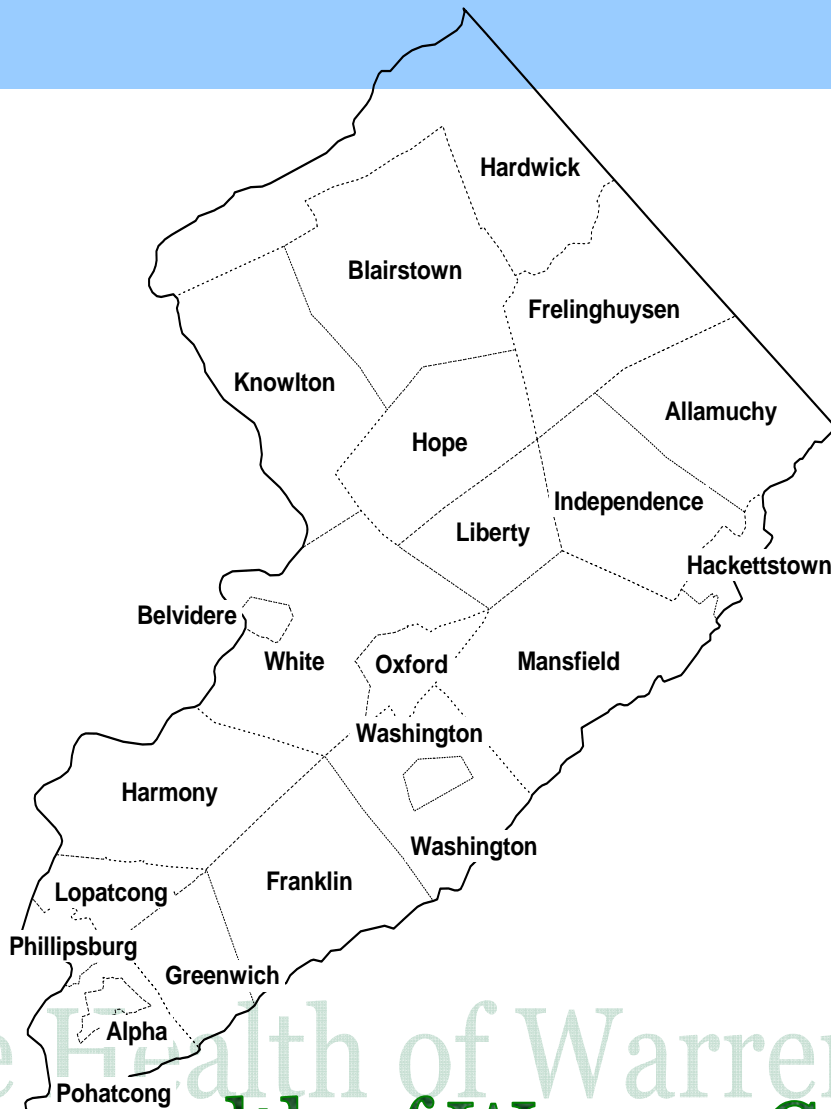




# Warren County 2009 Community Profile



The Health of Warren County  
**The Health of Warren County**

## **Acknowledgements**

Improving the health of Warren County residents requires the involvement and cooperation of individual residents, community-based organizations and the public health community. The following health department staff helped to gather data to compile this Profile.

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## Introduction

### Why a Community Profile?

Many of the health related challenges facing the nation and Warren County today - such as providing vaccinations to all children, controlling infectious disease outbreaks and epidemics, and dealing with environmental health risks - require public health solutions. Medical care alone is not sufficient to address these challenges. Although good medical care is a necessity, individuals and families can address the majority of health problems most effectively in collaboration with government, business, and community groups, as well as with the health care systems.

A wide array of factors influences a community's health. These may include many entities in the community sharing the responsibility for maintaining and improving the health of community members. Stakeholders may include health care providers (clinicians, health plans, and hospitals), public health agencies, and community organizations explicitly concerned with health. While various other government agencies, community organizations, along with private industry, may not see themselves as having an explicit health role, such groups as sports clubs, employers, faith communities, the criminal justice system, the educational system and agencies providing social services, housing and transportation services, do impact the health of the community.

This re-thinking of public health must include a broader understanding of health, not just a dynamic state that embraces well being as well as the absence of illness. Health must be capable of performing in the face of changing circumstances. Factors included in the definition may be items such as healthy behavior, quality education, public safety, environmental protection, economic opportunity, available health care and other contributions that affect our "quality of life".

The following compilation of diverse health related information representing a countywide assessment is the development of an integrated health information system by the Warren County Health Department. Its purpose is to provide a clearer understanding of health data and perceptions to outline priority health issues as a basis for a countywide health plan.

The data in this report will reference empirical as well as community perception information. Examples of referenced empirical information include public health data, medical systems data, demographics, socioeconomic data, educational data, human service data, environmental data and criminal justice data.

This community profile was developed to present highlights of important health issues and county-wide facts for Warren County. Preventing illness and premature death requires people making the right healthy life choices, neighborhood resources that promote healthy living, and high-quality appropriate and accessible health care. A healthy community encompasses social and economic dimensions as well as areas traditionally defined as health. A broad definition of health is the basis for this profile. It includes socioeconomic factors, physical environment, behavior factors, health issues and disease.

A variety of data resources were used to complete this Profile. In areas where there was no available data an attempt was made to collect or find evidence to support identified health issues.

# ABOUT WARREN COUNTY

## Past and Present

Warren County came into existence in 1825 when an act of the New Jersey Legislature, passed on Nov. 20, 1824, took effect and separated the area from Sussex County. The county was named in honor of Dr. Joseph Warren who, although he had no known association with the area, earned a heroic reputation throughout the original 13 states for his devotion to the revolutionary cause, which led to his death in the battle of Bunker Hill. During the Revolutionary War, a large majority of the 13,000 colonists who lived in Sussex (and what is now Warren) supported the patriotic cause. Sussex was among three New Jersey counties commended by the Provincial Congress in 1775 for "spirited exertions" in raising minutemen for the fight for independence.

The county originally had the townships of Greenwich, Hardwick, Independence, Knowlton, Mansfield, Oxford and Pahaquarry, from which the present 22 municipalities were carved. The Town of Belvidere was chosen as the county seat, a decision that was considerably influenced by the action of General Garret D. Wall, who donated grounds for a county courthouse and public square in Belvidere. The county's freeholders ordered \$3,500 raised toward construction of a brick courthouse with a jail and offices for the clerk and surrogate on the first floor and a courtroom (still in use today) on the second floor. The final accounting for the project was \$9,942.24.



***THE COURTHOUSE ANNEX** houses the headquarters of the Warren County Free Public Library system and the county Human Services Department's Division of Temporary Assistance and Social Services. Built in 1860, it became the home of Dewitt C. Blair in 1867, and was later expanded and converted to become the Presbyterian Home for the Aged before becoming a county government facility in the 1970s.*

Although it was the first area of the county to be settled by European colonists, Pahaquarry Township is no more. Largely vacated by the federal government's disputed plan to build the Tocks Island Dam, much of Pahaquarry later became federal and state parkland. With only a handful of residents left, the Township merged with neighboring Hardwick Township on July 2, 1997, reducing the number of municipalities in New Jersey to 566. Accomplished through special legislation, the merger was the first one in the state in 45 years.

***THE CUMMINS BUILDING** was built on Belvidere's courthouse square in 1834 by John B. Maxwell, a newspaper editor and two-term Congressman. Today, Warren County government offices are located there, including the Department of Human Services and the Board of Taxation.*





Transportation has played an important role in the development of the county since its beginning. Its earliest residents were the Lenni Lenape, who lived along the rivers and streams of the region. The first Europeans to settle in the county were the Dutch, who came to Pahaquarry Township and dug for copper around 1650. During this period, they constructed a road from Pahaquarry to Kingston, N.Y., over which they transported the proceeds of their mining ventures. This road, the first commercial highway built in the United States, is still in existence today. Known as "Old Mine Road," it traverses the Delaware Water Gap National Recreation Area, a major visitor attraction in the county.

In the early 1830s, the Morris Canal opened in New Jersey, with its western terminus at Phillipsburg on the Delaware River in Warren County. Some 33 miles of the canal's 102-mile route to Jersey City were in Warren County, and the canal provided a thoroughfare for the county's farm products to reach metropolitan markets. Villages such as Port Warren, Port Colden, Port Murray and Rockport owe their names and their existence to their location along the canal. The Morris Canal also brought together the anthracite coal from Pennsylvania with the limestone and iron ore from New Jersey in the formation of heavy industry. Railroads quickly replaced the canal and sped the development of industry within the county.

Today, sections of the Morris Canal are being transformed into a public greenway across the county. Moreover, the Warren County Historical Learning Center is located at Bread Lock Park (site of a lock on the canal) in Franklin Township; the Jim & Mary Lee Museum welcomes visitors to a former canal inclined plane in Greenwich Township; two rail and transportation museums operate in Phillipsburg; and a steam train excursion runs on the scenic "Bel-Del" railroad tracks along the Delaware River.

Transportation continues to play an important role in the county's evolution. Interstate highways Route 78 and Route 80 cross the county, opening the area to many new residents who commute daily to their jobs in metropolitan New Jersey. Meanwhile, commercial and industrial areas are being created along the highway corridors, as Warren County's proximity to New York, Philadelphia and New Jersey's metropolitan area, along with the quality of life the county offers, make it an attractive place for homes and businesses.

## **General Information**

The County of Warren occupies an area of 364.55 square miles, is 32 miles long and has an average width of 13 miles. It ranks ninth in area and 19th in population among New Jersey's 21 counties. Within the county is some of the most rugged and scenic terrain found in the state. The landscape is characterized by a series of ridges and valleys in a northeasterly / southwesterly direction. Elevations range from 125 feet to 1,600 feet above sea level. Mountain ranges and ridges that divide the county's fertile river valleys include Kittatinny Mountain, Jenny Jump Mountain, Scott's Mountain and Pohatcong Mountain. Streams and rivers, all emptying into the Delaware River, include the Musconetcong, Paulinskill and Pequest rivers; Dunnfield, Lopatcong and Pohatcong creeks; and Van

Campens Brook. Fertile valleys have enabled the county to become an important agricultural district in the Garden State.

## Governmental Structure

Warren County operates under the freeholder form of county government. The Board of Chosen Freeholders consists of three Freeholders each elected at large for staggered terms of three years. The Freeholder Director is chosen by the Freeholders at the board's annual reorganization meeting in January. The Freeholders supervise, direct and administer all county services and functions through the various departments, autonomous boards, agencies and commissions.



***THE WAYNE DUMONT, JR. ADMINISTRATION BUILDING***, in White Township contains the office and meeting room of the Warren County Board of Chosen Freeholders, as well as other county departments. Opened in 1986, the building is named for State Senator Dumont (1914-1992) of Phillipsburg, who represented Warren County for 37 years.

Reporting to the Board of Chosen Freeholders is an appointed County Administrator. In addition to its fiscal administration and the responsibility of linking the county's municipalities with State and other local governmental units, the Board of Chosen Freeholders has these duties:

To fulfill the following legislative responsibilities: (1) formulating county policies; (2) developing new county programs; (3) appointing members of the various commissions and boards; and (4) appropriating funds required from the 22 municipalities of the county to maintain all county services.

And to provide for the following services: (1) general government; (2) regulations; (3) roads and bridges; (4) correctional and penal; (5) health and welfare; and (6) education.

The term "freeholder" originated in England, dating back to at least the 16th Century. Originally, a Freeholder was a person in the British Royal Court who was considered responsible in character or otherwise in favor with the King, and therefore a worthy recipient as an owner (holder) of land grants in the new American colony.

Many years later, on July 2, 1776, just two days before the Declaration of Independence was adopted in Philadelphia, the Provincial Congress of New Jersey met in Burlington and declared its separation from King George and the British parliament. The meeting provided that qualified voters were to elect various officers under the "hands" (approval) of six Freeholders. Legislation in 1798 set the composition of Freeholder Boards at one elected representative for each municipality, and in 1904 smaller boards were authorized. Warren is the only remaining county in New Jersey to have a three-member board, and voters reaffirmed keeping the board at that size in a 2007 referendum.

## Quality of Life

Among Warren County's greatest natural assets are clean air, clean water and open spaces for resident families, for visitor recreation, and for commerce. Nearly 40,000 acres are prime forest, and more than 61,000 acres are termed forestland of statewide importance. Parks, forests and conservation lands within the County total nearly 43,000 acres and include Jenny Jump State Forest, Stephens State Park, Allamuchy Mountain State Park, Worthington State Forest, Merrill Creek Environmental Resource Preserve, Pequest Trout Hatchery and Natural Resource Educational Center, and the Delaware Water Gap National Recreation Area. The county also has three sizable parcels purchased with open space preservation funds, the Marble Hill, White Lake and West Oxford Mountain Natural Resource Areas. Country roads for biking, hiking or driving offer many scenic vistas as well as country craft and antique shops for browsing, farms for picking fresh vegetables and fruits, and wineries that welcome visitors to taste their selections.



***THE WARREN COUNTY HOME** in Mansfield originally served as the county "poor farm." Only five years after Warren County was established, the Freeholder Board bought the property and erected this structure, making it the second county building project after the Courthouse in Belvidere. After being used as a youth shelter and then standing vacant for many years, the Warren County Home was completely refurbished and opened in December 2007 as the new home of the county Health Department.*

The Delaware River, with 52 miles of county shoreline, is a major recreation resource. Anglers can try for bass, muskies, shad and a variety of other fish, while outdoors enthusiasts can enjoy canoeing, swimming, tubing and boating. The Delaware's tributary streams and rivers, each having its own picturesque setting, are alive with sport fish and offer other recreational opportunities. Camping, bird watching and hunting are other outdoors activities that many county residents and visitors enjoy.

The Pequest Trout Hatchery and Natural Resource Education Center, operated by the New Jersey Department of Environmental Protection's Division of Fish and Wildlife, was sited in the Pequest River Valley because of the ample supply of pure water. The hatchery uses up to 7,000 gallons of ground water a minute to raise more than 700,000 trout each year for stocking in New Jersey's publicly accessible waterways. Visitors are welcome at the hatchery for self-guided tours, and group programs are held by arrangement.



In 1993, a non-binding public referendum was passed by Warren County voters to allow an additional tax of up to 2 cents per \$100 of assessed valuation for the purpose of acquiring areas of scenic and environmental value throughout the county. The open space trust fund has been tapped to buy county and municipal parkland, protect historic features and permanently retire the development rights on prime farmland. In 1999 and again in 2002, county voters approved non-binding open space referendums by large margins to increase the open space tax. Last year, the 6-cent open space tax raised \$8.29 million to help keep Warren County green. A number of municipalities have approved their own dedicated open space taxes as well, demonstrating the strong sentiment among residents for protecting the natural and historic resources that make the county a beautiful and unique place.

All or part of 16 Warren County communities are listed on the National Register of Historic Places, plus 60 other county structures or sites are listed on the register. The Town of Belvidere, the county seat, is noted for its Victorian-style architecture, with more than 200 homes listed on the register. Meanwhile, the Village of Hope in Hope Township contains many of the buildings constructed during the Moravian settlement period between 1769 and 1808.

*The county offers a wide variety of cultural events through the community groups and educational institutions. Each year, the Warren County Cultural and Heritage Commission organizes concerts and special events in Oxford Township that revolve around the Oxford Furnace and **Shippen Manor**, which were built in the mid-1700s. Shippen Manor, home to the ironmasters of Oxford Furnace, has been restored and is open as a county museum.*



Meanwhile, every summer the area's agricultural heritage is on display with the Warren County Farmers' Fair in Harmony Township (July 26-August 1). Music fills the air at festivals in Phillipsburg (July 24-26), Knowlton (Aug. 14-16), and Washington (Oct. 3); Belvidere puts its heritage on display with Victorian Days (Sept. 5-6) and Millbrook Village recreates 19th Century life with Millbrook Days (Oct. 3-4). Year-round and county-wide, there is always something interesting to do in Warren.

Located in Warren County are community parks, pools, country inns, golf courses, campgrounds, hiking trails, riding stables and fine restaurants, plus quaint historic villages, country shopping, scenic splendor, a relaxing environment, outdoor recreation, and many family entertainment attractions.

