

VI. HEALTHY PEOPLE IN HEALTHY NEIGHBORHOODS (STRATEGIC IMPERATIVE THREE)

“Investing in our schools, improving housing, integrating neighborhoods, better jobs and wages, giving people more control over their work – these are as much health strategies as disease prevention and education efforts.”

(Dr. David R. Williams, Harvard School of Public Health and RWJ Foundation Commission to Build a Healthier America)

WHERE YOU LIVE EFFECTS YOUR HEALTH

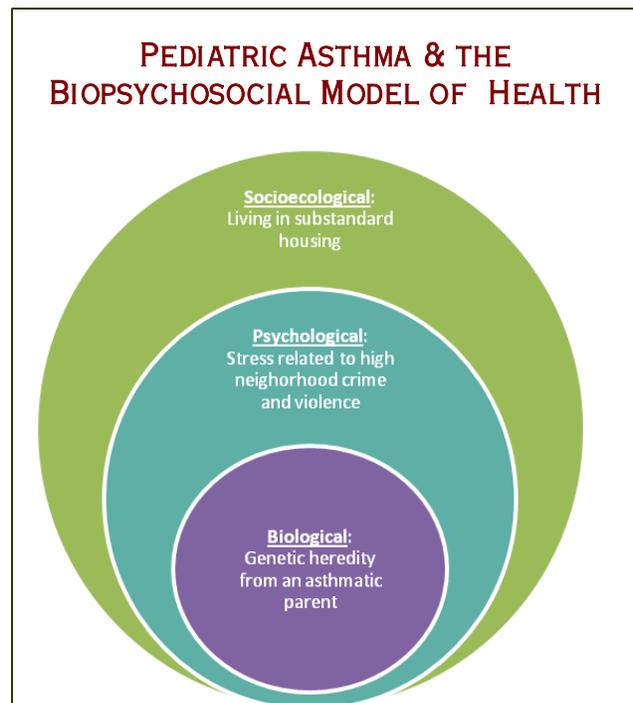
An individual’s health status is greatly influenced by where he/she lives, works, plays, shops, and learns. Understanding the place-based factors affecting health is necessary for creating health promoting neighborhoods for all Manchester residents.^{103-105 106}

The Institute of Medicine defines health as “a state of well-being and the capability to function in the face of changing circumstances.” Based on this definition, health is more than the presence or absence of disease. It is rooted in interactions among individual characteristics and the surrounding environment, such as a person’s place of residence or his social support network.

A more formalized expansion of this concept is known as the “Biopsychosocial Model of Health” (Figure A).¹⁰⁷ In the example of pediatric asthma summarized in Figure A, the biological factor of genetic heredity is affected by increased stress related to the exposure to violence, which has proven to increase asthma exacerbations or attacks, and substandard housing that increases the risk of exposure to known asthma triggers, such as cockroaches or mold.^{108, 109}

This model illustrates clearly the connection between the traditional biomedical approach of medicine (which is focused on the diagnosis, treatment and management of disease) and the population-based, ecological approach of public health (which aims to include social, cultural and psychological, and environmental influences on health).

These models direct us to examine the places or environments in which people spend their time in order to fully understand community health. “Environment” has many important interpretations and



definitions – from everyday resources such as clean air and water to the social impacts within neighborhoods, such as poverty or crime. In this chapter the neighborhood environment where people live, work, learn, and play was discussed in terms of *traditional environmental health* concerns, such as air, water and food sources, the *built environment* that focuses on improving a community’s physical design and structure, and the *social environment* that aims to address socioeconomic concerns, such as the growth in poverty and fostering community cohesion.

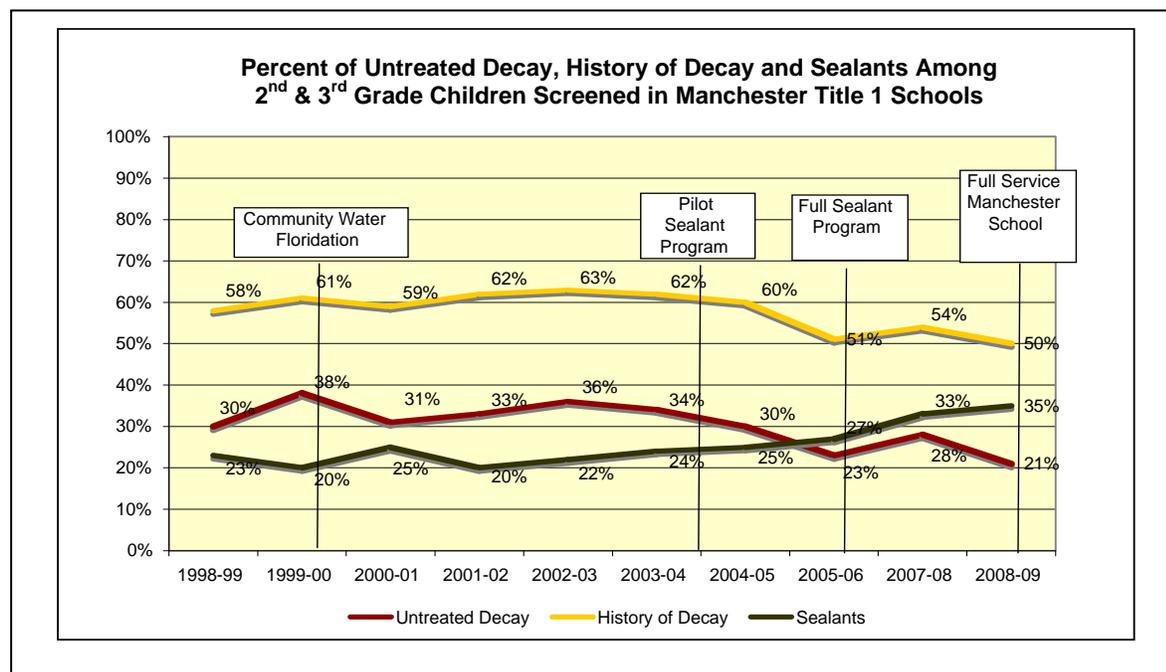
The information in this chapter primarily focuses on the City of Manchester and includes data about the other HSA communities when possible. While the severity may be different in the communities outside of Manchester, the variables described exist in all HSA communities to a certain extent, and these factors are critical elements to consider for the future development of population health improvement strategies.

