Why do people die young here? Project aims to send 'citizen scientists' out to investigate

September 16, 2019 7:00 AM By Rich Lord / Pittsburgh Post-Gazette

The cost of being poor can include decades of life. A just-launched partnership between a Homewoodbased community group and a University of Pittsburgh research team intends to explore that grim price tag, and to create a corps of "citizen scientists" who could lead the charge to close the life expectancy gap.

A jarring example of the gap: Life expectancy in most of Highland Park is 86 years, but in one neighborhood to the south, in Larimer, residents live just an average of 62 years. That's the region's most extreme life expectancy chasm, according to Noble Maseru, director of the Center for Health Equity within Pitt's Graduate School of Public Health, but it's far from the only one.

Life expectancy in Homewood is just shy of 70 years, while in Point Breeze it's 86. In parts of McKeesport, people live, on average, a decade less than they do in White Oak. Same with Clairton versus Jefferson Hills.

Make people aware of that ultimate inequity, Mr. Maseru said, and you can spur "empowerment activism" in which citizens sleuth for the causes of premature death in their communities, then advocate for solutions.

That's the aim of the project called Live Longer: Empowering and Engaging Pittsburgh Communities, which is backed by a \$170,000 grant from the Robert Wood Johnson Foundation and the Urban Institute.

It pairs Mr. Maseru's team and its data smarts with the grassroots Community Empowerment Association and the consultancy UrbanKind Institute. Their process will include community meetings starting next month in Homewood, and later in McKeesport and Clairton.

"The general objective is to look at how life expectancy is impacted by the social determinants of health," Mr. Maseru said.

He said life expectancy in the U.S. increased by 30 years over the course of the 20th century, and that was almost entirely due to social and economic changes — better housing, transportation and jobs, for instance.

It follows that some communities that lag in life expectancy do so because they haven't seen the economic advances of their neighbors. In other communities, other factors may be in play.

"We recognize that there is this huge environmental contribution to health and life expectancy," added Jim Fabisiak, associate professor in the Department of Environmental and Occupational Health at Pitt's public health school. "We know that Pittsburgh does have an air pollution burden greater than most other comparable cities throughout the United States," and that can contribute to a host of lung and heart ailments that can shorten life.

The Pitt team doesn't want to leap to conclusions. After all, the team won a highly competitive grant in part because its plan calls for the communities to take the lead.

"One of the goals that we're trying to work toward is to have the citizens or residents of these communities put themselves in the role of researcher or scientist," Mr. Fabisiak said.

The job of generating neighborhood interest and bringing forth citizen scientists falls to Community Empowerment Association, which is based in Homewood with a satellite office in McKeesport.

"We're going a little bit deeper than just talking about life expectancy," said Rashad Byrdsong, the nonprofit organization's president and CEO.

He expects the three communities to talk about the effects of housing, employment, nutrition, drugs, abandoned houses, the environment and many other socioeconomic factors on physical health and length of life.

Following the recruitment and training of citizen scientists in the three neighborhoods, the researchers and organizers anticipate six months of community engagement, investigation and data crunching. And then?

"The community is going to have to engage in the political process" to draw the resources needed to start bridging the life expectancy gap, Mr. Byrdsong said.

"We hope to be able to establish what we would call solutions-oriented interventions that would involve the public and private sector, as well as community-based organizations," Mr. Maseru said.

He has seen this work before. In his past job as health commissioner for Cincinnati, he and his assistant commissioner, Camille Jones, spurred a similar data-and-community-engagement process, called the Live Longer Project. It prompted newly empowered community members to challenge the civic leadership.

"It really influenced the policymakers," Mr. Maseru said Thursday.

