boys;
- 17.3% for White boys; and
- 18.5% for Black boys.

The same NHANES data showed that for girls, aged 12–19 years, the prevalence rate of obesity was:

- 27.7% for Black girls;
- 14.5% for White; and
- 19.9% for Mexican American girls.

### **New Mexico Overweight and Obesity for Adults<sup>77</sup>**

In NM, the rates of overweight and obesity continue to rise along with the U.S. In 2008, according to Kaiser State Health Facts:

- 59.9% of adult New Mexicans were overweight or obese;
- 65% of New Mexican males were overweight or obese; and
- 51% of New Mexican females were overweight or obese.

### **Race/Ethnicity<sup>78</sup>**

In NM, overweight and obesity are disproportionately represented in several population groups. Among those groups in 2008, the CDC reported:

- 53.7% were White;
- 64% were Hispanic;
- 63.8% were American Indian/Alaska Native
- 48.3% claimed Other; and
- Not Sufficient Data (NSD) for Black and Asian/Pacific Islander.

<sup>75</sup> Center for Disease Control and Prevention (CDC). Overweight and Obesity. NHANES Surveys (1976-1980 and 2003-2006). Retrieved October 2, 2009 from <http://www.cdc.gov/obesity/childhood/prevalence.html>

<sup>76</sup> Ibid.

<sup>77</sup> The Henry J. Kaiser Family Foundation. (2008). Health Status-New Mexico-Kaiser State Health Facts. Retrieved October 1, 2009 from <http://www.statehealthfacts.org/profileind.jsp?cat=2&sub=26&rgn=33>

<sup>78</sup> Ibid.

## Economic Consequences of Overweight and Obesity in New Mexico<sup>79</sup>

An estimated \$324 million is spent in NM annually on adult obesity-attributable medical expenditures; of these, \$51 million is spent within the Medicare population, and \$84 million is spent within the Medicaid population.

The business sector also bears significant costs through lost work time, decreased productivity and health benefit costs. This results in a greater burden of disease and financial impact to individuals, families, communities, governments, and businesses.

## New Mexico Overweight and Obesity for Children and Adolescents

According to the Henry J. Kaiser Family Foundation, 33% of NM children aged 10-17 were at or above the 85<sup>th</sup> percentile of the CDC growth charts and considered overweight or obese in 2007.<sup>80</sup>

According to the 2007 YRRS, of the public school students in grades 9–12 from 105 NM high schools:<sup>81</sup>

- 43.6% engaged in physical activity;
- 29.9% spent more than three hours per day television viewing;
- 18.7% spent more than three hours per day on other screen activities; and
- 17.9% had healthful nutrition including fruit and vegetable consumption.

## Reducing the Burden of Overweight and Obesity

Obesity is associated with increased health-care costs, reduced quality of life, and increased risk for premature death. Policy and environmental change initiatives that make healthy choices in nutrition and physical activity available, affordable, and easy will likely prove most effective in combating obesity.<sup>82</sup>

Overweight and obesity, as well as their related chronic diseases, are largely preventable. At the individual level, individuals can:

- Achieve energy balance (when the calories you take in is equal to the calories expended) and a healthy weight;
- Limit energy intake from total fats and shift fat consumption away from saturated fats to unsaturated fats;
- Increase consumption of fruits and vegetables, as well as legumes, whole grains and nuts;

79 New Mexico Department of Health. (2006). The New Mexico Plan to Promote Healthier Weight 2006-2015. Retrieved October 1, 2009 from [www.health.state.nm.us/pdf/3\\_nm\\_ob\\_ow.pdf](http://www.health.state.nm.us/pdf/3_nm_ob_ow.pdf)

80 The Henry J. Kaiser Family Foundation. (2007). Child Overweight/Obesity Rate-New Mexico. Kaiser State Health Facts. Retrieved October 1, 2009 from <http://www.statehealthfacts.org/profileind.jsp?ind=51&cat=2&rgn=33>

81 New Mexico Youth Risk & Resiliency Survey. 2007 Reports. Highlights. Retrieved October 16, 2009 from <http://www.youthrisk.org/>

82 Center for Disease Control and Prevention (CDC) (2009). Overweight and Obesity. Retrieved July 31, 2009 <http://www.cdc.gov/obesity/index.html>

- Limit the intake of sugars; and
- Increase physical activity - at least 30 minutes of regular, moderate-intensity activity on most days. More activity may be required for weight control.

## DIABETES

According to the CDC, diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. Diabetes can lead to serious complications (i.e., heart disease and stroke, high blood pressure, blindness, kidney and nervous system disease, amputations, etc.) and premature death.

Types of diabetes include:<sup>83</sup>

- Type 1 diabetes was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes. Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. Generally, this form of diabetes affects children and young adults; however, disease onset can occur at any age. In adults, type 1 diabetes accounts for 5% to 10% of all diagnosed cases of diabetes. Risk factors for type 1 diabetes may be autoimmune, genetic, or environmental. There is no known way to prevent type 1 diabetes.
- Type 2 diabetes was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult onset diabetes. In adults, type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce it. Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity.
- Gestational diabetes is a form of glucose intolerance diagnosed during pregnancy. It is more common among obese women and women with a family history of diabetes. During pregnancy, gestational diabetes requires treatment to normalize maternal blood glucose levels to avoid complications in the infant. Immediately after pregnancy, 5% to 10% of women with gestational diabetes are found to have diabetes, usually type 2. Women who have had gestational diabetes have a 40% to 60% chance of developing diabetes in the next five to ten years.
- Other types of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, medications, infections, pancreatic disease, and other illnesses. Such types of diabetes account for 1% to 5% of all diagnosed cases.

Prediabetes is a condition in which individuals have blood glucose levels higher than normal, but not high enough to be classified as diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke.

83 Centers for Disease Control and Prevention. (2008). *National diabetes fact sheet, 2007: General information*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved November 10, 2009 from [http://www.cdc.gov/diabetes/pubs/pdf/ndfs\\_2007.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf)

## Prevalence of Diabetes and Prediabetes in the United States<sup>84</sup>

According to the American Diabetes Association (ADA), 23.6 million children and adults in the U.S. (7.8% of the population) have diabetes. While an estimated 17.9 million have been diagnosed with diabetes, there are approximately 5.7 million individuals (24%) unaware that they have the disease. There are 57 million people with prediabetes. In 2007, there were 1.6 million new diagnosed cases of diabetes in people aged 20 years or older.

In addition, the ADA reports that in 2007:

- 186,300 (22% of age group population) individuals under 20 years of age had diabetes.
  - About one in every 400 to 600 children and adolescents had type 1 diabetes.
  - Two million adolescents (one in six overweight adolescents) aged 12-19 had pre-diabetes.
- Approximately 11% (23.5 million) of all individuals aged 20 Years or older had diabetes.
- 12.2 million (23.1% of age group population) individuals aged 60 years or older had diabetes.
- 12 million (11.2%) men aged 20 years or older had diabetes; although nearly one third of them did not know it.
- 11.5 million (10.2%) women aged 20 years or older had diabetes; however, approximately one quarter of these women did not know it. The prevalence of diabetes was at least two to four times higher among non-Hispanic Black, Hispanic/Latino American, American Indian, and Asian/Pacific Islander women than among non-Hispanic White women.
- 16.5% of American Indians/Alaska Natives aged 20 years or older had diabetes.
- 11.8% of Non-Hispanic Blacks aged 20 years or older had diabetes.
- 10.4% of Hispanics aged 20 years or older had diabetes.
- 7.5% of Asian Americans aged 20 years or older had diabetes.
- 6.6% of Non-Hispanic Whites aged 20 years or older had diabetes.

## The Economic Consequences of Diabetes in the United States<sup>85</sup>

The total annual economic cost of diabetes in 2007 was estimated to be \$174 billion. Medical expenditures totaled \$116 billion and were comprised of \$27 billion for diabetes care, \$58 billion for chronic diabetes-related complications, and \$31 billion for excess general medical costs. Indirect costs resulting from increased absenteeism, reduced productivity, disease-related unemployment disability, and loss of productive capacity due to early mortality totaled \$58 billion.

After adjusting for population age and gender differences, average medical expenditures

<sup>84</sup> American Diabetes Association. (n.d.). *Diabetes statistics*. Alexandria, VA. Retrieved November 10, 2009 from <http://www.diabetes.org/diabetes-basics/diabetes-statistics/>

<sup>85</sup> American Diabetes Association. (n.d.). *Diabetes statistics*. Alexandria, VA. Retrieved November 10, 2009 from <http://www.diabetes.org/diabetes-basics/diabetes-statistics/>

among people with diagnosed diabetes were 2.3 times higher than what expenditures would be in the absence of diabetes. Additionally, there are other costs relating to undiagnosed diabetes, prediabetes, and gestational diabetes, which brought the total cost of diabetes in the U.S. in 2007 to \$218 billion, including:

- \$18 billion for the 6.3 million people with undiagnosed diabetes
- \$25 billion for the 57 million American adults with pre-diabetes
- \$623 million for the 180,000 pregnancies where gestational diabetes is diagnosed

## Prevalence of Diabetes in New Mexico<sup>86</sup>

In 2007, 7.5% of New Mexicans aged 18 years and older had diagnosed diabetes. Approximately 160,000 New Mexicans were estimated to have diabetes in 2007; of these, about 41,000 were unaware that they had the disease. In NM, certain populations are at higher risk for developing diabetes: American Indians (approximately 3 times more likely than Whites), Hispanics (1.8 times more likely than Whites), and Asian Americans (1.7 times more likely than Whites).

Among New Mexican adults with diabetes:<sup>87</sup>

- Approximately half are obese, and eight out of 10 are either obese or overweight.
- About 40% (ratio of 2 to 5) report no leisure-time exercise.
- 58% are less likely to engage in leisure-time exercise compared to all New Mexican adults (77%).

Diabetes was the 6<sup>th</sup> leading cause of death in NM in 2005 and 2006.

The following four tables describe the prevalence of diabetes in NM. Counts (number of diabetics) were generated from the 2007 NM BRFSS data set. Percentage figures (rate of diabetes) were derived from a three year (2006 to 2008) BRFSS data set, using 2007 as the mid-point. This method provided stable percentage estimates while generating count estimates based on the 2007 population figures. Count estimates were not totaled in each table; the single count estimates in the first table are the best total estimates for the over all 20+ and 60+ populations.

<sup>86</sup> New Mexico Department of Health. (2009, August). *Indicator report for diabetes prevalence*. Santa Fe, NM: New Mexico's Indicator-Based Information System. Retrieved November 10, 2009 from [http://ibis.health.state.nm.us/indicator/view/Diab-Prevl.Year.NM\\_US.html](http://ibis.health.state.nm.us/indicator/view/Diab-Prevl.Year.NM_US.html)

<sup>87</sup> New Mexico Department of Health. (2007, November). *Diabetes in New Mexico: The latest facts*. Santa Fe, NM: Diabetes Prevention and Control Program. Retrieved November 10, 2009 from <http://www.diabetesnm.org/documents/DIABETES-FACTS2007Nov30.pdf>

**2007 Numbers and Rates of Adults (Age 20+) Diagnosed with Diabetes in New Mexico by Age**

Age	Number of Diabetics	Rate of Diabetes (95% CI)	BRFSS only contains data on adults. The 20+ age group figures represent the estimated total adult population with diabetes. These estimates exclude undiagnosed diabetes; therefore, these estimates should be considered an under-estimate. Gestational diabetes and “pre-diabetes” are excluded.
Under 20 Years			
20 Years and Older	122,903	8.1% (7.6 - 8.6)	
60 Years and Older	57,984	16.2% (15.1 - 17.3)	

NOTE: These counts under-estimate the total number of adults with diabetes due to missing values for some records; and self-reported data only includes adults that know they have diabetes.

**2007 Numbers and Rates of Adults (Age 20+) Diagnosed with Diabetes in New Mexico by Gender**

Gender	Number of Diabetics	Rate of Diabetes (95% CI)	There was no measurable difference in diabetes prevalence between men and women, even after adjusting for age differences between these populations. Male/female diabetes prevalence among adults age 60+ was also similar (16.5% versus 16.0%).
Female	64,034	8.1% (7.5 - 8.7)	
Male	58,194	8.1% (7.4 - 8.9)	

**2007 Numbers and Rates of Adults (Age 20+) Diagnosed with Diabetes in New Mexico by Race/Ethnicity**

Race/Ethnicity	Number of Diabetics	Rate of Diabetes (95% CI)	Small sample size made comparison across race/ethnic groups difficult. These estimates should be used when reporting the prevalence of diabetes among adults aged 20 and older.
American Indian/ Alaska Native	17,084	11.7% (10.0 - 13.7)	
Asian/Pacific Islander	1,325	8.5% (4.5 - 15.3)	
Black	2,968	8.7% (5.0 - 14.6)	
Hispanic	59,404	9.9% (9.1 - 10.9)	
White	45,358	6.3% (5.7 - 6.9)	

**2007 Age-Adjusted Percentage of Adults (Age 20+) Diagnosed with Diabetes in New Mexico by Race/Ethnicity**

Race/Ethnicity	Number of Diabetics	Rate of Diabetes (95% CI)	Adjusting for differences in the age distribution of the different race/ethnic populations results in artificial estimates that represent the expected prevalence of diabetes if the populations actually had similar age distributions. Adult Native Americans, Black, and Hispanics, were more likely to report a diagnosis of diabetes than were adult White, non-Hispanics. Adult Native Americans were also more likely than adult Hispanics to report a diagnosis of diabetes.
American Indian/ Alaska Native	N/A	15.1% (12.9 - 17.6)	
Asian/Pacific Islander	N/A	10.4% (6.3 - 16.6)	
Black	N/A	10.4% (6.1 - 17.0)	
Hispanic	N/A	11.1% (10.2 - 12.1)	
White	N/A	5.0% (4.5 - 5.6)	

NOTE: This table should be used for comparing the risk of diabetes between groups.