TRADITIONAL ENVIRONMENTAL HEALTH

The traditional field of environmental health encompasses the health consequences of the interaction between people and their natural environment. Examples of such factors include safe and adequate food, clean drinking water, and good air quality. The Manchester Health Department, in addition to several City departments and community partners, is actively involved in protecting community health as it relates to the natural environment.

ENHANCING THE PUBLICS’ WATER SUPPLY

The public water supply that serves Manchester as well as residents within some of the surrounding communities was fluoridated in 2000 to improve the oral health of Manchester residents by decreasing dental decay. A fluoridated water supply is considered one of the top ten greatest achievements of public health in the 20th Century. In Manchester, a combination of community water fluoridation and a full dental sealant program has contributed to a reduction in untreated dental decay and the overall history of decay among elementary school aged children.



Source: Manchester Health Department

FOOD SAFETY

A major aspect of ensuring a safe food source is achieved through routine restaurant inspections. All licensed food service establishments are inspected twice per year. The goal of the inspections is to prevent and/or remedy critical violations in food preparation practices that pose a particular health threat to patrons or employees. The following table shows the number of establishments that had two or more critical violations on their food safety inspections each year.

FOOD SAFETY INSPECTIONS AND VIOLATIONS			
INSPECTION YEAR	NUMBER OF INSPECTIONS	INSPECTIONS WITH 2+ CRITICAL VIOLATIONS	% WITH 2+ CRITICAL VIOLATIONS
2006*	716	103	14.4%
2007	1622	236	14.6%
2008	1978	320	16.2%
2009*	536	87	16.2%
total	4852	746	15.4%

**Partial Years - 2006 beginning 6/1/2006. 2009 ending 5/21/2009.
Source: Manchester Health Department*

Correcting violations of food preparation is important because violations increase the community's risk of exposure to food borne illnesses, such as Salmonella or E. coli. Illness from food borne pathogens may also result from individual or farm practices, as well as restaurant, grocery store, or catering activities. The table below lists cases of food borne illnesses investigated by the health department.

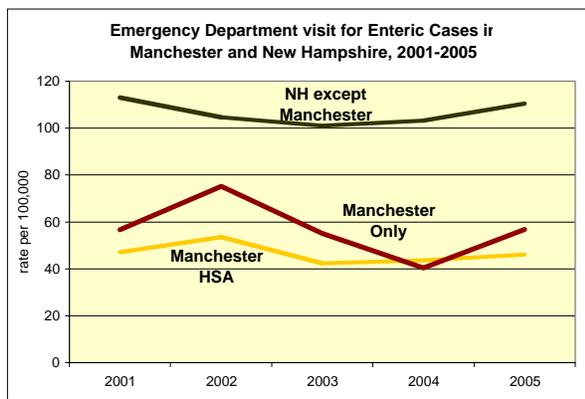
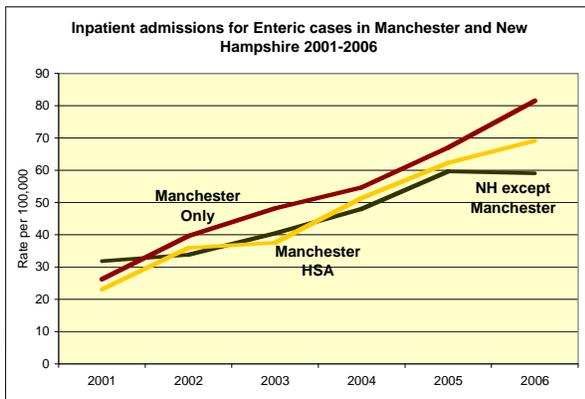
Cases of enteric disease (food- or water-borne illness) are caused by eating or drinking contaminated food or water or by contact with infected feces or vomit. Cases of these diseases provide an indirect measure of food safety practices; however, enteric disease is highly underreported due to its common, and often delayed, symptoms, such as nausea and diarrhea.