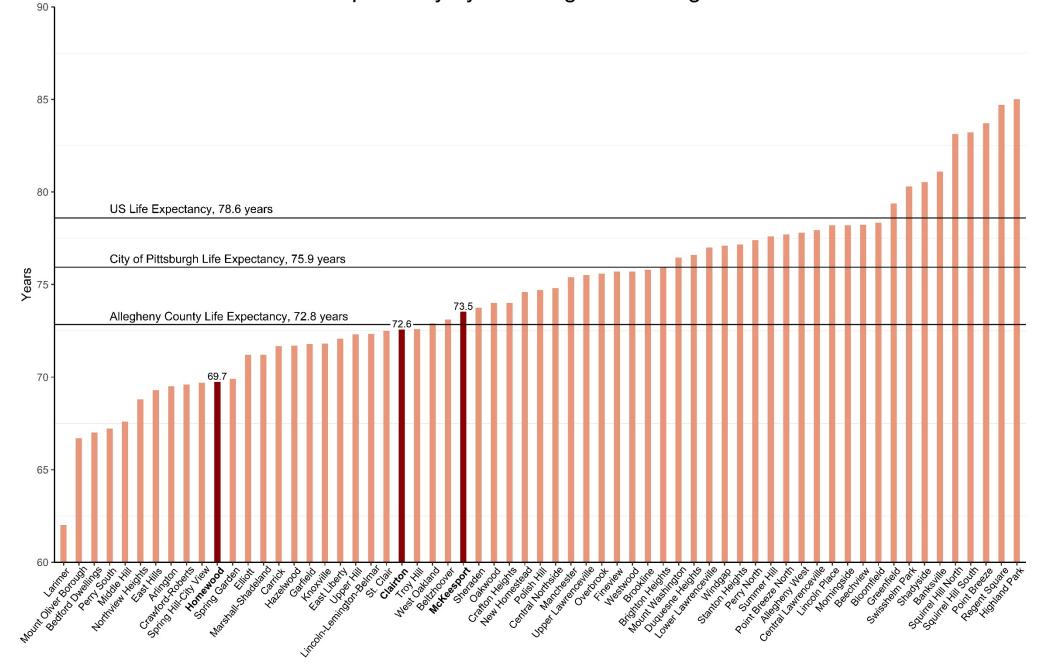
The project helped to spur several improvements in transportation and employment programs, he said, as well as a living-wage ordinance.

Mr. Maseru, who is starting his third year in Pittsburgh, said he hopes his new project will ultimately contribute to the development of "a master plan for eliminating poverty."

Early in his time here, he said, he saw the region's leadership come together in an ultimately unsuccessful effort to lure Amazon's second headquarters. He said he would love to "have that same vigor actually be developed in terms of eradicating poverty within these neighborhoods and communities so we don't have a 20-year, eight-year or even three-year differential in terms of life expectancy."

Rich Lord: rlord@post-gazette.com or 412-263-1542.

Life Expectancy by Pittsburgh Area Neighborhood

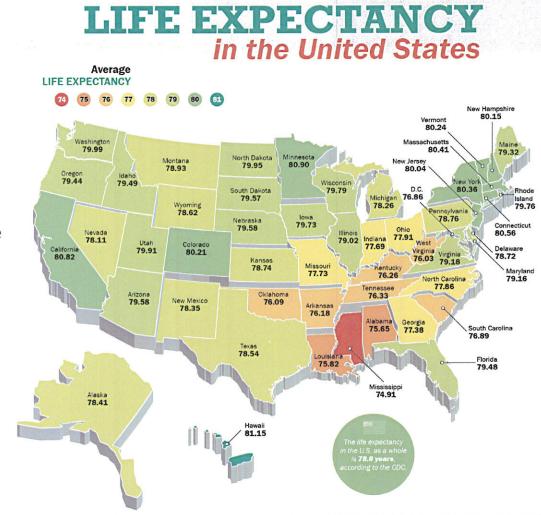


National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File for Allegheny County, PA, 2010-2015. National Center for Health Statistics. 2018. Available from: https://www.cdc.gov/nchs/nvss/usaleep/usaleep/usaleep.html

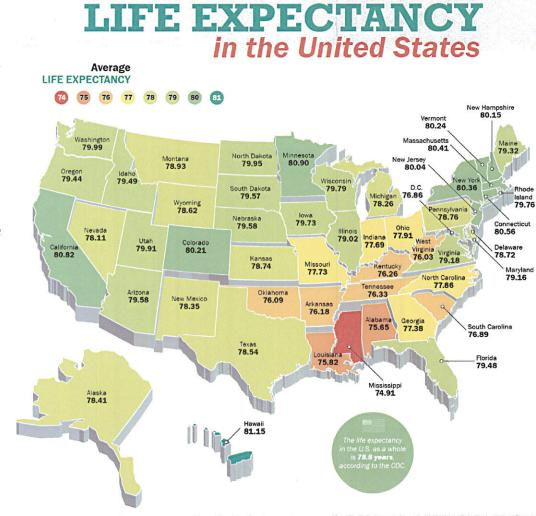
PittPublicHealth

Why Aren't We Living As Long?