The following three tables describe the numbers and rates of deaths caused by diabetes in NM. The information below is provided the NM Bureau of Vital Records and Health Statistics.

**2007 Numbers and Rates of Deaths Caused by Diabetes in New Mexico by Age**

Age	Number of Deaths	Rate of Deaths
Under 20 Years	0	0
20 Years and Older	614	41.5
60 Years and Older	497	139.8
Total	614	33.7

**2007 Numbers and Rates of Deaths Caused by Diabetes in New Mexico by Gender**

Gender	Number of Deaths	Rate of Deaths
Female	313	32.7
Male	304	34.5
Total	614	33.7

**2007 Numbers and Rates of Deaths Caused by Diabetes in New Mexico by Race/Ethnicity**

Race/Ethnicity	Number of Diabetics	Rate of Diabetes
American Indian/ Alaska Native	81	74.1
Asian/Pacific Islander	6	43.7
Black	23	67.9
Hispanic	251	46
White	253	23.4
Total	614	33.7

NOTES: Age-specific death rates are the numbers of deaths per 100,000 population in the specified sex and age groups. Age-adjusted death rates are the numbers of deaths per 100,000 U.S. standard population. Rates based on fewer than 20 events may be statistically unreliable and should be interpreted with caution.

Population source is from the Bureau of Business and Economic Research (BBER), University of NM. BBER updated its methodology beginning with the 2007 population estimates. For rates calculated from these estimates, any rate differences from 2006 to 2007 must be interpreted with caution, as they may be partly attributable to the changes in population estimates used in the rate denominators.

## HEART DISEASE AND STROKE

### Heart Disease New Cases and Deaths<sup>88</sup>

Coronary heart disease (CHD) is the leading cause of death in the U.S. CHD is a narrowing of the small blood vessels that supply blood and oxygen to the heart. Approximately every 25 seconds an American will suffer a coronary event, and approximately every minute someone will die from one.

### Age/Gender<sup>89</sup>

According to data from the Framingham Heart Study (FHS):

- Coronary heart disease makes up more than half of all cardiovascular events in men and women younger than 75 years of age;
- The lifetime risk of developing CHD after 40 years of age is 49% for men, and 32% for women;
- 50% of men and 64% of women who die suddenly of CHD have no previous symptoms of this disease;
- Between 70% and 89% of sudden cardiac deaths occur in men; and
- The annual incidence of cardiac death is 3 to 4 times higher in men than in women.

### Race/Ethnicity<sup>90</sup>

According to the American Heart Association (AHA), among individuals 18 years of age and older, the prevalence of CHD is estimated to be:

- 5.6% among American Indians/Alaska Natives;
- 6.1% among Whites;
- 6% among Blacks; and
- 4.3% among Asians.

### Risk Factors<sup>91 92</sup>

A number of factors increase the risk of developing cardiovascular disease. Some factors cannot be controlled, such as genetics, age and gender. Other factors can be changed to prevent or delay the onset of cardiovascular disease such as abnormal cholesterol, high blood pressure, pre-diabetes, diabetes, tobacco use, secondhand smoke (SHS)

88 American Heart Association. (2009). Circulation. Heart disease and Stroke Statistics 2009. Volume 119, Issue 3. doi:10.1161/CIRCULATIONAHA.108.191261. Retrieved October 2, 2009 from <http://circ.ahajournals.org/cgi/reprint/119/2/e21.pdf>

89 Ibid.

90 Ibid.

91 New Mexico Department of Health. (2008). Heart Disease and Stroke in New Mexico Facts and Figures: At-A-Glance. Retrieved October 6, 2009 from [www.health.state.nm.us/epi/pdf/CVD\\_trifold%20FINAL.pdf](http://www.health.state.nm.us/epi/pdf/CVD_trifold%20FINAL.pdf) American Heart Association. Risk Factors and Coronary Heart Disease. Retrieved October 6, 2009 from <http://www.americanheart.org/presenter.jhtml?identifier=4726>

92 American Heart Association. Risk Factors and Coronary Heart Disease. Retrieved October 6, 2009 from <http://www.americanheart.org/presenter.jhtml?identifier=4726>

exposure, physical inactivity, poor nutrition and excess weight.

The rates of death from heart disease and stroke have been declining, primarily from control of certain risk factors such as tobacco, cholesterol and blood pressure, as well as from advances in medicine. This overall decreasing trend could potentially be reversed in the future if preventive action is not taken with controlling the risk factors of obesity and diabetes.

The AHA has identified several risk factors. The more risk factors an individual has, the greater chance of developing coronary heart disease. The risk factors that can be modified, treated or controlled include:

- High blood pressure - High blood pressure increases the heart's workload causing the heart to thicken and become stiffer. It also increases the risk of stroke, heart attack, kidney failure and congestive heart failure.
- High blood cholesterol - As blood cholesterol rises, so does risk of coronary heart disease.
- Diabetes mellitus - Diabetes seriously increases the risk of developing cardiovascular disease. Even when glucose (blood sugar) levels are under control, having diabetes increases the risk of heart disease and stroke. The risks are even greater if blood sugar is not well controlled.
- Tobacco smoke - Smoker's risk of developing coronary heart disease is 2-4 times that of nonsmokers.
- Physical inactivity - An inactive lifestyle is a risk factor for coronary heart disease. Regular, moderate-to-vigorous physical activity helps prevent heart and blood vessel disease.
- Obesity and overweight - People that have excess body fat, especially at the waist, are more likely than people with these other risk factors to develop heart disease and stroke even if they have no other risk factors.

The risk factors that cannot be modified include:

- Increasing age - Over 83% of people who die of coronary heart disease are 65 or older. At older ages, women who have heart attacks are more likely than men are to die from them within a few weeks.
- Gender - Men have a greater risk of heart attack than do women. Men also have attacks earlier in life. Even after menopause, when women's death rates from heart disease increase, the rate for women is still not as great as it is for men.
- Heredity - Children of parents with heart disease are more likely to develop it themselves.

Other factors that may contribute to coronary heart disease are:

- Individual response to stress; and
- Drinking too much alcohol, which can raise blood pressure, cause heart failure and

lead to stroke.

## The Economic Consequences of Heart Disease<sup>93</sup>

According to AHA, the estimated direct and indirect cost of coronary heart disease for 2009 is \$165.4 billion. In 2006, \$11.7 billion was paid to Medicare beneficiaries for in-hospital costs when coronary heart disease was the principal diagnosis. Other related costs were:

- \$14,009 per discharge for acute myocardial infarction (MI);
- \$12,977 per discharge for coronary atherosclerosis; and
- \$10,630 per discharge for other ischemic heart disease.

## Heart Disease in Children<sup>94</sup>

There are genetic and environmental factors related to the increased risk of CHD in children. Differences in plasma cholesterol levels were found in children in different geographic areas, generally paralleling pediatric cholesterol and saturated fat intake with the incidence of adult coronary heart disease. According to an article in *Pediatrics in Review*, children have risk factors which in adults are predictive of coronary heart disease.

## Stroke New Cases and Deaths<sup>95</sup>

A stroke is the sudden death of brain cells in a localized area due to inadequate blood flow. According to AHA, on average, every 40 seconds, someone in the U.S. has a stroke. Of all strokes, 87% are ischemic, 10% are intracerebral hemorrhage, and 3% are subarachnoid hemorrhage strokes. In 2005:

- Strokes accounted for approximately 1 out of every 17 deaths in the U.S.;
- Approximately 53% of stroke deaths occurred out of the hospital;
- Stroke mortality was 143,579; and
- Total-mention mortality (deaths from all causes of stroke) was 242,000.

## Age/Gender<sup>96</sup>

As acknowledged by AHA, each year more women than men have a stroke. Stroke is a major health issue for women, particularly for postmenopausal women, which raises the question of whether increased incidence is due to aging or to hormone status and

93 American Heart Association. (2009). *Circulation. Heart disease and Stroke Statistics 2009*. Volume 119, Issue 3.

doi:10.1161/CIRCULATIONAHA.108.191261. Retrieved October 2, 2009 from <http://circ.ahajournals.org/cgi/reprint/119/2/e21.pdf>

94 Glueck, C.J., Mellies, M.J., Tsang, R.C., Morrison, J.A. (1980) Risk Factors for Coronary Artery Disease in Children: Recognition, Evaluation, and Therapy. *Pediatrics in Review*, 2: 131-138. Retrieved October 6, 2009 from <http://pedsinreview.aappublications.org/cgi/content/abstract/2/5/131>

95 American Heart Association. (2009). *Circulation. Heart disease and Stroke Statistics 2009*. Volume 119, Issue 3.

doi:10.1161/CIRCULATIONAHA.108.191261. Retrieved October 2, 2009 from <http://circ.ahajournals.org/cgi/reprint/119/2/e21.pdf>

96 American Heart Association. (2009). *Circulation. Heart disease and Stroke Statistics 2009*. Volume 119, Issue 3.

doi:10.1161/CIRCULATIONAHA.108.191261. Retrieved October 2, 2009 from <http://circ.ahajournals.org/cgi/reprint/119/2/e21.pdf>

whether hormone therapy affects risk. Stroke incidence rates for men are greater than they are for women at younger ages but not at older ages.

## Race/Ethnicity<sup>97</sup>

According to data from the 2005 BRFSS, 2.7% of men and 2.5% of women 18 years of age and older had a history of stroke. Among these with a history of stroke:

- 2.3% were non-Hispanic White;
- 4% were non-Hispanic Black;
- 1.6% were Asian/Pacific Islander;
- 2.6% were Hispanic (might be of any race);
- 6% were American Indian/Alaska Native; and
- 4.6% were multiracial.

## Stroke Risk Factors<sup>98</sup>

The AHA has identified several risk factors for stroke. The risk factors that can be changed, treated or controlled include:

- High blood pressure - High blood pressure is the leading cause of stroke and the most important controllable risk factor for stroke.
- Cigarette smoking - In recent years, studies have shown cigarette smoking to be an important risk factor for stroke.
- Diabetes mellitus - Diabetes is an independent risk factor for stroke. Many people with diabetes also have high blood pressure, high blood cholesterol and are overweight. This increases their risk even more.
- Carotid or other artery disease - The carotid arteries in your neck supply blood to your brain. The heart's upper chambers quiver instead of beating effectively, which can let the blood pool and clot. If a clot breaks off, enters the bloodstream and lodges in an artery leading to the brain, a stroke results.
- Atrial fibrillation - This heart rhythm disorder raises the risk for stroke. The heart's upper chambers quiver instead of beating effectively which can let the blood pool and clot.
- Other heart disease - People with coronary heart disease or heart failure have a higher risk of stroke than those with hearts that work normally. Dilated cardiomyopathy (an enlarged heart), heart valve disease and some types of congenital heart defects also raise the risk of stroke.
- Sickle cell disease (also called sickle cell anemia) - This is a genetic disorder that mainly affects African-American and Hispanic children. "Sickled" red blood cells are less able to carry oxygen to the body's tissues and organs. These cells also tend to stick to blood vessel walls, which can block arteries to the brain and cause a stroke.
- High blood cholesterol - People with high blood cholesterol have an increased

<sup>97</sup> Ibid.

<sup>98</sup> American Heart Association. Stroke Risk Factors. Retrieved October 6, 2009 from <http://strokeassociation.org/presenter.jhtml?identifier=4716>

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risk for stroke. Also, it appears that low HDL (“good”) cholesterol is a risk factor for stroke in men, but more data are needed to verify its effect in women.

- Poor diet - Diets high in saturated fat, trans fat and cholesterol can raise blood cholesterol levels leading to stroke. Diets high in sodium (salt) can contribute to increased blood pressure. Diets with excess calories can contribute to obesity. Also, a diet containing five or more servings of fruits and vegetables per day may reduce the risk of stroke.
- Physical inactivity and obesity - Being inactive, obese or both can increase your risk of high blood pressure, high blood cholesterol, diabetes, heart disease and stroke.

