



Trends in Life Expectancy for New Yorkers

DECEMBER 2017



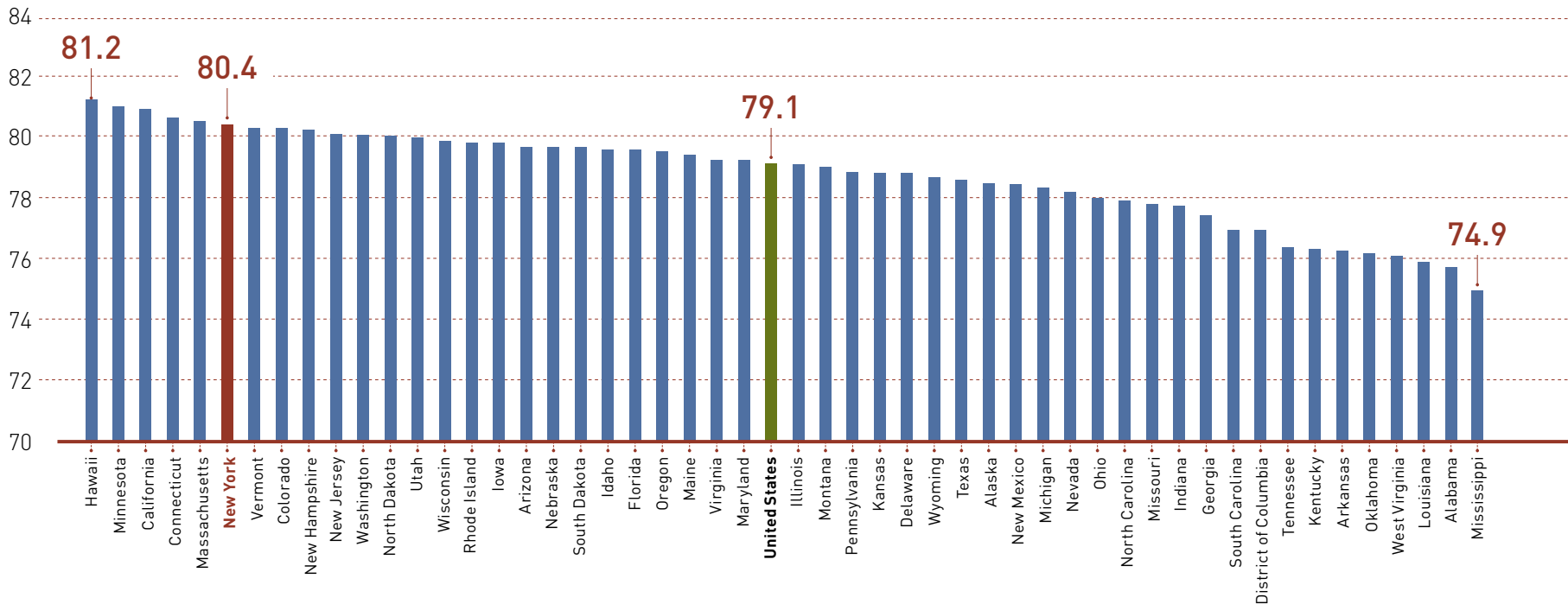
Improving the state of New York's health

Executive Summary

- New York State is ranked 6th-highest in the nation for life expectancy at birth in 2014 (80.4 years), up from 35th in 1980 (73.2 years)
- New York State experienced the second-largest increase in life expectancy since 1980 (9.8%)
- Mortality rates in New York State decreased for most causes from 1980 to 2014, with the largest reductions occurring for deaths from cardiovascular disease and cancer
- New York State counties with the longest life expectancy at birth in 2014 tended to be around New York City, with the exception of the Bronx
- New York State counties with the largest increase in life expectancy since 1980 also tended to be in or around New York City
- There is a four-year difference in life expectancy between counties with the longest (Rockland) and shortest (Sullivan) life expectancies
- In New York State, females are expected to live more than 4 years longer than males (82.5 vs 78.1). The difference is widest for Bronx county, at 6.2 years

New York State Is Ranked Sixth-Highest in the Nation for Life Expectancy at Birth