Homewood Community Conversation #1 October 8, 2019



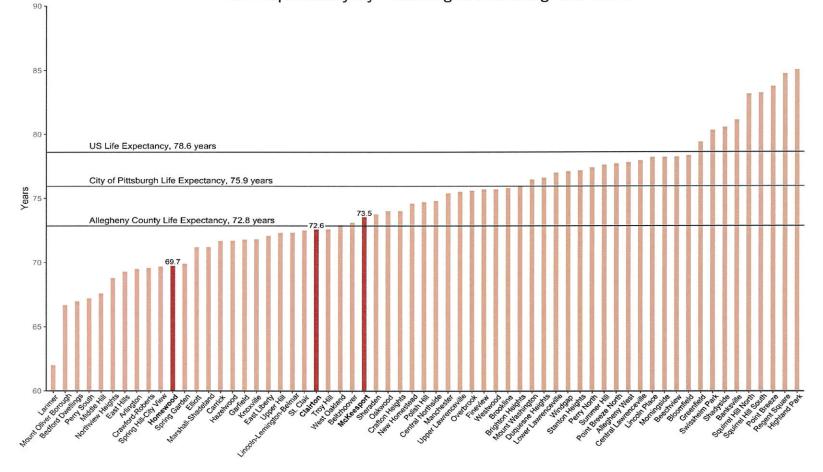
Life Expectancy = the <u>average age</u> that a particular group will be when they die.



Premature Death = Dying before age of Life Expectancy

Life Expectancy = the average age that a particular group will be when they die.

Life Expectancy by Pittsburgh Area Neighborhood

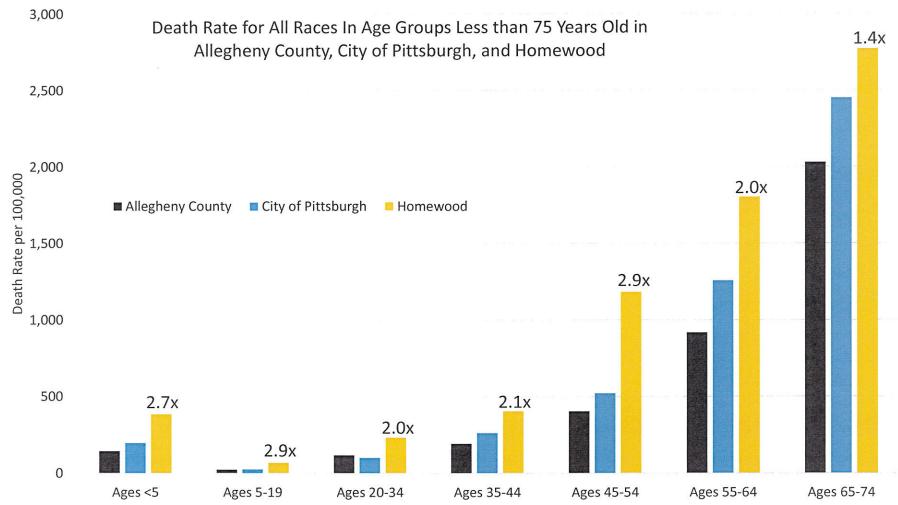


National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP); Life Expectancy Estimates File for Allegheny County, PA, 2010-2015. National Center for Health Statistics. 2018 Available from: https://www.cdc.gov/inat/ms/wsslusaleep.itm

PittPublicHealth

*Life expectancy averaged over census tracts by neighborhood

Who Is Affected the Most?



How Do Premature Deaths Impact Life Expectancy?

How Do Premature Deaths Impact Life Expectancy?

1 16 year old dying = 1 46 year old dying = 1 71 year old dying

How Do Premature Deaths Impact Life Expectancy?

1 16 year old dying = 2 46 year olds dying = 12 71 year olds dying

How Do Premature Deaths Impact Life Expectancy?

1 16 year old dying = 246 year olds dying = 1271 year olds dying



 $1 \times (76 - 16) =$ 60 years of life lost

 $2 \times (76 - 46) =$ 60 years of life lost

12 x (76 – 71) = 60 years of life lost

Years of Life Lost

- Says that all deaths are NOT equal
- More impacted by deaths in young people
- Helps determine which premature deaths most lower life expectancy

What Is Causing These Premature Deaths?

Community Perceptions: What Do Most People Die From?

Homewood

- 1. Guns/Violence
- 2. Drugs
- 3. Illness/Disease/Old Age
- 4. Lack of Exercise/Healthy Food
- 5. Police brutality

Top 5 Causes of Death – Under 75 Years Old

Allegheny County

- 1. Cancer
- 2. Heart disease
- 3. Accidents (including drug overdose)
- 4. Respiratory diseases
- 5. Diseases of digestive system