## **Health Care**

Warren County prides itself on having two hospitals, both of which are expanding in size and services. Warren Hospital in Phillipsburg is a full-service hospital with divisions in medicine, surgery, family practice, obstetrics-gynecology and radiology. Community services include education, physical therapy, poison control, alcohol and drug recovery and speech and hearing services.

The other full-service hospital is the Hackettstown Regional Medical Center, owned and operated by Adventist HealthCare. The hospital offers a full range of surgical and medical care including 24-hour emergency services, as well as obstetric, therapy and rehabilitation services. A wide range of screenings and programs are offered to educate the public in early detection, prevention, and healthful living. The hospital underwent major construction and renovation including expansion of its ICU/ITU, ambulatory surgery area, diagnostic imaging department, and cardiopulmonary department, and opened a new Cancer Center featuring a Linear Accelerator for radiation treatments.

long-term care, Warren County has several private nursing facilities and Warren Haven, the 1 For 80-bed skilled care facility run by the county in Mansfield Township.

## **Institutions of Learning**

The county has eight secondary educational schools. Seven are public - including a county operated vocational-technical high school - while the private schools are Blair Academy in Blairstown and the Good Shepherd Christian Academy in Washington Township. There are 37 public and eight private Kindergartens, elementary and middle schools, with at least one located in every municipality except Hardwick Township.

Belvidere, Hackettstown and Phillipsburg have public high schools that receive students on a tuition basis from neighboring municipalities, while Phillipsburg also has an Alternative Secondary School. North Warren Regional High School, located in Blairstown, serves that township and three surrounding communities. Warren Hills Regional High School in Washington Township includes students from five communities.

Warren County Technical School was established in 1959 and offers a full array of technical and vocational training as well as basic educational courses. The school opened a \$6.7 million expansion in 2003. Located in Franklin Township, the school has an excellent job placement percentage for its graduates, and is highly regarded among employers.

There are two institutions of higher learning in the county, Warren County Community College and Centenary College. Founded in 1867, Centenary is a private, four-year college in Hackettstown that also offers 12 graduate programs. Founded in 1981 as a college commission, Warren County Community College opened its permanent campus along Route 57 in Washington Township in 1996 and opened an expansion in 2008. The College offers a range of programs, including transfer degrees to four-year institutions, associate degrees and certificates in several career fields, on-line courses, and a variety of community services.



***THE WARREN COUNTY WAR MEMORIAL*** next to the Warren County Courthouse in Belvidere was erected in 1998 and is used as the setting for the County's Veterans Recognition ceremonies.

On November 11, 1998, the Warren County War Memorial was dedicated and presented to the people of Warren County. Located next to the Warren County Courthouse at the corner of Second and Mansfield streets in Belvidere, the War Memorial consists of three panels of black granite, quarried in India. On them are inscribed the names of the 287 men and two women from Warren County who lost their lives or are listed as missing in action while on active duty in World War I, World War II, the Korean War and the Vietnam War. Another stone has been added with names of those killed in the current Iraq conflict. The stones rest on a brick plaza equipped with granite benches, while above fly the United States flag and the POW-MIA flag. A time capsule holding various documents was placed there in 1999, and a voice repeater system was installed in 2000 so visitors can hear a recorded history of the monument and the names of those it memorializes.

Next to the War Memorial is the Purple Heart Memorial, which was dedicated on Nov. 5, 2000. This red granite marker - "red for the blood they shed" - is dedicated to all those who were wounded during our nation's wars and conflicts. This memorial also includes granite benches, a brick-paved walkway, special lighting and landscaping.



In 2003, the Board of Chosen Freeholders launched the Warren County Veterans Recognition Program. The first person to be honored was Julius Hausold, a 108-year-old World War I veteran from Harmony Township. Since then, the County has held annual ceremonies at the War Memorial to recognize its war veterans and present them with the Warren County Distinguished Military Service Medal. Other ceremonies were held at nursing homes in the county. Applications continue to be

received for future recognition ceremonies, including May 30, 2009.

***THE PURPLE HEART MEMORIAL*** was dedicated in November 2000 "to all recipients of the 'Purple Heart,' those wounded during our nation's wars and conflicts." The \$20,000 project, funded through donations, is located between the Warren County War Memorial and the front entrance of the Warren County Courthouse on Second Street in Belvidere.

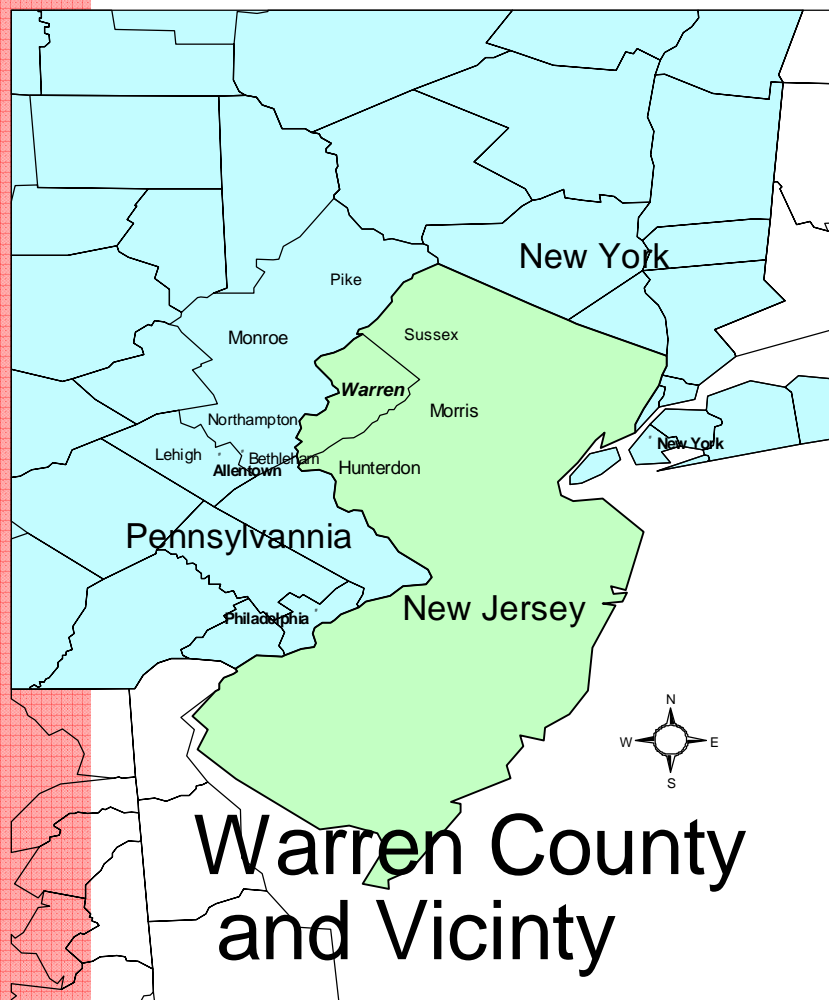


## Geographical Location

The Delaware River and the Commonwealth of Pennsylvania bind the County to the west, by the Musconetcong River, Morris County and Hunterdon County to the east and southeast and by Sussex County on the northeast. The County is highly accessible, yet maintains a predominantly rural character.

Historically, Warren County had been part of the Allentown-Bethlehem Metropolitan Statistical Area. The commercial market area for the County was to the west in Pennsylvania. In December 1992, the federal Office of Management and Budget reclassified Warren County as part of the New York-Newark Primary Metropolitan Statistical Area. There are a number of reasons indicated for this move, including:

- Decreased affinity of Warren County with neighboring Pennsylvania counties;
- Development of its own retail-commercial base;
- The increase of the County's labor force through residential relocation from metropolitan New Jersey, and subsequent daily commutation to jobs held before relocation; and
- A conscious effort on the part of the County to realign itself with northern New Jersey planning groups.





## Transportation

The 1990 Census indicated that 24,950 residents worked outside the County, with 21,222 commuting to other New Jersey counties. That trend is expected to continue with the 2000 Census. In 1990, the inbound total was 13,589 while the 1980 total was nearly the same at 14,027. In both 1980 and 1990, approximately 20,000 county residents worked within the County.

This changing commuter pattern can be attributed primarily to the new residents in the county commuting to their jobs in other areas of New Jersey. As an example, in 1980, 3,601 Warren County residents worked in Morris County. The 1990 figure was 8,002. Commuting to Hunterdon, Somerset, Middlesex, Sussex and Essex counties increased from 4,775 in 1980 to 11,032 in 1990. Meanwhile, inbound commutation from neighboring Pennsylvania counties remained at just over 2,700 in both 1980 and 1990. In 2003 an update was calculated by the Transportation Authority based on the 2000 Census. Analysis improved the accuracy of the data but no significant changes were noted in trends or travel patterns.

*Freight Rail Services* - After the sale and breakup of Conrail, Norfolk Southern took over Conrail's main line and three secondary lines in Warren County. The lines serve the industrial areas of Phillipsburg, Belvidere, Washington and Hackettstown. Two lines provide service to the Port of Newark and the New England region, the other two to points north and south of Phillipsburg.

*Airports* - Two major airports with regularly scheduled passenger flights and freight service throughout the world are within a one-hour drive from Warren County. The Lehigh Valley International Airport is located 12 miles west of Phillipsburg just outside Allentown, Pa., and within a half-mile of Route 22. Newark International Airport is located only 50 miles east on I-78. Also, JFK International, LaGuardia and Philadelphia International are less than two hours away. Two private airports are located in Blairstown and Mansfield Townships. Open dawn to dusk every day, they offer a variety of services such as fuel and airplane sales, repairs, instruction and air taxi and charter service.

*Highways* - Warren County is served by two interstate highways (I-78 and I-80) that provide easy access to many of the major employers in eastern New Jersey, New York City and the Lehigh Valley in eastern Pennsylvania. The interstate highway systems allow residents of Warren County to travel to recreational and cultural areas including ski areas, the Jersey Shore, New York City and Philadelphia, all within a 1-1/2 hour drive.

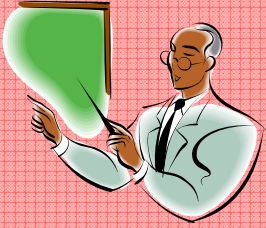
The major north south corridors are State Routes 31, 94 and County Route 519. Routes 57 and 46 run east and west. Route 31 and 46 function as interstate commercial highways providing a direct connection to I-78 and I-80 of which Warren County is in between. Routes 57, 46 and 519 link the towns of Belvidere, Hackettstown, Phillipsburg and Washington Borough together. These roadways allow Warren County residents to travel from one town to another and to access the interstate system. Sussex County is easily reached via Routes 94, 517 and 519, while the State capital, Trenton, is within a 1-1/2 hour drive on Route 31.

*Public Transit* - Existing public transit service includes interstate commuter bus service to New York City from Phillipsburg and Hackettstown, originating from Pennsylvania. Local bus operations exist between Phillipsburg and Hackettstown, as well as a countywide specialized paratransit service (available to residents who meet various funding source requirements) such as the elderly, disabled,

low income, and veterans. In addition, on Oct. 31, 1994, NEW JERSEY Transit extended the Morristown Commuter Rail Line from its present terminus in Netcong, Morris County, to Hackettstown. Four outbound trains each weekday connects with the ferry and PATH to New York City at Hoboken, while two return each day. The train also stops at the nearby International Trade Center in Mount Olive.

Noted: Transportation in Warren County is primarily available through private automobiles. In a recent transportation study, it was reported that approximately 2,634 county residents do not have an automobile available to them. A high percentage of these residents live in Phillipsburg where it is reported that over 1,100 residents do not have access to an automobile. Since the county does not have a large fixed route transportation system, this presents a significant problem for those who must routinely access employment, educational opportunities, social service agencies and childcare outside the Phillipsburg/Hackettstown areas.

## Interesting Facts



<b>Warren County educational facilities:</b>		
Public Elementary Schools		34
Private Elementary Schools		8
Public High Schools		6
Private High Schools		2
Colleges		2
Colleges within a 50 mile radius		16

<b>Warren County hospitals</b>		2
<b>Hospitals within a 25 mile radius</b>		11
<b>Medical Centers and Clinics</b>		4

<b>Library's</b>	County managed	4
	Municipal managed	5

<b>Airports and general aviation facilities</b>		2
---	--	---

<b>Police Depts.</b>		13
<b>Fire Depts.</b>		22
<b>Emergency Squads</b>		13



<b>Office of Emergency Management</b>		
	County Public Safety	1
	Municipal OEM	22



<b>Churches</b>		110
Methodist		21
Presbyterian		19
Catholic		12
Baptist		9
Lutheran		7
Episcopal		6
7 <sup>th</sup> Day Adventist		4
Jehovah Witness		3
Christian		2
Eastern Orthodox		2
Mennonite		1
Church of the Nazarene		1
Pentecostal		1
Synagogues		1
Others		16

## Demographics and Socioeconomics

Data on the basic demographic and socioeconomic characteristics of a community are important for understanding current or potential health concerns. The size of the population necessitates special care in the analysis of group-specific data allowing for privacy issues.

Warren County/New Jersey by Age and Sex									
Age Group	Warren County						New Jersey		
	Number			Percentage			Percentage		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<1	725	655	1,380	0.7	0.6	1.35	4.8	4.9	9.7
1 - 14	10,866	10,210	21,076	10.6	10.0	20.6	10.0	9.6	19.6
15 - 24	5,452	5,243	10,695	5.3	5.1	10.4	6.1	5.8	12.0
25 - 44	15,605	16,431	32,036	15.2	16.0	31.3	15.5	15.8	31.2
45 - 64	11,961	12,083	24,044	11.7	11.8	23.5	10.9	11.8	22.8
65 - 74	2,955	3,775	6,730	2.9	3.7	6.6	3.0	3.8	6.8
75 and older	2,306	4,170	6,476	2.3	4.1	6.3	2.3	4.1	6.4
<b>*Total</b>	<b>49,870</b>	<b>52,567</b>	<b>102,437</b>	<b>48.7</b>	<b>51.4</b>	<b>100.0</b>	<b>48.5</b>	<b>51.5</b>	<b>100.0</b>

\* Total may not equal 100%

Source – 2000 US Census

A community that has a significant number of young families may have a special interest in health issues related to children, pregnancy, teenagers and injuries. Whereas an older community may need to address health issues related to health care resources and utilization and chronic diseases associated with aging. The demographic composition of the population should be understood because significant disparities in health status between minority and non-minority populations may be due to factors including economic resources, health care access, discrimination, and genetic susceptibility to disease.

Warren County/New Jersey Races and Ethnicity 2000 – 2007					
Population Subgroup	Warren County				New Jersey
	Population 2000	Percentage 2000	Population 2007	Population 2007	Percentage 2007
Total Population	102,437	100	109,737	100	
White	96,846	94.5	95,495	87.0	61.9
Black or African American	1,914	1.9	3,534	3.2	13.2
American Indian and Alaskan Native	115	0.1	93	.1	.1
Asian	1,242	1.2	2,643	2.4	7.4
Native Hawaiian and Other Pacific Islander alone	19	n/a	n/a	n/a	.0
Hispanic or Latino	3,757	3.7	6,919	6.3	15.9
Some other race	1,034	1.0	140	.1	.4
U.S. Census 2000/2007					



## Warren County Population Estimates 2000-2030

Population estimates help with planning in a variety of areas in public health. Potential bioterrorism events, natural disasters, need for services, master plan for development, and various other situations. Warren County because of its geographical location is considered a "bedroom community". People live in county, but travel in and out of Warren County for employment in either Pa. or neighboring counties.

