2019 Community Health Needs Assessment Health Profile
Lehigh and Northampton Counties

LVHN.org

Lehigh Valley Health Network

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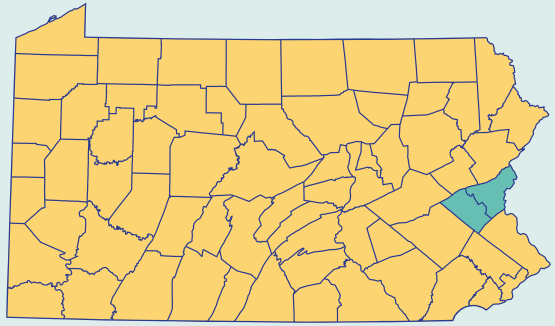

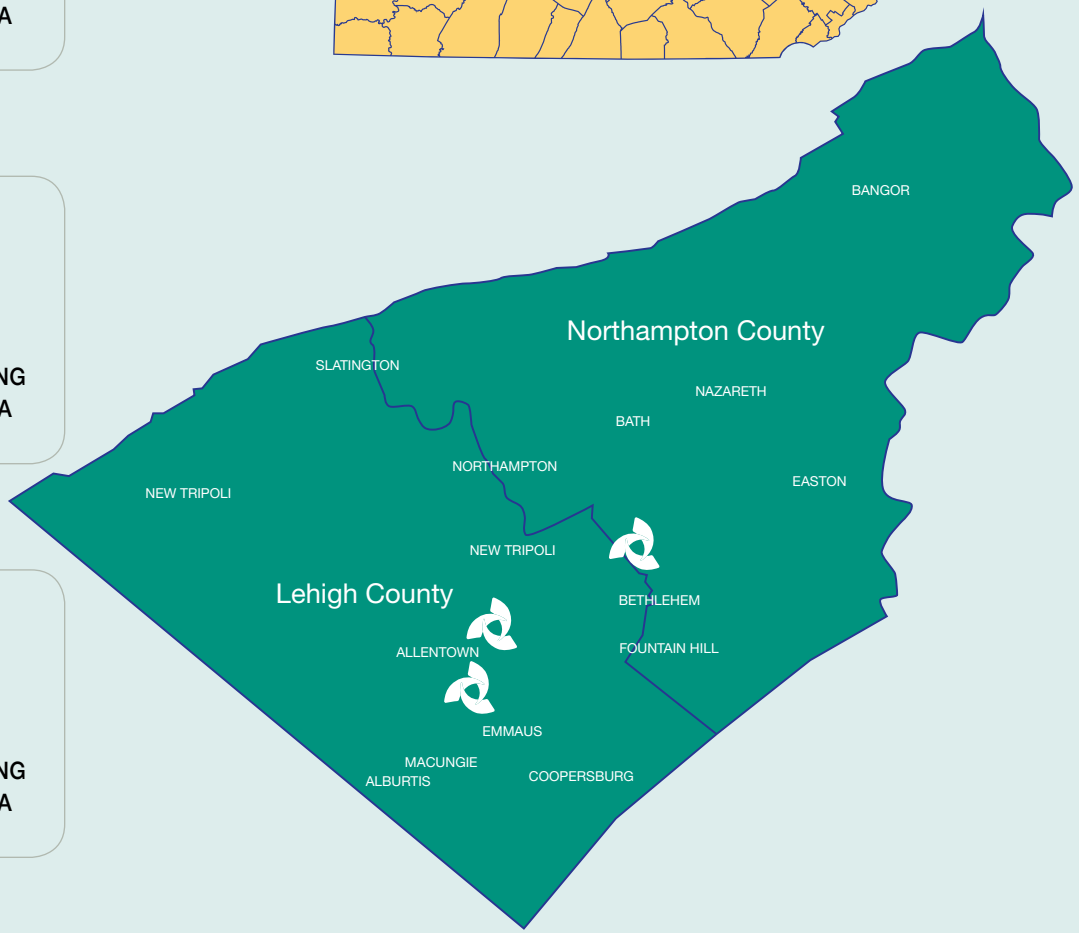

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WHO WE ARE: DEMOGRAPHICS

TOTAL POPULATION

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Lehigh	358,792	345.18	1,039.44
Northampton	300,520	369.62	813.49
Pennsylvania	12,783,977	44,742.38	285.72
United States	318,558,162	3,532,068.58	90.19

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

URBAN AND RURAL POPULATION

Percentage of population living in urban and rural areas. Urban areas are identified using population density, count and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

Report Area	Total Population	Urban Population	Rural Population	% Urban	% Rural
Lehigh	349,497	321,797	27,700	92.07%	7.93
Northampton	297,735	259,719	38,016	87.23%	12.77
Pennsylvania	12,702,379	9,991,287	2,711,092	78.66%	21.34
United States	312,471,327	252,746,527	59,724,800	80.89%	19.11

Data Source: US Census Bureau, Decennial Census. 2010. Source geography: Tract

POPULATION GROWTH

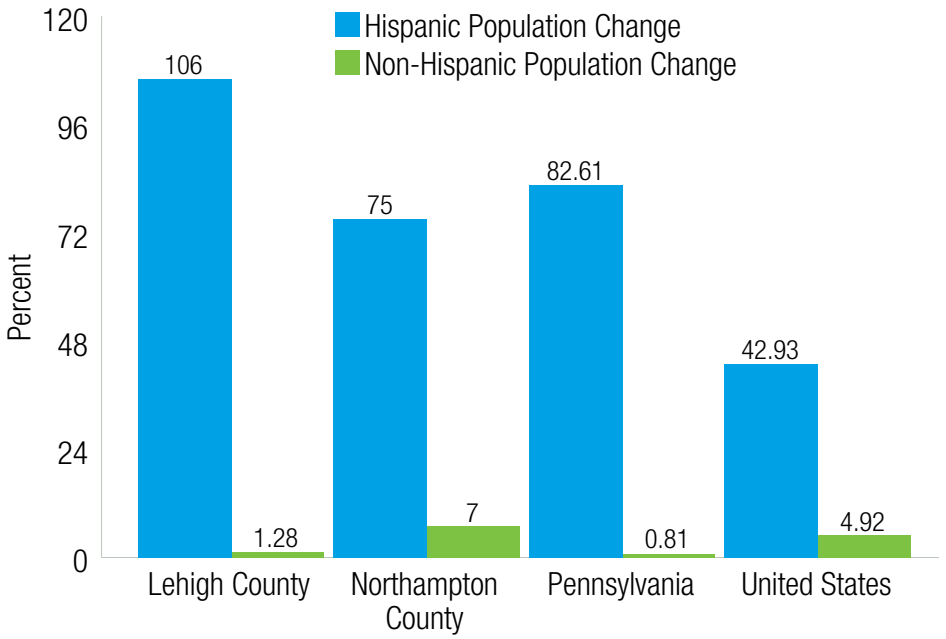
Change in Total Population

A significant positive or negative shift in total population over time impacts health care providers and the utilization of community resources.

Report Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	% Population Change, 2000-2010
Lehigh	312,210	349,497	37,287	11.94
Northampton	266,964	297,735	30,771	11.53
Pennsylvania	12,281,049	12,702,379	421,330	3.43
United States	280,405,781	307,745,539	27,339,758	9.75

Data Source: US Census Bureau, Decennial Census. 2000-10. Source geography: Tract

Population Change (2000-2010) by Hispanic Origin



Percent Population Change (2000–2010) by Race

Report Area	% White	% Black	% Native American/ Alaska Native	% Asian	% Native Hawaiian/ Pacific Islander	% Other Race	% Multiple Race
Lehigh	1.69	93.1	131.28	56.37	8.62	82.35	76.06
Northampton	5.48	102.68	49.26	97.02	22.5	38.29	79.72
Pennsylvania	-0.74	12.5	46.3	58.81	6.91	59.73	67.23
United States	5.8	15.43	22.56	43.72	47.37	24.2	32.61

Data Source: US Census Bureau, Decennial Census. 2000-10. Source geography: Tract

358,792 people live in Lehigh County, and 300,520 people live in Northampton County.

POPULATION AGE

Number and percentages of people in the community by age in the designated geographic area

	Lehigh County	Northampton County	Pennsylvania	United States
Total Population	358,792	300,520	12,783,977	318,558,162
Population Age 0-4	21,339	15,200	714,598	19,866,960
Population Age 5-17	60,717	46,796	2,004,573	53,771,807
Population Age 18-24	32,799	30,207	1,243,213	31,368,674
Population Age 25-34	45,670	34,390	1,608,855	42,881,649
Population Age 35-44	44,571	35,991	1,536,388	40,651,910
Population Age 45-54	50,553	43,955	1,842,705	43,895,858
Population Age 55-64	46,208	41,881	1,762,338	40,061,742
Population Age 65+	56,935	52,100	2,084,386	44,615,477

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

POPULATION UNDER AGE 18

Report Area	Total Population	Population Age 0-17	% Population Age 0-17
Lehigh	358,792	82,056	22.87
Northampton	300,520	61,996	20.63
Pennsylvania	12,783,977	2,704,268	21.15
United States	318,558,162	73,612,438	23.11

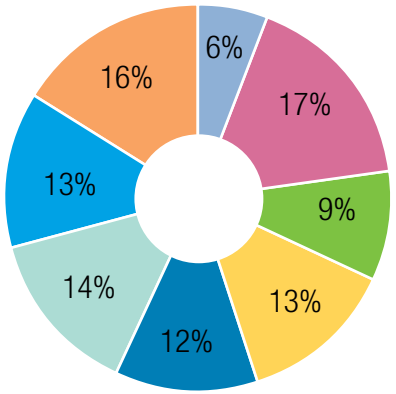
Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

FAMILIES WITH CHILDREN

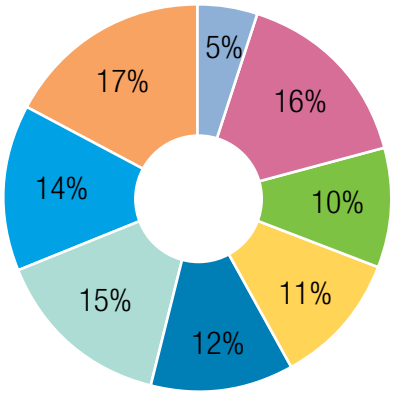
A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage or adoption.

Report Area	Total Households	Total Family Households	Families with Children (Under Age 18)	Families with Children (Under Age 18), % of Total Households
Lehigh	135,363	90,319	43,478	32.12
Northampton	112,819	78,084	34,447	30.73
Pennsylvania	4,961,929	3,195,577	1,416,713	28.55
United States	117,716,237	77,608,829	37,648,651	31.98

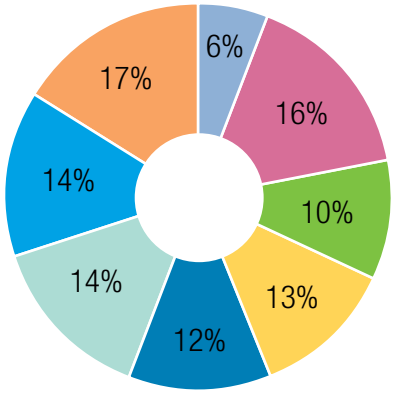
Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract



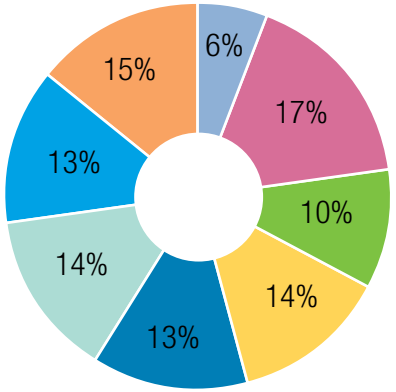
LEHIGH COUNTY



NORTHAMPTON COUNTY



PENNSYLVANIA



UNITED STATES

- Population Age 0–4
- Population Age 5–17
- Population Age 18–24
- Population Age 25–34
- Population Age 35–44
- Population Age 45–54
- Population Age 55–64
- Population Age 65+

16 percent of the population in Lehigh and Northampton counties is 65 or older. Just over 20 percent in each county is under age 18.

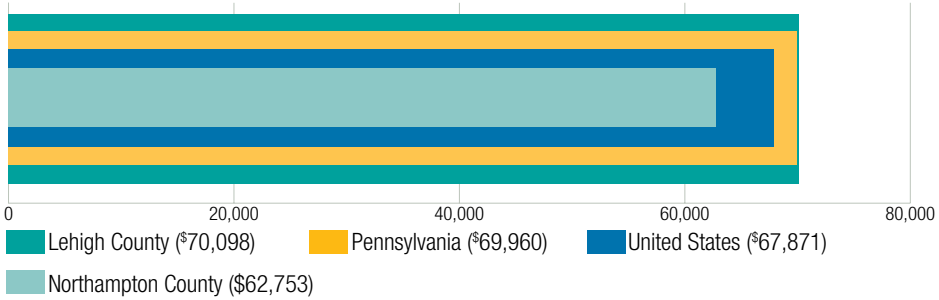
FINANCIAL HEALTH

MEDIAN FAMILY INCOME

Median family income based on latest five-year American Community Survey estimates. Family income includes incomes of all family members age 15 and older.

Report Area	Total Family Households	Average Family Income	Median Family Income
Lehigh County	90,319	$88,505	$70,098
Northampton	112,819	$80,685	$62,753
Pennsylvania	3,195,577	$90,446	$69,960
United States	77,608,829	$90,960	$67,871

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract



DIVERSITY AND LANGUAGE

TOTAL POPULATION BY GENDER

Report Area	Male	Female	% Male	% Female
Lehigh County	174,829	183,963	48.73	51.27
Northampton	147,510	153,010	49.08	50.92
Pennsylvania	6,255,042	6,528,935	48.93	51.07
United States	156,765,322	161,792,840	49.21	50.79

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

POPULATION AGE 18 AND OLDER BY GENDER

Percentage of population who are age 18 and older, by gender

Report Area	Age 18-64				Age 65+			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Lehigh	108,330	64.19	111,471	60.59	21,300	12.18	32,615	17.73
Northampton	93,102	63.12	93,322	60.99	20,008	13.56	29,613	19.35
Pennsylvania	3,952,665	63.19	3,993,797	61.17	811,266	12.97	1,215,859	18.62
United States	98,851,301	63.06	99,913,791	61.75	18,244,716	11.64	25,876,504	15.99

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

The median family income is $70,098 in Lehigh County and $62,753 in Northampton County.

Community members and stakeholders who participated in focus groups and interviews frequently mention barriers to accessing services and care for those who do not speak English fluently. For those who are Spanish speaking in particular, community members share that there are multiple dialects of Spanish, and those who live in Lehigh and Northampton counties do not all speak the same dialect, which can make accessing services difficult.

Participants also note that one issue is the way individuals are treated when they do seek services, and there is a need for professionals to provide culturally sensitive services for all individuals in the community. Negative experiences when accessing services can deter individuals from following up with services later.

TOTAL POPULATION BY RACE ALONE

Report Area	White		Black		Asian		Native American/ Alaska Native		Native Hawaiian/ Pacific Islander		Other		Multiple	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Lehigh County	282,360	78.70	24,174	6.74	11,680	3.26	701	0.2	134	0.04	29,356	8.18	10,387	2.89
Northampton County	259,549	86.37	15,282	5.09	8,132	2.71	1,132	0.38	53	0.02	6,790	2.26	9,582	3.19
Pennsylvania	10,402,703	81.37	1,410,563	11.03	401,979	3.14	24,947	0.2	4,463	0.03	253,514	1.98	285,768	2.24
United States	232,657,078	73.35	40,241,818	12.63	16,614,625	5.22	2,597,817	0.82	560,021	0.18	15,133,856	4.75	9,752,947	3.06

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

TOTAL POPULATION BY ETHNICITY ALONE

Report Area	Total Population	Hispanic or Latino	% Hispanic or Latino	Non-Hispanic	% Non-Hispanic
Lehigh	358,792	78,318	21.83	280,474	78.17
Northampton	300,520	36,294	12.08	264,226	87.9
Pennsylvania	12,783,977	843,164	6.6	11,940,813	93.4
United States	318,558,162	55,199,107	17.33	263,359,055	82.67

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

POPULATION WITH LIMITED ENGLISH PROFICIENCY BY ETHNICITY ALONE

Percentage of population age 5 and older living in limited-English-speaking households, or one in which no one over age 14 (1) speaks only English at home or (2) speaks a language other than English at home and speaks English "very well."

Report Area	Total Pop Age 5+	Linguistically Isolated	% Linguistically Isolated
Lehigh	337,453	14,556	4.31
Northampton	285,320	5,597	1.96
Pennsylvania	12,069,379	277,936	2.30
United States	298,691,202	13,393,615	4.48

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract.

Between July 2016 and June 2017, 105,700 encounters with interpreters took place across all LVHN entities in Lehigh and Northampton counties, for an average of 286 encounters per day. This number includes live in-person, phone and video encounters.

NON-HISPANIC POPULATION BY RACE ALONE, PERCENT

Report Area	White	Black	Asian	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander	Some Other Race	Multiple Races
Lehigh	86.45	6.75	4.11	0.13	0	0.31	2.25
Northampton	89.19	5.19	3.07	0.12	0.01	0.27	2.14
Pennsylvania	83.2	11.33	3.34	0.12	0.02	0.16	1.83
United States	74.94	14.85	6.24	0.79	0.19	0.26	2.74

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

HISPANIC POPULATION BY RACE ALONE, PERCENT

Report Area	White	Black	Asian	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander	Some Other Race	Multiple Races
Lehigh	50.94	6.69	0.21	0.43	0.16	36.38	5.19
Northampton	65.79	4.29	0.03	2.28	0.07	16.71	10.84
Pennsylvania	55.5	6.78	0.37	1.26	0.25	27.83	8.03
United States	65.75	2.07	0.34	0.93	0.09	26.19	4.62

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

21.8 percent of the population of Lehigh County and 12.1 percent of Northampton County is Hispanic. 4.3 percent in Lehigh and 2 percent in Northampton speak a language other than English at home and are not proficient in English.

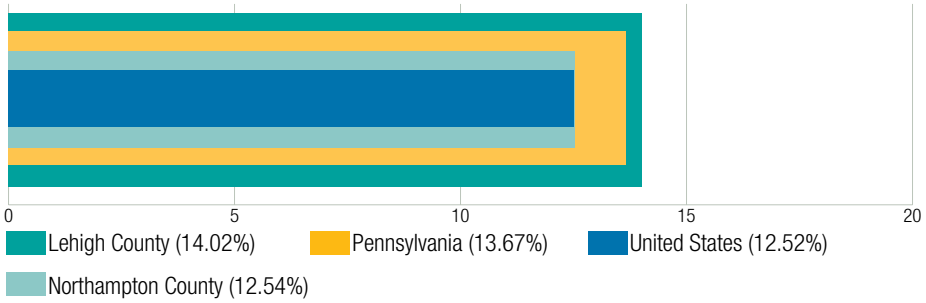
DISABILITIES AND VETERANS

POPULATION WITH ANY DISABILITY

Percentage of total civilian non-institutionalized population with a disability. A disability is defined as individuals who report any one of the following six disability types: 1) hearing difficulty, 2) vision difficulty, 3) cognitive difficulty, 4) ambulatory difficulty, 5) self-care (bathing and dressing) difficulty, 6) independent living (doing errands alone) difficulty.

Report Area	Total Population (for Whom Disability Status Is Determined)	Total Population with a Disability	% Population with a Disability
Lehigh	353,896	49,613	14.02
Northampton	297,641	37,334	12.54
Pennsylvania	12,579,598	1,719,069	13.67
United States	313,576,137	39,272,529	12.52

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract



VETERAN POPULATION

Percentage of population age 18 and older who served (even for a short time), but is not currently serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps or Coast Guard, or who served in the U.S. Merchant Marine during World War II.

Report Area	Total Population Age 18	Total Veterans	Veterans, % of Total Population
Lehigh	276,657	21,071	7.62
Northampton	238,497	20,242	8.49
Pennsylvania	10,074,933	840,258	8.34
United States	243,935,157	19,535,341	8.01

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Just over 11,000 veterans in Lehigh County have received care at LVHN.

In Lehigh County, 7.6 percent of the population is a veteran, and in Northampton County 8.5 percent of the population is a veteran.

HEALTH FACTORS

SOCIAL AND ECONOMIC FACTORS

UNEMPLOYMENT RATE

Total unemployment in Lehigh County in June 2018 was 8,850, or 4.6% of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted). Total unemployment in Northampton County in June 2018 was 7,170, or 4.5% of the civilian non-institutionalized population age 16 and older.

The top five employers in Lehigh County in 2017 were LVHN and LVPG, St. Luke's, Amazon and Lehigh County. The top five employers in Northampton County in 2017 were Walmart, Sands Casino, C&S Wholesale Grocers, Northampton County and Lehigh University (Department of Labor and Industry, Center for Workforce Information and Analysis).

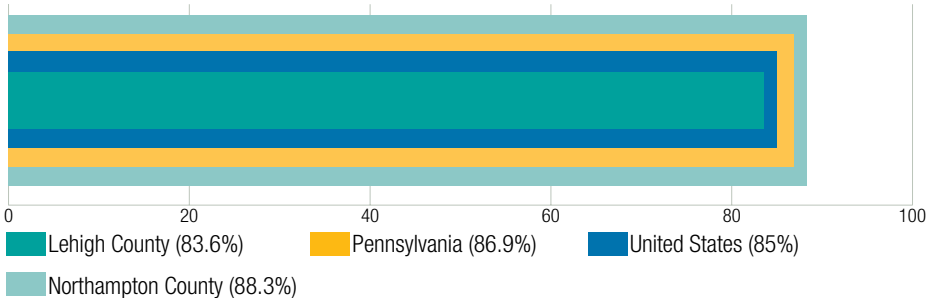
EDUCATION

High School Graduation Rate

Data represents the 2014-15 school year.

Report Area	Total Student Cohort	Estimated Number of Diplomas Issued	Cohort Graduation Rate
Lehigh	3,817	3,191	83.6
Northampton	3,254	2,872	88.3
Pennsylvania	122,509	106,458	86.9
United States	3,116,301	2,648,271	85

Data Source: US Department of Education, EDFacts. Accessed via DATA.GOV. Additional data analysis by CARES. 2014-15. Source geography: School District



Population Education Level, Age 25+

Report Area	Total Population	No High School Diploma		Bachelor's Degree or Higher	
		N	%	N	%
Lehigh	243,937	13,362	12.53	16,412	15.39
Northampton	208,317	19,950	9.58	58,066	27.87
Pennsylvania	8,849,846	950,001	10.78	2,522,037	28.61
United States	213,649,147	28,229,094	13.35	62,952,272	29.77

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Population with No High School Diploma by Ethnicity Alone

Report Area	Hispanic			Non-Hispanic		
	No HS Diploma	Total Population	%	No HS Diploma	Total Population	%
Lehigh	11,399	78,318	28.21	17,714	280,474	8.7
Northampton	4,609	36,294	23.84	15,341	264,226	8.12
Pennsylvania	132,021	815,538	31.41	817,980	11,964,021	9.75
United States	10,512,401	54,232,205	35.10	17,716,693	262,282,816	9.76

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

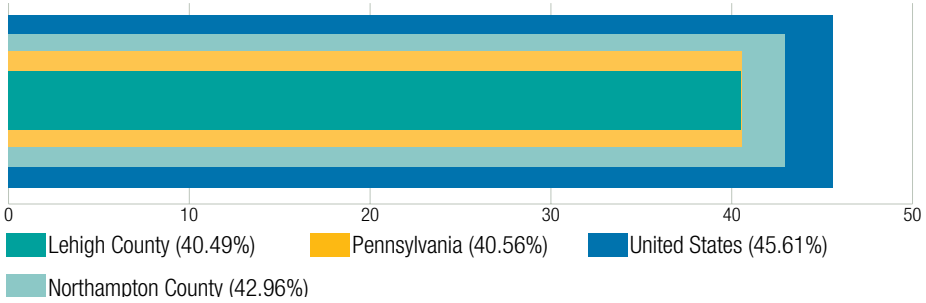
Within Lehigh County, 83.6 percent of students are receiving their high school diploma within four years; in Northampton County, this percentage is 88.3 percent. 12.5 percent of adults in Lehigh County and 9.6 percent of adults in Northampton County do not have a high school diploma.

Student Reading Proficiency (Fourth Grade)

Percentage of children in grade 4 whose reading skills tested below the "proficient" level for the English Language Arts portion of the state-specific standardized test.

Report Area	Total Students with Valid Test Scores	% of Students 'Proficient' or Better	% of Students 'Not Proficient' or Worse
Lehigh	3,820	59.51	40.49
Northampton	2,989	57.04	42.96
Pennsylvania	119,743	59.44	40.56
United States	3,393,582	49.67	45.61

Data Source: US Department of Education, EDFacts. Accessed via DATA.GOV. 2014-15. Source geography: School District



INCOME AND POVERTY

Population and Children Below 200% of Federal Poverty Level

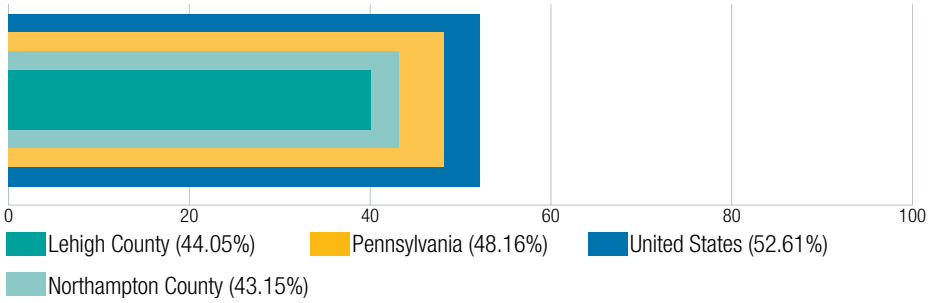
Report Area	General Population			Children Under 18		
	Total Population	Population at or Below 200% FPL	% at or Below 200% FPL	Children Under Age 18	Children at or Below 200% FPL	% at or Below 200% FPL
Lehigh	349,404	107,633	30.8	80,876	34,531	42.7
Northampton	289,531	70,273	24.27	60,828	19,161	31.5
Pennsylvania	12,369,671	3,736,519	30.21	2,658,853	1,040,438	39.13
United States	310,629,645	104,390,198	33.61	72,456,096	31,364,270	43.29

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

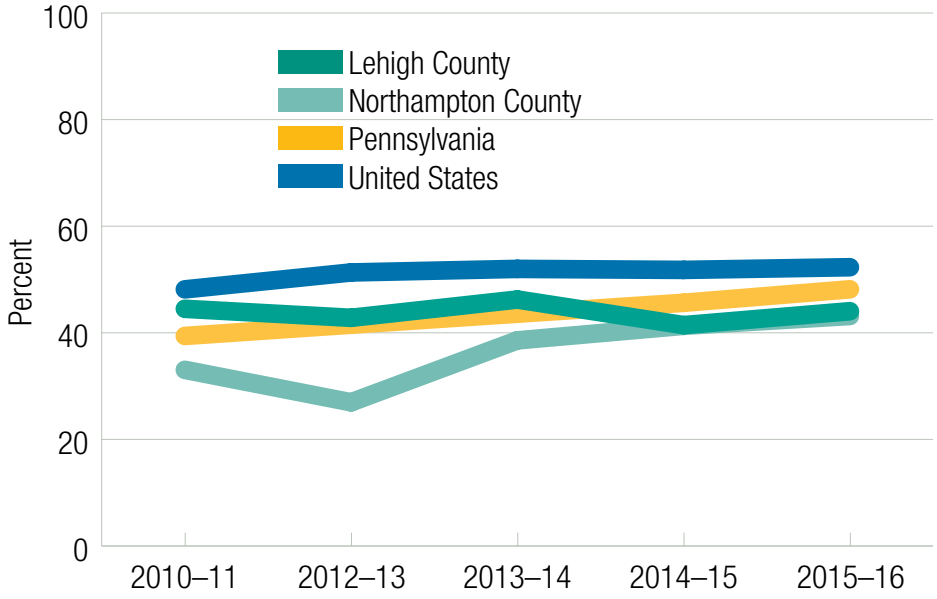
Children Eligible for Free/Reduced Price Lunch

Report Area	Total Students	Number Free/Reduced Price Lunch Eligible	% Free/Reduced Price Lunch Eligible
Lehigh	52,251	23,014	44.05
Northampton	41,428	17,877	43.15
Pennsylvania	1,704,502	802,045	48.16
United States	50,611,787	25,893,504	52.61

Data Source: National Center for Education Statistics, NCES - Common Core of Data. 2015-16. Source geography: Address



Children Free and Reduced Lunch, By Year

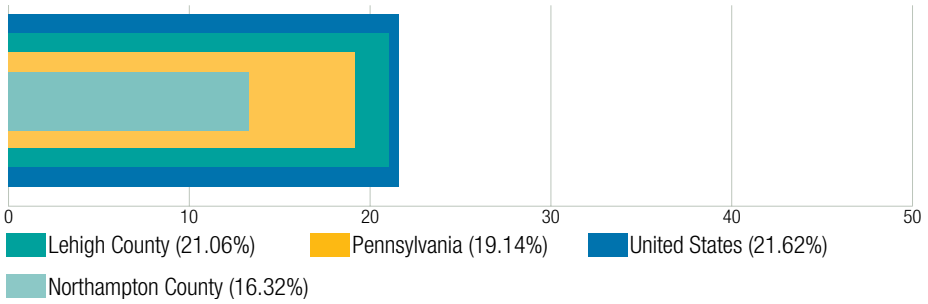


Population Receiving Medicaid

Percentage of population with insurance enrolled in Medicaid (or other means-tested public health insurance).