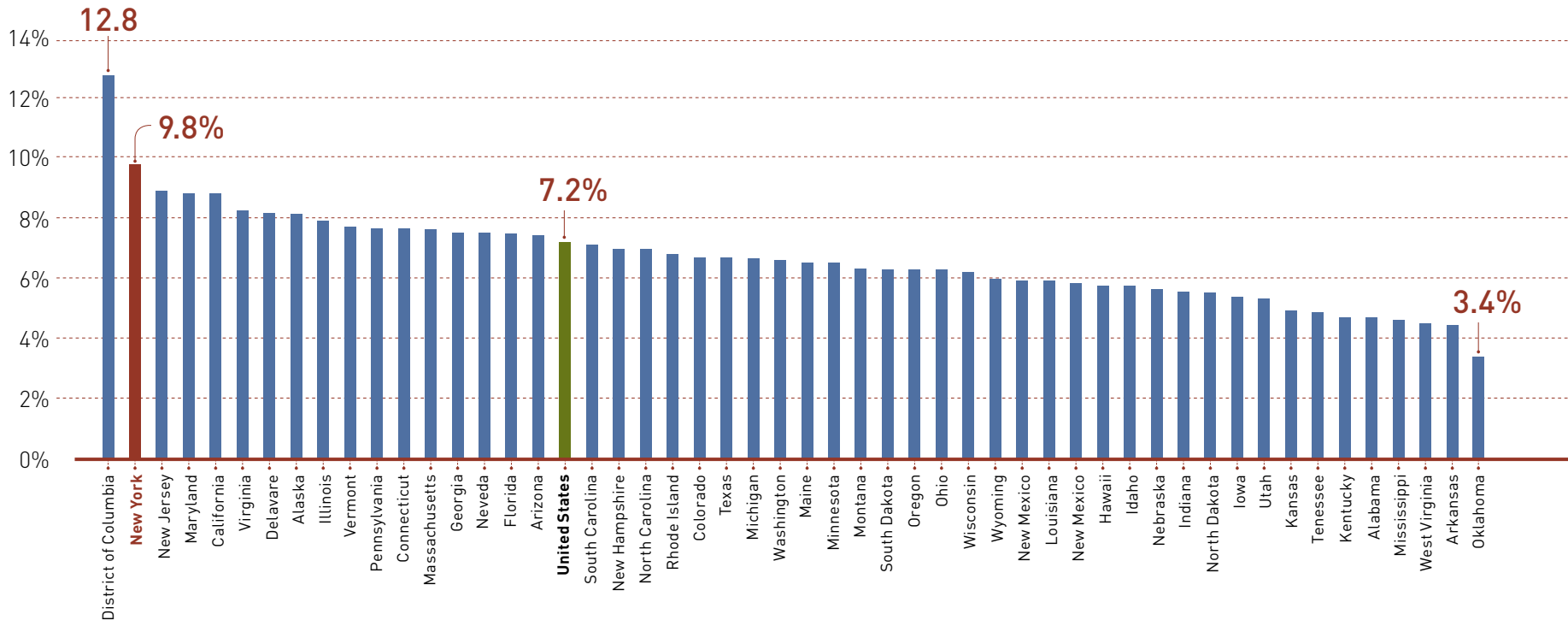
Life Expectancy at Birth by State, 2014



SOURCE: Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*. Data available at: <http://ghdx.healthdata.org/record/united-states-life-expectancy-and-age-specific-mortality-risk-county-1980-2014>.

New York State Experienced Second-Largest Increase in Life Expectancy since 1980

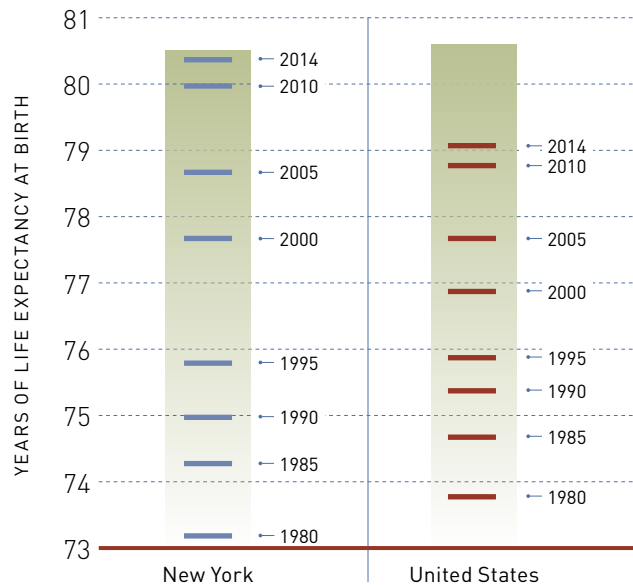
Percent Change in Life Expectancy by State, 1980–2014



