# Two Rivers Health and Wellness Foundation

# Northampton County:
## Community health assessment

*The health and wellness of Northampton County*

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# Executive Summary

As a result of the conversion of Easton Hospital from a non-profit to a for-profit hospital, the Two Rivers Health And Wellness Foundation was created. With its mandate to address the health concerns of the residents of Northampton County and in particular the needs of indigent patients, the Foundation embarked in a year long process of assessing the County's needs. and of developing a strategic plan for addressing those needs. This report is the first component of that assessment and planning process.

This community assessment gathered information on the current strengths, concerns, and conditions of children, families, and the community. The assessment is based on information from many sources, and is elicited by many techniques, including over 80 interviews with key informants, focus groups, a survey of over fifty human service agencies and analysis of demographic data and epidemiological data collected by:

- United States Census Bureau
- Lehigh Valley Planning Commission
- Centers for Disease Control and Prevention
- Pennsylvania Department of Health Measurable Enhancement of the Status of Health (MESH) group of Lehigh Valley Hospital

The assessment results are described in four sections – Demographic Characteristics, Epidemiological Characteristics, Gaps and Barriers, and Assets.

An interesting and important trend in the demographic analysis is the geographic focalization of the demographic trends. The demographic growth, the poverty, and the ethnic and racial diversification of the population are concentrated in specific municipalities of the County. Both Bethlehem and Forks Township experienced the fastest growth, while the City of Bethlehem and Easton have the lowest socioeconomic status and the fastest growing minority population. Also of importance is the increase in the number of persons under the age 20 and over the age of 60. This latter trend tends to increase the need for specialized services, while the increase in the minority population, especially Latinos, raises the demand for culturally and linguistically adequate services.

After comparing Northampton County's epidemiological profile with the profile of three peer counties and that of the state, the epidemiological analysis shows that Northampton County has unfavorable epidemiological rates in ten areas. Health outcomes that are most critical for the County are maternal health concerns, (teenage pregnancy, low birth weight and pre-term births), high death rates due to lung and cervical cancer and heart disease. In the area of behavioral health both mental health and substance abuse emerged as priorities. A chronic lack of preventive services in general, and an acute lack of dental health services were identified as key structural and systemic barriers.

The evidence demonstrates that the systemic factors identified as suffering from service gaps are interrelated with the outcome indicators that were identified. In other words, the picture that emerges is of a county that is lacking preventive health services and in turn suffers from preventable health outcomes such as low birth weight, teenage pregnancy, cervical cancer, lung cancer and heart disease. The assessment highlights that disease prevention and health promotion programs that may effectively and efficiently address the County's critical health outcomes are in great need.

In addition to these systemic barriers, the assessment demonstrates that these chronic gaps are magnified and made much more acute in certain geographic regions and populations. The epidemiological analysis showed that the areas of Easton, Bethlehem, and the Slatebelt suffer from poorer health status, more maladaptive health behaviors, and limited services. The demographic analysis highlights that these same areas are facing demographic and economic pressures likely to aggravate these already structural problems.

While most of the residents of the County report that the County provides a good quality of life with a

strong sense of community, the asset analysis shows that the County lacks adequate dental care, maternal health care, clinical services for the indigent and services aimed at minority populations, and that the existing services are poorly distributed. The service network suffers from a limited information system and poor accessibility since there is very limited knowledge among the residents about the availability of services even in the areas were services exist and were there is good distribution.

Finally there is a disconnect between County residents and governmental structures with regard to human and health services. County residents have the perception that the County and the municipal governments provide a very limited set of social and health services. This is most likely due to the fact that majority of the County's funding is expended in services that impacts a very narrow spectrum of residents. Neither the County nor the municipalities expend a significant amount of funds on population-based services aimed at a broader spectrum of residents and health problems.

# Introduction

This assessment was directed by the Two Rivers Health And Wellness Foundation as part of its mandate to address the health concerns of the residents of Northampton County and in particular the needs of indigent patients. Northampton County because of its geographic location is among the fastest growing in the State of Pennsylvania.

Northampton County is located in East Central Pennsylvania, 80 miles west of New York City and 60 miles north of Philadelphia. It encompasses 380 square miles and has a population of 267,000. The two largest cities are Bethlehem with a population of 52,000 and Easton with a population of 26,000.

Northampton County was part of Bucks County Pennsylvania, until Northampton County was founded in 1752. Scotch-Irish Presbyterians settled in Allen Township as early as 1728, the first permanent settlement in Northampton County. In 1740, missionary George Whitefield founded Nazareth, and invited the Moravians to Nazareth. Moravians founded Bethlehem in 1741 as a center for their missionary work among the Native Americans and German Protestants. Nazareth lands purchased from Whitefield became the agricultural component of the Moravian community. Counties created from the original Northampton County jurisdiction include Wayne (1798), Monroe (1836); Lehigh (1812) Northumberland (1772), Schuylkill (1811), and Carbon (1843).

The County is not only among the fastest growing in the State but its population's ethnic and racial diversity is growing. The County's history and its current expansion create a special challenge for the County's healthcare infrastructure.

## Methodology

This community assessment gathered information on the current strengths, concerns, and conditions of children, families, and the community. The assessment employed a two-tiered analysis using a mixed methodology. The first tier was a macro-analysis of the county and the second tier was a microanalysis of 7 purposefully sampled geo-social locales (townships, boroughs or municipalities). The Macro-analysis collected county level data from the following sources.

**Institutional surveys** mailed to 175 directors of the county health and human service providers working in service areas that impact the health status of the population.

**Secondary data** Social and demographic data were collected and analyzed for the county from the following sources.

- Department of Health data on : Behavioral Risk Factor Surveillance System, Analysis of Cancer Incidence in Pennsylvania Counties: 1993-1997, Health Status and Trends for Pennsylvania Counties and Health Districts
- Lehigh Valley Planning Commission
- Lehigh Valley Hospital -MESH

**Key Informants**. A survey of key informants collected input from over 20 county leaders regarding their perceptions of the most pressing issues in the county.

Public health graduate students working in teams carried out the community level analysis. The teams analyzed seven communities in the County – Bangor, Portland, South Easton, Wilson, Wind Gap, Palmer and Nazareth. The teams collected information using:

**Key Informants**. A survey of community leaders regarding their perceptions of the most pressing issues in the locale.

**Focus groups**. The input of the citizens of the locales (consumers) was collected using focus groups to be held at various locations throughout the area and representative.

**Windshield surveys**. These surveys were conducted within the sampled locales.

## Organization of the Report

The report is divided in five sections. Section one "Demographic Trends," highlights the most critical demographic trends affecting Northampton County. The chapter examines overall population growth, sources of population growth, the county's changing demographic profile, geographic distribution of the population growth, socioeconomic profile of the population, and the county's ethnic and racial makeup.

Section two "The Health and Wellness Status of the Residents of Northampton County: An epidemiological profile," is an epidemiological assessment of Northampton County. The section uses the Comprehensive Assessment for Tracking Community Health (CATCH) Approach.[1] CATCH, draws health indicators from multiple sources and uses a comparative framework and weighted evaluation criteria to produce a rank-ordered community problem list. The results focus attention on high priority health problems and provide a framework for measuring the use of health resources on community health status outcomes.

Section three "The Gaps and Barriers to Health and Well-being: the community's perspective," identifies and analyzes the perceived needs of the community with regard to health and well-being. The section examines the gaps between what the community thinks a situation is and what it should be. The needs explored may be felt by individuals, a group, or the entire community. By examining these needs the report helps discover what is lacking, and points the direction of future improvement.

Section four "Community Assets," examines the assets of the greater community of Northampton County. The analysis identifies the community assets (or community resource, a very similar term) that can be used to improve the quality of community life. These mean persons, organizations, agencies, and place or intangible characteristic of the community.

Finally section five "recommendations," describes the recommendations of the foundation for the future development of a community health plan.

[1] A systematic method for assessing the health status of communities under development at the University of South Florida since 1991. The system, known as CATCH, draws 150 indicators from multiple sources and uses an innovative comparative framework and weighted evaluation criteria to produce a rank-ordered community problem list.

# Section 1

## *Demographic Trends*

This section highlights the most critical demographic trends impacting Northampton County. The chapter examines overall population growth, sources of population growth, the county's changing demographic profile, geographic distribution of the population growth, socioeconomic profile of the population, and the county's ethnic and racial makeup.

The 2000 Census set the population of Northampton County at 267,066. This is a 16 percent increase from the 1980 census. The projections from the Lehigh Valley Planning Commission (LVPC) show another 16 percent growth in the population by the year 2020. A significant aspect of this growth is that Northampton County's growth is expected to outpace that of Lehigh County. Currently Northampton County's population represents 46 percent of the Lehigh Valley area, by the year 2030 it is expected to represent 49 percent (LVPC 2002, Census 2000).

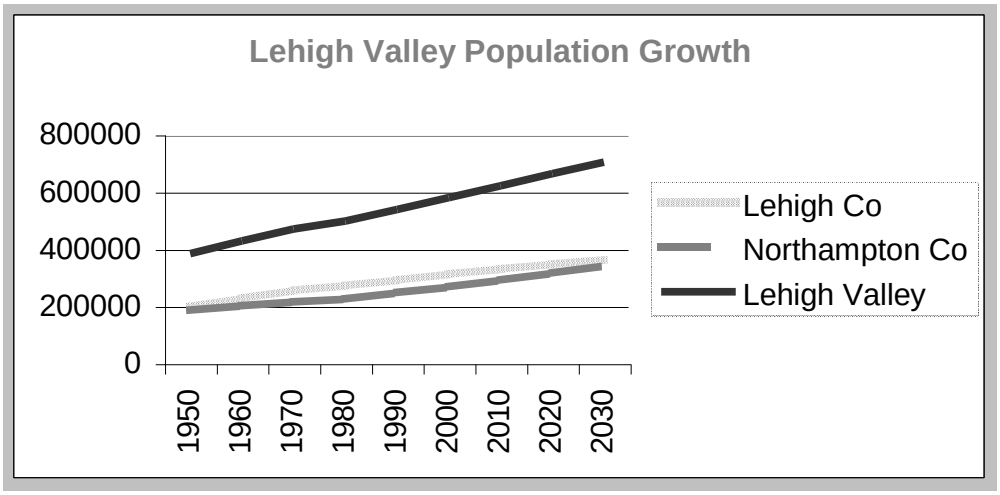



**Figure 1**

According to LVPC a significant growth of the region and of Northampton County will come from migration into the county. LVPC's projections show that Northampton County will have a net increase of 13,300 persons from migration. The data also shows that this will be a continuation from the 1990's when 66 percent of Northampton's growth was due to migration (LVPC 2002). This growth is changing the age of the county, where people live in the county, and the county's racial and ethnic make-up, all characteristics critical to the county's health and wellness.

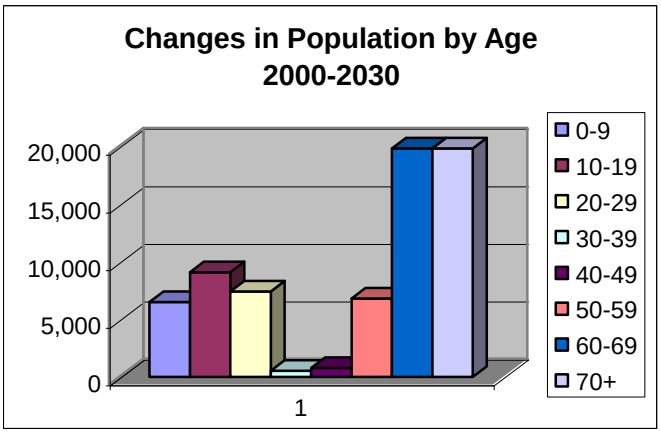



**Figure 2**

## *Age Profile*

The only groups that show a net negative migration are the 20–24 and 25–29 age groups. This is a local manifestation of the statewide trend that sees college graduates leaving the state to take jobs or pursue opportunities elsewhere. However LVPC also shows a net positive migration of parents in their early thirties bringing their young families to live in Northampton County (LVPC 2002).

This means a skewed growth favoring the poles of the age range. As figure 2 shows the greatest growth will take place in the population over the age of 60 followed by the population between the ages of 10-19.

As a result of this trend Northampton County's population is getting older. The median age of the population in the county has increased by 6 years. The median age in 1980 was 32.6, while that of 2000 is 38.5. An apparent exception to this trend can be found in the municipalities of West Easton, Wilson, Bangor and East Bangor. In these municipalities the population got younger by about 3 years between 1980 and 2000.

## Geographic Growth

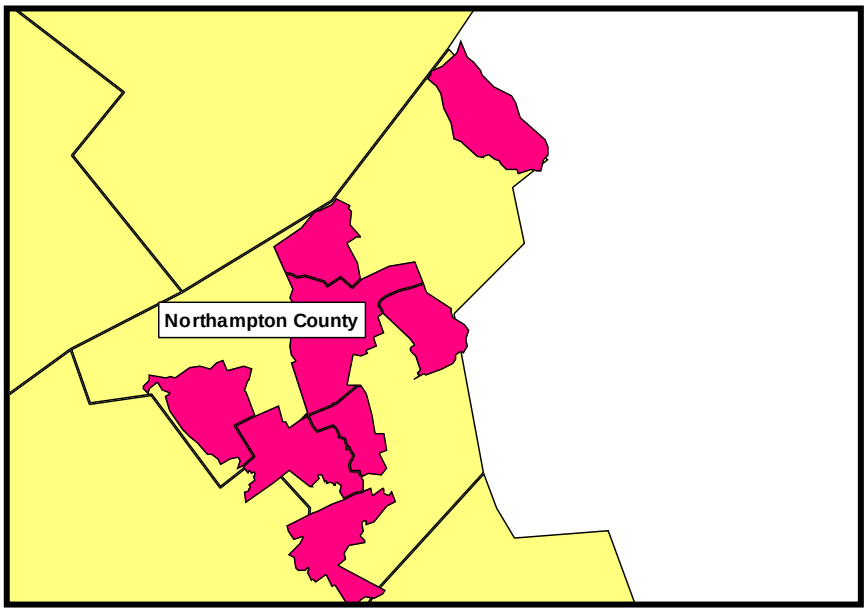
An important characteristic of the growth is that it has impacted certain areas of the county more than others. Table 1 shows the six municipalities with population growth of 25 percent or more between 1980 and 2000. With the exception of Upper Mt. Bethel, which is in the northern tier, the growth has been most visible in the central and southern tiers of the county (see map1).

**Table 1**
**Municipalities with at least 25% increase in population, 1980-2000**

| Municipality | Pop Growth | Percent |
|---|---|---|
| Forks Twp. | 3,807 | 45% |
| Bethlehem Twp. | 9,077 | 43% |
| Hanover Twp. | 3,490 | 36% |
| Bushkill | 2,513 | 36% |

| | | |
|---|---|---|
| Twp. | | |
| Lower Nazareth Twp. | 1,724 | 33% |
| Upper Mt. Bethel | 1,816 | 30% |
| Bath | 725 | 27% |
| East Allen Twp. | 1,298 | 26% |
| Lower Saucon Twp. | 2,512 | 25% |

**Map 1**
**Areas with more than 25% population growth**



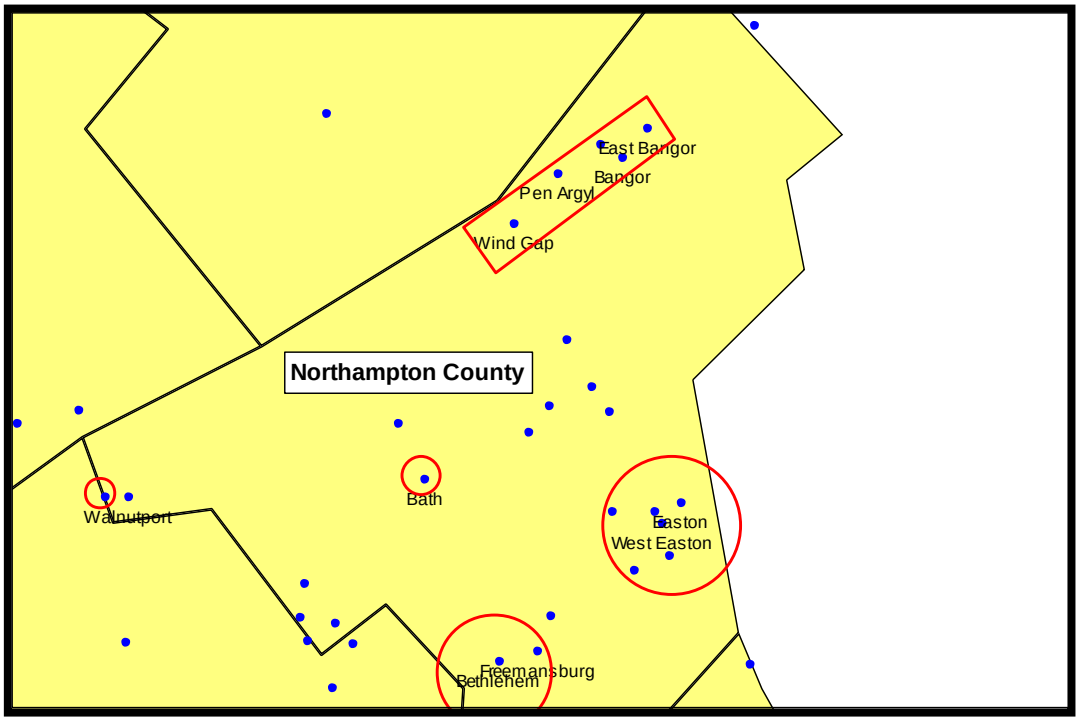

## *Socioeconomic Status*

In contrast to the growth areas, the areas that demonstrate the lower socio-economic levels, as measured by median income and percent of families under poverty, are concentrated in the urban areas of Easton and Bethlehem, as well as the slate belt region (see table 2 and map 2). Since a common characteristic of migration is that it usually concentrates near more prosperous areas, it is not surprising that these areas have not seen the population growth experienced by other regions. All the municipalities with lower socioeconomic levels show less than 7 percent population growth, a potential barrier to future economic growth.