The risk factors that cannot be modified include:

- Age - The chance of having a stroke approximately doubles for each decade of life after age 55.
- Heredity - Your stroke risk is greater if a parent, grandparent, sister or brother has had a stroke.
- Gender - Stroke is more common in men than in women. However, more than half of total stroke deaths occur in women. At all ages, more women than men die of stroke. Use of birth control pills and pregnancy pose special stroke risks for women.
- Prior stroke, transient ischemic attack or heart attack - The risk of stroke for someone who has already had one is many times greater than that of a person who has not had a stroke.

## The Economic Consequences of Stroke<sup>99</sup>

The estimated direct and indirect cost of stroke for 2009 is \$68.9 billion. In 2006, \$3.9 billion was paid to Medicare beneficiaries discharged from short-stay hospitals for stroke, which averaged \$7,449 per discharge.

## Stroke in Children<sup>100</sup>

The incidence of stroke in children is relatively low, about six cases in every 100,000 children per year. At least one-third of those cases are in newborns. Strokes in children are often caused by birth defects or infections such as:

- Meningitis;
- Encephalitis;
- Trauma; and
- Blood disorders such as sickle cell disease.

Children who have suffered a stroke may often have problems with speech and

99 American Heart Association. (2009). *Circulation*. Heart disease and Stroke Statistics 2009. Volume 119, Issue 3.

doi:10.1161/CIRCULATIONAHA.108.191261. Retrieved October 2, 2009 from <http://circ.ahajournals.org/cgi/reprint/119/2/e21.pdf>

100 St. John's Hospital. Stroke /Children. Retrieved October 6, 2009 from. [http://www.stjohns.org/services/stroke\\_center/Children.aspx](http://www.stjohns.org/services/stroke_center/Children.aspx)

communication, as well as visual problems such as trouble with visual perception. There are stroke-related disabilities that are unique to children, such as:

- Cerebral palsy, mental retardation and epilepsy;
- 20% -35% of infant stroke survivors will go on to have another stroke; and
- More than two-thirds of survivors will have cognitive deficits, physical disabilities, or seizures that may require therapy, medication or surgery.

Signs and Symptoms of Childhood Stroke:

- Severe headache;
- Nausea and/or vomiting with warm, flushed, clammy skin;
- Slow, full pulse (may have distended neck veins);
- Speech difficulties - absent, slurred or inappropriate speech;
- Eye movement problems;
- Numbness, paralysis, weakness, or loss of coordination of limbs;
- Facial droop;
- Urinary incontinence;
- Seizures;
- Brief loss of consciousness; and
- Transient ischemic attack (TIA).

## Heart Disease and Stroke in New Mexico

### New Cases and Deaths<sup>101</sup>

In 2007, 7.3% of NM adults reported living with cardiovascular disease (defined as having ever had a heart attack, angina, coronary heart disease or a stroke). This translates to over 109,000 NM adults living with cardiovascular disease (CVD) statewide.

In NM, heart disease is the leading cause of death and stroke is the fifth leading cause of death. According to DOH, in 2006, diseases of the heart and strokes combined claimed nearly 4,000 lives, accounting for over a quarter of all deaths in NM.

<sup>101</sup> New Mexico Department of Health. (2008). Heart Disease and Stroke in New Mexico Facts and Figures: At-A-Glance. Retrieved October 6, 2009 from [www.health.state.nm.us/epi/pdf/CVD\\_trifold%20FINAL.pdf](http://www.health.state.nm.us/epi/pdf/CVD_trifold%20FINAL.pdf)

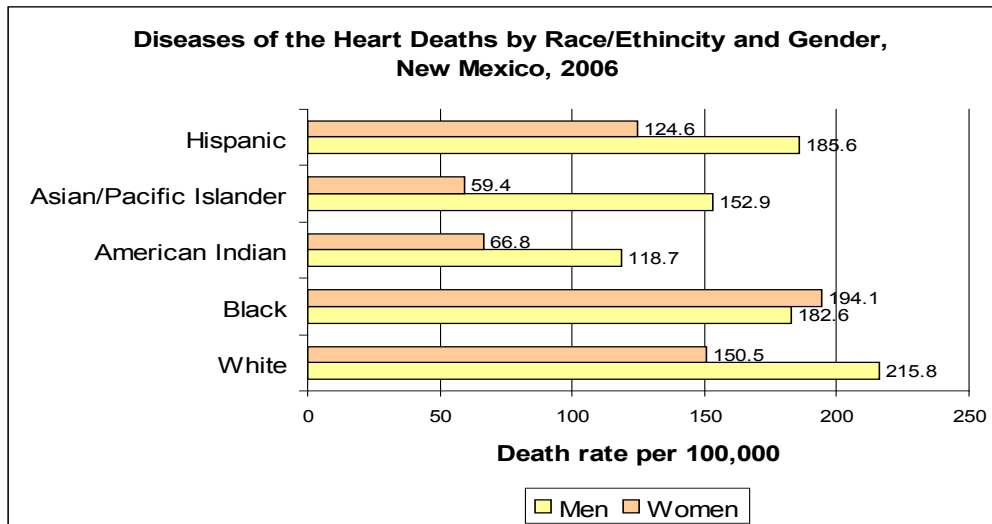
Mortality Rates by Disease and County New Mexico, 2006 <sup>13</sup>		
County	Heart Disease*	Stroke*
Bernalillo	1,071	216
Catron	6	0
Chaves	131	28
Cibola	44	7
Colfax	39	9
Curry	118	11
De Baca	3	0
Dona Ana	245	52
Eddy	125	18
Grant	78	21
Guadalupe	9	0
Harding	1	0
Hidalgo	8	8
Lea	131	19
Lincoln	46	46
Los Alamos	28	1
Luna	109	10
McKinley	60	17
Mora	10	1
Otero	148	14
Quay	33	4
Rio Arriba	62	14
Roosevelt	51	51
San Juan	143	37
San Miguel	57	11
Sandoval	146	38
Santa Fe	175	28
Sierra	38	9
Socorro	28	7
Taos	44	7
Torrance	40	3
Union	12	5
Valencia	91	28
<b>Total</b>	<b>3,330</b>	<b>720</b>
*Mortality rate per 100,000 population		

## Race/Ethnicity/Gender<sup>102</sup>

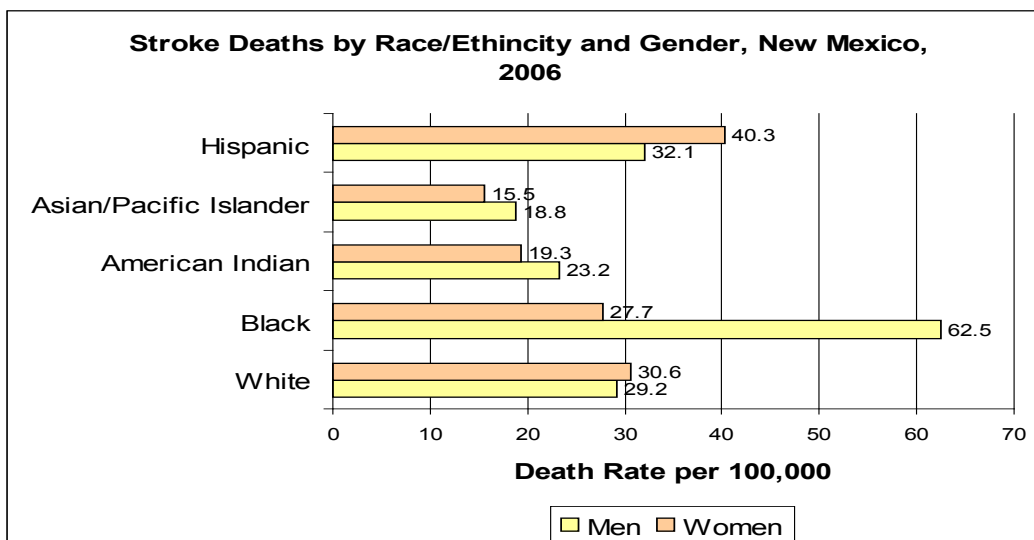
Although the death rates from diseases of the heart and stroke in NM are lower than the national average, certain subpopulations are disproportionately affected.

102 New Mexico Department of Health. (2009) Heart Disease and Stroke in New Mexico Comprehensive Report, June 2009. Retrieved October 9, 2009 from [www.health.state.nm.us/epi/hdata.html](http://www.health.state.nm.us/epi/hdata.html)

In 2006, White males had the highest rate of death from heart disease followed by Black females and then Hispanic males.



For stroke, Black males had the highest rate of death, followed by Hispanic females and then Hispanic males.



### The Economic Consequences of Stroke<sup>103</sup>

In 2007, an estimated \$390 million was spent in NM on treatment related to heart disease; lost productivity accounted for a loss of an additional \$780 million. For stroke, an estimated \$70 million was spent on treatment while lost productivity accounted for \$130 million.

103 New Mexico Department of Health. (2008). Heart Disease and Stroke in New Mexico Facts and Figures: At-A-Glance. Retrieved October 6, 2009 from [www.health.state.nm.us/epi/pdf/CVD\\_trifold%20FINAL.pdf](http://www.health.state.nm.us/epi/pdf/CVD_trifold%20FINAL.pdf)

Of the treatment expenditures for heart disease and stroke in NM in 2007, nearly \$85 million was estimated to have been paid by Medicaid.

## TOBACCO

Tobacco use is a major preventable cause of premature death and disease worldwide. According to the CDC, in 2007:<sup>104</sup>

- An estimated 43.4 million (19.8%) of all adults aged 18 years and older in the U.S. currently smoke cigarettes. This decreased by 1 percentage point (20.8%) from 2006.
- Smoking prevalence was higher among men (22.3%) than women (17.4%).
- The prevalence of smoking among women has remained below 20% for five consecutive years (19.2% in 2003 and 17.4% in 2007); however, variability existed among subgroups of women.
- Among the different racial/ethnic groups, Asians (9.6%) had the lowest smoking prevalence while American Indians and Alaska Natives (36.4%) had significantly higher prevalence than the other racial/ethnic groups. Smoking prevalence among Whites (21.4%) and Blacks (19.8%) was significantly higher than among Hispanics (13.3%).
- Adults who had a General Education Development (GED) diploma (44%) and those with 9-11 years of education (33.3%) had the highest prevalence of current smoking. Those who had an undergraduate or graduate degree had the lowest smoking prevalence (11.4% and 6.2%, respectively).
- Smoking prevalence was lowest among those 65 years and older (8.3%) compared to those 18-24 years (22.2%), 25-44 years (22.8%) and 45-64 years (21%).
- Smoking among adults whose incomes were below the federal poverty level (28.8%) was significantly higher than those whose incomes were at or above this level (20.3%).
- Subpopulations that continue to meet the Healthy 2010 objective to reduce the prevalence of adult cigarette smoking to 12% or less include: Hispanic (8.3%) and Asian (4%) women, women who have 0-8 years of education (10%) or undergraduate (9.4%) or graduate degrees (6%), and women aged 65 years and older (7.6%). Men with graduate degrees (6.4%) and men aged 65 years and older (9.3%) also met this goal.

## Quit Attempts<sup>105</sup>

Among the estimated 86.8 million adults who had smoked at least 100 cigarettes in their lifetime, 52.1% (47.3 million) were no longer smoking at the time of the interview. According to 2007 data from the *Morbidity and Mortality Weekly Reports*, of the estimated 19.8% (43.4 million) of U.S. adults that were current cigarette smokers:

104 Centers for Disease Control and Prevention. (2009) Smoking & Tobacco Use. Adult Cigarette Smoking in the U.S.: Current Estimates. Retrieved October 21, 2009 from [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/adult\\_data/cig\\_smoking/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/index.htm)

105 Centers for Disease Control and Prevention. *Morbidity and Mortality Weekly Reports*, Cigarette Smoking Among Adults—U.S. 2007. *Mortality and Morbidity Weekly Report*. November 14, 2008 /Vol.57 (45); 1221-1226, November 9, 2007. Retrieved October 21, 2009 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a2.htm>

- 77.8% (33.8 million) smoked every day;
- 22.2% (9.6 million) smoked some days; and
- 39.8% (13.4 million) of adult current everyday smokers had stopped smoking for more than one day during the preceding 12 months because they were trying to quit.

## Children and Adolescents<sup>106</sup>

Youth and tobacco use according to CDC:

- In 2007, 20% of high school students in the U.S. were current cigarette smokers - approximately 19% of females and 21% of males.
- Among racial and ethnic subgroups, approximately 23% of White, 17% of Hispanic, and 12% of Black high school students were current cigarette smokers in 2007.
- In 2006, approximately 6% of middle school students in this country were current cigarette smokers.
- Among racial and ethnic subgroups, approximately 7% of White, 7% of Hispanic, 6% of Black, and 3% of Asian American middle school students were current cigarette smokers in 2006.
- Each day in the U.S., approximately 3,900 young people between the ages of 12 and 17 years smoke their first cigarette.
- Each day in the U.S., an estimated 1,000 young people between the ages of 12 and 17 years become daily cigarette smokers (defined as ever smoking ever day for at least 30 days).

