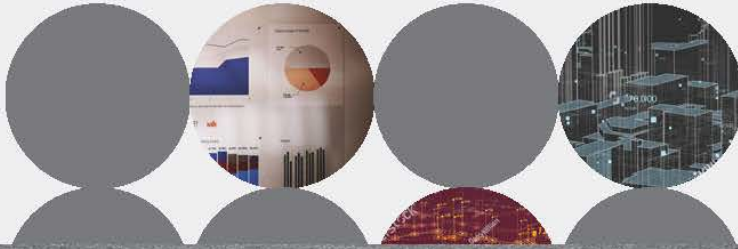
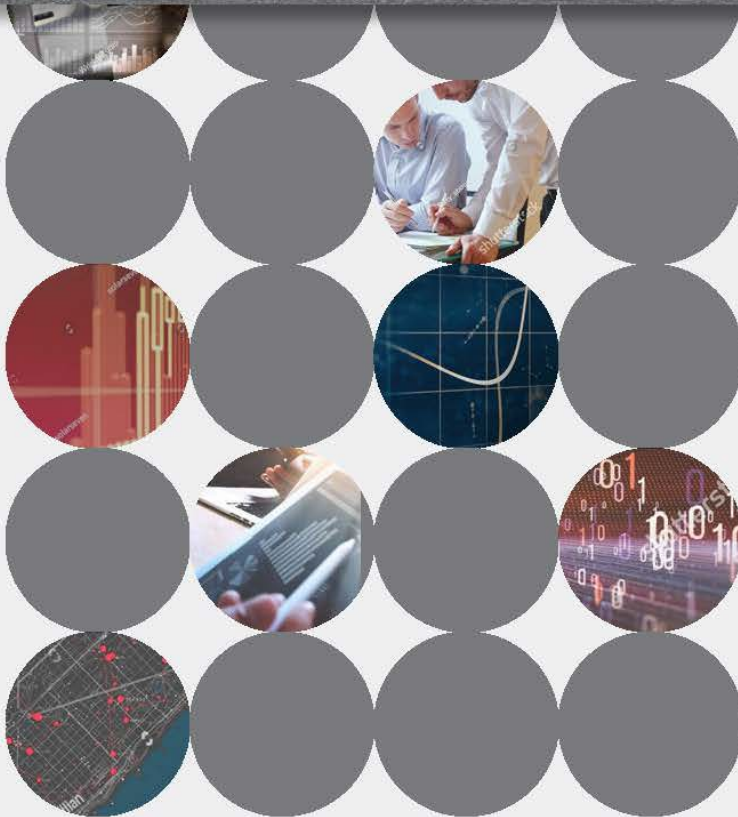


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THE INSTITUTE FOR PUBLIC POLICY & ECONOMIC DEVELOPMENT



Lifestyle Medicine in Northeastern Pennsylvania: Physical Activity

2024

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Introduction

Lifestyle medicine is a critical aspect of medical practice, in which specialty and approach demonstrate how the adjustment to healthy behaviors and practices leads to long-term well-being. The six pillars of lifestyle medicine include healthy eating, physical activity, restorative sleep, stress management, avoidance of risky substances, and positive social connections. All are interconnected, though this report focuses specifically on the value of physical activity. Various health organizations have consistently promoted the importance of physical activity and the accessibility of community resources to facilitate exercise.¹ Research emphasizes the importance of maintaining an active lifestyle in all populations in order for chronic illnesses like heart disease and diabetes to be avoided and managed. Improving walkability, rideability, and recreational facilities in neighborhoods will foster opportunities for individuals to exercise. Additionally, park accessibility will strengthen environmental sustainability and encourage physical activity.

Executive Summary

As a pillar of lifestyle medicine, physical activity contributes to quality of life. Improving daily lifestyles and providing safe options for physical activity subsequently enhances community well-being. In 2020, the Centers for Disease Control and Prevention indicated that \$117 billion of yearly healthcare costs can be attributed to physical activity insufficiencies. By investing in pedestrian connectivity and accessible transportation, local economies can benefit and conserve health care costs.

A variety of socio-demographic characteristics impact how physical activity facilitates bodily function, which then decreases the risk of chronic diseases. Adults who engage in physical movement strengthen their mental health and lower the risks of high blood pressure, stroke, arthritis, and weight gain. More specifically, older adults who exercise tend to experience benefits associated with sleep, balance, joints, muscles, and cognitive health. In children, physical movement helps reduce the risk of depression while strengthening academic performance and muscular and body composition.²

According to the authors of *Lifestyle Medicine: Physical Activity* in the Supplement to The Journal of Family Practice, physical activity as “any bodily movement that is produced by the contraction of skeletal muscle that increases energy expenditure above a basal level.” By extension, exercise represents a category of physical activity in which individuals perform scheduled and repetitive movements. Challenges associated with the need for exercise include limited proximity to areas that are safe for activities such as walking and cycling, and lack of transportation to reach these areas. These challenges are particularly prohibitive for people who live in rural communities. Furthermore, the rise of telehealth appointments during the COVID-19 pandemic brought advantages to medical care, though lack of accessible in-person appointments further limited physical activity and access to relevant information and resources.³ In other words, local infrastructure may facilitate or hinder accessibility to fitness and recreational facilities.