FOOD BORNE ILLNESS INVESTIGATIONS IN MANCHESTER, 2005-2009					
FOOD BORNE ILLNESSES	2005	2006	2007	2008	1/09 TO 5/09
Campylobacter	26	10	19	13	12
E. Coli 0157	2	4	1	3	2
Giardia	51	11	4	3	11
Hepatitis A	9	16	6	6	7
Salmonella	12	11	35	13	13
Shigella	0	1	1	0	1

Source: Manchester Health Department



Safe food and water sources are important because enteric diseases can be serious health risks and result in hospitalization. The graphs below show that residents in the rest of the state visit emergency departments more than Manchester area residents for enteric diseases. Since 2001, inpatient admission for enteric disease has increased significantly both in Manchester and statewide.



Source: NH DHHS

THE BUILT ENVIRONMENT

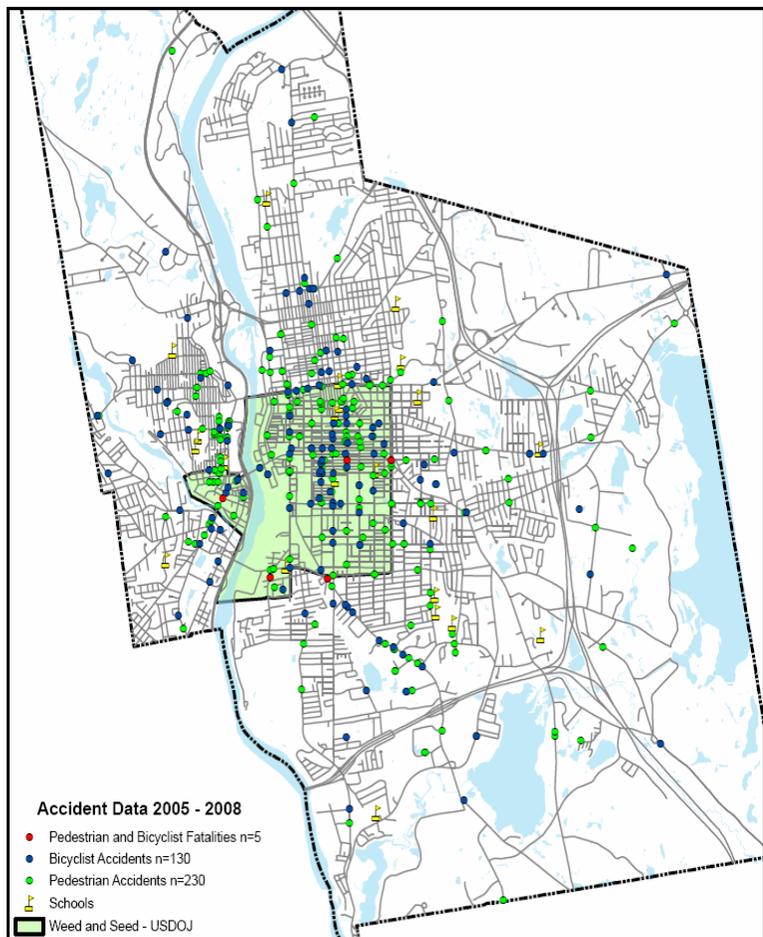
Health promoting neighborhoods provide and facilitate connections to essential resources for their residents. Examples of essential resources are quality health care and safe places for physical activity. In general, a health-promoting neighborhood is important for community well-being and livability.

The built environment refers to structural elements within the community, such as sidewalks, streets, walking paths, parks, and public and private buildings. An example of a concern related to the built environment and healthy community design is ensuring that a community has access to safe places for physical activity and healthy food options. For instance, if a corner store is serving as the neighborhood's main source of food and it does not provide fresh fruits and vegetables, the built environment makes it challenging, if not impossible, for the families within the neighborhood to achieve good nutrition.

NEIGHBORHOOD SAFETY

Another example of how the built environment influences health is in its relationship to safety. Health-promoting neighborhoods are livable and walkable. Poor structural design can lead to unsafe areas for walking and/or bicycling. From 2005 to 2008, there were five pedestrian/bicycle fatalities, 130 bicycle accidents, and 230 pedestrian

MANCHESTER PEDESTRIAN ACCIDENTS 2005-2008



Source: Manchester Health Department

accidents in Manchester. The highest concentration of accidents occurred in the center City area. Of particular concern is that this area contains several elementary schools that are considered neighborhood “walking schools,” which means that they have limited bus service, thus more students are out on the sidewalks making their way to school on foot. This fact makes it especially important to ensure adequate areas for walking and biking to support safe routes to school for all of Manchester’s children.