SOURCE: Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*. Data available at: <http://ghdx.healthdata.org/record/united-states-life-expectancy-and-age-specific-mortality-risk-county-1980-2014>.

Largest Increase in Life Expectancy for New York Occurred in Late 1990s

Changes in Life Expectancy from 1980 to 2014



CHANGES IN LIFE EXPECTANCY FROM 1980 TO 2014 FOR NEW YORK AND THE NATION									
	1980	1985	1990	1995	2000	2005	2010	2014	1980-2014
New York									
Life Expectancy at Birth	73.2	74.3	74.9	75.8	77.7	78.7	80.0	80.4	
Additional Years Gained from Previous Year Shown		1.1	0.6	0.8	1.9	1.1	1.3	0.37	7.2
Percent Change in Life Expectancy from Previous Year Shown	16.7%	1.5%	0.9%	1.1%	2.5%	1.4%	1.6%	0.5%	9.8%
United States									
Life Expectancy at Birth	73.8	74.7	75.4	75.9	76.9	77.7	78.8	79.1	
Additional Years Gained from Previous Year Shown		1.0	0.7	0.5	1.1	0.7	1.2	0.3	5.3
Percent Change in Life Expectancy from Previous Year Shown		1.3%	0.9%	0.6%	1.4%	0.9%	1.5%	0.3%	7.2%

SOURCE: Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*.
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Mortality Rates Have Decreased in New York State for Most Causes of Death

Cause of Death [#]	Mortality Rate* (deaths per 100,000 population)		Change in Mortality Rate ⁺	Percent Change in Mortality Rate
	1980	2014	1980–2014	1980–2014
Forces of nature, war, and legal intervention	0.2	0.0	-0.1	-80.8%
Neonatal disorders	9.9	3.1	-6.8	-68.6%
Transport injuries	18.6	7.9	-10.7	-57.4%
Cirrhosis and other chronic liver diseases	26.1	11.4	-14.7	-56.4%
Cardiovascular diseases	571.5	258.5	-313.0	-54.8%
Other non-communicable diseases	9.6	4.5	-5.1	-53.1%
Self-harm and interpersonal violence	24.8	13.0	-11.8	-47.7%
Other communicable, maternal, neonatal, and nutritional diseases	2.4	1.3	-1.1	-44.6%
Digestive diseases	19.5	12.3	-7.2	-36.8%
Unintentional injuries	20.4	13.3	-7.0	-34.5%
Nutritional deficiencies	0.9	0.6	-0.3	-32.1%
Neoplasms	256.8	177.1	-79.7	-31.0%
Diarrhea, lower respiratory, and other common infectious diseases	45.0	33.3	-11.7	-25.9%
Musculoskeletal disorders	2.3	1.9	-0.4	-17.9%
Maternal disorders	0.6	0.5	0.0	-7.8%
Diabetes, urogenital, blood, and endocrine diseases	44.1	45.6	1.5	3.4%
Chronic respiratory diseases	35.3	38.8	3.5	9.9%
Neurological disorders	50.0	62.2	12.2	24.4%
Mental & substance use disorders	7.4	11.3	3.9	53.0%
HIV-AIDS & tuberculosis	2.8	4.9	2.1	74.4%

*Age-standardized mortality rate for both sexes combined.† Numbers may not match differences between 1980 and 2014 amounts shown because of rounding.

#Mortality Rates for deaths from “Neglected tropical disease” are also available, but not shown because of rates that are near zero in 1980 and 2014.

SOURCE: Dwyer-Lindgren L, Bertozzi-Villa A, Stubbs RW, Morozoff C, Kutz MJ, Huynh C, Barber RM, Shackelford KA, Mackenbach JP, van Lenthe FJ, Flaxman AD, Naghavi M, Mokdad AH, Murray CJL. US County-Level Trends in Mortality Rates for Major Causes of Death, 1980-2014. *JAMA*. 2016;316(22):2385–2401.