The American Public Health Association (APHA) addresses the issues involved with creating equitable communities and the involvement of national organizations by emphasizing the *Joint Call to Action to Promote Healthy Communities* plan. Four major topics supported in the collaboration of the eight organizations include building relationships, establishing health goals, applying strategies to improve health, and disseminating knowledge. The action plan asserts that the reduction of environmental pollutants can be solved through nutritional and inexpensive food options as well as the promotion of

physical activity in underserved communities. It also emphasizes the importance of practitioners working together to address the risk of chronic diseases and health inequities affecting community well-being.⁴

Additionally, understanding the social environment as a determinant of health is integral for creating positive physical health outcomes. The Kaiser Family Foundation developed the following table, depicting determinants such as socioeconomic status, employment, education, food access, social support networks, and access to the health care system. Neighborhood and physical environment refer to the quality and geographical location of housing, transportation, parks, and playgrounds – all of which influence the propensity for exercise.⁵

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations



Source: “Social Determinants of Health” Kaiser Family Foundation

The Office of Disease Prevention and Health Promotion manages the Healthy People 2030 initiative, which reports on the most significant public health priorities and challenges. This initiative defines the social determinants of health as the environment where individuals are “born, live, learn, work, play, worship, and age.” Currently, Healthy People 2030 tracks the goals of increasing adolescents and adults who travel by walking or biking. Healthy People 2030 will continue to track physical activity objectives, such as installation of sidewalks and bike lanes, which contribute to quality of life and community safety.⁶

Recommendations to improve physical activity in lifestyle medicine include finding available funding at local, state, and federal levels to advance community infrastructure and transportation. Additionally, databases and Geographic Information System mapping can identify gaps in availability of public parks and recreational opportunities. Regional improvements and local connectivity can also be achieved by replicating case studied best practices of fitness and mobility programs designed to improve health.

Other resources also provide guidance for bringing attention to the social determinants of health and improving health equity via community-engaged lifestyle medicine. For example, Healthy People 2030 set a “place-based” framework to bolster economic stability, education access and quality, health care access and quality, and neighborhood and built environment. Specifically, the outcomes measured in association with neighborhoods and built environments convey the importance of walkable and rideable connectivity to community safety and quality of life. The Healthy People 2030 initiative also emphasizes the need for local, state, and federal policy changes to promote health and wellness.

Research Methodology

The information collected for this report outlines current healthcare interventions and practices for promoting physical activity. Additionally, secondary data for the region and state were gathered from the Behavioral Risk Factor Surveillance System (BRFSS) via the PA Department of Health, and other public sources. All information presented is the most recent available at the time of publication.

Population Characteristics

According to the BRFSS analysis from 2019 to 2021, adult men and women of all ages – regardless of marital status – living within the Lackawanna, Luzerne, and Wyoming region were likelier to report no leisure time physical activity or exercise in the past month compared to those in the Pike, Monroe, Susquehanna, and Wayne region and statewide. This is also the case regardless of Veteran status and for individuals with incomes over \$50,000 in the Lackawanna, Luzerne, and Wyoming region.

People with less than high school education in the Lackawanna, Luzerne, and Wyoming region were likelier than individuals with higher education and residents in both other geographies to report no leisure time physical activity within the previous month. Additionally, a higher percentage of respondents who identified as veterans, non-veterans, and married in the Lackawanna, Luzerne, and Wyoming region indicated they have no leisure time physical activity in the past month than the other counties identified and statewide.

No Leisure Time Physical Activity in the Past Month (2019-2021)			
Demographic	Pennsylvania	Pike, Monroe, Susquehanna, Wayne	Lackawanna, Luzerne, Wyoming
Total Adult Population	25%	25%	31%
Female	27%	26%	32%
Male	22%	24%	30%
Age 18-44	19%	18%	21%
Age 45-64	26%	31%	37%
Age 65+	33%	29%	37%
Less than High School	33%	27%	41%
Some College	23%	31%	28%
College Degree	13%	14%	18%
Income less than \$25,000	38%	No Data	No Data
Income \$25,000 - \$49,999	32%	No Data	No Data
Income \$50,000+	17%	17%	26%
White, non-Hispanic	24%	26%	30%
Nonwhite and/or Hispanic	29%	23%	No Data
Married	23%	28%	30%
Divorced/Separated	30%	No Data	41%
Widowed	40%	No Data	No Data
Never Married	22%	No Data	25%
Veteran	25%	24%	32%
Non-Veteran	25%	25%	31%

Source: Behavioral Risk Factor Surveillance System (BRFSS), Accessed via PA Dept. of Health

Proportionally, non-drinkers were likelier than drinkers (not including chronic drinkers) to report no leisure time physical activity in the prior month. Although this statement is counterintuitive, no other information could be found to support or refute the data. The highest rate of non-drinkers reporting no leisure-time physical activity resides in Lackawanna, Luzerne, and Wyoming Counties (37 percent). Where data was available, people with asthma or diabetes are likelier to report no leisure time physical activity than those without asthma or diabetes.