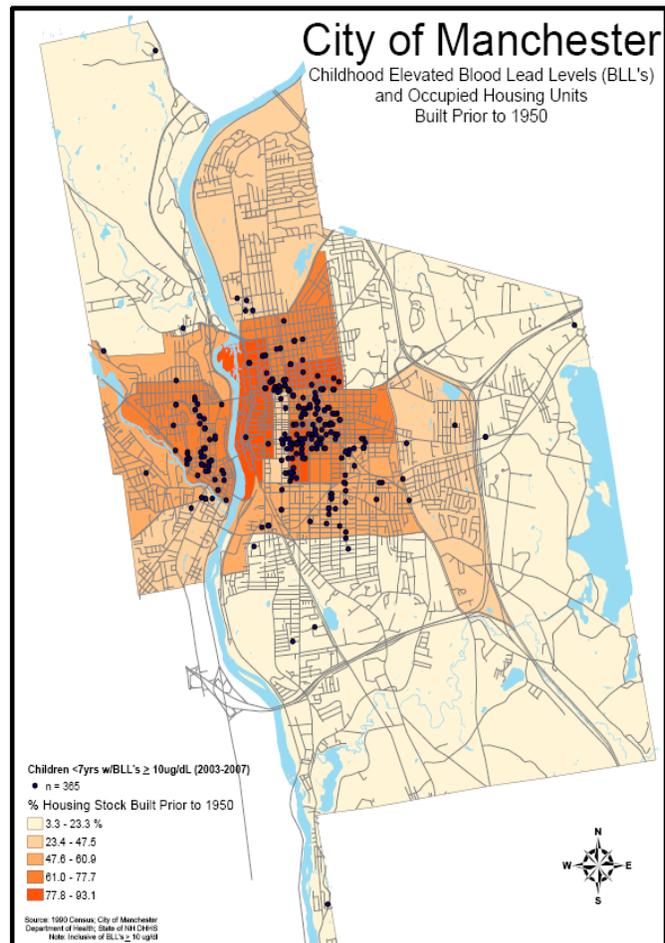
"Good health begins at home. Ensuring that the nation's homes are safe, healthy, affordable, accessible and environmentally friendly will have a direct, immediate and measurable effect on the health of the nation."

- Dr. Howard Frumkin, Director of CDC's National Center for Environmental Health

SAFE HOMES

Homes are considered an important part of the built environment. A healthy home is a place that promotes and supports safe, decent and sanitary housing conditions that protects from disease and injury. The national Healthy Homes program identifies seven principles to make homes safer. Healthy homes should be dry, clean, pest-free, safe, contaminant-free, ventilated, and well-maintained.¹¹⁰

Some of the most common environmental influences that affect people in their homes include radon, asthma triggers, and lead. Older housing stock that was built before 1950 is more likely to expose residents to lead. Lead is highly toxic and exposure may result in cognitive impairments and behavioral problems. Young children are most vulnerable to lead poisoning from their surrounding environment and should be screened for elevated lead blood levels at one and two years of age. Older children, ages 36 to 72 months, should also be screened if they were not previously screened at ages one and two years of age. As illustrated by the map, housing built prior to 1950 is clustered in the center City area of Manchester on both the east and west sides of the Merrimack River. This pattern is mirrored by the locations of elevated blood lead levels among children ages 7 and younger.

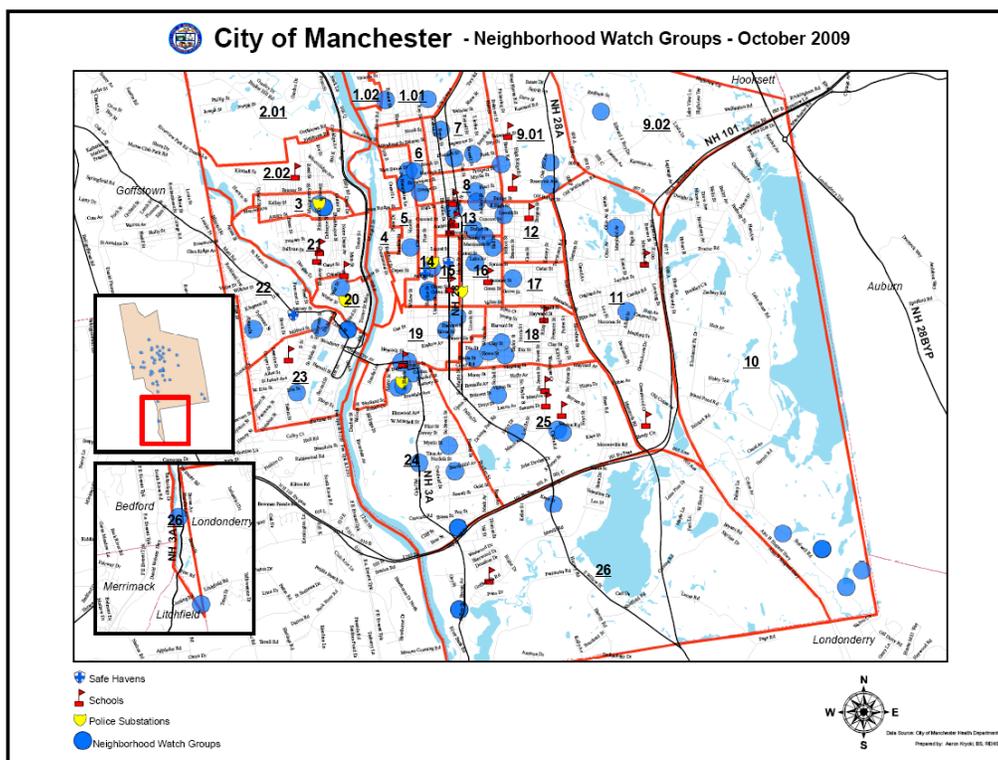


Source: Manchester Health Department

THE SOCIAL ENVIRONMENT

The health and well-being of populations are influenced by the social environment as well as the physical environment in which they live. A key element of a positive social environment is “collective efficacy”, which is defined as the linkage of mutual trust and shared expectations for intervening on behalf of the common good within the neighborhood context.¹¹¹