Table 2
Municipalities with highest percentage
of families under the poverty

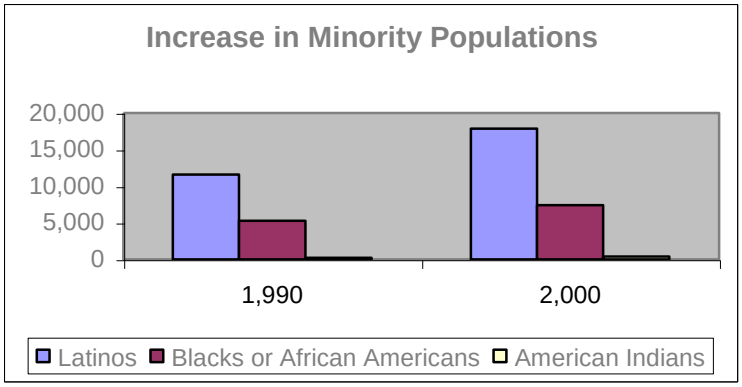
| Municipality | Percent of Families under Poverty |
|---|---|
| Bethlehem City (N) | 22.70% |
| Easton | 22% |
| East Bangor | 18.80% |
| Walnutport | 17.10% |
| Wind Gap | 15.40% |
| Bath | 15.20% |
| Bangor | 15.10% |
| West Easton | 12% |
| Freemansburg | 10.20% |

Map 2 Municipalities with Highest Percentage of Persons in Poverty



## Ethnic and Racial Profile

A final characteristic of the population growth is its impact on the county's ethnic and racial profile. During this period of growth (1990-2000) the Latino population grew by 35 percent and now makes up 6.62 percent of the population, twice the state average of 3.21 percent. The African-American population represents 2.77 percent of the current population. This represents a growth of 29 percent. The most significant growth came from the American Indian population that grew by 49 percent. However this group represents only .15 percent of the population.




However, as table 3 shows the growth of the minority population is also concentrated in regional pockets. Eighty one percent of the county's minority population resides in three municipalities, City of Bethlehem North (53%), Easton (23%), and Bethlehem Township (5%).

**Table 3**
**Percentage of Municipal population that is a Minority**

| Municipality | Percentage Minority Population |
|---|---|
| Bethlehem City (N) | 26% |
| Easton | 23% |
| Freemansburg | 18% |
| Bethlehem Twp. | 6% |
| Wilson | 6% |
| West Easton | 6% |
| Palmer Twp. | 5% |
| Forks Twp. | 4% |
| Portland | 4% |

## Summary

An interesting and important trend is how focalized the impact of the demographic trends seem to be. The growth, the poverty, and the ethnic and racial diversification of the population have concentrated in specific municipalities of the county. This is a critical process in the planning of county health services. In addition, these trends are significant because they each represent a challenge to the county's health and wellness related services. The aging of the population, and the increase in the under 20 and over 60 population tends to increase the need for specialized services. The increase in minority population, especially Latinos, raises the demand for culturally adequate services. And the population decrease in areas with higher levels of poverty decreases the resources that are available for the development of local health services.

# Section 2

## *The Health and Wellness of Northampton County: An epidemiological profile*

The epidemiological assessment of Northampton County was carried out using a modified Comprehensive Assessment for Tracking Community Health (CATCH) approach.[2] CATCH, draws health indicators from multiple sources and uses an innovative comparative framework and weighted evaluation criteria to produce a rank-ordered community problem list. CATCH results focus attention on high priority health problems and provide a framework for measuring the use of health resources on community health status outcomes.

The CATCH approach uses an established set of indicators. For this assessment 16 of the 28 focus areas of Healthy people 2010 were used. Healthy People 2010 (HP2010) provides a set of public health objectives for the Nation to achieve over the first decade of the new century. The focus areas allow health planners to measure and compare the health status of the population. All the indicators cited in this section (unless otherwise noted) are from either the Pennsylvania Department of Health, Healthy People 2010 indicator database, or the BRFSS survey data collected and analyzed by MESH (these are the behavioral risk factor indicators for South East, Slatebelt, and Lehigh Valley Region).

**Healthy People 2010 Focus Areas**
**(bolded focus areas are those used for this assessment)**

**1.Access to Quality Health Services**
2. Arthritis, Osteoporosis and Chronic Back Conditions
**3. Cancer**
4. Chronic Kidney Disease
**5. Diabetes**
6. Disability and Secondary Conditions
**7. Educational and Community-Based Programs**
8. Environmental Health
**9. Family Planning and Sexual Health**
**10. Food Safety**
11. Health Communication
**12. Heart Disease and Stroke**
**13. HIV**
**14. Immunizations and Infectious Diseases**
**15. Injury and Violence Prevention**
**16. Maternal, Infant, and Child Health**
17. Medical Product Safety
**18. Mental Health and Mental Disorders**
19. Nutrition
20. Occupational Safety and Health
**21. Oral Health**
22. Physical Activity and Fitness
**23. Public Health Infrastructure**
24. Respiratory Diseases

[2] A systematic method for assessing the health status of communities under development at the University of South Florida since 1991. The system, known as CATCH, draws 150 indicators from multiple sources and uses an innovative comparative framework and weighted evaluation criteria to produce a rank-ordered community problem list.

**25. Sexually Transmitted Diseases**
**26. Substance Abuse**
27. Tobacco Use
28. Vision and Hearing

Second, the CATCH approach uses two comparative values or groups — peer group counties and the State. This allowed the assessment to compare Northampton County to the State average as well as 3 peer counties within Pennsylvania with regard to the 16 focus areas. Peer counties were selected by identifying counties that were similar with regard to factors that make a difference in a community's health. To define the counties, the following five factors were used – frontier status, population size, poverty, median age and population density.[3] Northampton's peer counties in Pennsylvania are Berks, Lancaster and Lehigh. The BRFSS data compares, South Easton, the Slatebelt, and the Lehigh Valley Region with Pennsylvania.

In the third step of the methodology the indicators from the focus areas are grouped into four categories: a) unfavorable to both the state and the peer group; b) unfavorable to only the state; c) unfavorable to only the peer group; d) favorable to both. The approach then ranks (first step of prioritizing) the problem areas using the number of people affected by the problem, the indicators long-term trend, availability of an efficacious intervention, economic impact of the problem and the magnitude of the difference (between Northampton, peer and state). Each indicator is given a score of 1-4. A weighted score (sum of the scores divided by the individual scores multiplied by 10) is calculated allowing for ranking.

## Focus Area Analysis

The 16 focus areas mentioned above are grouped into the following five "area profiles." The focus areas of food safety, and diabetes are not examined in-depth because Northampton County compared favorably in all indicators within these areas.

### Area profile 1 Health Care Access, Community-based programs and Oral Health

The determinants of access to health care are complex and highly interdependent. This assessment uses the following indirect indicators as a proxy measures of access; socioeconomic status, education, levels of public assistance, and health care professional to population ratios.

⇒ While Northampton County has pockets of poverty, as discussed in the previous chapter, in comparison to its peer counties and the State, Northampton County has average to lower levels of poverty. However it has slightly higher levels of unemployment as compared to its peer group and minimally lower than the State average. This second indicator is critical given that over 60% of persons in the United States receive their health insurance through employers (see tables 1 & 2).

[3] (1) Frontier status (The National Committee on Rural Health recommended classifying areas as frontier if they had fewer than 7 persons per square mile. Source: Popper, F.J. (1986) The strange case of the contemporary American frontier. *Yale Review*: 76(1); 101-121); (2) Population size, using the National Association of County and City Health Officials' population categories (less than 25,000; 25,000-49,999; 50,000- 99,999; 100,000-249,999; 250,000-499,999; 500,000-999,999; 1,000,000 or more); (3) Poverty quartiles (less than or equal to 10.55%; 10.56-14.15%; 14.16- 19.25%; more than 19.26%), based on the percentage of individuals in the county living below the poverty level (e.g., in 1995 and for a family of four, the poverty level is $15,569); (4) Median age categories, based on the percentage of children percentage of persons age<18 less than 26.13% or greater than or equal to 26.13%) and elderly (percentage of persons age 65+ less than or equal to 14.70% or greater than 14.70%) in the county; and (5) Population density, as measured by half deciles (e.g., CHSI stratum 45 ranges between 42-157 persons per square mile).

**Table 1**

| POVERTY | Northampton | Peer County Average | Berks | Lancaster | Lehigh | State Average |
|---|---|---|---|---|---|---|
| Poverty Rate, 1999 | 7% | 9% | 9% | 8% | 9% | 11% |
| Poverty Rate for Children Under 18, 1999 | 11% | 13% | 14% | 12% | 14% | 17% |

**Table 2**

| UNEMPLOYMENT RATES | Northampton | Peer County Average | Berks | Lancaster | Lehigh | State Average |
|---|---|---|---|---|---|---|
| Annual Avg. Unemployment Rate, 1997 | 5.00% | 4% | 4.30% | 3.00% | 4.70% | 5.20% |
| Annual Avg. Unemployment Rate, 1998 | 4.40% | 4% | 4.30% | 2.90% | 4.30% | 4.60% |
| Annual Avg. Unemployment Rate, 1999 | 4.00% | 4% | 4.10% | 2.70% | 3.90% | 4.40% |
| Annual Avg. Unemployment Rate, 2000 | 3.60% | 3.3% | 4.00% | 2.50% | 3.40% | 4.20% |

⇒ Areas of Northampton County do not show unfavorable levels of uninsured persons as compared to average rates of the region and the state.[4] The county also shows favorable rates of persons receiving cash assistance as well as with regard to the number of persons eligible for medical assistance (table 3 & 4).

**Table 3**

| | South Easton | Slatebelt | Lehigh Valley | State Average |
|---|---|---|---|---|
| Uninsured | 6% | 5% | 7% | 11% |
| Uninsured ages 18-29 | 18% | 10% | 20% | 23% |
| Uninsured annual income over $50,000 | 0% | 0% | 4% | 3% |

[4] Levels of insurance are collected from BRFSS that does not have county data.

Table 4

| PUBLIC ASSISTANCE | Northampton | Peer County Average | Berks | Lancaster | Lehigh | State Average |
|---|---|---|---|---|---|---|
| % Population Receiving Cash Assistance, June, 2000 | 1% | 1% | 2% | 1% | 1% | 3% |
| % Population Eligible for Medical Assistance (MA), June, 2000 | 7% | 9% | 9% | 7% | 10% | 12% |

## Health Disparity Area

In Northampton County there exists disparity with regard to health insurance coverage. While 7% of the overall population in the Lehigh Valley is uninsured (table 3), among Hispanics the rate is almost double (13.7%).[5]

⇒ Northampton County compares unfavorably with regards to the number of health professionals per person. Northampton has lower number of primary care physicians, and pediatricians as compared to both the peer group and the State.

⇒ Northampton County also compares unfavorably with the state with regard to population to dentist ratio. This in combination with the fact that there are no public sector entities (i.e. local department of health) with comprehensive dental programs, places Northampton County in an unfavorable position with regard to HP2010 Focus Area 21 -- oral health (table 5).

**Table 5**

| HEALTH CARE PROFESSIONALS | Northampton | Peer County Average | Berks | Lancaster | Lehigh | State Average |
|---|---|---|---|---|---|---|
| # Primary Care Physicians per 100,000 Residents | 102.6 | 121 | 102.2 | 95.8 | 166.9 | 137.1 |
| # Pediatric Physicians per 100,000 Children | 38.5 | 48 | 38.1 | 27.9 | 80.3 | 81.3 |
| Population to Dentist Ratio | 1,734 | 1,771 | 2,008 | 1,9775 | 1,328 | 1,650 |

In addition to focus area 1 of Healthy People 2010, Access to Health Care, focus area 7 looks for school-based clinics with adequate staff as an indicator of access to care and preventive services for children.

⇒ Northampton County compares very unfavorably in this measure. No Northampton school has a nurse

[5] Rodriguez, Elaine. "The Health Status of Latinos in the Lehigh Valley." unpublished manuscript, presented as requirement for MPH program, East Stroudsburg University, May 2002.

to student ratio that is acceptable to Healthy People 2010 goals (1 nurse for 750 students) (table 6).

**Table 6**

| Percent of elementary, middle, junior high, and senior high schools that have a nurse-to-student ratio of 1:750 or less | |
|---|---|
| **COUNTY** | **1999-00** |
| Berks | 22.2 |
| Lancaster | 12.5 |
| Lehigh | 0 |
| Peer Co Mean | 12 |
| Northampton | 0 |
| All Counties | 16.1 |

## *Area Profile 2 Cancer and Coronary Heart Disease*

Cancer and Cardio Vascular Disease (CVD) are the two most important causes of death in the United States. They are also the two most important causes of lost healthy life years. Cancer kills half a million people in the United States and is responsible for 1.5 million years of lost life (YLL). Heart disease kills 720,000 persons and is responsible for 1.2 million YLLs. Therefore, cancer death rates are important indicators for the determination of trends in community health status. This is especially true given the behavioral determinants of both diseases (diet, smoking and physical inactivity), and the effective preventive interventions such as screenings that exist.

⇒ Northampton County compares unfavorably with its peer group in overall cancer death rates although it compares favorably in comparison to the state average (see Table 7).

**Table 7**

| Cancer death rate (per 100,000) | | | |
|---|---|---|---|
| **COUNTY** | **1996-00** | **1995-99** | **1994-98** |
| **Berks** | **196.3** | **198.0** | **200.0** |
| **Lancaster** | **192.0** | **196.4** | **197.8** |
| **Lehigh** | **193.3** | **192.0** | **197.0** |
| **Peer Co Mean** | **193.9** | **195.5** | **198.3** |
| **Northampton** | **200.5** | **206.1** | **204.3** |
| **State** | **209.1** | **210.7** | **212.2** |

⇒ Northampton County cancer death rates are favorable in the areas of breast, colorectal and prostate cancer.

⇒ Northampton compares very unfavorably when compared to both its peer group and the state with regard to cervical cancer death rates (table 8). Northampton County has a 30% higher cervical cancer death rate than the peer group and 20% higher than the State average. In addition, the BRFSS carried out in the Lehigh valley region showed a low number of women (over the age of 65 and with lower levels of education) having had a pap smear in the last three years (Table 9).

Table 8

| Cervical cancer death rate (per 100,000 females) | | | |
|---|---|---|---|
| COUNTY | 1996-00 | 1995-99 | 1994-98 |
| Berks | DSU | DSU | DSU |
| Lancaster | 3.0 | 2.8 | 2.9 |
| Lehigh | 2.1 | DSU | DSU |
| Peer Co Mean | 2.6 | 2.8 | 2.9 |
| Northampton | 3.9 | 3.8 | 3.9 |
| State | 3.0 | 3.1 | 3.1 |

Table 9

| Pap Test in the Past Three Years | | | | |
|---|---|---|---|---|
| | South Easton | Slatebelt | Lehigh Valley | Pennsylvania |
| All Women | 85% | 81% | 81% | 84% |
| Women aged 65+ | 55% | 69% | 57% | 68% |
| Less than a high school education | 68% | 80% | 57% | 73% |
| Women with a high school education | 86% | 75% | 81% | 81% |

⇒ Northampton compares unfavorably when compared to both its peer group and the state with regard to Melanoma. The data shows that Northampton has a 19% higher rate of skin cancer deaths than the peer group and 28% higher death rate than the State. Most importantly, for both cervical and skin cancer the trend is negative. In other words, while the state death rate has been decreasing the rate in Northampton has been increasing or has remained unchanged (Table 10).

Table 10

| Melanoma (skin) cancer death rate (per 100,000) | | | |
|---|---|---|---|
| COUNTY | 1996-00 | 1995-99 | 1994-98 |
| Berks | 3.1 | 2.8 | 2.9 |
| Lancaster | 2.7 | 2.9 | 3.1 |
| Lehigh | 3.3 | 2.9 | 3.1 |
| Peer Co Mean | 3.0 | 2.9 | 3.0 |
| Northampton | 3.7 | 3.1 | 2.9 |
| All Counties | 2.7 | 2.8 | 2.8 |

⇒ Northampton County's Lung cancer death rate is higher than the peer group but lower than the state average. However while the trend at the state level shows a decreasing rate, in Northampton County the trend shows an increase in the rate (Table 11). This is reinforced by the BRFSS results showing that the prevalence of smoking (among the population 18-29) in the Lehigh Valley, the Slatebelt and South Easton is much higher than the State average (Table 12).