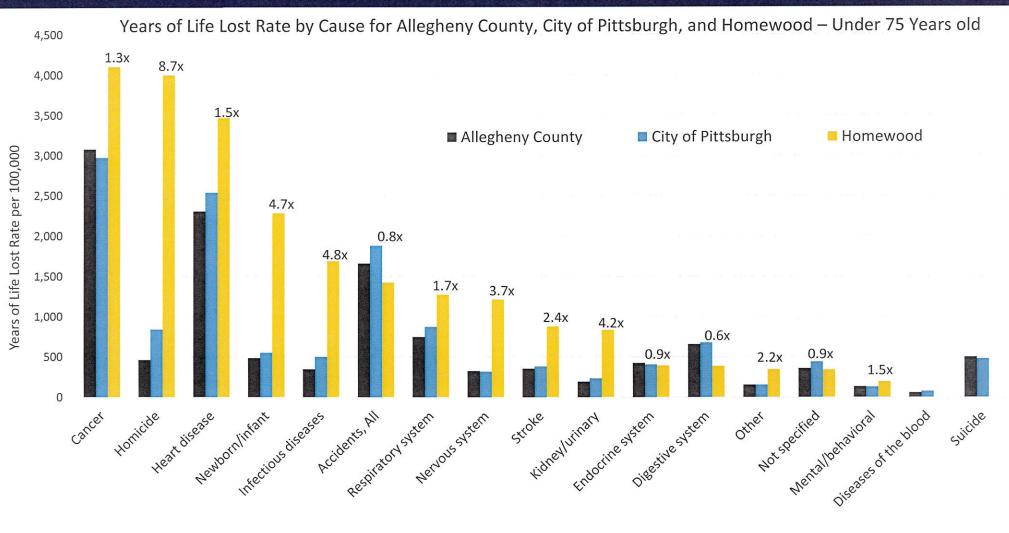
City of Pittsburgh

- 1. Cancer
- 2. Heart disease
- 3. Accidents (including drug overdose)
- 4. Respiratory diseases
- 5. Diseases of digestive system

<u>Homewood</u>

- 1. Cancer
- 2. Heart disease
- 3. Homicide
- 4. Respiratory diseases

5T. Infectious diseases/ Accidents (including drug overdose)



Top Causes of Death and Years of Life Lost in Homewood

Top Causes of Death

- 1. Cancer
- 2. Heart disease
- 3. Homicide
- 4. Respiratory disease
- 5T. Infectious disease/ Accidents (including drug overdose)

Top Causes of Years of Life Lost

- 1. Cancer
- 2. Homicide
- 3. Heart disease
- 4. Newborn/infant
- 5. Infectious disease

What Do We Think About Our Community's Health?

Responses from the Community Questionnaire

Community Perceptions: What Is Making Us Unhealthy?

Top Causes of Illness

- 1. Drugs & Alcohol
- 2. Unhealthy Lifestyle
- 3. Stress/Depression
- 4. Food Insecurity/Unhealthy Food
- 5. Air & Water Pollution

Top Things Making Us Unwell

- 1. Crime/Violence/Guns
- 2. Drugs & Alcohol
- 3. Pollution/Poor Air & Water Quality
- 4. Garbage/Littering
- T5. Animal/Animal Feces Unhealthy Food Poverty

Community Perceptions: What is Making Us Healthy?