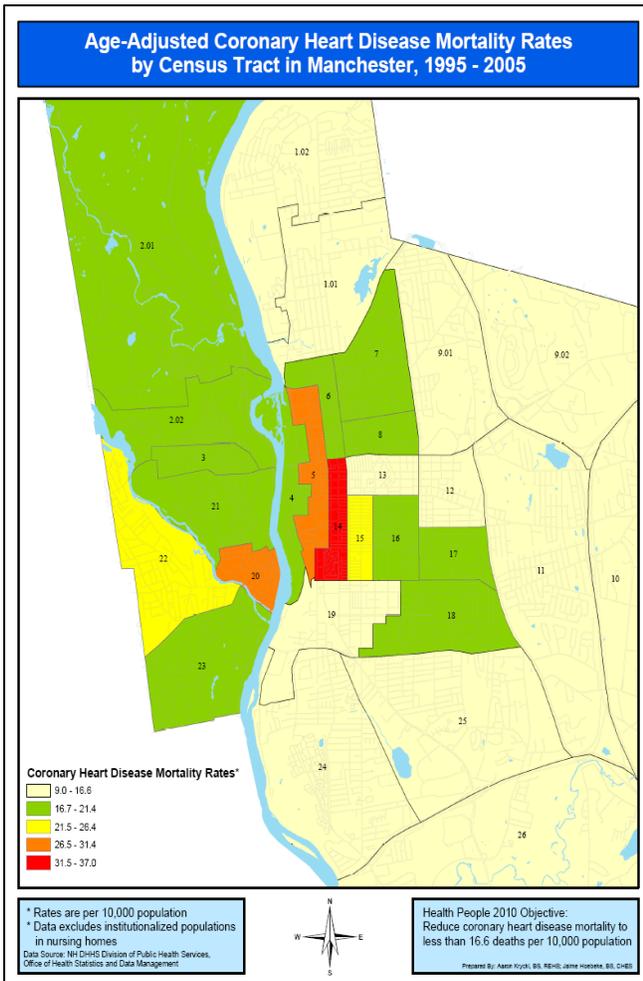
A lack of collective efficacy contributes to disorder in neighborhoods and may increase stress and lead to adverse health outcomes, such as high blood pressure or asthma exacerbations/attacks.¹¹¹ Efforts aimed at increasing collective efficacy reduce violent crime and improve neighborhood disadvantage.¹¹¹ Residents of neighborhoods with increased collective efficacy are likely to be more active and connected to positive social support networks that promote healthy behaviors. One example of an effort to improve collective efficacy is the establishment of neighborhood watch groups within Manchester. There are nearly sixty active neighborhood watch groups in the City.



Source: Manchester Health Department

DISADVANTAGED COMMUNITIES

Places with poverty rates at or above 20% are considered “poverty areas” by national definitions.¹¹² While people who live in poverty reside in all areas of the City, a higher proportion of them are geographically concentrated within the center City area in Census Tracts 5, 6, 14, and 15, combining for an average poverty rate of 31% of the population.¹¹³ This is meaningful for the needs assessment because Manchester residents who live in poverty areas may be negatively affected by aspects of their surrounding environment.^{57, 114}

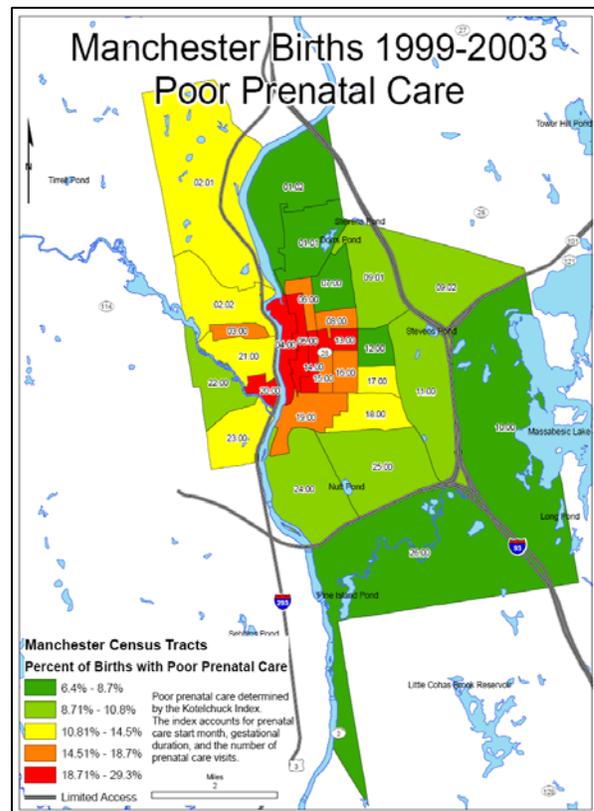


Areas of the City with a higher proportion of people living in poverty tend to have a higher rate of poor health measures such as increased rates of heart disease deaths and poor prenatal care.¹¹⁵ From 1995 to 2005, in neighborhoods with high rates of poverty, Manchester residents had significantly higher rates of coronary heart disease mortality (27.6 deaths per 10,000) compared to Manchester neighborhoods that had lower rates of poverty (13.9 deaths per 10,000).⁶¹ Similar patterns are observed when analyzing the distribution of poor prenatal care for Manchester births during 1999-2003.