Data available at: <http://ghdx.healthdata.org/record/united-states-mortality-rates-county-1980-2014>.

Largest Decreases in Mortality Rates in New York State Occurred for Deaths from Cardiovascular Diseases and Cancers

Cause of Death	Change in the Number of Deaths per 100,000 population During Select Time Periods*							
	1980-1985	1985-1990	1990-1995	1995-2000	2000-2005	2005-2010	2010-2014	1980-2014
Cardiovascular diseases	-41.8	-63.8	-31.2	-60.6	-55.4	-49.4	-11.0	-313.0
Neoplasms	-10.4	-6.3	-6.7	-22.5	-16.4	-15.0	-2.4	-79.7
Cirrhosis and other chronic liver diseases	-3.1	-5.3	-2.9	-1.9	-0.3	-0.5	-0.8	-14.7
Self-harm and interpersonal violence	-4.1	1.0	-4.6	-2.7	-0.3	-0.5	-0.6	-11.8
Diarrhea, lower respiratory, and other common infectious diseases	-1.2	4.2	-3.3	-4.9	-3.3	-1.7	-1.5	-11.7
Transport injuries	-2.7	-1.2	-2.3	-1.1	-0.7	-2.0	-0.7	-10.7
Digestive diseases	-1.0	-1.2	-0.9	-1.2	-1.2	-1.3	-0.4	-7.2
Unintentional injuries	-0.9	-3.2	-1.4	-0.9	0.0	-0.4	-0.1	-7.0
Neonatal disorders	-2.3	-0.7	-1.6	-0.7	-0.2	-0.7	-0.5	-6.8
Other non-communicable diseases	-1.0	-1.0	-0.9	-0.9	-0.5	-0.6	-0.1	-5.1
Other communicable, maternal, neonatal, and nutritional diseases	0.4	0.0	0.2	0.4	-1.4	-0.6	0.0	-1.1
Musculoskeletal disorders	0.0	0.0	0.1	0.1	-0.2	-0.3	-0.1	-0.4
Nutritional deficiencies	0.0	0.0	0.1	0.0	-0.2	-0.1	0.0	-0.3
Forces of nature, war, and legal intervention	0.0	0.0	0.0	0.0	0.5	-0.4	-0.1	-0.1
Maternal disorders	-0.2	-0.1	-0.1	0.1	0.2	0.1	0.0	0.0
Neglected tropical diseases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diabetes, urogenital, blood, and endocrine diseases	1.5	0.3	0.6	3.8	-1.1	-3.6	0.0	1.5
HIV-AIDS & tuberculosis	6.6	19.0	8.1	-23.0	-3.3	-3.7	-1.7	2.1
Chronic respiratory diseases	1.0	1.9	3.2	1.7	-1.4	-2.2	-0.6	3.5
Mental & substance use disorders	0.1	-1.0	1.5	-0.2	1.3	1.0	1.2	3.9
Neurological disorders	-0.4	-1.6	1.1	2.5	0.8	4.0	5.7	12.2