Report Area	Population with Any Health Insurance	Population Receiving Medicaid	% of Insured Population Receiving Medicaid
Lehigh	322,230	67,875	21.06
Northampton	276,717	45,152	16.32
Pennsylvania	11,579,382	2,216,468	19.14
United States	276,875,891	59,874,221	21.62

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract



Population Receiving Medicaid by Age Group

Report Area	% Under Age 18	% Age 18 - 64	% Age 65
Lehigh	40.76	12.93	11.61
Northampton	32.8	10.57	10.43
Pennsylvania	35.88	12.79	12.04
United States	38.48	12.99	13.92

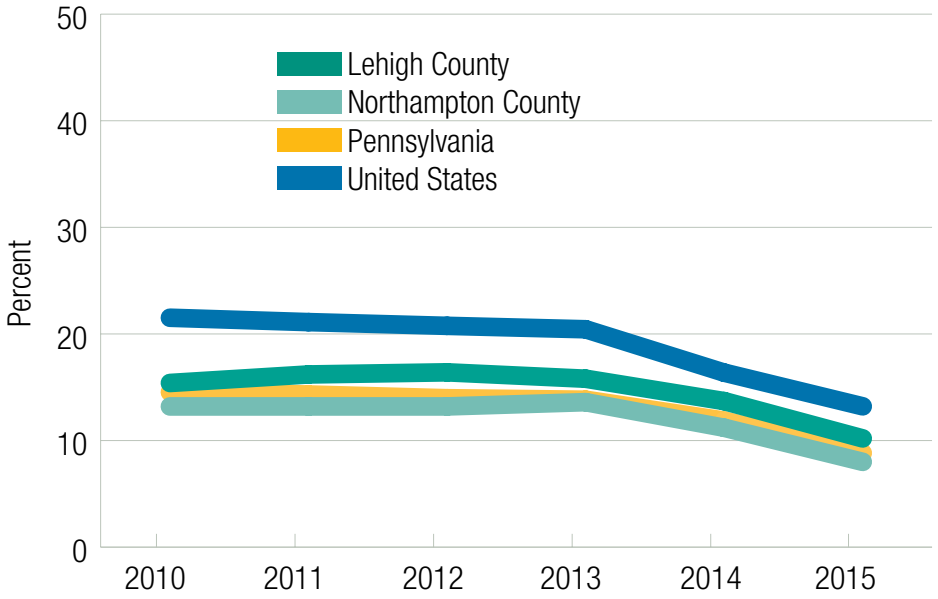
Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Uninsured Population by Age Group, Percent

Report Area	% Under Age 18	% Age 18 - 64	% Age 65	% Total Population
Lehigh	4.07	12.90	0.41	8.95
Northampton	2.88	10.18	0.47	7.03
Pennsylvania	4.82	10.99	0.49	7.95
United States	5.90	16.37	0.91	11.7

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Uninsured Population Age 18-64, Percent by Year



40.49 percent of fourth-graders in Lehigh County and 42.9 percent in Northampton County are not proficient in reading. 30.8 percent of the Lehigh County population and 24.7 percent of the Northampton County population are living in poverty.

21 percent of the insured population of Lehigh County and 13.3 percent in Northampton County receive Medicaid. 9 percent of the population in Lehigh County and 7 percent in Northampton County are uninsured.

FOOD ACCESS

Food Environment Index

The Food Environment Index ranges from 0 (worst) to 10 (best) and equally weights limited access to healthy foods and food insecurity. There are many facets to a healthy food environment, such as cost, distance and availability of healthy food options. This measure includes access to healthy foods by considering distance an individual lives from a grocery store or supermarket.

Report Area	Food Environment Index
Lehigh	8.6
Northampton	8.6
Pennsylvania	8.2

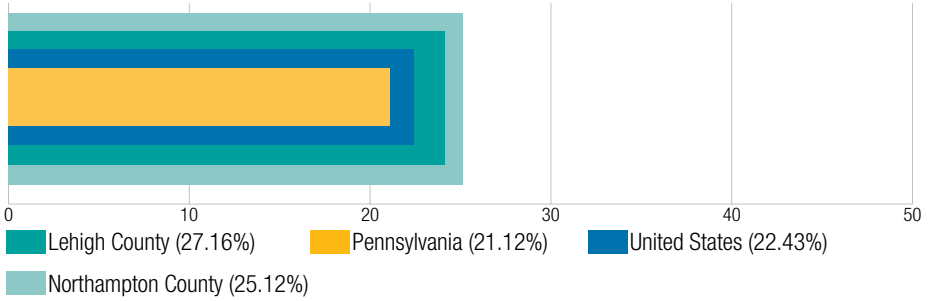
Data Source: USDA Food Environment Atlas, 2015

Low Food Access

Percentage of population living more than ½ mile from the nearest supermarket, supercenter or large grocery store.

Report Area	Total Pop.	Population with Low Food Access	% Population with Low Food Access
Lehigh	349,497	94,906	27.16
Northampton	297,735	74,793	25.12
Pennsylvania	12,702,379	2,682,905	21.12
United States	308,745,538	69,266,771	22.43

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015. Source geography: Tract



Food Insecurity Rate

Estimated percentage of population who experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.

Report Area	Population			Children		
	Total	Food Insecure Population	Food Insecurity Rate	Total	Food Insecure Children	Food Insecurity Rate
Lehigh	354,537	37,970	10.71	81,998	16,890	20.60
Northampton	299,225	31,510	10.53	64,038	11,840	18.49
Pennsylvania	12,787,209	1,760,450	13.8	2,716,253	564,440	20.78
United States	318,198,163	47,448,890	14.91	73,580,326	17,284,530	23.49

Data Source: Feeding America. 2014. Source geography: County

Population Receiving SNAP Benefits

Average percentage of population receiving Supplemental Nutrition Assistance Program (SNAP) benefits between July 2014 and July 2015.

Report Area	Total Population	Population Receiving SNAP Benefits	% Population Receiving SNAP Benefits
Lehigh	360,685	53,021	14.70
Northampton	300,813	33,769	11.20
Pennsylvania	12,802,503	1,863,359	14.60
United States	321,396,328	44,567,069	13.90

Data Source: US Census Bureau, Small Area Income Poverty Estimates. 2015. Source geography: County

Just over 10 percent of the population in Lehigh and Northampton counties are food insecure. 14.7 percent of the Lehigh County population and 11.2 percent of the Northampton County population receive SNAP benefits.

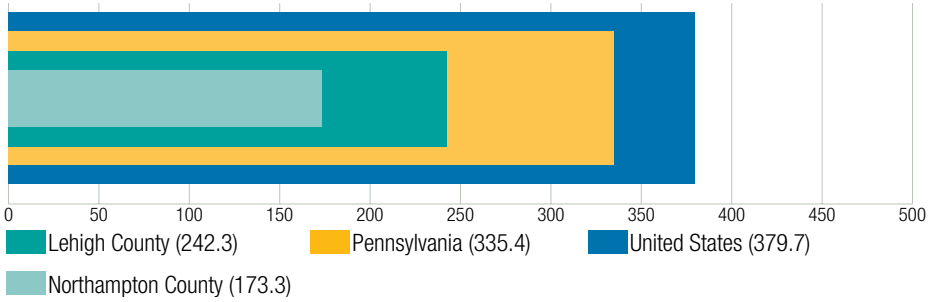
About 20 percent of adults in Northampton and Lehigh counties lack adequate social and emotional support.

VIOLENT CRIME

Rate of violent crime offenses reported by law enforcement per 100,000 residents. Violent crime includes homicide, rape, robbery and aggravated assault.

Report Area	Total Population	Violent Crimes	Violent Crime Rate (Per 100,000 Pop.)
Lehigh	355,532	861	242.3
Northampton	299,542	519	173.3
Pennsylvania	12,755,946	42,790	335.4
United States	311,082,592	1,181,036	379.7

Data Source: Federal Bureau of Investigation, FBI Uniform Crime Reports. Additional analysis by the National Archive of Criminal Justice Data. Accessed via the Inter-university Consortium for Political and Social Research. 2012-14. Source geography: County

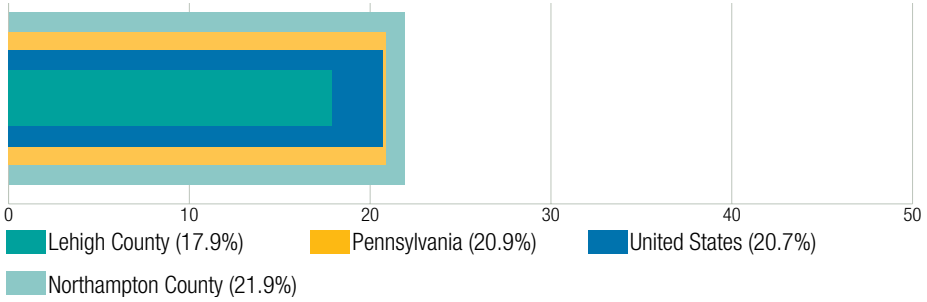


SOCIAL AND EMOTIONAL SUPPORT

Percentage of adults age 18 and older who self-report they receive insufficient social and emotional support all or most of the time.

Report Area	Total Population Age 18+	Estimated Pop. without Adequate Social/ Emotional Support	% Age-Adjusted
Lehigh	264,870	47,677	17.90
Northampton	231,056	50,832	21.90
Pennsylvania	9,857,384	2,070,051	20.90
United States	232,556,016	48,104,656	20.70

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



A lack of social connections is one of the most commonly identified and discussed needs of community members in both Lehigh and Northampton counties. Participants in focus groups and interviews emphasize the importance of social interaction for the overall mental and physical health of the community. Participants note that this is an issue for all community members across all demographics because of an increase in stressors of everyday life, which is contributing to social isolation. A lack of social connection also is contributing to the rising drug use in the community.

Two segments of the population that were specifically discussed are youth and the elderly. For older individuals living in the community, some receive services at independent living centers, which was noted as a benefit, but they can be costly and not everyone has access to them. Social isolation can be partially attributed to mobility issues among this segment of the population, and participants discussed that it is some times higher among healthier seniors because they are receiving fewer services and therefore do not know where to go to interact with others.

For youth, participants note young people who are no longer in high school and do not have access to school-based or student-centered activities or programs are experiencing social isolation. Some feel social media also can be viewed as a barrier to social interaction for young people because it limits individual interaction and inhibits building healthy personal relationships.

HEALTH BEHAVIORS

ALCOHOL AND DRUG USE

Alcohol Consumption

Percentage of adults age 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women).

Report Area	Total Population Age 18+	Estimated Adults Drinking Excessively	% Age-Adjusted
Lehigh	264,870	47,147	18.90
Northampton	231,056	39,973	18.20
Pennsylvania	9,857,384	1,705,327	18.70
United States	232,556,016	38,248,349	16.90

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County

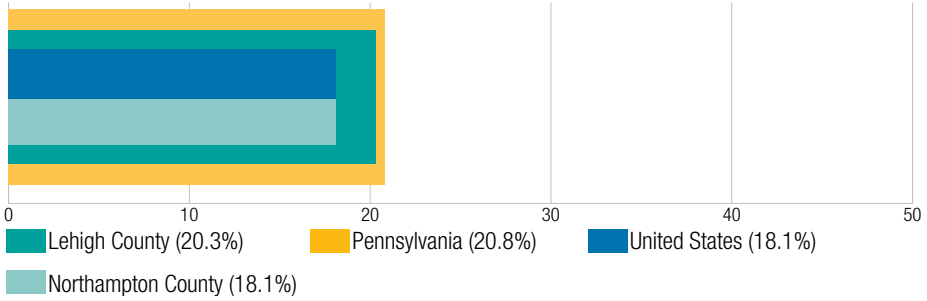
TOBACCO USE

Current Smokers

44.38 percent of adults in Lehigh County and 50.7 percent of adults in Northampton County report ever smoking more than 100 cigarettes.

Report Area	Total Population Age 18+	Total Adults Regularly Smoking Cigarettes	% Age-Adjusted
Lehigh	264,870	51,650	20.30
Northampton	231,056	40,897	18.10
Pennsylvania	9,857,384	1,961,619	20.80
United States	232,556,016	41,491,223	18.10

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



In 2016, there were 1,556 DUI/DWI misdemeanor charges in Lehigh County, representing a 6 percent increase from 2011 to 2016. There were 1,312 DUI/DWI misdemeanor charges in Northampton County, representing a 0.83 percent decrease from 2011 to 2016 (The Unified Judicial System of Pennsylvania, County Caseload Statistics).

About 18 percent of adults in both counties drink excessively. 20 percent of adults in Lehigh and Northampton counties are current smokers.

The increase in drug use and overdoses in the community is identified as a rising concern repeatedly by community members who participated in focus groups and interviews in both Northampton and Lehigh counties. Participants note the need for additional services to address drug use and addiction because it is present in large and small communities throughout the counties. Some participants at the county level note they would like to see an action plan of how health care will be a partner in the community to address opioid and alcohol overdose issues.

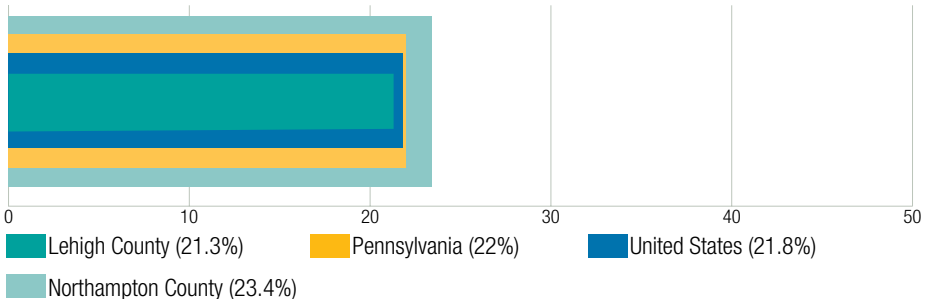
DIET AND PHYSICAL FITNESS

Physical Inactivity

Adults age 20 and older who self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening or walking for exercise?"

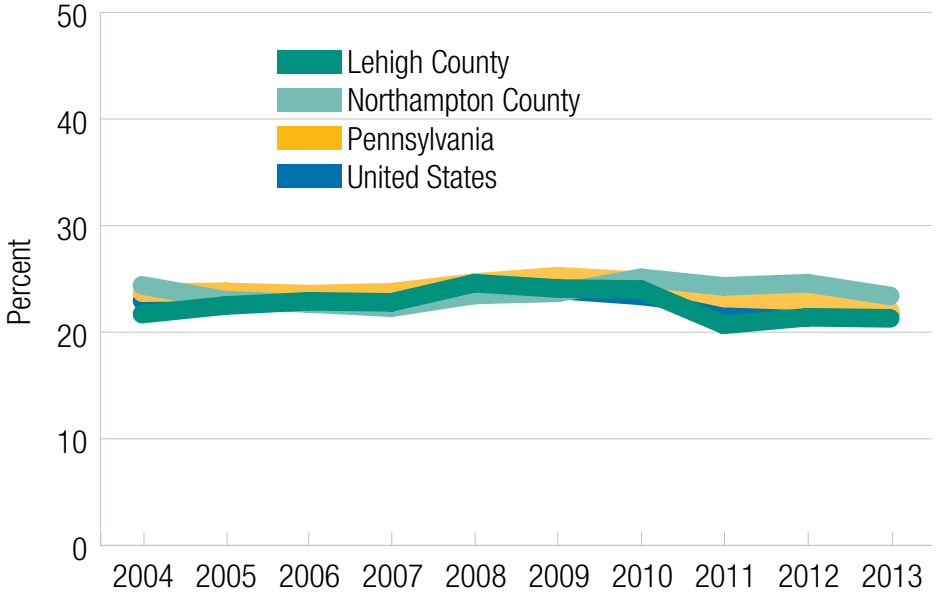
Report Area	Total Population Age 20+	Population with no Leisure Time Physical Activity	% Population with no Leisure Time Physical Activity
Lehigh	265,327	59,168	21.3
Northampton	227,271	56,136	23.4
Pennsylvania	9,697,156	2,244,307	22
United States	234,207,619	52,147,893	21.8

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013. Source geography: County



In 2017, LVHN made 302 referrals to the Lehigh County Hospital Opioid Support Team (HOST) program. Among those who were assessed by a HOST provider, heroin and other opiates were the primary drugs of choice for 42 percent. Medically monitored detox was the most commonly suggested level of care (122 patients), with 64 percent of individuals who were recommended that level of care entering into a medically monitored detox facility. In LVHN EDs, alcohol and narcotics were the most commonly used substances when patients arrived in crisis (over 80 percent).

Percent Adults Physically Inactive by Year



No physical activity:
21 percent Lehigh County
23 percent Northampton County

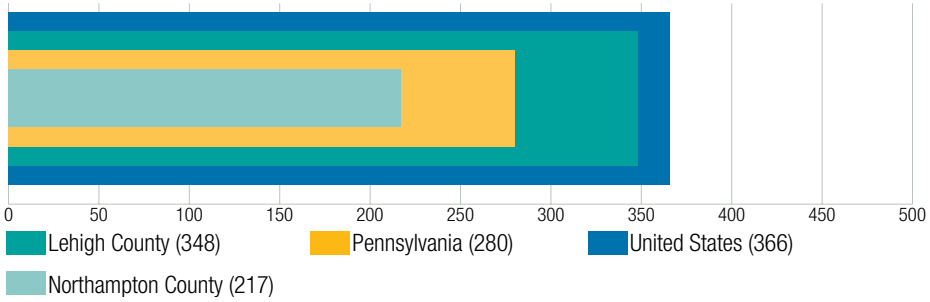
SEXUAL HEALTH

Teen Births

Rate of total births to women age 15-19 per 10,000 female population age 15-19.

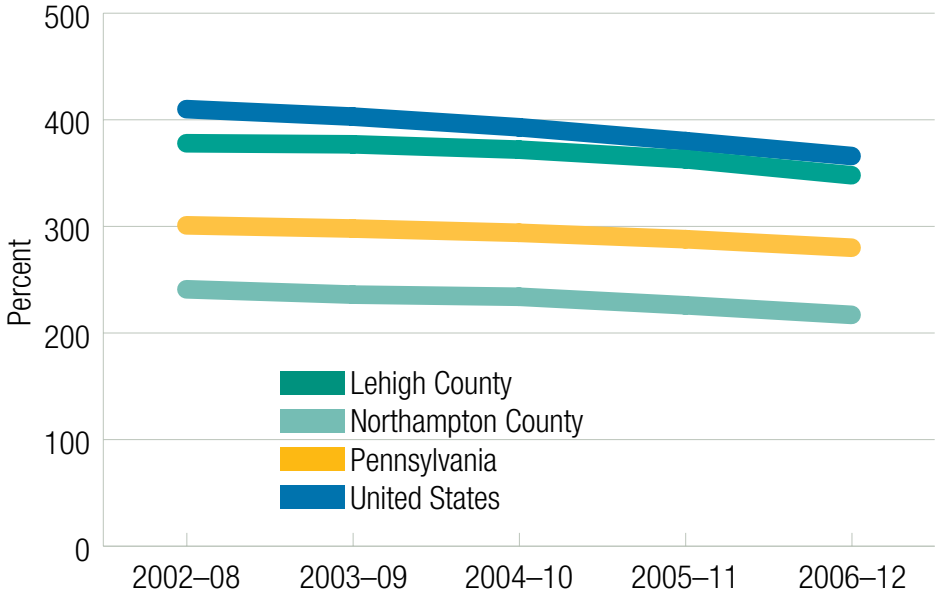
Report Area	Female Population Age 15-19	Births to Mothers Age 15-19	Teen Birth Rate (Per 10,000 Population)
Lehigh	12,218	425	348
Northampton	10,523	228	217
Pennsylvania	442,601	12,393	280
United States	10,736,677	392,962	366

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source geography: County



In Lehigh County, for every 10,000 adolescents in the community about 348 give birth as teenagers. This rate increases to 806 per 10,000 in the Hispanic population. In Northampton County, for every 10,000 adolescents 217 have a baby as a teenager. This rate increases to 616 in the Hispanic population.

Births to Women Age 15-19, Rate per 10,000 Population Female Age 15–19, by Time Period



Births to Women Age 15-19, Rate (per 10,000 Pop.) by Race/ Ethnicity

Report Area	Non-Hispanic White	Non-Hispanic Black	Hispanic or Latino
Lehigh	159	556	806
Northampton	143	303	616
Pennsylvania	185	594	716
United States	246	549	620

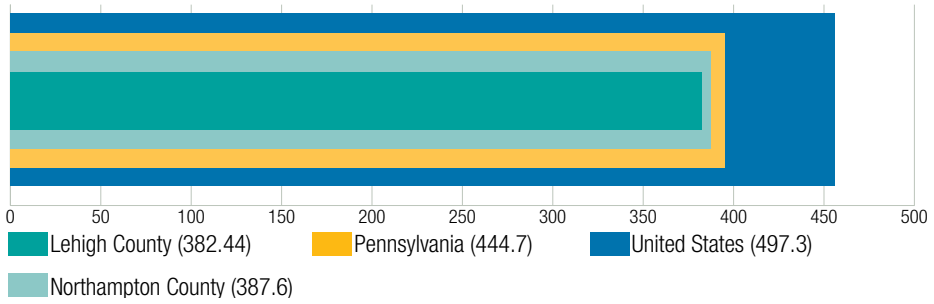
Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source geography: County

STI – Chlamydia Incidence

Incidence rate of chlamydia cases per 100,000 population

Report Area	Total Population	Total Chlamydia Infections	Chlamydia Infection Rate (Per 100,000 Pop.)
Lehigh	355,092	1,358	382.44
Northampton	300,813	1,166	387.6
Pennsylvania	12,802,503	56,930	444.7
United States	321,418,820	1,598,354	497.3

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2014. Source geography: County

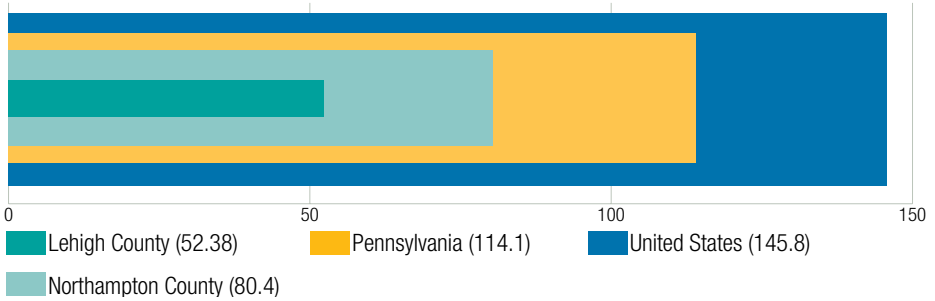


STI – Gonorrhea Incidence

Incidence rate of gonorrhea cases per 100,000 population

Report Area	Total Population	Total Gonorrhea Infections	Gonorrhea Infection Rate (Per 100,000 Pop.)
Lehigh	355,092	186	52.38
Northampton	300,813	242	80.4
Pennsylvania	12,802,503	14,603	114.1
United States	321,418,820	468,514	145.8

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2014. Source geography: County

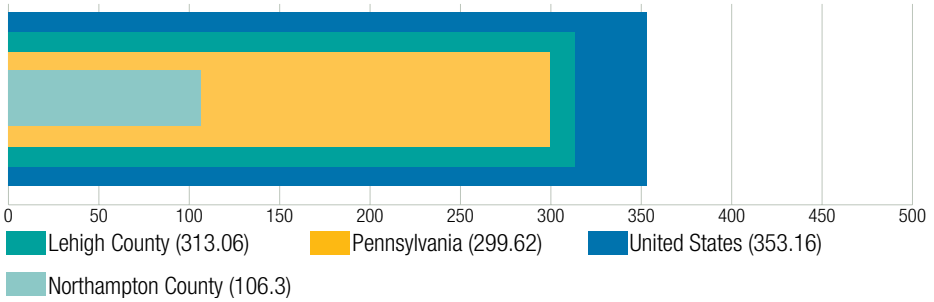


STI – HIV Prevalence

Prevalence rate of HIV per 100,000 population

Report Area	Population Age 13+	Population with HIV/AIDS	Population with HIV/ AIDS, Rate (Per 100,000 Pop.)
Lehigh	298,344	934	313.06
Northampton	258,619	275	106.3
Pennsylvania	10,862,772	32,547	299.62
United States	263,765,822	931,526	353.16

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2013. Source geography: County



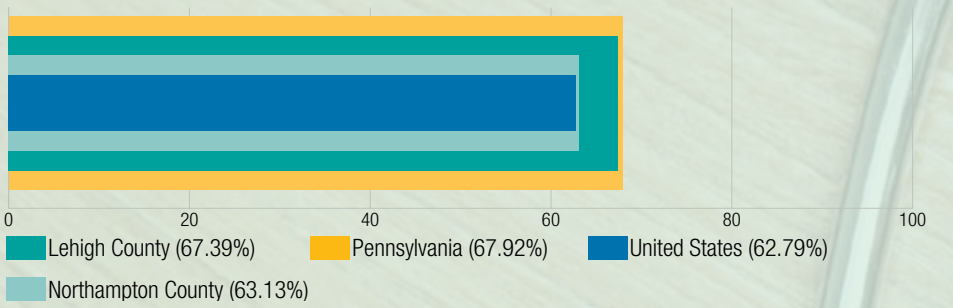
HEALTH SCREENINGS

HIV Screenings

Percentage of adults age 18–70 who self-report they have never been screened for HIV.

Report Area	Survey Population (Adults Age 18+)	Total Adults Never Screened for HIV/AIDS	% Adults Never Screened for HIV/ AIDS
Lehigh	213,894	144,137	67.39
Northampton	194,538	122,808	63.13
Pennsylvania	8,948,560	6,077,953	67.92
United States	214,984,421	134,999,025	62.79

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

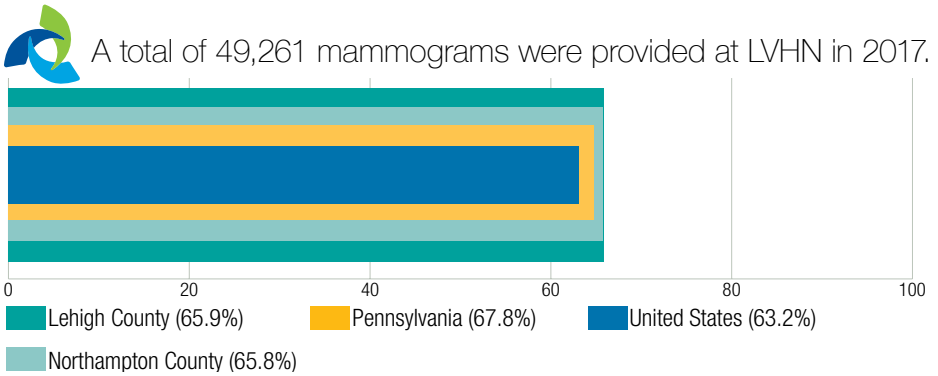


Mammogram

Percentage of female Medicare enrollees, age 67-69, who have received one or more mammograms in the past two years.

Report Area	Total Medicare Enrollees	Female Medicare Enrollees		
		N	N with Mammogram in Past 2 Years	% with Mammogram in Past 2 Years
Lehigh	34,534	2,724	1,795	65.9
Northampton	34,029	3,014	1,982	65.8
Pennsylvania	550,660	58,753	39,850	67.8
United States	26,937,083	2,544,732	1,607,329	63.2

Data Source: Dartmouth College Institute for Health Policy Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County

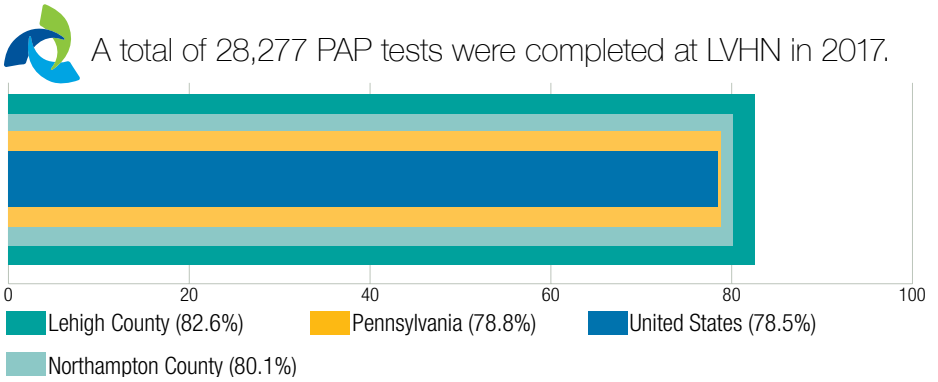


Pap Test

Percentage of women age 18 and older who self-report they have had a Pap test in the past three years.

Report Area	Female Population Age 18+	Estimated Number with Regular Pap Test	% Age-Adjusted
Lehigh	224,575	181,906	82.60
Northampton	205,929	162,478	80.10
Pennsylvania	8,337,831	6,395,116	78.80
United States	176,847,182	137,191,142	78.50

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County

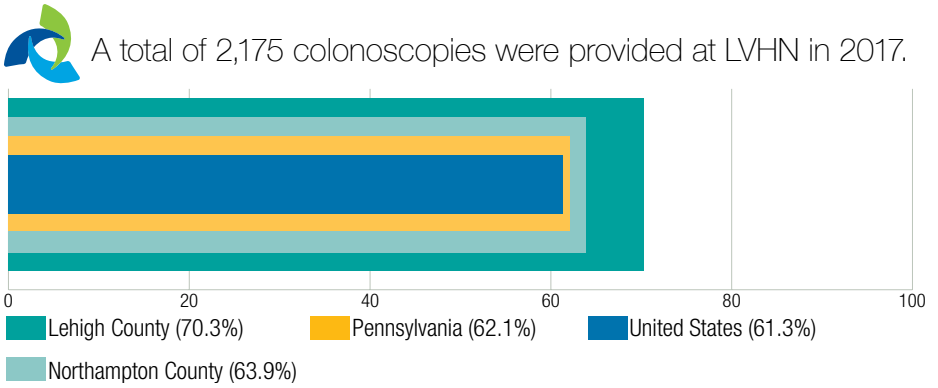


Sigmoidoscopy or Colonoscopy

Percentage of adults 50 and older who self-report they have ever had a sigmoidoscopy or colonoscopy.