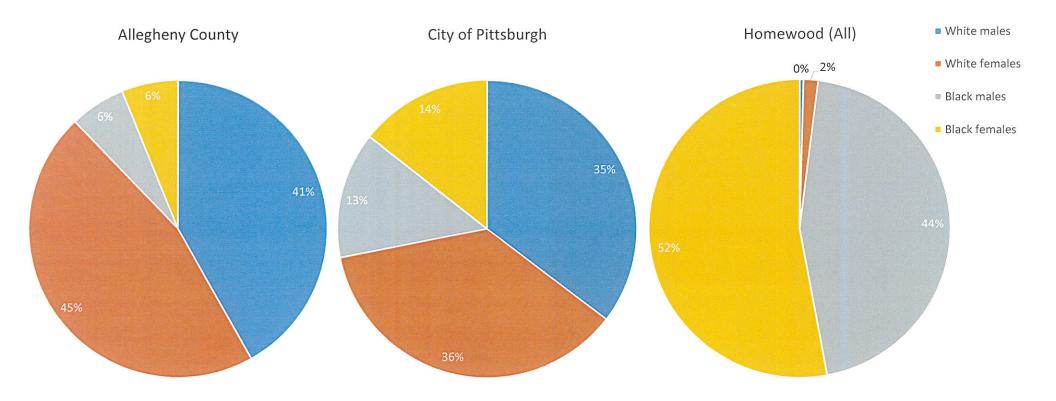
Best Things About Homewood

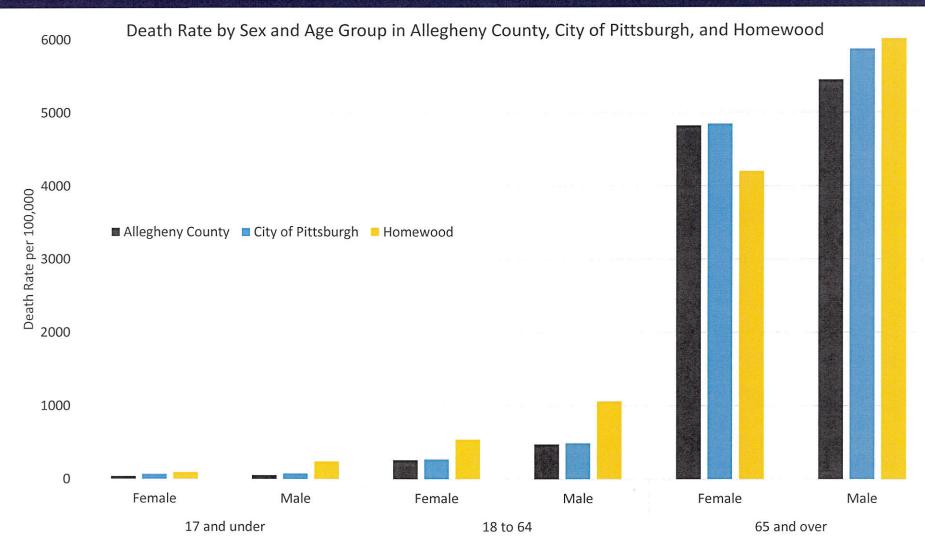
- 1. Friends & Family/Neighbors
- 2. Local Schools (Pitt, CCAC, Westinghouse Academy)
- 3. Home Development
- 4. Community Events/Programs
- 5. Police Patrol

Top Things Making Us Healthy

- 1. Food/Garden/Farmer's Market
- 2. Community Centers/Programs & Events
- 3. Outdoor Parks/Pools/Exercise
- 4. Friends & Family/Neighbors
- 5. Public Transportation/Walkability