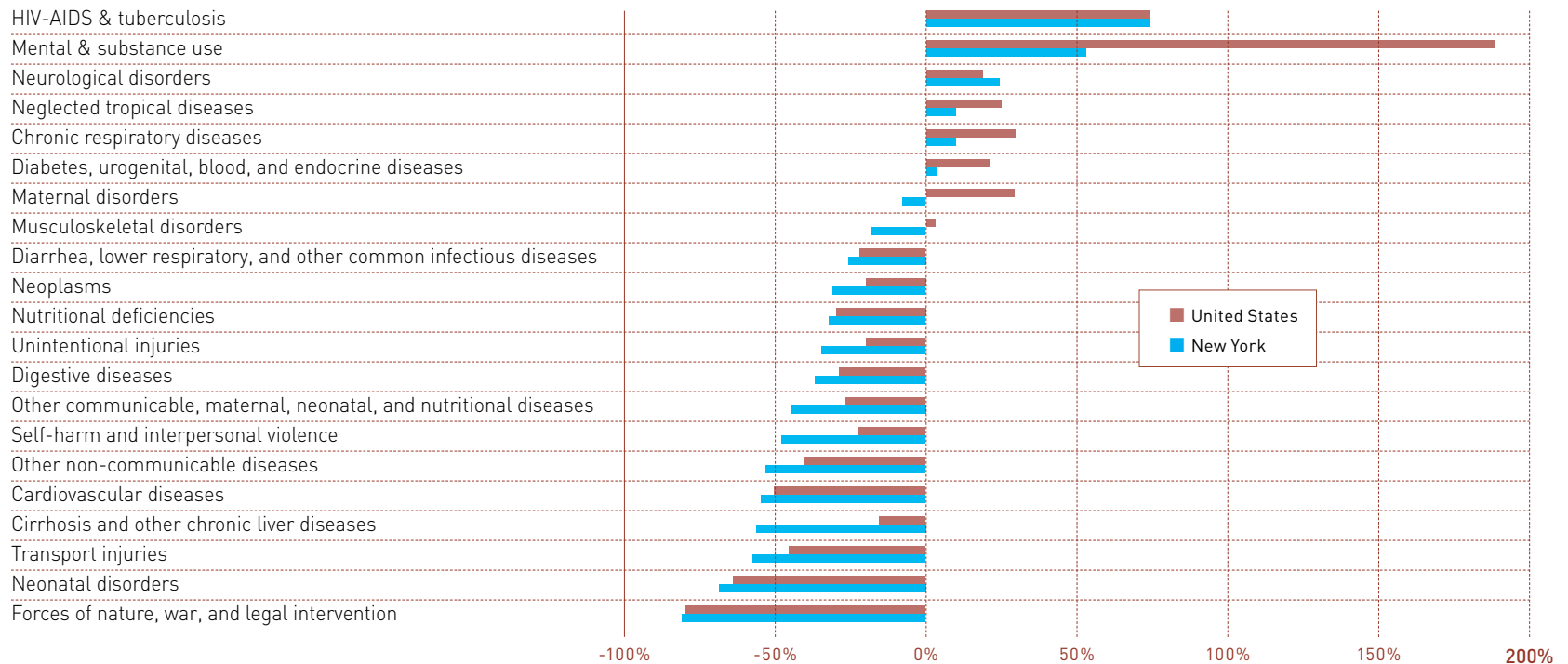
*Mortality rates are age-standardized for both sexes combined.

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New York State Mortality Rate Decreases Outpaced the Nation