Municipality	2000 Population	2005 Population	2010 Population	2015 Population	2020 Population	2025 Population	2030 Population
Allamuchy	3,880	4,060	5,290	5,510	5,700	5,870	5,950
Alpha	2,480	2,530	2,800	2,920	3,000	3,060	3,110
Belvidere	2,770	2,810	3,280	3,430	3,550	3,710	3,820
Blairstown	5,750	6,070	6,190	6,470	6,710	7,000	7,210
Franklin	2,770	3,210	3,580	3,730	3,860	4,010	4,120
Frelinghuysen	2,080	2,210	2,270	2,370	2,460	2,560	2,640
Greenwich	4,370	5,360	5,680	5,900	6,080	6,300	6,410
Hackettstown	8,980	9,460	9,720	9,760	9,930	10,130	10,270
Hardwick	1,460	1,620	1,680	1,740	1,790	1,850	1,890
Harmony	2,730	2,850	3,750	3,890	4,010	4,150	4,250
Hope	1,890	1,980	2,020	2,110	2,180	2,280	2,350
Independence	5,600	5,870	5,940	6,140	6,310	6,520	6,670
Knowlton	2,980	3,190	3,260	3,380	3,470	3,590	3,670
Liberty	2,770	2,960	3,010	3,080	3,140	3,210	3,260
Lopatcong	5,770	8,020	8,280	8,440	8,540	8,690	8,790
Mansfield	8,070	8,650	9,420	9,710	9,960	10,260	10,470
Oxford	2,310	2,650	2,760	2,860	2,940	3,040	3,080
Phillipsburg	15,170	15,350	15,350	16,040	16,260	16,620	16,860
Pohatcong	3,420	3,480	5,230	5,360	5,470	5,600	5,690
Washington Boro	6,710	7,000	7,160	7,480	7,760	8,090	8,340
Washington	6,250	6,790	7,050	7,340	7,590	7,890	8,100
White	4,250	5,270	5,690	5,900	6,090	6,310	6,470
WC Totals	102,400	111,400	119,400	123,500	126,800	130,700	133,400

NJTPA population forecast by county and municipality 2000-2030

## Special Population Data

Subpopulations such as migrants, the homeless, disabled or those who do not speak English are at greater risk for more significant health problems than the general population. They may have greater difficulty gaining access to community services and resources, and may benefit from a variety of specialized responses.

### 2007 Disabled Data

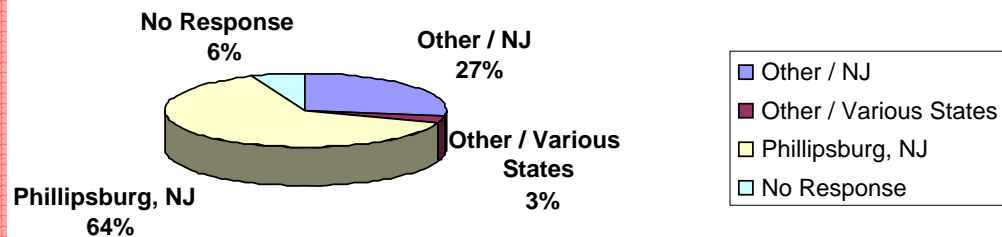
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION		
<b>Population 5 years and over</b>	<b>101,562</b>	<b>100%</b>
With a disability	11,861	11.7%
<b>Population 5 to 15 years</b>	<b>15,987</b>	<b>100%</b>
With a disability	899	5.6%
<b>Population 16 to 64 years</b>	<b>72,297</b>	<b>100%</b>
With a disability	6,405	8.9%
<b>Population 65 years and over</b>	<b>13,278</b>	<b>100%</b>
With a disability	4,557	34.3%
*U.S. Census 2007		

## Homelessness Point-in Time

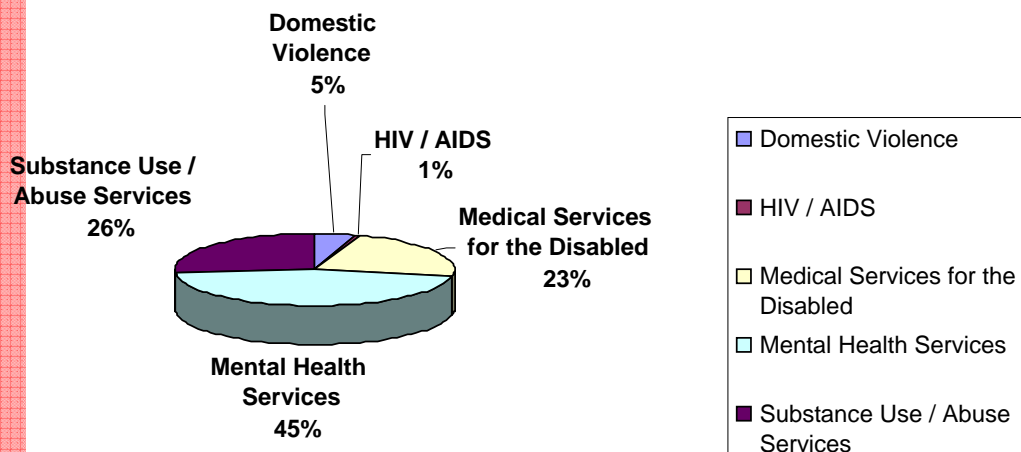
Warren County participates in the statewide annual count of homeless persons known as the "Point-in-Time" survey. The survey counts the number of individuals homeless on a given day. The survey is a requirement for the continuum of Care and subsequent HUD application which provides funds for housing. Persons living in overcrowded housing or those staying with friends or families are not considered homeless for the purpose of the Point in Time survey.

The 2006 Warren County Point in Time survey counted 230 homeless individuals including 44 families and 98 single persons. Of the total respondents, 64% were in Phillipsburg; 45% of homeless were in need of mental health services; 26% needed substance abuse services and 5% needed services for domestic violence.

**Last Permanent Residence of Homeless Individuals in Warren County  
2006 Point in Time Survey**



**Services Needed / Received**



The January 2009 point in time survey response was hindered by a severe snow storm, only 25 people responded compared to 230 people in 2006. Another point in time survey is planned for September of 2009 in hopes of receiving better results.

## Warren County Educational Profile

### Educational Data

Adults with less than a high school education can be at increased risk of health problems because of illiteracy, low paying jobs that do not provide health insurance, lack of health information, and poor living conditions. There is also evidence that children living with parents whose educational attainment is low have more health problems than other children, even after other socioeconomic factors have been taken into account. These problems can begin even before birth because low education is associated with poor maternal health.

<b>EDUCATIONAL ATTAINMENT</b>				
	<b>2000 Population</b>	<b>2000 Percentage</b>	<b>2007 Population</b>	<b>2007 Percentage</b>
<b>Population 25 years and over</b>	69,457	100.0	74,013	100.0
<b>Less than 9th grade</b>	3,027	4.4	2,017	2.7
<b>9th to 12th grade, no diploma</b>	7,488	10.8	5,300	7.2
<b>HS graduate (includes equivalency)</b>	24,556	35.4	26,889	36.3
<b>Some college, no degree</b>	13,008	18.7	13,116	17.7
<b>Associate degree</b>	4,433	6.4	4,607	6.2
<b>Bachelor's degree</b>	11,692	16.8	14,861	20.0
<b>Graduate or professional degree</b>	5,253	7.6	7,268	9.8
<b>Percent high school graduate or higher</b>	(X)	84.9	(X)	90.0
<b>Percent bachelor's degree or higher</b>	(X)	24.4	(X)	29.8
Source: U.S. Census 2000/2007				

### Home schooling

Home schooling occurs in Warren County as in other parts of New Jersey. For **2006**, there are 121 home schooled children ranging from K to 12<sup>th</sup> grades, according to the County Department of Education. Home schooling is noted here because students do not receive a diploma unless they take the GED exam and also are not included in the State testing programs or monitored for compliance with immunization laws.



## Dropout Rates Warren County High Schools

Teenagers who drop out of high school may be at increased risk of unwanted pregnancy, sexually transmitted diseases, substance abuse, low paying jobs with out health insurance, and violence.

Warren County School District	Rate 2004-2005	Rate 2005-2006	Rate 2006-2007
Belvidere	1.86	2.1	1.9
Hackettstown	0.4	0.2	.5
North Warren	1.05	2.7	1.2
Phillipsburg	4.43	3.9	3.4
W C Vocational	0.588	0.8	.2
Warren Hills	2.7	3.1	2.5

\* Source: New Jersey Department of Education. Special Services not included. Rate is calculated by the number of dropouts divided by the total enrolled from grades 9-12.

## Employment /Unemployment Data

For individuals, unemployment reduces household income, can limit access to health insurance, and can contribute to psychological stress. For a community, an increase in the unemployment rate can increase demands on social services and might signal broader economic problems. The unemployment rate can fluctuate considerably from month to month: therefore rates should be obtained to see underlying trends.

### Warren County Employment Trends

Business and Industry Facts	WC 2005	NJ 2005	WC 2006	NJ 2006	WC 2007	NJ 2007
Labor Force (annual average)	59,600	4,430,400	61,370	4,450,400	58,177	4,527,994
Employed Residents (annual average)	57,300	4,235,900	58,141	422,600	54,277	4,253,046
Unemployed Residents (annual average)	2,200	194,400	3,229	224,400	3,580	267,718
Unemployment Rate (%) (annual average)	3.8%	4.4%	5.3%	5.0%	6.2%	5.9%

Source NJ Dept. Labor - Annual Demographic Profile for New Jersey: 2004-2007

**Average Travel Time for Warren County Residents: 36.6 minutes**

<b>Occupation of Workers: Warren County Civilian Employment Population &gt;16 years of age</b>		
<b>Occupation</b>	<b>Number</b>	<b>Percentage</b>
Management Professional and Related	20,852	38.4%
Service	9,503	17.5%
Sales and Office	12,854	23.7%
Farming, Fishing, and Forestry	240	0.4%
Construction, Extraction, Maintenance and Repair Occupations	4,797	8.8%
Production, Transportation, and Material Moving	6,031	11.1%
<b>Total Workers</b>	<b>54,277</b>	

Source: U.S. Census 2007

<b>Industry 2007: Warren County Civilian Employment Population &gt;16 years of age</b>		
	<b>Number</b>	<b>Percentage</b>
Agriculture, forestry, fishing and hunting, and mining	1,176	2.2%
Construction	3,725	6.9%
Manufacturing	6,462	11.9%
Wholesale trade	1,133	2.1%
Retail trade	5,509	10.1%
Transportation and warehousing, and utilities	3,010	5.5%
Information	1,486	2.7%
Finance and insurance, and real estate and rental and leasing	4,178	7.7%
Professional, scientific, and management, and administrative and waste management services	6,123	11.3%
Educational services, and health care and social assistance	13,054	24.1%
Arts, entertainment, and recreation, and accommodation, and food services	2,921	5.4%
Other services, except public administration	2,181	4.0%
Public administration	3,319	6.1%

Source: U.S. Census 2007

**Income/Poverty**

Median household income in the community provides information on family economic resources and the distribution of income in the community. Household income can affect a family's ability to obtain suitable housing, nutrition, or health insurance and may be related to behaviors that affect health. Comparisons over time within the community, among populations within the community, or with other communities may be helpful in gauging the possible relationships between income and health status or other factors.

<b>Poverty Rates in Warren County, New Jersey</b>		
	<b>2005</b>	<b>2007</b>
People age 65 and over	3%	6.8%
All children under 18 years	5%	8.3%
All Families	3%	4.8%
Female householder families	12%	15.3%

\* Source: U.S. Census Bureau, 2007 American Community Survey

**POVERTY AND PARTICIPATION IN GOVERNMENT PROGRAMS:** In 2005, 5 percent of people were in poverty. Five percent of related children under 18 were below the poverty level, compared with 3

percent of people 65 years old and over. Three percent of all families and 12 percent of families with female householder and no husband present had incomes below the poverty level.

*Also see NORWESCAP's Poverty Study at [www.norwescap.org](http://www.norwescap.org)*

## Warren County residents requiring Public Assistance

The **Warren County Division of Temporary Assistance and Social Services (TASS)** is responsible for administrating a variety of programs that provide assistance and social services to Warren County residents. The division of TASS has provided services to the citizens since 1932 as provided by law and regulation. Each social services program was initiated for a specific purpose and there are different eligibility requirements, which may change due to Federal or State laws and regulations or court decisions. All services are subject to the availability of County, State and/or Federal funding. Services are provided to the public without regard to race, color, creed, sex, age, national origin, martial status, or disability.

The **Social Services Unit** provides a wide variety of supportive and emergency assistance in the form of Temporary Assistance to Needy Families (TANF), Supplemental Security Income (SSI), and General Assistance (GA) to its recipients.

Social Service units may include:

- Homeless Program
- Medical transportation
- Boarding Home Services, and
- Information and Referral

The **Food Stamp program** is a federally funded program that assists low-income individuals, seniors and families to afford more nutritious food. Eligibility is based upon income, resources, and expenses.

<b>Public Assistance from August 2006 to 2009</b>				
	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Food Stamps	1562	1737	1745	2143
General Assistance	312	395	342	379
Medicaid		2206		2336
Source: Warren County TASS Sept. 2009				

The **WorkFirst New Jersey (WFNJ) program** provides assistance to families and children as well as support services for single adults and couples without dependent children through work directed activities. WFNJ's goal is to provide a smooth transition from welfare to self-sufficiency. The following services provide assistance for WFNJ:

- Temporary Assistance to Needy Families (TANF) – this program provides monetary assistance to eligible families with minor children along with aid in the form of Food Stamps and Medicaid, while the adults in the household participate in work-directed activities, including job training and education.
- General Assistance (GA) – The Division administers the GA program for seventeen of the county's 22 municipalities, which represents three-quarters of the county's caseload. The program serves both single adults and childless couples with little or no income. Some are considered unemployable, while others must participate in WFNJ work-directed activities to maintain their eligibility. Recipients receive some medical coverage and may participate in the Food Stamp program.

## Medicaid Program

Medicaid is the Federal-State medical insurance program for low-income individuals and their families. The Division accepts and processes applications for a large variety of Medicaid programs:

- NJ Family Care – provides free or low cost health coverage to lower income families without health insurance. Coverage includes children under 19 years old, pregnant women and their newborns. Children 19-21 years old, with prior Medicaid coverage, can also receive Family Care services. Family Care also provides coverage for parents based on their income level.
- Medically Needy – medical coverage is granted to disabled or blind adults or individuals over 65 years old who have unpaid medical bills totaling more than their calculated spend-down.
- Adult Medicaid – program for those 65+, blind or permanently disabled. This program provides both community and long-term care including short-term rehabilitation and nursing home care.
- Medicaid Special – program for those single and 18-21 years old with low income. If living with parents their income is counted for eligibility.
- GA Medicaid – covers doctor visits and prescriptions for those individuals receiving General Assistance. This program does not cover hospitalization.
- Early Periodic Screening/Diagnosis and Treatment Program – offers free periodic medical and dental examinations and follow-up treatment to children under age 21 who are eligible for Medicaid.

<b>Medicaid Eligible Persons in Warren County</b>						
	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>As of 6/20/05</b>
Total	4973	5615	5840	5682	5667	7875
AFDC/ TANF	2452	2649	2860	2962	3031	3194
SSI Related	1787	1757	1783	1732	1721	1758
Medically Needy	57	56	58	63	45	50
DYFS	127	134	155	160	205	2199
Kidcare Part - A	307	302	278	219	208	256
Presumptive Eligibility	3	5	4	6	3	6
Famcare	240	712	702	540	454	412
Famcare Present Eligibility	11	4	2	1	1	1
Source U.S. Dept. Health & Human Services CMS						

There has been a significant increase from previous years, especially in the Food Stamp numbers and General Assistance. As there is more and more working poor in this county, the Food Stamps cases, by necessity have risen. Minimum wage has remained unchanged for several years. Large corporation/private industry for the most part has decreased in this county forcing resident's to work at lesser paying jobs, and making them food stamp eligible.

General Assistance, welfare for adults without children, has increased due to fewer jobs, increased substance abuse issues as well as other issues. This program has a job readiness component as well as addiction recovery component while working diligently to reduce these roadblocks to self-sufficiency.



**Medicare and Medicaid data** show no apparent differences in mortality rates in a Community. However, this information should be used to look at appropriate use of resources for health care. Because data does not exist on the total health care costs for most communities, the per capita health care spending for Medicare participants serves as an alternative for the community's health care costs. Most population estimates reflect approximately 10,000 WC citizens between the ages of 55 and 64 that within 10 years, will be become Medicare eligible (At least for part A when they hit 65). In addition, the 45-55 year age bracket shows an additional 15,000 people. That's 25,000 people becoming Medicare eligible within the next 20 years. Match that with a longer life expectancy for the current Medicare eligible and we should see a marked increase in Medicare recipients over the next few years. This will naturally put a strain on all aging and health care services whether they are Medicare counselors, nursing agencies, physicians, medical supply companies or hospitals.