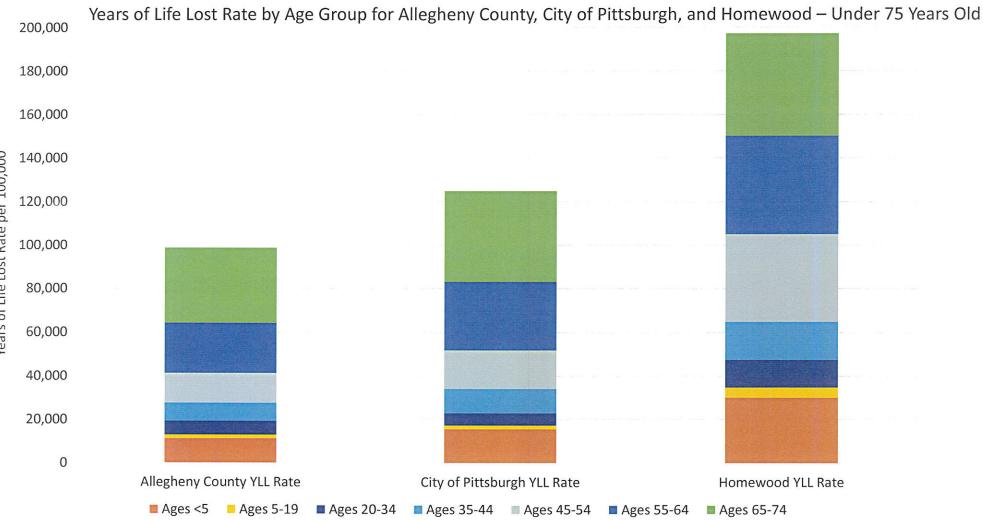
All Deaths by Race & Sex



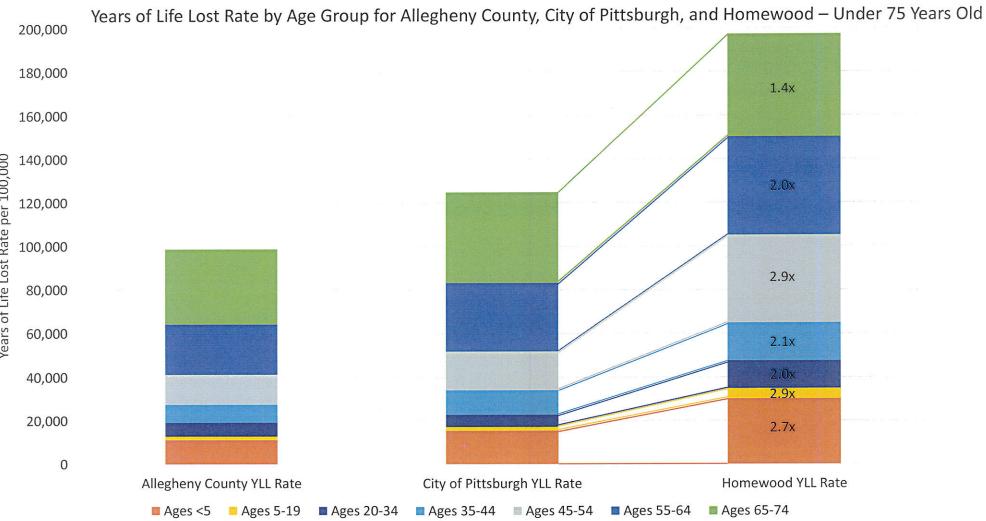


How Do Premature Deaths Impact Life Expectancy?

1 16 year old dying = 1 46 year old dying = 1 71 year old dying



Years of Life Lost Rate per 100,000



Years of Life Lost Rate per 100,000

Top 5 Causes of Death – All Ages

Allegheny County

- 1. Heart disease
- 2. Cancer
- 3. Respiratory diseases
- 4. Mental and behavioral disorders
- 5. Diseases of the nervous system

<u>Pittsburgh</u>

- 1. Heart disease
- 2. Cancer
- 3. Respiratory diseases
- 4. Accidents (including drug overdose)
- 5. Mental and behavioral disorders

Homewood

- 1. Heart disease
- 2. Cancer
- 3. Respiratory diseases
- 4. Stroke
- 5. Homicide

Top 5 Causes of Death – Under 75 Years Old

Allegheny County

- 1. Cancer
- 2. Heart disease
- 3. Accidents (including drug overdose)
- 4. Respiratory diseases
- 5. Diseases of digestive system

<u>Pittsburgh</u>

- 1. Cancer
- 2. Heart disease
- 3. Accidents (including drug overdose)
- 4. Respiratory diseases
- 5. Diseases of digestive system

<u>Homewood</u>

- 1. Cancer
- 2. Heart disease
- 3. Homicide
- 4. Respiratory diseases
- 5. <u>Infectious diseases/</u> Accidents (including drug overdose)

Community Perceptions: Most Like to See Changed (before learn/earn responses)

Most Like to See Changed

- 1. More Community Recreational Programs
- 2. More Police/Crime Watch
- 3. Better Infrastructure/Homes
- 4. Better Attitude
- 5. More Youth Programs

Community Perceptions: Most Like to See Changed

Most Like to See Changed

- 1. More Community Recreational Programs
- 2. More Police/Crime Watch
- 3. (tie) Better Infrastructure/Homes Fewer shootings/Safer
- 4. Better Attitude

Community Perceptions: What Do Most People Die From? (Before learn/earn responses)

Homewood

- 1. Guns
- 2. Drugs
- 3. Illness/Disease/Old Age
- 4. Diet/Lack of Exercise
- 5. Poverty

Community Perceptions: What Is Making Us Unhealthy? (Before learn/earn responses)

Top Causes of Illness

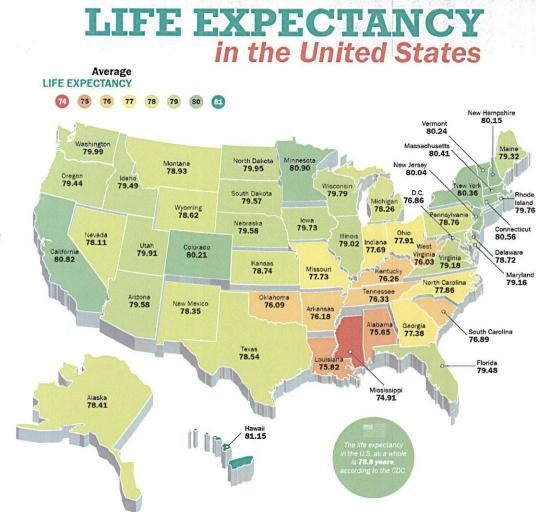
- 1. Drugs & Alcohol/Violence
- 2. Chronic Illness
- 3. Lack of Healthcare/Community Resources
- 4. Air & Water Pollution
- 5. Food Insecurity/Unhealthy Food