Report Area	Total Population Age 50+	Estimated Population Ever Screened for Colon Cancer	% Age-Adjusted
Lehigh	92,371	66,138	70.30
Northampton	83,195	54,909	63.90
Pennsylvania	3,524,771	2,301,675	62.10
United States	75,116,406	48,549,269	61.30

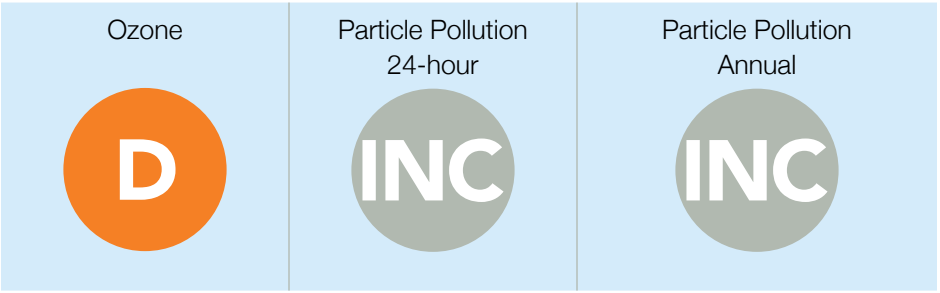
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



PHYSICAL ENVIRONMENT

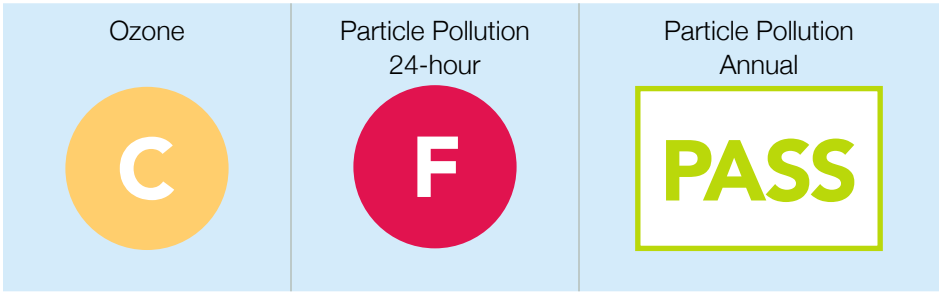
AIR QUALITY

If you live in **Lehigh County**, the air you breathe needs your support.



Data Source: American Lung Association 2017 State of the Air Report

If you live in **Northampton County**, the air you breathe may put your health at risk.



Data Source: American Lung Association 2017 State of the Air Report

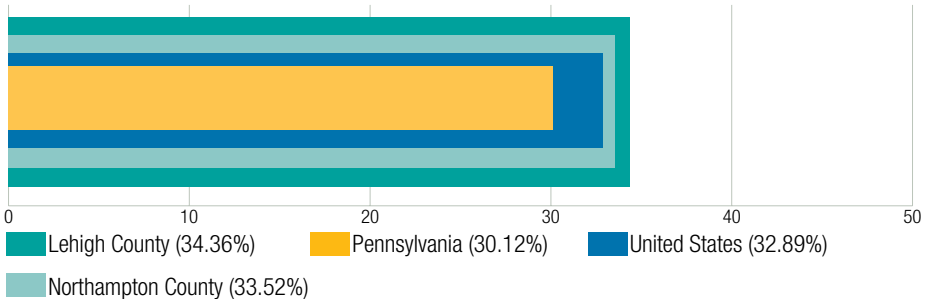
HOUSING

Housing Cost Burden

Percentage of households where housing costs exceed 30 percent of total household income. This indicator provides information on cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs.

Report Area	Total Households	Cost Burdened Households	% of Cost Burdened Households
Lehigh	135,363	46,514	34.36
Northampton	112,819	37,812	33.52
Pennsylvania	4,961,929	1,494,667	30.12
United States	117,716,237	38,719,430	32.89

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

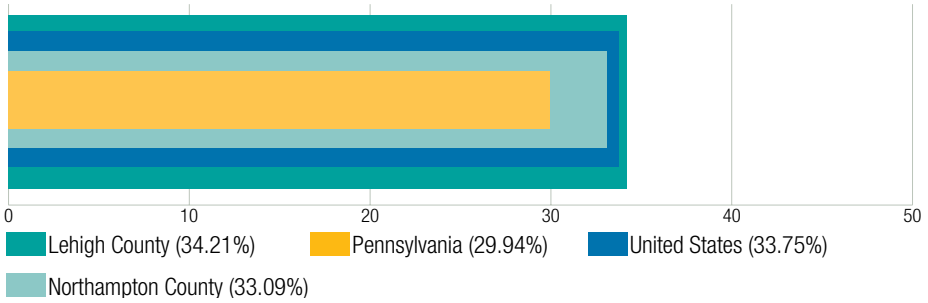


Housing – Substandard Housing

Number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent.

Report Area	Total Occupied Housing Units	Occupied Housing Units with One or More Substandard Conditions	% Occupied Housing Units with One or More Substandard Conditions
Lehigh	135,363	46,309	34.21
Northampton	112,819	37,332	33.09
Pennsylvania	4,961,929	1,485,705	29.94
United States	117,716,237	39,729,263	33.75

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract



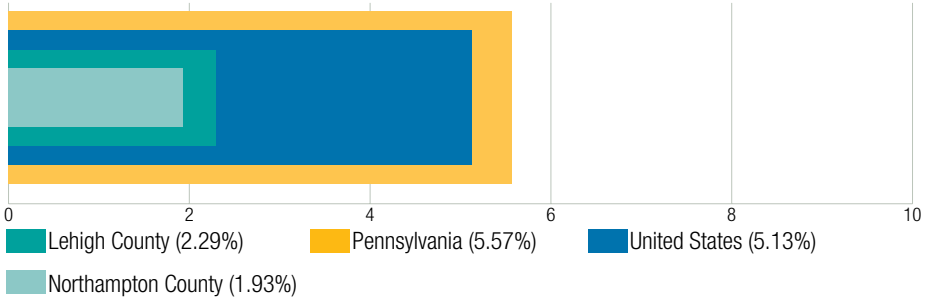
TRANSPORTATION AND COMMUTING

Use of Public Transportation

Percentage of population using public transportation as primary means of commute to work. Public transportation includes buses or trolley buses, streetcars or trolley cars, subway or elevated rails, and ferryboats.

Report Area	Total Population Employed Age 16+	Population Using Public Transit for Commute to Work	% Population Using Public Transit for Commute to Work
Lehigh	169,221	3,877	2.29
Northampton	143,423	2,775	1.93
Pennsylvania	5,922,289	329,912	5.57
United States	145,861,221	7,476,312	5.13

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract



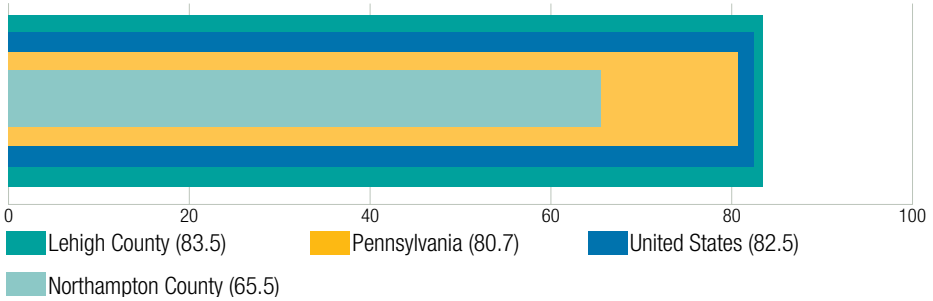
ACCESS TO COMMUNITY INFRASTRUCTURE

SNAP-Authorized Food Stores

Number of SNAP-authorized food stores as a rate per 100,000 population. SNAP-authorized stores include grocery stores as well as supercenters, specialty food stores and convenience stores that are authorized to accept SNAP (Supplemental Nutrition Assistance Program) benefits.

Report Area	Total Population	Total SNAP-Authorized Retailers	SNAP-Authorized Retailers, Rate per 100,000 Population
Lehigh	349,497	292	83.5
Northampton	297,735	195	65.5
Pennsylvania	12,702,379	10,257	80.7
United States	312,411,142	257,596	82.5

Data Source: US Department of Agriculture, Food and Nutrition Service, USDA - SNAP Retailer Locator. Additional data analysis by CARES. 2017. Source geography: Tract



Transportation is consistently identified as a barrier to health by community members in focus groups and interviews in both counties. Transportation is seen as a means to engage in preventive care and a way to overcome lack of follow-up services. Not being located near public transportation limits what community members can access, including social interactions, health care, and the grocery store. Even when public transportation is available, many participants note the length of time it requires out of their day.

From the perspective of the transportation sector, the issue is more about location. If health care facilities and city planners put facilities and services in locations that are difficult to get to, the issue is not inadequate transportation but inadequate site selection. There needs to be greater collaboration and communication across these two sectors.

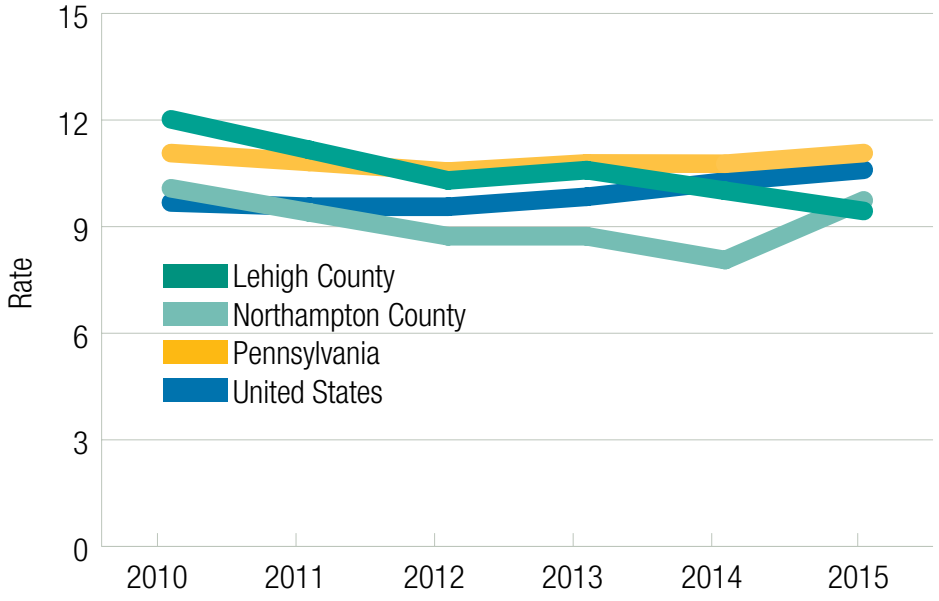
WIC-Authorized Food Stores

Number of food stores that accept Women, Infants, and Children (WIC) benefits per 100,000 population.

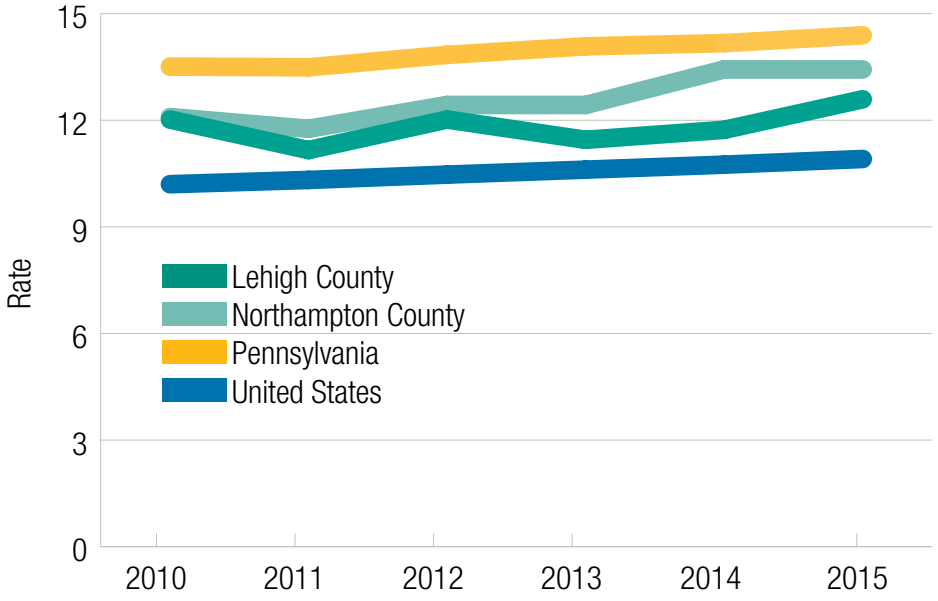
Report Area	Total Population (2011 Estimate)	Number WIC-Authorized Food Stores	WIC-Authorized Food Store Rate (Per 100,000 Pop.)
Lehigh	352,948	89	25.2
Northampton	298,476	40	13.4
Pennsylvania	12,844,373	2,138	16.6
United States	318,921,538	50,042	15.6

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Environment Atlas. 2011. Source geography: County

Recreation and Fitness Facilities, Rate per 100,000 Population by Year



Beer, Wine and Liquor Stores, Rate per 100,000 Population by Year



Community members who participated in focus groups and interviews call for additional care out in the community, including follow-ups at home, services at schools and senior centers where people are located, and outreach and education about available resources. Participants ask for a greater presence in the community from health care systems in the places where people are most frequently present. Schools are identified the most as a place where health care should be available. They also suggest more mobile clinics that would move to different locations throughout the county.

Participants identify the need for a central management of health care and prescription drugs; having one person to coordinate which doctors a patient needs to see and which medications he or she needs to obtain would be helpful and could also be useful in the transition out of the hospital, back into the community.

Furthermore, there is a need for education about what plans and services are available to individuals. Community members lack information about what medical and drug services are out there, and additional outreach could improve access to clinics and preventive care.

CLINICAL CARE

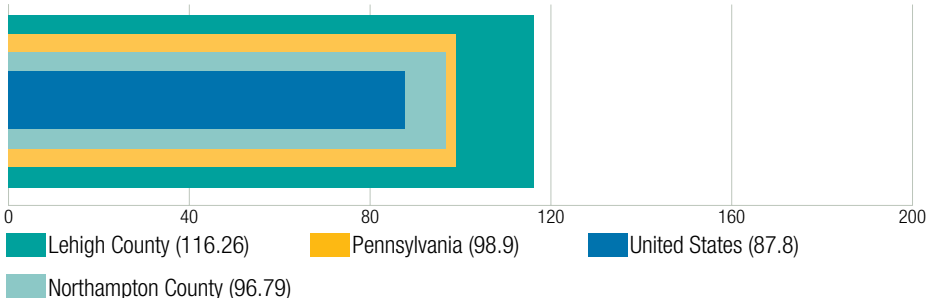
A lack of access to care presents barriers to good health. Supply and accessibility of facilities and physicians, rate of uninsurance, financial hardship, transportation barriers, cultural competency and coverage limitations affect access. Rates of morbidity, mortality and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions. (Courtesy of the CARES Engagement Network)

Access to Primary Care

Number of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the AMA include: family medicine, general internal medicine, and pediatric MDs and DOs. Physicians age 75 and over and physicians practicing subspecialties within the listed specialties are excluded.

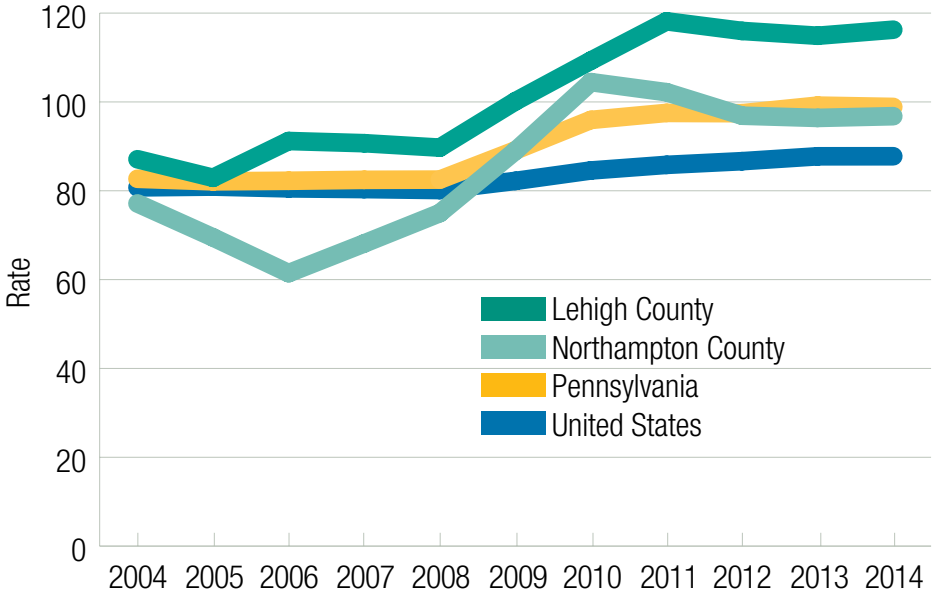
Report Area	Total Population, 2014	Primary Care Physicians, 2014	Primary Care Physicians, Rate per 100,000 Pop.
Lehigh	357,823	416	116.26
Northampton	300,654	291	96.79
Pennsylvania	12,787,209	12,643	98.9
United States	318,857,056	279,871	87.8

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014. Source geography: County



11.94 percent of adults in Lehigh County and 10 percent in Northampton County lack a consistent source of primary care.

Rate of Primary Care Physicians per 100,000 Population by Year

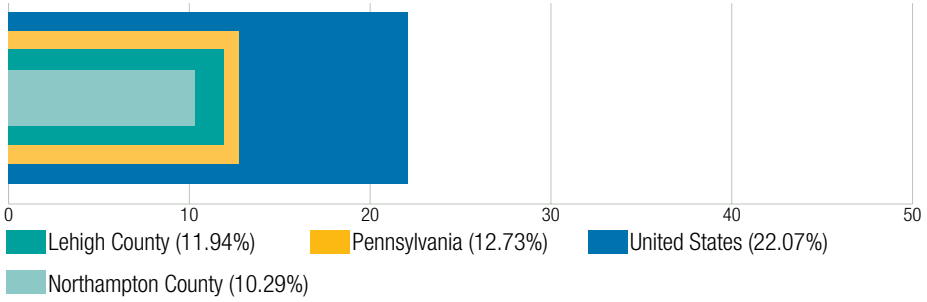


Lack of a Consistent Source of Primary Care

Percentage of adults age 18 and older who self-report they do not have at least one person who they think of as their personal doctor or health care provider.

Report Area	Survey Population (Adults Age 18+)	Total Adults Without Any Regular Doctor	% Adults Without Any Regular Doctor
Lehigh	235,544	28,124	11.94
Northampton	205,180	21,105	10.29
Pennsylvania	9,777,605	1,244,908	12.73
United States	236,884,668	52,290,932	22.07

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

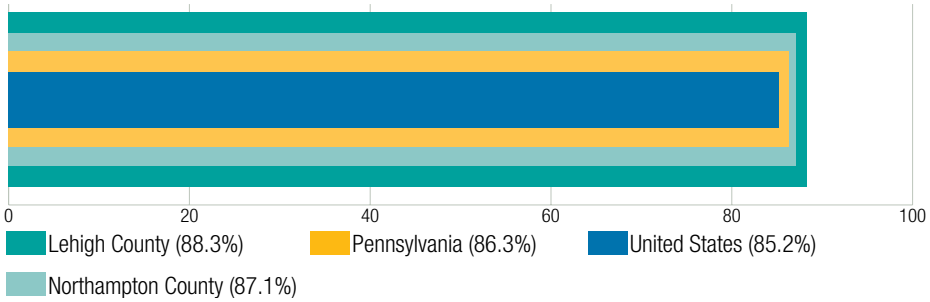


DIABETES MANAGEMENT

Percentage of Medicare patients with diabetes who have had a hemoglobin A1c (hA1c) test, a blood test that measures blood sugar levels, administered by a health care professional in the past year.

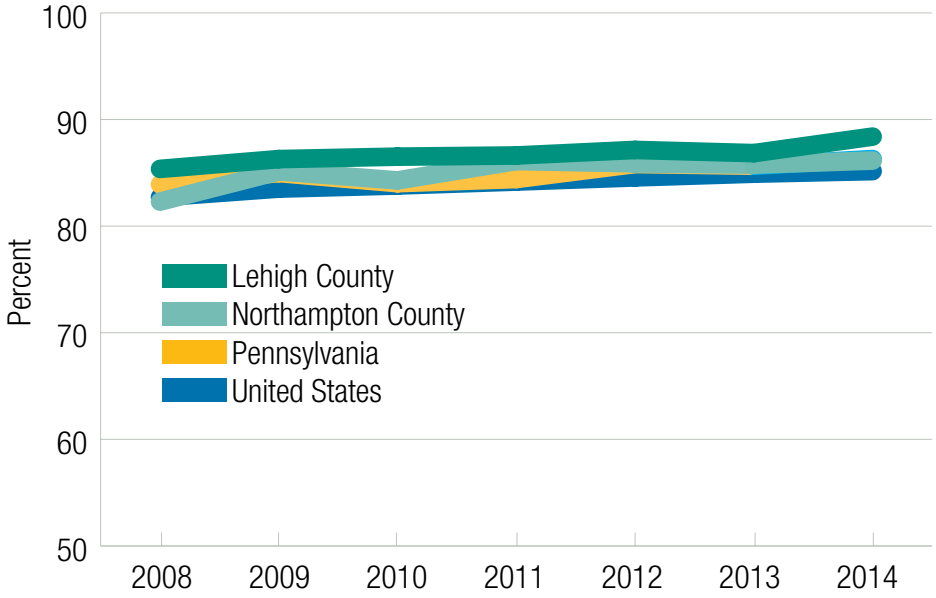
Report Area	Total Medicare Enrollees	Medicare Enrollees with Diabetes	Medicare Enrollees with Diabetes with Annual Exam	% Medicare Enrollees with Diabetes with Annual Exam
Lehigh	34,534	4,101	3,622	88.3
Northampton	34,029	3,550	3,091	87.1
Pennsylvania	1,053,822	123,915	106,920	86.3
United States	26,753,396	3,314,834	2,822,996	85.2

Data Source: Dartmouth College Institute for Health Policy Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County



The increasing cost of health care, specifically medications and health insurance, is noted in almost all focus groups and interviews for both Lehigh and Northampton counties. Participants note that community members are having to choose between meeting basic needs (e.g., food and shelter) or paying for medications on a regular basis. They note that this limitation contributes to chronic health conditions in the community and suggest that providers and practices help patients more closely monitor prescriptions in order to ensure they receive medications they can afford.

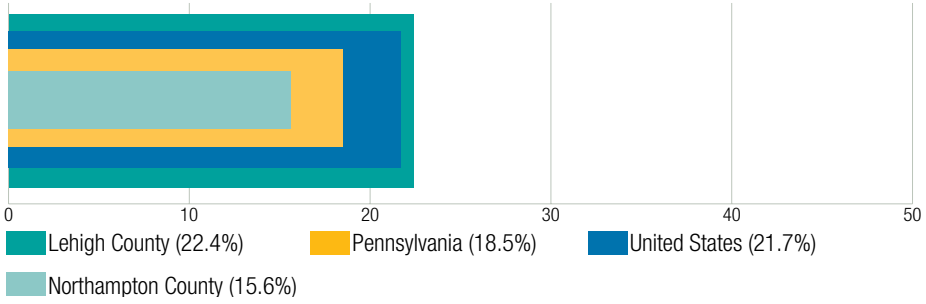
Percent of Medicare Beneficiaries with Diabetes with Annual Hemoglobin A1c Test by Year



HIGH BLOOD PRESSURE MANAGEMENT

Report Area	Total Population Age 18 +	Total Adults Not Taking Blood Pressure Medication	% Adults Not Taking Medication
Lehigh	261,940	58,791	22.4
Northampton	228,935	35,601	15.6
Pennsylvania	9,857,384	1,828,367	18.5
United States	235,375,690	51,175,402	21.7

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-12. Source geography: County

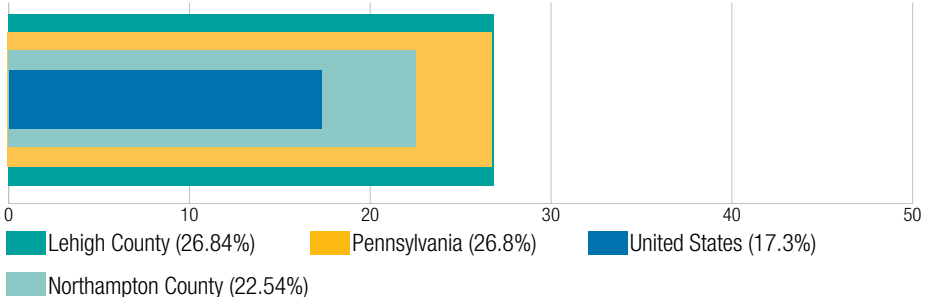


ACCESS TO PRENATAL CARE

Percentage of women who do not obtain prenatal care during their first trimester of pregnancy.

Report Area	Total Births	Prenatal Care in First Semester	Prenatal Care Not Reported	Late or No Prenatal Care	%, Late or No Prenatal Care
Lehigh	17,220	11,489	1,100	4,621	26.84
Northampton	12,611	8,609	1,159	2,843	22.54
Pennsylvania	589,741	391,570	40,189	157,982	26.8
United States	16,693,978	7,349,554	6,464,326	2,880,098	17.3

Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. 2007-10. Source geography: County



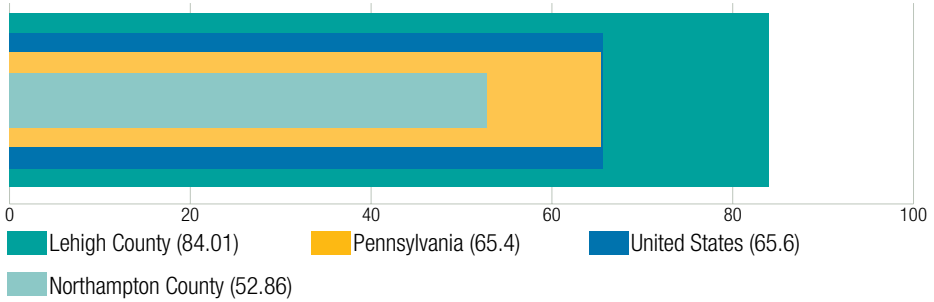
ACCESS TO DENTAL CARE

Access to Dentists

Number of dentists per 100,000 population. This indicator includes all dentists, qualified as having a doctorate in dental surgery (DDS) or dental medicine (DMD), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.

Report Area	Total Population, 2015	Dentists, 2015	Dentists, Rate per 100,000 Pop.
Lehigh	360,685	303	84.01
Northampton	300,000	159	52.86
Pennsylvania	12,802,503	8,368	65.40
United States	321,418,820	210,832	65.60

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2015. Source geography: County

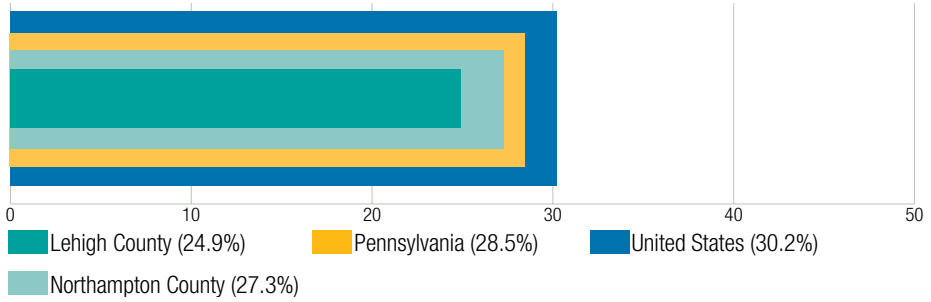


Dental Care Utilization

Percentage of adults age 18 and older who self-report they have not visited a dentist, dental hygienist or dental clinic within the past year.

Report Area	Total Population (Age 18+)	Total Adults Without Recent Dental Exam	% Adults with No Dental Exam
Lehigh	261,940	65,156	24.9
Northampton	228,935	62,403	27.3
Pennsylvania	9,857,384	2,804,554	28.5
United States	235,375,690	70,965,788	30.2

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-10. Source geography: County

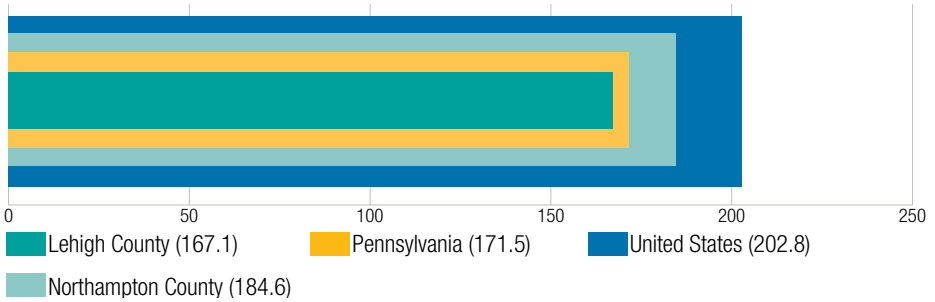


ACCESS TO MENTAL HEALTH PROVIDERS

Rate of county population to number of mental health providers including psychiatrists, psychologists, clinical social workers and counselors who specialize in mental health care.