## Economic Impact<sup>107</sup>

According to the CDC, costs associated with smoking are more than \$193 billion annually. This includes \$96 billion per year in medical expenditures and another \$97 billion per year resulting from lost productivity. In addition, in the U.S., the health impacts of secondhand smoke costs more than \$10 billion in health care expenditures annually.

## New Mexico Tobacco Use<sup>108</sup>

According to the DOH's Tobacco Use Prevention and Control Program (TUPAC), 2,106 New Mexicans die annually from smoking. Furthermore, an estimated 54,976 New Mexicans suffer with at least one serious illness from smoking. In NM in 2008:

- 19.3% of the population were smokers (This was the first time adult smoking in NM dropped below 20%);

106 Centers for Disease Control Prevention. (2009). Smoking & Tobacco Use. Youth and Tobacco Use: Current Estimates. Retrieved October 21, 2009 from [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/youth\\_data/tobacco\\_use/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm)

107 Centers for Disease Control and Prevention. (2009) TOBACCO USE: Targeting the Nation's Leading Killer. At a Glance 2009. Retrieved October 21, 2009 from <http://www.cdc.gov/nccdphp/publications/aag/osh.htm> [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/fast\\_facts/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm)

108 New Mexico Department of Health. (2009). Tobacco Use Prevention and Control Program. 2009 New Mexico Tobacco Data Highlights. Retrieved October 22, 2009 from [http://www.nmtupac.com/reports/new/NM\\_Tobacco\\_Data\\_Highlights\\_2009.pdf](http://www.nmtupac.com/reports/new/NM_Tobacco_Data_Highlights_2009.pdf).

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- Smoking dropped significantly between 2001 (23.8%) and 2008 (19.3%);
- About 4.6% of the population use spit tobacco; and
- 5.3% of the population use cigars.

Smoking rates are highest among adults who are young (18-24 years), low-income (under \$20,000/yr), low education (less than a high school diploma), the unemployed, the uninsured, and among lesbian, gay, and bisexual individuals.

### **New Mexico Quit Attempts<sup>109</sup>**

In 2007, of NM smokers:

- 57.5% of adult smokers tried to quit smoking in the year prior to being surveyed; and
- 51.6% of high school youth smokers have tried to quit smoking in the past year.

In 2006, 64% of NM adult smokers who saw a health care provider in the past year were advised to quit smoking, compared to 49% in 2001.

Other than cold turkey, the cessation aid most commonly used by NM adult smokers was a medication such as Bupropion, Wellbutrin, or Zyban, followed by nicotine patches and gum.

### **Children and Adolescents<sup>110</sup>**

According to TUPAC, of tobacco use by NM high school youth:

- 24.2% of NM high school students were current smokers in 2007, compared to 20% in the U.S.
- Smoking by NM high school youth declined significantly from 30.2% in 2003 to 24.2% in 2007.
- Smoking among high school boys is 24.9%, similar to girls at 23.7%.
- 11.8% of NM high school youth use spit tobacco, which is higher than the national rate of 7.9%. Boys are significantly more likely (17.4%) to use spit tobacco than girls (5.7%).
- About 13.4% of NM middle school students were current smokers in 2007.

### **Economic Impact of Smoking in New Mexico<sup>111</sup>**

NM carries a significant economic burden due to tobacco use. According to TUPAC, in 2009 the annual smoking-related costs in NM were \$976 million. This includes \$483 million per year in direct medical costs and another \$493 million per year resulting from lost productivity.

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109 Ibid.

110 Ibid.

111 New Mexico Department of Health. (2009). Tobacco Use Prevention and Control Program. 2009 New Mexico Tobacco Data Highlights. Retrieved October 22, 2009 from [http://www.nmtupac.com/reports/new/NM\\_Tobacco\\_Data\\_Highlights\\_2009.pdf](http://www.nmtupac.com/reports/new/NM_Tobacco_Data_Highlights_2009.pdf).

Also according to TUPAC, each pack of cigarettes sold costs the state \$14.00 in smoking-attributable medical and lost productivity costs. The average retail price of a pack of cigarettes in NM is \$4.85.

## ORAL HEALTH<sup>112</sup>

Oral refers to the entirety of the mouth, which includes teeth, gums, hard and soft palate, linings of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws. According to the CDC, good oral health regards the absence of tooth decay and gum disease, and chronic oral pain conditions such as oral cancer, birth defects (i.e., cleft lip and palate), and other conditions that affect the mouth and throat.

Oral health is more than just healthy teeth; it is an essential and integral component of overall health. The oral cavity is a portal of entry as well as the site of disease for bacterial and viral infections that affect general health status. Recent research indicates that infections in the mouth such as periodontal (gum) diseases may increase the risk of heart disease and stroke, premature births in some women, difficulty in controlling blood sugar in persons with diabetes, and respiratory infection in susceptible individuals. Conversely, changes in the mouth often are the first signs of problems elsewhere in the body, such as infectious diseases, immune disorders, nutritional deficiencies, and cancer.

### Dental Caries (Tooth Decay)

Dental caries (tooth decay) is a disease in which acids produced by bacteria on the teeth lead to loss of minerals from the enamel and dentin (the hard substances of teeth). Untreated dental caries can result in the loss of tooth structure, inadequate tooth function, unsightly appearance, pain, infection, and tooth loss. In the U.S., dental caries are four times more common than childhood asthma and seven times more common than hay fever.

People are susceptible to dental caries throughout their lifetime. Similar to children and adolescents, adults can experience new decay on the crown (enamel covered) portion of the tooth. However, adults can also develop caries on the root surfaces of teeth as those surfaces become exposed to bacteria and carbohydrates as a result of gum recession. According to the CDC, the most recent national examination survey indicates that 85% of U.S. adults had at least one tooth with decay or a filling on the crown. Root surface caries affects 50% of adults aged 75 years or older. A substantial portion of adults experiencing dental caries do not obtain treatment at any point in time. The most common factors associated with tooth loss in adults are tooth decay and periodontal (gum) disease. In addition, tooth loss can result from infection, unintentional injury, and head and neck cancer treatment.

The prevalence of decay in children is measured by assessing caries experience (if they have ever had decay and now have fillings), untreated decay (active unfilled cavities),

112 Centers for Disease Control and Prevention. (2005). *The burden of oral disease: A tool for creating state documents*. Atlanta, G.A.: U.S. Department of Health and Human Services. Retrieved October 15, 2009 from <http://www.cdc.gov/OralHealth/publications/library/burdenbook/index.htm>

and urgent care (reported pain or a significant dental infection that requires immediate care).

## **Periodontal (Gum) Diseases**

### **Gingivitis**

Gingivitis is characterized by localized inflammation, swelling, and bleeding gums without a loss of the bone that supports the teeth. Gingivitis is usually reversible with good oral hygiene. Daily removal of dental plaque from the teeth is important to prevent gingivitis, which can progress to destructive periodontal disease. Not all cases of gingivitis progress to periodontal disease; however, all periodontal diseases start as gingivitis.

### **Periodontitis**

Periodontitis (destructive periodontal disease) is characterized by the loss of the tissue and bone that support the teeth. Without appropriate treatment, it places an individual at risk for eventual tooth loss. Among adults, periodontitis is a leading cause of bleeding, pain, infection, loose teeth, and tooth loss. In the U.S., the prevalence of gingivitis is highest among American Indians, Alaska Natives, Mexican Americans, and adults with less than a high school education.

### **Oral Cancer**

Cancer of the oral cavity or pharynx (oral cancer) is the fourth most common cancer in Black men and the seventh most common cancer in White men in the U.S. In 2004, an estimated 28,000 new cases of oral cancer and 7,200 deaths from these cancers occurred in the U.S. Approximately 90% of cases of oral cancer in the U.S. occur among persons aged 45 years and older. The age-adjusted incidence was more than twice as high among men (15) than among women (6.6).

Survival rates for oral cancer have not improved substantially over the past 25 years.

- More than 40% of persons diagnosed with oral cancer die within five years of diagnosis.

Survival varies widely by stage of disease when diagnosed:

- 5-year relative survival rate for individuals with oral cancer diagnosed at a localized stage is 81%.
- 5-year survival rate for individuals with cancer that spread to regional lymph nodes at the time of diagnosis is 51%.
- 5-year survival rate for individuals with distant metastasis is 29%.

Some groups experience a disproportionate burden of oral cancer.

- Oral cancer is the fourth most common cancer in Black men and the seventh most common cancer in White men in the U.S.

- Blacks are more likely than Whites to die from oral cancer.

## Oral Health Disparities

### Race/Ethnicity

The status of oral health has improved for the population as a whole; however, the gains in oral health status have not been evenly distributed across subpopulations.

- Non-Hispanic Blacks, Hispanics, and American Indians and Alaska Natives generally have the poorest oral health of any of the racial and ethnic groups in the U.S. population. These groups are more likely than non-Hispanic Whites to experience dental caries in some age groups, are less likely to have received treatment for it, and have more extensive tooth loss.
- Black adults in each age group are more likely than other racial/ethnic groups to have gum disease.
- Blacks compared to Whites are more likely to develop oral or pharyngeal cancer, are less likely to have it diagnosed at early stages, and are more likely to experience a worse 5-year survival rate.

### Gender

Most oral diseases and conditions are the product of interactions between genetic, socioeconomic, behavioral, environmental, and general health influences. Multiple factors may act synergistically to place some women at higher risk of oral diseases. For example, the comparative longevity of women, compromised physical status over time, and the combined effects of multiple chronic conditions and side effects from multiple medications used to treat them can result in increased risk of oral disease.

However, according to the CDC, there are numerous statistical indicators showing that women have better oral health status than men.

- Women are less likely than men at each age group to have severe periodontal disease.
- Both Black and White women have a substantially lower incidence rate of oral and pharyngeal cancers than do Black and White men, respectively.

However, a higher proportion of women than men have oral-facial pain, including pain from oral sores, jaw joints, face/cheek, and burning mouth syndrome.

### Socioeconomic Status

People living in low-income families bear a disproportionate burden from oral diseases and conditions. Despite progress in reducing dental caries in the U.S.:

- Children and adolescents in families living below the federal poverty level experience

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more dental decay than children living above the poverty level.

- 50% of poor children aged two to 11 years have one or more untreated decayed primary teeth as compared to the 31% of non-poor children.
- Poor adolescents aged 12 to 17 years in each racial/ethnic group have a higher percentage of untreated decay in the permanent teeth than do non-poor adolescents.
- Caries in individuals of all ages from poor families are more likely to be untreated than caries in those living above the poverty level.

At every age, a higher proportion of those at the lowest education and income levels have periodontitis.

- Adults with some college (15%) have two to 2.5 times less destructive periodontal disease than do adults with high school (28%) or with less than high school (35%) levels of education.
- Overall, a higher percentage of Americans living below the federal poverty level are edentulous (have lost all their natural teeth) than are those living above the federal poverty level.

In addition, people living in rural areas have a higher disease burden due to the difficulties in accessing preventive and treatment services.

### New Mexico Oral Health<sup>113</sup>

The Office of Oral Health, Health Systems Bureau of the DOH describes the state's oral health profile as follows:

- 66.4% of the population visited a dentist or a dental clinic within the past year.
- 66.3% of the population had their teeth cleaned by a dentist or dental hygienist within the past year.
- 21.8% of the population, aged 65 and older, has lost all of their teeth.
- 43% of the population, aged 65 and older, has lost six or more teeth.
- 77% of the population on public water systems is receiving fluoridated water.
- 43.2% of 3<sup>rd</sup> grade students have one or more sealants on their permanent first molar teeth.
- 64.6% of 3<sup>rd</sup> grade students have caries (treated or untreated tooth decay).
- 37% of 3<sup>rd</sup> grade students have untreated tooth decay.

113 Centers for Disease Control. (n.d.). *National oral health surveillance system: New Mexico oral health profile*. Retrieved October 15, 2009 from <http://apps.nccd.cdc.gov/nohss/bystate.asp?stateid=35>

## MENTAL DISORDERS

### Mental Disorders in the United States<sup>114</sup>

Mental disorders are health conditions characterized by alterations in thinking, mood, and/or behavior that are associated with personal distress or role impairment.<sup>115</sup> Common mental disorders include anxiety and mood disorders, and substance use disorders.<sup>116</sup>

In the U.S., an estimated 26.2% of people aged 18 years and older (approximately one in four adults) suffer from a diagnosable mental disorder in a given year. In addition, approximately 6% of individuals (one in 17) suffer from a serious mental illness. Many people suffer from more than one behavioral health or mental disorder at a given time. Nearly half (45%) of those with any behavioral health or mental disorder meet the criteria for two or more disorders, in which the severity is strongly related to co-morbidity.