The geographic variation of the adverse health outcomes across the City outlined above may in part be explained by differences in each neighborhood's social conditions that are related to economic hardship. For instance, violence negatively contributes to a community's psychosocial health by increasing stress experienced by residents within these communities. One type of chronic stress that has been investigated in relation to the well-being of urban populations is neighborhood disadvantage, characterized by the presence of a

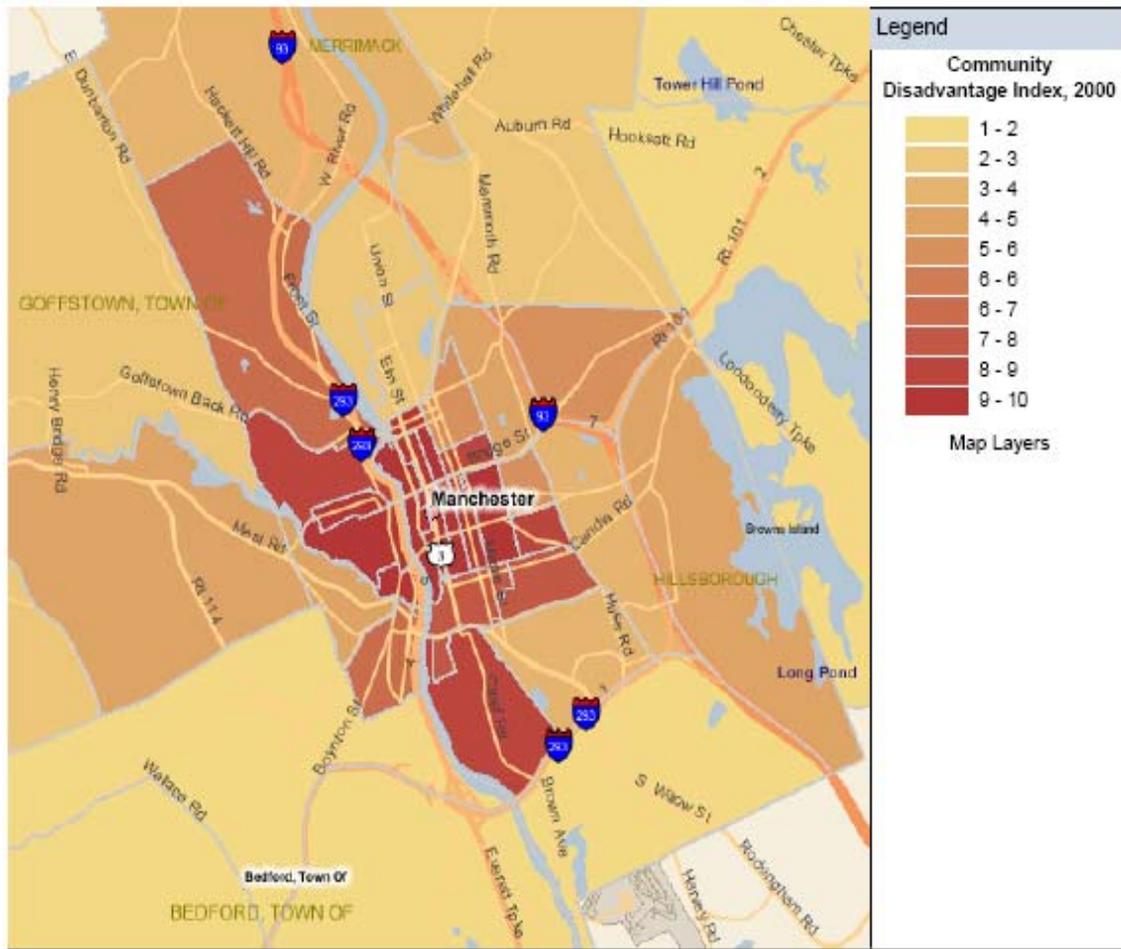
number of community-level stressors, including poverty, unemployment, substandard housing, and high crime and violence rates.⁷³

The Community Disadvantage Index provides a tool for measuring neighborhood disadvantage. This index consists of a combination of three measures calculated at the Census Tract level – percent of persons at or below 100% of the Federal Poverty Level, percent of persons receiving public assistance, and the percent of female-headed households with children. The scores range from 0 to 10 with a score of 10 indicating the most disadvantaged Census Tracts in the United States. For instance, a score of nine can be interpreted as a Census Tract that is more disadvantaged than 90% of other Census Tracts in the country. When considering this index in Manchester, the center City area is the most disadvantaged, and Manchester, in general, is more disadvantaged than surrounding communities.