### Warren County Medicare Trends

	Aged			Disabled			TOTAL Aged & Disabled		
	HI &/or SMI	HI	SMI	HI &/or SMI	HI	SMI	HI &/or SMI	HI	SMI
<b>2000</b>	13,804	13,748	13,386	1,663	1,663	1,459	15,467	15,411	14,84
<b>2001</b>	13,939	13,877	13,514	1,739	1,739	1,526	15,678	15,616	15,040
<b>2002</b>	14,088	14,027	13,658	1,828	1,828	1,588	15,916	15,855	15,246
<b>2003</b>	14,193	14,123	13,752	1,886	1,886	1,632	16,079	16,009	15,384
HI = Hospital Insurance or Part A, , SMI = Supplemental Medical Insurance or Part B									
Source U.S. Dept. Health & Human Services CMS									

## Years of potential life lost due to early death .....

People who die before the age of 65 can be thought of as dying prematurely. The difference between 65 years and the age of a person who dies before that is called the “years of potential life lost (YPLL).” More than half the years of potential life lost among Warren County residents were due to five causes: cancer, heart disease, stroke, chronic respiratory (includes flu and pneumonia), non-motor vehicle and motor vehicle accidents.

<b>2005 Years of Potential Life Lost Statistics for Warren County All Causes</b>		
<b>Age Group</b>	<b>Number of Deaths</b>	<b>YPLL</b>
<b>&lt;1</b>	2	129
<b>1-4</b>	2	125
<b>5-14</b>	0	0
<b>15-24</b>	9	418.5
<b>25-34</b>	6	219
<b>35-44</b>	15	397.5
<b>45-54</b>	42	693
<b>55-64</b>	71	461.5
<b>Total &lt;65</b>	147	2443.5
Data Source: NJ SHAD    Formula Source: <a href="http://www.apheo.ca/index.php?pid=190">http://www.apheo.ca/index.php?pid=190</a>		

Calculation of YPLL demonstrates the impact of disease and injury death on society. YPLL classifies current, but not future impact of disease on society, it is important to realize that the impact of chronic disease and injury can be changed with prevention efforts. Practicing efforts toward prevention and safety can reduce the YPLL due to accidents and chronic disease.

## Warren County Chronic Disease Data

The leading causes of death provide a basic understanding of the health status of the community. Data should be analyzed by age, race, and gender if possible to target preventive efforts. Although in some communities the numbers of deaths will always be too small to develop a stable rate, it is important to know the number of events that have occurred. **In Warren County the top 5 causes of death are Heart Disease, Cancer, Chronic Respiratory Disease, Stroke, and Unintentional Injuries.** The death rates for Warren County residents compared to New Jersey are lower as a rule; however we follow the leading causes.

**Warren County & New Jersey Chronic Disease Trends  
by Gender**

		2000		2001		2002		2003		2004		2005	
		NJ	WC	NJ	WC	NJ	WC	NJ	WC	NJ	WC	NJ	WC
<b>Heart Disease</b>	M	272.2	245.4	253.9	237.8	249.7	255.0	245.6	274.4	227.8	216.7	226.9	227.1
	F	290.0	295.3	279.9	251.8	275.7	275.5	266.2	257.7	247.7	238.9	245.8	256.0
<b>Cancer</b>	M	248.3	215.3	247.3	241.8	237.8	210.6	236.7	236.8	222.3	254.5	221.9	266.8
	F	178.5	194.6	177.1	175.7	172.7	181.1	171.3.9	157.1	164.3	180.9	160.5	166.2
<b>Chronic Lower Respiratory Disease</b>	M	33.9	53.9	32.3	@@	30.8	44.1	30.6	41.6	32.2	37.7	32.2	52.6
	F	37.3	37.9	36.1	42.6	36.5	40.1	36.9	37.8	37.8	79.0	39.8	66.2

Source: NJSHAD, NJDHSS

Data was reviewed by age, race and sex. In Warren County our population is predominantly white (92%), largely an aged population (36% over 64 y/o), and few minorities (black-2%, Hispanic-4%, and other 2%), which results in numbers of cases too small to calculate rates. When looking at the age ranges, the lower ages have very small numbers resulting in too few cases to calculate. As expected, disease rates increased with age. Consistently across the board women have a higher incidence than men of heart disease and men have a higher incidence than women in cancer. It should be noted there are specific cancers (i.e., prostate vs. uterine) that are gender specific.

## Heart and Respiratory Disease

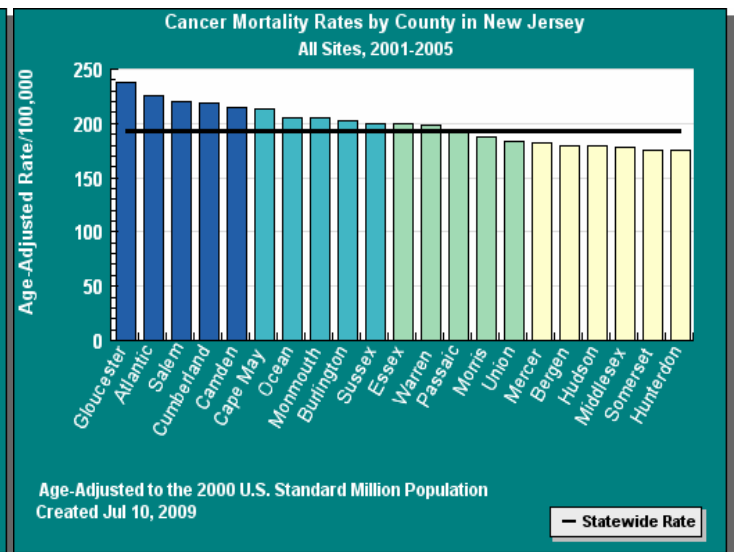
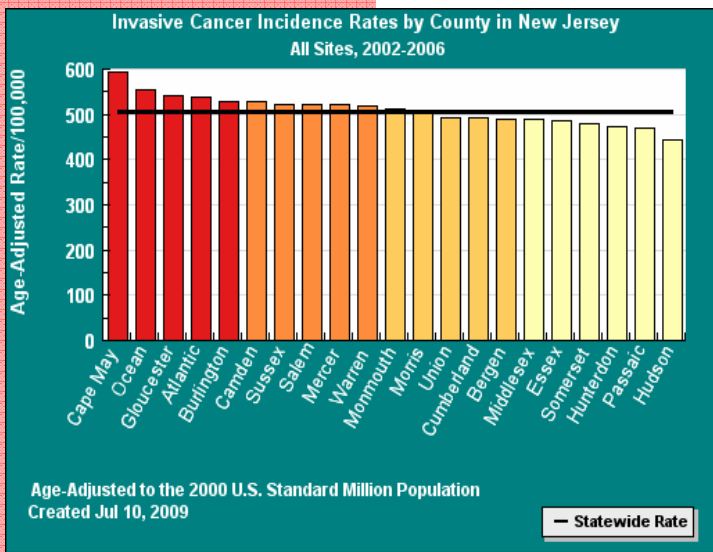
Cardiovascular disease remains the leading cause of death in the nation, New Jersey and Warren County, despite the considerable reduction in the mortality rates. Warren County fares slightly worse than the State (a rate of 483.1 vs. 472.7 per 100,000), and women are affected consistently more than men by heart disease. Most deaths from heart disease are caused by preventable or controllable factors, such as smoking, high blood pressure, high cholesterol, diabetes, and obesity. In reviewing respiratory diseases for 2005, Warren County (a rate of 118.8 vs. N.J. 72.0 per 100,000) rates much higher than the State and females are affected more than men. Therefore Warren County still has much work to do to reduce morbidity and mortality from both heart and respiratory disease through educational interventions and promotion of healthy lifestyle choices.

## Cancer data

Cancer is the second leading cause of death in the United States, New Jersey, and in Warren County. Cancer is not one disease but a combination of many that develop in the various organs and tissues of the human body. Comparing one cancer to another is a complex process that must be addressed in a variety of ways. The Cancer Report for Warren County reported seven common cancers. These cancers include: breast, cervical, colorectal, lung, melanoma, oral and oropharyngeal, and prostate. In addition, bladder and cancers related to HIV infection were briefly discussed. The report provided an overall picture of the cancer burden in Warren County as compared to overall cancer burden for New Jersey. Incidence, mortality, prevalence, and "staging" (i.e., the stage at which the cancer is diagnosed during disease progression) information was provided for each of the common cancers. In addition, the report provided a summary of the target populations within the county that are most impacted by these cancers.

While it is important to assess the cancer burden on racial and ethnicity minorities, this was difficult to do in Warren County due to data suppression. To maintain confidentiality, data is suppressed when there are fewer than five reported cases for a given geographic area. Since 94% of the population in Warren County is white, data for various ethnic groups was not available to provide comparisons.

Below are comparisons of Warren County with other counties in NJ. While our incidence rates are high, our mortality (death rates) are low, possibly due to early screening and diagnoses. Also increase in population within the county over the past few years has brought residents from other states and counties. Noting Cancer takes approximately 20 to 30 years to develop, this influx of people may be the result of increased incidence.



\*<http://www.cancer-rates.info/nj/>



## HIV

According to the CDC, 34 states have shown at least a 15% increase in known HIV cases. Although this increase may be connected to updated reporting laws and increased screening efforts it is important to be responsive toward HIV/AIDS virus trends in and around Warren County in order to create proper awareness, prevention and screening programs for residents.

<b>Warren County Reported HIV Cases 1990-June2008</b>		
<b>Year of Diagnosis</b>	<b>Cases</b>	<b>Case Fatality Rate (%)</b>
<b>Before 1990</b>	<b>24</b>	<b>88%</b>
<b>1990</b>	<b>10</b>	<b>80%</b>
<b>1991</b>	<b>7</b>	<b>57%</b>
<b>1992</b>	<b>12</b>	<b>75%</b>
<b>1993</b>	<b>16</b>	<b>56%</b>
<b>1994</b>	<b>16</b>	<b>44%</b>
<b>1995</b>	<b>5</b>	<b>20%</b>
<b>1996</b>	<b>17</b>	<b>35%</b>
<b>1997</b>	<b>5</b>	<b>20%</b>
<b>1998</b>	<b>13</b>	<b>15%</b>
<b>1999</b>	<b>15</b>	<b>27%</b>
<b>2000</b>	<b>9</b>	<b>11%</b>
<b>2001</b>	<b>9</b>	<b>11%</b>
<b>2002</b>	<b>9</b>	<b>33%</b>
<b>2003</b>	<b>5</b>	<b>0</b>
<b>2004</b>	<b>9</b>	<b>11%</b>
<b>2005</b>	<b>#</b>	<b>0</b>
<b>2006</b>	<b>#</b>	<b>0</b>
<b>2007</b>	<b>6</b>	<b>0</b>
<b>Total</b>	<b>195</b>	<b>40%</b>
#- indicates number is not shown due to small cell size in accordance with NJDHSS security and confidentiality policies Source: NJ Dept. of Health and Senior Services		

<b>2008 HIV/AIDS Facts: NJ &amp; WC</b>		
	<b>Warren County</b>	<b>New Jersey</b>
<b>AIDS Cases</b>	<b>124</b>	<b>51,094</b>
<b>HIV Positive Cases</b>	<b>71</b>	<b>20,718</b>
<b>HIV&amp; AIDS Cumulative</b>	<b>195</b>	<b>71,812</b>
<b>Persons Living w/ HIV/AIDS</b>	<b>117</b>	<b>35,309</b>
<b>Pediatric Infections*</b>	<b>3</b>	<b>1,336</b>
<b>Prenatal HIV Exposures**</b>	<b>10</b>	<b>3,973</b>
*Child born to HIV Positive Mother: child included in HIV cases counts **Child born to HIV positive mother: child's HIV status negative or undetermined Source: NJ Dept. of Health and Senior Services		

## Communicable Disease

The New Jersey Department of Health and Senior Services require the reporting of a number of communicable/infectious diseases including food borne and waterborne pathogens. Surveillance of communicable disease is necessary in order to prevent the further spread of debilitating and/or deadly diseases within the population. Salmonellosis and Campylobacteriosis are food borne illnesses caused by bacteria and tend to occur in the warmer months in temperate climates. Each year (summer) Warren County experiences isolated cases of food borne diseases and occasionally larger outbreaks.

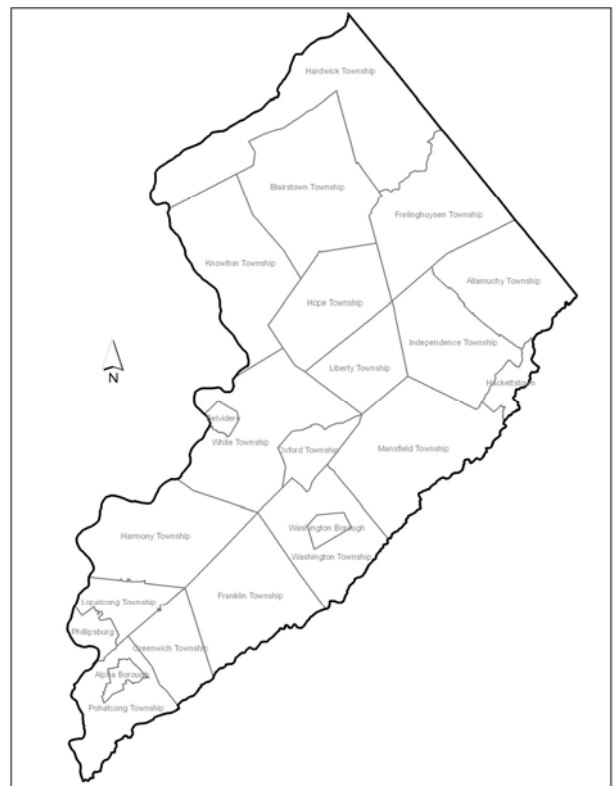
### Communicable Disease Trends in Warren County 2005- 2008

	2005	2006	2007	2008
<b>Campylobacteriosis</b>	11	10	14	9
<b>Hepatitis C- chronic</b>	28	35	27	43
<b>Lyme Disease</b>	221	164	274	250
<b>Salmonellosis</b>	16	9	11	10

Source: NJDHSS/ CDRSS

Due to its rural nature, Warren County has a very high yearly incidence of Lyme Disease. When compared to other counties in New Jersey, Warren ranks second only behind Hunterdon County. Also, Hepatitis C is a growing concern throughout the state of New Jersey and nationwide because those who are infected with the virus may not exhibit symptoms for 10 to 20 years after exposure to the disease. The "epidemic" that we are seeing now is often the identification of old cases that were not previously diagnosed. Although many of these Hepatitis C infections are old cases, the burden to the health care system is current.

Currently, the overall incidence of reportable disease is lower in Warren County than some other areas of NJ. However, it is important to remember that as the population density grows there is always the potential for an increase in communicable disease.



## Quality of life issues in WC .....

Health is more than just the biological events occurring or not occurring in a person. The ideal of health is a sense of well-being in a person's life with co-factors from the community's environment affecting their perceptions. Although quality of life is a difficult concept to measure, this indicator represents an effort to address the community's state of health.