Top Things Making Us Unwell

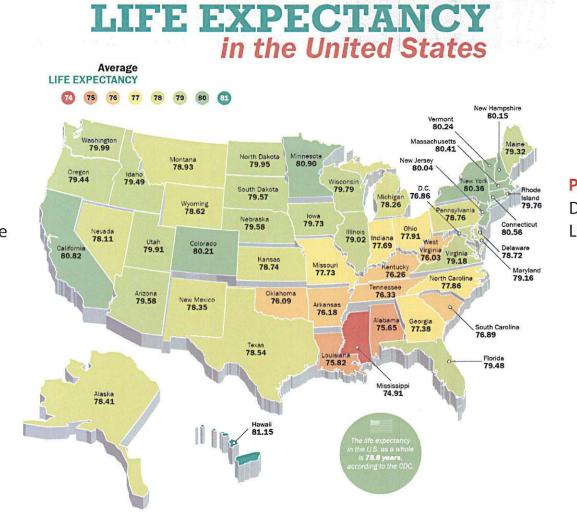
- 1. Crime/Violence/Guns
- 2. Pollution/Poor Air & Water Quality
- 3. Drugs & Alcohol
- 4. Wild Animals
- 5. Unhealthy Food/Bad Healthcare

Why Aren't We Living As Long?

McKeesport Community Conversation #1 December 3, 2019



Life Expectancy = the <u>average age</u> that a particular group will be when they die.

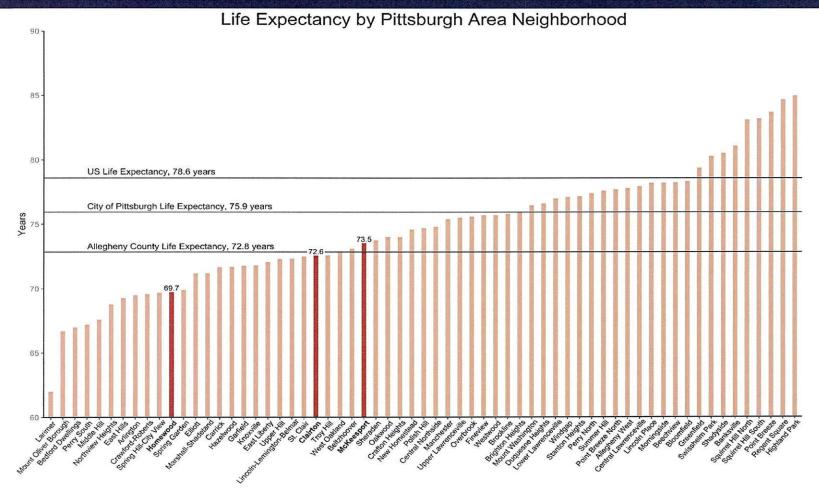


Premature Death =

Dying before age of Life Expectancy

Life Expectancy = the average age that a particular group will be when they die.

PittPublicHealth



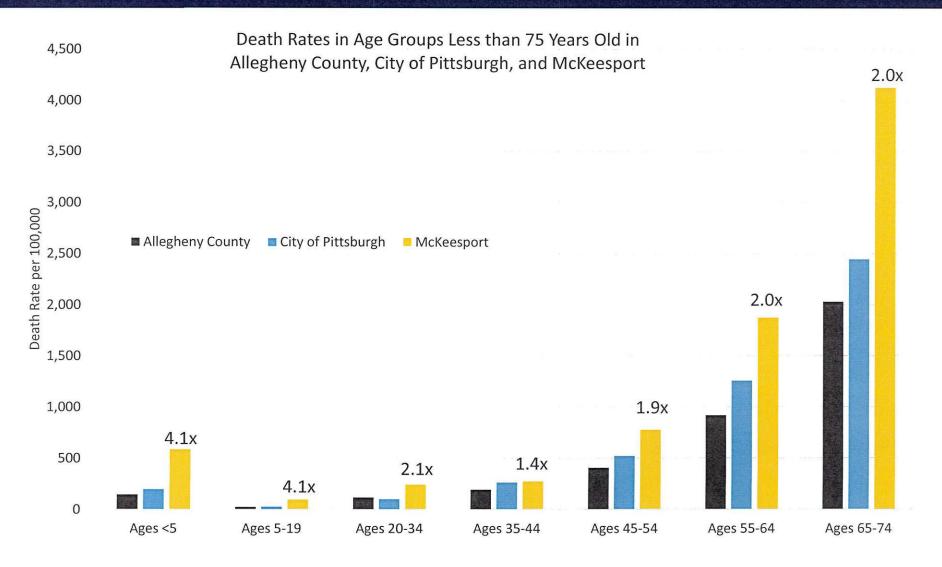
PittPublicHealth

National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File for Allegheny County, PA, 2010-2015. National Center for Health Statistics. 2018 Available from. https://www.cdc.gov/nchi/mvss/usaleep/tusaleep.thml

*Life expectancy averaged over census tracts by neighborhood

Who Is Affected the Most?