Report Area	Estimated Population, 2016	Mental Health Providers, 2016	Mental Health Care Provider, Rate Per 100,000 pop.
Lehigh	357,827	598	167.1
Northampton	300,650	555	184.6
Pennsylvania	12,782,379	21,927	171.5
United States	317,105,555	643,219	202.8

Data Source: University of Wisconsin Population Health Institute, County Health Rankings. 2016. Source geography: County

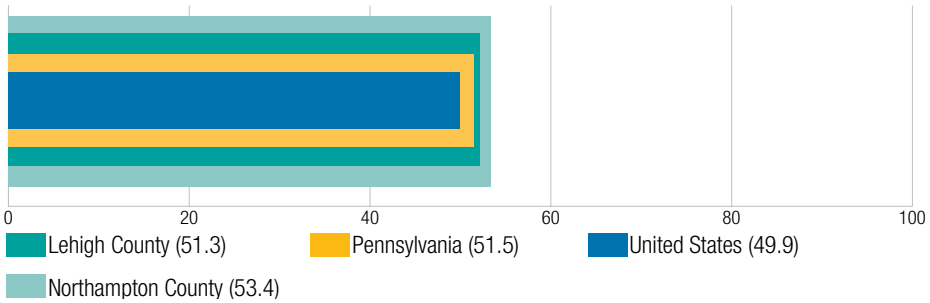


PREVENTABLE HOSPITAL EVENTS

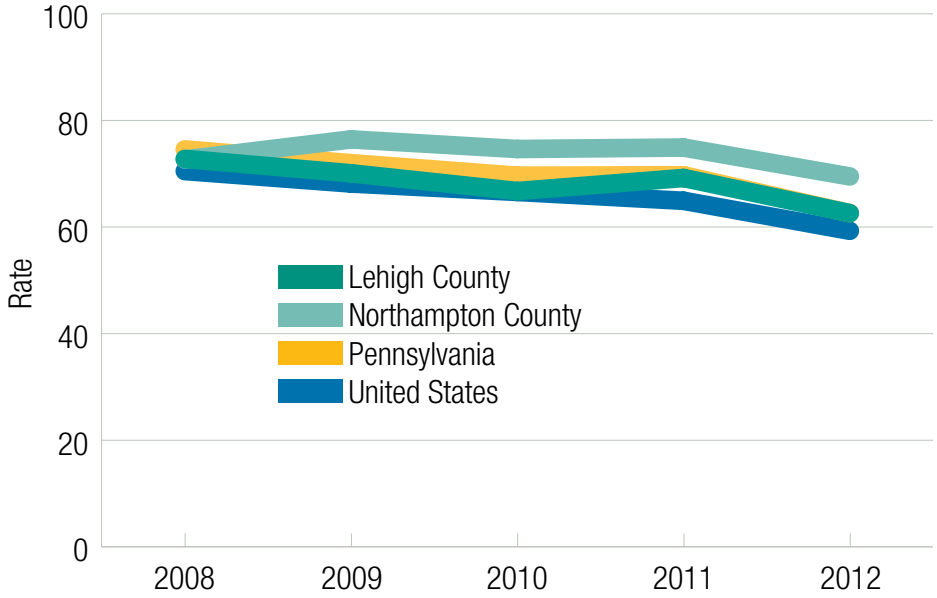
Discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes and other conditions that could have been prevented if adequate primary care resources were available and accessed by those patients.

Report Area	Total Medicare Part A Enrollees	Ambulatory Care-Sensitive Condition Hospital Discharges	Ambulatory Care-Sensitive Condition Discharge Rate
Lehigh	28,720	1,474	51.3
Northampton	27,763	1,483	53.4
Pennsylvania	1,185,487	61,097	51.5
United States	22,488,201	1,112,019	49.4

Data Source: Dartmouth College Institute for Health Policy Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County



Rate of Ambulatory Care-Sensitive Condition Discharges (per 1,000 Medicare Part A Beneficiaries)



HEALTH OUTCOMES

OVERALL HEALTH OUTCOMES

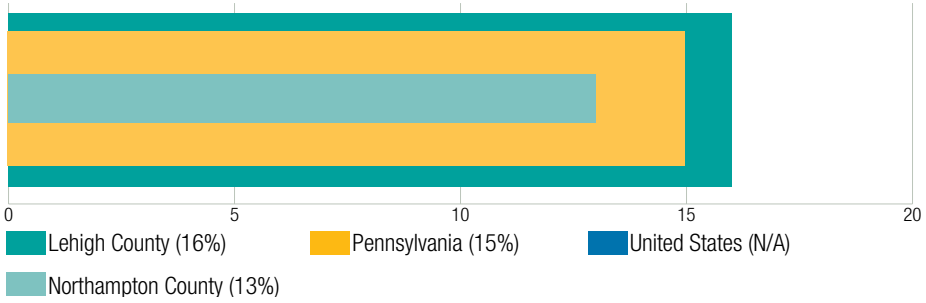
General Health

Adults age 18 and older self-report having poor or fair health in response to the question, “Would you say that in general your health is excellent, very good, good, fair or poor?”

Within Lehigh County 16 percent of adults age 18 and older self-report having poor or fair health in 2016; 13 percent self-reported in Northampton County. The highest performing counties in the U.S. stand at 12 percent.

Report Area	% Age-Adjusted
Lehigh	16
Northampton	13
Pennsylvania	15
United States	N/A

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via University of Wisconsin RWJ County Health Rankings, 2016 County Estimates



3.5

POOR PHYSICAL HEALTH DAYS PER MONTH REPORTED BY RESIDENTS IN LEHIGH COUNTY

3.3

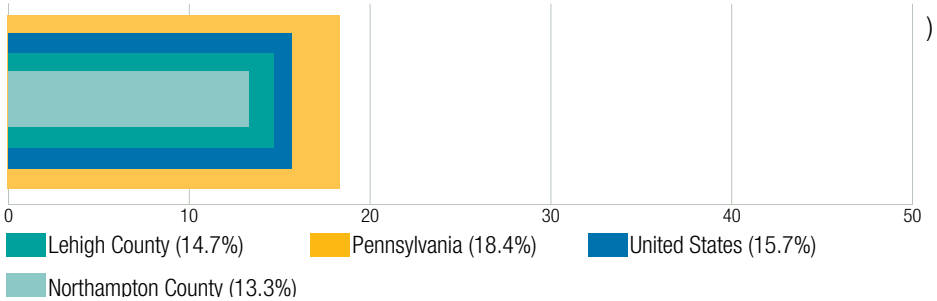
POOR PHYSICAL HEALTH DAYS PER MONTH REPORTED BY RESIDENTS IN NORTHAMPTON COUNTY

DENTAL HEALTH

Percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease or infection.

Report Area	Total Population (Age 18+)	Total Adults with Poor Dental Health	% Adults with Poor Dental Health
Lehigh	261,940	38,561	14.7
Northampton	228,935	30,521	13.3
Pennsylvania	9,857,384	1,814,547	18.4
United States	235,375,690	36,842,620	15.7

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-10. Source geography: County



15 percent of adults in Lehigh County and 13 percent in Northampton County have poor dental health.

Adults report 3.9 poor mental health days in the last month in Lehigh County and 3.6 in Northampton County.

Within Lehigh County 16 percent of adults age 18 and older self-report having poor or fair health in 2016; 13 percent self-reported within Northampton County.

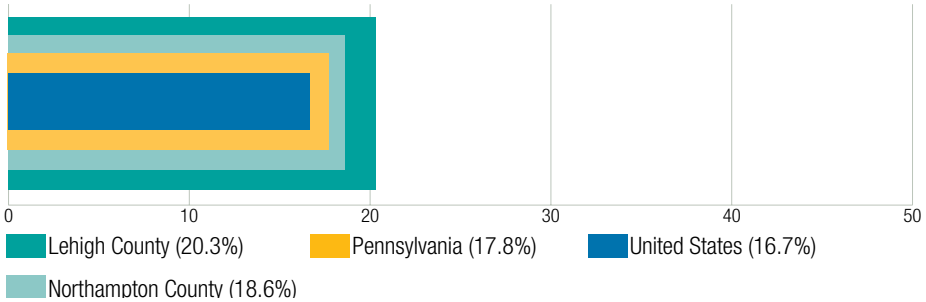
MENTAL HEALTH

Individuals in Lehigh County reported an average of 3.9 poor mental health days in the last month. Individuals within Northampton County report an average of 3.6 poor mental health days per month. The average for Pennsylvania was 4.3 days per month, according to County Health Rankings (Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via University of Wisconsin RWJ County Health Rankings, 2016 County Estimates).

Depression (Medicare Population)

Report Area	Total Medicare Fee-for-Service Beneficiaries	Beneficiaries with Depression	% with Depression
Lehigh	44,633	9,061	20.3
Northampton	42,865	7,954	18.6
Pennsylvania	1,381,208	245,323	17.8
United States	34,118,227	5,695,629	16.7

Data Source: Centers for Medicare and Medicaid Services. 2015. Source geography: County



Intertwined with the discussion on social isolation in the focus groups and interviews are multiple references to the need for additional mental health services. Participants identify that there are fewer providers for mental health care, and they do not know where to refer people for mental health counseling. As one participant notes, the hospitals seem to have "gotten out of the behavioral health business at a time when it is more necessary than ever." Some participants feel services are not provided in locations that are accessible to community members, and many note that co-locating mental and physical health services in public clinics would be beneficial in order to increase access to the community. Another suggestion is creating easier access to emergency mental health services, similar to an urgent care model.

Participants emphasize that there is still negative stigma around mental health, which creates a barrier to accessing services. Participants recommend normalizing a yearly checkup for mental health and publicizing treatment services. They also note the need for more mental health-related community trainings like mindfulness.

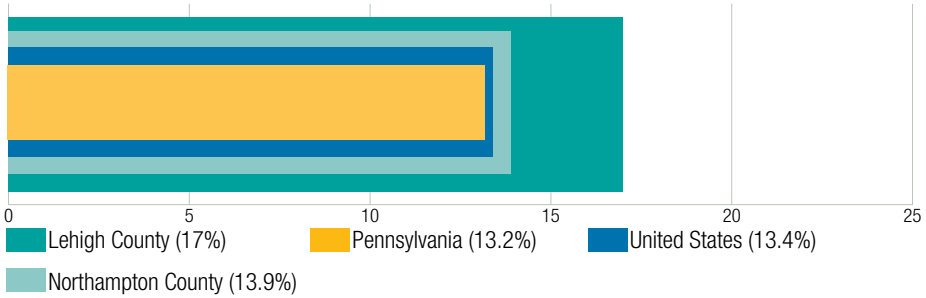
CHRONIC CONDITIONS

ASTHMA PREVALENCE

Percentage of adults age 18 and older who self-report they have ever been told by a doctor, nurse or other health professional they have asthma.

Report Area	Survey Population (Adults Age 18+)	Total Adults with Asthma	% Adults with Asthma
Lehigh	235,211	39,901	17
Northampton	205,688	28,517	13.9
Pennsylvania	9,780,692	1,293,643	13.2
United States	237,197,465	31,697,608	13.4

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County



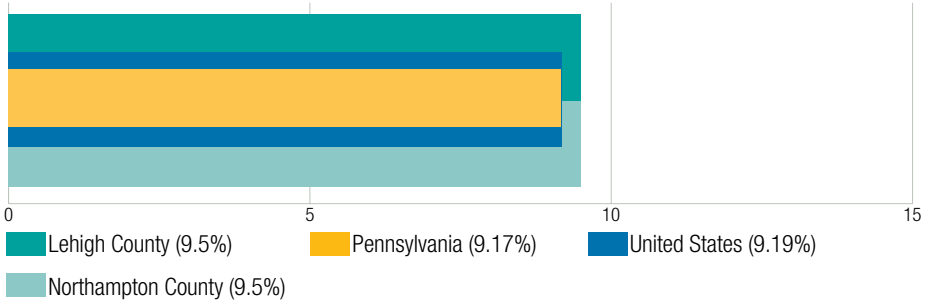
17 percent of adults in Lehigh County and 14 percent in Northampton County report having asthma. 10 percent of adults in Lehigh and Northampton counties report having diabetes.

DIABETES PREVALENCE

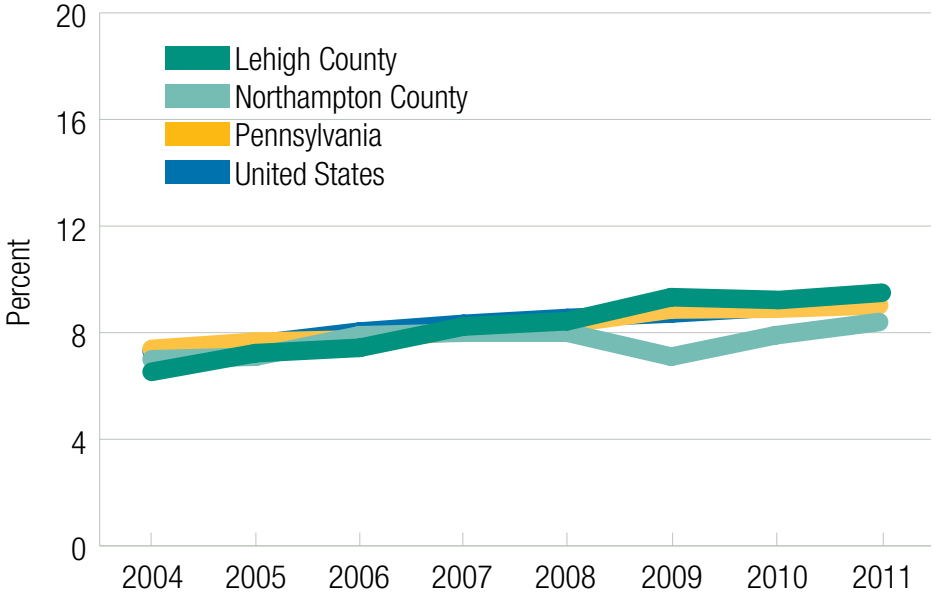
Percentage of adults age 20 and older who have ever been told by a doctor they have diabetes.

Report Area	Total Population Age 20+	Population with Diagnosed Diabetes	% Age-Adjusted
Lehigh	265,917	28,719	9.50
Northampton	227,393	25,468	9.50
Pennsylvania	9,702,557	1,028,685	9.17
United States	236,919,508	23,685,417	9.19

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013. Source geography: County



Percent Adults with Diagnosed Diabetes by Year

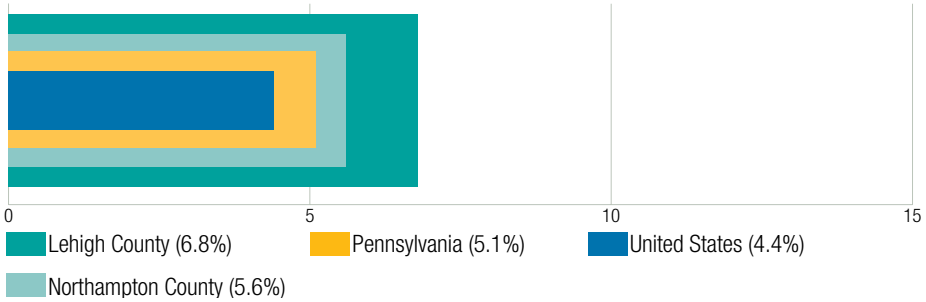


HEART DISEASE PREVALENCE

Percentage of adults who were told by a doctor they have coronary heart disease or angina.

Report Area	Survey Population (Adults Age 18+)	Total Adults with Heart Disease	% Adults with Heart Disease
Lehigh	234,841	15,896	6.8
Northampton	204,842	11,378	5.6
Pennsylvania	9,757,195	500,791	5.1
United States	236,406,904	10,407,185	4.4

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

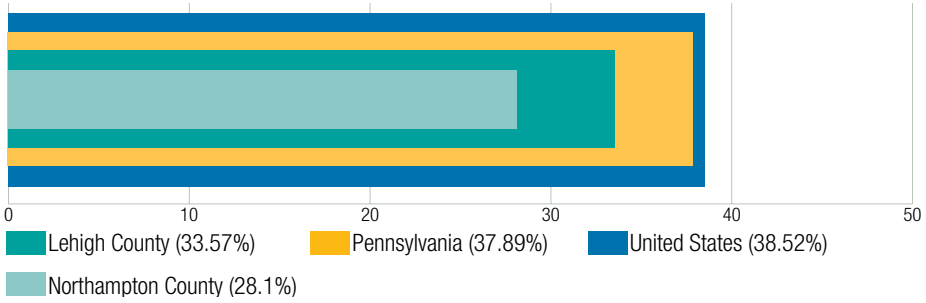


HIGH CHOLESTEROL PREVALENCE

Percentage of adults age 18 and older who self-report they have ever been told by a doctor, nurse or other health professional they have high blood cholesterol.

Report Area	Survey Pop. (Adults Age 18+)	Total Adults with High Cholesterol	% Adults with High Cholesterol
Lehigh	170,750	57,320	33.57
Northampton	181,804	51,090	28.10
Pennsylvania	7,669,036	2,906,160	37.89
United States	180,861,326	69,662,357	38.52

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County



7 percent of adults in Lehigh County and 6 percent in Northampton County report having heart disease. 33.6 percent of adults in Lehigh County and 28 percent in Northampton County have high cholesterol.

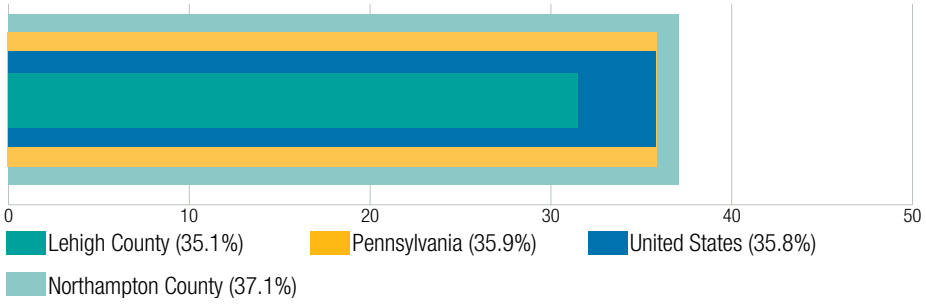
OVERWEIGHT AND OBESITY

Overweight

Body mass index (BMI) between 25.0 and 30.0

Report Area	Survey Population (Adults Age 18+)	Total Adults Overweight	% Adults Overweight
Lehigh	223,120	78,414	35.1
Northampton	195,368	72,401	37.1
Pennsylvania	9,320,559	3,350,133	35.9
United States	224,991,207	80,499,532	35.8

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

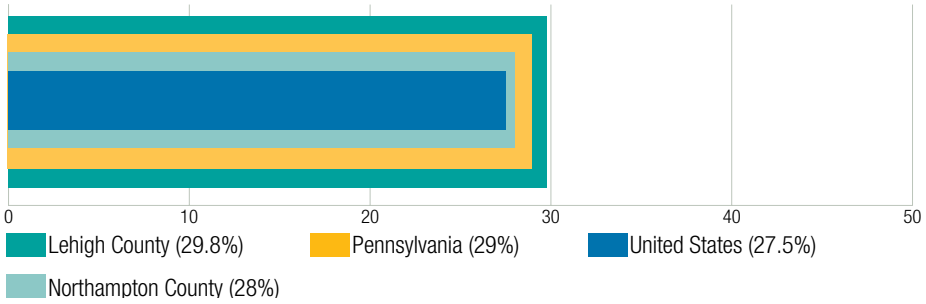


Obese

Body mass index (BMI) greater than 30.0 in the report area

Report Area	Total Population Age 20+	Total Adults Obese	% Adults Obese
Lehigh	264,934	79,745	29.8
Northampton	227,255	64,995	28.0
Pennsylvania	9,696,134	2,844,376	29.0
United States	234,188,203	64,884,915	27.5

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013. Source geography: County



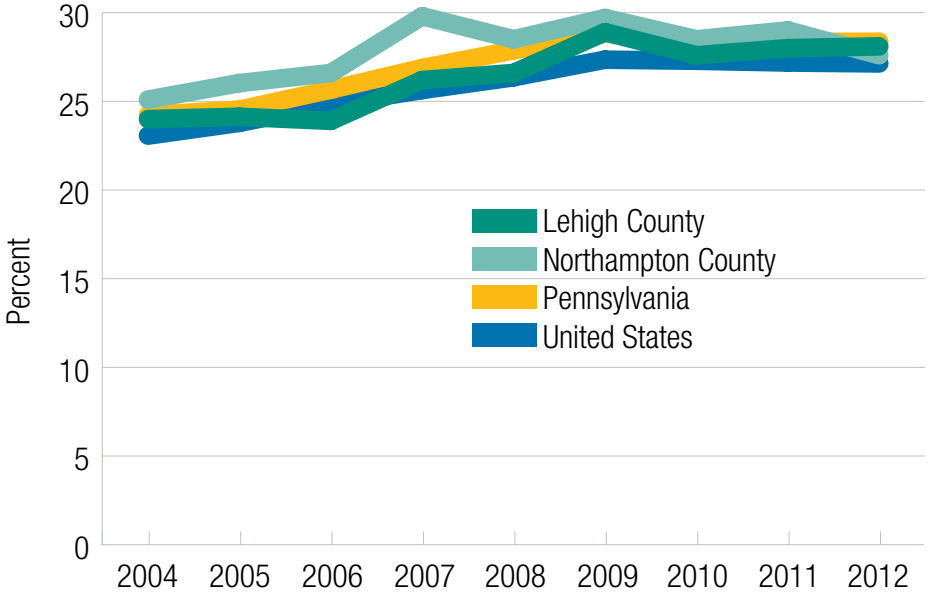
Adults Obese (BMI > 30.0) by Gender

Report Area	Total Males Obese	% Males Obese	Total Females Obese	% Females Obese
Lehigh	38,762	30.2	40,983	29.3
Northampton	32,324	29.0	32,671	27.1
Pennsylvania	1,401,512	29.67	1,442,867	28.19
United States	32,051,606	27.92	32,833,321	27.06

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013. Source geography: County

In Lehigh County, 35 percent of adults are overweight and 30 percent are obese. In Northampton County, 37 percent of adults are overweight and 28 percent are obese.

Percent Adults Obese (BMI > 30) by Year



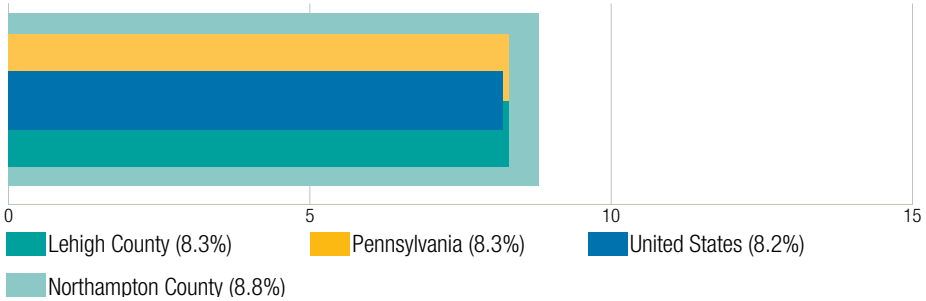
BIRTH OUTCOMES

Low Birth Weight

Percentage of total births that are low birth weight (under 2500g)

Report Area	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, % of Total
Lehigh	29,484	2,447	8.3
Northampton	22,302	1,963	8.8
Pennsylvania	1,031,597	85,623	8.3
United States	29,300,495	2,402,641	8.2
HP 2020 Target	<= 7.8%		

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source geography: County

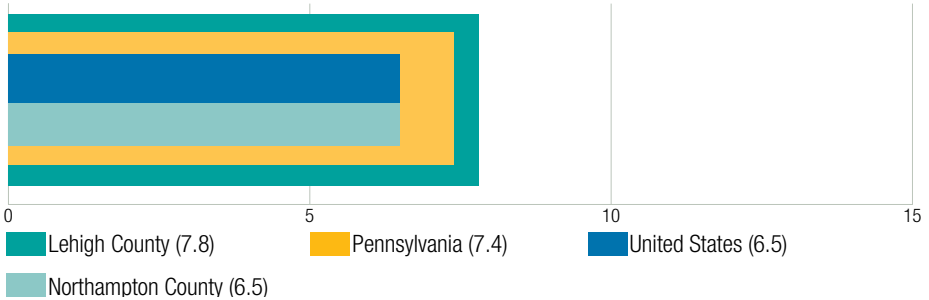


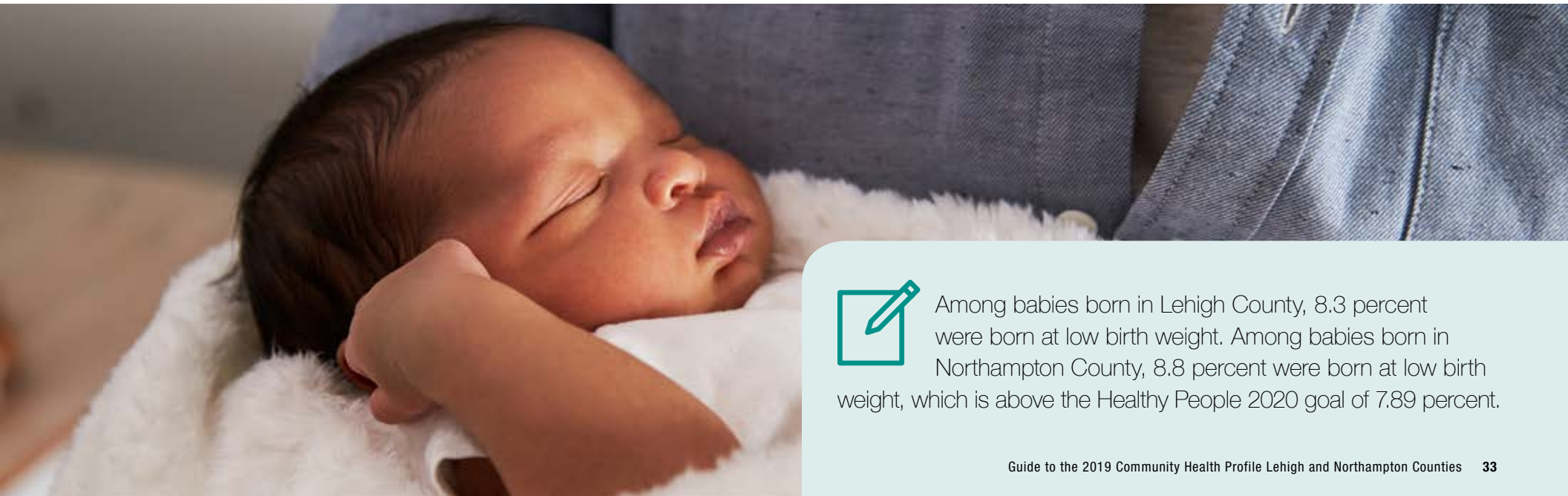
Infant Mortality

Rate of deaths to infants less than 1 year of age per 1,000 births

Report Area	Total Births	Total Infant Deaths	Infant Mortality Rate (Per 1,000 Births)
Lehigh	21,355	167	7.8
Northampton	16,000	104	6.5
Pennsylvania	733,495	5,428	7.4
United States	20,913,535	136,369	6.5
HP 2020 Target	<= 6.0		

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2006-10. Source geography: County

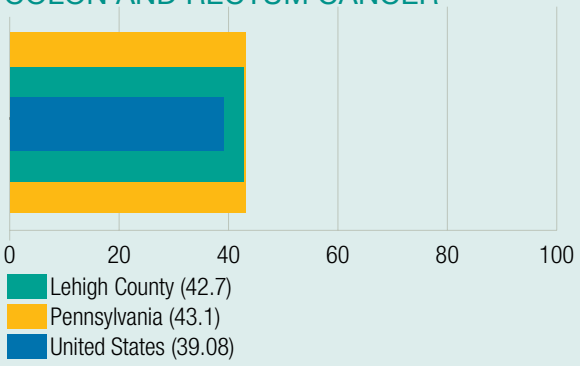




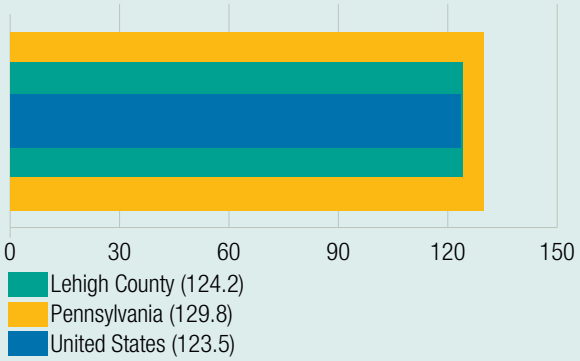
Among babies born in Lehigh County, 8.3 percent were born at low birth weight. Among babies born in Northampton County, 8.8 percent were born at low birth weight, which is above the Healthy People 2020 goal of 7.89 percent.