From the 2005 Quality of Life survey, administered by the Warren County Health Dept., the following was reported by respondents:

### **Top 5 most important factors which that are perceived to "most improve life"**

- 55% Good place to raise children
- 49.5% Low crime/safe neighborhoods
- 44.8% Good schools
- 31.7% Clean environment
- 20% Good jobs and healthy economy

### **Top 5 Most important perceived "Health Problems"**

- 45% Cancers
- 37.2% Heart Disease & Stroke
- 34% Aging problems (Arthritis, hearing loss, vision loss, etc.)
- 24.8% Motor Vehicle crashes
- 19.4% High blood Pressure
- 18% Domestic Violence

### **Top 5 most perceived "Risky Behaviors"**

- 62% Alcohol abuse
- 47% Overweight
- 34.9% Tobacco use
- 32.3% Lack of exercise
- 30% Drug abuse

### **Warren County residents rated the County as a "Healthy Community"**

- 52% Very healthy to healthy
- 40% Somewhat healthy

When given a list of eighteen health problems identified in Warren County, residents ranked the following as the most serious:

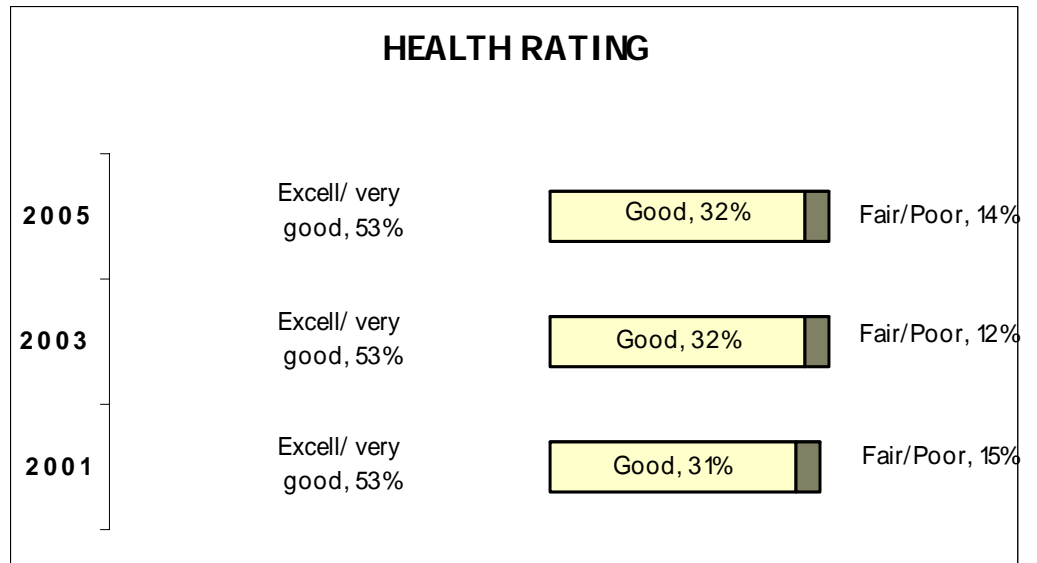
- Alcohol and drug abuse
- Smoking and smokeless tobacco
- Transportation
- Motor vehicle accidents

### **Not as serious but important:**

- Domestic violence
- Cancer cases
- Drug related crime
- Lack of affordable dental care

## How Warren County residents rank their own health

Comparing the 2001, 2003 and the 2005 behavioral surveys sent out by the Warren County Health Dept., more than eighty percent of WC residents ranked their health as good to excellent.



## How WC residents used NJ hospitals 2001 to 2003 .....

Cancer, heart disease and stroke are the leading causes of adult hospitalization for WC residents. Hospitalization data, gathered from NJ and PA hospitals, also revealed the burden of illness due to mental illness, drug and alcohol abuse, as well as the chronic diseases. Hospitalization rates in WC are generally lower than the rest of the New Jersey. Sorted by zip code, residents used the hospitals for the following top three reasons in Warren County during 2001-2003

- **Respiratory** problems
- Treatment of various **Psychoses**, and
- Treatment for a variety of **Heart Disease** problems

\*\* Data obtained from NJ QuadraMed 2004. Not in rank order of leading disease causes.



**Emergency Call Data** was collected by Public Safety/911, from 2005 to 2008, and reviewed for types of **medical calls** Warren County residents requested. There were 31,567 EMS calls for medical purposes during the four years of collected data. When sorted as to specific type of calls the following ranked in more than 500 calls:

<u>Rank</u>	<u>Explanation</u>	<u>#Calls</u>
20	FRACTURE (FRACTURE/BROKEN BONE)	439
19	CARDIAC (CARDIAC EMERGENCY/ARREST)	544
18	BACKPAIN (BACK INJURY)	623
17	CVA (CVA/STROKE)	628
16	DIABETIC (DIABETIC EMERGENCY)	651
15	PSYCH EM (PSYCHIATRIC EMER. [1096])	736
14	BLEEDING (BLEEDING/HEMORRHAGE)	836
13	ABDOM PN (ABDOMINAL PAIN)	910
12	SEIZURES (SEIZURES/CONVULSIONS)	969
11	SYNCOPE (SYNCOPE)	969
10	BDCAST/E (BROADCAST MESSAGE (EMS))	1003
9	DUALRT/E (DUAL ALERT STATUS (EMS))	1010
8	DIVERT (HOSPITAL DIVERT STATUS)	1070
7	UNCONSC (UNCONSCIOUS PERSON)	1415
6	SP ASNE (SPECIAL EMS ASSIGNMENT)	1871
5	CHEST PN (CHEST PAIN)	1896
4	MVA PI (MOTOR VEH. ACC. W/INJURY)	2175
3	WEAKNESS (GENERAL WEAKNESS)	2827
2	DIF BREA (DIFFICULTY BREATHING)	3293
1	FALL (FALL/PERSONAL ACCIDENT)	3690

Source: Warren County Public Safety 2009

## **Common Behavioral Risks in WC .....**

**Behavioral Risk factors in this category include behaviors which are believed to cause, or to be contributing factors to, injuries, disease, and death during youth, adolescence and may cause significant morbidity and mortality in later life.**

Four components reflect personal behaviors and their impact on health: the prevalence of smoking, the motor vehicle death rate, the prevalence of obesity and the high school graduation rate. These components measure both positive and negative behaviors and activities that have an immediate or delayed effect on health and are prominently included in these rankings. However, the selection of these four components does not imply that they are the only underlying personal behaviors that need to be addressed in a comprehensive public health effort. For example, the American Academy of Family Physicians lists the following as the choices individuals can make to improve their health: Avoid any form of tobacco. Eat a healthy diet. Exercise regularly. Drink alcohol in moderation, if at all. Avoid use of illegal drugs. Practice safe sex. Use seat belts (and car seats for children) when riding in a car or truck. Avoid sunbathing and tanning booths. Keep immunizations up-to-date. See a doctor regularly for preventive care.

### **Tobacco**

Research has demonstrated the health consequences of tobacco use. Smoking causes heart disease, cancer of the lungs, larynx, esophagus, pharynx, mouth and bladder. Consequences of smoking during pregnancy include spontaneous abortion, low birth weight babies and sudden infant death syndrome. Smokeless tobacco causes a number of serious health problems including cancer of the mouth, gum disease and tooth loss. Exposure to second hand smoke can cause heart disease and lung cancer among adults and lower respiratory tract infections among children.

The Center of Disease Control and Prevention Youth Tobacco 2006 Survey reported 23% of high school students in the United States are current cigarette smokers—23% of females and 22.9% of males. The 2006 American Drug and Alcohol Survey done in Hackettstown, Belvidere and Warren Hills high schools, reports 23% males and 24% females having used tobacco in the past 30 days.

Further more, each day in the United States, approximately 4,000 young people between the ages of 12 and 17 years initiate cigarette smoking, and an estimated 1,140 young people become daily cigarette smokers. (CDC).

Prevalence of Smoking measures the percent of the population over age 18 that smokes tobacco products regularly. The information measures the percentage of the population that has smoked at least 100 cigarettes and currently smokes regularly. The prevalence of smoking in the population has an adverse impact on overall health by causing increased cases of respiratory diseases, cancer and other illnesses. It is a lifestyle behavior that an individual can directly influence.

## Warren County Respondents (847) reporting from the WCHD 2005 Behavioral Risk Survey

Warren County residents were asked to self report \*\* the following behaviors:

### Data regarding Smoking \*\*

Smoked Cigarettes	12%
Smoked Cigars	2.4%
Non-smoking	79%
Tried to stop smoking	8%

### Data regarding drinking \*\*

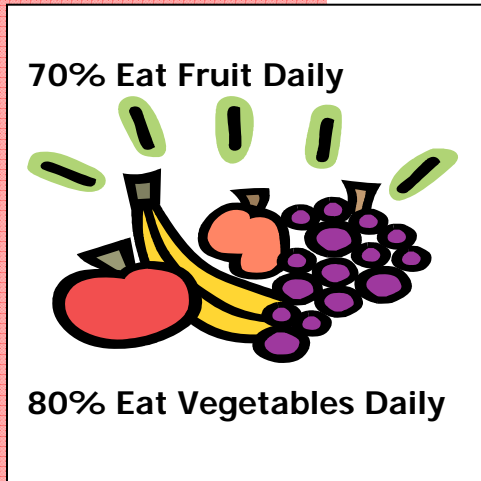
Males reporting drinking	36%
Females reporting	31%
Average number of drinks	1 to 2 each time
Binge drinking (>5 drinks)	95% (805) responded 1 or more times
Drinking and driving	22% reported having done so

### Drug use \*\*

Respondents reporting using In the past year	3%
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## Nutrition and Physical Activity

**Nutrition and physical activity are an area of concern due to the current state of our nation's health. According to the U.S. Department of Health and Human Services, nearly two-thirds of Americans are overweight or obese, with over 350,000 Americans dying each year of obesity-related diseases. This trend is evident in both adults and children, with obesity currently considered an epidemic in children. Fifteen percent of American children are overweight or obese and over one in three of our 6th graders is overweight right here in NJ. (NJ Obesity Group)**



Adapting good nutrition and physical activity habits is crucial to combat overweight and obesity. This can be achieved by following the 2005 Dietary Guidelines for Americans. The newly updated Guidelines emphasize balancing caloric consumption with physical activity. This includes eating a variety of plant foods such as fruits and vegetables on a daily basis and getting regular physical activity, at least 30 minutes for adults and 60 minutes for children most days of the week.

The **2003 Warren County Health Risk Behavioral Survey Report** indicated that residents were making an effort to consume fruits and

vegetables with 41% of those surveyed reporting eating two or more servings of fruit each day, 74% eating salads daily and 30% eating more than 2 servings of green or yellow vegetables each day. With the recommendation of 5 or more servings of fruits and vegetables daily, there is room for improvement, but this data is consistent with all of New Jersey residents with a reported 72% not consuming five or more servings of fruits and vegetables a day. (CDC)

In 2006 there were 17 produce and farm stands that participated in the "voucher program" to help low income and seniors purchase fresh fruits and vegetables.



With regard to physical activity, the Warren County Health Department **2005 Health Behavior Risk Factor Survey** for Warren County indicated that over 75% of residents surveyed participated in physical activities in the month before being surveyed, slightly surpassing the state report of 70%. (CDC)

Access to recreational areas is important for residents to participate in physical activities. The 2005 survey indicated that 74% of residents in Warren County had access to recreational areas such as parks, fitness facilities, hiking trails and pools within their community. There was a significant difference in the types of recreational venues available based on the region of residence with more hiking trails being reported in the northern area of the county and more pools reported in the southern area of the county.

Warren residents report eating	Percent
High fiber foods more once a day	97.75
High cholesterol / fatty foods once a day	65.80%
Sugar 1 serving per day	50%
Drink 100% fruit juice daily	50%
Eat fruit once a day	49%
Eat salads daily	74.40%
Eat green or yellow vegetables	95%

## Prevalence of Obesity

Assessing weight status is achieved by determining the Body Mass Index (BMI) of individuals in a population. In the 2001 Warren County Behavioral survey respondents were asked to report their height and weight. A formula to calculate BMI was then used to find the average of respondents. The formula was developed by Belgium statistician Adolphe Quelet and designed for adults over 20 years old. Once calculated, Body Mass Index can be compared to weight status categories. This formula was used with the 2001 data on N=672 Warren County respondents to determine rough estimates of BMI:



1% was below 18.5 kg/m<sup>2</sup> - considered to be underweight  
37% were 18.5 to 24.9 kg/m<sup>2</sup> - normal weight  
36% were 25 to 29.9 kg/m<sup>2</sup> - considered to be overweight  
25% were 30 and above – considered to be Obese

Of the females that surveyed 28% were overweight and **26%** were obese;

Of the males surveyed **49%** were overweight and **25%** obese.

**Obesity in childhood** is a growing concern in the United States. In the last thirty years, the percentage of overweight youth has tripled for ages 2-5 and 12-19. For those 6-11 years of age, the percent overweight has increased by nearly five times. According to the National Health and Nutrition Examination Survey (NHANES), an estimated 17 percent of children and adolescents are overweight<sup>1</sup>. Childhood overweight is associated with various immediate and long-term health-related consequences including high cholesterol, high blood pressure, heart disease, stroke, asthma, depression and diabetes. Since childhood patterns of nutrition and physical activity are key factors in obesity prevention, early intervention is important.

The purpose of this cross-sectional study was to determine baseline estimates of the percents of Warren County school-aged children (grades kindergarten, five and nine) who are overweight and obese, and therefore at risk for chronic disease. The principal measure of weight status is the body mass index (BMI). The BMI status for children in this study was evaluated in relation to demographic factors of gender, race and ethnicity.

The estimated percentage of overweight and obese kindergarteners in Warren County is **31%**. For grade five, the estimate is **38%**, and for grade nine **37%**. A loose comparison of the Warren County data to NHANES reveals similar prevalence estimates for the definition "greater than or equal to the 95<sup>th</sup> percentile of the age and sex specific BMI". It is important to note, however, that these weight status rates are not adjusted for population demographics such as race, ethnicity, socioeconomic status and other factors that might influence weight status. Adjustment would be necessary for a truly valid comparison between these data.

### NHANES 2003-2004

2-5 years	13.9
6-11 years	18.8
12-19 years	17.4

### Warren County 2006-2007

4-6 years	12.9
10-12 years	17.6
14-16 years	18.7

<sup>1</sup> In the NHANES analysis, children with BMI values at or above the 95<sup>th</sup> percentile of the sex-specific BMI growth charts (CDC, 2000) are categorized as overweight.



## Trends of Intentional and Unintentional Deaths for Warren County

In the category of Unintentional injuries overall men are more affected than women. In both cases the top cause of death is motor vehicles accidents followed by other unintentional injuries and falls. The following chart shows the type of unintentional injuries. Numbers of cases were too few to calculate rates.

<b>Unintentional Injuries for Warren County 2000-2003</b>	
<b>Cause</b>	<b>Total</b>
Unintentional injuries-motor vehicle	48
Unintentional injuries-other land transport	2
Unintentional injuries-water air space other unspecified transport	1
Unintentional injuries-falls	28
Unintentional injuries-firearms	2
Unintentional injuries-drowning and submersion	5
Unintentional injuries-smoke fire and flame	2
Unintentional injuries-poisoning and exposure to noxious substances	19
Unintentional injuries-other and unspecified non-transport	30
<b>Total</b>	<b>137</b>
<b>Source: NJ Department of Health and Senior Services - NJSHAD</b>	

<b>Unintentional/Intentional Injury Deaths for Warren County and New Jersey</b>									
Causes	WC 2000	NJ 2000	WC 2001	NJ 2001	WC 2002	NJ 2002	WC 2004	NJ 2004	
<b>ALCOHOL</b>	7	500	3	493	4	482	9	468	
<b>DRUG</b>	3	320	7	796	8	884	13	712	
<b>MOTOR VECHILE</b>	15	772	9	755	14	786	14	771	
<b>FIREARMS</b>	5	n/a	6	370	5	415	5	454	
<b>SUICIDE</b>	10	560	12	588	8	553	10	599	
<b>HOMICIDE</b>	3	320	7	1,051	3	333	0	405	
<b>ALL UNINTENTED INJURIES</b>	15	2,284	30	2,405	38	2,599	31	2329	
<b>*NJSHAD</b>									

## Motor Vehicle Deaths

Motor Vehicle Deaths measures the annual number of deaths per 100,000,000 miles driven and is compiled by the National Safety Council. Motor vehicle deaths reflect reckless driving and the effects of excessive use of alcohol and drugs on the general population. This component is not adjusted for the quality of each state's road system, weather or drivers' ages.

### Speeding and Reckless Driving in Warren County Statewide rank: **2**

Speeding- and reckless driving-related fatalities (1999-2004): **50**

Total traffic fatalities for which cause was recorded (1999-2004): **73**

Percentage of total traffic fatalities that were caused by speeding or reckless driving (1999-2004): **68.5%**

Data source: TSTC analysis of National Highway Traffic Safety Administration's Fatality Analysis Reporting System (FARS) database, 1999 through 2004. Includes speeding, failing to obey traffic signals or signs, failure to yield, improper lane changes, and other forms of reckless driving.