In the U.S.:

- Major depressive disorder is the leading cause of disability in the U.S. for ages 15-44.
- Major depressive disorder affects approximately 14.8 million American adults, or about 6.7% of the U.S. population age 18 and older in a given year.
- Bipolar disorder affects approximately 5.7 million American adults, or about 2.6% of the U.S. population age 18 and older in a given year.
- Dysthymic disorder affects approximately 3.3 million American adults, or about 1.5% of the U.S. population age 18 and older in a given year.
- More than 90% of people who commit suicide have a diagnosable mental disorder, most commonly a depressive disorder or a substance abuse disorder.
- Approximately 2.4 million American adults or about 1.1% of the population age 18 and older in a given year have schizophrenia.
- Approximately 40 million American adults ages 18 and older, or about 18.1% of people in this age group in a given year, have an anxiety disorder.
- Approximately 7.7 million American adults age 18 and older, or about 3.5% of people in this age group in a given year, have Post Traumatic Stress Disorder (PTSD).

114 National Institute of Mental Health. (2009). *The number count: Mental disorders in America* (updated, August 10). Bethesda, MD. Retrieved November 20, 2009 from <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml#Intro>

115 New Mexico Health Policy Commission. (2009). *2008 hospital inpatient discharge data*. Santa Fe, NM: Elisha Leyba-Tercero. Retrieved November 20, 2009 from [http://www.hpc.state.nm.us/documents/HIDD%20Report%20\\_2008.pdf](http://www.hpc.state.nm.us/documents/HIDD%20Report%20_2008.pdf)

116 Ibid.

## Mental Disorders in New Mexico<sup>117</sup>

It is estimated that 500,000 New Mexicans have mental health disorders. Between 25 and 35% of New Mexicans with mental disorders require public payment for their care (Medicaid, Medicare, IHS, and other sources of state and federal payment).

- Approximately 369,000 New Mexicans suffer from some form of mental illness including depression.
- About 71,000 adults have a serious mental illness, which includes individuals with schizophrenia, manic depression, major depression, panic disorder, and obsessive-compulsive disorder.
- Approximately 19,000 children and adolescents in NM live with a severe emotional disturbance.
- 19,025 youth and 131,112 adults (including 3,047 individuals in the state's jails and prisons) have substance use disorders.<sup>118</sup>

## Depression<sup>119</sup>

Depression is one of the most prevalent and treatable mental disorders and is commonly encountered by clinicians in primary care practice. Major depression is usually associated with co-morbid mental disorders, such as anxiety and substance use disorders, marked symptom severity, and impairment of a person's ability to function in work, home, relationship, and social roles. Depression is also a risk factor for suicide and attempted suicide. In addition, depressive disorders have been associated with increased prevalence of chronic medical conditions, such as heart disease, stroke, asthma, arthritis, cancer, diabetes, and obesity.

In 2006:

- 17.1% of adult New Mexicans reported a history of diagnosed depression.
- Females were more likely to report a history of diagnosed depression (22.8%) than were males (11.1%).
- Adult New Mexicans with less income were more likely to report a history of diagnosed depression.
- Adult New Mexicans that were unemployed (25.4%) or unable to work (49.6%) were more likely to report a history of diagnosed depression than those who were employed (14.5%).

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117 New Mexico Human Services Department. (2006). *Needs assessment, resource inventory, and demographic data*. Santa Fe, NM: New Mexico Interagency Behavioral Health Purchasing Collaborative. Retrieved November 20, 2009 from [http://www.bhc.state.nm.us/pdf/NM\\_NARID.pdf](http://www.bhc.state.nm.us/pdf/NM_NARID.pdf)

118 Technical Assistance Collaborative Incorporated. (n.d.). *Behavioral health needs and gaps in New Mexico*. Boston, MA. Retrieved November 20, 2009 from [http://www.tacinc.org/pubs/NM\\_needs\\_gaps.htm](http://www.tacinc.org/pubs/NM_needs_gaps.htm)

119 New Mexico Department of Health. (2008). *Health Behaviors and Conditions of Adult New Mexicans, 2007: Results from the New Mexico Behavioral Risk Factor Surveillance System (BRFSS)*. Santa Fe, NM: Honey, W., Murphy, T., Roeber, J., & Brady, F. Retrieved December 17, 2009 from [http://www.health.state.nm.us/ERD/HealthData/HealthBehaviors/HealthBehaviors-and-Conditions\\_2006.pdf](http://www.health.state.nm.us/ERD/HealthData/HealthBehaviors/HealthBehaviors-and-Conditions_2006.pdf) <[http://www.health.state.nm.us/ERD/HealthData/HealthBehaviors/HealthBehaviors-and-Conditions\\_2006.pdf](http://www.health.state.nm.us/ERD/HealthData/HealthBehaviors/HealthBehaviors-and-Conditions_2006.pdf)>

**2006 Percentage of Adult New Mexicans that Reported a History of Diagnosed Depression by Gender, Age, and Race/Ethnicity**

Demographic Characteristics	Total Number of Respondents to K6 Scale Question	Total Number Reporting History of Depression	Weighted Percent	Range of Rates for Reported Depression (95% Confidence Interval)
Gender				
Female	3,815	888	22.8	21.1 - 24.5
Male	2,331	305	11.1	9.7 - 12.7
Age				
18-24	311	39	9.2	6.3 - 13.2
25-34	780	145	16.2	13.5 - 19.3
35-44	994	194	17.1	14.6 - 20.1
45-54	1,295	309	22.9	20.2 - 25.8
55-64	1,253	299	23.4	20.6 - 26.3
65-74	868	144	15.5	12.8 - 18.6
75+	614	60	9.7	7.1 - 12.9
Race/Ethnicity				
American Indian/Alaska Native	589	92	14.5	11.4 - 18.3
Hispanic	1,874	338	14.4	12.7 - 16.5
White	3,468	727	19.7	18.1 - 21.4
Other	157	24	14.6	8.5 - 23.8
Total	6,146	1,193	17.1	16.0 - 18.3

## Serious Psychological Distress<sup>120</sup>

The DOH used the K6 Scale of Non-Specific Psychological Distress to obtain population-based estimates of the prevalence of mental illness and to describe characteristics of adults with mental disorders. The K6 Scale was not used to diagnose and classify mental disorders according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). However, the K6 Scale was used to assess the likelihood of an individual having a mental health problem that is serious enough to cause moderate to serious impairment in his or her ability to function in work, home, relationship, and social roles.

In 2007:

- 4.1% of adult New Mexicans could be described as having Serious Psychological Distress (SPD).

<sup>120</sup> New Mexico Department of Health. (2009). *Health Behaviors and Conditions of Adult New Mexicans, 2007: Results from the New Mexico Behavioral Risk Factor Surveillance System (BRFSS)*. Santa Fe, NM: Honey, W., & Murphy, T. Retrieved December 17, 2009 from [http://www.health.state.nm.us/ERD/HealthData/HealthBehaviors/Health%20Behaviors%20and%20Conditions\\_2007\\_finalwt10%2011-25-09.pdf](http://www.health.state.nm.us/ERD/HealthData/HealthBehaviors/Health%20Behaviors%20and%20Conditions_2007_finalwt10%2011-25-09.pdf)

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- Education was associated with SPD. Adults with lower education level were more likely to report SPD.
- Adult New Mexicans living in households with lower annual income were more likely to report SPD.
- There was no clear difference in reporting of SPD by gender, race/ethnicity, age, or region of residence.
- Adult New Mexicans who were unemployed or unable to work were more likely to be classified as having SPD than those who were employed, retired, or were a homemaker or a student.

**2007 Percentage of Adult New Mexicans that met the Criteria for Serious Psychological Distress by Gender, Age, and Race/Ethnicity**

Demographic Characteristics	Total Number of Respondents to K6 Scale Question	Total Number Reporting Serious Psychological Distress	Weighted Percent	Range of Rates for Reported Serious Psychological Distress (95% Confidence Interval)
Gender				
Female	3,777	157	4.2	3.4 - 5.3
Male	2,195	88	3.9	2.9 - 5.1
Age				
18-24	263	9	2.5	1.1 - 5.9
25-34	664	31	4.6	2.9 - 7.2
35-44	912	41	5.1	3.3 - 8.0
45-54	1,294	66	4.3	3.3 - 5.7
55-64	1,242	53	4.4	3.1 - 6.2
65-74	910	24	2.8	1.8 - 4.5
75+	666	21	3.5	2.1 - 5.6
Race/Ethnicity				
American Indian/Alaska Native	500	27	3.6	2.3 - 5.8
Asian/Pacific Islander	56	2	2.9	0.7 - 11.3
Black	69	2	1.6	0.4 - 6.4
Hispanic	1,835	120	5.2	4.1 - 6.6
White	3,472	94	3.5	2.6 - 4.7
Total	5,972	245	4.1	3.4 - 4.8

## DOMESTIC VIOLENCE<sup>121</sup>

The National Coalition Against Domestic Violence describes domestic violence as an act of abusive behavior (by the means of intimidation, assault, battery, sexual assault, etc.) perpetrated by an intimate partner against another. It is an epidemic that affects individuals regardless of age, socio-economic status, race, religion, nationality or educational background. Violence against women encompasses a systematic pattern of dominance and control through emotionally abusive and controlling behavior. The consequences of domestic violence have the potential to become intergenerational and last a lifetime.

- One in every four women will experience domestic violence in her lifetime.
- 85% of family violence victims are female.
- 81% of women stalked by a current or former intimate partner are also physically assaulted by that partner.
- 31% are also sexually assaulted by that partner.
- Females 20-24 years of age are at the greatest risk for intimate partner violence.

## Homicide and Injury due to Domestic Violence<sup>122</sup>

In 2008, law enforcement agencies submitted supplemental homicide data that provided information regarding the age, sex, and race of the murder victim and the offender; the type of weapon used in the murder; the relationship of the victim to the offender; and the circumstance surrounding the incident, to the FBI for 14,180 homicides of the 16,272 total nationwide homicides. Of those 14,180 homicides:

- 34.7% of female victims were murdered by their husbands or boyfriends; and
- 42% of all victims were murdered during arguments, including romantic triangles.

## Domestic Violence and Children<sup>123</sup>

- Witnessing violence between one's parents or caretakers is the strongest risk factor of transmitting violent behavior from one generation to the next.
- Boys who witness domestic violence are twice as likely to abuse their own partners and children when they become adults.
- 30% to 60% of perpetrators of intimate partner violence also abuse children in the household.

## Reporting Rates<sup>124</sup>

- Approximately 25% of physical assaults, 20% of rapes, and 50% of stalking

<sup>121</sup> National Coalition Against Domestic Violence. Fact Sheets. National Facts. Domestic Violence Facts. Retrieved October 7, 2009 from <http://www.ncadv.org/resources/FactSheets.php>

<sup>122</sup> Federal Bureau of Investigation (2008) 2008 CRIME IN THE U.S.. Violent Crime: Murder . Retrieved October 21, 2009 from [http://www.fbi.gov/ucr/cius2008/offenses/violent\\_crime/murder\\_homicide.html](http://www.fbi.gov/ucr/cius2008/offenses/violent_crime/murder_homicide.html)

<sup>123</sup> National Coalition Against Domestic Violence. Fact Sheets. National Facts. Domestic Violence Facts. Retrieved October 7, 2009 from <http://www.ncadv.org/resources/FactSheets.php>

<sup>124</sup> National Coalition Against Domestic Violence. Fact Sheets. National Facts. Domestic Violence Facts. Retrieved October 7, 2009 from <http://www.ncadv.org/resources/FactSheets.php>

- perpetuated against females by intimate partners are reported to the police.
- Domestic violence is one of the most chronically underreported crimes.

## Economic Impact<sup>125</sup>

- Intimate partner violence results in costs of more than \$5.8 billion each year, \$4.1 billion of which is related to direct medical and mental health services.
- Victims lost almost 8 million days of paid work, equivalent to more than 32,000 full time jobs and almost 5.5 million days of household productivity as a result of domestic violence.

## Domestic Violence in New Mexico<sup>126</sup>

In 2007, law enforcement identified 22,286 domestic violence incidents perpetrated and 162 stalking victims.

## Homicide and Injury due to Domestic Violence

In 2007, 36% of law enforcement reported domestic violence cases involved injury to the victim. There were 178 homicides statewide. Of these homicides, 18% (32) were domestic violence related. Of these domestic violence cases:

- 34% involved “personal” weapons (feet, fists, knee, belt, etc.);
- 31% involved a firearm; and
- 14% involved knives or vehicles.

## Domestic Violence and Children

On average, in NM, 1 in every 7 incidents of domestic violence reported by law enforcement involved a child witness and an average of two children were present at each.

As reported by law enforcement, there were 3,184 children present at the scene of domestic violence incidents. Of those children:

- 55% of the children who witnessed these incidents were 12 years of age and under;
- 48% experienced physical abuse; and
- 4% experienced sexual abuse at the hands of their adult-victim’s offender.

## Reporting Rates

Incidents of domestic violence go unreported to law enforcement due to refusal of family, friends, or neighbors to report. In addition, patients that are seen in the healthcare/

<sup>125</sup>

Ibid.

<sup>126</sup> Caponera, Betty. (July 2008). Incidence and Nature of Domestic Violence In New Mexico VIII: An Analysis of 2007 Data From The New Mexico Interpersonal Violence Data Central Repository. Retrieved October 15, 2009 from <http://www.cvrc.state.nm.us/pdf/DVVIII.pdf>

emergency room setting with a domestic violence- and stalking-related injury are typically not reported to law enforcement and represent an additional area of underreporting. In 2007, 53% (4,436) of the adult victims who sought services from domestic violence service providers claimed they did not report their incident to law enforcement.