LEHIGH COUNTY ANNUAL CANCER INCIDENCE (RATE PER 100,000 POPULATION)

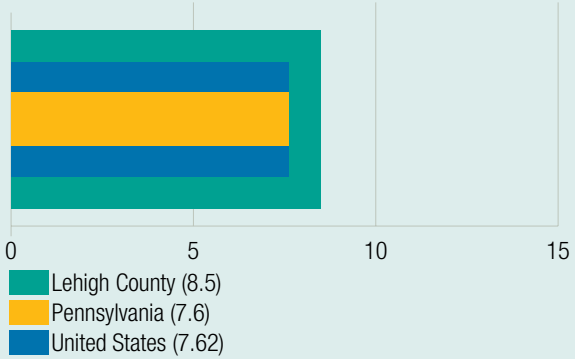
COLON AND RECTUM CANCER



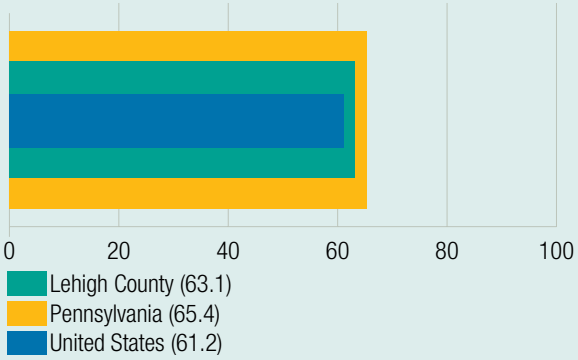
BREAST CANCER



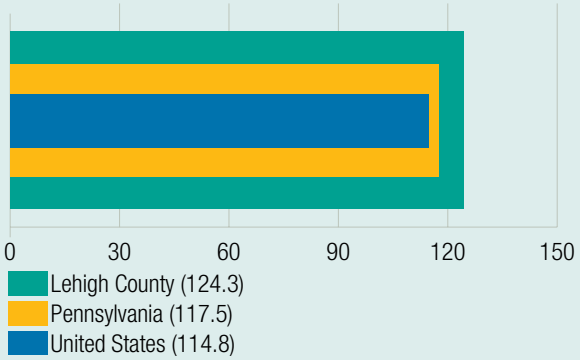
CERVICAL CANCER



LUNG CANCER



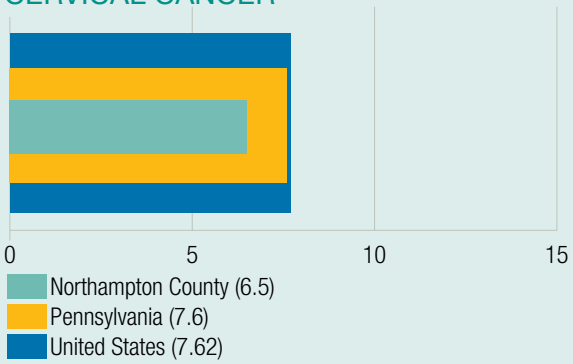
PROSTATE CANCER



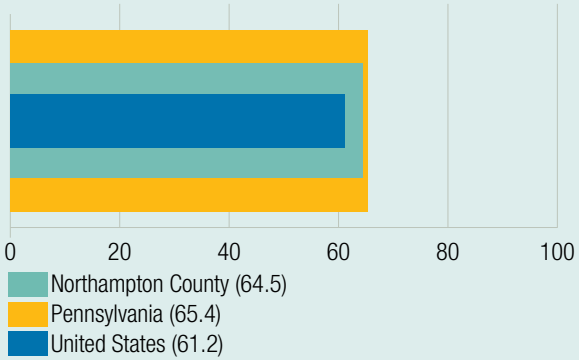
In Lehigh County, prostate and breast cancer incidence is greatest. Lehigh County rates of cervical and prostate cancer are greater than those for Pennsylvania or the United States.

NORTHAMPTON COUNTY ANNUAL CANCER INCIDENCE (RATE PER 100,000 POPULATION)

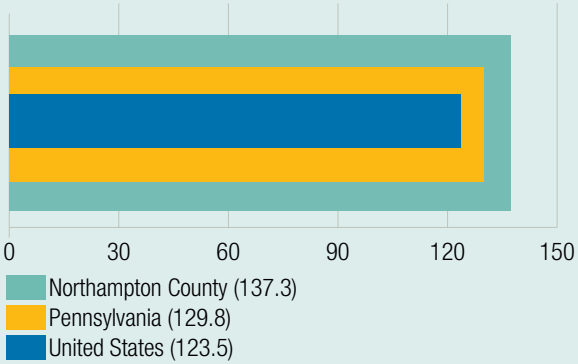
CERVICAL CANCER



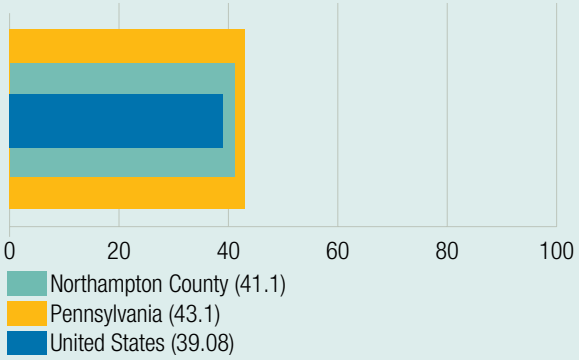
LUNG CANCER



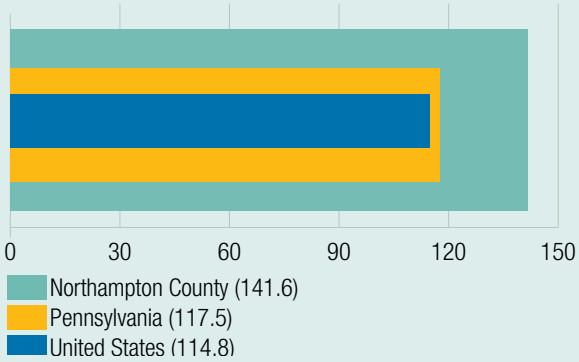
BREAST CANCER



COLON AND RECTUM CANCER



PROSTATE CANCER



In Northampton County, the incidence of breast and prostate cancer is greatest. The rates of these two types of cancer are also greater than those of Pennsylvania and the United States.

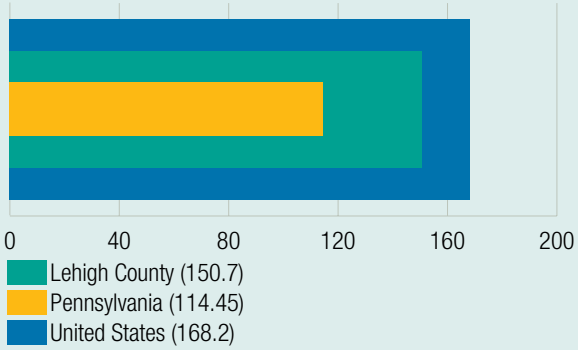
LEADING CAUSES OF DEATH AGE-ADJUSTED DEATH RATE (PER 100,000 POPULATION)

In 2015, the rate of drug-related overdose deaths per 100,000 people in Lehigh County was 38.3 (17th worst in the state, N = 134). The greatest number of overdose deaths was due to heroin and then fentanyl. The rate of drug-related overdose deaths per 100,000 people in Northampton County was 23.5 (42nd worst in the state, N=70). The greatest number of overdose deaths was due to heroin and then fentanyl. The PA drug-related overdose death rate per 100,000 people in 2016 was 36.5, an increase from 26.7 per 100,000 people in 2015. The U.S. drug overdose death rate per 100,000 people in 2015 was 16.3.

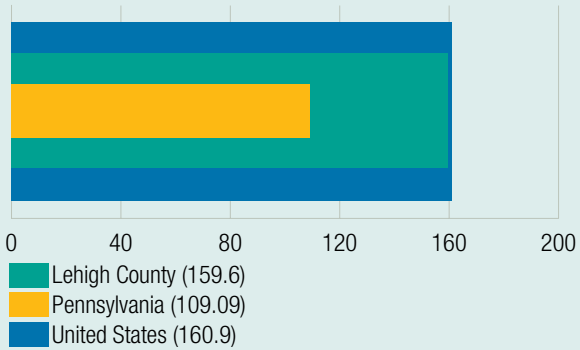
In 2016, the Pennsylvania Department of Health listed heart disease and cancer as the top two leading causes of death in Lehigh and Northampton counties.

LEHIGH COUNTY LEADING CAUSES OF DEATH

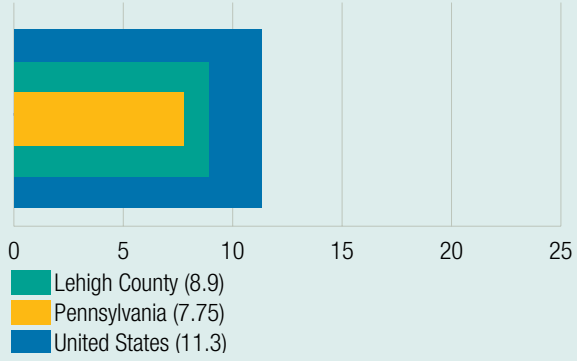
HEART DISEASE MORTALITY



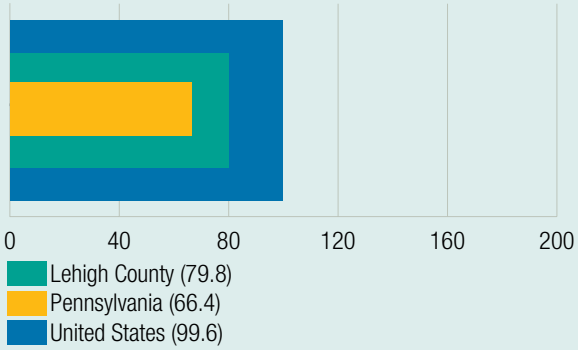
CANCER MORTALITY



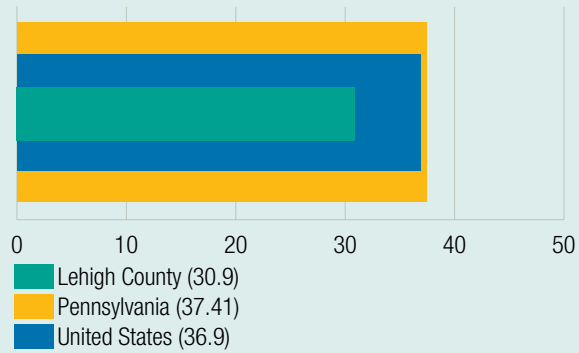
MOTOR VEHICLE CRASH DEATH



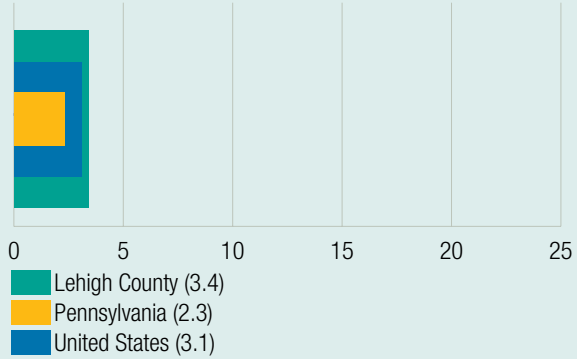
CORONARY HEART DISEASE MORTALITY



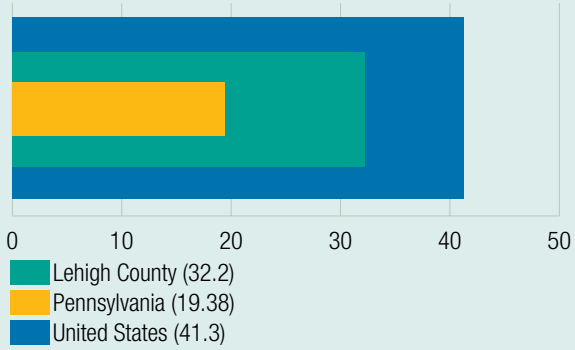
STROKE MORTALITY



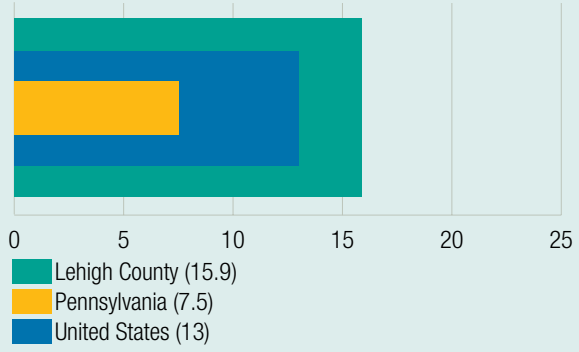
PEDESTRIAN MOTOR VEHICLE CRASH DEATH



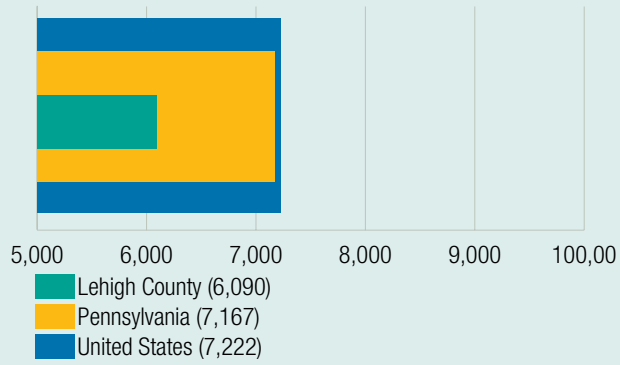
LUNG DISEASE MORTALITY



SUICIDE DEATH

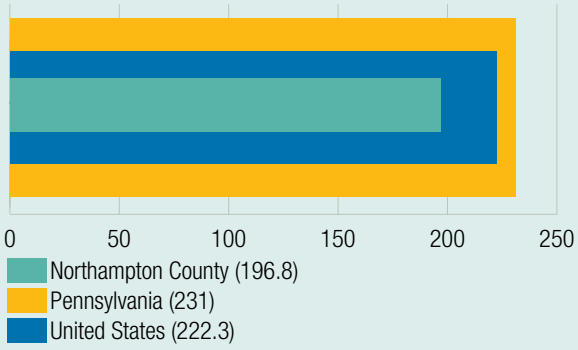


YEARS OF POTENTIAL LIFE LOST

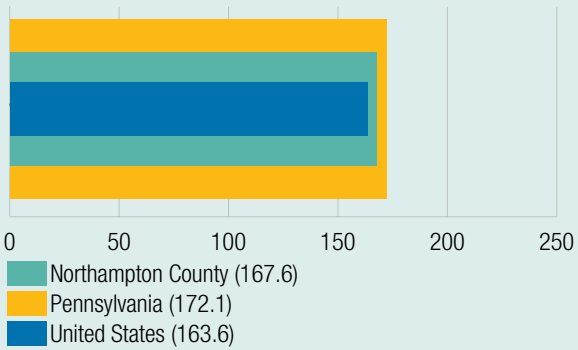


NORTHAMPTON COUNTY LEADING CAUSES OF DEATH

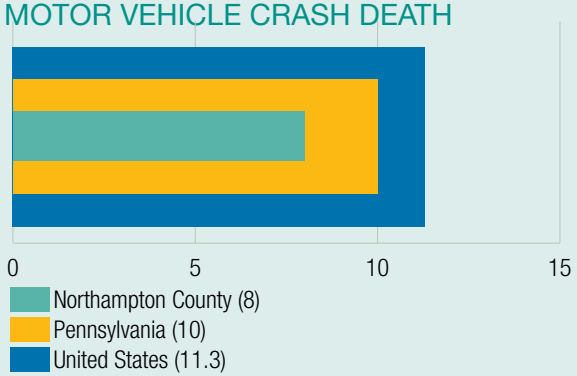
HEART DISEASE MORTALITY



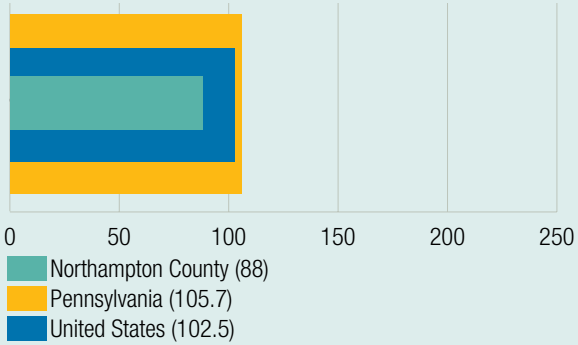
CANCER MORTALITY



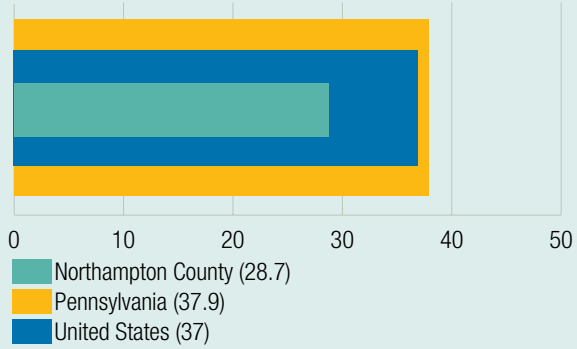
MOTOR VEHICLE CRASH DEATH



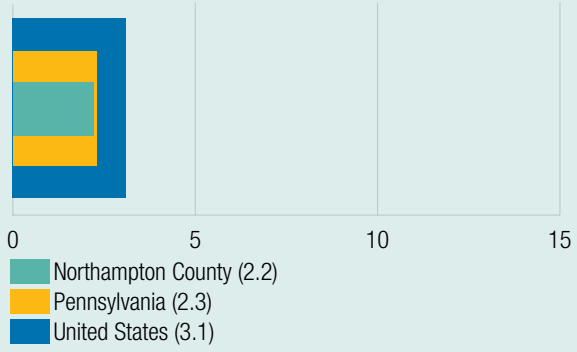
CORONARY HEART DISEASE MORTALITY



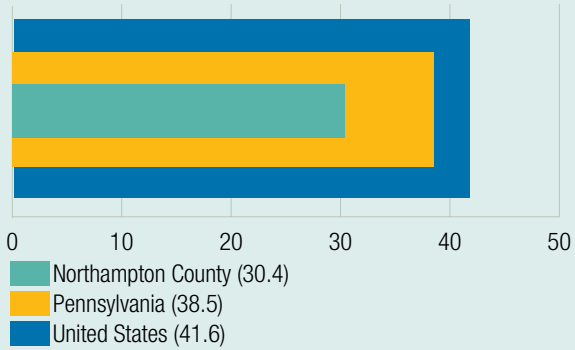
STROKE MORTALITY



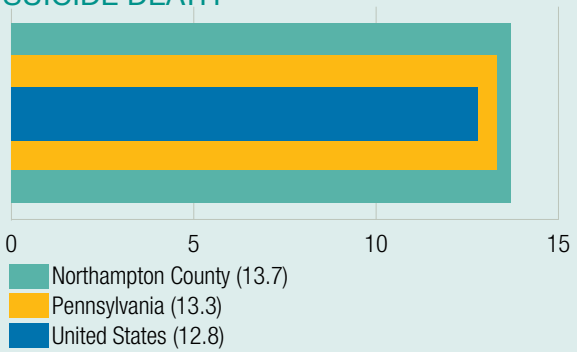
PEDESTRIAN MOTOR VEHICLE CRASH DEATH



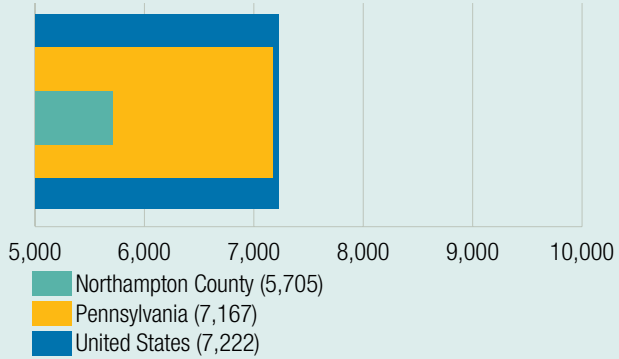
LUNG DISEASE MORTALITY



SUICIDE DEATH



YEARS OF POTENTIAL LIFE LOST



SUMMARY OF DATA

- 358,792 people live in Lehigh County and 300,520 people live in Northampton County.
- 16 percent of the population in Lehigh and Northampton counties is 65 or older. Just over 20 percent in each county is under age 17.
- The median family income is $70,098 in Lehigh County and $62,753 in Northampton County.
- 21.8 percent of the population of Lehigh County and 12.1 percent of Northampton County is Hispanic. 4.3 percent in Lehigh and 2 percent in Northampton speak a language other than English at home and are not proficient in English.
- In Lehigh County, 7.6 percent of the population is a veteran, and in Northampton County 8.5 percent of the population is a veteran.
- Within Lehigh County, 83.6 percent of students are receiving their high school diploma within four years; in Northampton County, this percentage is 88.3 percent. 12.5 percent of adults in Lehigh County and 9.6 percent of adults in Northampton County do not have a high school diploma.
- 40.49 percent of fourth-graders in Lehigh County and 42.9 percent in Northampton County are not proficient in reading. 30.8 percent of the Lehigh County population and 24.27 percent of the Northampton County population are living in poverty.
- 21 percent of the insured population of Lehigh County and 16.32 percent in Northampton County receive Medicaid. 9 percent of the population in Lehigh County and 7 percent in Northampton County are uninsured.
- Just over 10 percent of the population in Lehigh and Northampton counties are food insecure. 14.7 percent of the Lehigh County population and 11.2 percent of the Northampton County population receive SNAP benefits.
- About 20 percent of adults in Northampton and Lehigh counties lack adequate social and emotional support.
- In 2016, there were 1,556 DUI/DWI misdemeanor charges in Lehigh County, representing a 6 percent increase from 2011 to 2016. There were 1,312 DUI/DWI misdemeanor charges in Northampton County, representing a 0.83 percent decrease from 2011 to 2016 (The Unified Judicial System of Pennsylvania, County Caseload Statistics).
- About 18 percent of adults in both counties drink excessively. 20 percent of adults in Lehigh and Northampton counties are current smokers.
- No physical activity: 21 percent Lehigh County; 23 percent Northampton County.
- In Lehigh County, for every 10,000 adolescents in the community about 348 give birth as teenagers. This rate increases to 806 per 10,000 in the Hispanic population. In Northampton County, for every 10,000 adolescents 217 have a baby as a teenager. This rate increases to 616 in the Hispanic population.
- About 34 percent of households in Lehigh and Northampton counties spend 30 percent or more of their income on housing.
- 11.9 percent of adults in Lehigh County and 10 percent in Northampton County lack a consistent source of primary care.
- 15 percent of adults in Lehigh County and 13 percent in Northampton County have poor dental health.
- Adults report 3.9 poor mental health days last month in Lehigh County and 3.6 poor mental health days in Northampton County.
- 10 percent of adults in Lehigh and Northampton counties report having diabetes. 17 percent of adults in Lehigh County and 14 percent in Northampton County report having asthma.
- 7 percent of adults in Lehigh County and 6 percent in Northampton County report having heart disease. 33.6 percent of adults in Lehigh County and 28 percent in Northampton County have high cholesterol.
- In Lehigh County, 35 percent of adults are overweight and 30 percent are obese. In Northampton County, 37 percent of adults are overweight and 28 percent are obese.
- Among babies born in Lehigh County, 8.3 percent were born at low birth weight. Among babies born in Northampton County, 8.8 percent were born at low birth weight, which is above the Healthy People 2020 goal of 7.89 percent.
- In Lehigh County, prostate and breast cancer incidence is greatest. Lehigh County rates of cervical and prostate cancer are greater than those for Pennsylvania or the United States.
- In Northampton County, the incidence of breast and prostate cancer is greatest. The rates of these two types of cancer are also greater than those of Pennsylvania and the United States.
- In 2016, the Pennsylvania Department of Health listed heart disease and cancer as the top two leading causes of death in Lehigh and Northampton counties.

APPENDIX: SPOTLIGHT ON ALLENTOWN

One of LVHN's campuses is based in center city Allentown and is the primary location for services for vulnerable populations living in the Lehigh Valley. Therefore, we felt it would be beneficial to look at data specific to the City of Allentown and compare it to Lehigh County where applicable.

TOTAL POPULATION

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Allentown	119,624	17.55	6,817.11
Lehigh County	358,792	345.18	1,039.44

TOTAL POPULATION BY AGE

Report Area	Total Population	% Pop. Age 0–4	% Pop. Age 5–17	% Pop. Age 18–24	% Pop Age 25–34	% Pop. Age 35–44	% Pop. Age 45–54	% Pop. Age 55–64	% Pop. Age 65+
Allentown	119,624	7.36	19.08	12.28	15.09	12.52	11.65	10.23	11.78
Lehigh	358,792	21,339	60,717	32,799	45,670	44,571	50,553	46,208	56,935

POPULATION UNDER AGE 18

Report Area	Total Population	Population Age 0-17	% Population Age 0-17
Allentown	119,624	31,636	26.45
Lehigh County	358,792	82,056	22.87

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

FAMILIES WITH CHILDREN

A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage or adoption.

Report Area	Total Households	Total Family Households	Families with Children (Under Age 18)	Families with Children (Under Age 18), % of Total Households
Allentown	41,474	26,426	15,670	37.8
Lehigh	135,363	90,319	43,478	32.12

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

FINANCIAL HEALTH

Median Family Income

Report Area	Total Family Households	Average Family Income	Median Family Income
Allentown	41,474	$50,226.00	N/A
Lehigh County	135,363	$76,292.00	$57,685.00

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

DIVERSITY AND LANGUAGE

Total Population by Gender

Report Area	Male	Female	% Male	% Female
Allentown	57,813	61,811	48.33	51.67
Lehigh County	174,829	183,963	48.73	51.27

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Total Population by Race Alone

Report Area	White		Black		Asian		Native American/ Alaska Native		Native Hawaiian/ Pacific Islander		Other		Multiple	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Allentown	70,339	58.8	16,794	14.04	2,550	2.05	382	0.32	126	0.11	24,076	20.13	5,452	4.56
Lehigh	282,360	78.70	24,174	6.74	11,680	3.26	701	0.2	134	0.04	29,356	8.18	10,387	2.89

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Total Population by Ethnicity

Report Area	Total Population	Hispanic or Latino	% Hispanic or Latino	Non-Hispanic	% Non-Hispanic
Allentown	119,624	58,593	48.98	61,031	51.02
Lehigh	358,792	78,318	21.83	280,474	78.17

Hispanic Population by Race Alone, Percent

Report Area	White	Black	Asian	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander	Some Other Race	Multiple Races
Allentown	46.86%	6.77%	0.03%	0.38%	0.22%	40.71%	5.05%
Lehigh County	50.94%	6.69%	0.21%	0.43%	0.16%	36.38%	5.19%

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Population With limited English Proficiency

Report Area	Total Pop Age 5+	Linguistically Isolated	% Linguistically Isolated
Allentown	110,815	9,971	9
Lehigh County	337,453	14,556	4.31

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

DISABILITIES AND VETERANS

Population with Any Disability

Percentage of the total civilian non-institutionalized population with a disability. A disability is defined as individuals who report any one of the following six disability types: (1) hearing difficulty, (2) vision difficulty, (3) cognitive difficulty, (4) ambulatory difficulty, (5) self-care (bathing and dressing) difficulty, (6) independent living (doing errands alone) difficulty.

Report Area	Total Population (For Whom Disability Status Is Determined)	Total Population with a Disability	% Population with a Disability
Allentown	117,369	21,641	18.44
Lehigh County	353,896	49,613	14.02

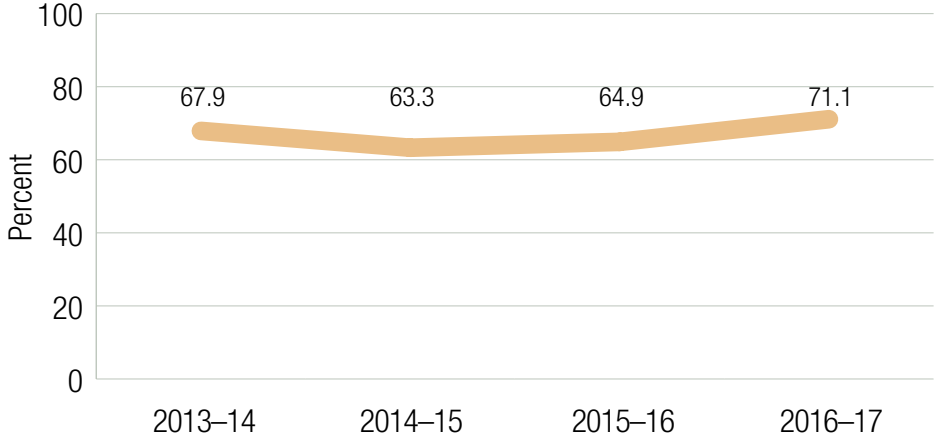
Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

HEALTH FACTORS

SOCIAL AND ECONOMIC FACTORS

Education

High School Graduation Rate



Population Education Level, Age 25+

Report Area	Total Population	No High School Diploma		Bachelor's Degree or Higher	
		N	%	N	%
Allentown	73,302	15,925	21.73	11,268	15.37
Lehigh	243,937	13,362	12.53	16,412	15.39

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Population with No High School Diploma by Ethnicity Alone

Report Area	Total Hispanic/ Latino	Total Not Hispanic/Latino	% Hispanic/ Latino	% Not Hispanic/ Latino
Allentown	9,778	6,147	32.6	14.19
Lehigh	11,399	17,714	28.21	8.7

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Student Reading Proficiency (Fourth Grade)

Percentage of children in grade 4 whose reading skills tested below the "proficient" level for the English Language Arts portion of the state-specific standardized test.