Percent Change in Mortality Rate: 1980–2014

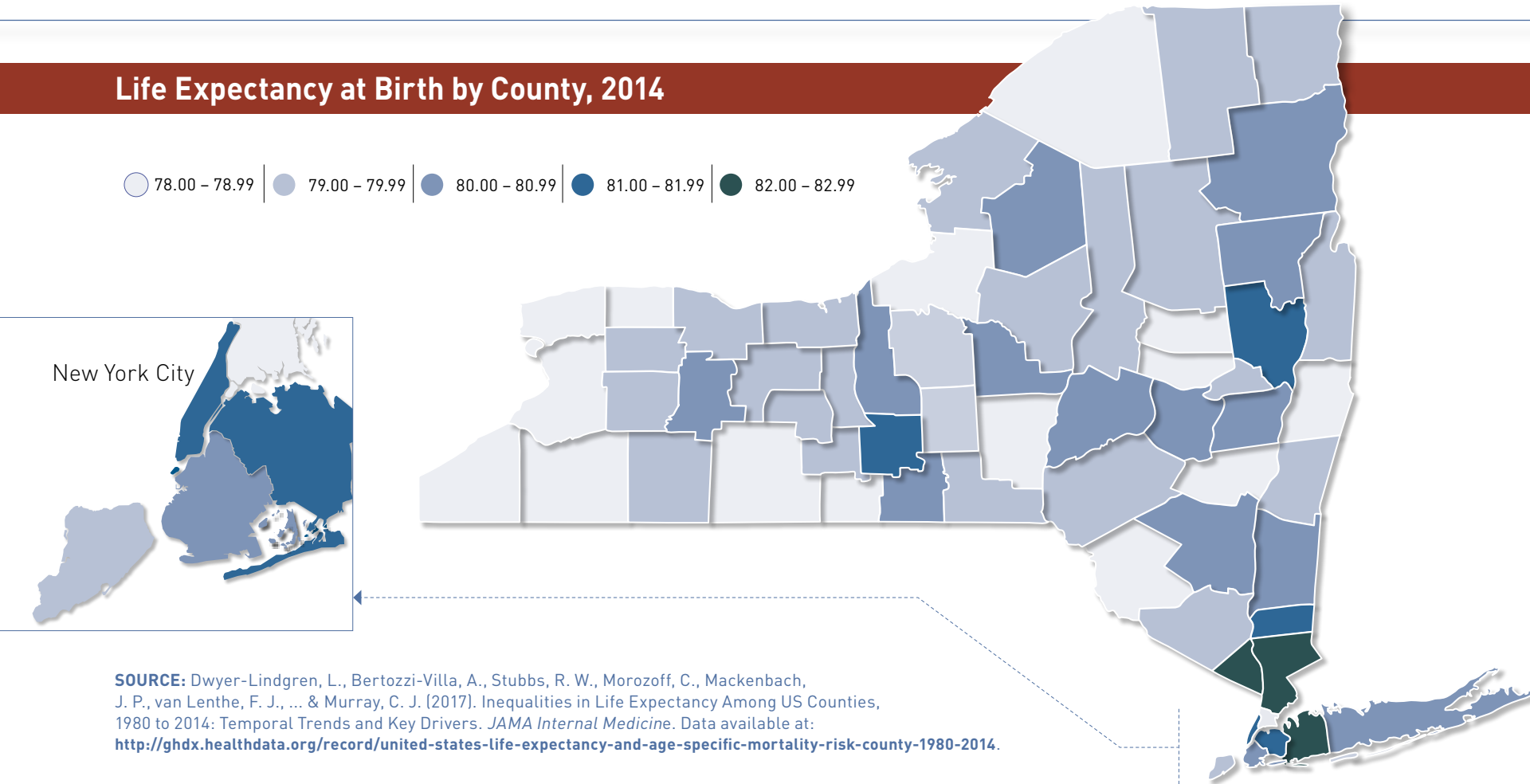


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New York State Counties with Longest Life Expectancies Cluster in or Around New York City