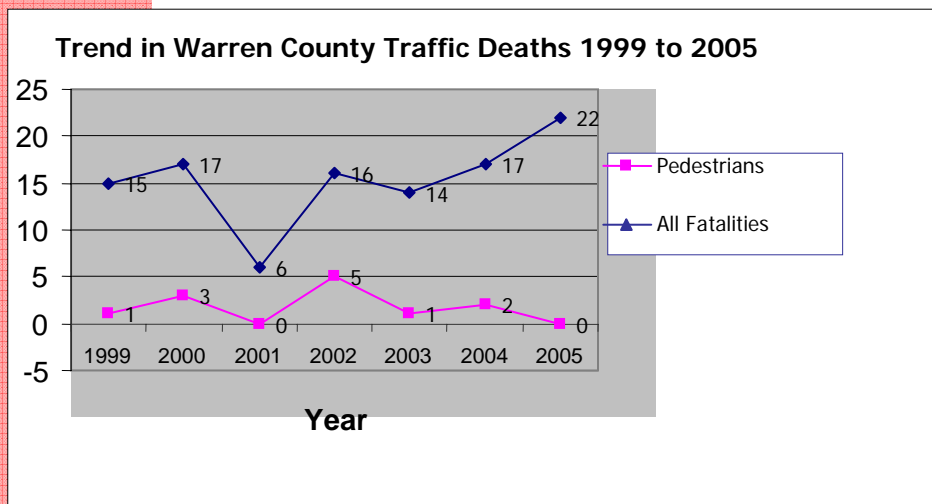
### Pedestrian risk data for Warren County Statewide rank: **17**

Total pedestrians fatalities (1999-2005): **12**

Total traffic fatalities (1999-2005): **107**

Percentage of total traffic fatalities that were pedestrians (1999-2005): **11.2%**

Data sources: For 1999 to 2005, New Jersey Department of Law and Public Safety, State Police, *1999-2005 Traffic Crash Fatality Report by Victim Classifications*. Data current as of 2/17/2006, but subject to change.



## Substance Abuse

### Overview

"Research has long shown that the abuse of alcohol, tobacco, and illicit drugs is the single most serious health problem in the United States, straining the health care system, burdening the economy and contributing to the health problems and death of millions of Americans every year. Today, substance abuse causes more deaths, illnesses, and disabilities than any other preventable health condition. Research also shows that only a quarter of individuals who abuse alcohol and illicit drugs get treatment." ( Ericson, Nels; Substance Abuse: The Nation's Number One Health Problem, UUDC Fact Sheet, U.S Department of Justice, May 2001 # 17)

Drug abuse problems are not simple to detect, quantify, and categorize. Drug abuse is a constantly changing and complex phenomenon, driven by changes in supply, demand and consequences of use. Therefore, the collections of substance abuse related data is a challenging task. The county has been mostly relying on the substance abuse data collected at the State level. Many indicators are not collected or maintained at the community or county level.

Warren County/ New Jersey Alcohol, Drug and Injury Deaths 2001-2004														
Year	ALCOHOL		DRUG		MOTOR VEHICLE		UNINTENTIONAL INJURIES		FIREARM		SUICIDE		HOMICIDE	
	WC	NJ	WC	NJ	WC	NJ	WC	NJ	WC	NJ	WC	NJ	WC	NJ
2001	3	493	7	796	9	755	30	2405	6	370	12	588	7	1051
2002	4	482	8	884	14	786	38	2599	5	415	8	553	3	333
2003	9	428	14	751	8	761	33	2285	4	436	5	560	1	406
2004	9	468	13	712	14	771	31	2329	5	454	10	599	0	405

Source: NJDHSS  
 2001- <http://www.state.nj.us/health/chs/stats01/mort01.pdf>,  
 2002- <http://www.state.nj.us/health/chs/stats02/mort02.pdf>,  
 2003- <http://www.state.nj.us/health/chs/stats03/mort03.pdf>,  
 2004- <http://www.state.nj.us/health/chs/stats04/mort04.pdf>

According to the 2007 Warren County Comprehensive Alcoholism and Drug Abuse Plan, the 2005 state provided statistical information reflects only a very slight increase in Warren County substance abuse treatment admissions. However, the review of the data provided by substance abuse treatment providers that do not participate in the State statistical reporting process indicates a 50% increase in substance abuse treatment admissions with total reported substance abuse admissions totaling 1,125. Most of the admissions were alcohol related (403) followed by 284 for heroin. The dramatic increase in the 2005 substance abuse admissions demonstrates and ongoing trend that has been underreported for years.

The 2005 Quality of Life survey, done for the Mobilizing for Action through Planning and Partnership (MAPP) project, reported 59.2% of residents of Warren County listed substance abuse and related issues as a major concern in the community. While it is difficult to determine exactly how severe or widespread the problem of substance abuse in Warren County, we have the following statistics from the Department of Human Service, Division of Addictions Services:

- Arrests Attributable to Alcohol, 1999-2003 (5 yr. average)
 

DUI	386 individuals	380 adults	5 juveniles
Liquor Laws	120 individuals	73 adults	46 juveniles
- Arrests Attributed to Drug use, 1999-2003 (5 yr. average)
 

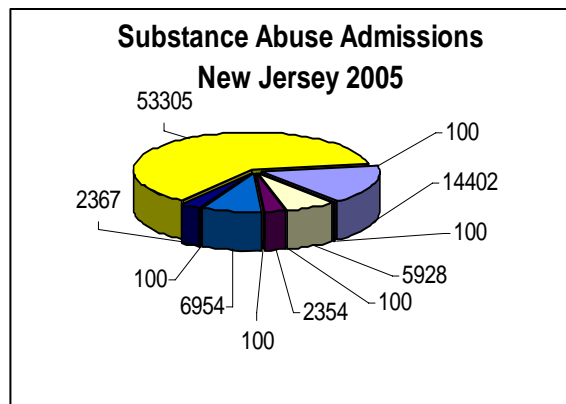
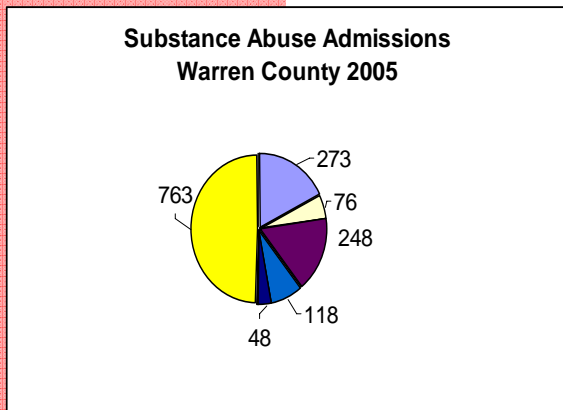
Drug Laws	421 individuals	352 adults	62 juveniles
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- Substance abuse treatment admissions/10,000 have increased 154.3% from 1990-2000.
- The average age-adjusted death rate attributable to alcohol and drugs are 22.8 per 100,000 of which, 17.8 deaths were due to alcohol and 5.0 deaths were due to drugs.

The Warren County Prosecutor's Office reports:

- 30 deaths caused by drug overdoses in Warren County between 2000 and 2004.
- 12 deaths confirmed to have been directly caused by drug overdose since 2004.

In Warren County, alcohol and other substance abuse/misuse has affected minor children in the home when their parents are substance abusers. Alcohol and/or other drugs were present in 41.1% of the domestic violence offences; children were involved or present in 45.2% of the cases. From January 2006 to October 2006 there were 81 children from 46 families removed from their home. 34 (80%) of the 46 families had parents with substance abuse issues that at least partially led to 69 children being removed from their homes.

The NJ Department of Human Services, Division of Substance Abuse estimates that 6,633 Warren County resident adults are chronic abusers of alcohol and 2,200 are chronic abusers of drugs. Among the student population an estimated 486 youth 14-15 year olds are moderate users of alcohol and 206 are moderate users of drugs. High use of alcohol and drugs is among 16-17 year olds, 492 and 191 respectively.



<b>Alcohol Related Crime Warren County</b>						
<b>Alcohol Attributable Arrests, 1999-2003 (5-Year Average)</b>						
Type of Offenses	Annual Arrests in County	Fraction of Annual Attributable to Alcohol Abuse*				
		Adults	Juvenile	All Ages	Arrest Rates/100,00	
					Warren County	New Jersey
Homicide	1	0.2	0.0	0.2	0.2	0.9
Aggravated Assault	58	14.3	2.9	17.3	16.4	37.8
Sexual Assault	4	0.6	0.3	0.9	0.9	1.6
Other Assault	329	83.2	15.6	98.8	93.5	116.8
Robbery	15	0.4	0.1	0.5	0.5	1.7
Burglary	65	1.4	0.9	2.3	2.2	2.8
Larceny	316	6.0	2.9	8.8	8.4	9.7
Auto theft	18	5.0	1.4	6.4	6.1	6.0
DUI	386	280.6	5.0	385.6	365.0	337.8
Liquor Laws	120	73.8	46.4	120.2	113.8	125.8
<b>Total</b>	<b>1,312</b>	<b>565.6</b>	<b>76.0</b>	<b>641.2</b>	<b>606.9</b>	<b>640.6</b>

\* "Alcohol Abuse Attribution Factor" used in this study is adopted from H. Harwood (Harwood et al. 1998)

<b>Drug Related Crime Warren County</b>						
<b>Drug Attributable Arrests, 1999-2003 (5-Year Average)</b>						
Type of Offenses	Annual Arrests in County	Fraction of annual attributable to drug abuse*				
		Adults	Juvenile	All Ages	Arrest Rates/100,00	
					Warren County	New Jersey
Homicide	1	0.1	0.0	0.1	0.1	0.5
Aggravated Assault	58	1.1	0.2	1.4	1.3	3.0
Sexual Assault	4	0.1	0.1	0.2	0.2	0.4
Other Assault	329	14.1	2.7	16.8	15.9	19.9
Robbery	15	2.9	1.2	4.1	3.9	13.4
Burglary	65	11.8	7.6	19.4	18.3	23.7
Larceny	316	63.0	30.4	93.5	88.5	102.4
Auto theft	18	2.0	0.3	1.3	1.2	1.2
Stolen Property	28	1	1.1	4.3	4.1	12.8
Prostitution	0	3.2	0.0	0.0	0.0	3.6
Drug Laws	421	0	69.0	421.0	389.5	663.6
<b>Total</b>	<b>1,760</b>	<b>450</b>	<b>112</b>	<b>562</b>	<b>532</b>	<b>845</b>

\* "Drug Abuse Attribution Factor" used in this study is adopted from H. Harwood (Harwood et al. 1998)

**Individuals With Co-occurring Disorders** – The need for treatment for individuals with co-occurring disorders continues to increase substantially as demonstrated by growing number of clients on waiting lists to receive services. Along with the continuing increase in number of clients is the need for more effective treatment services. Individuals with co-occurring disorders are more effectively treated in a specialized programs currently not provided in most traditional alcohol/drug or mental health treatment setting. The county lacks many of the services required for a continuum of care for substance abuse and mental health.



## MENTAL HEALTH

**Mental illnesses are common in the United States. An estimated 26.2 percent of Americans ages 18 or older suffer from a diagnosable mental illness in a given year. Even though mental problems are widespread in the population, the main burden of illness is concentrated in a much smaller proportion, about 6 percent, who suffer from a serious mental illness. In addition, mental illnesses are the leading cause of disability in the U.S. for ages 15-44.** It should be noted, many people suffer from more than one mental illness at a given time. Nearly half (45%) of those with a mental health problem meet criteria for two or more illnesses, with severity strongly related to co-morbidity (NIMH statistics). Due to the escalating costs of health insurance, many employers have dropped mental health coverage completely from their policies. Since mental health issues are still stigmatized in society, few employers advocate for maintaining this fringe benefit.

According to the NJDOHSS, only 25% of persons with a mental illness obtain professional help. It has been estimated that two-thirds of youths with mental health problems do not get treatment and according to the CDC, the suicide rate has more than doubled in just over ten years for those between the ages of 15 to 24 years old. Furthermore, mental health problems in the elderly may be dismissed as part of the natural aging process, yet assessments to differentiate causes of cognitive, emotional and behavioral dysfunction are rarely performed. Normal aging is not characterized by mental or cognitive illness, yet an estimated 25% of people 65 and older experience specific mental problems with depression, anxiety, and/or substance abuse being the most common. As aging continues, forms of dementia increase in incidence which can account for the rise of mental health illness in the aging population in Warren County.

Applying the national rate of mental illness to the 2005 census data for the County about 5.3% or approximately 4,375 adults in Warren County are estimated to have a serious mental illness. In 2005, approximately 2,998 people living in the County received **publicly funded** mental health services (slightly less than 50% of those estimated to be affected by mental illness). Examples of the services provided were: outpatient therapy and medication monitoring; partial hospitalization; crisis intervention and case management.

As this document goes to publication, there are few psychiatric specialists, no inpatient treatment programs, and seriously insufficient specialized outpatient treatment resources, and partial care programs for **children and youth** living in Warren County.

For **persons over 65** years of age, psychiatric care is also virtually non-existent, unless they pay privately. There is only one hospital located in the County that provides inpatient treatment. If a person's income meets the poverty level, making them eligible for Medicaid, there is one outpatient service available and there may be a waiting period before services are available. The County Office on Aging contracts with the Family Guidance Center of Warren County to provide in-home counseling services for clients referred by the local home care nursing programs.

**Adults 18 to 65**, low income or uninsured, Medicaid eligible, have one publicly funded outpatient program available, the Family Guidance Center (FGC) of Warren County. They serve approximately 1,100 clients per year in this program of which 410 are new clients who entered into mental health services during the year. The waiting list for services is 6.2 weeks on average with the shortest wait time of one day and the longest 91 days. Persons with "Co-Occurring Disorders", (i.e., individuals who are diagnosed with both mental illness and substance abuse/dependence), may be eligible for the program and therapy.

The FGC perform 60 intakes a month for mental health services and 23 intakes per month for substance abuse services. With lack of services available for persons suffering from mental illness, the community and emergency rooms of our local hospitals are receiving increased use to service Mental Health needs. In 2006, Warren Hospital saw 739 psychiatric patients in the emergency room. A total of 477 clients were admitted to psychiatric facilities. Of those clients that were hospitalized, 40 were children/adolescents requiring the highest most intensive level of psychiatric care. The number of children/adolescents referred for psychiatric care continues to grow on a yearly basis. The remainder of clients seen by the Warren Hospital mental health staff was referred for some other form of outpatient psychiatric care, which often included the need for psychiatric medications. There is also a need for housing for people with mental illness. The Crisis Intervention staff of Warren Hospital routinely sees 2 to 3 homeless mentally ill individuals monthly throughout the year. The Family Guidance Center, Crisis Intervention Program, serves approximately 534 clients per year, and responds to 3,000 hot line emergency phone contacts yearly.

**Mental illnesses affect people of all ages, races, ethnicity, socioeconomic status, and gender, although differences in prevalence can correspond to these factors.** Minority populations are especially unlikely to seek and get mental health services. The reasons are varied and complex, and include reluctance to seek treatment due to the persistence of stigma associated with mental illness. Other problems affecting the mentally ill are:

- Inadequate screening of patients by primary care providers for mental illnesses;
- Lack of available mental health care, particularly culturally competent care;
- Cost barriers;
- Lack of sufficient and accessible affordable housing for the mentally ill with appropriate support services;
- Lack of timely access and/or long waiting lists for outpatient mental health services that include therapy and medication monitoring; and
- Lack of sufficient and appropriately trained mental health professionals.
- Furthermore, stigmatization precludes almost half of all mentally ill persons or their family members from seeking services.

## Maternal - Child Information

Infant mortality rates by race and ethnicity are widely used as health indicators. Some reasons are: why infants die; infant mortality reflects the effectiveness of health departments, personal health care providers, outreach services and preventive services for the mother before and during pregnancy and for the child during the first year of life. The number of deaths will be small in most communities so caution is required in analyzing the data. Collecting data for multiple years will present a more stable rate.