Report Area	Total Students with Valid Test Scores	% of Students 'Proficient' or Better	% of Students 'Not Proficient' or Worse
Allentown	1,555	36.99	63.01
Lehigh	3,820	59.51	40.49

Data Source: US Department of Education, EDFacts. Accessed via DATA.GOV. 2014-15. Source geography: School District

INCOME AND POVERTY

Children Eligible for Free/Reduced Price Lunch

Report Area	Total Students	Number of Students Eligible	% Free/Reduced Price Lunch Eligible
Allentown	36,388	25,146	69.11
Lehigh	52,251	23,014	44.05

Data Source: National Center for Education Statistics, NCES - Common Core of Data. 2015-16. Source geography:

Uninsured Population by Age Group, Percent

Report Area	Under Age 18	Age 18– 64	Age 65 +	Total Population
Allentown	5.53	21.7	0.95	15
Lehigh County	4.07	12.9	0.41	8.95

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

FOOD ACCESS

Low Food Access

Report Area	Total Population	Population with Low Food Access	% Population with Low Food Access
Allentown	236,064	10,608	4.49
Lehigh County	349,497	94,906	27.16

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015. Source geography: Tract

Population Receiving SNAP Benefits

Report Area	Total Population	Population Receiving SNAP Benefits	% Population Receiving SNAP Benefits
Allentown	121,811	17,906	14.7
Lehigh	360,685	53,021	14.7

Data Source: US Census Bureau, Small Area Income & Poverty Estimates. 2015. Source geography: County

COMMUNITY SAFETY AND VIOLENCE

Violent Crime

Report Area	Total Population	Violent Crimes	Violent Crime Rate (Per 100,000 Pop.)
Allentown	120,070	290	242.3
Lehigh	355,532	861	242.3

Data Source: Federal Bureau of Investigation, FBI Uniform Crime Reports. Additional analysis by the National Archive of Criminal Justice Data. Accessed via the Inter-university Consortium for Political and Social Research. 2012-14. Source geography: County

HEALTH BEHAVIORS

SEXUAL HEALTH

STI - Chlamydia Incidence

Report Area	Total Population	Total Chlamydia Infections	Chlamydia Infections, Rate (Per 100,000 Pop.)
Allentown	121,810	547	448.9
Lehigh	360,685	1,619	448.9

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2016. Source geography: County

STI – Gonorrhea Incidence

Report Area	Total Population	Total Gonorrhea Infections	Gonorrhea Infections, Rate (Per 100,000 Pop.)
Allentown	121,810	83	68.5
Lehigh	360,685	247	68.5

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2016. Source geography: County

STI – HIV Prevalence

Report Area	Population Age 13+	Population with HIV/AIDS	Population with HIV/AIDS, Rate (Per 100,000 Pop.)
Allentown	102,229	326	320
Lehigh	302,704	966	319.1

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2015. Source geography: County

HEALTH SCREENING

Mammogram

Report Area	Total Medicare Enrollees	Female Medicare Enrollees		
		N	N with Mammogram in Past 2 Years	% with Mammogram in Past 2 Years
Allentown	9,524	865	567	65.5
Lehigh	34,534	2,724	1,795	65.9

Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County

YOUTH BEHAVIORS

The following highlights are from the 2017 Pennsylvania Youth Survey (PAYS) for Allentown School District. A total of 253,566 surveys of students from grades 6, 8, 10, and 12 were completed across more than 973 schools from over 400 school districts. In the Allentown School District, 3,241 surveys of students from grades 6, 8, 10, and 12 from nine schools were completed; this is a participation rate of 68.8 percent.

- The most common early initiation/higher prevalence substance used was alcohol (37.9 percent of students in this district, compared to 43.3 percent at the state level). The next most frequent drug used was marijuana, with 17.7 percent indicating lifetime use (compared to 17.7 percent at the state level).
- The prescription drug most frequently used by students in this district was prescription narcotics (5 percent of students indicating lifetime use, compared to 5.1 percent at the state level). The next most frequently used substance was over-the-counter drugs to get high (3.8 percent of students indicating lifetime use, compared to 3.8 percent at state level).
- 7 percent of students in this district engaged in binge drinking in the past two weeks (compared to 7.5 percent at the state level). 1.8 percent of students reported driving while or shortly after drinking (compared to 2.2 percent at the state level).
- The most frequent "other" antisocial behavior in Allentown City School District was "been suspended from school," reported by 15.0 percent of students (compared to 7.5 percent at the state level). 9 percent of respondents reported they had been drunk or high at school in the last 12 months.
- 65.6 percent students in this district viewed the things they are learning in school as going to be important later in life (compared to 57.5 percent at the state level). School work was viewed as meaningful and important by 41.7 percent of students (state rate: 40.4 percent) and 41.7 percent enjoyed being in school during the past year (state rate: 41.3 percent).
- A feeling of safety was reported by 74.6 percent of the students, compared to 83.4 percent at the state level. 71.6 percent students reported opportunities to talk with a teacher one-on-one (state rate: 77.2 percent) and 76.2 percent reported chances to be part of class discussions or activities (state rate: 86.7 percent). 53.3 percent of students reported that teachers praise them when they work hard in school (state rate: 52.7 percent).
- 71 percent of students in this district reported participating in at least one pro-social activity, compared to 86.5 percent at the state level.
- In the past 12 months, 23.7 percent of students in this district reported being threatened with violent behavior on school property (compared to 20.5 percent at the state level). 10.7 percent of students reported having actually been attacked on school property (2.6 percent reported being attacked with weapons). 2.2 percent of students had brought a weapon to school (state rate: 1.2 percent). 23.7 percent of students reported they had been threatened to be hit or beaten up on school property in the past 12 months (compared to a state rate of 20.5 percent).
- Overall, 20.1 percent of students in this district indicated experiencing bullying in the past 12 months (compared to 28.2 percent of students at the state level).
- The most common depressed thought was "at times I think I am no good at all," reported by 37.4 percent of students in this district. 45.1 percent of students reported they felt sad or depressed MOST days in the past 12 months. Overall, 19.1 percent of students had seriously considered attempting suicide, (compared to 16.5 percent of students at the state level).

PHYSICAL ENVIRONMENT

HOUSING

Housing Cost Burden (30%)

Report Area	Total Households	Cost Burdened Households	% of Cost Burdened Households
Allentown	41,474	19,408	46.8
Lehigh	135,363	46,514	34.36

Note: This indicator is compared to the state average. Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

Housing – Substandard Housing

Report Area	Total Occupied Housing Units	Occupied Housing Units with One or More Substandard Conditions	% Occupied Housing Units with One or More Substandard Conditions
Allentown	41,474	19,647	47.37
Lehigh	135,363	46,309	34.21

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

ACCESS TO COMMUNITY INFRASTRUCTURE

SNAP-Authorized Food Stores (Rate per 10,000 Population)

Report Area	Total Population	Total SNAP-Authorized Retailers	Rate of SNAP-Authorized Retailers
Allentown	236,064	312	13.22
Lehigh	349,497	292	8.35

Data Source: US Census Bureau, American Community Survey. 2012-16. Source geography: Tract

CLINICAL CARE

Access to Primary Care

Report Area	Total Population, 2014	Primary Care Physicians, 2014	Primary Care Physicians, Rate per 100,000 Pop.
Allentown	120,843	140	116.3
Lehigh	357,823	416	116.3

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014. Source geography: County

Access to Dentists

Number of dentists per 100,000 population. This indicator includes all dentists – qualified as having a doctorate in dental surgery (DDS) or dental medicine (DMD), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.

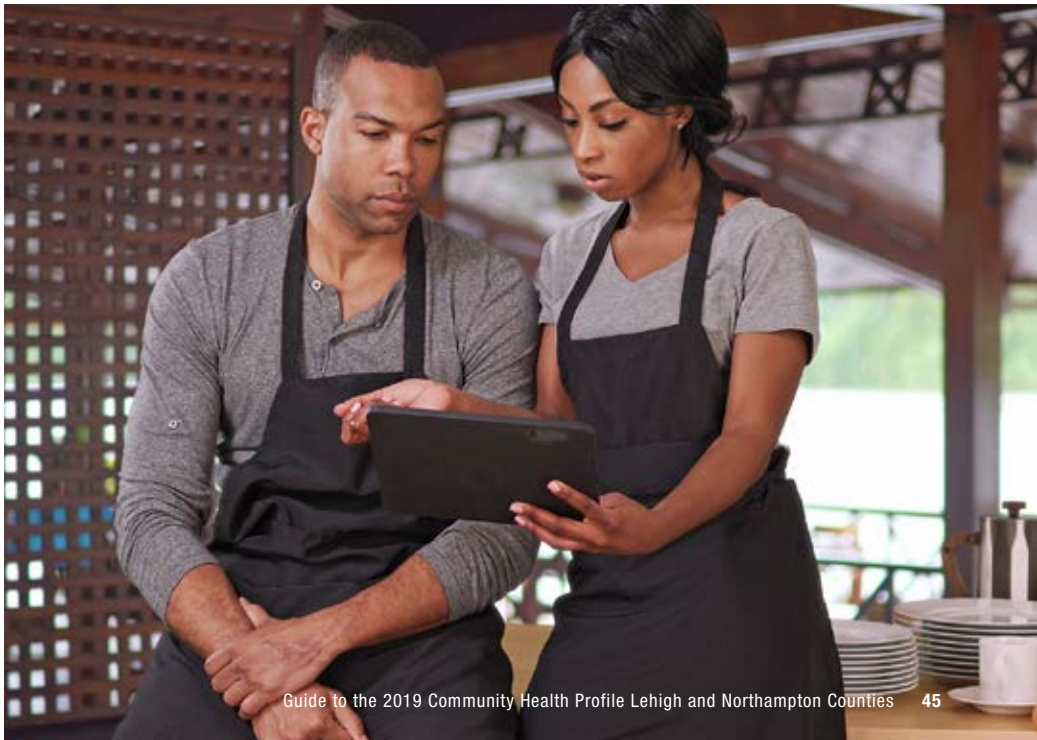
Report Area	Total Population, 2015	Dentists, 2015	Dentists, Rate per 100,000 Pop.
Allentown	121,810	102	84.01
Lehigh	360,685	303	84.01

Data Source: US Department of Health Human Services, Health Resources and Services Administration, Area Health Resource File. 2015. Source geography: County

Diabetes Management

Report Area	Total Medicare Fee-for-Service Beneficiaries	Beneficiaries with Diabetes	% with Diabetes
Allentown	12,126.96	3,224.31	26.6
Lehigh	44,633	11,867	26.6

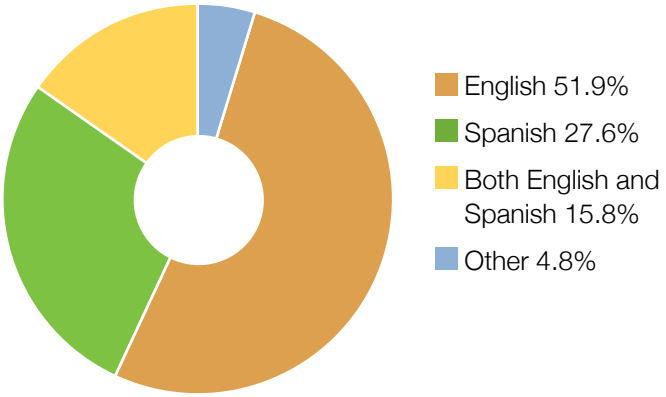
Note: This indicator is compared to the state average.
Data Source: Centers for Medicare and Medicaid Services. 2015. Source geography: County



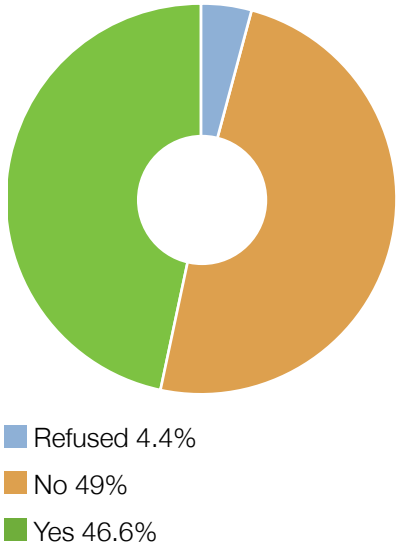
PNLV 2018 NEIGHBORHOOD SURVEY

A total of 1,002 surveys were collected across four census tracts in downtown Allentown during the summer of 2018. Below presents some highlights of the survey findings.

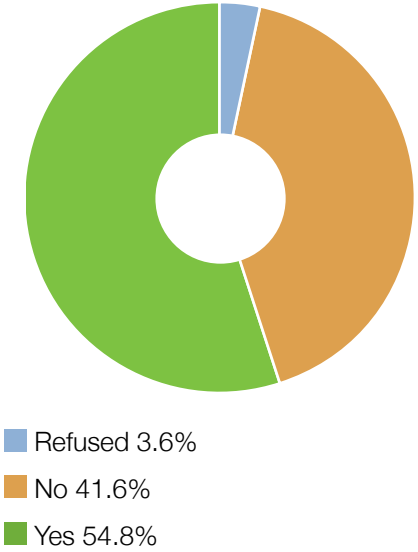
PRIMARY LANGUAGE SPOKEN IN THE HOME



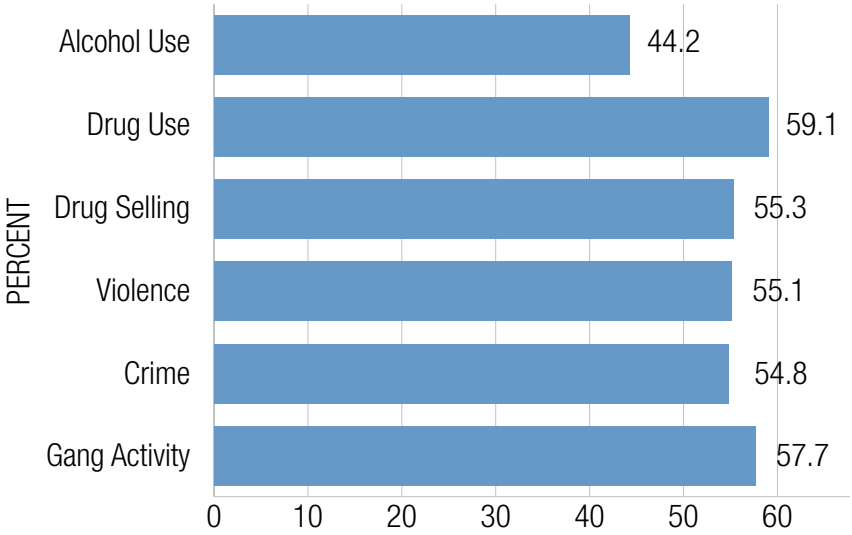
SOMEONE IN HOUSEHOLD SMOKES



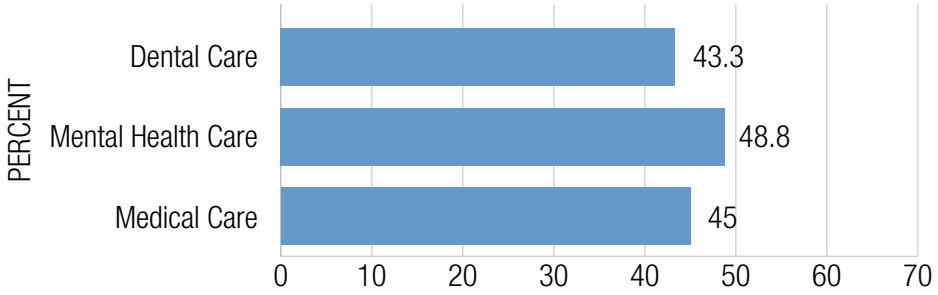
USE OF EMERGENCY DEPARTMENT AS PRIMARY CARE



PERCEIVED ISSUES IN THE COMMUNITY



NEEDED ACCESS TO CARE



13 percent of respondents reported no one in their household has health insurance

ONCOLOGY COMMUNITY NEEDS ASSESSMENT LEHIGH AND NORTHAMPTON COUNTIES

INTRODUCTION

Lehigh Valley Cancer Institute at Lehigh Valley Health Network is an accredited program with the American College of Surgeons Commission on Cancer. As a part of this accreditation, we are required to conduct a triennial community health needs assessment (CHNA) to address health care disparities and barriers to cancer care. From this CHNA, we will establish or enhance navigation processes and identify resources to address barriers to care each year of the three-year cycle. The CHNA assesses the cancer program's community and local population, evaluates socioeconomic characteristics, demographic characteristics, behavioral/psychosocial characteristics (e.g., tobacco use) and the cancer burden of the community served.

DESCRIPTION OF FACILITY

Lehigh Valley Health Network (LVHN) includes eight hospital campuses and 22 health centers caring for communities in seven counties in eastern Pennsylvania. Our Cedar Crest, Muhlenberg and Bangor Cancer Centers are located in Lehigh and Northampton counties where over 3,500 analytic cancer cases were identified in 2017. Lehigh Valley Cancer Institute provides a full-range of prevention, screening, diagnostic, treatment, rehabilitation, multidisciplinary consultations, hemophilia, genetics, supportive care, palliative care, home care/hospice and survivorship services at multiple locations. LVHN offers over 100 leading-edge clinical trials through relationships with Memorial Sloan Kettering (MSK), NCI Community Oncology Research Program (NCORP) and private industry. Tumor board case conferences are held for all cancer sites including joint tumor boards and disease management teams. Interdisciplinary breast services include self-referral mammography, 3D digital tomosynthesis, and minimally invasive breast biopsies. Breast Health Services has 15 convenient locations throughout the region, and this year we added a mobile mammography coach. The mobile unit brings screening services to workplaces, schools and community organizations in an effort to decrease barriers to care and find cancers at their earliest, most curable stage. LVHN has the region's only NAPBC Breast Center of Excellence. Radiation Oncology services include Gamma Knife® Icon,™ intensity-modulated radiation therapy (IMRT), image-guided radiation therapy (IGRT), stereotactic radiosurgery (SRS), stereotactic body radiotherapy (SBRT), brachytherapy, and 4D treatment planning (respiratory gating), Calypso,® SpaceOAR® and more. Multidisciplinary consultation/clinics are offered for patients diagnosed with breast, lung/thoracic, prostate, melanoma/soft tissue, gastrointestinal, head and neck, and cervical cancers. Multidisciplinary clinics are staffed with nurse navigators, medical oncologists, surgeons, radiation oncologists, social workers and other professionals who provide a multidisciplinary approach to disease management with a single cohesive recommendation for plan of care.

At Lehigh Valley Cancer Institute, the word "institute" describes a location where clinicians of the highest caliber collaboratively conduct patient care, research, and participate in provider education at the highest level to better predict, prevent and combat disease. We have adopted the institute model because we have the necessary infrastructure, programs and partnerships in place to help our communities stay healthy and provide the most advanced treatment when needed. This includes our membership in the Memorial Sloan Kettering Cancer Alliance, which offers the nation's highest standard of oncology care, access to key MSK clinical trials and integrated learning.

BASIC FACTS ABOUT CANCER

WHAT IS CANCER?

- Cancer is a group of diseases related to the uncontrolled growth and spread of abnormal cells.
- Death can occur if growth of abnormal cells spreads.
- If detected early and treated promptly, many cancers can be cured.

WHAT CAUSES CANCER?

- Tobacco, diet and obesity are major contributors to cancer.
- Other contributors are believed to include alcohol consumption, sedentary lifestyle, occupation, family history, viruses/ biologic agents, prenatal factors/growth, reproductive factors, socioeconomic status, environmental pollution, ionizing/ ultraviolet radiation and some drugs/prescription medicines.

HOW IS CANCER PREVENTED?

- Primary prevention includes avoiding cancer-causing exposures like tobacco, sun exposure, excess and dietary fat.
- Secondary prevention includes early detection and treatment of benign precursor lesions.

HOW IS CANCER TREATED?

- Surgery, radiation, chemotherapy, hormones and immunotherapy/ targeted therapy

WHO GETS CANCER?

- Cancer strikes all segments of the population.
- Occurrence of cancer rises with age and exposure to risk factors.

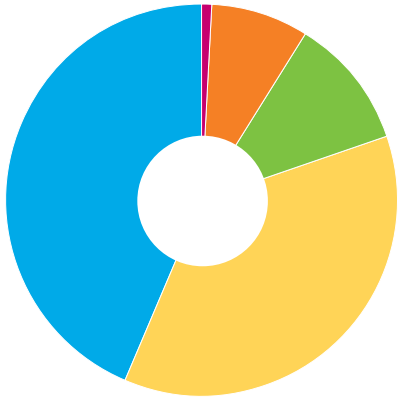
WHAT ARE THE MOST COMMON CANCERS?

- In Pennsylvania, the top 10 cancers by incidence rate are breast, prostate, lung and bronchus, colon and rectum, uterine, bladder, melanoma of skin, thyroid, non-hodgkin lymphoma and kidney.

SURVEY RESPONSES

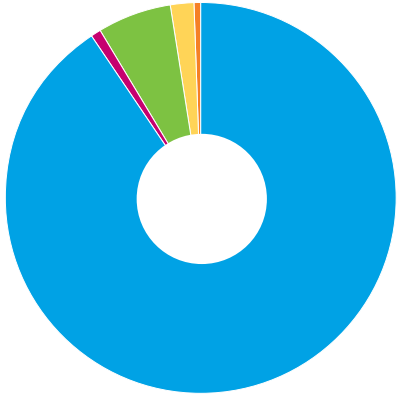
LEHIGH AND NORTHAMPTON COUNTIES DEMOGRAPHICS (N = 3,373)

AGE



- 18–25 (5%)
- 26–39 (8%)
- 40–49 (11%)
- 50–64 (35%)
- 65 and older (44%)

RACE/ETHNICITY



- Asian (0.5%)
- Black/African American (0.9%)
- Hispanic/ Latino (2%)
- Other (6%)
- White (91.6%)

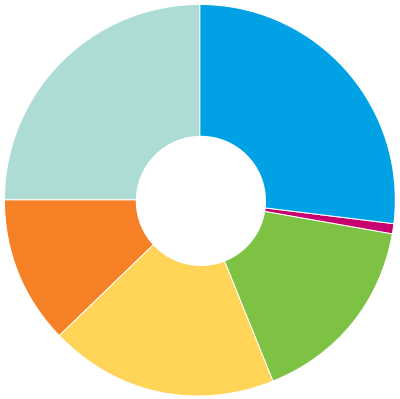
COUNTY OF RESIDENCE

Lehigh (65%)
Northampton (35%)

PRIMARY LANGUAGE

ENGLISH (98%)
OTHER (0.2%)

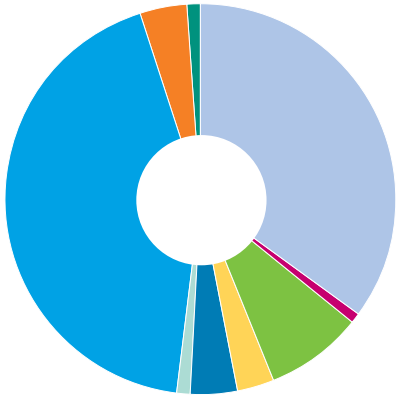
EDUCATION LEVEL



- Less than high school (1%)
- High school/GED (16%)
- College, no degree (19%)
- Associate degree (12%)
- Bachelor's degree (25%)
- Graduate or professional degree (27%)

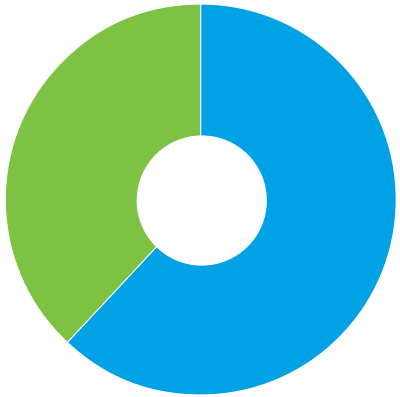
12%
RESPONDENTS WHO REPORTED THAT THEY ARE A VETERAN

EMPLOYMENT STATUS



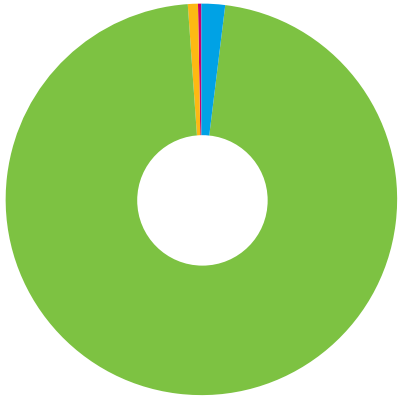
- Homemaker full time (4%)
- Student full time (1%)
- Retired (43%)
- Employed full time (35%)
- Employed part-time 4(%)
- Self-employed full time (3%)
- Self-employed part-time (8%)
- Unemployed for <one year (1%)
- Unemployed for >one year (1%)
- Not working because of illness or injury (4%)

GENDER IDENTITY



- Male (38%)
- Female (62%)

SEXUAL ORIENTATION

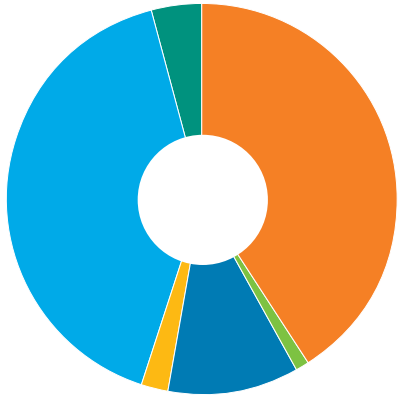


- Straight (not Lesbian or Gay) (96.2%)
- Lesbian or Gay (1%)
- Bisexual (0.6%)
- Other (0.1%)
- Prefer not to disclose (2%)

MILITARY VETERAN

Yes (12%) No (88%)

MILITARY DEPLOYMENT (N = 388)

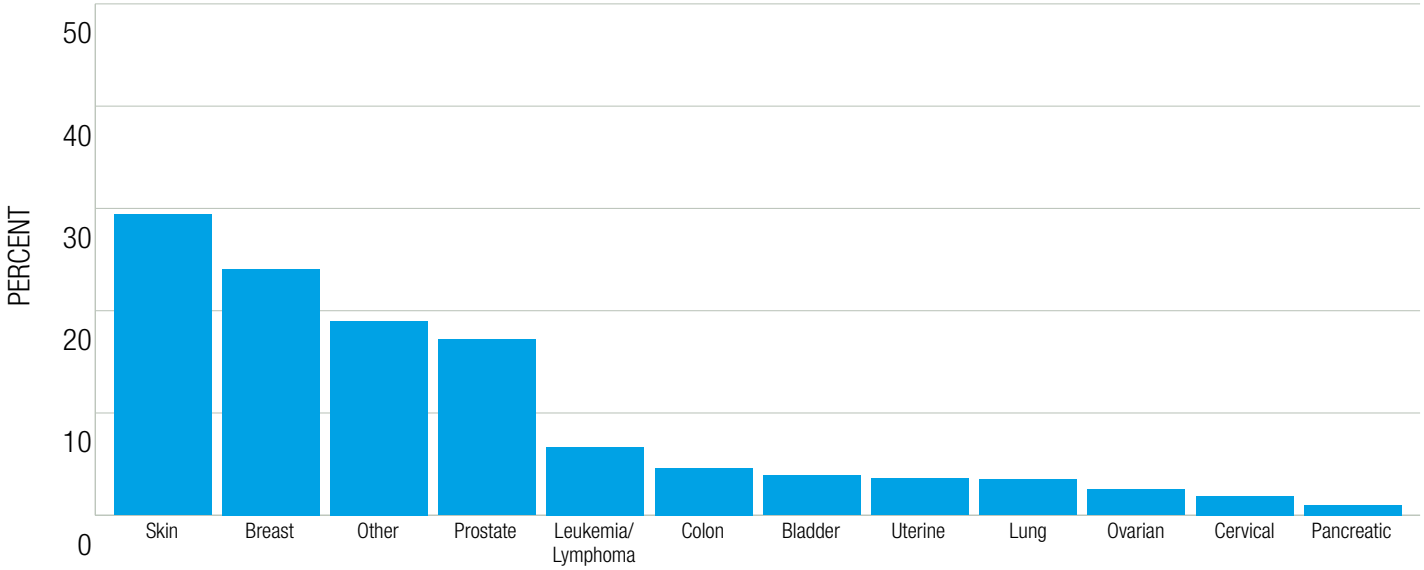


- Operation Enduring Freedom (1%)
- Iraq War (2%)
- Persian Gulf War (4%)
- Vietnam War (41%)
- Other (11%)
- None of these (14%)

EXPERIENCES WITH CANCER, CANCER SCREENING AND TREATMENT

INDIVIDUALS WITH AT LEAST ONE PREVIOUS CANCER DIAGNOSIS

- 33% (N = 1127) of respondents said they have been told in the past that they have cancer.



ARE YOU BEING TREATED RIGHT NOW? (N = 1,119)

Yes (29%) No (71%)

HAS ANYONE IN YOUR IMMEDIATE FAMILY HAD CANCER? (N = 3,352)

Yes (67%) No (33%)

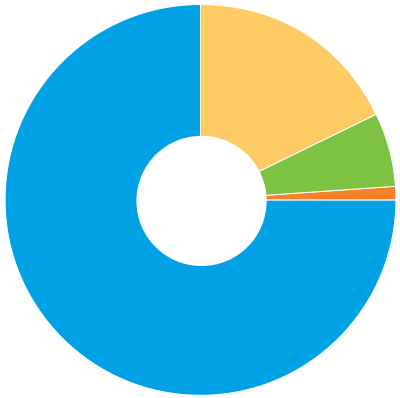
AMONG ALL RESPONDENTS:

- 22.8 percent (N = 504) have had someone talk to them about genetic counseling.
- 30.4 percent (N = 1020) have had a family member receive hospice care for cancer, and 14.5 percent (N = 485) had a family member receive palliative care.
- 56.5 percent (N = 1837) said they would consider participating in a clinical trial.

CANCER SCREENING UTILIZATION

- 96 percent of women over the age of 40 (N = 1770) reported ever having a mammogram done.
- Among male respondents (N = 1267), 20.7 percent always practice testicular self-exams, 42.9 percent practice sometimes, and 34.3 percent never.
- 76.5 percent of respondents over the age of 45 reported having been screened for some type of cancer (including skin, lung, prostate, oral, colon and cervical).
- The most common reason respondents did not get a screening was they did not know they needed a screening (11.3 percent). Less than 2 percent of respondents reported other reasons including not having a provider, lack of transportation, fear of possible results and lack of access to a screening.