Source: NH DHHS, Manchester Health Department

COMMUNITY DISADVANTAGE INDEX, 2000 CITY OF MANCHESTER AND SURROUNDING COMMUNITIES



Source: Manchester Health Department

AREA RESIDENTS WEIGH IN: HEALTHY PEOPLE IN HEALTHY NEIGHBORHOODS

Residents who participated in focus groups expressed a variety of opinions regarding how their surrounding environment in Manchester encourages or discourages health and healthy behavior. The positive environmental influences on health that were identified included the City's smoking ban, improved parks and trails, options for recycling, and lead abatement. Recommendations to improve the built environment included more paths and trails, improved sidewalks for walking and biking, improved trash removal from neighborhood streets, establishment of a downtown supermarket, and efforts to address run-down or unsafe buildings.

TRANSPORTATION AND HOUSING

Many participants reported that public transportation in Manchester did not adequately address the needs of the local residents. Transportation was mentioned in almost all focus group sessions as a barrier to accessing care, and was highlighted by several key City leaders as an issue of vital importance. Participants reported that the hours and location of bus stops are not convenient, which is very important because there is evidence that public transportation barriers have adverse effects on the populations that depend most on them for health services access, namely the poor and older persons.¹¹⁶ This is particularly true in urban areas such as Manchester, where safety is also a concern for those having to use public transportation when it is available.

"My family came to this country to give my kids a chance at a better education, but we live in an old apartment that is making them sick. My family has been dealing with lead paint problems since 2005 in our apartment. My child has learning problems as a result. We have moved to different apartments, but they have the same problem. We get good care from the doctor, but no help with the apartment."

And for some participants, the affordability and quality of housing were pressing issues. Participants stated that many affordable apartments were old and had lead paint in them, and they would like to see an increase in Section 8 housing.

INTENTIONAL COMMUNITY DESIGN OF THE IDEAL CITY

The ideal community is a city that attracts families and businesses. It is a "destination city".

– Quote from a Key Leader Interview

The concept of intentional community design developed through discussions with focus group participants and key leaders as they discussed the concepts that were important to the development of healthy neighborhoods. This concept includes intentional development of places, programs, and policies that cultivate and maintain a local environment that fosters access to health care and other services, and physical and social safety. This ideal community design will also foster and support healthy behaviors and prosperity. The attributes related to community design talked about by most of the leaders were a thriving economy, access to care and services and safety.

Focus group participants had many ideas regarding what makes a community the best place to live. The number one idea was a safe community with no drugs and a good police force. In all the focus groups, at least one participant mentioned that having a safe community makes it the best place to

live. Participants, also mentioned that a sense of respectfulness and of being able to help neighbors out in time of need were features that contribute to an ideal community. Another theme that was mentioned centered on children. Many participants mentioned good schools, parks and affordable, family-friendly activities as aspects of an ideal community.

Key leaders identified over twenty different topics that describe an ideal city. According to the key leaders interviewed, an ideal city is a place that:

- is designed so that its physical infrastructure promotes all aspects of quality of life within neighborhoods;
- is supported by a thriving economy and local businesses;
- has the capacity to provide for persons of all ages, access to health care and services that are used appropriately by the local population;
- has safe neighborhoods;
- has a sense of pride and values oriented toward family and community;
- prides itself on its cultural diversity and opportunities; and
- provides good and affordable housing to its economically diverse population.

Manchester leadership felt that the population needs to ask itself the question – “Why would I want to come to Manchester?” And they thought that the work of answering this question would guide the future design of the City and its surrounding towns. Key leaders stated that a “destination city” should be built on the sense of pride and accountability and leadership of its population.

The ideal community would be designed to support family and community oriented lifestyles and activities within the city itself and its neighborhoods. Specifically, the physical infrastructure would maximize residents’ ability to enjoy the beauty of the natural environment - including the river that runs through the City center - as well as meet and enjoy their fellow residents. Thus, safe, clean, esthetically pleasing, and vibrant neighborhood spaces for recreation and congregating were noted as being very important to the design of the ideal community. Likewise, having a good and effective transportation system to link persons to services and neighborhoods to each other was mentioned as being vital to the physical design of the future Manchester. Community leaders also depicted how the ideal design of physical spaces and transportation would help enhance social networks and a sense of trust among the diverse populations of the local area residents.

A major theme threaded through the key leader interview responses was the belief that an ideal city should be “ideal for all”:

- (a) that all residents have a sense that their labor means something to the larger population;
- (b) that all neighborhoods are attractive and vibrant and provide opportunities for recreation and social outreach; and
- (c) that Manchester provides a place for all to enjoy a full life that is stimulated by educational and religious opportunities, cultural diversity, and a rich cultural history.

Additionally, and most importantly, the key leaders believed that all of the City’s children have the opportunity for a bright future based on their having been raised in this ideal place and that they would think of Manchester as the place to “move back to” to raise their own children.

DATA SNAPSHOT: HEALTHY PEOPLE IN HEALTHY NEIGHBORHOODS

The table below summarizes the main themes talked about by Key Leaders and Focus Group Participants in regard to what the community is doing well and where it could do better in regard to creating *healthy environments* and promoting *personal safety and violence*.