**Table 11**

| Lung cancer death rate (per 100,000) | | | |
|---|---|---|---|
| COUNTY | 1996-00 | 1995-99 | 1994-98 |
| Berks | 52.5 | 52.6 | 53.2 |
| Lancaster | 46.7 | 47.6 | 47.3 |
| Lehigh | 46.7 | 45.5 | 46.3 |
| Peer Co Mean | 48.6 | 48.6 | 48.9 |
| Northampton | 53.5 | 52.2 | 52.3 |
| State | 56.4 | 56.8 | 57.1 |

Table 12

| Smoking | | | | |
|---|---|---|---|---|
| | South Easton | Slatebelt | Lehigh Valley | Pennsylvania |
| **Overall** | **21%** | **31%** | **22%** | **25%** |
| **Those aged 18-29** | **37%** | **62%** | **36%** | **28%** |
| **Those aged 65 years and older** | **9%** | **9%** | **3%** | **11%** |

In the area of heart disease Northampton County compares favorably in its stroke death rate. It has a lower death rate for stroke when compared to both the peer counties and the state average.

⇒ However Northampton County has a very high death rate due to coronary heart disease (193 per 1000). Northampton's coronary heart disease death rate is 3 points higher than the peer group mean, although it is lower than the state average. It does show a decreasing death rate over an eight-year trend (table 13).

**Table 13**

| Coronary heart disease death rate (per 100,000) | | | | |
|---|---|---|---|---|
| COUNTY | 1995-99 | 1994-98 | 1993-97 | 1992-96 |
| Berks | 185.0 | 198.0 | 204.9 | 212.8 |
| Lancaster | 197.3 | 202.3 | 210.9 | 213.3 |
| Lehigh | 196.9 | 207.1 | 215.6 | 220.4 |
| Peer Co. mean | 193.1 | 202.5 | 210.5 | 215.5 |
| Northampton | 198.8 | 202.0 | 209.4 | 215.2 |
| All Counties | 211.4 | 219.3 | 229.5 | 236.6 |

The BRFSS data for the region shows that the levels of physical inactivity, a major determinant for coronary heart disease, in the Slatebelt area are significantly higher as compared to both the Lehigh Valley region and the State. The rates for South Easton are also higher than the Lehigh valley region although not higher than the state averages (table 14).

**Table 14**

| Persons Reporting Physical Inactivity | | | |
|---|---|---|---|
| South Easton | Slatebelt | Lehigh Valley | PA |

| | | | | |
|---|---|---|---|---|
| Overall | 25% | 34% | 24% | 26% |
| Men | 23% | 28% | 22% | 23% |
| Women | 26% | 38% | 26% | 29% |

## *Profile area 3 Family Planning and Maternal Infant and Child Health*

There are several unfavorable birth related health status indicators for Northampton County.

⇒ Relative to the state average and the peer counties Northampton has unfavorable rates of low birth weight-- 8.6% of births weigh less than 2500g or 5.5lb. (Table 15).

**Table 15**

| Percent of infants born at low birth weight (LBW) (less than 2500 grams) | | | | |
|---|---|---|---|---|
| | County | County | County | County |
| COUNTY | 1997-99 | 1996-98 | 1995-97 | 1994-96 |
| Berks | 7.0 | 7.2 | 6.9 | 6.6 |
| Lancaster | 5.7 | 5.5 | 5.4 | 5.2 |
| Lehigh | 8.7 | 8.7 | 8.1 | 7.4 |
| Peer Co Mean | 7.1 | 7.1 | 6.8 | 6.4 |
| Northampton | 9.4 | 9.0 | 8.7 | 8.5 |
| All Counties | 7.7 | 7.6 | 7.5 | 7.5 |

⇒ Relative to the state average and the peer counties Northampton has unfavorable rates of premature births -- 12.3% of births occur before 37 weeks of gestation (Table 16).

**Table 16**

| Percent of Preterm live births (less than 37 weeks) | | | | |
|---|---|---|---|---|
| | County | County | County | County |
| COUNTY | 1997-99 | 1996-98 | 1995-97 | 1994-96 |
| Berks | 8.8 | 9.0 | 8.7 | 8.2 |
| Lancaster | 7.0 | 6.8 | 6.4 | 6.3 |
| Lehigh | 10.1 | 10.6 | 10.0 | 9.4 |
| Peer Co Mean | 8.6 | 8.8 | 8.4 | 8.0 |
| Northampton | 11.1 | 11.2 | 10.9 | 10.9 |
| All Counties | 9.2 | 9.1 | 8.9 | 8.8 |

⇒ Relative to the state and two of the three peer counties Northampton has unfavorable percentage of mothers receiving early and adequate prenatal care -- only 68% of births are to mothers with early and adequate prenatal care (table 17).

Table 17

| Percent of live births to mothers who received early and adequate prenatal care | |
|---|---|
| COUNTY | 1997-99 |
| Berks | 72 |
| Lancaster | 53 |
| Lehigh | 72 |
| Peer Co Mean | 65.7 |
| Northampton | 68 |
| All Counties | 72 |
| | |

Northampton County also shows high proportion of teen pregnancies.

⇒ Compared to its peer group Northampton county has an unfavorable rate of teenage pregnancy. The rate of pregnancy among girls 15-17 is 32.3 per 1000. This is higher than the peer group average but lower than the state average. It is important to mention that the trend shows a decreasing rate (Table 18).

Table 18

| Pregnancy rate among adolescent females aged 15-17 (per 1,000 females 15-17) | | | | |
|---|---|---|---|---|
| COUNTY | 1995-99 | 1994-98 | 1993-97 | 1992-96 |
| Berks | 32.4 | 33.5 | 34.1 | 35.7 |
| Lancaster | 25.5 | 27.0 | 29.3 | 30.9 |
| Lehigh | 35.7 | 35.6 | 35.6 | 35.5 |
| Average | 31.5 | 32.2 | 33.2 | 34.4 |
| Northampton | 32.3 | 32.7 | 33.7 | 35.5 |
| All Counties | 33.1 | 34.9 | 37.0 | 39.4 |

## Health Disparity Area

There is significant disparity with regard to maternal and child health indicators among ethnic and racial populations within Northampton county. Hispanics and blacks have almost twice the rates in all the key indicators as compared to whites (Table 19).

Table 19

| | Infant death rate | LBW | No prenatal Care | Teen Pregnancy |
|---|---|---|---|---|
| White | 4.9 | 7.2 | 9 | 2.9 |
| Minority population | 9 | 12.7 | 24.7 | 9.9 |

## *Profile area 4 Infectious Diseases, STDs & HIV*

Infectious diseases are on the rise nationwide. The reemergence of previously controlled infectious diseases such as tuberculosis, and the emergence of new diseases such as HIV/AIDS are an indicator of the burden placed on a region's public health infrastructure.

In the area of infectious disease, Northampton compares favorably with its peer group and the state with regard to the incidence of Tuberculosis, Giardia, and Hepatitis A & B.

⇒ Northampton County has higher than expected incidence of Lyme disease, comparing unfavorably with its peer counties but not the State (Table 20).

**Table 20**

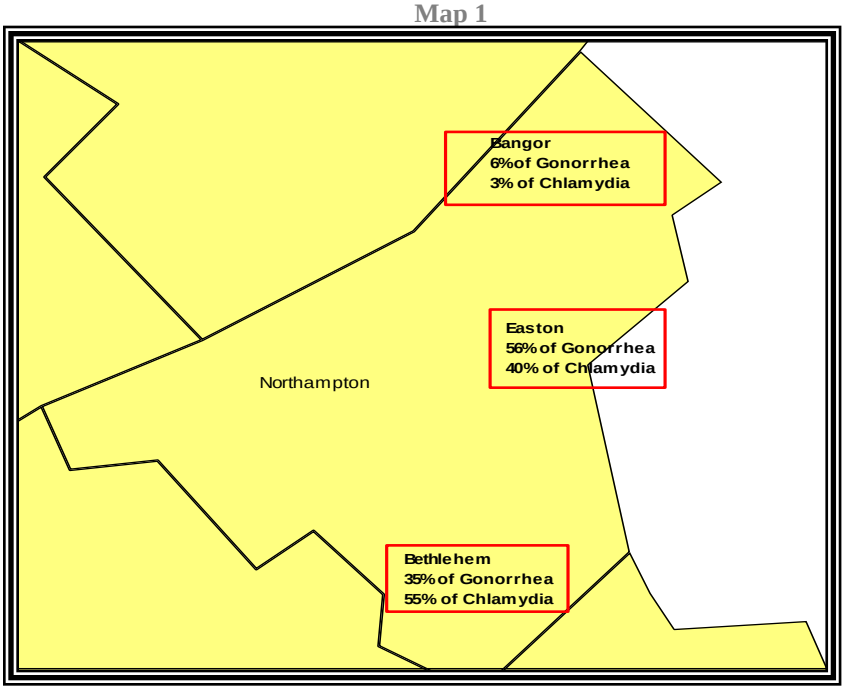
| | TB | Giardiasis | Hep A | Hep B | Lyme |
|---|---|---|---|---|---|
| Rate per 100,000 (1999) | | | | | |
| Lehigh | 4 | 6.1 | 3 | 1.7 | 10.9 |
| Berks | 3.4 | 7.1 | 2.2 | 2.7 | 37.2 |
| Lancaster | 2.3 | 9.6 | 2.3 | 2.8 | 10.4 |
| Peer Co Mean | 3.23 | 7.6 | 2.5 | 2.4 | 19.5 |
| Northampton | 2.2 | 6.3 | 1.3 | 1.8 | 20.6 |
| PA | 4 | 9.9 | 3.2 | 2.4 | 21.1 |

⇒ Northampton County compares favorably with regard to the incidence of STDs and HIV/AIDS. Northampton County has half of State's AIDS incidence rate, and significantly less than its peer counties. The county also compares favorably with regard to HIV death rate. The county has a ten point lower incidence rate of Chlamydia and Gonorrhea than its peer counties and less than half of the rate of the State.

## Health Disparity Area

Within Northampton county the STD cases are not distributed evenly. Cases are concentrated in very specific geographic areas. Over 96 percent of Gonorrhea cases and 95 percent of the Chlamydia cases are in Easton, Bethlehem and Bangor (map 1).

**Map 1**



## *Profile area 5 Injury and Violence*

The area of injury and violence prevention is of growing importance, because of its impact on years of potential life lost. Unintentional injuries, and violence are the cause of 1.9 million years of lost life every year in the United States. This is because they tend to impact the young.

⇒ Northampton County compares favorably with regards to firearm related deaths and in homicide rates. However, the homicide rate is on the rise and the number of serious crimes reported in Northampton has increased by 9.4% between 1994-1999 while it has decreased in all of the other peer counties and the State. So while the county currently compares favorably, the increasing trend may be a concern in the future (table 21).

**Table 21**

| Injury Rates | | | | |
|---|---|---|---|---|
| **Firearm-related death rate (per 100,000)** | | | | |
| **COUNTY** | **1995-99** | **1994-98** | **1993-97** | **1992-96** |
| **Berks** | **10.6** | **11.3** | **11.1** | **10.8** |
| **Lancaster** | **6.8** | **6.7** | **7.2** | **7.3** |
| **Lehigh** | **8.4** | **8.1** | **7.6** | **7.2** |
| **Average** | **8.6** | **8.7** | **8.6** | **8.4** |
| **Northampton** | **7.3** | **7.0** | **7.1** | **7.8** |
| **All Counties** | **10.7** | **10.9** | **11.2** | **11.1** |
| | | | | |
| **Homicide rate (per 100,000)** | | | | |
| **COUNTY** | **1995-99** | **1994-98** | **1993-97** | **1992-96** |
| **Berks** | **4.5** | **4.3** | **3.9** | **3.7** |
| **Lancaster** | **2.4** | **2.4** | **2.6** | **2.4** |
| **Lehigh** | **4.2** | **4.3** | **4.4** | **4.1** |
| **Average** | **3.7** | **3.7** | **3.6** | **3.4** |
| **Northampton** | **2.3** | **2.0** | **2.1** | **2.0** |
| **All Counties** | **5.9** | **6.1** | **6.4** | **6.3** |

⇒ Northampton County has higher than expected rates of accidental poisonings, having higher rates than its peers (table 22).

⇒ The County has a slightly higher death rate as a result of motor vehicles as compared to its peer group and the State (table 22).

⇒ The County has a significantly higher rate of maltreatment of children as compared to the state and slightly higher rate as compared to the peer counties (table 22).

Table 22

| Injury Rates | | | | |
|---|---|---|---|---|
| Poisoning death rate (per 100,000) | | | | |
| COUNTY | 1995-99 | 1994-98 | 1993-97 | 1992-96 |
| Berks | 7.3 | 7.2 | 6.8 | 6.0 |
| Lancaster | 7.8 | 8.3 | 7.9 | 6.9 |
| Lehigh | 8.2 | 8.4 | 8.9 | 7.8 |
| Peer Co. Mean | 7.8 | 8.0 | 7.9 | 6.9 |
| Northampton | 8.4 | 8.2 | 7.8 | 7.4 |
| All Counties | 9.5 | 9.3 | 9.1 | 8.6 |
| | | | | |
| Motor vehicle crash death rate (per 100 million miles traveled) | | | (occurrences) | |
| COUNTY | 1999 | 1998 | 1997 | 1996 |
| Berks | 2.0 | 1.8 | 2.0 | 1.7 |
| Lancaster | 1.6 | 1.5 | 1.9 | 1.4 |
| Lehigh | 1.2 | 1.5 | 1.4 | 1.1 |
| Peer Co. Mean | 1.6 | 1.6 | 1.7 | 1.4 |
| Northampton | 1.7 | 1.3 | 1.5 | 1.6 |
| All counties | 1.5 | 1.5 | 1.6 | 1.5 |
| Maltreatment of children under 18 (all reported* cases per 1,000 children under 18) | | | | |
| | County | County | County | County |
| COUNTY | 1999 | 1998 | 1997 | 1996 |
| Berks | 12.0 | 11.5 | 11.4 | 11.5 |
| Lancaster | 6.1 | 5.5 | 6.4 | 6.1 |
| Lehigh | 11.6 | 11.4 | 9.8 | 11.0 |
| Peer Co. Mean | 9.8 | 9.5 | 9.2 | 9.5 |
| Northampton | 9.9 | 10.6 | 9.6 | 10.2 |
| All Counties | 8.0 | 8.0 | 8.0 | 8.3 |

## *Profile area 6 Substance Abuse and Mental Health*

Substance abuse is a critical indicator of community health status because substance abuse is an important risk factor for both chronic and infectious diseases. Substance abuse is a risk factor for cardio-vascular disease, cancer, hepatitis, and HIV, and therefore an essential area of prevention.

⇒ Northampton County has a slightly higher death rate due to alcohol related motor vehicle accidents as compared to the peer group and lower than the state average (table 23).

## Table 23

| Death rate for alcohol-related motor vehicle crashes (per 100,000) (occurrences) | | | | |
|---|---|---|---|---|
| | County | County | County | County |
| COUNTY | 1996-00 | 1995-99 | 1994-98 | 1993-97 |
| Berks | 3.5 | 3.6 | 4.1 | 4.5 |
| Lancaster | 3.1 | 3.5 | 3.5 | 4.1 |
| Lehigh | 2.8 | 3.1 | 3.4 | 3.2 |
| Average | 3.1 | 3.4 | 3.7 | 3.9 |
| *Northampton* | *3.5* | *3.2* | *3.5* | *3.8* |
| All Counties | 4.3 | 4.3 | 4.3 | 4.4 |

⇒ Northampton County ranks favorably with regard to persons admitted for drug and alcohol treatment.

⇒ Northampton County ranks very unfavorably with regard to substance abuse treatment facilities per capita and per admission (table 24).

Table 24

| *Drug and Alcohol Treatment* | | | | | |
|---|---|---|---|---|---|
| | Tot. Admissions/ 100,000 | Drug Adm. / 100,000 | Alcohol Adm. / 100,000 | Facilities/ 100,000 | Facilities/ 1,000 Adm. |
| Lehigh | 568 | 397 | 167 | 6 | 10.55 |
| Berks | 1086 | 706 | 369 | 8.93 | 8.22 |
| Lancaster | 714 | 437 | 275 | 5.65 | 7.9 |
| Peer Co Mean | 789 | 513 | 270 | 6.82 | 8.89 |
| Northampton | 528 | 352 | 168 | 3.47 | 6.57 |
| PA | 567 | 294 | 263 | 6.5 | 11.54 |

Mental health has been the silent epidemic in the United States. Throughout the country mental health, both in the private and public funding stream, has been woefully under-funded. This is despite the fact that depression is the second most important cause of disability-adjusted life years. Limited data exists on mental health status in Northampton County.