IMPORTANCE OF CANCER SCREENINGS TO HEALTH

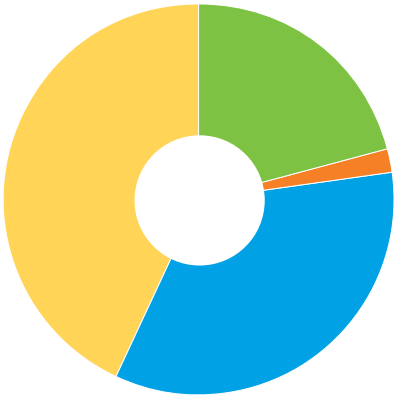


- Very Important (75%)
- Important (18%)
- Somewhat Important (6%)
- Not Important (1%)

FREQUENCY OF EXERCISING 30 MINUTES OR MORE AT A TIME

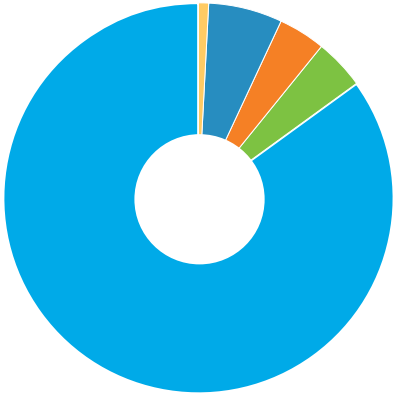
- Daily (25%)
- Once or twice a week (41%)
- Once or twice a month (17%)
- Never (17%)

FREQUENCY OF APPLYING SUNSCREEN BEFORE OUTDOOR ACTIVITIES



- Always (21%)
- Never (34%)
- Sometimes (43%)
- Not Applicable (2%)

FREQUENCY OF TEETH CLEANING



- Every year (85%)
- Every 2–5 years (6%)
- More than 5 years (4%)
- Never (1%)
- Not sure (4%)

TOBACCO PRODUCT USE AND EXPOSURE

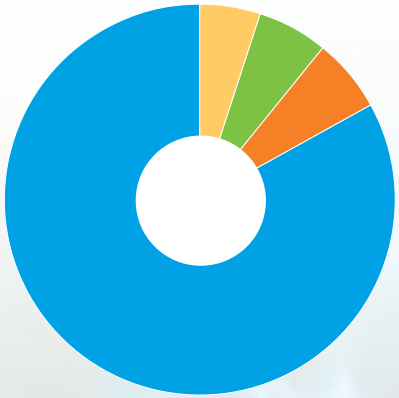
Cigarettes N = 157
Cigars N = 28
Other N = 5

- 83.2 percent of current users use these products daily
- 78.7 percent (N = 378) are never exposed to smoke or vapor in their home

ARE YOU A CURRENT OR FORMER TOBACCO USER?

- Yes, I am a current user (6%)
- Yes, I am a former user (35%)
- No, I have never used these products (59%)

HOW LONG AGO DID YOU QUIT USING TOBACCO PRODUCTS? (N = 1,160)



- Within the last year (5%)
- More than 1–3 years ago (6%)
- More than 3–5 years ago (6%)
- More than 5 years ago (83%)

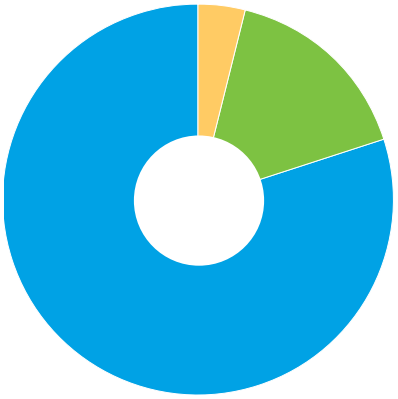
HOW MANY TIMES DURING THE PAST 30 DAYS DID YOU HAVE 2 OR MORE DRINKS IN AN EVENING? (N = 506)

- Never (51%)
- 1–5 (34%)
- 6–10 (7%)
- More than 10 (8%)

PERCENT OF RESPONDENTS AWARE OF CANCER INSTITUTE SERVICES	N = 2,515
Treatment options (surgery, chemotherapy, radiation therapy)	72%
Complimentary valet parking	68%
Hospice	62%
Support group	55%
Cancer clinical trials (prevention and treatment)	51%
Nutrition counseling	48%
Pastoral services	47%
Pain management clinic	45%
Social work	36%
Genetic counseling	34%
Patient educators	33%
Classes (preparing for breast surgery)	33%
Financial counseling	29%
Patient navigators	27%
Interpreter services	28%
Psychosocial counseling	22%
Online cancer fact sheets	21%
Complementary therapies (reiki, acupuncture)	15%
Limited transportation service	13%

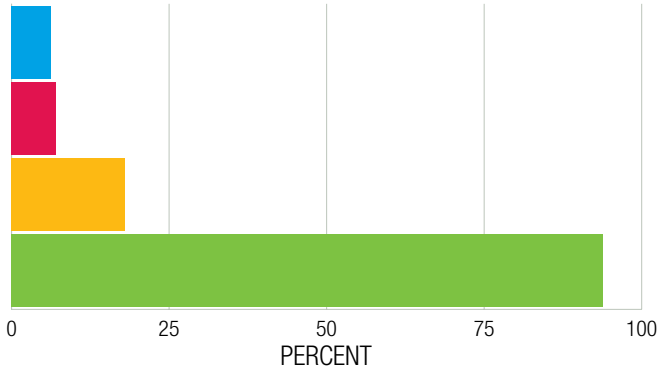
- 68.5 percent of respondents (N = 3,355) had not been immunized against HPV. 22 percent (N = 737) were unsure, and 5.6 percent (N = 187) received the immunization.
- 35.5 percent (N = 1,192) were immunized against hepatitis B, while 31.5 percent (N = 1,057) were not. 31.1 percent (N = 1,045) did not know whether they received it.
- Of respondents with children age 11–26 (N = 1,181), 33 percent said the children were not immunized against HPV, while 48.1 percent said their children were immunized. 18.5 percent were unsure.
- 73 percent of respondents (N = 2343) rely on their medical providers for obtaining cancer-related information. 61 percent (N = 1944) rely on the internet, 44.7 percent (N = 1423) rely on family and friends, and 16.9 percent (N = 537) from the newspaper.
- 15.9 percent of respondents (N = 527) come in contact with one or more of the following: asbestos, pesticides, solvents, benzene, formaldehyde. 41.3 percent (N = 218) of those said this is related to their profession.

WHEN WAS YOUR LAST PHYSICAL EXAM?



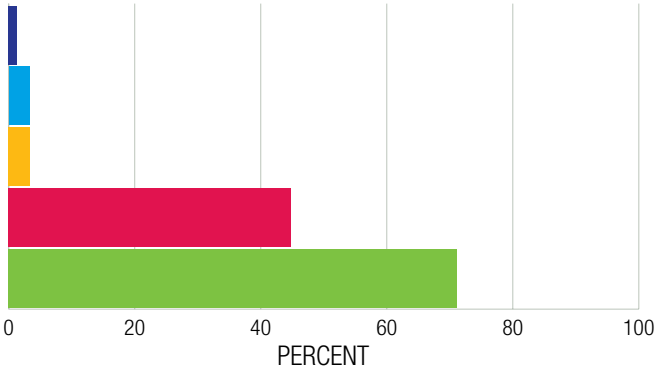
- Less that one year (80%)
- 1 year to less than 3 years (18%)
- More than 3 years (4%)

WHICH HEALTH CARE LOCATIONS DO YOU USUALLY GO TO WHEN YOU ARE SICK OR NEED ADVICE ABOUT YOUR HEALTH?



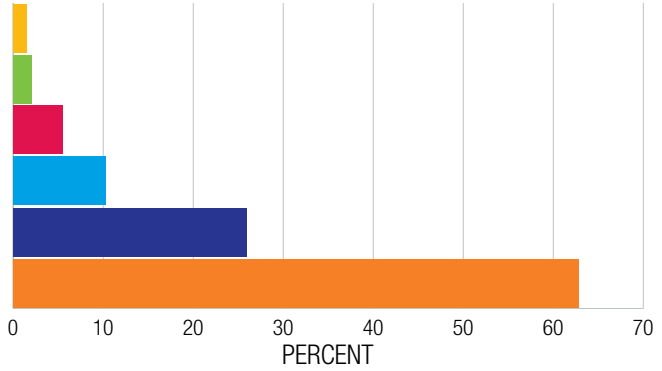
- Internet/Online Visit (6.3%)
- Hospital Emergency Dept. (7.1%)
- Urgent Care (18%)
- Doctor's Office (93.8%)

WHAT TYPE OF HEALTH INSURANCE DO YOU CURRENTLY HAVE?



- No insurance (1.3%)
- Medicare (44.8%)
- Veterans Coverage (3.3%)
- Private (71.1%)
- Medicaid (3.4%)

WHAT IS THE BIGGEST OBSTACLE YOU FACE WHEN ACCESSING HEALTH CARE?



- No transportation (1.5%)
- No insurance (2.1%)
- Location of services (5.5%)
- Not sure what is available (10.3%)
- Time/scheduling (25.9%)
- N/A (62.8%)

- When asked, "Have you ever chosen NOT to fill a prescription because the medication was too expensive?" 25.6 percent (N = 857) said yes, but not often, and 4.2 percent said yes, and often.

COMPLEMENTARY THERAPY UTILIZATION:

- 60.8 percent of respondents (N = 1,961) said that they would be interested in using complementary, integrative or alternative therapies offered by LVHN.
- 25.7 percent of those surveyed (N = 856) use complementary, alternative or integrative medicine products or services.
- Of those, 30 percent (N = 259) said those services were recommended by their doctor.
- The most utilized services were chiropractic, massage therapy, relaxation techniques and yoga.

LVH STATISTICS FROM TUMOR REGISTRY

LVH PREVALENCE BY DISEASE SITES

2017 ANALYTIC CASES BY PRIMARY BODY SITE

PRIMARY SITE	TOTAL
Head and Neck	**96**
Digestive Organs	**621**
Esophagus	35
Stomach	44
Small Intestine	22
Colon	196
Rectosigmoid Junction	15
Rectum	79
Anus and Anal Canal	8
Liver and Bile Ducts	68
Gallbladder	10
Other Biliary Tract	12
Pancreas	125
Other Digestive Organs	7
Thorax	**459**
Bronchus and Lung	446
Thymus	5
Heart Mediastinum Pleura	8
Musculoskeletal/Soft Tissue Sites	**12**
Blood and Bone Marrow	**226**
Skin	**148**
Breast	**504**
Female Genital Organs	**352**
Vulva	17
Vagina	6
Cervix Uteri	26
Corpus Uteri	206
Uterus Nos	5
Ovary	76
Other Female Genital Organs	15
Placenta	1

PRIMARY SITE	TOTAL
Male Genital Organs	**281**
Penis	3
Prostate Gland	267
Testis	10
Other and Unspecified Male Genital Organs	1
Urinary Tract Organs	**314**
Kidney	133
Kidney, Renal Pelvis	18
Ureter	4
Urinary Bladder	157
Other and Unspecified Urinary Organs	2
Central Nervous System	**206**
Meninges	114
Brain	78
Other Nervous System	14
Endocrine Glands	**128**
Thyroid Gland	104
Adrenal Gland	2
Other Endocrine Glands	22
Other	**9**
Other Ill-Defined Sites	2
Retroperitoneum and Peritoneum	7
Lymph Nodes	**152**
Unknown Primary	**49**

Source: LVH Tumor Registry

3,557

ANALYTIC CASES

2017 LVH ANALYTIC CASE STAGING- SELECT SITES BY STAGE OF DISEASE

BREAST	
Stage	**Volume**
Stage 0	70
Stage 1	216
Stage 2	115
Stage 3	36
Stage 4	30
Stage unknown	3
TOTAL	**470**

LUNG	
Stage	**Volume**
Stage 0	1
Stage 1	120
Stage 2	37
Stage 3	85
Stage 4	189
Stage unknown	11
TOTAL	**443**

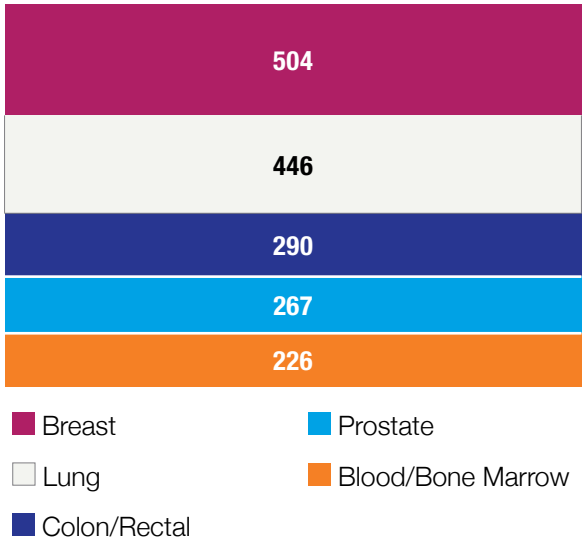
PROSTATE	
Stage	**Volume**
Stage 0	n/a
Stage 1	50
Stage 2	143
Stage 3	31
Stage 4	25
Stage unknown	18
TOTAL	**267**

COLON	
Stage	**Volume**
Stage 0	8
Stage 1	32
Stage 2	43
Stage 3	61
Stage 4	36
Stage unknown	15
TOTAL	**195**

RECTUM	
Stage	**Volume**
Stage 0	3
Stage 1	8
Stage 2	16
Stage 3	24
Stage 4	20
Stage unknown	8
TOTAL	**79**

Source: LVH Tumor Registry

TOP FIVE MOST PREVALENT CANCER SITES TREATED AT LVH–CEDAR CREST AND LVH–MUHLENBERG CY 2017



Source: LVH Tumor Registry

2017 LVHN AGE AT DIAGNOSIS FOR TOP FIVE DISEASE SITES

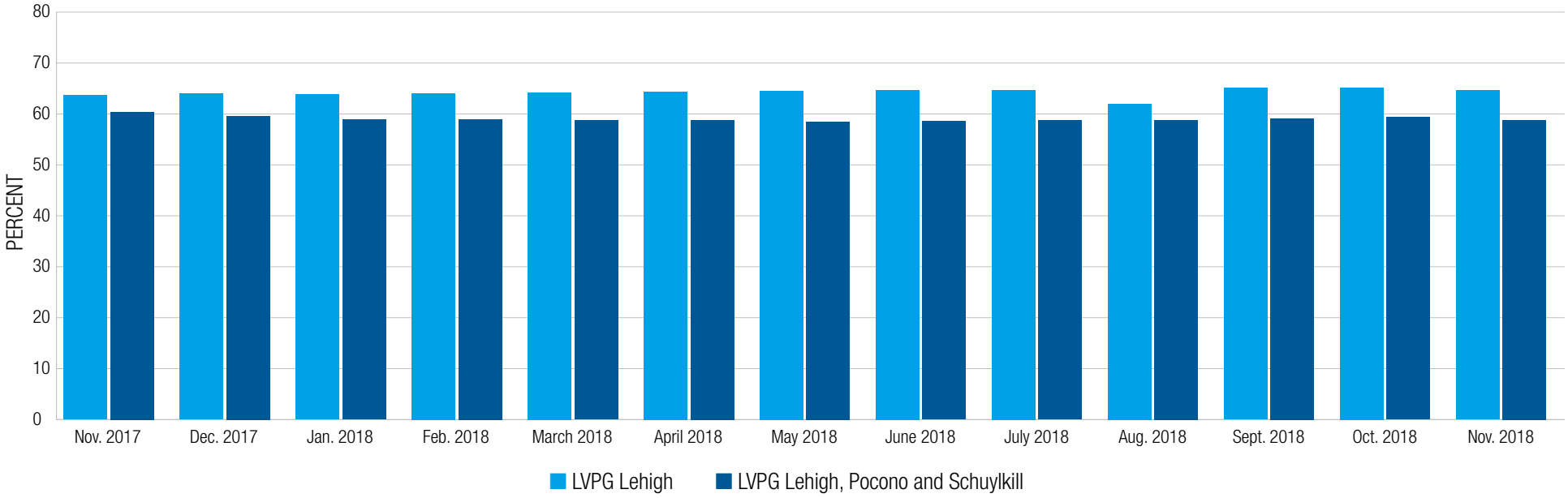
INCIDENCE OF BREAST CANCER											
Age at diagnosis	0–9	10–19	20–29	30–39	40–49	50–59	60–69	70–79	80–89	90–100	**TOTAL**
(N)	–	–	2	15	70	111	152	113	37	4	**504**
INCIDENCE OF LUNG CANCER											
Age at diagnosis	0–9	10–19	20–29	30–39	40–49	50–59	60–69	70–79	80–89	90–100	**TOTAL**
(N)	–	1	0	3	10	57	137	140	86	12	**446**
INCIDENCE OF PROSTATE CANCER											
Age at diagnosis	0–9	10–19	20–29	0–39	40–49	50–59	60–69	70–79	80–89	90–100	**TOTAL**
(N)	–	–	0	0	2	42	126	76	19	2	**267**
INCIDENCE OF COLON CANCER											
Age at diagnosis	0–9	10–19	10–29	30–39	40–49	50–59	60–69	70–79	80–89	90–100	**TOTAL**
(N)	–	–	2	4	20	29	48	46	43	4	**196**
INCIDENCE OF RECTAL CANCER											
Age at diagnosis	0–9	10–19	20–29	30–39	40–49	50–59	60–69	70–79	80–89	90–100	**TOTAL**
(N)	–	–	0	1	10	23	20	19	6	0	**79**
INCIDENCE OF BLOOD AND BONE MARROW CANCER											
Age at diagnosis	0–9	10–19	20–29	30–39	40–49	50–59	60–69	70–79	80–89	90–100	**TOTAL**
(N)	7	4	3	2	18	26	57	58	43	8	**226**

Source: LVHN Tumor Registry)

LVHN SCREENING DATA

LVHN COLON SCREENING RATES

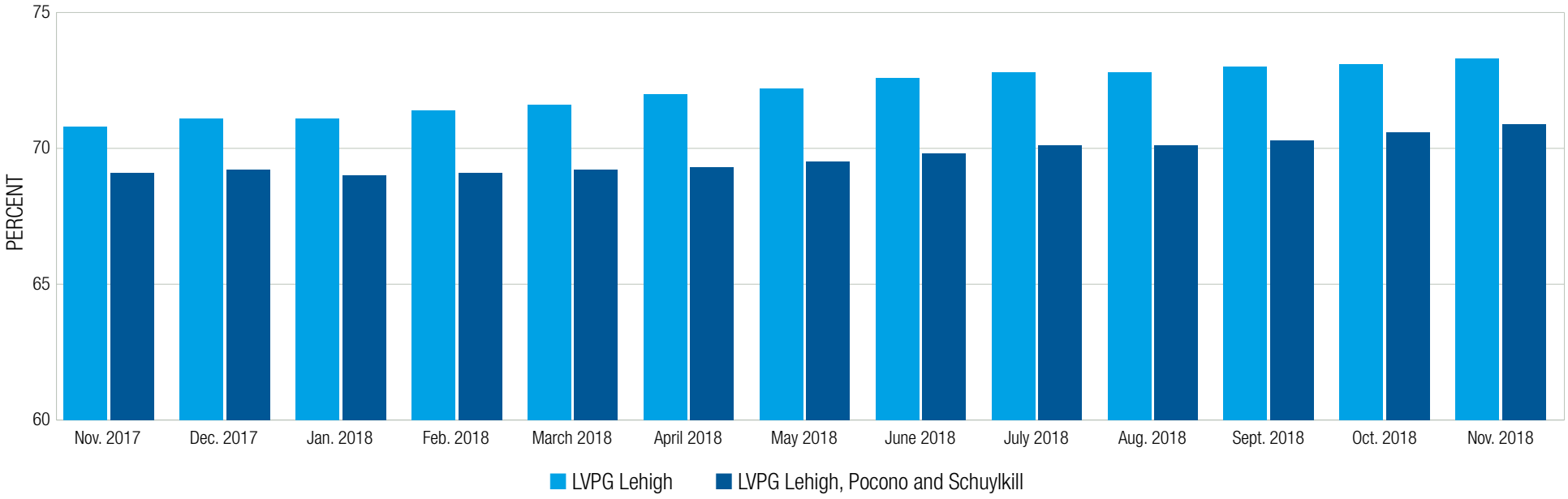
Colonoscopy screening rates at LVHN improved between 2016 and 2017, but have remained mostly flat in 2018 (Source: CIBIT Quality Dashboard). For 2018 year to date, LVHN Executive Dashboard demonstrates incremental improvement, but with continued efforts needed to achieve a 60 percent goal in all service regions for adults 50-75 having an appropriate screening for colorectal screening (FOBT or colonoscopy). According to NCQA, 2017 national colorectal screening rates were between 59.3 percent and 71.1 percent (ncqa.org/hedis/measures/colorectal-cancer-screening/). The American Cancer Society had an initiative of 80 percent by 2018, which was not achieved, and there continue to be barriers to reaching this. According to the American Cancer Society's Colorectal Cancer Facts and Figures 2017-2019, about one-third of adults do not get screened, and screening prevalence varies greatly based on race, insurance status and state. Continued focus is needed to remove barriers and increase screening rates.



Source: EPIC Executive Dashboard Breast Cancer Screening

LVHN MAMMOGRAPHY SCREENING RATES

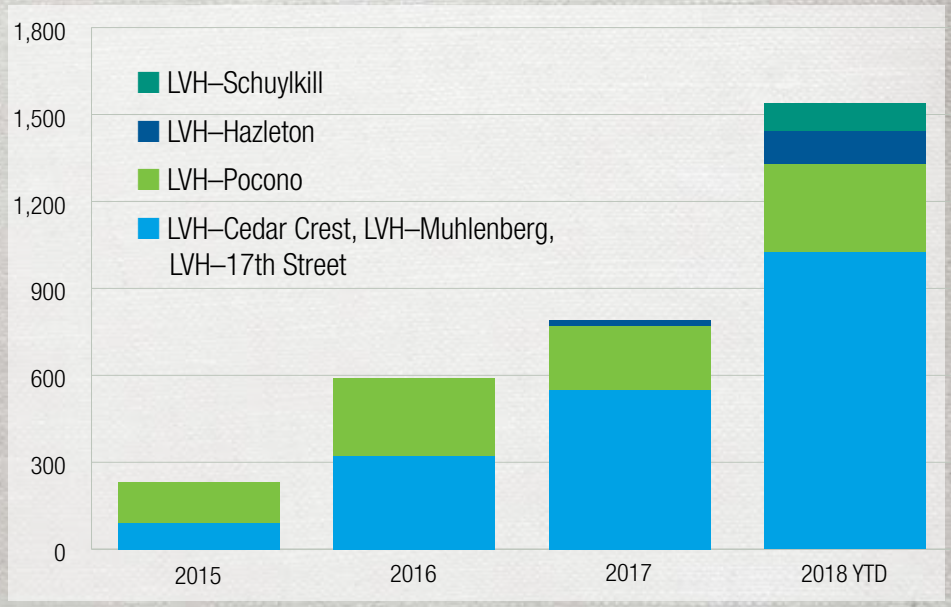
Mammography screening rates at LVHN have sustained improvement from 2017 where a goal of 70 percent was established (Source: CIBIT Quality Dashboard). LVHN Executive Dashboard demonstrates continued commitment to increase the percentage of women 50-74 who have had a mammogram within 27 months. The network continued its commitment to improving screening rates by increasing the goal to 73 percent in the Lehigh Valley region. Mobile mammography started in October 2018 and offers great promise for reaching a broader audience in the community. Within the first 11 business days, 124 patients were screened. Of those, 38 had a mammogram within two to three years, 25 had not had a mammogram in more than four years, and 13 had their first mammogram ever (ages spanned 41-60). According to the CDC National Center for Health Statistics (cdc.gov/nchs/fastats/mammography.htm), the rate of women age 40 and over who had a mammogram within the past two years was 65.3 percent (2015). With a goal of 70 percent, LVHN is exceeding the national rate.



Source: EPIC Executive Dashboard Breast Cancer Screening

LVHN LOW-DOSE LUNG CT SCREENING RATES

LVHN began offering low-dose lung CT screening immediately upon clinical evidence to support its use, but prior to widespread insurance coverage decisions. In 2015, the program offered the service for a nominal out-of-pocket fee. With the 2015 decision by Medicare to cover low-dose lung CT screen for at-risk populations and the community outreach efforts of LVHN, the program has made great strides in increasing screening rates. Recently, it was identified that of the lung CT screenings performed in at LVHN, a lower proportion were performed at the 17th Street campus, which is designed to meet the needs of our underserved/disparate populations. This finding may represent an opportunity to fill an unmet need in the community. One barrier to utilization may be the insurance requirement for patients to have a shared decision-making visit with a primary care provider, and disparate populations are less likely to have an established primary care provider. LVHN has been working to develop a lung nodule clinic where incidental findings (e.g., trauma/ER) and noncancerous but higher-risk findings would be followed by a dedicated team/navigator. Current efforts are underway to seek grant funding. Our regional campuses are committed to providing a unified standard of care across the Cancer Institute. Toward that end LVH–Hazelton began offering LDCT in 2017, and LVH–Schuylkill began offering it in 2018, allowing us to expand access. In fiscal year 2018, LVHN demonstrated its commitment to expanded access by establishing a network goal of 135-157 LDCTs per month.



374

TOTAL ATTENDANCE AT 2018 COMMUNITY EVENTS

209

NUMBER OF EVALUATIONS COMPLETED AT EVENTS

FOCUS GROUP INSIGHTS 2018

Evaluations obtained from four community events in 2018 were tallied and summarized. The events included a colon cancer event, a kidney cancer event, a breast cancer event and a cancer health fair focusing on lung health and lung cancer screening. Total attendance at these events was 374. The number of evaluations completed was 209.

Community members expressed need for information related to types of cancers, nutrition and weight management. Prevention, wellness/healthy lifestyle, family support and complementary therapies were also identified. Obtaining screening for uninsured was mentioned in the I Pink I Can (breast program) evaluation. The greatest number of respondents indicated they would like to see programs on a variety of non-cancer topics effecting the aging population, such as diabetes, brain, prostate, thyroid, kidney, liver and heart health; Alzheimer's prevention, hormones in aging, Parkinson's, Lupus, men's health and STD testing.

The Cancer Institute Patient and Family Advisory Council (PFAC) was created in 2017 to improve and maintain high-quality patient- and family-centered care. The group is comprised of patients, family members, staff and physicians of LVHN. Throughout 2018, the group has provided recommendations on several topics including increasing privacy in changing areas as part of the renovation of Radiation Oncology, fertility issues for people of child-bearing age with cancer, and readability of patient education materials. One of the PFAC family members has joined the Patient Education Committee.

For this CHNA, three questions were posed for discussion:

1. What barriers to care have you experienced or witnessed in our community?
   a. Patient centered
   b. Provider centered
   c. Health system centered
2. Have you seen/experienced resources in action to help address any of the barriers listed above?
3. Please identify at least one gap in the availability of resources to overcome barriers.

Themes that emerged from the discussion of these questions include: difficulties getting to appointments due to transportation and work schedules; cost of care and confusion about medical bills and what is covered by insurance; family support and how to communicate with children about a parent's cancer diagnosis; support for mental health; accuracy of medication lists and polypharmacy; need for assistance in gathering information when second opinions are desired or care is referred elsewhere; lack of privacy for discussion in the clinical treatment areas; and need for more bilingual staff.

Resources identified by PFAC members included transportation support by family, friends and churches; expanded physician office hours (early morning, evening and Saturday appointments); accessing the financial department or financial coordinators to assist with figuring out medical bills.

Suggestions for overcoming the barriers included continued expansion of resources listed in the previous paragraph; better review and updating of medication lists when at physician appointments; encourage and incentivize staff to learn Spanish or at least become more familiar with medical terminology in Spanish.

RESOURCES AVAILABLE TO OVERCOME BARRIERS ON-SITE OR BY REFERRAL

CARE COORDINATION

NURSE NAVIGATORS BY DISEASE SITE AND BILINGUAL NURSE NAVIGATORS

When patients learn they have cancer, they may feel overwhelmed and scared. Patients and their familes may have questions and concerns. Nurse navigators are available to support them through this difficult time. Nurse navigators can:

- Offer emotional support and teach about the diagnosis and treatment
- Help patients communicate with their physicians
- Provide guidance for decision-making about choices in care
- Direct patients to support services and community resources to assist with treatment-related supplies, financial concerns and transportation
- Assist with coordination of all members of the health team
- Guide patients to survivorship services when treatment is complete
- Bilingual (Spanish) nurse navigators can help communicate primarily in the preferred language.

MULTIDISCIPLINARY CONSULTATION

Disease site-specific visits, facilitated by nurse navigators, are an opportunity to meet with all of the care providers at one time. During the conference the team will provide a combined written document reflecting the scope of your condition and unified recommendation for the best course of care. Patients will have time to discuss concerns and ask questions of the group. A nurse navigator will be there along the way to help support before, during and after the visit.

CULTURAL AND LINGUISTIC

INTERPRETER SERVICES/CULTURAL COMPETENCY

In addition to bilingual nurse navigators, the following resources are available to assist those who are most comfortable with interpretation services: we have on-site interpreters, employees trained in medical interpretation, contracted sign language interpreters, video remote interpreter services via iPad, telephonic interpretation via Cyracom phones and translation services for written materials.

CULTURAL SENSITIVITY

LVHN provides regular training on cultural competency and maintains a website of resources to support understanding of all cultural backgrounds and the unique needs of our patients. We record information in the medical record to help ensure that we are being respectful of, and meeting the cultural needs of, all patients we serve.

ECONOMIC/LOGISTICS

ONCOLOGY FINANCIAL COORDINATORS

Our financial coordinators are available at all hospital locations to help minimize the confusion and stress that can be caused by financial concerns. They will answer questions about health insurance, precertification requirements, medical bills and financial assistance options. They may be able to help patients receive free or reduced-cost services and medicine at LVHN, as well as access financial aid through cancer support agencies and philanthropic funds. At our non-hospital-based locations, a mixture of social workers and financial assistance colleagues are able to support patients and make referrals for additional resources.

HELP WITH MEDICAL ASSISTANCE/DISABILITY

Patients who need assistance with obtaining state medical assistance or disability are referred to our partner PATHS.

HELP SELECTING INSURANCE PLANS – APPRISE

Medicare patients who need help in understating their Medicare insurance, prescription plans or making informed choices about plan selection of Medicare, Medigap and Medicare Advantage plans are referred to the APPRISE program offered through the Area Agency on Aging (1-800-783-7067).

FURNITURE ASSISTANCE VIA LEHIGH VALLEY OUTREACH DEPOT

LVOD provides assistance with obtaining furniture for individuals and families suffering from disasters/catastrophic events such as fire, floods, hurricanes, earthquakes, abusive situations, transitioning from a homeless situation or other significant life-changing event (e.g., eviction or infestations for example).