Proportions of people who are current and former smokers in the Lackawanna, Luzerne, and Wyoming area are larger than Pennsylvania's rates (39 percent and 30 percent, respectively, compared to 33 percent and 27 percent, respectively), while the shares of 23 percent in the Pike, Monroe, Susquehanna, and Wayne area are smaller. Rates of obesity in both northeastern regions are higher than the state rate. At 30 percent, the proportion of people who are overweight in the Lackawanna, Luzerne, and Wyoming area is higher than Pennsylvania's rate of 22 percent, while the share of 17 percent in the Pike, Monroe, Susquehanna, and Wayne area is smaller.⁷

No Leisure Time Physical Activity in the Past Month (2019-2021)			
Demographic	Pennsylvania	Pike, Monroe, Susquehanna, Wayne	Lackawanna, Luzerne, Wyoming
Chronic Drinker	21%	No Data	No Data
Drink but Not Chronic	18%	20%	22%
Non-Drinker	32%	32%	37%
Asthmatic (Current)	30%	No Data	No Data
Not Asthmatic	24%	26%	31%
Diagnosed Diabetic	39%	No Data	41%
Not Diagnosed Diabetic	23%	23%	29%
Current Tobacco Smoker	33%	23%	39%
Former Tobacco Smoker	27%	23%	30%
Never a Tobacco Smoker	21%	28%	29%
Neither Overweight nor Obese	19%	23%	23%
Obese (BMI > 30)	32%	35%	38%
Overweight (BMI > 25 and BMI < 30)	22%	17%	30%

Source: Behavioral Risk Factor Surveillance System (BRFSS), Accessed via PA Dept. of Health

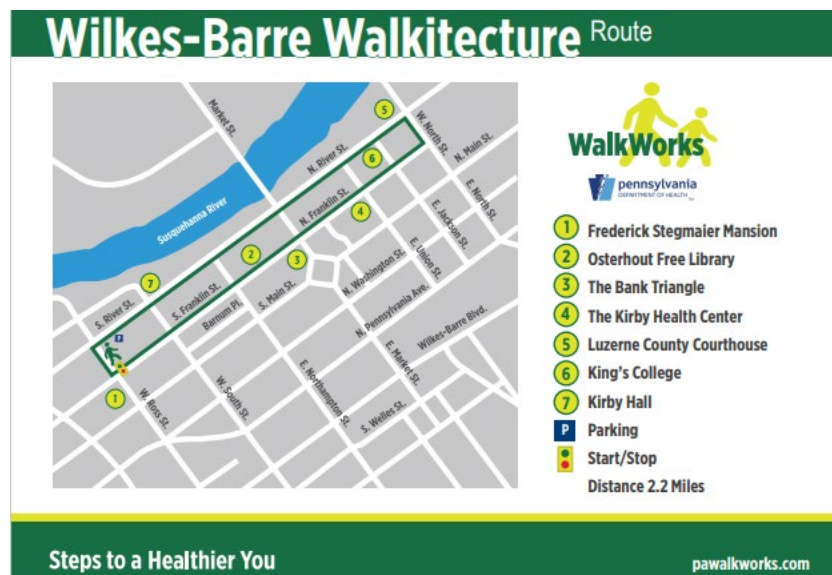
Interventions and Practices Promoting Physical Activity

Previous research completed by The Institute elaborated on programs and initiatives that are currently available to promote physical activity. These efforts include Silver Sneakers, the “Rails to Trails” recreational fitness project, and The Safe Routes to Parks Program.¹ The Pennsylvania Department of Health continues to promote different interventions and practices so communities can access ways to stay active and exercise, reducing the risk of chronic diseases in Northeastern Pennsylvania.

Within the Commonwealth, an initiative called WalkWorks is carried out by the Pennsylvania Department of Health and the Pennsylvania Downtown Center. The program offers a variety of assistance and development tactics to help expand walking, biking, wheeling, and public transportation options. Since 2014, these entities have been funded to design active transportation plans and policies to select grantees which build valuable routes to common destinations. WalkWorks’ strategies for enhancing social connectivity, economies, and public health include:

- Funding Active Transportation Plans
- Delivering technical assistance
- Educating the public (regardless of their background, income, or location) about the importance of safe and easily available walking, biking, and transit options
- Promoting events, routes, and programs that encourage the use of different modes of transportation.

The graphic below outlines the WalkWorks Route available in Luzerne County. The downtown Wilkes-Barre guide spans 2.2 miles and includes 19 structures in addition to a path and waterfront park along the Susquehanna River.⁸



Source: “Wilkes-Barre Walkitecture Route” PA Department of Health

The Department of Health is also assisting in promoting physical activity through the Centers for Disease Control and Prevention’s State Physical Activity and Nutrition (SPAN) five-year grant. Not only does the SPAN grant aid individuals in gaining nutritional food options, another pillar of lifestyle medicine, it emphasizes physical activity. The Department of Health is committed to increasing “the implementation

of nutrition and physical activity standards in early care education systems” and “the number of places that implement community planning and transportation interventions to support safe and accessible physical activity”). In collaborating with the Pennsylvania Downtown Center, the SPAN grant is providing the same support as WalkWorks. They both are investing time in growing the opportunity for all community members to travel to home, early care and educational institutions, healthcare facilities, work, and parks/recreation centers. Additionally, the SPAN grant will supply technical assistance in helping those with physical disabilities.⁹

Additionally, current practices in the promotion of physical exercise involve students in a school setting as they have the option to participate in class curriculums, extracurricular activities, and sports organizations. The Pennsylvania State Board of Education outlined their health and physical education programs and current requirements of students attending primary school to high school. The school’s set curriculum helps children maintain healthy lifestyles and “increase their chances of achieving to their highest academic potential and are better able to handle the demands of today’s hectic schedules.” Not only can students participate in gym classes during the school day, but options are available during the summer months and after school. Also, students of all ages and grade levels can participate in different sporting events depending on their interests.¹⁰