⇒ Using suicide rate as an indirect indicator of mental health shows that Northampton has unfavorable rate of suicide as compared to both the peer group and the State (table 25).

Table 25

| Suicide rate (per 100,000) | | | | |
|---|---|---|---|---|
| COUNTY | 1995-99 | 1994-98 | 1993-97 | 1992-96 |
| Berks | 13.8 | 14.7 | 14.2 | 13.5 |
| Lancaster | 9.8 | 9.8 | 10.1 | 10.4 |
| Lehigh | 11.7 | 12.3 | 12.5 | 12.4 |
| Average | 11.8 | 12.3 | 12.3 | 12.1 |
| *Northampton* | *12.4* | *12.1* | *12.1* | *12.7* |
| All Counties | 11.3 | 11.3 | 11.4 | 11.3 |

## Summary

The following three tables summarize the individual focus area analysis carried out above. Northampton County compares unfavorable with its peer counties and the state in twelve categories (see table 26). These twelve categories are then prioritized using the following rating criteria – 1) impact of the gap, 2) the available interventions, and 3) the overall trend of the gap (table 27). As a result of the prioritization the analysis shows that the health outcomes that are most critical for the county are issues surrounding maternal health care in particular teenage pregnancy, low birth weight and pre-term births. The County's cancer and traffic related death rates are a priority as is heart disease death rates. In the area of behavioral health both mental health and substance abuse emerged as priorities. Finally a lack of preventive and primary care services emerged as key structural and systemic gaps.

Table 26

| | State | |
|---|---|---|
| | **Unfavorable** | **Favorable** |
| **Unfavorable** | • Provider/population ratios<br>• School nurse programs<br>• Cervical Cancer D.R. Melanoma D.R.<br>• Smoking rates<br>• Percent of LBW Births<br>• Percent of Pre-term Births<br>• Levels of early and adequate prenatal care<br>• Significant percentage increase in the number of serious crimes.<br>• Motor vehicle crash D.R. Maltreatment of children<br>• Number of Drug and Alcohol treatment facilities<br>• Suicide rate | • Unemployment<br>• Cancer D.R.<br>• Lung Cancer D.R.<br>• Coronary Heart Disease D.R.<br>• Physical Inactivity<br>• Teenage Pregnancy<br>• Lyme Disease Incidence<br>• Poisoning D.R.<br>• Alcohol-related motor vehicle crashes D.R. |
| **Peer** | | |
| **Favorable** | • Pap test in last three months | • Poverty<br>• Levels of MA<br>• Prostate & Colorectal D.R. STD rates<br>• HIV rates<br>• Firearm and Homicide rates<br>• Food borne illnesses<br>• Rates of alcohol and drug abuse. |

# Section 3

## *The Gaps and Barriers to Health and Well-being: The community's perspective*

The analysis of the gaps and barriers was carried out so as to identify the perceived needs of the community with regard to health and well-being. Gaps and barriers to health are the perceived gaps between what the community thinks a situation is and what it should be. These needs may be felt by individuals, a group, or the entire community. Examining these needs helps discover what is lacking, and points the direction of future improvement.

The analysis of gaps and services was carried out using institutional surveys, key informant interviews and community-level analysis of 7 communities.

One hundred and seventy-five providers were sent surveys. Forty-seven were returned for a response rate of 27 percent. Twenty key informants were interviewed, and seven communities were analyzed.

This section will describe the perceptions of the community along four general constructs – health outcomes, social behavioral issues, systemic factors and regional disparities. The analysis will look to see what the community's perception is in terms of what health outcomes are most underserved, what are the social and behavioral issues that suffer from gaps in services, and what are the most critical systemic factors affecting access.

### Health Outcomes

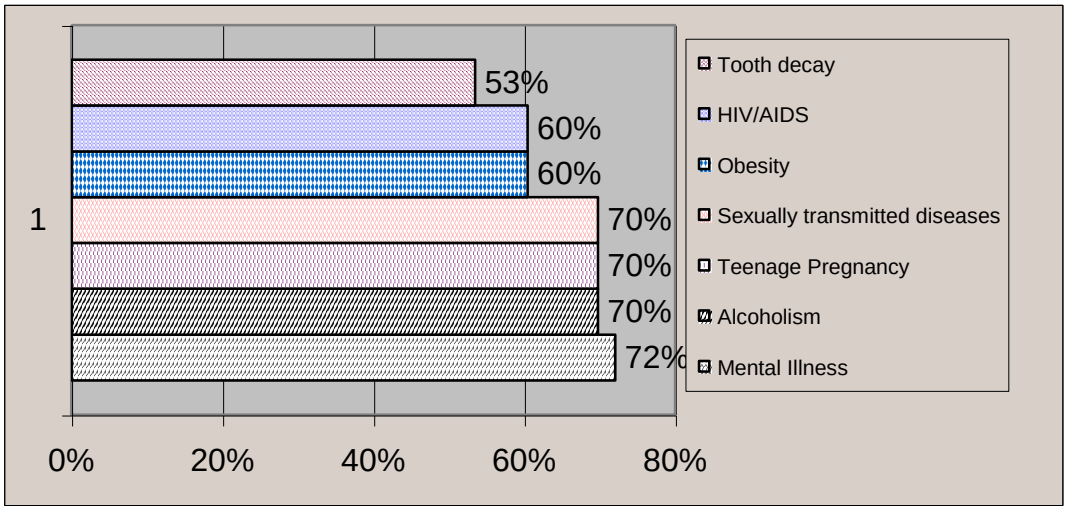
In the provider surveys the perception among health and human service directors is that mental illness is the health issue facing the most significant gap in services.

## Table 1

| Please indicate how important the following health issues are for the residents of Northampton County? 1 = very important 5= not important | | | | |
|---|---|---|---|---|
| Item | Mean* | Very Importance | Somewhat Importance | Little Importance |
| Mental Illness | 1.32 | 31 | 12 | 1 |
| Alcoholism | 1.32 | 30 | 14 | 0 |
| Teenage Pregnancy | 1.36 | 30 | 12 | 2 |
| STDs | 1.41 | 30 | 10 | 4 |
| Diabetes | 1.37 | 28 | 11 | 2 |
| Obesity | 1.44 | 26 | 15 | 2 |
| HIV/AIDS | 1.48 | 26 | 15 | 3 |
| Smoking | 1.57 | 23 | 17 | 4 |
| Tooth decay | 1.61 | 23 | 15 | 6 |
| Low birth weight | 1.89 | 14 | 21 | 9 |
| Tuberculosis | 2.09 | 9 | 21 | 13 |
| Lyme disease | 2.02 | 8 | 25 | 9 |

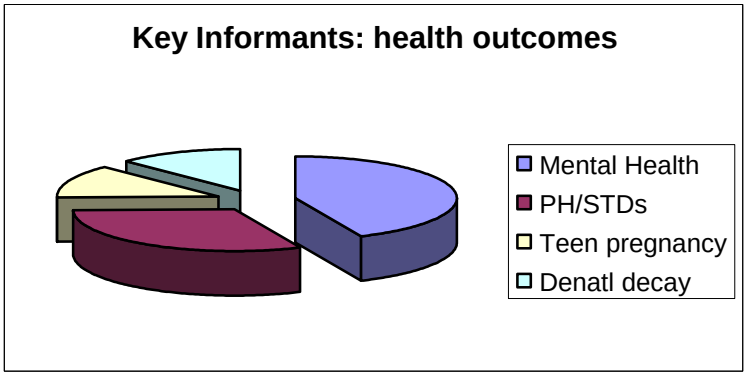
Seventy-two percent of the respondents mentioned mental illness as being the issue facing significant barriers to services. Seventy percent of the times the respondents indicated that alcoholism, low birth weight and sexually transmitted diseases faced significant barriers. The other outcomes that the majority of the directors perceived as suffering from the greatest barriers were obesity (60%), HIV/AIDS (60%) and tooth decay (53%).

Figure 1




The responses of the key informants demonstrate a similar pattern. Mental health was the health outcome that the greatest number of key informants mentioned as being a key health concern (43%). In addition, the key informants mentioned public health controlled diseases such as STDs (32%), dental decay (12.5%) and teen pregnancy (12.5%)as the other most significant health issues facing the County.

## Figure 2




In the community analysis heart disease emerged as the health outcome with the highest number of communities reporting it as a major concern. The residents of South Easton, Palmer, Portland and Wind Gap indicated that heart disease was of critical importance for their community. These same communities ranked cancer and asthma as the second most important health outcome facing their communities. The communities of South Easton and Wilson were the only communities to identify teen pregnancy as a concerning health outcome.

**Table 2**

**Community Analysis Summary: health outcomes***

| Locales | Heart Disease | Cancer | Asthma | Dental Decay |
|---|---|---|---|---|
| Wind Gap | X | X | | |
| Portland | X | X | X | |
| Bangor | X | X | X | X |
| S. Easton | X | | X | X |
| Wilson | | | X | |
| Nazareth | | | | |
| Palmer | X | X | | X |

*health outcomes identified by more than one community.

### *Summary*

⇒ The perceptions of the providers both through surveys and key informants converge on mental health as the health outcome facing the most significant critical gaps in services.

While the epidemiological data did indicate a higher than expected mortality rate due to suicide there was no significant epidemiological evidence of higher than normal incidence of mental health problems. In addition, in the community analysis mental health does not emerge as a major issue. This is an expected pattern since providers have the most difficult time trying to place mental health patients in appropriate

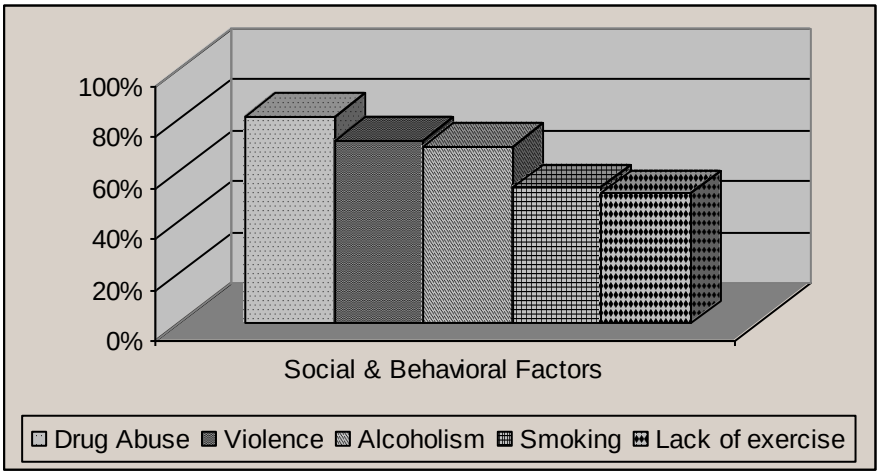
services and mental health patients have higher length of stays in inpatient settings. Hence, these patients are a major concern for providers.

⇒ The perceptions that emerge from the community analysis do agree with the epidemiological data that shows that heart disease and cancer rates are a significant health concern as is the lack of dental services.

## Behavioral and Social Issues

The social and behavioral factors perceived by providers as being of greatest concern are drug abuse, followed by violence. Eighty-one percent (81%) of the respondents mentioned that violence is an important social and behavioral factor for the residents of the county. This was higher that any other issue including any of the health outcomes. This was followed by violence, and alcoholism that were mentioned by 72% and 70% of the respondents respectively.

**Figure 3**




The other behavioral factors that were reported and are critical for health outcomes are smoking and lack of exercise, that were reported by 53% and 50% respectively.

**Table 3**

| Please indicated how important the following social and behavioral factor are for Northampton County. 1 = very important 5= not important | | | | |
|---|---|---|---|---|
| Item | Mean* | Very Important | Somewhat Important | Little Importance |
| Drug Abuse | 1.19 | 35 | 8 | 0 |
| Violence | 1.32 | 31 | 12 | 1 |
| Alcoholism | 1.32 | 30 | 14 | 0 |
| Smoking | 1.57 | 23 | 17 | 4 |
| Lack of exercise | 1.61 | 22 | 17 | 5 |

In the case of social and behavioral factors the perceptions of the community members resemble those of the providers. In the community analysis, community members identified crime, violence and drug and alcohol abuse as the social behavioral issues that most concerned them. Five communities -- Portland, Bangor, South

Easton, Palmer and Wilson -- out of the seven identified substance abuse, as the social and behavioral issue of greatest concern. This was followed by crime that was mentioned by four communities -- Portland, Bangor, South Easton, and Wilson. Portland, Bangor, South Easton, and Palmer identified youth and domestic violence as being areas of concern.

It is interesting to note that in both Wilson and South Easton cultural and ethnic diversity were mentioned as being sources of social tension that then created barriers to services.

Table 4

Community Analysis Summary: social & behavioral factors*

| | Substance abuse | Youth Violence | Crime | Domestic Violence | Cultural and ethnic diversity |
|---|---|---|---|---|---|
| Wind Gap | | | | | |
| Portland | X | | X | X | |
| Bangor | X | | X | | |
| S. Easton | X | X | X | X | X |
| Wilson | X | | X | | X |
| Nazareth | | | | | |
| Palmer | X | X | | X | |

*Factors identified by more than one community.

## *summary*

⇒ There is strong agreement between the providers and the communities on the most important social and behavioral issue. Drug and alcohol abuse is a critical social and behavioral factor that is a major determinant of the County's health and well-being.

⇒ Violence is a second negative health determinant that both providers and the communities perceive as an important social/behavioral factor.

⇒ Crime was the second most often mentioned problem by the community.

These two findings are consistent with some of the epidemiological data that showed that alcohol related traffic accidents and maltreatment of children were areas that Northampton County rated unfavorably. In addition the epidemiological data showed crime was a growing concern in the county.

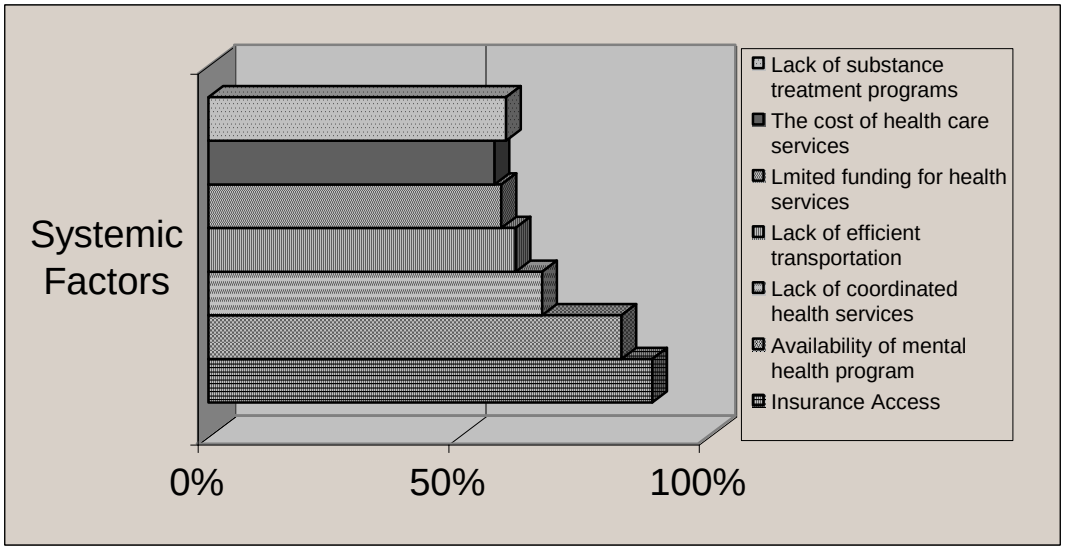
The reports seem to show a link between substance abuse, crime and violence. The same communities that highlighted substance abuse as a social and behavioral factor of concern also highlighted crime and/or violence. These are also the areas that the demographic analysis showed had lower socio-economic status, but limited net positive migration.

⇒ The importance of local variations is demonstrated by South Easton and Wilson's mention of a fourth social and behavioral factor, cultural and language barriers. Other than South Bethlehem these areas have the highest number of Latinos in the county.

## Systemic Factors

Among providers the two most pressing barriers to health and wellbeing in the county are the level of uninsurance and the lack of mental health programs. The problems facing the uninsured and underinsured residents of the county is cited 89% of the times as being a major barrier to the health and wellbeing of the community. That was followed by the problem of limited mental health programs in the community that was cited 83% of the times.

**Figure 4**




As the following table reiterates the barriers related to uninsurance and mental health resonate very strongly with providers. According to provider's testimony, they spend a disproportionate amount of time identifying providers for the uninsured or placing mental health patients.

This pattern is also reflected in the testimony of the key informants. Over one third of the key informants reported that mental health was an area of critical gaps. It is significant that both a broad group of community-based providers and that a group of county planners, policy makers and key providers emerge so strongly on the issue of mental health. It represents an area of concern that transcends the various levels of services. Key informants also reiterated the problems of the uninsured with 13% of them reporting that the uninsured was the second most significant gap in services for Northampton County residents (table 6).