ONCOLOGY SOCIAL WORKERS

We understand cancer affects both patients and their loved ones in many different ways. Our social workers provide resources to assist with financial difficulties, transportation and community resources.

A PLACE TO STAY

Hackerman-Patz House at Lehigh Valley Hospital–Cedar Crest is a convenient and affordable "home away from home" that offers an alternative to an expensive hotel or daily trips to and from a distant home. Whether it's a patient or a loved one needing to be close by, our goal remains the same: to offer comfortable accommodations and a supportive environment that allow our guests to focus on healing. Discounted rates are available for military members. Financial assistance is also available (1-888-402-LVHN).

1,915

FY18 TOTAL TRANSACTIONS LVH–CC CANCER CENTER

Additionally, the American Cancer Society (ACS) has Hope Lodges in different locations such as NYC and Philadelphia should you be referred to a tertiary center for specialized care such as bone marrow transplants. ACS also partners with hotels to provide lodging assistance for cancer patients and their caregivers traveling away from home for treatment (1-800-227-2345).

HEALTHY WOMAN PROGRAM (1-800-215-7494)

We connect women to the Healthy Woman Program. The Healthy Woman Program is a free breast and cervical cancer early detection program of the Pennsylvania Department of Health. It is funded by the Department of Health and through a grant it receives from the Centers for Disease Control and Prevention. Free services for those meeting the eligibility standards include:

- Clinical breast examination
- Mammogram
- Pelvic examination and Pap test
- Follow-up diagnostic tests for an abnormal screening result

BREAST AND CERVICAL CANCER PREVENTION AND TREATMENT PROGRAM (BCCPT)

We connect under/uninsured patients for whom breast or cervical cancer is detected to a follow-up program from Health Woman to BCCPT. Patients may be eligible for free treatment through the Pennsylvania Department of Human Services' (DHS) BCCPT Program.

PUBLIC TRANSPORTATION

LANTA-metro buses stop on the campus of LVH–Cedar Crest, LVH–Muhlenberg and LVH–17th Street.

MCTA buses stop at LVH–Pocono on the Red Route. Monroe County Transit Authority can provide more information.

Schuylkill Transpiration System (STS) Pottsville Loop provides public transportation at LVH–Schuylkill East Norwegian at Tremont.

VALET PARKING

Valet parking is available free of charge at our Cedar Crest, Muhlenberg, 17th Street and Pocono campuses.

Cedar Crest Center Total Transactions	
FY17	FY18
9,544	9,531

EMOTIONAL, SPIRITUAL AND PSYCHOSOCIAL

ONCOLOGY COUNSELING SERVICES

A diagnosis of cancer upsets the balance of so many aspects of your life. One part that may not receive enough attention is your own mental well-being. Our licensed counselors and therapists are experts in cancer care and can help you find ways to manage the emotional roller coaster cancer puts you on, and provide you with the tools you need to maintain your sense of well-being. We also help family members and caregivers cope and feel less distressed.

SUPPORT OF SURVIVORS (SOS)

If you are a breast cancer patient, Support of Survivors (SOS) is a support system designed for you. Staffed by a network of volunteers who are breast cancer survivors, SOS offers information, insight and encouragement to women – and their families – as they face breast cancer diagnosis and treatment. You can reach SOS by calling the Survivors' Helpline at 610-402-4SOS (4767). This line connects you to a voice mailbox. Leave a message with contact information, and an SOS volunteer will return your call.

LYMPHEDEMA SUPPORT GROUP

Lymphedema is fluid retention caused by a compromised lymphatic system. It can occur in any body part due to cancer and/or cancer treatment. Lymphedema therapy can be accessed through the Cancer Rehabilitation page, but LVHN also encourages patients to attend meetings of the Lymphedema Support Group. It meets three times per year and provides a way to connect with other patients who have lymphedema.

ADDITIONAL SUPPORT GROUPS

We provide monthly support groups for women with metastatic breast cancer and men with urologic cancers. We can assist with referrals to other support groups offered in the community.

PASTORAL CARE

Spiritual support can help you face difficult news about your illness or find peace in a time of turmoil. Our chaplains are available to help you at your request. We also have a quiet chapel available for meditation and reflection. At Lehigh Valley Health Network, we offer spiritual support and guidance if you need it through our Pastoral Care Department. A chaplain can help you and your families identify the sources of your fear and find strength through your faith, other meaningful value systems or spiritual resources from the community. Interfaith chaplains are available on a 24-hour basis. Chapels are available in all hospitals.

FINALITY BELL/CHIMES

The final day of cancer treatment is a significant milestone. Patients are able to make a sound to emotionally call out this transition in their journey. Donated by generous benefactors touched by cancer, our bells are distinct in appearance, but their symbolism remains the same. Patients are encouraged to ring the finality bell to mark the completion of treatment or for a major milestone/transition. We ring it three times: once for love, once for hope/courage and once more for all those who could not.

At LVH–Cedar Crest and LVH–Muhlenberg, patients are able to celebrate the end of treatment with a little music – Vivaldi's "Four Seasons." Each time patients complete chemotherapy, radiation, the entire cancer journey or just reach a personal milestone, they are invited to sound our new cancer chimes throughout the entire campus.

ACCESS TO RESEARCH

ONCOLOGY CLINICAL TRIALS

As members of the Memorial Sloan Kettering Cancer Alliance and Michigan Cancer Research Consortium National Community Oncology Research Program (NCORP), patients have access to hundreds of leading-edge and increasingly innovative science in clinical trials. We have a team of oncology-dedicated clinical trial nurse navigators who support patients through decision-making, enrollment and treatment. If a patient wishes to participate in a trial that cannot be offered locally, our nurse navigators have fast-track processes to facilitate enrollment at a partner site. Lehigh Valley Cancer Institute has started laying the groundwork to offer phase 1 clinical trials in the near future.

SUPPORT DURING AND AFTER TREATMENT

ONCOLOGY NUTRITIONAL ASSESSMENT AND COUNSELING

Board-certified specialists in oncology nutrition are available to meet with patients and families before, during and after treatments to assess nutritional needs and determine appropriate goals and strategies to reach those goals and offer education. They make nutrition recommendations to help with the management of treatment-related side effects. Dietitians also may provide guidance for healthy eating, supplement use and weight management, both during and after treatment. Our dietitians also offer their expertise to the community through our community outreach programs including presentations, cooking demonstrations and participation in health fairs.

ONCOLOGY GENETIC RISK ASSESSMENT AND COUNSELING

You may be concerned about your family's risk for cancer, particularly if more than one relative has had a similar health condition. Lehigh Valley Health Network can help assess your family's inherited risk for developing cancer by utilizing genetic and medical history tools. If genetic testing is warranted, a discussion between patient and provider determines the most appropriate type of testing (single gene vs. multi-gene panels). Genetic test results as well as personal and family risk factors help clinicians personalize a medical management and surveillance plan. Patients who test positive are invited to attend the genetics multidisciplinary clinic where an annual appointment continues to offer recommendations for cancer risk reduction. Patients who test positive are invited to attend the genetics multidisciplinary clinic where an annual appointment continues to offer recommendations for cancer risk reduction.

CANCER REHABILITATION

If you are suffering from fatigue, weakness, balance problems, lymphedema or other symptoms related to your condition and treatment, our trained rehabilitation therapists can help provide relief or recommend steps you can take to improve your symptoms through physical, occupational and speech therapy. We offer specialized programs in lymphedema detection and management, osteoporosis education, fatigue management, breast cancer and pelvic floor rehabilitation, management of issues related to head and neck cancer, and post-rehabilitation fitness.

CANCER SURVIVORPLACE

Lehigh Valley Health Network offers a Survivorship Program, a comprehensive follow-up care program, designed to help you with the transition to your post-treatment phase. The Mary Rose Muhr Slemmer SurvivorPLACE (Programs for Living After the Cancer Experience) is designed to help people live a healthy life after they have undergone cancer treatment.

REIKI MANUAL THERAPY

Reiki is a light touch manual therapy from Japan that supports the whole person. Reiki can have a relaxing effect similar to meditation in that it is designed to reduce anxiety and promote comfort. The practitioner, a trained volunteer, places his/her hands over positions on the body along energy centers and pathways on the head, neck, shoulders and upper chest, abdomen, legs and feet (similar to those used by acupuncturists). The practitioner's hands are held flat against the receiver's body in a stationary manner in each position for at least three minutes or more. The receiver may feel warmth or coolness, tingling or relaxation, or may feel nothing during a session. Sometimes people fall asleep as they become more relaxed. The Reiki session will still be effective even if the person is asleep. The therapy is offered free to outpatients receiving cancer treatment or follow-up care in the Cancer Center.

ASSIST TO FITNESS/MIND-BODY FITNESS

This program, offered to cancer survivors, includes three months free membership to the Healthy You Fitness Centers, plus consultation with a trainer, use of exercise equipment and access to classes. The program is made available through a generous grant from the Women's 5K Classic and the Mary Rose Muhr Slemmer Fund.

END-OF-LIFE AND GRIEF SUPPORT

PALLIATIVE CARE

Palliative care is specialized medical care for people with serious illnesses. Its focus is on providing patients with relief from symptoms, pain and stress of a serious illness with the goal of improving quality of life for both the patient and the family. Palliative care is provided by a team of doctors, nurses and other specialists who work with the patient's other doctors to provide an extra layer of support. It is appropriate at any age and at any stage in a serious illness. Access to palliative care is available in the hospital, our outpatient cancer clinic, or in the home/assisted-living facility.

HOSPICE

When you, your loved ones and a physician decide emotional and physical needs should be the focus of care, it's time to consider hospice. At Lehigh Valley Health Network, we are dedicated to helping those on the final passage live their lives to the fullest in the time they have left. We provide a full range of services to allow you or your loved ones peace, comfort, courage and dignity in your own home or in our hospice unit. Nurses are on-call 24 hours a day, seven days a week. We provide hospice services to people in all settings – whether you live alone, with someone else or in a long-term care facility.

Hospice is generally covered by Medicare, Medical Assistance, HMOs and other managed care and private insurance plans. Thanks to the generosity of grateful family members and community donors, Lehigh Valley Hospice is able to care for eligible patients regardless of their ability to pay.

We encourage you to call hospice as soon as you change your focus from cure to comfort and care. We can help organize your life, draw upon available resources and prepare for what's ahead, as well as provide relief from pain and other symptoms. Getting hospice involved early may give you more quality time with loved ones.

GRIEF SUPPORT

The loss of a loved one stirs intense emotions; sometimes those feelings are very difficult to cope with. Through our grief support services, we offer several options to help children and adults work through their grief. Lehigh Valley Health Network's Bereavement Services offers emotional, psychological and spiritual support to help people cope with grief, loss and life transition.

PREVENTION, SCREENING AND MISCELLANEOUS SERVICES

TOBACCO CESSATION PROGRAM

Our private and confidential Tobacco Treatment Program will increase your chances for living smoke-free. As an over-the-phone and face-to-face counseling service, we are here for you if you are ready to quit smoking or using tobacco products. Programs like ours have been scientifically proven to increase your chances of living a smoke-free life. Enrolling in our Tobacco Treatment Program will help you get through the physical and psychological withdrawal associated with quitting smoking.

TOBACCO CESSATION PA FREE QUITLINE

The PA Free Quitline is a free, evidence-based tobacco cessation service available to all Pennsylvanians through the Department of Health. Annually, the PA Free Quitline provides services to over 13,000 Pennsylvanians. Participants are self-referred by calling 1-800-QUIT-NOW or 1-855-DEJELO-YA (335-3569) [Spanish]. Providers refer by Fax to Quit or electronic referral methods. Patients can enroll online via PA.Quitlogix.org

SCREENING SERVICES

LVHN has cancer screening services available for all cancers. We can connect uninsured and underinsured patients with low-cost or free screening services directly and through our partners like the local health bureaus.

MOBILE MAMMOGRAPHY COACH

Mobile mammography was successfully implemented in October 2018. The mammography coach is available to visit communities served by LVHN, and beyond. The goal of the coach is to increase access to this important screening technology, especially in underserved areas of our community. This is done through partnership with employers and community partners.

PLASTIC SURGERY

Part of the healing process can mean easing or erasing the sign of disfigurement from disease treatment. If you're thinking about reconstructive or plastic surgery, it's important for you to research the capabilities of the surgeon and supporting clinical team. The plastic surgery professionals at Lehigh Valley Health Network are here to help consider your options and provide treatment that can correct or mask physical reminders.

WOUND CARE

If you have a long-lasting (chronic) or cancer-related wound, LVPG Wound Healing has the most experience in the region to help treat your condition. Located at Lehigh Valley Hospital–Cedar Crest in Allentown, Pa., and Lehigh Valley Hospital–Muhlenberg in Bethlehem, Pa., we are the longest operating wound care center in the area.

PATIENT RESOURCE CENTER

Free educational materials are available; including brochures, books and access to nationally recognized cancer-focused websites. Information about support services also can be found here. This educational information is available in our Cancer Support Team office.

EDUCATIONAL PROGRAMS

Education programs for patients and families are provided throughout the year; schedules are available by calling 888-402-LVHN.

COMMUNITY PARTNERS

AMERICAN CANCER SOCIETY (ACS)

The American Cancer Society offers programs and services to help people with cancer and their loved ones understand cancer, manage their lives through treatment and recovery, and find the emotional support they need. The help is free. They also can help connect patients to other free or low-cost resources available in the area. ACS's Road to Recovery Program provides transportation to and from treatment for people who do not have a ride and are unable to drive themselves.

LEUKEMIA LYMPHOMA SOCIETY (LLS)

LLS is the leading source of free, highly specialized blood cancer information, education and support for patients, survivors, families and health care professionals. We touch patients in their communities through our chapters

across the U.S. and Canada. We advocate for blood cancer survivors and their families, helping patients navigate their cancer treatments and ensuring they have access to quality, affordable and coordinated care.

CANCER SUPPORT COMMUNITY OF THE GREATER LEHIGH VALLEY (CSC)

The Cancer Support Community's programs help people affected by cancer—survivors, caregivers, friends and family – regain control of their lives, reduce stress and isolation, and restore a sense of hope for a better quality of life, regardless of the stage of the disease or the type of cancer. CSC offers multiple disease site-specific support groups, educational programs, social connection activities and wellness activities.

HEALTH BUREAU – CITY OF ALLENTOWN (AHB 610-437-7513)

The Allentown Health Bureau's mission is to prevent disease and injury and to protect and promote the public's health. AHB serves City of Allentown and the surrounding communities.

The purpose of the cancer prevention activities is to collaborate with local hospitals and community agencies to increase awareness about cancer in our community, and to promote ways in which individuals can protect themselves from cancer through prevention and/or early detection.

The Cancer Prevention Program provides FREE screening services and education programs to address cancer issues in our community. The goal of these services is to reduce incidence (number of new cases developed) and mortality (number of deaths) of those cancers that have been identified as preventable or more successfully treated if detected early. The program focuses on the most common forms of cancer – breast, ovarian and gynecologic, colon/rectum, ovarian, prostate and skin. AHB offers the following primary services.

- Schedule FREE mammograms for women 40 years of age and older who do not have health insurance to help pay for the mammogram. Participating sites include Breast Health Services of Lehigh Valley Hospital and others.
- Schedule FREE Pap tests for women 21 years of age and older who do not have health insurance to help pay for the Pap test. Participating sites include Center for Women's Medicine of Lehigh Valley Hospital and others.
- Conduct FREE cancer education presentations. The available topics include breast cancer, cervical and gynecologic cancers, colorectal cancer, ovarian cancer, prostate cancer and skin cancer.

HEALTH BUREAU – CITY OF BETHLEHEM (BHB 610-865-7083)

Bethlehem health bureau offers the American Lung Association's Freedom from Smoking® Tobacco Cessation program.

BARRIERS TO CARE

LOGISTICAL/ECONOMIC

As LVH expands, there is a need to provide additional convenient locations of cancer care services in a broader area to decrease travel time for patients. Telehealth services in addition to brick-and-mortar facility expansions are two ways these barriers could potentially be addressed.

While transportation support is available, the demand continues to be high as patients and families continue to balance working schedules with clinical services as well as the distance to services. ACS has now partnered with Ride Share. If they are unable to find volunteer drivers, they will utilize a ride sharing service to meet the needs of the patients in Lehigh and Northampton counties. Expanding this offering to other counties would help reduce additional barriers.

Access to phase I clinical trials, bone marrow transplant and precursor services are not presently offered at LVH requiring patients to travel away from their support system and experience logistical/economic challenges. In the future, offering CAR-T may be an important service offering to minimize patients' need to travel out of the area.

Mobile mammography was successfully implemented in October 2018. Reducing barriers to screening can be improved through full utilization of the new coach and increased partnership with community and industry. Additional access and expansion of open access scheduling also may play a role in improved screening. Northampton County has a breast cancer incidence rate worse than that of the US and Pennsylvania as does prostate cancer. In Lehigh County, cervical and prostate cancer incidence rates are greater than those for Pennsylvania or the U.S. Outreach, prevention and screening planning may benefit from a focus on these issues with slightly different strategies in the counties.

Four percent of survey respondents said that they "often" choose not to fill a prescription because the medication was too expensive; 25 percent said yes, but not often. While financial navigation, social worker and nurse navigation support is in place, the uncertainty of the federal regulatory climate, insurance marketplace, expansion of high deductible plans, prescription medication costs

(oral chemotherapy, etc.) and uncertain economic opportunities are driving up patient financial obligations. These drivers will likely require the need for ongoing and additional support in addressing financial barriers to care. As demand increases, available funding sources often run dry. Expansion of philanthropy efforts to ensure patient-assistance funds are replenished will be important to ensuring continuation and/or expansion of patient support for both medical and nonmedical needs. Our Patient and Family Advisory Council has indicated the desire for every patient to have a nurse navigator.

ED visits and inpatient utilization carry a financial burden on patients. As more people work through their cancer treatment, there is a need to provide extended hours of service. Patients often choose the emergency room (ER) setting because of its 24-hour opening or other urgent care centers with extended hours. Yet those locations are often not best prepared to manage the unique needs of oncology patients. There are opportunities to decrease ER and inpatient utilization with some strategies like developing an oncology symptom evaluation unit, implementing cancer-specific protocols/pathways in the ER and LVHN ExpressCare locations and other tactics.

CULTURAL/LINGUISTIC/SOCIAL

Patients with limited English proficiency (LEP) are less likely to receive all recommend health care services according to a number of studies. There is a continued need to support and expand the knowledge for those with LEP that professional interpretation services are available in several formats to ensure continued efforts on decreasing language as a barrier to care.

Tobacco utilization in Pennsylvania continues to outpace national rates. Early intervention and education is critical to breaking the tobacco cycle. Continued efforts to prevent or reduce tobacco utilization would be beneficial to the community.

Culturally, Pennsylvanians are at higher than national rates of obesity and lower than national rates of physical activity. In Lehigh and Northampton counties about 20 percent of the population gets no physical activity. According to the National Cancer Institute, cancers associated with obesity include meningioma, esophageal, multiple myeloma, kidney, endometrium, ovary, breast, liver, gallbladder, thyroid stomach, pancreas and colorectal (cancer.gov/about-cancer/causes-prevention/risk/obesity/overweight-cancers-infographic).

According to survey respondents, only 27 percent indicated they always wear sunscreen and 14 percent said they never use it. Continued efforts to promote prevention of skin cancers through the use of sunscreen will be necessary.

Of the survey respondents, 15 percent indicated that they are having six to greater than 10 drinks a night at least once in the month prior. According to the National Cancer Institute website on Alcohol and Cancer Risk, “There is a strong scientific consensus that alcoholic drink can cause several types of cancer.” They go on to say that clear patterns exist between head and neck, esophageal, liver, breast and colorectal cancers.

COMMUNICATION

Lack of knowledge about wellness behaviors for prevention and health behaviors during treatment can contribute to the cancer burden. Outreach for education on prevention, early detection and self-care during treatment will continue to be key in supporting the community. Focused efforts for increasing screening rates for early detection also will be important for the community as even those without economic barriers are missing routine screenings.

While all cancer screening services are available, timely access is a challenge for some screening services and in general utilization continues to lag behind in desired performance rates. Ongoing work to expand the number of eligible patients receiving routine screenings, on schedule, should continue to be an area for gap reduction. Ongoing efforts to eliminate both provider and consumer confusion resulting from conflicting recommendation schedules should persist.

Coordination and smoother transitions from inpatient to outpatient care are identified as an opportunity for improvement.

Health literacy continues to be an area of focus to ensure that all patients can comfortably understand their condition and its management for safety and effectiveness. PFAC offered feedback that our new patient information packet, still feels too advanced. There may be opportunities to include PFAC representatives on patient education and other committees to ensure patient/family thoughts and needs are represented firsthand. Respondents were asked about the following interventions:

PROVIDER/SYSTEM-CENTERED

As the network expands, lack of shared medical records will provide challenges in efficiency and care coordination. Efforts are underway to expand the centralization to a single electronic medical record (EMR) platform. Phasing will continue to standardize systems across all new mergers, and expanses will be an important component.

This was the first year our survey included questions regarding integrative medicine use and interest. Surprisingly, the results from the survey indicated that 60 percent of respondents would be interested in using complementary/integrative medicine if it were offered by LVHN, and 25 percent were currently using some type of CAM intervention. While there are some limited CAM offerings within the network (e.g., Reiki, chiropractic, acupuncture), there is clearly a strong desire for a more organized and comprehensive approach to education and offerings from a trusted source. There is an opportunity for LVH to become a leader in providing evidenced-based complementary interventions to our oncology and cancer survivor community, to be a resource for safe practices, and fulfill an unmet need. The following list of interventions was included for inquiry about use of complementary/integrative medicine: The top five are listed in bold.

- Herbs, Aromatherapy/**Essential Oils, Relaxation techniques** (meditation, guided imagery, deep breathing, progressive relaxation), **Chiropractic/ Osteopathic Manipulation**, Special Diets (e.g. vegetarian, macrobiotic, Atkins, Ornish, etc.), High Dose Vitamins, Homeopathy, **Yoga, Massage**, Tai Chi, Acupuncture, Accupressure, Energy healing/Reiki, Qi Gong, Hypnosis, Biofeedback, Folk Medicine (Curanderismo, Native American healing), Ayurveda, Chelation, Traditional Chinese Medicine (TCM), Movement therapies (Feldenkrais, Alexander, Pilates, Rolfing, Trager, Watsu), Balneotherapy (hydrotherapy), Reflexology, Cryotherapy, Bach flower remedies, Healing Touch/Chi Nei Tsang.

Reasons given for seeking complementary intervention (top five in bold):

- Breathing, Cure my Cancer, Digestive, **General overall wellness**, Immune support, Infection, **Pain**, Prevent cancer/return of cancer, Sexual health, Skin/Hair/Nails, **Sleep**, **Stress/Anxiety/Tension**, **Weight**, Other.

Our PFAC and clinical team have identified a barrier with the medication list in our EMR. Modification to this workflow to share reconciliation across encounters and improve clarity on printed materials should be supported by LVHN leadership to ensure that patients and clinicians are comfortable with the output and accuracy of the medication list.

Staffing shortages of physicians, nurses and clinical assistants, as well as increased provider burnout, create access barriers. It will be important to ensure there are efforts in place to train, retain and recruit qualified medical professionals to sustain access to care with the aging population.

Limited surgical providers at regional locations often prevents patients from being able to receive initial care closest to home. Increasing surgical and specialty provider access at regional centers could help minimize barriers to care. Some strategies may include being proscriptive about which centers will be able to offer specific services, rotation of disease site experts to regional centers, and/or tele-health offerings.

The largest obstacle in accessing health care, per survey respondents, is time and scheduling issues. Expansion of hours and tele-health offerings may be options to help reduce that barrier.

Patients who have lung screenings with positive nodule findings, but not cancer, need to be followed closely by experts in the management of patients at high risk for lung cancer. Currently there is limited access in pulmonary care to cohort this population of patients for dedicated management. Patients are currently referred to primary care or pulmonary providers independently. Developing a nodule clinic may be a potential solution.

While palliative care programs are available, there continues to be a gap in patient/family and provider use and acceptance. Even with that gap, the existing demand often exceeds the capacity/timeliness needs of the population. Additionally provider and patient perceptions can stand in the way of early connection to palliative care. Gaining agreement on oncology and palliative care provider roles and imbedding palliative care into oncology practices/departments may be one solution to help reduce barriers.

ACCREDITATIONS

- Member, Memorial Sloan Kettering Cancer Alliance
- Commission on Cancer (CoC) Accredited – continuously since 2005
- American College of Radiology (ACR) – Radiation Oncology Practice Accreditation since 2012
- American College of Radiology (ACR) – Breast Health Services Accreditation
- American College of Radiology (ACR) – Breast Center of Excellence Designation (COE)
- American College of Radiology (ACR) – Lung Cancer Screening Center
- National Accreditation Program for Breast Centers (NAPBC) – Breast Health Services Accreditation
- National Quality Measures for Breast Centers (NQMBC) Certified Quality Breast Center of Excellence™ – Breast Health Services
- American Association of Gynecologic Laparoscopists (AAGL) – Center of Excellence for Minimally Invasive Gynecology (COEMIG)
- Quality Oncology Practice Initiative (QOPI) Certified – LVPG Hematology-Oncology Associates – continuously certified since 2011
- U.S. News and World Report 2014-15 High Performer – Cancer

REFERENCES AND ADDITIONAL SOURCES OF CANCER INFORMATION IN PENNSYLVANIA

AMERICAN CANCER SOCIETY
Cancer Facts and Figures 2018

CANCER SUPPORT COMMUNITY
Access to Care in Cancer 2016: Barriers and Challenges. November 2016.

NATIONAL CANCER INSTITUTE
Understanding Cancer, Cancer Statistics and Cancer Disparities

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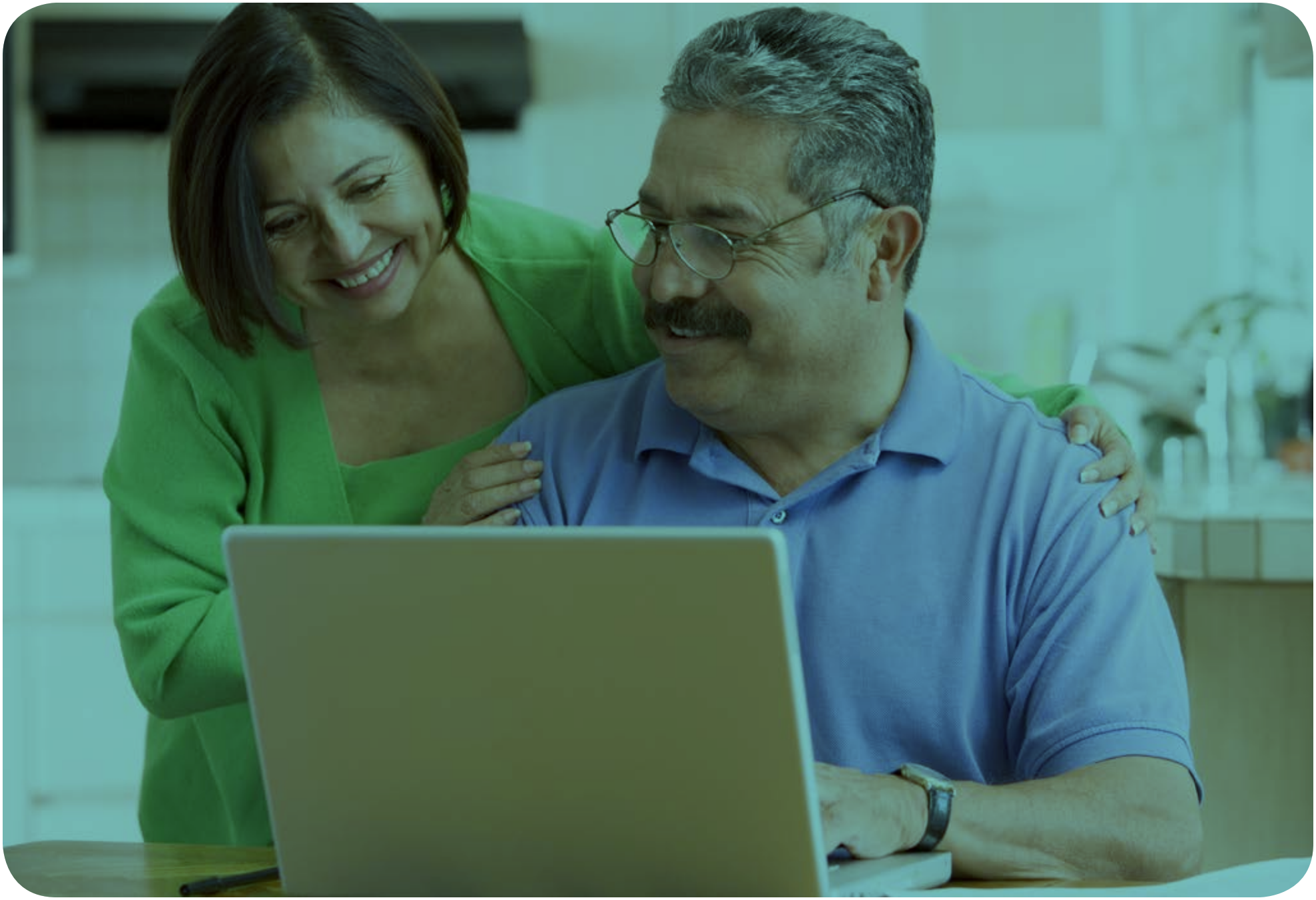
Cancer State Profiles - Pennsylvania

PENNSYLVANIA DEPARTMENT OF HEALTH
Cancer Facts and Figures: Pennsylvania, 2017

PENNSYLVANIA DEPARTMENT OF HEALTH
The Burden of Cancer in Pennsylvania: Calculating Costs, Understanding Impacts, Exploring Interventions. Pennsylvania, 2017

PENNSYLVANIA DEPARTMENT OF HEALTH
Cancer Statistics



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