Current Physical Activity Options and Needs

In May 2023, the Pennsylvania Environmental Council (PEC) released *NEPA Trails: Assessing Community and Connectivity in Northeastern PA*. While analyzing the ecosystems throughout Carbon, Lackawanna, Luzerne, Monroe, Pike, Susquehanna, Wayne, and Wyoming Counties, the data outlined outdoor recreation uses and the paths cyclists can take. The report addressed how the PEC must look beyond the task of connecting abandoned rails to trails due to the length of the process. Many areas of Northeastern Pennsylvania have been abandoned due to the existence of anthracite coal and railroads. Additionally, regional stakeholders such as county planners, tourism promotion agencies, trail organizations, event promoters, business owners, and promoters of cycling, were involved in the data collection process. The project team developing this evaluation took information from in-person mapping and workshops where the stakeholders discussed trail placement, interviews, and public survey questions.

The report first detailed the natural attributes of the NEPA region and the importance of improving the economy and job retention through the development of diversifying outdoor recreation and tourism. Existing public lands include 15 state parks, state forests spanning approximately 130,000 acres, the Delaware Water Gap National Recreation Area, and various land trusts/conservancies. Cyclists and mountain bikers can also ride or hike on a variety of dirt and gravel paths connected by forests and towns. Multi-use trails are available as well. They include the Delaware and Hudson Rail Trail, which is connected to historic parks/towns, the Lackawanna River Heritage Trail extending from Wilkes-Barre to the New York state border, and the Commonwealth’s longest rail trail – the Delaware and Lehigh Trail (D&L).

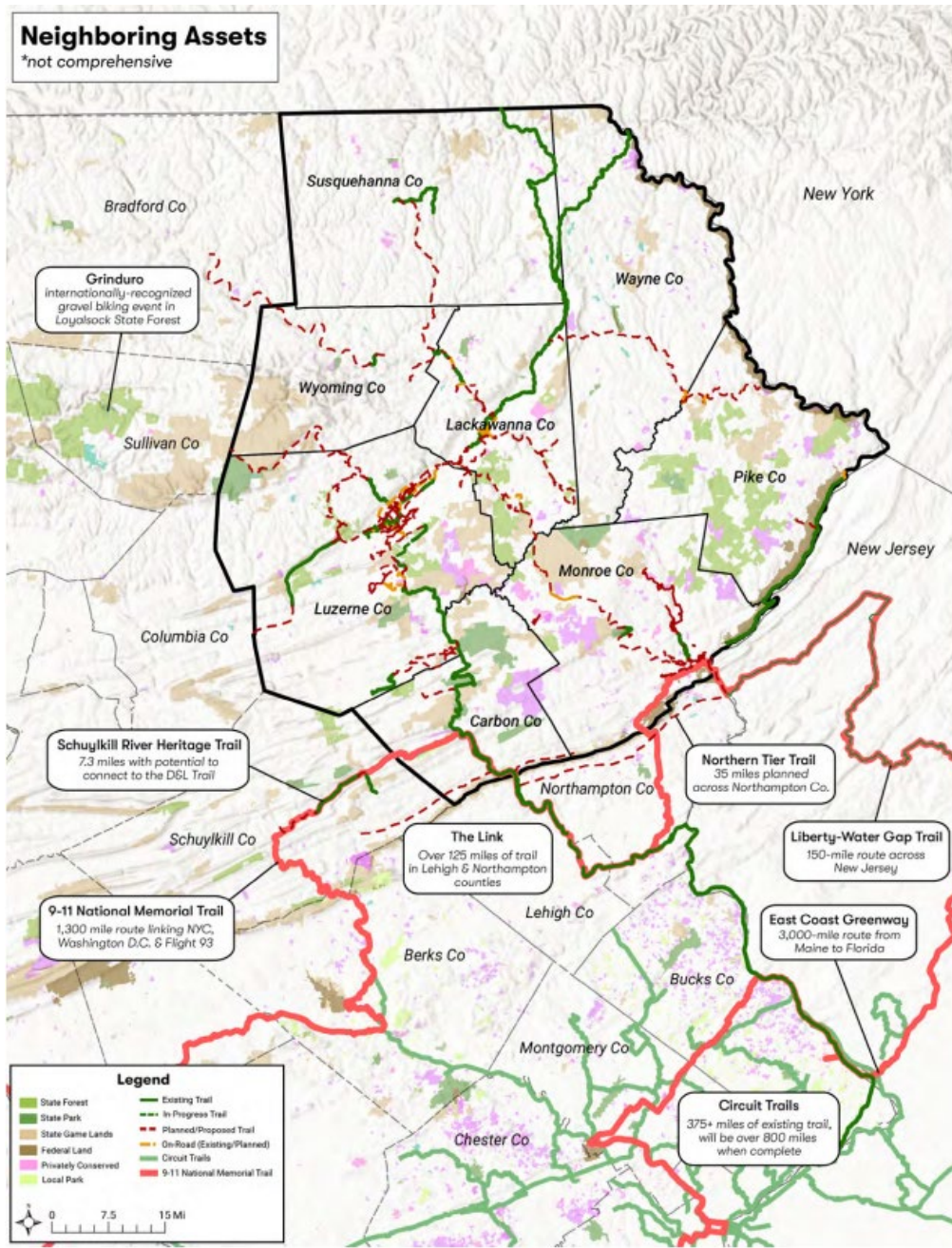
These local organizations also promote cycling and outdoor recreation:

- Endless Mountains Heritage Region (EMHR): Members of the affiliated nonprofit attend to 2,850 square miles of land running through Bradford, Sullivan, Susquehanna, and Wyoming Counties. They also manage the upper North Branch Susquehanna River Water Trail.