Child Population Data Trends 2001-2006							
		2001	2002	2003	2004	2005	2006
<b>Total Population</b>	Warren	105,640	107,498	109,219	110,018	110,376	110,919
	NJ	8,504,114	8,575,252	8,638,369	8,698,879	8,717,925	8,724,560
<b>Child Population &lt;18</b>	Warren	27,107	27,306	27,268	27,762	27,548	26,660
	NJ	2,107,840	2,127,391	2,131,617	2,156,059	2,161,801	2,089,338
<b>Child Population Percentage</b>	Warren	25.7	25.4	25.0	25.2	25.0	24.0
	NJ	24.8	24.8	24.7	24.8	24.8	23.9

Source: NJ Kids Count Indicators

Families in Need Data Trends 2002-2007							
		2002	2003	2004	2005	2006	2007
<b>Free/Reduced Price School Lunch</b>	Warren	2,457	2,079	2,019	2,130	2,244	2,327
	NJ	373,360	306,659	307,659	310,425	293,802	302,999
<b>Children Receiving TANF</b>	Warren	325	379	455	492	502	n/a
	NJ	64,746	65,601	68,312	71,539	67,037	n/a
<b>Children Receiving Food Stamps</b>	Warren	1,174	1,320	1,409	1,419	1,633	1,763
	NJ	149,725	160,810	174,841	184,327	201,755	208,790
<b>People Receiving WIC</b>	Warren	1,296	1,322	1,441	1,432	1,377	1,442
	NJ	149,725	152,941	161,981	164,085	166,028	166,890
<b>Number of Households Paying More than 30% of Income for Rent</b>	Warren	n/a	n/a	n/a	4,280	5,040	n/a
	NJ	411,904	451,205	447,757	489,564	484,464	n/a
<b>Percent of Households Paying More Than 30% of Income for Rent</b>	Warren	n/a	n/a	n/a	36.2	47.2	n/a
	NJ	39.0	43.4	44.8	47.6	47.3	n/a
<b>Children in Poverty</b>	Warren	1,815	2,241	1,884	1,276	1,724	n/a
	NJ	224,313	246,231	251,387	251,999	244,074	n/a
<b>Percent Child poverty</b>	Warren	6.7	8.1	6.8	4.7	6.5	n/a
	NJ	10.7	11.7	11.8	11.8	11.8	n/a

Source: NJ Kids Count Indicators

<b>Children Receiving Government Assistance For HealthCare 2002-2007</b>							
		2002	2003	2004	2005	2006	2007
<b>Children Receiving Medicaid</b>	Warren	2,805	2,801	2,829	4,663	3,328	3,404
	NJ	377,941	382,109	389,650	404,679	421,802	428,250
<b>Children Receiving Family Care</b>	Warren	1,038	933	918	910	1,040	1,137
	NJ	96,731	96,313	104,227	109,078	116,218	119,986

Source: NJ Kids Count Indicators

<b>Child Illness Trends 2002-2007</b>						
		2002	2003	2004	2005	2006
<b>Asthma Admissions to Hospital</b>	Warren	26	37	35	23	n/a
	NJ	4,923	5,909	5,262	4,683	n/a
<b>Asthma Admission to Hospital via ER</b>	Warren	13	14	25	15	n/a
	NJ	3,178	4,071	3,680	3,436	n/a
<b>Child Lead Screenings: Tested</b>	Warren	1,258	1,307	1,383	1,567	1,660
	NJ	171,712	172,932	181,265	196,335	200,581
<b>Child Lead Screenings: Poisoned</b>	Warren	19	29	20	33	25
	NJ	5,457	5,320	4,877	4,547	3,653
<b>Child Lead Screening: Percent Poisoned</b>	Warren	1.5	2.2	1.4	2.1	1.5
	NJ	3.2	3.0	2.7	2.3	1.8

Source: NJ Kids Count Indicators

**Immunization** of all public and private, pre-school, school age and child care centers attendees are required by law according to Chapter 14 of the N.J.A.C. Therefore all children attending any form of schooling must be immunized. Persons transferring in from out of state have 30 days to provide proof of immunization or be immunized.

A significant problem in monitoring immunization records is that the immunizations may not be up to date or current. Also there are exemptions allowed for medically contraindicated and religious reasons. Children that are home schooled are not monitored or followed until they enter the system. This may allow for a pocket of the population to be vulnerable to vaccine preventable illnesses.

## Prenatal care info

Infants born preterm (less than 37 completed weeks of gestation) or with low birth weight (less than 2,500 grams or 5 lbs. 8 oz.) are at higher risk of early death and long-term health and developmental issues than infants born later in pregnancy or at higher birth weights. Many, but not all, preterm infants are also low birth weight, and vice versa. Nationally, in 2006, infants born preterm accounted for two-thirds of all low birth weight infants, and over 40 percent of preterm births were low birth weight. Preterm infants born at less than 34 weeks (very and moderately preterm) are at high risk for poor outcomes, including chronic health conditions, long-term disability, and death. The majority of preterm births are infants born at 34–36 weeks (late preterm). Late preterm infants are at lower risk of poor outcomes than infants born earlier but are at higher risk than infants delivered at term or later. Disorders related to preterm birth and low birth weights are the second leading cause of infant death in the United States.

	Prenatal Indicators													
	No prenatal care				Low birth weight (< 2500 grams)				Very low birth weight (< 1500 grams)				All Live Births	
	WC		NJ		WC		NJ		WC		NJ		WC	NJ
	#	%	#	%	#	%	#	%	#	%	#	%	#	#
2000	10	0.8	1376	1.2	62	4.7	8702	7.5	13	1.0	1755	1.5	1328	115542
2001	12	0.9	1857	1.6	103	7.7	8929	7.7	15	1.1	1851	1.6	1346	115769
2002	2	0.1	1292	1.1	100	7.4	8921	7.8	15	1.1	1736	1.5	1351	114642
2003	5	0.4	1294	1.1	97	7.3	9244	7.9	24	1.8	1872	1.6	1335	116823
2004	4	0.3	1318	1.2	82	6.3	9157	8.0	14	1.1	1712	1.5	1309	114443
Total	33	0.5	7137	1.2	444	6.7	44953	7.8	81	1.2	8926	1.5	6669	577219

Source: New Jersey Department of Health and Senior Services, NJSHAD Query System.

Infant/Child Health Trends 2002-2004				
		2002	2003	2004
<b>Total Births</b>	Warren	1,351	1,335	1,309
	NJ	114,641	116,823	114,443
<b>Infant Mortality</b>	Warren	7	8	2
	NJ	651	662	248
<b>Child Deaths (1-14)</b>	Warren	1	3	4
	NJ	281	255	229
<b>Low Birth Weights</b>	Warren	100	97	82
	NJ	8,921	9,244	9,157
<b>Births to Unmarried Women</b>	Warren	100	97	82
	NJ	33,304	33,879	34,087

Source: NJ Kids Count Indicators



## Troubled Teens

Development of chronic diseases in adulthood can result from increased levels of physical and mental stress during youth. Studies have supported that a child is more receptive to developing risk factors for diseases such as coronary artery disease, chronic pulmonary disease, cancer, alcoholism, drug abuse, depression and other mental illnesses. Stress caused by events such as juvenile arrest, teen pregnancy, and child abuse can lead to a wide variety of health problems in adulthood.

Troubled Juvenile Statistics							
Year		2001	2002	2003	2004	2005	2006
Teen Deaths	Warren	3	2	4	5	n/a	n/a
	NJ	240	264	242	290	272	n/a
Juvenile Arrests	Warren	549	578	534	559	374	491
	NJ	64,971	63,886	62,668	61,907	60,717	62,350
Juvenile Commitments	Warren	10	6	3	2	2	2
	NJ	1,084	1,262	1,161	908	1,031	844
Juvenile Detention: Average Daily Population	Warren	17.4	16.7	16.1	10.1	7.5	10.9
	NJ	987.1	965.7	932.7	806.1	723.7	638.4
	NJ	7,795	7,472	7,209	6,968	n/a	n/a
	NJ	7%	7%	6%	6%	n/a	n/a
Source: Kids Count							

## Teen pregnancy trends

There are enormous personal and financial costs associated with teen pregnancy. Children of teen mothers are more likely than children of older mothers to be born at low birth weight, putting them at high risk for long-term physical and cognitive problems. They are more likely to be born into and raised in single parent households, and fully two-thirds of families begun by a young, unmarried mother are poor. Children of teen mothers also are at higher risk of struggling in school, becoming victims of child neglect and being placed in foster care. Teen mothers are more likely than other teens to have dropped out of school, and they face all the employment barriers and reduced earning potential of high school dropouts generally. One study has found that teen births cost taxpayers at least \$7 billion a year in dollars spent on health care, foster care, criminal justice, and public assistance, as well as lost tax revenues.

Year		2001	2002	2003	2004	2005	2006
Number of births to Girls Age 10-19	Warren	68	61	64	60	n/a	n/a
	NJ	7,795	7,472	7,209	6,968	n/a	n/a
Percent of Births to girls age 10-19	Warren	5%	5%	5%	5%	n/a	n/a
	NJ	7%	7%	6%	6%	n/a	n/a
Source: Kids Count							

## Childhood Abuse and Neglect Data

Also important indicators for children's health are the number and rate of confirmed abuse and neglect cases among children. Children are the most vulnerable population in a community. Most abuse and neglect cases involve young children who cannot defend or choose for themselves; thus a community response is necessary. Child abuse and neglect are thought to be under reported, and inconsistencies in reporting and confirmation practices make it difficult to assess changes in incidence.

<b>Abuse and Neglect in Children Trends 2001-2006</b>							
	Year	2001	2002	2003	2004	2005	2006
Substantiated Cases	Warren	87	101	74	n/a	n/a	n/a
	NJ	8,440	7,918	8,236	n/a	n/a	n/a
Children in Out of Home Placement	Warren	83	93	117	73	79	105
	NJ	10,586	11,369	13,058	11,838	11,077	
Child Abuse/Neglect Substantiations as % of Referrals	Warren	14.5	16.1	11.8	n/a	n/a	n/a
	NJ	21.8	21.2	19.5	n/a	n/a	n/a
Child Abuse/Neglect Referrals	Warren	600	627	629	726	n/a	n/a
	NJ	38,706	37,424	42,149	42,618	n/a	n/a
Family Problem Referrals: # of Children	Warren	836	912	1,006	n/a	n/a	
	NJ	35,176	36,347	42,732	n/a	n/a	n/a
Family Problem Referrals: rate per 1,000 children	Warren	31.3	33.4	36.9	n/a	n/a	n/a
	NJ	16.8	17.1	20.0	n/a	n/a	n/a
Proven Cases of Child Abuse/ Neglect	Warren	*	*	*	*	*	186
	NJ	*	*	*	*	n/a	11,038
Source: NJ Kids Count Indicators							
* Not previously reported							

## Domestic Abuse Data

**Sexual Assault** is any unwanted sexual contact. It is a crime perpetrated on an individual against her or his will intended to terrorize, humiliate, hurt, and exert control. Sexual assault is an act of violent aggression.

### You may be a survivor of sexual assault:

- Even if he is not a stranger. Approximately 75% of sexual assaults fall into the category of non-stranger rape.
- Even if you are incapacitated by drugs or alcohol. Being incapacitated does not imply permission for sex. In fact, it renders you incapable of giving your consent.
- Even if you have a prior sexual history with other people or this person, even if you are married. You have the right to have your wishes adhered to. You always have the right to say "no".
- Even if you did not fight back physically or have no signs of the assault. Almost all sexual assault survivors state that they were in fear for their lives during the assault. For many, this fear makes them incapable of physically fighting their attacker.

**Domestic Violence** includes one or more of the following acts: physical, verbal, financial, sexual, mental, or emotional abuse, destruction of property belonging to the victim or abuse of pets. It is rarely a single act. Domestic violence incidences almost always increase in frequency and severity.

### You may be a victim of domestic violence if your partner has:

- Hit, kicked, shoved, or thrown objects at you.
- Forced you to modify your behavior.
- Criticized, ridiculed, or insulted you based on your values, beliefs, race, gender, or class.
- Frightened, intimidated, or threatened you.
- Engaged in sexual activity that made you uncomfortable.
- Isolated you from your family and friends.
- Kept you from becoming employed or maintaining employment.
- Attempted to control aspects of your life such as finances, social interactions, employment and or behavior.

In 2008 in Warren County client services provided:

- 3,346 domestic violence and 573 sexual assault hotline calls were answered;
- 4,599 hours of counseling were provided to domestic violence clients through in-person emergency crisis counseling, ongoing individual support counseling or support groups;
- 97 new sexual assault victims were provide with services;
- 667 clients were served by legal advocates;
- 20 sexual assault clients were accompanied by confidential advocates to hospitals, police stations or court; and
- 42 women and 51 children were provided emergency temporary shelter.
- 2,162 hours of service were donated by trained volunteers, double that in 2007.
- Domestic Violence Response Team (DVRT) responded to 7 calls; Sexual Assault Response Teams (SART) advocates responded to 17 victims.

## Environmental Concerns

**The physical environment directly impacts health and quality of life. Clean air and water, as well as safely prepared food, are essential to physical health. Exposure to environmental substances such as lead or hazardous waste increases risk for preventable disease. Unintentional home, workplace, or recreational injuries affect all age groups and may result in premature disability or mortality.**

Among Warren County's greatest natural assets are clean air, clean water and open spaces for resident families, for visitor recreation, and for business and industry. With only slightly more than 10 percent of its area covered by urban development, Warren County offers a great deal in the way of outdoor recreation. Nearly 40,000 acres are prime forest, and more than 61,000 acres are termed forestland of statewide importance. Parks, forests and conservation lands within the County total nearly 38,000 acres and include Jenny Jump State Forest, Stephens State Park, Allamuchy Mountain State Park, Worthington State Forest, Merrill Creek Environmental Resource Preserve, Pequest Trout Hatchery and Natural Resource Educational Center, and the Delaware Water Gap National Recreation Area. Approximately 35% of Warren's total acreage is devoted to farming, with 46% of the total land being woodlands. Wetlands comprise about 9% of the county area.

### Air Quality

Air quality in Warren County has been a contentious public issue for many years. Emissions sources of concern have included the County solid waste incinerator in Oxford, nearby power plants in PA, and large industrial facilities such as Atlantic States Cast Iron Pipe Co., Oxford Textile, Roche (now DSM) plant in Belvidere and the Warren County Landfill. Air quality can have significant impact on health, particularly for those who have chronic respiratory conditions. Concerns about Asthma incidence prompted UMDNJ to conduct a controlled study in 2004 to determine if changes in respiratory function of asthmatic school children were related to SO<sub>2</sub> levels in our Belvidere area. The results indicated that SO<sub>2</sub> levels even below the federal standards, could pose a health threat, especially to sensitive persons.

	Warren County 2003	New Jersey 2003	Warren County 2008	New Jersey 2008
<18 years	2,318	181,187	6,432	481,112
>18 years	5,820	462,568	26,660	164,356

Source: American Lung Association 2008

The July 2000 HRSA report states that Warren County air met national standards for CO, NO<sub>x</sub>, SO<sub>2</sub>, ozone, particulates and lead. However, the 2003 NJDEP Air Quality Report notes that the entire State of New Jersey is non-attainment for Ozone, and the same report designates a western portion of Warren County as the only SO<sub>2</sub> non-attainment area in New Jersey. The SO<sub>2</sub> non-attainment may be related to emissions from the nearby Martins Creek, PA power plant that burns coal and oil. An agreement with NJDEP that provided for DSM Corporation to fund a Supplemental Environmental Project (SEP), for several air monitoring stations in the County and to support a Warren/Northampton PA Regional Air Quality Advisory Panel (AirQap) was established in 2000. The AirQap is addressing air health impacts and evaluating the air monitoring station data. New monitoring stations were installed and began operation in late 2002 at the County Administration Building in White Township, at



Belvidere High School and on Scotts Mountain in Harmony. An AirQap news release in July 2004 presented the first 18 months of air monitoring project data. The data indicated that levels of SO<sub>2</sub> and PM 2.5 were generally below health benchmarks. In addition, of the 59 VOC's being monitored, 5 exceeded health benchmarks. In 2007 the Martins Creek Power Plant stopped burning coal and the monitoring is no more.

<b>Air Quality Northern Delaware Valley Region</b>	
<b>Pollutant</b>	<b>Reading</b>
<b>Ozone</b>	<b>Good</b>
<b>Particulates</b>	<b>Good</b>
<b>Source: NJ DEP April 7, 2005</b>	

Warren County is also part of the Northern Delaware Valley Region for air quality monitoring.

Offensive odors from sludge, compost and industrial facilities have been a vexing source of complaints in Warren County for many years. Hundreds of odor complaints have been received annually. Such releases continue to negatively impact Warren's environmental health and quality of life. At this time enforcement measures taken by the NJDEP and the Warren County Health Dept., and improved management at a number of facilities has helped improve the overall air quality in the County related to odors. Health department activities include regular compliance inspections of air pollution sources. All program activities are:

- ✓ The investigation of DEP referrals and citizen air pollution complaints of odors, particulates, and open burning, and the initiation of enforcement actions for violations of the State Air Code.
- ✓ Performing routine air permit compliance inspections of gas stations dry cleaners, and boilers.
- ✓ The assessment and collection of penalties from noncompliant facilities.
- ✓ Activism against any proposals by upwind power plants or other emissions that would negatively impact Warren County's Air Quality.