**Table 5**

| How much of a barrier to health care are the following Issues in Northampton County. 7= Major Barrier, 1= Not a Barrier | | |
|---|---|---|
| Item | Mean Barrier Score | Percent scoring 5 or higher |
| Insurance Access | 6 | 89% |
| Availability of mental health program | 5.7 | 83% |
| Lack of coordinated health services | 5.12 | 67% |
| Lack of efficient transportation | 5.05 | 61% |
| Limited funding for health services | 4.93 | 59% |
| Lack of substance treatment programs | 4.84 | 59% |
| Waiting lists | 4.8 | 53% |
| Availability of primary care providers | 4.63 | 56% |
| Lack of data | 4.63 | 54% |
| Health care services aren't provided in Spanish | 4.42 | 51% |
| Lack of a Local Health Department | 4.34 | 46% |

A third barrier that is mentioned by the providers and is related to the problems of the mentally ill is the lack of substance abuse programs. Substance abuse and mental illness are co-morbidities that require integrated inpatient and outpatient systems of care. The lack of these types of integrated services is a drain on the collective resources of the organizations, and hence why it emerges as such a strong concern for the providers.

The assertions by both providers and the key informants also agree on two additional factors that also negatively contribute to the problems of the uninsured and the mentally ill, namely lack of a source of coordination for the different types of health care services, and the lack of adequate public transportation. Over two-thirds of the providers report that these two factors are a significant barrier for patients and over half of the key informants indicate that transportation is an issue, and one-fifth indicate that confusion of where to go for services is a major barrier (table 7). Without a centralized source of information and referral for health services patients, case managers and providers are left to their ingenuity to identify appropriate services. This tends to lead to both ineffective and inefficient access that in turn contribute to duplication of services and rising expenditures. In addition transportation exacerbates this trend because as recent studies in the Lehigh Valley (Rodriguez 2002) have shown, the availability of transportation is a strong determinant of a patient's ability to keep appointments and therefore a major determinant of their satisfaction and their ability to have a usual source of care. If in addition to a lack of coordinated services, patients lack the physical means by which to access services the system is creating multi-level barriers.

What the testimony of the providers and key informants also demonstrates is the interrelatedness of these issues and factors. Not only does the lack of referral and coordination negatively impact the burden of the uninsured, but issues such as lack of primary care providers, long waiting times, limited funding for health programs, and limited language competency among providers, all reported by both providers and key informants as significant barriers (tables 5, 6 & 7), further aggravate the barriers.

Finally, the lack of a local health department and more importantly the lack of preventive services is a gap highlighted by both groups that not only magnifies the other identified barriers but represents a lost opportunity to alleviate these barriers.

Table 6

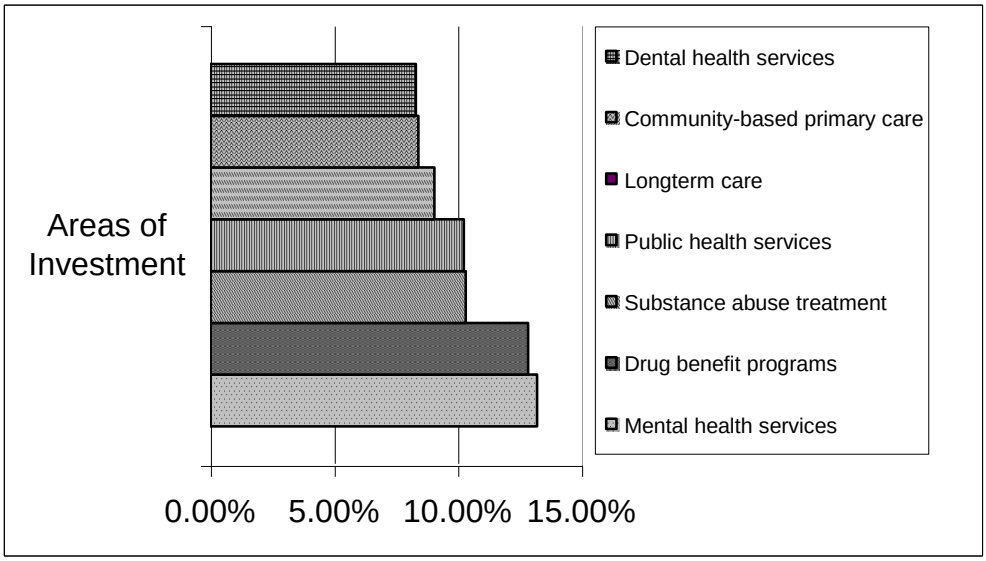
| Most Significant Gaps in Health Services | |
|---|---|
| Lack of mental health services | 33% |
| Uninsured & underinsured (elderly & working) | 13% |
| Over dependence on hospital services | 13% |
| No municipal or county health department | 7% |

Table 7

| Most Significant Barriers for Patients | |
|---|---|
| Lack of public transportation | 53% |
| Confusion about where is best to go for what, no coordination in system | 20% |
| Long wait times @ hospital | 13% |
| Cultural (language) | 13% |

Providers were asked to assume that there are NEW or EXTRA health care monies to spend on the health care services system in Northampton County and to distribute 100 percentage points among different types of services as a way of indicating how they would divide these EXTRA health care funds so they would best address the health care needs of Northampton residents. The results reconfirm the concerns described above (see figure 5 and table 6).

Figure 5




The

providers would provide an average of 14% of the funds to mental health and 10% to substance abuse programs. According to the providers 24% of the funds should be earmarked toward behavioral health services.

The need for more primary care and preventive services is highlighted by the amount the providers would give public health services, community based primary care services, and home health care for a total of 26% of the funds (table 7).

Providers also highlighted the need that exists in maternal and child health care. The providers allocated over 25% of the funds to prenatal care and infant health services, a reflection of the needs identified by the epidemiological data.

**Table 8**

| **Assuming that there are NEW health care monies to spend on the health care services system in Northampton County, how would you divide these EXTRA health care funds among the different services so they would best address health care needs of the county** | |
|---|---|
| Item | Average % allocated |
| Mental health services | 13.21% |
| Drug benefit programs | 12.85% |
| Substance abuse treatment | 10.33% |
| Public health services | 10.26% |
| Long-term care | 9.07% |
| Community-based primary care | 8.42% |
| Dental health services | 8.32% |
| Home health care | 8.02% |
| Transportation services | 7.51% |
| Centralized information | 4.90% |

The results of the community analysis show that the community concerns with regard to systemic factors affecting health services reflect the perspectives of the providers and the key informants. With the exception of mental health and substance abuse programs, which the communities do not highlight (for reasons mentioned above), the communities' concerns highlight the need for centralized information, better transportation, and accessible primary care services. These concerns are reported by the communities regardless whether they are rural or urban. Nonetheless, the problem of insurance access that is an overarching factor for all the other barriers continues to be a major concern from all the perspectives.

**Table 9**

**Community Analysis Summary: systemic factors***

| | Uninsured | Lack of centralized information | Lack of primary care providers | Lack of public transportation | Lack of preventive services | Need for broader language competency |
|---|---|---|---|---|---|---|
| **Wind Gap** | X | | X | X | | |
| **Portland** | X | X | X | X | X | |
| **Bangor** | X | | | X | | |
| **S. Easton** | X | X | X | X | X | X |
| **Wilson** | X | X | X | X | X | X |
| **Nazareth** | X | | X | X | X | |
| **Palmer** | X | X | | X | X | |

*Factors identified by more than one community.

## *Summary*

The systemic factors can be grouped into three categories – provider shortages, access and prevention.

⇒ The concerns of the three sources of testimony reflect a deep concern for provider shortages in the areas of mental health, substance abuse treatment, primary care, and dental care.

⇒ The concerns of access are multi-dimensional. They not only highlight the problem of obtaining insurance coverage, a traditional measure of access, but they also highlight other critical determinants of access – transportation, waiting times, lack of referral services, and language barriers.

⇒ The problem of the region's over dependence on curative services is underscored by the concerns of the providers, the key informants and the communities about the lack of preventive services. The testimony of all three groups, a need for more health education, a need for healthier lifestyles, and the need for disease data, all point to the need for more coordinated public health services.

## Population and geographic areas facing gaps and barriers

The perspectives of the providers, and the key informants highlight various subpopulations that are currently facing additional gaps and barriers and some can be expected to face increased gaps and barriers.

Key informants highlighted the growing Hispanic population (the demographic data showed this population as the fastest growing in the county) as the group facing the most significant barriers. These emerge not only because of language and culture, but because of an inherently lower economic status that exacerbates their problems with access. This is consistent with key informant views on the most critical barriers to services (table 7).

| **Populations with difficulty in accessing health care…** | | *Sources of gaps and barriers* |
|---|---|---|
| Hispanics | 40% | Language; cultural; undocumented; lack of funding. |
| Elderly | 27% | Bad diet, afraid of asking questions of doctors; have to choose between prescriptions and meals; not information receptive, not very forthcoming, no source like school to contact. |
| Uninsured | 13% | Working poor in between gaps. |
| Single parent families | 13% | Young families; new families to the region; commuter families. |
| Working poor (all races and ethnicities) | 13% | Lack of outreach. |

The elderly are the second population that the key informants identified to as facing current and future barriers. This is because of increased pressure on the region's health services as this population grows (the demographic data showed an increasing median age for the county) and as the tax base decreases. The growing needs of this population were reinforced by the fact that the providers reported they would spend additional funds for services aimed at the elderly (table 8). The providers would spend 13% for a drug benefit program and 8% for home health care for a total of 21%. This tracks their perception in another question that asks them which population requires more additional services (see table 10). In that question the providers indicated that they would spend close to one fifth of new monies on elder care services.

Table 10

| Assuming that there are NEW health care monies to spend on the health care services system in Northampton County, how would you divide these EXTRA health care funds among the different patient populations so they would best address health care needs of the county | |
|---|---|
| Item | Average % allocated |
| Elder care | 19.48% |
| Adult health services | 14.88% |
| Child health services | 14.61% |
| Infant health care | 13.16% |
| Prenatal care | 12.73% |
| Chronic care | 11.67% |
| Women's health services | 8.96% |

Geographically the providers as well as the key informants indicate that the residents in three areas of the county are most likely to face gaps and barriers in their services – Easton, South Bethlehem and the Slatebelt. This is consistent with the epidemiological date that showed that these areas tended to show higher levels of risk factors in the BRFSS.

Table 11

| Given the experience of your organization what areas of Northampton County are in greatest need of health services | |
|---|---|
| Geographic Area | Number of times mentioned |
| Slate Belt | 25% |
| Easton | 20% |
| South Bethlehem | 17% |
| Rural (non-Slate Belt) | 9% |

The community analysis showed that the Slatebelt communities were suffering from a decreasing tax base as people and businesses moved away, a decrease in the number of providers as providers relocated to the urban areas, a growing elderly population, and a general downturn in the region's economic level. On the other hand the communities of South Easton and Wilson had the burden of a growing population without the infrastructure to support the growth, a growing minority population and because of their size and inability to grow a limited tax base. The areas infrastructure will continue to feel the demographic pressure as the new 33 extension makes the area an attractive place to live for commuters.

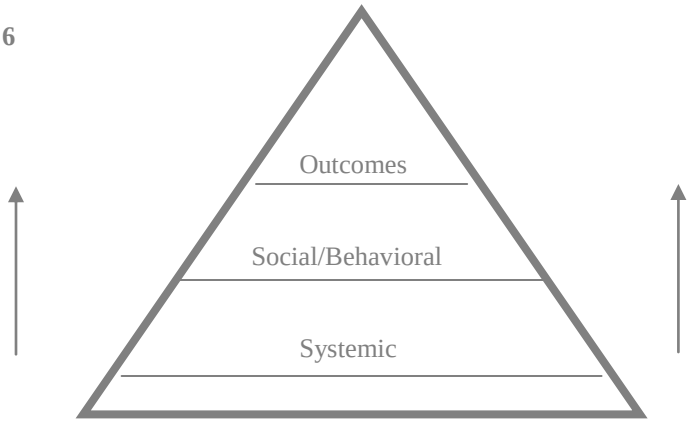
## Conclusions

The presentation of the data has looked at these factors as fitting in individual categories.

- Health outcomes
- Social/behavioral outcomes
- Geographic disparity
- Systemic factors

However in reality these factors are highly interrelated. Many of the outcome, and social/behavioral factors have their foundations in the systemic factors that were highlighted (figure 6).

**Figure 6**




This is an important relationship to explore because it provides the roadmap to the root causes of many of the issue highlighted over the last two sections. Before exploring the root causes it is important to identify any correlation between the epidemiological data and the qualitative data presented in this section. By looking at the both the qualitative and quantitative data and discerning the frequency that certain themes and factors were identified the following factors (table 12) were refined as being the central themes emerging from all the sources of the data.

**Table 12**

| Outcomes | Social & Behavioral Factors | Systemic Factors |
|---|---|---|
| Mental illness | Substance Abuse | Lack of primary care providers |
| Maternal health (and associated outcomes) | Violence (domestic and youth) | Lack of behavioral health programs |
| Cancer | Alcoholism | Lack of preventive services |
| Heart disease | Smoking | Poor public transportation |
| Dental decay | | Lack of information and referral |

By cross-tabulating these three sets of indicators and using the established correlations in the literature between the systemic factors and the identified outcomes and behaviors observed, it becomes apparent that the five systemic factors identified are highly interrelated with the nine outcome indicators that were identified (table13). According to this logic, interventions in the community that address the systemic factors identified may effectively and efficiently address the more specific health outcomes identified as being critical in the community. For example the lack of preventive health services is a root cause for all of

the specific health and behavioral outcome identified -- teen pregnancy, mental illness, cancer heart disease etc.

**Table 13**

| Outcomes & Social & Behavioral Factors | Systemic Factors | | | | |
|---|---|---|---|---|---|
| | Lack of primary care providers | Lack of behavioral health programs | Lack of preventive services | Poor public transportation | Lack of information and referral |
| Mental illness | | X | X | | X |
| Teen pregnancy (and associated outcomes) | X | | X | X | X |
| Cancer | X | | X | | |
| Heart Disease | X | | X | | |
| Dental Care | X | | X | X | X |
| Substance Abuse | X | X | X | | X |
| Violence (Domestic and youth) | | | X | | X |
| Alcoholism | | X | X | | X |
| Smoking | X | X | X | | X |

In addition, these systemic barriers are magnified in certain key geographic regions and populations that suffer from a disproportionate disparity. As was highlighted in section 1 the areas of Easton, Wilson and Bethlehem will see both a rapid growth in its population in general and in its minority population in particular while, the municipalities in the Slatebelt region will probably suffer from a continued economic slump. The trends these communities face will most likely further aggravate their existing gaps in services.

# Section – 4

## *Community Assets*

This section examines the assets of the greater community of Northampton County. The section defines community—any community—as a network of connections and interrelationships among individuals, institutions, and groups of individuals and institutions that is structured, functional, and distinct. Communities consist of, in varying degrees, a myriad of connections, interrelationships, webs of affiliation, and collaborative networks involving individuals from different social roles, positions and groups. These relationships form the social infrastructure of the community.

The analysis views community assets (or community resource, a very similar term) as anything that can be used to improve the quality of community life. And this means:

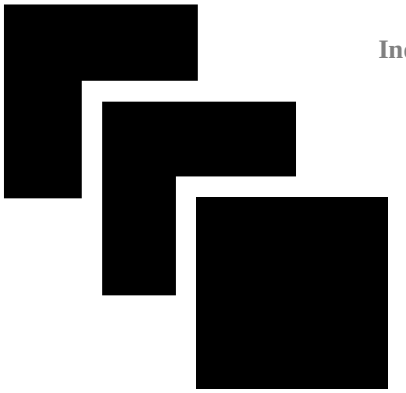
⇒ It can be a person -- the master mechanic down the street who can fix any car ever made. The stay-at-home mom or dad who organizes a playgroup. The church member who starts a discussion group on spirituality. Or a star high-school athlete, or coach, or cheerleader, or fan in the stands. These are all community assets.

⇒ It can be a physical structure or place -- a school, hospital, church, library, recreation center, and social club. It could be a town landmark or symbol. It might also be an unused building that could house a community hospice, or a second-floor room ideal for community meetings. Or it might be a public place that already belongs to the community a park, a wetland, or other open space.

⇒ It can be a business that provides jobs and supports the local economy.

⇒ It can be an intangible characteristic of the community – strong sense of community.

The asset mapping for this section will report the perspectives of the key informants and the community analysis using three overlapping but distinctive constructs.




In addition this section analyzes secondary data that looks at the local funding base expended on health and social services by the county and the townships, and the distribution of agencies providing key services.

## Individuals

In the key informant interviews, the provider survey and the community analysis the focus of the responses were on institutions and community groups (tables 4.1 and 4.2). However, various individuals and groups of individuals emerged as important members of the community that touched the lives of many residents in a positive fashion.

The director of the 4th street clinic is described as someone with energy, passion and commitment and as someone who "doesn't get caught up in the red tape." Informants described her as someone who left her institutional setting (Easton Hospital and 4th Street Clinic) and came out into the community to work with social service agencies.

The pastor of Shiloh Baptist Church was also highlighted as a key asset in the community. The pastor was described as expanding the boundaries of the church to bring critical services to the community. A majority of those responding in the community of Easton highlighted the pastor and the church as the key place where they turned for assistance.