INDICATOR	MAIN THEMES
<p>Healthy Environments</p>	<p>WHAT WE ARE DOING WELL</p> <ul style="list-style-type: none"> • People love it here • Trash pick up is good, as are hazardous waste days • Air and water quality are ok • Adopt a trail program in Deerfield • Live Better Institute at the Elliot Health System • Health Coaches at some work sites • Addressing issues of childhood asthma <p>WHERE WE COULD DO BETTER</p> <ul style="list-style-type: none"> • Lead paint • Trash pickup in depressed neighborhoods could be improved, especially in back alleys • Improved snowplowing • Better inspections of new subdivisions outside of the City • Light pollution in surrounding towns • Increase home ownership • Affordable housing • Housing for working poor and disabled • Improve the built environment • Improve safety so that the population accesses opportunities in the City for recreation and exercise • Be tougher on land lords • Free bus service • Radon • Community Design <ul style="list-style-type: none"> • Planning department needs vision for solutions • Create a culture for “health” • Put more priority on health education/promotion and prevention • Provide more open dialogues about the health risks of being overweight or obese • Healthy cooking classes for residents • Better food in neighborhood stores • Bring in a large downtown grocery store • More green spaces offering more sports and recreational opportunities for adults as well as children, and low-cost gym memberships • More parks, sidewalks, playgrounds, walking trails, swimming pools, tracks, and ball fields • Employ traffic-calming measures to improve safety

Personal Safety & Violence	<p>WHAT WE ARE DOING WELL</p> <ul style="list-style-type: none"> • Neighborhood watch groups • Commend Chief Mara • The police are doing a great job building relationships • The Mayor is doing a good job – very proactive • CAPS program • Weed and Seed program • Greater Manchester Wrap Around <p>WHERE WE COULD DO BETTER</p> <ul style="list-style-type: none"> • Violence, drug and gun crimes are getting worse • Younger and younger children getting into trouble • Domestic/family violence – there is silence around this issue • Improve mental health services • Family-oriented programs • Bring preventive programs into the schools • Change the culture – violence is NOT ok • Decrease homelessness • City needs to deal with vacant and foreclosed properties which are magnets for crime and vandalism • Better funding for mental health center • Do something about poverty • Determine if school bullying is an issue. • Increase awareness about the link between high crime rate areas and poor health areas • Increase student resource officers in schools • Do a better job maximizing resources • Decrease fragmentation of services • Clean up night clubs and bars • Fund health officers for towns outside of Manchester • Offer for after-school programs for unsupervised youth • Offer more parenting programs for young parents
---------------------------------------	---

CONCLUSION

Health-promoting neighborhoods are vital to supporting and improving the health of Manchester area residents. To improve community health and achieve health equity, we must work toward a shared vision of an ideal community for all Manchester area residents. The seven major attributes described by key leaders should serve as the foundation for building neighborhoods that provide a better quality of life for all residents in Manchester and the surrounding communities.

In regards to current capacity in Manchester to develop healthy neighborhoods, there are several existing local committees that have started to focus on the environment as a way to improve population health and quality of life. Examples of these interdisciplinary committees include, but are not limited to, the Safe Routes to School Task Force that has been assembled to lead efforts in improving the built environment around the Henry Wilson Elementary School and other schools in Manchester, the Weed & Seed Strategy that is a crime reduction and quality of life initiative to improve the social environment within neighborhoods, and the Social Fabric Committee of the Public Health Preparedness Advisory Council that is working to build social connectedness and efficacy among Manchester’s most vulnerable populations.

It would be beneficial for improving Manchester’s status as a healthy place if these various entities are able to work together based on a shared vision. Also, it would be beneficial for these community groups to engage in interdisciplinary planning with key stakeholders from entities such as the economic development, planning, parks and recreation, and law enforcement. This may require the establishment of a Healthy People in Healthy Neighborhoods Committee to act as a steering body for better coordination of efforts addressing the neighborhood environment in Manchester; including efforts that may be less directly associated with health status, such as projects proposed in City Master Plans.

In addition, further assessment of data at the neighborhood level should continue to be explored. As highlighted above, variations among health and quality of life occur within Manchester’s neighborhoods, and more data at the sub-geographic level, such as for census tracts, will provide a better understanding of health equity and disparity. For example, five-year estimates for the American Community Survey will be available next year, which will enable the City to analyze these data at the Census Tract level. However, data related to health behaviors, such as the Behavioral Risk Factor Surveillance Survey, is currently not available for Census Tracts. Furthermore, data for the surrounding communities related to the place-based factors highlighted above would improve our understanding of the differences and similarities that exist between neighborhoods in the HSA.

Lastly, neighborhood level data and environmental health information are important for identifying and prioritizing issues/areas of need and for determining appropriate interventions that are tailored to these needs and root causes. For instance, reasons for lack of physical activity among children in the center City area of Manchester are likely multi-pronged. For example, safety issues, such as a high traffic volume as well as a lack of adequate sidewalks may both be issues for the center City population. Such concerns would require different intervention strategies, which would likely result in a combination of policy changes, infrastructure improvements, and increasing social support.