<b>2007 Inspections</b>		<b>2008 Inspections</b>	
29	Gas Stations	26	Gas Stations
1	Dry Cleaning	5	Dry Cleaning
13	Paint Spray Inspections	5	Paint Spray Inspections
7	Facility Reinspections	10	Facility Reinspections
36	Boiler Inspection	50	Boiler Inspection
<b>Source: WCHD Annual Report</b>			

In addition to the regular inspection of all necessary sites the Health Department received 36 Air Quality complaints from citizens, and 20 from the DEP, in 2007. In **2008** there were **35** Air Quality complaints from citizens and **36** from the DEP. All complaints were responded to promptly.



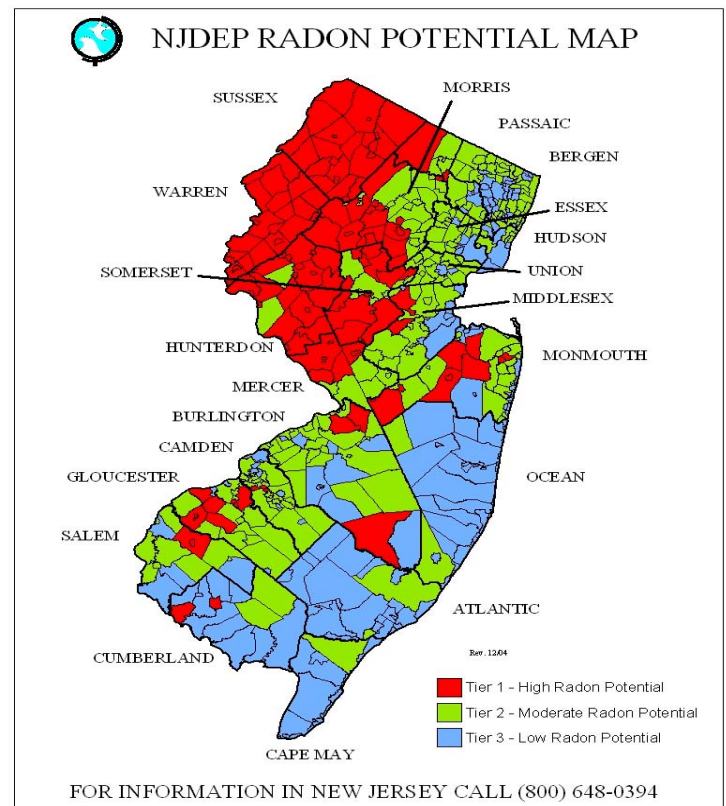
## RADON

Radon is a radioactive gas that occurs naturally when uranium and radium break down in the soil and in rock formations. Radon gas moves up through the soil and finds its way into homes through cracks in the foundation and openings around pumps, pipes and drains. Radon is the number one cause of lung cancer among non-smokers, according to the U.S. Environmental Protection Agency estimates. Overall, radon is the second leading cause of lung cancer. Radon is responsible for about 21,000 lung cancer deaths every year. About 2,900 of these deaths occur among people who have never smoked. **Exposure to naturally occurring radon gas is a significant public health risk in Warren County.** The entire County is located in "Tier 1", a designation that carries the highest potential for elevated levels of indoor radon. NJDEP estimates that 50% of the County population is potentially exposed to indoor radon above the 4pCi/L action level, and that the average indoor radon concentration exceeds the action level in all County municipalities.

## Ground Water

All of Warren County's drinking water comes from wells. The County has 25 large Public Community Water Supply Systems, which are regulated by NJDEP. The WCHD oversees the County's 249 public non community (PNC) water supply systems and approves new private wells. There are approximately 15,000 private wells and septic systems in Warren County. About 40 % of County households use these systems, which can threaten groundwater and public health if improperly designed, constructed and maintained. Therefore, well and septic system management is a top county environmental and public health priority.

Groundwater quality in Warren County is generally good, but sporadic well contamination events do occur and the County does have one large superfund site, Pohatcong Valley, that is being monitored. Contaminants of greatest frequency and concern in our ground water are: fecal coliform bacteria, nitrate, and volatile organic compounds (VOC's). The primary sources of these contaminants in Warren County are believed to be farming operations (bacteria and nitrate), septic systems (bacteria and nitrates), improper historic solvent disposal practices (chlorinated VOC's), and underground fuel tanks (VOC's such as benzene and MTBE). Underground fuel storage tanks (UST's) are a significant source of VOC ground water contamination in Warren County. UST contaminants of concern include benzene and MTBE. The NJDEP "Known Contaminated Sites in New Jersey" list ([http://www.state.nj.us/dep/srp/kcsnj/kcsnj\\_active.pdf](http://www.state.nj.us/dep/srp/kcsnj/kcsnj_active.pdf)) contains over 50 Warren County locations with soil and/or groundwater contamination from leaking UST's. UST facility inspections and cleanups are administered by NJDEP.



In 2005 the WCHD undertook a comparison project of cancer registry data and environmental contaminate sites to see if there was a correlation of disease with contamination. There was no obvious correlation noted, however, one must consider the number of cofounders and/or various influences that can not be controlled when looking for cause and effect of diseases thereby resulting in more questions than answers.

The **Private Well Testing Act (PWTA)** implemented in late 2002 is beginning to expand our knowledge of County groundwater quality. The Act requires extensive testing of wells serving properties being resold. Several VOC well contamination clusters have been identified as a result of PWTA testing. ([http://www.nj.gov/dep/pwta/pwta\\_report\\_final.pdf](http://www.nj.gov/dep/pwta/pwta_report_final.pdf)) Recently Arsenic has been detected in some Warren County wells and testing is now being done.

Also, a surprising number of PWTA well tests failing for lead have been reported. The lead is believed to originate from the plumbing system, because Warren County has no known naturally occurring lead in ground water. A recent NJDEP study concluded that the high lead levels being found result from inadequate flushing of the plumbing system prior to sampling.

In **2008**, the Health Department received a total of **7** complaints concerning surface water, and responded with **6** initial inspections and **12** reinspections. In regards to potable (drinking) water, **83** routine Well site/Well line inspections, **4** well installation inspections, **219** PNC compliance inspections, and **29** PNC reinspections. Additionally, there were **20** complaint inspections and reinspections conducted.

<b>Beneficial Water Use Areas in Warren County</b>
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- Delaware water Gap National Recreation Area
- Jenny Jump State Forest
- Merrill Creek Reservoir and Environment Preserve
- Pequest Trout Hatchery and Natural Resource Education Center
- Stephens and Allamuchy Mountain State Parks
- White Lake Natural Resource Area
- Worthington State Forest

### Surface Water Quality

Pollution in a community's rivers, lakes, and estuaries may directly cause disease and also affect well-being of the community.

Surface water quality in

Warren County is generally good – obvious signs of stream and lake pollution are uncommon. However, examination of the State Impaired Waterbodies List (the “303 (d) list” AKA “sublist 5”) shows that the County's streams and lakes are not entirely pristine. The Federal Clean Water Act requires a state to maintain such a list of waterbody stations at which a water quality standard is not attained and designated water use is threatened. The Warren County list contains 29 surface water stations considered impaired. All major County waterways appear on the list. The impairment parameters of highest priority are fecal coliform bacteria (6 sites) and various heavy metals, including mercury (3 sites). Other non-attaining parameters on the list include temperature (7 sites), pH (5 sites), phosphorous (5 sites), suspended solids (2 sites), and benthic macro-invertebrates (9 sites).

The impairments are likely related to diffuse sources than to point source discharges. These documents are available for review from the Bureau of Water Quality Standards and Assessment, PO Box 409, 401 East State Street, Trenton, New Jersey, 08625, from the Department's web site at <http://www.state.nj.us/dep/wms> or by calling 609-777-1753.

## Lead Poisoning

Lead is a highly toxic metal that was used for many years in products found in and around our homes. In 1978, the use of lead-based paint in United States housing was banned due to the significant health problems caused by lead including adverse effects on the central nervous system, kidneys, and blood formation system. It is also associated with decreased intelligence and impaired neurobehavioral development in children. Although children under six years of age are especially at risk for lead poisoning, adults can be poisoned as well. Renovation and remodeling activities in constructed buildings prior to 1978, may create lead contaminated dust and fumes which may enter the body by ingestion or inhalation. Ingestion of lead contaminated dust is the primary way children get lead poisoned.

Warren County Housing Units		
Total Housing Units	Units Built Prior to 1950	% of Units Built Prior to 1950
45,473	20,470	45%
Source: 2007 U.S. Census of Selected Housing Characteristics; 2007 American Community Survey		

The Warren County Health Department averages approximately six abatement cases per year.

4 Year Trend Warren County Child Lead Testing Results				
Year	2003	2004	2005	2006
Children tested < 17 years	1,307	1383	1567	1532
<10 ug/dL	1,278	1363	1534	1,511
10 to14ug/dl	16	10	19	15
15-19 ug/dL	7	7	9	1
20-44 ug/dL	6	3	5	5
>45 ug/dL	0	0	0	0
<a href="http://www.state.nj.us/health/epht/documents/childhood_blood_lead_report.pdf">http://www.state.nj.us/health/epht/documents/childhood_blood_lead_report.pdf</a>				
Source: WCHD				

## Environmental Disease Data

Communicable diseases affect individuals and place communities at large, at risk. Injuries may demonstrate possible risky behaviors and hazardous situations. Prevention and health planning benefit from review of the various data.

### RABIES

Rabies is endemic in Warren County. Animal bites of any type must be reported to the Health Dept. and the animal tested for rabies if deemed necessary. Bats are our most common animal testing positive for Rabies.

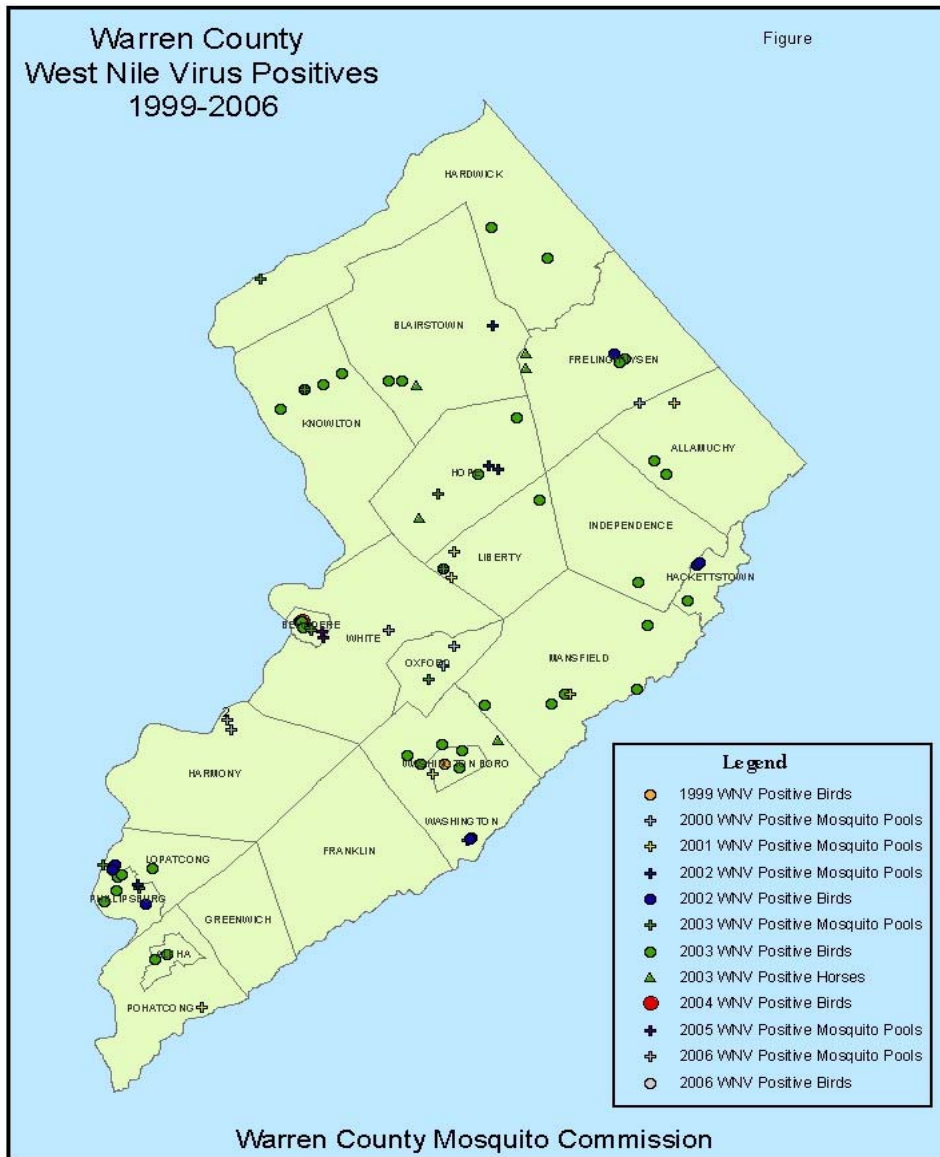
Animal Type	2003		2004		2005		2006		2007	
	WC	NJ	WC	NJ	WC	NJ	WC	NJ	WC	NJ
<b>Raccoon</b>	8	131	18	127	6	147	5	139	5	163
<b>Skunk</b>	1	21	1	16	4	31	2	45	1	28
<b>Fox</b>		6	-	3	1	6	1	8	0	8
<b>Cat</b>	1	20	1	14	2	17	1	19	0	18
<b>Groundhog</b>	1	6	-	0	0	6	0	4	0	5
<b>Bovine</b>	-	0	1	1		1	1	2	0	1
<b>Equine</b>	-	1	-	1	0	0	0	0	0	2
<b>Dog</b>	-	0	-	0	0	0	0	0	0	1
<b>Ferret</b>	-	0	-	0	0	0	0	1	0	0
<b>*Other domestic</b>	-	1	-	0	0	0	0	1	0	1
<b>Deer</b>	-	0	-	1	0	0	0	0	0	1
<b>**Other Wild</b>	-	0	-	0	1	1	0	0	0	2
<b>Total Terrestrial</b>	11	186	0	163	14	209	10	219	6	230
<b>Bats</b>	3	62	2	47	5	32	3	4	2	54

<http://www.state.nj.us/health/cd/izdphome.htm>  
Source: WCHD



## West Nile virus

After West Nile Virus was first identified in the United States in September of 1999, it has been documented in Warren County every year. Thirty nine (39) samples of mosquitoes, 54 birds and 5 horses have been found infected with the virus in the county, distributed among all the municipalities except Greenwich and Franklin Townships. Warren County provides comprehensive mosquito control to suppress the number of mosquitoes present and there has been no human involvement documented to date.





## Existing Data Resources

- *2000 U.S. Census and available updates*
- *Warren County Health Department*
- *Community Research Partners*
- *New Jersey Department of Health Center for Health Statistics*
- *National Center for Health Statistics*
- *New Jersey, Department of Justice, Crime report*

## Baseline Survey Data

In addition, baseline survey data shown throughout this report was obtained from:

- *Warren County Health Dept. 1999 Community Health Risk Assessment*
- *2001 Warren County Community Health Risk Assessment*
- *2003 Warren County Community Health Risk Assessment*
- *2005 Warren County Quality of Life Survey*
- *2005 Warren County Behavioral Risk Survey*

## References

U.S. Census: American Community Survey

NJDOE, New Jersey Department of Education

NJDOL, New Jersey Department of Labor and Workforce Development

USDHHS, US Department of Health & Human Services

CMS, Centers for Medicare and Medicaid Services

NJDHSS, New Jersey Department of Health and Senior Services: NJSHAD Query System

NJ Kids Count Indicators

Warren County Domestic Abuse and Rape Crisis Center

NDEP, New Jersey Department Environmental Protection

Division of Family Health Services

Division of Epidemiology, Environmental and Occupational Health, 2005

Warren County Community Surveys: 2001, 2003, and 2005

NJLPS, New Jersey Department of Law and Public Safety: Traffic Crash Fatality Report

American Lung Association: State of the Air

Centers for Disease Control

Communicable Disease Reporting and Surveillance System

Warren County Health Department Annual Report

National Health and Nutrition Examination Survey

New Jersey Quadra Med

Warren County Department of Human Services

North Jersey Transportation Planning Authority

Warren County Mosquito Commission