## SEXUALLY TRANSMITTED DISEASE

According to the DOH, all sexually transmitted disease (STD) cases diagnosed or treated in NM are required by law to be reported to the DOH STD Program. Any medical laboratory or facility in the U.S. that performs testing on a NM resident is mandated to report positive results to the state's STD Program.

### Prevalence of STDs in the United States

The following STDs are reportable infections required by law:

#### Chlamydia<sup>127</sup>

*Chlamydia trachomatis* infections are the most commonly reported notifiable disease in the U.S. Since 1994, chlamydial infections have comprised the largest proportion of all STDs reported to the CDC. In women, chlamydial infections, which are usually asymptomatic, may result in pelvic inflammatory disease (PID), which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain.

In 2007, 1,108,374 chlamydial infections were reported to CDC from 50 states and the District of Columbia. This case count corresponds to a rate of 370.2 cases per 100,000 population, an increase of 7.5%, compared with the rate of 344.3 in 2006. The reported number of chlamydial infections was over three times the number of reported cases of gonorrhea (355,991 gonorrhea cases were reported in 2007). From 1988 through 2007, the rate of reported chlamydial infection increased from 87.1 to 370.2 cases per 100,000 population.

In 2007, chlamydia rates per 100,000 population by state ranged from 156.3 cases in New Hampshire to 745.1 cases in Mississippi. Fifteen states, the District of Columbia, and Guam had chlamydia case rates higher than 400 cases per 100,000 population.

#### Gender

In 2007, the overall rate of reported chlamydial infection among women in all 50 states and the DC (543.6 cases per 100,000 females) was almost three times higher than the rate among men (190 cases per 100,000 males). According to the CDC, this trend may reflect that more women are screened for this infection. The lower rates among men also suggest that many of the sex partners of women with chlamydia are not being diagnosed or reported as having chlamydia. From 2003 through 2007, the chlamydial infection rate

<sup>127</sup> Centers for Disease Control and Prevention. (2007). *Sexually transmitted diseases surveillance, 2007*. Atlanta, GA. Retrieved October 28, 2009 from <http://www.cdc.gov/std/stats07/chlamydia.htm#a1>

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in men increased by 42.9% (from 133 to 190 cases per 100,000 males) compared with a 17.3% increase in women during the same period (from 463.6 to 543.6 cases per 100,000 females).

Among women, the highest age-specific rates of reported chlamydia in 2007 were among those 15 to 19 years of age (3,004.7 cases per 100,000 females) and 20 to 24 years of age (2,948.8 cases per 100,000 females). When compared to 2003, case rates per 100,000 women have increased in these two age groups by 12.4% and 17.3%, respectively. These increased rates in women may, in part, reflect increased screening in this group. Age-specific rates among men, while substantially lower than the rates among women, were highest in the 20 to 24 year-old age group (932.9 cases per 100,000 males). Chlamydia case rates among men have increased in most age groups since 2003.

### Race/Ethnicity

In 2007, chlamydia rates increased for all racial and ethnic groups except American Indian/Alaska Natives. The rate of chlamydia among Blacks was over eight times higher than that of Whites (1,398.7 and 162.3 cases per 100,000, respectively). The rates among American Indian/Alaska Natives (732.9) and Hispanics (473.2) were also higher than that of Whites (4.5 and 2.9 times higher, respectively). In 2007, the chlamydia case rate per 100,000 population among Asian/Pacific Islanders was 139.5.

### Gonorrhea<sup>128</sup>

Gonorrhea is the second most commonly-reported notifiable sexually transmitted disease in the U.S. Infections due to *Neisseria gonorrhoeae*, are also a major cause of pelvic inflammatory disease in the U.S. The CDC notes that epidemiologic and biologic studies provide strong evidence that gonococcal infections facilitate the transmission of HIV infection.

From 1975 through 1997, the national gonorrhea rate declined 74% following implementation of the national gonorrhea control program in the mid-1970s. For the past ten years, however, gonorrhea rates appear to have reached a plateau that is far from the Healthy People 2010 target of 19 cases per 100,000 population.

In 2007, 355,991 cases of gonorrhea were reported in the U.S. The rate of reported gonorrhea in the U.S. was 118.9 cases per 100,000 population in 2007, a decrease of 0.7% since 2006. Gonorrhea rates have remained relatively stable for over 10 years.

In 2007, seven states (Idaho, Maine, Montana, New Hampshire, North Dakota, Vermont, and Wyoming) and Puerto Rico had gonorrhea rates below the Healthy People 2010 national target of 19 cases per 100,000 population.

128 Centers for Disease Control and Prevention. (2007). *Sexually Transmitted Diseases Surveillance, 2007*. Atlanta, GA. Retrieved October 28, 2009 from <http://www.cdc.gov/std/stats07/gonorrhea.htm>

## Gender

Prior to 1996, rates of gonorrhea among men were higher than rates among women. For the seventh consecutive year, however, gonorrhea rates among women and men were similar with rates among women being slightly higher. In 2007, the gonorrhea rate among women was 123.5 and the rate among men was 113.7 cases per 100,000 population.

## Age

In 2007, gonorrhea rates continued to be highest among adolescents and young adults. Among females in 2007, 15- to 19 and 20- to 24-year-old women had the highest rates of gonorrhea (647.9 and 614.5, respectively). Among males, the rate was highest in those 20 to 24 years of age (450.1). Among females between 15 and 44 years of age (from 2003 to 2007) increases were greatest in those 25 to 29 years of age (10.9%) and those 30 to 34 years of age (11.4%). Among males between 15 and 44 years of age, increases over that time period were seen among those 15 to 19 years of age (9.5%) and those 25 to 29 years of age (1.5%).

## Race/Ethnicity

In 2007, gonorrhea rates remained highest among Blacks (662.9 cases per 100,000 population). Similar to recent years, the rate among Blacks was 19.1 times greater than the rate among Whites (34.7 cases per 100,000 populations). Gonorrhea rates were 3.1 times greater among American Indian/Alaska Natives (107.1 cases per 100,000 population), and 2 times greater among Hispanics (69.2 cases per 100,000 population) than among Whites in 2007. Rates among Whites were 1.8 times higher than those among Asian Pacific Islanders (18.8 cases per 100,000 population in 2007).

## Syphilis<sup>129</sup>

Syphilis, a genital ulcerative disease, causes significant complications if untreated and facilitates the transmission of HIV. Untreated early syphilis in pregnant women results in perinatal death in up to 40% of all cases and, if acquired during the four years preceding pregnancy, may lead to infection of the fetus in 80% of the cases.

In 2007, primary and secondary (P&S) syphilis cases reported to CDC increased to 11,466 from 9,756 in 2006, an increase of 17.5%. The rate of P&S syphilis in the U.S. in 2007 (3.8 cases per 100,000 population) was 15.2 % higher than the rate in 2006 (3.3 cases per 100,000 population), and it is greater than the Healthy People 2010 target of 0.2 case per 100,000 population.

## Gender

Although the rate of P&S syphilis in the U.S. declined 89.7% between 1990 and 2000, the rate of P&S syphilis increased annually between 2001 and 2007. Overall increases

129 Centers for Disease Control and Prevention. (2007). *Sexually Transmitted Diseases Surveillance, 2007*. Atlanta, GA. Retrieved October 28, 2009 from <http://www.cdc.gov/std/stats07/syphilis.htm>

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in rates between 2001 and 2007 were observed primarily among men (from 3 cases per 100,000 population to 6.6 cases per 100,000 population). After persistent declines from 1992 to 2003, the rate of P&S syphilis among women increased from 0.8 cases per 100,000 population in 2004 to 0.9 cases per 100,000 population in 2005 to 1 case per 100,000 population in 2006, to 1.1 case per 100,000 population in 2007.

The rate of P&S syphilis increased 17.9% among men (from 5.6 cases to 6.6 cases per 100,000 men) between 2006 and 2007. During this time, the rate increased 10% among women from 1 to 1.1 cases per 100,000 women.

## Age

In 2007, the rate of P&S syphilis was highest in persons in the 25- to 29-year-old age group (8.9 cases per 100,000 population). Between 2006 and 2007, P&S syphilis rates in most age groups among men and women increased.

## Race/Ethnicity

From 2006 to 2007, the rate of P&S syphilis increased in all racial and ethnic groups except Asian/Pacific Islanders. The rate increased 5.3% among non-Hispanic Whites (from 1.9 to 2), 25% among Blacks (from 11.2 to 14), 22.9% among Hispanics (from 3.5 to 4.3), and 6.3% among American Indian/Alaska Natives (from 3.2 to 3.4). The rate remained the same at 1.2 cases per 100,000 population among Asian/Pacific Islanders.

## Prevalence of STDs in New Mexico

### Chlamydia<sup>130 131</sup>

In 2007, the prevalence of chlamydial infections in NM is as follows:

- 9,462 total cases
  - 7,047 female cases
  - 2,414 male cases
  - 1 unknown gender case
- 459.5 cases per 100,000 population

According to the DOH's August 2009 *Racial and Ethnic Health Disparities Report Card*:<sup>132</sup>

- The NM chlamydial infection rate continues to be slightly higher than the U.S. rate.
- The number of cases increased among Asians/Pacific Islanders.

130 New Mexico Department of Health. (2008). *STD epidemiology data: Chlamydia number of cases and rates – statewide(1997-2007)* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/GCandCTByYear07.pdf>

131 New Mexico Department of Health. (2008). *STD epidemiology data: Chlamydia number of cases by age group, sex, and county for each year from 1999 through 2007* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/ChlamydiaCasesAgeSexCounty07.pdf>

132 New Mexico Department of Health. (2008, August). *Racial and ethnic health disparities report card*. Santa Fe, NM.

- Hispanic females continue to have the highest rate of reported chlamydial infections and are the only group to have a rate exceeding the national rate.

## Gonorrhea<sup>133 134</sup>

In 2007, the prevalence of gonorrhea in NM is as follows:

- 1,797 total cases
  - 975 female cases
  - 822 male cases
- 87.3 cases per 100,000 population

## Syphilis<sup>135</sup>

In 2007, the prevalence of P&S and early latent syphilis in NM is as follows:

- 111 P&S and early latent total cases<sup>136</sup>
  - 46 P&S cases<sup>137</sup>
    - 31 P&S male cases
    - 15 P&S female cases
    - 2.2 P&S cases per 100,000 population
  - 65 early latent cases<sup>138</sup>
    - 41 early latent male cases
    - 24 early latent female

## HUMAN PAPILLOMAVIRUS<sup>139 140</sup>

Genital human papillomavirus (HPV) is the most common sexually transmitted infection (STI) in the U.S. Human papillomavirus is a group of viruses that includes more than 100 different strains or types.<sup>141</sup> More than 40 of these viruses are sexually transmitted and

133 New Mexico Department of Health. (2008). *STD epidemiology data: Gonorrhea number of cases and rates – statewide (1997-2007)* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/GCandCTByYear07.pdf>

134 New Mexico Department of Health. (2008). *STD epidemiology data: Gonorrhea number of cases by age group, sex, and county for each year from 1999 through 2007* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/GonorrheaCasesbyAgeSexCounty07.pdf>

135 New Mexico Department of Health. (2008). *STD epidemiology data: Syphilis number of cases and rates – statewide (1997-2007)* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/SyphilisCasesByYear07.pdf>

136 New Mexico Department of Health. (2008). *STD epidemiology data: Primary, secondary, and early latent syphilis combined number of cases by age group, sex, and county for each year from 1999 through 2007* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/PrimarySecondaryEarlyLatentSyphilisRace07.pdf>

137 New Mexico Department of Health. (2008). *STD epidemiology data: Primary and secondary syphilis only number of cases by age group, sex, and county for each year from 1999 through 2007* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/PrimaryandSecondarySyphilisAgeSexCounty07.pdf>

138 New Mexico Department of Health. (2008). *STD epidemiology data: Early latent syphilis only number of cases by age group, sex, and county for each year from 1999 through 2007* [Data table]. Retrieved October 28, 2009 from <http://nmhealth.org/erd/healthdata/std/EarlyLatentSyphilisAgeSexCounty07.pdf>

139 Markowitz, L. E., Dunne, E.F., Saraiya, M., Lawson, H. W., Chesson, H., & Unger, E. R. (2007, March 23). Quadrivalent human papillomavirus vaccine recommendations of the advisory committee on immunization practices (ACIP). *Morbidity and Mortality Weekly Report*, 56(RR02), 1-24. Retrieved December 1, 2009 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5602a1.htm>

140 Centers for Disease Control and Prevention. (2009). *Genital HPV Infection: CDC fact sheet* (updated, November 24). Atlanta, G.A. Retrieved December 1, 2009 from <http://www.cdc.gov/std/HPV/STDFact-HPV.htm>

141 Centers for Disease Control and Prevention. (2009). *Human papillomavirus (HPV) infection* (updated, November 6). Atlanta, G.A. Retrieved December 1, 2009 from <http://www.cdc.gov/std/hpv/default.htm>

can infect the genital area of men and women including the skin of the penis, vulva (area outside the vagina), or anus, and the linings of the vagina, cervix, or rectum. These HPV types can also infect the mouth and throat.