- **Pocono Forests and Waters Conservation Landscape:** The initiative supports Carbon, Lackawanna, Luzerne, Monroe, Pike, and Wayne Counties by advancing sustainability, conservation, community revitalization, and recreational projects.
- **Anthracite Mountain Pedalers:** The non-profit organization’s objective is to expand mountain biking in Luzerne County.
- **NEPA Trails Forum:** Diverse groups meet quarterly to address issues of trail building (including recreational, mountain biking, snowmobile, park, municipal, and water trails) on private and public property.
- **PA Route 6 Alliance:** This corporation executes the Management Action Plan, branding and marketing, community development programs, and other planning processes for the PA Route 6 Heritage Corridor.
- **Anthracite Bicycle Coalition:** The volunteers at this nonprofit group organize the Heritage Valley Bike Tour each year (along with efforts pertaining to bicycle safety, trail clean-ups, support services for races, organized rides, and helmet bike giveaways) to bring cyclists and their families together.
- **Keystone Mountain Bike Team:** This organization allows all Lackawanna County students in 6th through 12th grades to join a team at Lackawanna State Park through the Pennsylvania Interscholastic Cycling League and National Interscholastic Cycling Association.
- **Discover NEPA:** Since 2017, Discover NEPA has helped residents explore resources throughout the 10-county region. The organization also supports increased retention and attracts outside individuals by collaborating with economic development organizations, companies, healthcare institutions, and colleges/universities.
- **Endless Mountains Visitors Bureau (EMVB):** This tourism promotion agency specifically promotes organizations, events, and experiences in Sullivan, Susquehanna, and Wyoming Counties.
- **Pocono Mountains Visitors Bureau (PMVB):** This private non-profit is the “official destination marketing organization” for Carbon, Monroe, Pike, and Wayne Counties.
- **Visit Luzerne County:** The group uses advertising, promotion, and customer service to attract visitors to the region.
- **Lackawanna County Convention and Visitors Bureau (LCCVB):** This organization aims to improve the impact and development of the economy through tourism and hospitality advertising throughout Lackawanna County.

The Neighboring Assets noncomprehensive map below outlines forests and parks along with existing trails, trails in progress, and planned/proposed trails. The various trails provide ways in which residents can travel through the NEPA region and to neighboring counties or states. Two important trails within the map include The Circuit Trails in Greater Philadelphia and the Liberty-Water Gap Trail, linking Portland Borough to the Delaware Water Gap in Monroe County. Additionally, the network of local trails extends to Lehigh and Northampton Counties along with the urban communities of Allentown and Bethlehem. The PEC also added information about roads and multi-use trails in which one path connecting Lehigh River to the Delaware River and northern Northampton County spans 35 miles. The Schuylkill Valley Heritage Trail spans 7.3 miles through historic and mining sites and has designs to go through Pottsville and another trail in Jim Thorpe. One long-distance connection, the 9-11 National Memorial Trail, overlaps with the Schuylkill Valley Heritage Trail and Switchback Railroad Trail and

connects to the Delaware and Lehigh Trail. There are three other long-distance trails not incorporated in the map – the Adventure Cycling Routes, Bicycle PA Routes, and the East Coast Greenway; they allow users to reach other states.¹¹



Source: "NEPA Trails: Assessing Community and Connectivity in Northeastern PA" PA Environmental Council

As many outdoor opportunities exist in the region, one factor to consider when engaging in any form of physical activity is weather. The National Institute on Aging (NIA) shared that individuals exercising outside through different elements should consider heel support shoes with the right arch as well as comfortable and appropriate clothing depending on the activity. Exercising in the cold can become

dangerous if the proper precautions are not taken, so the NIA emphasized that a suitable number of layers should be worn that allow for both air circulation and moisture evaporation.¹² Additionally, the American Heart Association identified guidance on how to stay safe as temperatures decrease. In these weather conditions, significant medical emergencies like hypothermia can occur, causing various problems inhibiting physical activity. The most prominent symptoms include coordination issues, mental confusion, delayed reactions, slurred speech, cold extremities, shivering, and tiredness. Incorporating appropriate and insulated clothing material like fleece instead of cotton to prevent hypothermia and frostbite due to wind, rain, snow, and other factors in the winter.¹³

Recreational Opportunities

A variety of fitness and recreational facilities offer programming to NEPA residents. According to DiscoverNEPA, there are 143 sports and fitness centers in the region. They include the YMCA, yoga/dance/gymnastics studios, CrossFit facilities, sports complexes, and skating rinks. The Greater Scranton YMCA commissioned The Institute to conduct an asset map on programs in facilities within Lackawanna County, so considerably more data is available for Lackawanna County. Larger-scale organizations like the Greater Scranton and the Carbondale YMCA have opportunities for members to engage in physical activity. Even non-members can access other health and fitness programs in close proximity to the YMCA such as gyms and fitness centers, swimming pools, and Silver Sneaker programs for adults 65 years and older. In Lackawanna County, there are 71 gyms and fitness centers near the Greater Scranton and Carbondale YMCA that involve a variety of physical activity programs like CrossFit, personal training, physical/occupational therapy, nutritional education, gymnastics/dance studios, martial arts, Pilates, or Zumba. Other establishments like the Scranton Jewish Community Center and the ProFitness Club incorporate alternative ways to exercise with indoor and outdoor swimming classes. Public parks in the surrounding area, including Lackawanna State Park and Eagle Lake, also have swimming availability for residents. Designed workshops, online classes, and in-person programs at Silver Sneaker locations are also situated within Lackawanna County.