The Mayors of Portland and Windgap were viewed as strong advocates for community needs. In the case of Portland, community members reported him as being a critical source of community cohesiveness and more importantly as committed to improving local services. The mayor of Windgap was identified as being committed to developing Windgap while protecting the needs of the citizen of the communities.

As a group the physicians at Easton Hospital were reported by 50 percent of the key informants as being a major asset to the community because of their medical expertise. While the individual community volunteers in Portland, Palmer and Nazareth were identified as key to the quality of life in those communities.

**Table 4.1**

| **KEY INFORMANT RESPONSES**<br>**Assets** | **Comments** |
|---|---|
| Quality doctors | Tremendous medical expertise |
| Easton Hospital | Have taken public health role given void.<br>Long wait if you take your kid to hospital for stitches;<br>Strong potential, too bad physicians do so much sniping |
| School districts | Some providing comprehensive family services. |
| Daria Starosta | She has energy, passion, committed, doesn't get caught up in the red tape; pushed and pulled to make services available, strong commitment to making hospital all it can be; comes out in the community and works with social service agencies |
| Bethlehem health bureau | Problem is that not enough people know about them |
| Northampton County government | Does a reasonably good job. |
| ProJeCt of Easton, Weller Center, Alert Parntership for Drug Free Valley, Lehigh Valley MESH, good not for profits | Good not-for-profits |
| Clinic on North 4th street | Need clinics in walking distance of public housing and on south side |

| | |
|---|---|
| Higher education organizations | But not connected to community |
| Business Community | Shows encouraging signs of leadership and involvement |
| St. Luke's mobile dental unit | |
| Leadership in United Way | |
| Pool Trust | Leadership |
| St. Luke's and Lehigh Valley Hospital reputations | |

## Community Groups

All of the communities identified community based groups as being the backbone of their service network. Among the key informants, that reported from a broader county level, the 4th Street Clinic, The ProJeCt of Easton, The Weller Center, Alert Parntership for Drug Free Valley, and the community outreach services of Lehigh Valley Hospital MESH program were all identified as essential components of the service network. As is the case in many areas with limited institutional (public sector) services, the not-for-profit sector has filled in the void.

This trend is reinforced by the information in table 4.2 that shows that as a group, the Volunteer Fire Departments and the Churches are identified more often as key providers of services than Townships and Counties. In particular the communities identified Churches as key sources of information and referral and in some instances of direct provision as is the case with the River of God Fellowship, and the Shiloh Baptist Church.

School based services also play a vital service role, beyond education. Communities view the Family Connection program within the Cheston Elementary School, and the recreational facilities of the Wilson School District as critical sources of support for families. Two civic organizations -- The Lions Club and the Girls and Boy Scouts – are highlighted as important assets contributing to the quality of life of the communities. The communities also identified four traditional not-for-profit service groups as key assets – Meals on Wheels, Project of Easton and Neighborhood Center.

**Table 4.2**

| Community Analysis Assets | Specific Assets | Communities |
|---|---|---|
| Institutions/Organizations | **Fire Department**: Provides social services | Wind Gap |
| | **Church** (Food Bank, clothing bank, social services, transportation, counseling, recreational programs, etc.,) | Portland, Easton, Palmer Township, Nazareth |
| | **River of God Fellowship** Visits to the elderly, Food for the 3rd St. alliance, volunteer work for Safe Harbor | Easton |
| | **The Family Connection** (within Cheston Elem. School): Provides managed care seminars, parent newsletter, in-home pre-school tutoring | S. Easton |
| | Meals on Wheels | Portland, Palmer Township |
| | **Girls/Boy Scouts of America** | Portland |
| | **Lion's Club** | Wilson |
| | **PROJECT Easton** (food bank, social services, transportation, literacy program). | Wilson |
| | **Easton Hospital** (close proximity, "close association") | Wilson |
| | **Shiloh Baptist Church**: Medical clinic for the community, youth activities, computer labs, financial planning, business skill training and tutoring) | S. Easton |
| | **Neighborhood Center**: Provides senior transportation to Dr.'s appt. and shopping (Times are limited). | S. Easton |
| | **Wilson School District**: Community allowed to use district ground for recreational activities | Wilson |
| Individuals | Mayor | Portland, Wind Gap |
| | Community Volunteers | Portland, Palmer Township, Nazareth |

| | | |
|---|---|---|
| Quality | Cohesiveness of community | Portland, Wilson, Wind Gap, Palmer Township, Nazareth |

These groups form an informal network of services that although uncoordinated represents the only network available. Given its lack of coordination the distribution of these groups is not managed and therefore is based more on resource availability and administrative ease than a consideration of demand. As the next section, secondary data analysis, reveals there is in some circumstances resources available and a dense network of organizations but information about these services.

## Institutions

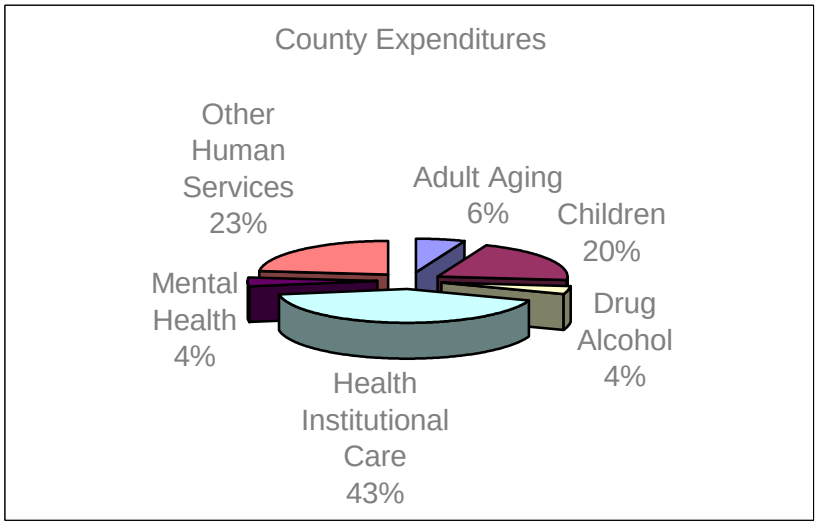
More formal institutions, whether private or public, were not identified as often as being essential sources of services. In view of the fact that this was a health assessment the most often mentioned institutions was Easton Hospital followed by St. Lukes hospitals and clinics . Although the informants were critical of the quality of the services at Easton, the hospital was given credit for having stepped in to fill a void by being the only local source of public health and indigent care. Despite the fact that the Bethlehem Health Bureau is mentioned, the void of public sector services is highlighted by the lack of mention of other specific public institutions. Even in the mention of Bethlehem Health Bureau the informants indicated that very few citizens are aware of their services.

### *Secondary Data Analysis*

*Financial Resources*

The county is a source of major financing in the human service area as are the individual townships. The county spends approximately $74,932,815 in human services. This is more than 50% of the total revenue of 137 million dollars. This represents approximately $300 per person. The greatest amount goes to institutional health care services.

Chart 1



| Area | Percent | Per capita |
|---|---|---|
| Adult Aging | 6% | $18.00 |
| Children | 20% | $ 59.00 |
| Drug Alcohol | 4% | $12.00 |
| Health Institutional Care | 41% | $123.00 |
| Mental Health | 4% | $71.00 |
| Other Human Services | 23% | $18.00 |

The Townships on the other hand spend approximately $5 per person on public health services. Twenty-two of the 35 townships or 62% spend nothing on public health. In addition the County also has lower mental health and retardation (MHR) reimbursement rates. Northampton County reimbursement rate is $17.58 per person. While this is comparable with Lehigh and above the 13 dollars per capita received by Monroe it is significantly under the $31 dollars per capita that Luzerne receives.

## *Community Services*

The following six maps and tables indicate the number and the location of agencies that provide elder services, dependency services, mental health services, clinical services, maternal health services and dental care services.

**Map 4. 1**

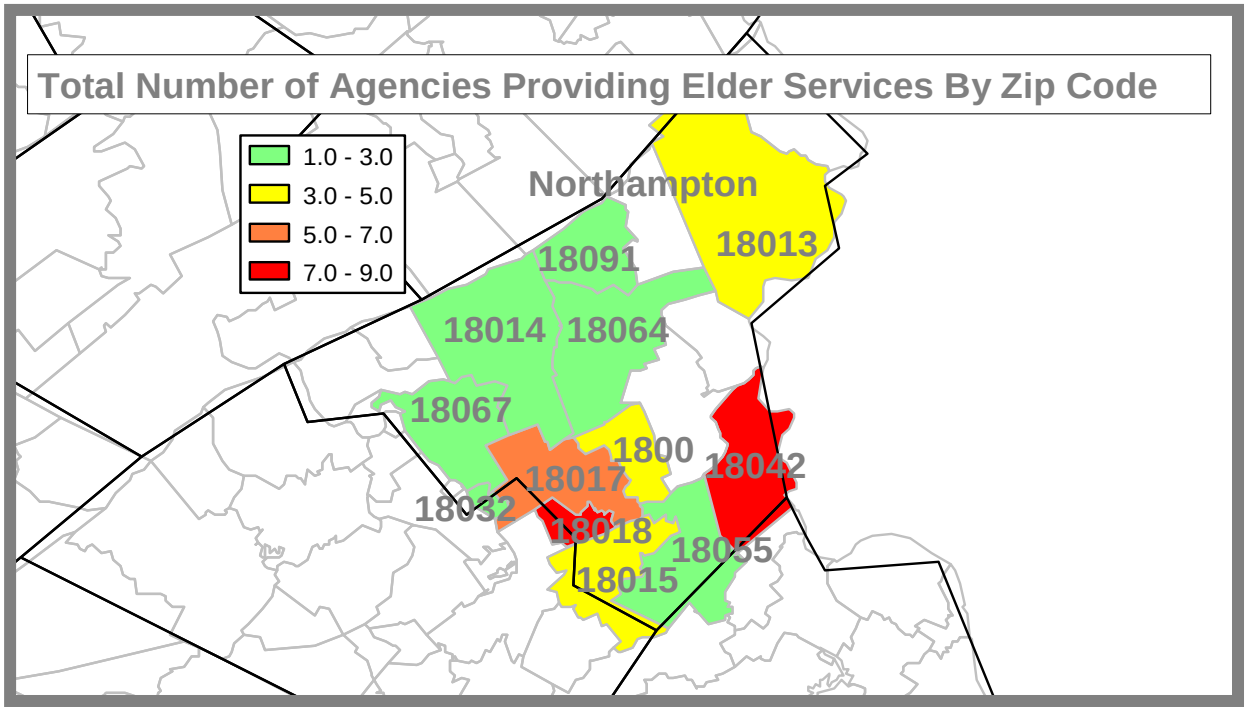


**Table 4.3**

*Agencies Providing Elder Care*

| Agency Name | Location |
|---|---|
| AARP Senior Community Service Employment Program | Room 501, 10 East Church St., Bethlehem, PA 18018 |
| Adult Injury Prevention Program | Bethlehem Health Bureau, 10 East Church Street, Bethlehem, PA 18018 |
| American Red Cross/Lifeline | 2200 Avenue A, Bethlehem, PA 18017-2181 |
| Antonian Towers | 2405 Hillside Ave., Easton, PA 18042 |
| Bangor Elderly Housing | 101 Murray Street, Bangor, PA 18013 |
| Bethlehem Health Bureau | City Hall Building, 10 East Church St, Bethlehem, PA 18018 |
| Bethlehem Senior Citizens Council, Incorporated | Rooney Building, 4 east 4th St. Bethlehem, PA 18015 |
| Bible Fellowship Home | 7 South New Street, Nazareth, PA 18064-2225 |
| Broadway Apartments | 35 South First Street, Bangor, PA 18013 |
| Century House | 8 North Main Street, Bangor, PA 18013 |
| Easton Area Senior Center | 42 Center Square, Easton, PA 18042-3631 |
| Holy Family Manor Nursing Home | 1200 Spring Street, Bethlehem, PA 18018 |
| Information Referral and Emergency Services | Northampton County Human Services, 45 North 2nd St., Easton, PA 18042 |
| Innovations | St. Lukes Hospital, 1107 Easton Ave, Bethlehem, PA 18015 |
| Life Path, Incorporated | 2014 City Line Road, Bethlehem, PA 18017 |
| Lower Mount Bethel Township Senior Center | Route 611, PO Box 283, Martins Creek, PA 18063 |
| Meals on Wheels of Northampton County | 4240 Fritch Drive, Bethlehem, PA 18020-8940 |
| Mid-County Senior Center | 234 South Walnut Street, Bath, PA 18014 |
| Moravian Hall Square Retirement Village | 175 West North Street, Nazareth, PA 18064 |
| Moravian House | Moravian Development Center, 1021 Center Street, Bethlehem, PA 18018 |
| North Catasaqua Recreation | 1066 Fourth Street, North Catasauqua, PA 18032 |
| Northampton County Area Agency on Aging | Governer Wolf Building, 45 North Second Street, Easton, PA 18042-7740 |

| | | |
|---|---|---|
| | Project ASSIST | Project of Easton, Incorporated, 320 Ferry Street, Easton, PA 18042 |
| | Senior Centers of Bethlehem | 720 Old York Road, Bethlehem, PA 18018 |
| | Settlers For Seniors | Po Box 96, Easton, PA 18044-0096 |
| | Share Care | 323 Wyandotte Street, Bethlehem, PA 18015 |
| | Shiloh Manor | 223 Brother Thomas Bright Ave, Easton, PA 18042 |
| | South Side Senior Center | Shull Building, 401 Berwick Street, Easton, PA 18042 |
| | St. Lukes Geriatric ACCESS Program | St. Lukes Hospital Health Network, 153 Broadhead Road, Bethlehem, PA 18017 |
| | St. Lukes Hospital-Bethlehem Campus | 801 Ostrum Street, Bethlehem, PA 18015 |
| | The Autumn Club | Bethlehem Township Parks Recreation, 4225 Easton, Ave, Bethlehem, PA 18020 |
| | The Caring Connection Incorporated | 2060 15th Street, 610 15th Street, Bethlehem, PA 18020 |
| | The Episcopal Apartments of the Slate Belt | 684 American-Bangor Road, Bangor, PA 18013 |
| | Third Street Alliance Adult Care Services | 41 North Third Street, Easton, PA 18042 |
| | YWCA of Bethlehem Adult Day Service Center | YWCA of Bethlehem, 1456 Roselawn Drive, Bethlehem, PA 18017 |
| | Fred B. Rooney Building | 4 East Fourth Street, Bethlehem, PA 18015 |
| | Hampton House | 1802 Lincoln Avenue, Northampton, PA 18067-155 |
| | Kirkland Village | One Kirkland Village Circle, Bethlehem, PA 18017-9914 |
| | Lutheran Manor Apts | 2085 Westgate Drive, Bethlehem, PA 18017 |
| | Moravian House I & II | 701 Main Street, Bethlehem, PA 18018 |
| | Moravian House III | 133 West Union Boulevard, Bethlehem, PA 18018 |
| | Saucon Manor | 650 Northampton Street, Hellertown, PA 18055 |
| | The Easton Home | Presbyterian Homes, 1022 Northampton St. Easton, PA 18042 |
| | Walden III, Personal Care Retirement Residence | 325 North Broadway, Wind Gap, PA 18091 |