Genital HPV types are categorized according to their epidemiologic association with cervical cancer.

- Infections with low-risk types (i.e., types 6 and 11) can cause benign or low-grade cervical cell changes, genital warts, and recurrent respiratory papillomatosis.
- High-risk HPV types act as carcinogens in the development of cervical cancer and other anogenital cancers.
  - High-risk types, including types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 69, 73, and 82, can cause low-grade cervical cell abnormalities, high-grade cervical cell abnormalities that are precursors to cancer, and anogenital cancers.
  - High-risk HPV types are detected in 99 % of cervical cancers; approximately 70 % of cervical cancers worldwide are caused by types 16 and 18.

Most individuals that become infected with HPV do not develop symptoms or health problems. In 90% of cases, the body's immune system clears HPV naturally within two years. However, persistent genital HPV infection can cause cervical cancer in women and other types of anogenital cancers such as cancer of the vulva, vagina, penis, anus, and head and neck (i.e., tongue, tonsils, and throat). Each of these is less common than cervical cancer. In addition, certain types of HPV can cause genital warts in both males and females. In rare cases, these types can cause warts in the throat (a condition called recurrent respiratory papillomatosis or RRP). The types of HPV that can cause genital warts differ from the types that can cause cancer.

## Prevalence of the Human Papillomavirus in the United States<sup>142</sup>

Approximately 20 million Americans are currently infected with HPV.

- It is estimated that 6 million individuals become newly infected each year.
- HPV is a very common infection, in which 50% (at a minimum) of sexually active men and women get it at some point in their lives.
- Approximately 1% of sexually active adults in the U.S. have genital warts at any one time.
- Other cancers that can be caused by HPV are less common than cervical cancer. Each year in the U.S., there are about:
  - 3,700 women who get vulvar cancer;
  - 1,000 women who get vaginal cancer;
  - 1,000 men who get penile cancer;
  - 2,700 women and 1,700 men who get anal cancer; and
  - 2,300 women and 9,000 men who get head and neck cancers. (NOTE: although HPV is associated with some of head and neck cancers, most of

<sup>142</sup> Centers for Disease Control and Prevention. (2009). *Genital HPV Infection: CDC fact sheet* (updated, November 24). Atlanta, G.A. Retrieved December 1, 2009 from <http://www.cdc.gov/std/HPV/STDFact-HPV.htm>

these cancers are related to smoking and heavy drinking.)

## **HANTAVIRUS PULMONARY SYNDROME<sup>143</sup>**

Hantavirus pulmonary syndrome (HPS) is a severe respiratory illness that can be fatal. HPS can be transmitted by infected rodents through their urine, droppings or saliva. Humans can contract the disease by breathing in the aerosolized virus. Rodent control in and around the home remains the primary strategy for preventing HPS.

### **Symptoms of Hantavirus Pulmonary Syndrome<sup>144</sup>**

According to the CDC:

- Early symptoms of HPS include fatigue, fever and muscle aches.
- Early symptoms may also include headaches, dizziness, chills, and abdominal problems such as nausea, vomiting, diarrhea, and abdominal pain. About half of all HPS patients experience these symptoms.
- Late symptoms of HPS occur four to 10 days after the initial phase of illness. These include coughing and shortness of breath.
- Uncommon symptoms of HPS include earache, sore throat, runny nose, and rash.

### **Hantavirus Activity in the United States<sup>145</sup>**

The latest CDC data indicates that there have been a total of 465 cases of HPS in the U.S. as of March 26, 2007. This count started when the disease was first recognized in May 1993. Of these 465 cases:

- 35% of HPS cases resulted in death;
- 64% occurred in males while 37% occurred in females;
- The mean age of HPS confirmed case patients was 38 years;
- Whites accounted for 78% of all cases, which includes about 14% for Hispanics;
- American Indians accounted for about 19% of cases;
- Over half of cases have been reported from areas outside the Four Corners area; and
- About three-quarters of HPS confirmed patients have been residents of rural areas.

<sup>143</sup> New Mexico Department of Health. Hantavirus Pulmonary Syndrome (HPS) Data. Retrieved September 30, 2009 from <http://www.health.state.nm.us/epi/hanta.html>

<sup>144</sup> Centers for Disease Control and Prevention. All About Hantavirus. Retrieved September 30, 2009 from <http://www.cdc.gov/ncidod/diseases/hanta/hps/noframes/symptoms.htm>

<sup>145</sup> Centers for Disease Control and Prevention. Case Information. Retrieved September 30, 2009 from <http://www.cdc.gov/ncidod/diseases/hanta/hps/noframes/caseinfo.htm>

## Hantavirus Activity in New Mexico<sup>146</sup>

NM has reported a total of 80 HPS cases with 33 deaths since 1975:

- In 2007, there were three HPS cases, one of which was fatal. These three cases occurred in Taos, San Miguel and McKinley counties.
- In 2008, there were two cases of HPS, both of which were fatal. These cases occurred in Taos and Otero counties.
- There have been two cases of HPS reported in 2009, one of which was fatal. These cases occurred in Santa Fe and San Miguel counties.

## WEST NILE VIRUS<sup>147</sup>

The West Nile Virus (WNV) is a mosquito-borne disease. WNV infections in humans occur seasonally, with the peak of cases in late summer and early fall. The most serious manifestation of the WNV infection is fatal encephalitis (inflammation of the brain) in humans and horses, as well as mortality in certain domestic and wild birds.

The risk of acquiring WNV can be reduced by:

- Using insect repellent;
- Reducing the amount of time spent outdoors at dusk and dawn when mosquitoes are most active;
- Having screens on doors and windows to keep mosquitoes out; and
- Emptying or eliminating water holding containers such as tires, flower pots and buckets where mosquitoes breed.

## Symptoms of West Nile Virus<sup>148</sup>

According to the CDC:

- About one in 150 people infected with WNV will develop severe illness. The severe symptoms may include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. These symptoms may last several weeks, and neurological effects may be permanent.
- Up to 20% of the people who become infected have symptoms such as fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands or a skin rash on the chest, stomach and back. Symptoms can last for as short as a few days; though even healthy people have become sick for several weeks.
- Approximately 80% of people who are infected with WNV will not show any symptoms at all.

146 New Mexico Department of Health. Hantavirus Pulmonary Syndrome (HPS) Data. Retrieved September 30, 2009 from <http://www.health.state.nm.us/epi/hanta.html>

147 New Mexico Department of Health. West Nile Virus Data. New Mexico. Retrieved September 30, 2009 from <http://www.health.state.nm.us/epi/wnv.html>

148 Centers for Disease Control and Prevention. (September 2009). *West Nile Virus: What You Need to Know*. Retrieved September 30, 2009 from [http://www.cdc.gov/ncidod/dvbid/westnile/wnv\\_factsheet.htm](http://www.cdc.gov/ncidod/dvbid/westnile/wnv_factsheet.htm)

## West Nile Virus Activity in the United States

In 2009, there were a total of 345 reported WNV cases in the U.S. Of these cases:

- 55 cases occurred in Texas;
- 51 cases occurred in Colorado;
- 47 cases occurred in California; and
- 12 cases were fatal.

## West Nile Virus Activity in New Mexico<sup>149</sup>

WNV cases in NM have occurred every year since 2003. However cases have been decreasing as follows:

- 209 cases in 2003;
- 88 cases in 2004;
- 33 cases in 2005; and
- 8 cases in 2006.

In 2007, the number of cases increased to 60. In 2008, the number of cases decreased again to 8 cases.

In 2009, there were five cases of WNV in NM. According to the DOH:

- These cases occurred in Dona Ana, Eddy, Lea, Quay, and Rio Arriba counties;
- Three of these cases occurred in the month of July and two occurred in the month of August;
- Three cases occurred in males and two cases occurred in females;
- The median age of the five individuals that contracted the WNV in NM was 70; and
- One of the five cases of WNV in NM in 2009 was fatal.

149 New Mexico Department of Health. (September 2009). 2009 Human West Nile Virus Case Information, New Mexico. Retrieved September 30, 2009 from [http://www.health.state.nm.us/epi/documents/2009WNVHumanCases\\_001.pdf](http://www.health.state.nm.us/epi/documents/2009WNVHumanCases_001.pdf)



## *OTHER ISSUES*





## VETERANS HEALTH

### National Veteran's Statistics<sup>150</sup>

According to the U.S. Department of Veterans Affairs (VA), in FY08, there were over 23 million veterans in the U.S., 7.84 million enrollees in the VA health care system, and 5.58 million unique patients treated through the VA system.

The VA also reports that as of June 30, 2009:

- There were 3.03 million veterans receiving VA disability compensation;
- There were 273,300 veterans rated 100% disabled;
- There were 354,326 veterans compensated for Post Traumatic Stress Disorder (PTSD); and
- There were 256,879 veterans in receipt of individual unemployability (IU) benefits.<sup>151</sup>

### New Mexico Veteran's Statistics<sup>152</sup>

According to the NM Department of Veteran's Services (DVS), there were an estimated 179,497 veterans in NM in 2008. Of these, approximately half lived in the tri-county area of Sandoval, Bernalillo and Valencia counties. In addition, DVS indicates that in 2008:

- There were 1,508 active-duty soldiers in Iraq and Afghanistan;
- There were 5,710 inpatient admissions to VA medical facilities;
- There were 534,985 outpatient visits to VA medical facilities; and
- There were 26,151 field office visits by NM veterans and their families.

### Post Traumatic Stress Disorder<sup>153</sup>

According to the National Center for PTSD, PTSD is an anxiety disorder that can occur after a traumatic event. A traumatic event is something horrible and scary that an individual sees or that happens to them. During this type of event, the individual thinks that their life or others' lives are in danger. They may feel afraid or that they have no control over what is happening.

Anyone who has gone through a life-threatening event can develop PTSD. Strong emotions caused by such an event create changes in the brain that may result in PTSD. These events can include:

150 U.S. Department of Veterans Affairs. (August 2009). VA Stats at a Glance. Retrieved September 30, 2009 from [http://www1.va.gov/vetdata/docs/4X6\\_summer09\\_sharepoint.pdf](http://www1.va.gov/vetdata/docs/4X6_summer09_sharepoint.pdf)

151 Ibid.

152 New Mexico Department of Veterans' Services. *2008 Annual Report*. Retrieved October 14, 2009 from [http://www.dvs.state.nm.us/pdfs/2008\\_Annual\\_Report.pdf](http://www.dvs.state.nm.us/pdfs/2008_Annual_Report.pdf)

153 U.S. Department of Veterans Affairs, National Center for PTSD. (October 2009). PTSD Overview. Retrieved October 22, 2009 from <http://www.ptsd.va.gov/public/pages/flslist-ptsd-overview.asp>

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- Combat or military exposure,
- Child sexual or physical abuse,
- Terrorist attacks,
- Sexual or physical assault,
- Serious accidents, such as a car wreck, or
- Natural disasters, such as a fire, tornado, hurricane, flood, or earthquake.

Symptoms of PTSD usually begin soon after the traumatic event; however, they may not occur until months or years later. They may also come and go over many years. There are four types of symptoms as follows:

- Reliving the event (re-experiencing symptoms),
- Avoiding situations that remind the individual of the event,
- Feeling numb, and
- Feeling keyed up (hyperarousal).

People with PTSD may also experience other problems. These include:

- Drinking or drug problems,
- Feelings of hopelessness, shame, or despair,
- Employment problems,
- Relationship problems including divorce and violence, and
- Physical symptoms.

The National Center for PTSD reports that experts believe PTSD occurs in:

- About 30% of Vietnam veterans;
- As many as 10% of Gulf War (Desert Storm) veterans;
- 6 to 11% of Afghanistan war (Enduring Freedom) veterans; and
- 12 to 20% of Iraq war (Iraqi Freedom) veterans.

Combat as well as other factors in combat situations such as what one does in the war, the politics of the war, where the war is fought, and the type of enemy faced in the war may contribute to PTSD.

Another cause of PTSD in the military can be military sexual trauma (MST). MST can happen to men and women and can occur during peacetime, training, or war. According to data updated in July 2009, among veterans using VA health care, about:

- 23% reported sexual assault when in the military; and
- 55% of women and 38% of men experienced sexual harassment when in the military.

## Suicide<sup>154</sup>

Research indicates that there is a correlation between PTSD and suicide. There is evidence that traumatic events such as sexual abuse, combat trauma, rape, and domestic violence generally increase a person's suicide risk.