Both Luzerne County and Wayne County are homes to YMCAs, with a variety of programs in their facilities. Wayne County itself supports parks and recreation and there is an extensive Lackawaxen River Trail. Luzerne County has three YMCAs and there are numerous trails and parks to support outdoor activities. The Catholic Youth Center in Wilkes-Barre offers a menu of programs for children and families as well. Both counties have sports complexes and there is a skating rink in downtown Wilkes-Barre. These community assets are in addition to private sector gyms and fitness and training centers. Stakeholders such as governmental and environmental groups frequently explore opportunities regarding volunteer initiatives and outdoor infrastructure investments in the Lehigh Valley/Pocono region. For example, the director of Pennsylvania's Outdoor Recreation traveled to a local stakeholder meeting where discussions began about improving the outdoor recreation and health of residents. Topics discussed at these meetings are important as the region continues to grow and build on the Commonwealth's status as the sixth-largest economy for outdoor recreation in the nation.¹⁴

Other recreational opportunities are uniquely tailored for various interest groups and special populations. In May 2023, for example, the Bike Buddy program in Lackawanna County began as part of the Individuals Abilities in Motion nonprofit group. This program allows residents with mobility impairments to use adaptive cycles at park trails. Volunteers teach riders how to navigate parks

independently. Residents have been able to learn about different bicycles such as Excelerator Handcycles and recumbent bikes from Lackawanna Heritage Valley Authority.¹⁵

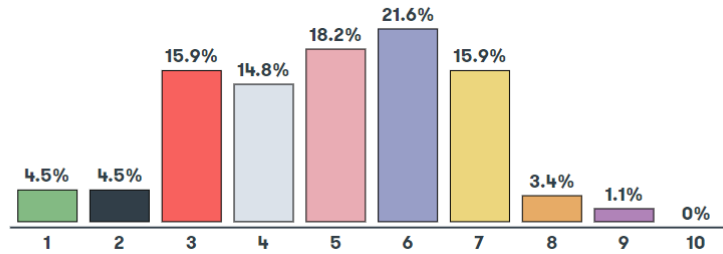
Individuals with a disability with limited walking ability can engage in physical exercises. Local opportunities that are accommodating to those individuals include public indoor swimming pools with wheelchair-accessible entrances, indoor tracks, weight training, yoga/Pilates, and sporting programs like basketball or tennis. More generally, aerobic exercises are important to engage in as well as muscle-strengthening activities. The CDC included other options that individuals can participate which include horseback riding, rowing, seated volleyball, or ballroom dancing.¹⁶ A statewide organization like the Pennsylvania Department of Aging provides residents 60 years and older an opportunity to be involved in the Healthy Steps in Motion (HSIM) program. This program allows residents in different counties to learn from Certified Workshop Leaders so they can build strength, flexibility, and balance depending on their fitness ability.¹⁷

Gaps in Physical Activity and Infrastructure

Interviews were also conducted with stakeholders of diverse backgrounds for the *NEPA Trails: Assessing Community and Connectivity in Northeastern PA* report. They were asked nine questions about their opinions on connecting the system of trails, the organizations and federal grants that can support connected communities, and whether the region is prepared for visitors. Many responses were particularly relevant to the counties in which the stakeholders live. They identified public perception of cost and out-of-state guests as the largest barrier to connecting trails, along with on-road bike safety. For visitors entering the region, issues include the inaccessibility of overnight lodging in the Wilkes-Barre and Scranton downtown areas. The advantages of the current system pertain to the variety of available trails and bike paths as well as the promotional work and development that can be completed by the NEPA Trails Forum.

Additionally, the report evaluated the public survey questions about the status of outdoor recreation. A little over 40 percent of the respondents indicated that the natural landscape/scenery and outdoor recreation facilitate the attraction of visitors to NEPA. In another survey, just under half of the respondents relayed that cycling infrastructure needs to be improved. Other potential improvements relate to bike lanes, share-the-road signage, funding, family-friendly events, maps, bike rentals/shops, and safety measures for cyclists. The graph below depicts respondents' feelings on the region's latest cycling-related infrastructure and amenities on a scale from 1 to 10, with 10 being the highest rating. Pluralities of respondents gave ratings of 5 and 6 (18.2 percent and 21.6 percent, respectively).¹¹

On a scale of 1-10, how would you rate the current state of cycling-related infrastructure and amenities (i.e. multi-use paths, mountain bike trails, on-road infrastructure, signage, trailheads, etc.) in the NEPA region?