Map 4.2

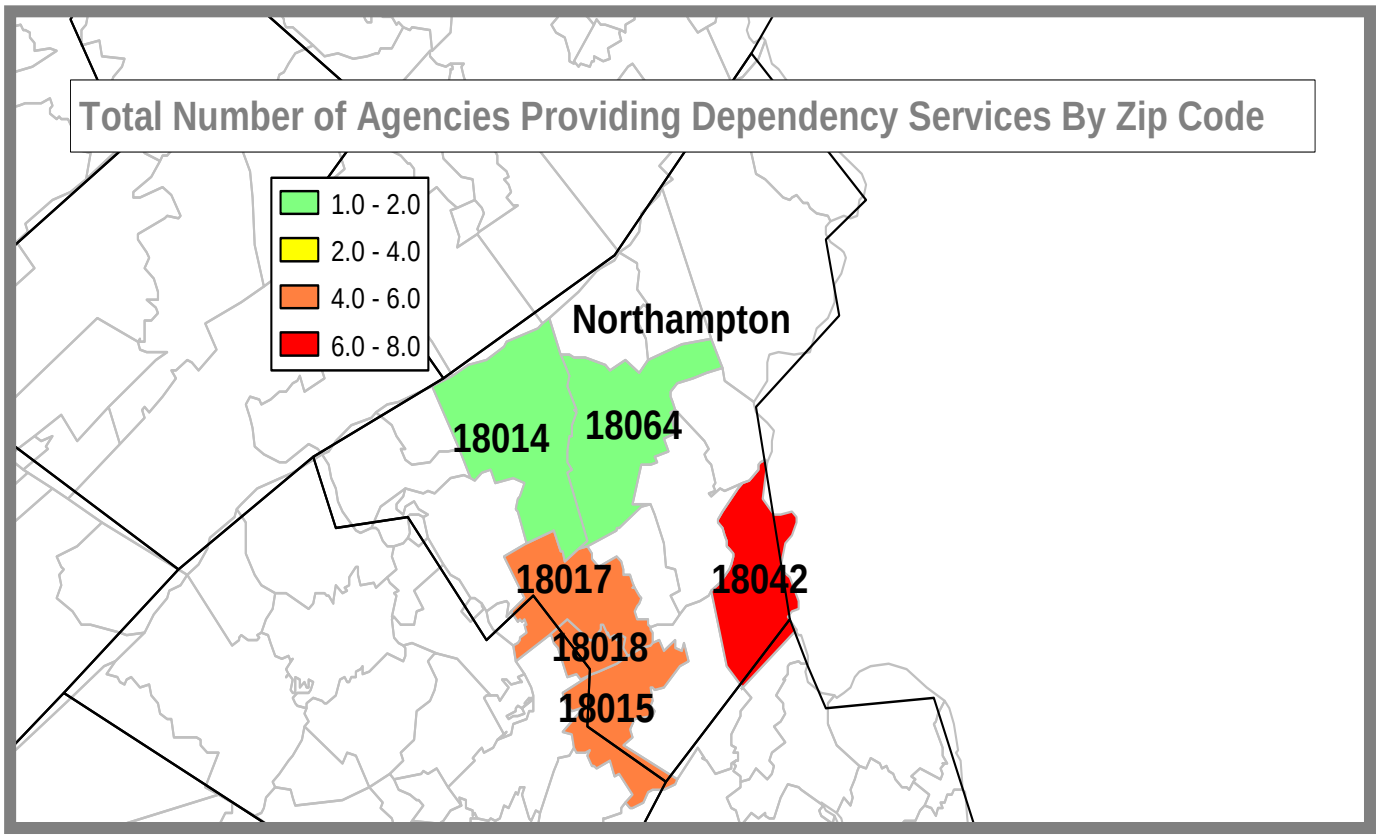



Table 4.4

*Agencies Providing Dependency Services*

| Agency Name | Location |
|---|---|
| Alcoholics Anonymous | Suite 208, 2285 Schoenersville Road, Bethlehem, PA 18017 |
| Center City Ministries Victory House | 314 Filmore Street, Bethlehem, PA 18015 |
| Center For Humanistic Change, Incorporated | Route 512, 7574 Beth-Bath Pike, Bath, PA 18014 |
| CONCERN Professional Services For Children, Youth And Families | Suite 300, 90 South Commerce Way, Bethlehem, PA 18017 |
| CONCERN's Counseling Services | Suite 300, 90 South Commerce Way, Bethlehem, PA 18017 |
| Council Of Spanish Speaking Organizations Of The Lehigh | 520 East Fourth Street, Bethlehem, PA 18015 |

| | | |
|---|---|---|
| | Easton Area Neighborhood Center - Dutchtown Gallow Hills | 639 Northampton Street, Easton, PA 18042 |
| | Family Intervention Prog | Valley Youth House, 531 main Street, Bethlehem, PA 18018 |
| | Hogar Crea Men's Center | 1920 East Market Street, Freemansburg, PA 18017 |
| | Hogar Crea Women's Center | 1409 Pembroke Road, Bethlehem, PA 18017 |
| | Information Referral And Emergency Services | Northampton County Human Services, 45 North Second St, Easton, PA 18042 |
| | Innovations | St. Luke's Hospital, 1107 Eaton Ave, Bethlehem, PA 18015 |
| | Marvine Family Center Marvine Elementary School | 1400 Lebanon Street, Bethlehem, PA 18017 |
| | Northampton County Juvenile Probation Department | 105 South Union Street, Easton, PA 18042 |
| | Northampton County Adult Probation Dept | Martin J. Bechtel Building, 520 East Broad St., Bethlehem, PA 18018-6395 |
| | Northampton County Drug And Alcohol Division | 684 Washington Street, Easton, PA 18042-7478 |
| | Northampton County TASC | Treatment Trends, 158-160 South Third St. Easton, PA 18042 |
| | Northampton County Youth Advocate Program | Suite 1010, 65 East Elizabeth Ave., Bethlehem, PA 18018 |
| | St. Luke's Addictions Treatment Services Outpatient Facilities | St. Luke's Hospital, 50 East Broad St., Bethlehem, PA 18018 |
| | St. Luke's Intensive Outpatient Treatment Alternative (IOTA) | St. Luke's Hospital Health Network, 1107 Eaton Ave., Bethlehem, PA 18018 |
| | Stephen's Place Incorporated | 729 Ridge Street, Bethlehem, PA 18015 |
| | Third Street Alliance Shelter Program | 41 North Third Street, Easton, PA 18042-3694 |

Map 4.3

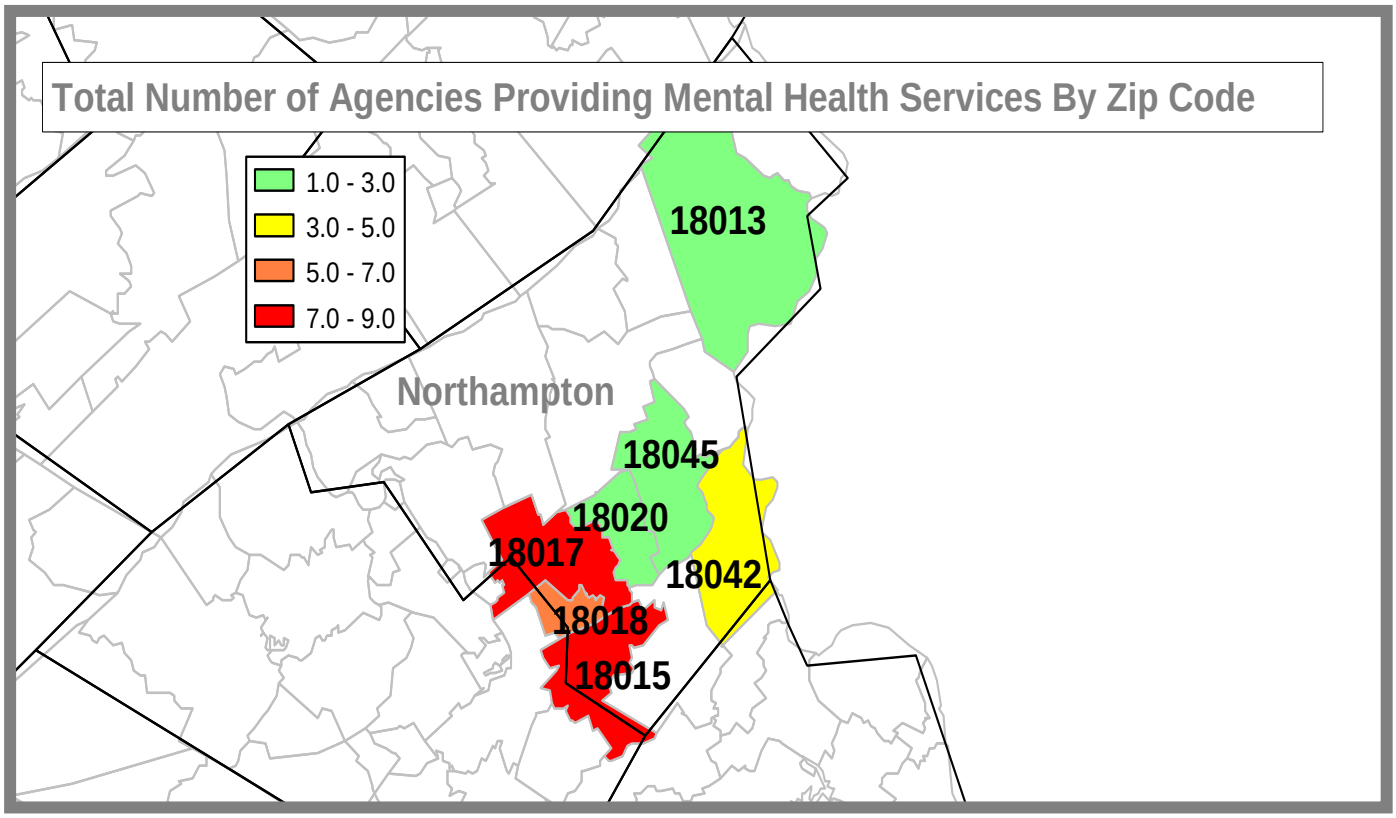



Table 4.5

*Agencies Providing Mental health Services*

| Agency Name | Location |
|---|---|
| Adult Injury Prevention Program | Bethlehem Health Bureau, 10 East Church St, Bethlehem, PA 18018 |
| Alternatives Partial Hospitalization Program | Muhlenberg Hospital Center, 2545 Schoenersville Road, Bethlehem, PA 18017-7300 |
| Base Service Unit 392 | Muhlenberg Hospital Center, 2545 Schoenersville Road, Bethlehem, PA 18017-7300 |
| Centennial School | Lehigh University, 2196 Avenue C, Bethlehem, PA 18017 |
| Center City Ministries Victory House | 314 Filmore Street, Bethlehem, PA 18015 |
| Children's Home Of Easton | 25th Street And Lehigh Drive, Easton, PA 18042 |
| CONCERN Professional Services For Children, Youth And Families | Suite 300, 90 South Commerce Way, Bethlehem, PA 18017 |
| CONCERN's Counseling Services | Suite 300, 90 South Commerce Way, Bethlehem, PA 18017 |

| | | |
|---|---|---|
| | Easton Area School District | 811 Northampton Street, Easton, PA 18042-4298 |
| | Genesis Of The Slate Belt | Second Floor, 51 Market Street, Bangor, PA 18013 |
| | Growth Horizons - Unity House | 119 West Fourth Street, Bethlehem, PA 18015 |
| | Hope House | 3606 Hecktown Road, Bethlehem, PA 18020 |
| | Information Referral And Emergency Services | Northampton County Human Services, 45 N. 2nd Street, Easton, PA 18042 |
| | Innovations | St. Luke's Hospital, 1107 Eaton Ave., Bethlehem, PA 18015 |
| | Lehigh Valley Community Mental Health Centers | 865 East Fourth Street, Bethlehem, PA 18015 |
| | LifePath, Incorporated | 2014 City Line Road, Bethlehem, PA 18017 |
| | Living With Depression Support Group | St. Luke's Hospital, 1107 Eaton Ave, Bethlehem, PA 18017 |
| | Muhlenberg Hospital Center | Lehigh Valley Hospital, 2545 Schoenersville Road, Bethlehem, PA 18017-7384 |
| | New Bethany Drop-In Meal Center | New Bethany Ministries, 333 4th St. Bethlehem, PA 18015 |
| | Northampton County Crisis Intervention Services | 45 North Second Street, Easton, PA 18042 |
| | Northampton County Mental Health/Mental Retardation | 520 East Broad Street, Bethlehem, PA 18018 |
| | Northampton County Youth Advocate Program | Suite 1010, 65 East Elizabeth Ave, Bethlehem, PA 18018 |
| | Northwestern Human Services Of Lehigh Valley | 701 West Broad Street, Bethlehem, PA 18018 |
| | PA Federation Of Injured Workers - Lehigh Valley Chapter | 53 East Lehigh Street, Bethlehem, PA 18018 |
| | Social Security Administration - Bethlehem | 555 Main Street, Bethlehem, PA 18018-5883 |
| | Social Security Administration - Easton | 200 Ferry Street, Easton, PA 18045 |
| | South Bethlehem Neighborhood Center | 700 Evans Street, Bethlehem, PA 18015 |
| | St. Luke's Geriatric ACCESS Program | St. Luke's Hospital Health Network, 153 Broadhead Road, Bethlehem, PA 18017 |
| | St. Luke's Hospital - Bethlehem Campus | 801 Ostrum Street, Bethlehem, PA 18015 |
| | Stephen's Place Incorporated | 729 Ridge Street, Bethlehem, PA 18015 |

| | | |
|---|---|---|
| | Via Of The Lehigh Valley | 336 West Spruce Street, Bethlehem, PA 18018-3789 |

Map 4.4

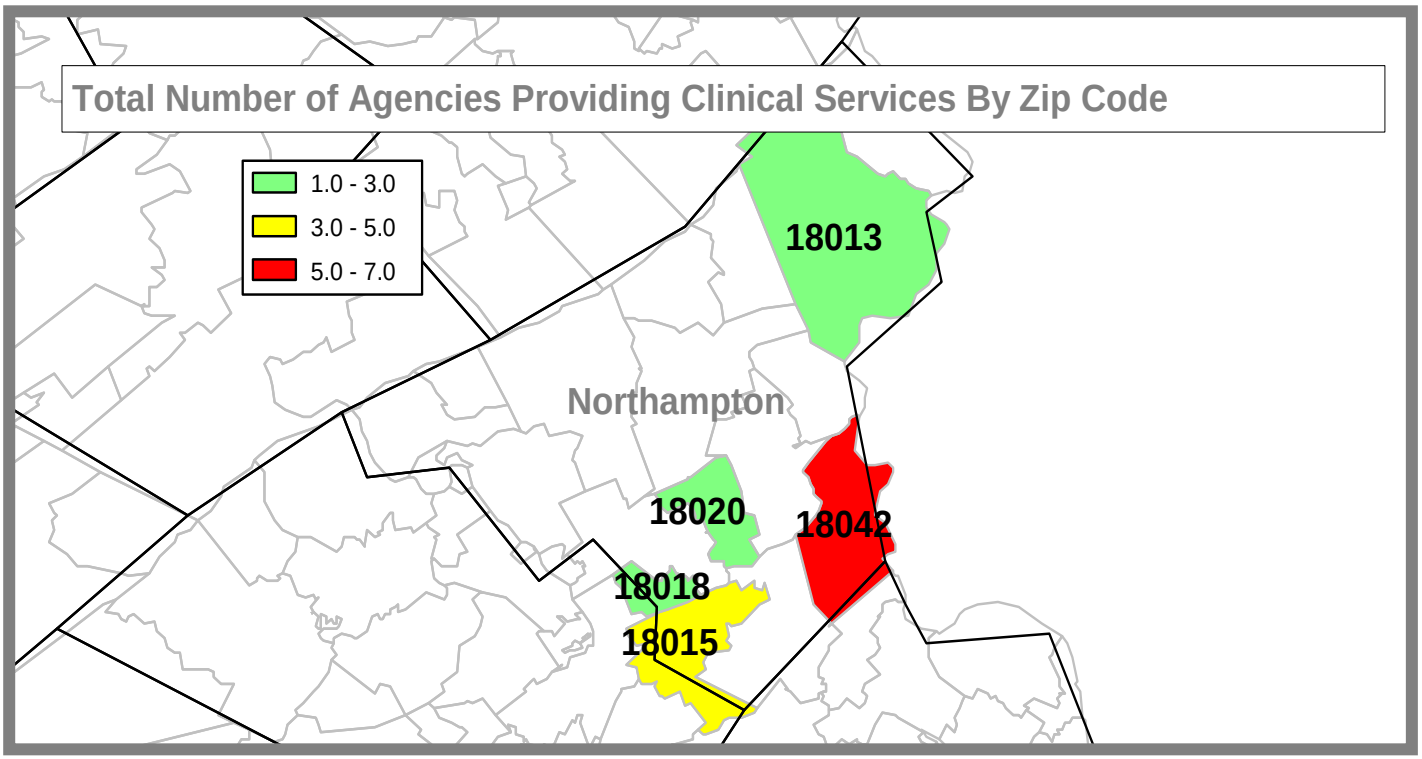



**Table 4.6**

*Agencies Providing Clinical Services*

| Agency Name | Location |
|---|---|
| Bethlehem Health Bureau | City Hall Building, 10 East Church Street, Bethlehem, PA 18018 |
| Bethlehem Health Bureau Pediatric Outreach Program | 829 East Fourth Street, Bethlehem, PA 18018 |
| Easton Hospital | 250 South 21st Street, Easton, PA 18042 |
| Easton Area Senior Center | 42 Center Square, Easton, PA 18042-3631 |
| Easton Senior Citizen Housing | 127 South Fourth Street, Easton, PA 18042 |
| Even Start | ProJeCt Of Easton, Incorporated, 320 Ferry St, Easton, PA 18042 |
| Muhlenberg Hospital Center | Lehigh Valley Hospital, 2545 Schoenersville Road, Bethlehem, PA 18017 |
| Northampton County Department Of Veterans Affairs | Governor Wolf Building, 45 N. 2nd Street, Easton, PA 18042 |

| | |
|---|---|
| Northeast Ministry | 1161 Fritz Drive, Bethlehem, PA 18016 |
| Project ASSIST | ProJeCt Of Easton, Incorporated, 320 Ferry St, Easton, PA 18042 |
| Settlers For Seniors | P O Box 96, Easton, PA 18044-0096 |
| Share Care | 323 Wyandotte Street, Bethlehem, PA 18015 |
| Sleep Disorders Laboratory | St. Luke's Hospital, 801 Ostrum St. Bethlehem, PA 18015 |
| South Bethlehem Neighborhood Center | 700 Evans Street, Bethlehem, PA 18015 |
| The Exodus Program, Incorporated | Van Bitner Hall, Room 9, 53 East Lehigh St, Bethlehem, PA 18018 |
| Transitional Housing | New Bethany Ministries, 337 Wyandotte, Bethlehem, PA 18015 |
| Visiting Nurse Association Of Eastern Pennsylvania | St. Luke's Health Network, 1510 Valley Center Parkway, Bethlehem, PA 18017-2294 |