PittPublicHealth



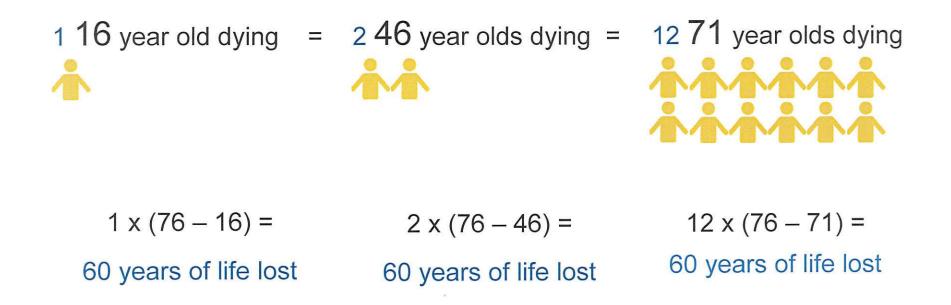


Life Expectancy = 76

1 16 year old dying = 246 year olds dying = 1271 year olds dying



Life Expectancy = 76



Life Expectancy = 76

Years of Life Lost

- Says that all deaths are NOT equal
- More impacted by deaths in young people
- Helps determine which premature deaths most lower life expectancy

What Is Causing These Premature Deaths?

Top 5 Causes of Death – Under 75 Years Old

Allegheny County

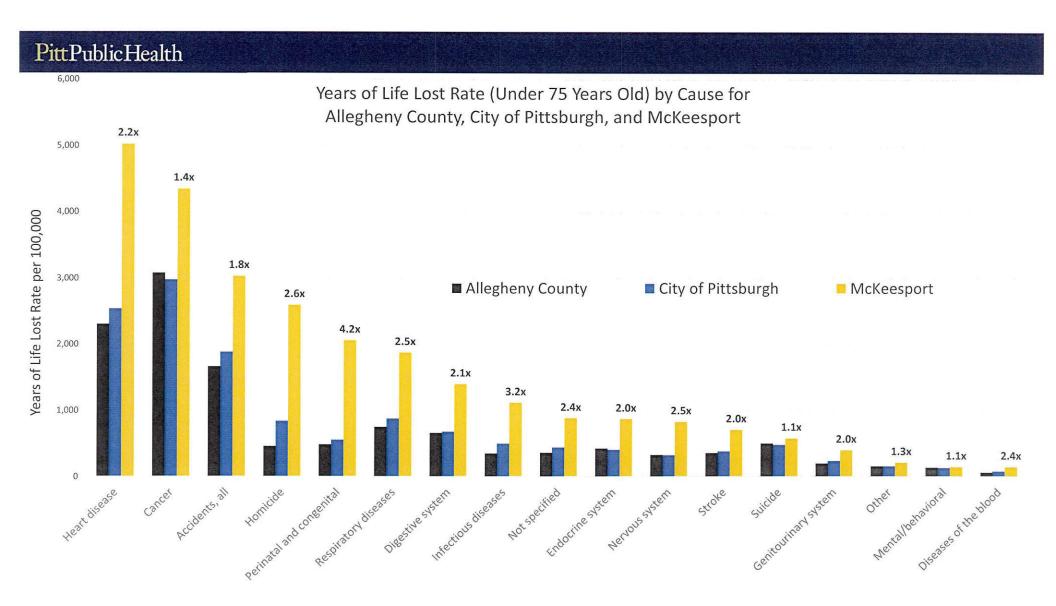
- 1. Cancer
- 2. Heart disease
- 3. Accidents (including drug overdose)
- 4. Respiratory diseases
- 5. Digestive system diseases

City of Pittsburgh

- 1. Cancer
- 2. Heart disease
- 3. Accidents (including drug overdose)
- 4. Respiratory diseases
- 5. Digestive system diseases

McKeesport

- 1. Heart disease
- 2. Cancer
- 3. Respiratory diseases
- 4. Accidents (including drug overdose)
- 5. Digestive system diseases



PittPublicHealth

Top Causes of Death and Years of Life Lost in McKeesport

Top Causes of Death

- 1. Heart disease
- 2. Cancer
- 3. Respiratory diseases
- 4. Accidents (including drug overdose)
- 5. Digestive system diseases

Top Causes of Years of Life Lost

- 1. Heart disease
- 2. Cancer
- 3. Accidents (including drug overdose)
- 4. Homicide
- 5. Newborn/infant