According to the National Center for PTSD, given the high rate of PTSD among veterans, research has examined the relationship between PTSD and suicide among this population. Multiple factors contribute to suicide risk in veterans, such as:

- Gender
- Alcohol abuse
- Family history of suicide
- Older age
- Poor social-environment support (exemplified by homelessness and unmarried status)
- Possession of firearms
- The presence of medical and psychiatric conditions (including combat-related PTSD) associated with suicide

The National Center for PTSD indicates that there is debate about the exact influence of combat-related trauma on suicide risk. For those veterans who have PTSD as a result of combat trauma, it appears that the highest relative suicide risk is observed in veterans who were wounded multiple times and/or hospitalized for a wound. This suggests that the intensity of the combat trauma and the number of times it occurred may influence suicide risk in veterans with PTSD. Other research on veterans with combat-related PTSD suggests that the most significant predictor of both suicide attempts and preoccupation with suicide is combat-related guilt. Many veterans experience highly intrusive thoughts and extreme guilt about acts committed during times of war. These thoughts can overpower the emotional coping capacities of veterans.

## LONG TERM SERVICES

Long term care includes a range of services for people who have functional limitations or chronic health conditions. Long term care services can include<sup>155</sup>:

- Homemakers;
- Home repair services;
- Adult day care;
- Home health providers;
- Respite care; and
- Hospice programs that offer medical services to ease suffering and guide families through the daily care of patients age 65 and over with a life expectancy of six

<sup>154</sup> U.S. Department of Veterans Affairs, National Center for PTSD. (November 2009). PTSD and Suicide. Retrieved November 10, 2009 from <http://www.ptsd.va.gov/public/pages/ptsd-suicide.asp>

<sup>155</sup> New Mexico Aging & Long-Term Services Department. Retrieved October 19, 2009 from <http://www.nmaging.state.nm.us/longterm.html>

months or less if the terminal illness or disease runs its normal course. The patient must choose to elect hospice, and eligibility must be certified by a physician.

Options for people who cannot stay in their own homes include:<sup>156</sup>

- Assisted Living/Residential Care Facilities can provide 24-hour staff protective oversight, three meals a day in a dining room type atmosphere, transportation and coordination of personal and social services. In NM:
  - Assisted living facilities are referred to as “residential care” facilities;
  - There are approximately 171 licensed assisted living facilities; and
  - Licensed NM assisted living facilities range in size from two residents to over 200 residents.
- Nursing facilities can provide 24-hour nursing care, rehabilitative care, are eligible to participate in Medicaid/Medicare programs and may provide sup-acute care. In NM:
  - There are 82 licensed nursing facilities;
  - The average number of residents per facility is 72;
  - There are a total of 5,917 residents needing assistance with approximately 3.54 activities of daily living; and
  - 89% of nursing facility residents are 65 or older.
- Retirement/Independent Living Facilities can provide living accommodations and meals only and provide the lowest intensity level of service. In NM, there are multiple retirement/independent living communities throughout the state to select from.

According to the American Health Care Association (AHCA), Medicaid pays for 69% of nursing facility residents. Twenty-four percent of residents pay for the care themselves, while 7% rely on Medicare. Long Term Care insurance pays for only 3% of care.<sup>157</sup>

## Long Term Care for New Mexicans<sup>158</sup>

- The Coordination of Long-Term Services (CoLTS) program is a joint initiative of the Aging and Long Term Services Department (ALTSD) and the HSD. CoLTS manages Medicare and Medicaid primary, acute, and long-term services and funding in one coordinated and integrated program. CoLTS will serve an estimated 38,000 Medicaid recipients in NM. Two managed-care organizations, AMERIGROUP and Evercare, are the contractors implementing this program.
- The Program of All-inclusive Care for the Elderly (PACE). PACE provides an integrated service delivery system including primary care, home care, rehabilitation services, personal care, meals, transportation, pharmacy and hospitalization and is funded by combining Medicare, Medicaid and private financing. Enrollees in the PACE plan must be at least 55 years old, live in the PACE service area, and be certified as eligible for nursing home care per Medicaid criteria.
- The GAP Program helps to bridge the gap to services and goods for adults with

156 New Mexico Health Care Association. Retrieved October 19, 2009 from <http://www.nmhca.org/pages/care.htm#retire>

157 New Mexico Health Care Association. Retrieved October 19, 2009 from <http://www.nmhca.org/pages/faqs.htm>

158 New Mexico Aging & Long-Term Services Department. Retrieved October 19, 2009 from [http://www.nmaging.state.nm.us/Elderly\\_Disability\\_Services\\_Division.html](http://www.nmaging.state.nm.us/Elderly_Disability_Services_Division.html)

physical disabilities in specific situations. GAP provides interim services and goods to individuals to increase or maintain their independence in a home- and/ or community-based setting. Goods and services provided by GAP shall not exceed \$7,500 per person.

NM has programs that provide support to individuals with disabilities so that they can remain in their own homes and communities. These include:

- The Personal Care Option (PCO) program is available to qualified consumers 21 years of age or older who are eligible for full Medicaid coverage and meet the medical necessity requirements such as individuals who need help with two or more activities of daily living. Individuals must meet the level of care requirement due to disability or functional limitations.<sup>159</sup> The PCO program offers a range of services to consumers who are unable to perform some or all activities of daily living because of a disability or functional limitation.
- The CoLTS C waiver (CCW) program, formerly known as the Disabled and Elderly Waiver, serves persons who are eligible both medically and financially for the Medicaid institutional level of care. Individuals who are elderly, blind or have a disability may be eligible. For medical eligibility, a person is considered disabled if they require assistance with at least two activities of daily living and meet a nursing facility level of care due to a medical disability which can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than 12 months.<sup>160</sup> A person is considered elderly if they are at least 65 years of age. However, a person may still be eligible for services if they qualify as medically disabled but not as elderly. Financial eligibility is based on the income and resources of the applicant. CCW is not an entitlement program. The number of slots is limited and dependent upon federal approval and state appropriations.
- The Traumatic Brain Injury Program offers a variety of service options for New Mexicans living with a brain injury. These include resource materials, training/ educational opportunities specific to individuals with a brain injury, family members, and professionals to help learn about brain injury and to help cope with the effects of brain injury.
- Developmental Disability Waiver.<sup>161</sup> The Developmental Disabilities Waiver program provides an array of residential, habilitation, employment, therapeutic and family support services. This program is designed to provide services and supports that will allow eligible individuals with developmental disabilities to participate as active members of their communities. Eligible individuals must have a developmental disability and mental retardation or a specific related condition. Related conditions are limited to cerebral palsy, autism (including asperger syndrome), seizure disorder, chromosomal disorders, syndrome disorders, inborn errors of metabolism, and developmental disorders of brain formation.
- Mi Via is New Mexico's Self-directed Waiver program. Mi Via is available to

159 The University of New Mexico. New Mexico Personal Care Option (PCO) Program Tip Sheet. Retrieved October 29, 2009 from <http://cdd.unm.edu/infocenterNM/TipSheets/PCO%20Tip%20Sheet.pdf>

160 New Mexico Health Care Association. Retrieved October 19, 2009 from <http://cdd.unm.edu/.../TipSheets/D&E%20Waiver%20Tip%20Sheet.pdf>

161 New Mexico Department of Health. Developmental Disabilities Supports Division - DD Waiver Program. Retrieved October 29, 2009 from <http://www.health.state.nm.us/ddsd/developmentaldisabilities/programddwaiverpg1.htm>

individuals who are eligible to receive long-term services through one of the four Medicaid waiver programs (Disabled and Elderly, Developmental Disabilities, Medically Fragile and AIDS). Also, individuals who have a brain injury and are eligible for home and community-based services may apply for Mi Via. Upon meeting medical and financial eligibility for Medicaid waiver services, a participant may choose Mi Via. Mi Via is designed to assist in managing services and supports so that individuals can live their lives in the best way possible. Mi Via participants can purchase, using their individual budgets, any current waiver service or other services and goods not covered in the waivers or the Medicaid program. Those services or goods must meet their functional, medical, or social needs according to their State-approved plan and budget.

- Intermediate Care Facilities for the Mentally Retarded (ICF/MR) can provide comprehensive psycho-social services, therapeutic intervention, and remedial education in a homelike setting. In NM there are 37 licensed ICF/MR facilities serving over 270 residents and the average number of ICF/MR residents in one facility is 7.65.<sup>162</sup>

## **New Mexico Aging and Long-Term Services Department<sup>163</sup>**

The ALTSD provides volunteer long-term care ombudsmen who visit nursing homes and other long-term care facilities on a regular basis to assure that residents are receiving the care they deserve.

The federal Centers for Medicare and Medicaid Services provide information on specific NM long-term care facilities. All Medicaid applications are handled by local offices of the HSD/ISD - the same offices that handle applications for food stamps, Low Income Home Energy Assistance Program (LIHEAP) heating/cooling help, and other benefits.

## **BORDER HEALTH ISSUES IN NEW MEXICO<sup>164</sup>**

Issues among New Mexico's border populations pose challenges for communities. The cultural, socioeconomic and political complexities of the border region require innovative public health outreach strategies. The following information provides a broad profile of demographics and health conditions in the border region.<sup>165</sup>

### **New Mexico's Border Population**

- In 2000, the estimated border population was 312,200 (16% of state's total population), with a projected increase of 26% from 2000-2010.
- The border population is 63% Hispanic (in Doña Ana and Luna Counties).

162 New Mexico Health Care Association. Retrieved October 19, 2009 from <http://www.nmhca.org/pages/care.htm#retire>

163 New Mexico Aging & Long-Term Services Department. Retrieved October 19, 2009 from <http://www.nmaging.state.nm.us/longterm.html>

164 Dulin, Paul. (October 2009). Personal communication. Community Health Workers Advisory Council: New Mexico Department of Health data on border health issues.

165 Luna County is used as proxy for statistical representation of demographics and health conditions throughout the border counties, as the larger urban center of Las Cruces tends to skew data for the rest of Doña Ana County, and the population of Hidalgo County is too small to be statistically representative.

- 20% of the border population is 1<sup>st</sup> generation and foreign-born with 86% of these residents born in Mexico.
- 32% of the border population is 2<sup>nd</sup> or 3<sup>rd</sup> generation Mexican heritage.
- 20% is Spanish-speaking only or has minimal proficiency in English; more than 50% speak a language other than English in the home.
- Approximately 43% of children in the border region live in immigrant families.
- Excluding Las Cruces, in 2007, border county residents had a median household income of \$25,880 vs. \$41,509 for NM and \$50,740 for the U.S.
- In 2006, 33% of the population in border counties lived below the poverty line vs. 18% for NM and 13% for the U.S. Fifty-four percent of children live in poverty in the border region.
- 33% of the border population is uninsured, but this reaches up to 75% and higher for adults in the approximate 50 Colonia communities found in the region.
- 65% of border residents from 0-21 years of age are enrolled in Medicaid.
- An estimated 5 to 7% of the NM population is undocumented, with an even higher percentage of undocumented individuals residing in the border region.

## **Selected Health Conditions in the New Mexico Border Region**

- The border counties of Doña Ana and Luna Counties account for 33% of all new Tuberculosis cases each year in NM. Nearly all cases are related to Mexico.
- Diabetes ranks as the leading cause of death and is the 5<sup>th</sup> most prominent health problem in the State of Chihuahua, Mexico; it is the 6<sup>th</sup> leading cause of death in NM, but the 3<sup>rd</sup> and 4<sup>th</sup> leading cause in Luna County and Doña Ana County respectively.
- Based on a 2001-2002 survey by the Pan American Health Organization, 16% of the adult population in NM border counties has diabetes.
- Research in the border region of Texas shows a 21% rate of type 2 diabetes among Mexican-American adults. Fifty percent of Mexican-American youth aged 15-19 are obese; 16% have type 2 diabetes; and 30% show insulin resistance (precursor to diabetes).
- Infant deaths in the border region for 2006 reached 9.7 deaths per 1,000 live births versus 4.5 per 1,000 for NM.
- For 2006, only 52% of women in the border region received prenatal care in the first trimester.
- NM border counties consistently rate among the highest in teen pregnancy. In 2007, there were 93 births per 1,000 females attributed to teen mothers aged 15-19 in border counties versus 61 per 1,000 in NM and 42 per 1,000 in the U.S.
- In 2008, 80 % of all children covered statewide under the Women, Infant and Children (WIC) program were Hispanic.
- Based on estimates of the Office of Border Health, the majority of children served by the Special Supplemental Nutrition Program for Women, Infant and Children in border counties are of 1<sup>st</sup> and 2<sup>nd</sup> generation Mexican heritage.
- In 2008, a high proportion of pregnant women participating in WIC had a weight problem when they enrolled: 18% were overweight; 31% were obese; and 6% were very obese. A healthy weight before pregnancy can prevent problems for the

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mother and delivery and in infant health outcomes. These weight problems persist among women participating in WIC as the percentages of overweight and obesity are nearly identical among mothers after giving birth.

- In the border counties of Luna and Hidalgo, 32 to 36% of children aged 2-5 years enrolled in the WIC program in 2008 were either overweight or obese versus 25.5% for all of NM; but this rises to 34 to 42% among Hispanic children in border counties versus 26 % for Hispanic children in the entire state.



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