Map 4.5

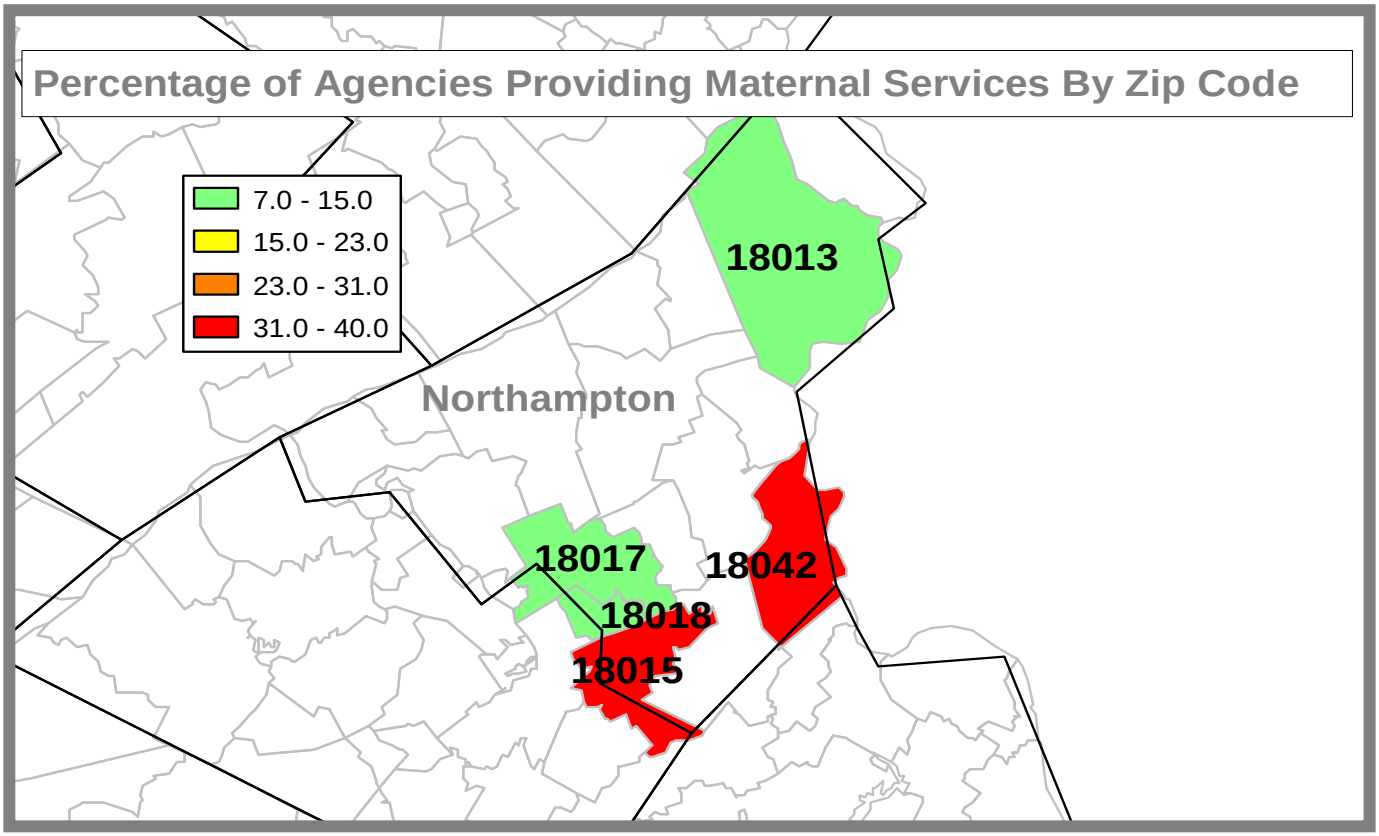


Table 4.7

*Agencies Providing Maternal Health Services*

| Agency Name | Location |
|---|---|
| Lehigh-Northampton Counseling Service For The Deaf | 2215 Florence Avenue, Bethlehem, PA 18018 |
| Slate Belt Pregnancy Crisis Center/ Catholic Service Agency | 123 Broadway, Bangor, PA 18013 |
| Third Street Alliance For Women And Children | 41 North Third Street, Easton, PA 18042-3694 |
| Weller Health Education Center | 325 Northampton Street, Easton, PA 18042-3541 |
| Community Care Center | Easton Hospital, 111 North 4th St. Easton, PA 18042 |
| CONCERN Professional Services For Children, Youth And Families | Suite 300, 90 South Commerce Way, Bethlehem, PA 18017 |
| Easton WIC Clinic | 101 Larry Homes Drive, Easton PA 18042 |
| Expectant Mother's Group/ Church of the Assumption | 4101 Old Bethlehem Pike, Bethlehem, PA 18015 |
| Planned Parenthood Of Northeast Pennsylvania – Bethlehem; Easton | St. Luke's Women's Health Center, Third Floor, 801 Ostrum St., Bethlehem, PA 18015 |
| St. Luke's Hospital - Bethlehem Campus | 801 Ostrum Street, Bethlehem, PA 18015 |
| Women's Health Center/St. Lukes Health Network | 801 Ostrum St., Bethlehem, PA 18015 |
| CareNet Pregnancy Centers Of The Lehigh Valley - Easton | 133 North Fourth Street, Easton, PA 18042 |

Map 4.6

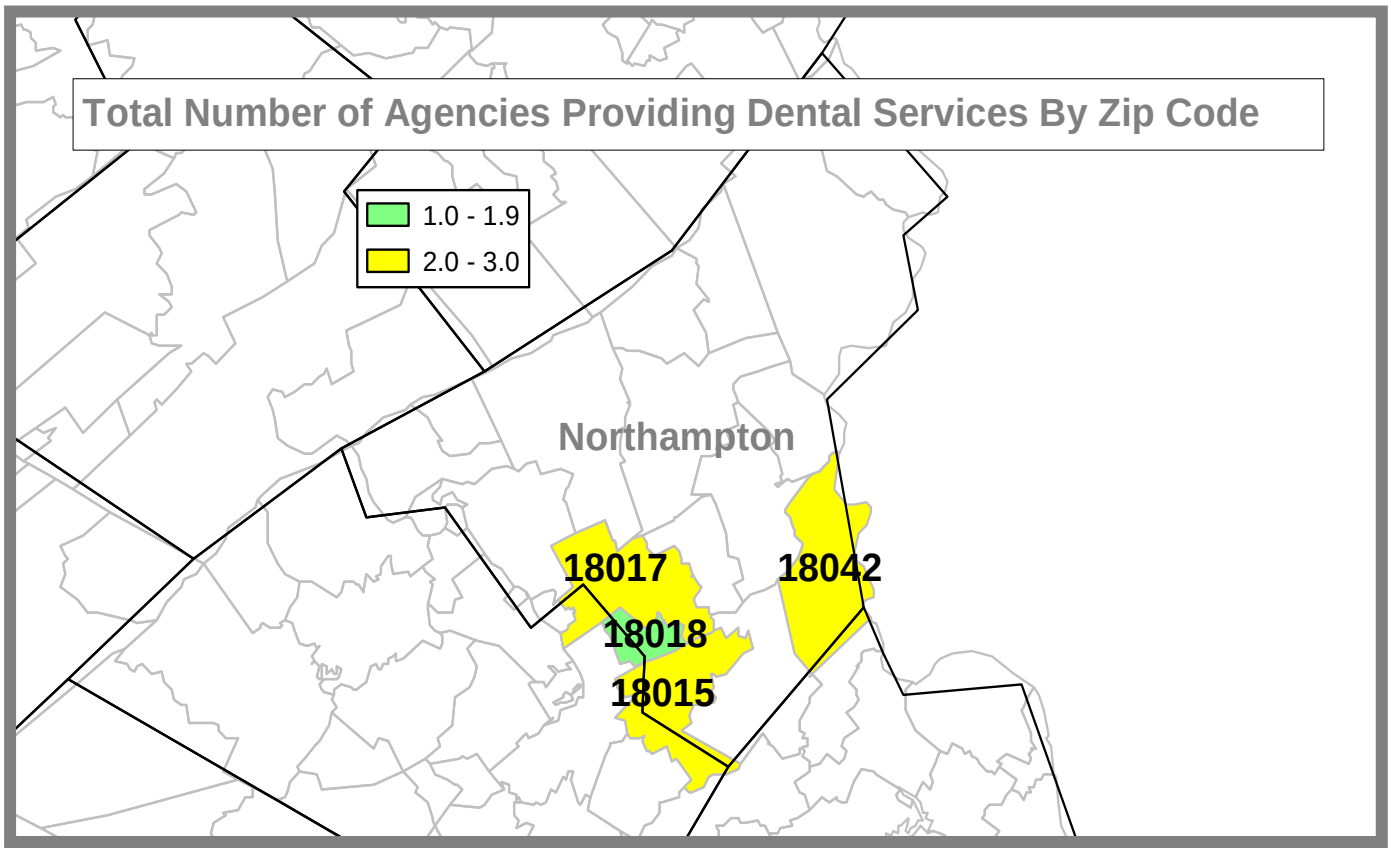
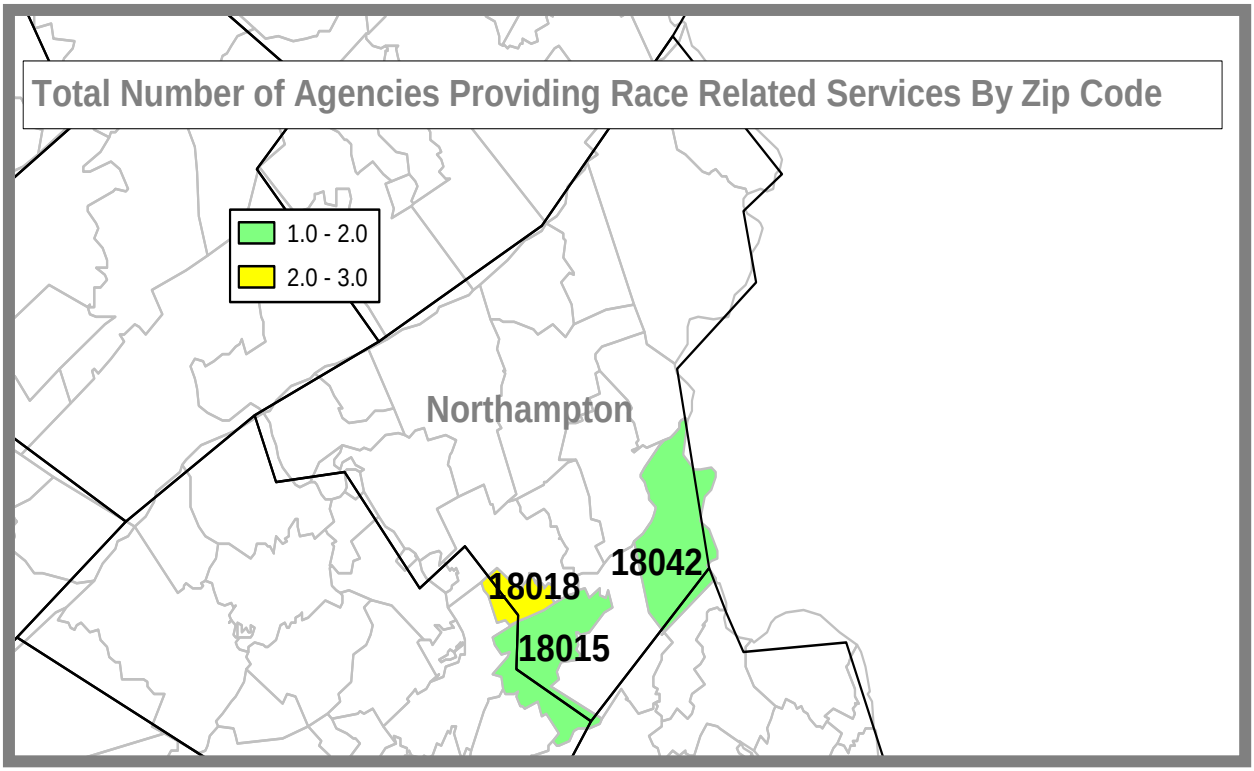

Total Number of Agencies Providing Dental Services By Zip Code
1.0 - 1.9
2.0 - 3.0
Northampton
18017
18042
18018
18015

**Table 4.8**

*Agencies Providing Dental Services*

| Agency Name | Location |
|---|---|
| Bethlehem Health Bureau | City Hall Building, 10 East Churc St., Bethlehem, PA 18018 |
| Easton Hospital | 250 South 21st Street, Easton, PA 18042 |
| Health Call | St. Luke's Hospital Health Network, 801 Ostrum St, Bethlehem, PA 18015 |
| Muhlenberg Hospital Center | Lehigh Valley Hospital, 2545 Schoenersville Rd., Bethlehem, PA 18017-7384 |
| St. Luke's Hospital - Bethlehem Campus | 801 Ostrum Street, Bethlehem, PA 18015 |
| The Easton Home | Presbyterian Homes, 1022 Northampton St., Easton, PA 18042 |
| Muhlenberg Hospital Center | Lehigh Valley Hospital, 2545 Schoenersville Rd., Bethlehem, PA 18017-7384 |

Map 4.7



## Summary

The residents of Northampton County perceive that their communities have the expected intangible assets such as a strong sense of community, good neighbors, good quality of life and good citizens that contribute to the community. Most reported that Northampton County is a very good place to live and to raise a family. However, there is a growing sense that the County's assets are being stretched by a new set of pressures namely a growing population and a weakening economy.

With regards to social and health services the residents are as likely to identify nontraditional providers such as churches, volunteer fire departments, and school districts than they are to identify the traditional providers. Although residents did identify all the large traditional institutions such as hospitals as assets, they only provided a small number of private non-profits human service agencies as assets, and even fewer residents identified the public sector as sources of services. This is despite the fact that the county and the townships provide significant funding for services. In fact, there is in certain service areas a significantly dense network of providers. For example, as table 4.3 and Map 1 indicates there is a significant number of agencies providing services to the elderly and they are well distributed throughout the county. Nonetheless residents were no more likely to identify these than they were to identify agencies providing dental care a service area in which there is a very limited network.

The county has significant shortages and or poor distribution of service agencies in the areas of dental care, maternal health care, clinical services and organizations providing services to minority populations. However more importantly, the network of services suffers from either a limited information system or poor accessibility since there is very limited knowledge among the residents of the availability of services even in the areas were services exist and were there is good distribution.

Finally there is a disconnect between county residents and governmental structures with regard to human and health services. County residents have the perception that the County and the municipal governments provide a very limited set of social and health services. This is most likely due to the fact that majority of the County's funding (43%) goes toward institutional health services, a service that while critical impacts a very narrow spectrum of residents. Neither the County nor the municipalities expend a significant amount of funds on services aimed at a broader spectrum of residents, and a broader set of health problems.

# Section 5

## *Recommendations*

Northampton County possesses the qualities and the assets required to enhance the health and well-being of its residents, and to improve the County's already good quality of life. The health and wellness assets of the County are a critical component of overall community development process.

The barriers to health and well-being that the residents of Northampton County face are varied, complex, basic and affect every segment of the community. The County is in need of programs that view health not as the absence of disease or the curing of disease, rather as the state of physical, mental and social well-being.

Any broad initiative looking to enhance the County's quality of life must be predicated on the availability of appropriate health data and information, access to disease prevention and health promotion programs and public policies conducive to social wellness.

### The health and wellness of Northampton County residents is being detrimentally affected by an acute lack of:

- ⇒ projects and programs that strengthen maternal health care,
- ⇒ initiatives improving access to behavioral health programs,
- ⇒ programs promoting healthy attitudes and practices among the elderly,
- ⇒ programs ensuring access to the basic dental care.

### The health and wellness of Northampton County residents would improve significantly through initiatives that:

- ⇒ Provided residents with information and knowledge required to attain the highest level of health and wellness.
- ⇒ Created and maintained a well-coordinated community health system, based on disease prevention and health promotion.
- ⇒ Eliminated the disparities in health conditions among the residents of Northampton County.

The health and wellness of Northampton County residents would improve significantly through the following specific programmatic strategies:

⇒ Support to community groups that use a community-oriented approach in developing and delivering their health programs.

⇒ Encouragement for the creation and support the maintenance of information and referral systems for consumers.

⇒ Promotion of policy changes and strengthening of programs that will improve access to information and primary, secondary, and tertiary prevention programs.

⇒ Assistance to safety-net providers that provide service to high risk, underserved and/or the disadvantaged in the community

⇒ Promotion of programs that encourage decision-making links with high-risk, underserved and/or disadvantaged communities.

⇒ Support to organizations and initiatives that unite relevant providers and community based organizations.