Source: "NEPA Trails: Assessing Community and Connectivity in Northeastern PA" PA Environmental Council

Case Studies on Physical Activity and Infrastructure Solutions

A study titled *Role of Built Environments on Physical Activity and Health Promotion: A Review and Policy Insights* addressed prominent health issues in vulnerable communities and identified possible urban planning and policy interventions to encourage physical activity. Grants from the Key Project of Social Science Foundation of China and National Natural Science Foundation of China supported the study, which was presented to the *Frontiers in Public Health* journal. The authors analyzed policies surrounding the “role of built environments in shaping individuals’ physical activities or other types of behaviors.” They address various attributes of the built environment, such as land-use and transportation systems that impact food and dietary behaviors, healthcare services, and opportunities for recreation and leisure-related physical activities. The publication also describes how public and private government sectors invest time to advocate for community activities and gaps in infrastructure. For instance, the U.S. Department of Health and Human Services, along with New York City, issued the “Physical Activity Guidelines for Americans: Be Active, Healthy, and Happy” and “Active Design Guidelines: Promoting Physical Activity and Health in Design.” Both reports outline how much moderate-intensity activity, vigorous-intensity activity, muscle-strengthening exercise, and bone-strengthening exercise are needed to improve healthy living habits. The research explored gaps in research surrounding the influence of “built environments” as well, along with the ways these environments affect physical and mental health in various societal groups. The authors emphasized the need to evaluate public health and lifestyle advancements through the integration of urban planning and policies involving green space, recreation, and bike facility developments.¹⁸

Additionally, the National Recreation and Park Association constructed recommendations for public health and park and recreational professionals in the *Active Parks! Increasing Physical Activity Through Parks, Trails, and Greenways* report. It outlines four case studies in areas such as McKinley Park in Pittsburgh, Pennsylvania, where improvements to physical infrastructure, restorations, community engagement efforts, and activity programs are underway.

Advancements began at Magic Johnson Park in South Los Angeles in 2018. Community members were convened through events and workshops to share what was required to increase physical activity. Restorations of a community center and new signage for the park concluded in 2022. Residents continue to be involved in the community through group fitness classes, educational programs, and after-school programs where students receive healthy snacks while participating in arts, sports, and STEM activities.

The Lafitte Greenway in New Orleans addressed a divide in physical activity and infrastructure after the Area was destroyed by Hurricane Katrina. The New Orleans Recreation Development Commission (NORDC) created a plan to increase community engagement. Further, the Friends of Lafitte Greenway group plans and designs events for local and historic parks. Other assessments produced by local groups include information about demographics, environmental challenges, and transportation barriers to inform consideration of projects such as a “multiuse transportation corridor.” These groups also connected the Lafitte Greenway with shaded paths for walkers and bicyclists, which included “ADA-compliant crosswalks and signals.” They offer outdoor cultural and community events and free fitness classes as well.

Furthermore, the Department of Parks and Recreation for the City of Grand Rapids made infrastructure improvements as they re-established Ken-O-Sha Park in 2021. Funding from the National Recreation and Park Association allowed trail repairs with “wayfinding signage, green infrastructure, and an outdoor

classroom.” As these improvements continue, individuals of different age groups can spend more time outdoors, which helps them improve physically, socially, and mentally.¹⁹

Additionally, there has been a necessity for health equity-oriented lifestyle medicine pertaining to the social determinants of health. A study titled *Community-Engaged Lifestyle Medicine as a Framework for Health Equity: Principles for Lifestyle Medicine in Low-Resource Settings* addressed health disparities and life expectancy risk factors in marginalized communities. Lifestyle medicine challenges such as inactivity persist in these vulnerable neighborhoods due to issues such as poverty, social isolation, food inaccessibility, and the built environment. The study stated that “70% to 90% of the most common and deadly diseases, including diabetes, coronary artery disease, stroke, and cancer, could be prevented via tobacco cessation, avoidance of overweight, moderate physical activity, and a healthy diet.”

Other disparities involve geographic location and socioeconomic status. Community-Engaged Lifestyle Medicine (CELM), a health equity framework created by the University of Texas Rio Grande Valley Preventative Medicine Residency program, addresses concerns about the disconnection of receiving care. The framework demonstrates that the insight of diverse communities can improve aspects of lifestyle medicine for those struggling to access resources. Overall, CELM can be explained as the “practice of preventing chronic disease and promoting healthy lifestyle behaviors via collaborative, multistakeholder, and community-engaged delivery of LM in diverse, low-income populations.”²⁰

Conclusion

Regular physical activity is an important aspect of lifestyle medicine. Research reveals that there are fewer cases of breast cancer, colorectal cancer, diabetes, and heart disease when individuals participate in physical activity and outdoor recreation. Although there are assets such as a network of trails connecting the NEPA region, there are also challenges – such as a need for safe and accessible options for transport to healthcare and fitness/recreational facilities. The region’s landscape contains natural and public lands, national parks, trails, and lakes/ponds where six main highways connect. Therefore, focusing on expanding walkable and rideable options will improve the local environment, encourage healthy lifestyles among residents, and even offer the potential to bring more visitors to the area.

PEC analysis indicated that many agencies and non-profit groups promote outdoor recreation. Specifically, the NEPA Trails Forum plays a key role in developing trails and recommends that other organizations maintain open communication and collaborate to resolve issues surrounding the lack of opportunities to be physically active. It is important that the primary organizations such as the NEPA Trails Forum have the proper resources to continue projects and communicate with government officials.

The Pennsylvania Environmental Council also produced an Outdoor Towns Toolkit, which provides an outline for enhancing outdoor recreation and subsequent economic prosperity. It details the steps of organizing an action team are to identify partners and resources to secure funding, create a vision for the community, set priorities, create an action plan, celebrate success, track results, and set future priorities. The City of Carbondale and Forest City have Action Teams that bring residents together.

Recommendations

The recommendations below are based on the region’s secondary data, professional publications, and case studies. They should be considered in combination with county-level data.

Funding and resources are available for advancing public health, and lifestyle medicine interventions in particular. Through safety measures and infrastructure investments, leaders in Northeastern Pennsylvania can reach and connect neighborhoods. Improving outdoor and indoor infrastructure and providing various opportunities to stay active will support residential walkability and diminish barriers to accessing health care. Additionally, engagement of the local community and the involvement of diverse organizations in promoting physical activity will address the social determinants of health.

Engaging in physical activity outside is important to the health and well-being of the individual, although it is important to be aware of one’s surroundings. Community members should feel safe when exercising outdoors, therefore it is important to help individuals feel protected and secure as they become active in their neighborhoods. The community will become more empowered and willing to walk, hike, ride a bike, swim, or play sports outside if they feel safe within the place they live.

Funding and Replication of Current Resources

Obtaining federal funding via the Infrastructure Investment and Jobs Act offers pathways to infrastructure and economic progression. The funds may be used to improve public transportation and

encourage physical activities like walking and cycling. Investing in road adjustments and increasing bike lanes and signage support community health efforts and increase pedestrian safety.

The report from the National Recreation and Park Association recommended that communities develop a Geographic Information System (GIS) database or The Trust for Public Land's ParkServe. The ParkServe tool produces data such as number and location of city parks and percentage of land utilized for parks and recreational purposes. Local communities can create a visual depiction of park systems including the existence of easily accessible sidewalks, trails, public transportation, and "layer these park metrics with demographic, environmental, community investment, and other data." Additionally, the National Recreation and Park Association identified how states can review information on parks, trails, and greenways with State Comprehensive Outdoor Recreation Plans (SCORP). Stakeholders in the Northeastern Pennsylvania region can use this resource to replicate changes to outdoor recreation and better connect neighborhoods.

Many of the case studies in this report highlight the need to inform the public and encourage people to work together and actively share information about events in their communities. Northeastern Pennsylvania can mimic areas that are implementing alternate fitness options such as offering free recreational activities in parks and schools. Extracurricular activities like Pilates, yoga, aerobic and strengthening exercises, and Zumba can be based on the individual's age and physical condition. Such opportunities should be accessible to residents who may not have their own reliable transportation. To bring the community together, public and private organizations can organize events to demonstrate how residents can adopt healthy living habits. Collaborative partnerships among diverse businesses and organizations can produce innovative strategies for satisfying unique health and wellness needs. Further, these groups can work together to address health inequities.

Addressing Social Determinants of Health

The pillar of physical activity in lifestyle medicine relates to the social determinants of health. Research suggests that the community-engaged lifestyle medicine (CELM) framework may be used effectively to include stakeholders from different industries to improve health outcomes of individuals facing health inequities. The CELM model incorporates four health-equity principles of physical activity in lifestyle medicine – community engagement, intersectoral partnerships, multilevel approaches, and cultural responsiveness.

- **Community involvement and engagement in health intervention practices will inform solutions for enhancing physical activity.** Short-term, community organizations can arrange focus groups and implement motivational interviewing techniques. Long-term, a diverse workforce of underserved populations should be represented so they can share their opinions of physical activity improvements. Including these populations will allow them to participate in volunteering and paid initiatives within clinical and community positions.
- **Community groups with different perspectives, knowledge, and skills will promote and build population health.** Intersectional partnerships will encourage open conversation of topics within lifestyle medicine. Discussion may encompass individual, family, social, neighborhood, and cultural influences that may not be understood by all stakeholders.

- **Using a multilevel approach will facilitate the involvement of non-health care providers in health equity efforts and add insight into adjusting community behaviors.** For instance, a long-term multilevel approach may involve the use of various technology platforms for underserved residents, so they participate in physical activities.
- **Embracing community culture, values, beliefs, and practices will help earn trust and engagement.** Examples of cultural responsiveness include multilingual training and availability of nutritious ethnic foods. Community-engaged lifestyle medicine can deliver long-term outcomes if local staff and health care providers are representative of those communities, and diverse community groups will be more comfortable expressing their views and improving physical activity if they can access equitable care and appropriate resources.

Endnotes

- ¹ [The Institute. \(2023\). "Lifestyle Medicine in Northeastern Pennsylvania." The Institute for Public Policy & Economic Development Health & Health Care Task Force \(instituteapa.org\).](#)
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- ¹² <https://www.nia.nih.gov/health/exercise-and-physical-activity/finding-right-fitness-shoes-and-clothes>
- ¹³ <https://www.heart.org/en/healthy-living/fitness/getting-active/how-to-stay-active-in-cold-weather>
- ¹⁴ <https://www.wvia.org/news/local/2023-04-10/state-outdoor-recreation-meetings-held-in-the-lehigh-valley>
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- ¹⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9326484/>
- ¹⁹ <https://www.nrpa.org/globalassets/research/active-parks-implementation-guide.pdf>
- ²⁰ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6732871/>

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