Life Expectancy at Birth by County, 2014

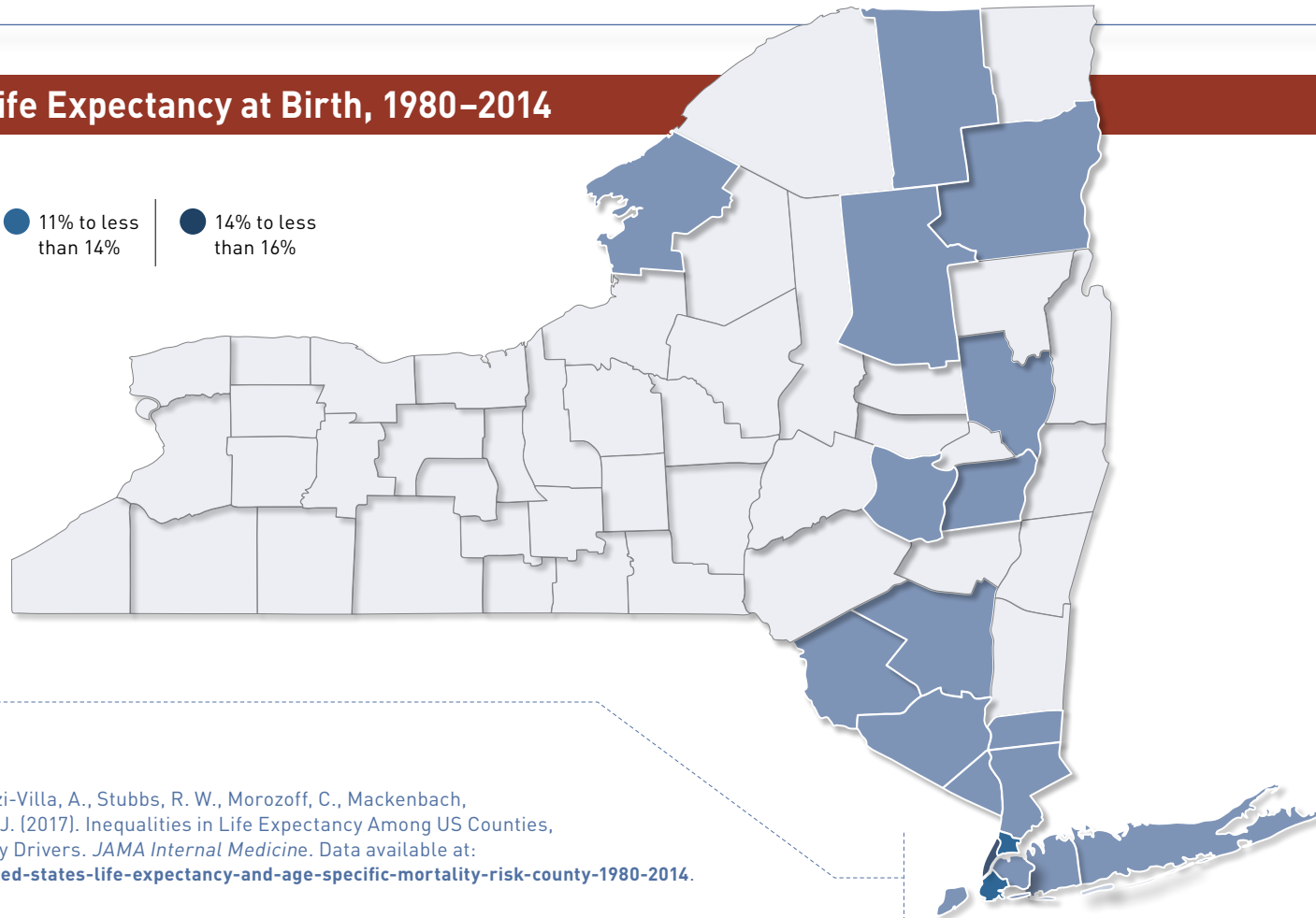
○ 78.00 – 78.99 | ● 79.00 – 79.99 | ● 80.00 – 80.99 | ● 81.00 – 81.99 | ● 82.00 – 82.99



SOURCE: Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*. Data available at: <http://ghdx.healthdata.org/record/united-states-life-expectancy-and-age-specific-mortality-risk-county-1980-2014>.

Counties with Largest Increases in Life Expectancies also Cluster in or Around New York City

Percent Increase in Life Expectancy at Birth, 1980–2014



New York City

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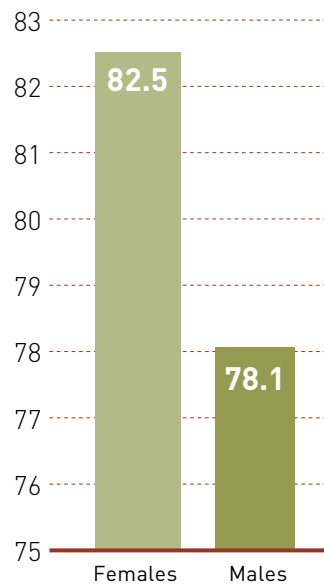
Life Expectancies Across New York State Counties Vary by as Many as 4 Years

10 New York State Counties with Longest Life Expectancies, 2014		10 New York State Counties with Shortest Life Expectancies, 2014	
County	Life Expectancy at Birth	County	Life Expectancy at Birth
Rockland	82.5	Bronx	78.7
Westchester	82.3	Orleans	78.7
Nassau	82.2	Chenango	78.6
New York	81.9	Steuben	78.6
Putnam	81.8	Greene	78.6
Queens	81.8	Erie	78.5
Saratoga	81.4	Niagara	78.4
Tompkins	81.2	Cattaraugus	78.3
Suffolk	80.6	Oswego	78.3
Dutchess	80.5	Sullivan	78.0

SOURCE: Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*. Data available at: <http://ghdx.healthdata.org/record/united-states-life-expectancy-and-age-specific-mortality-risk-county-1980-2014>.

Females Expected to Live More than 4 Years Longer than Males in New York State

New York Life Expectancy at Birth by Gender, 2014



10 New York State Counties with Largest Differences in Male and Female Life Expectancies, 2014

County	Female Life Expectancy	Male Life Expectancy	Difference
Bronx	81.6	75.4	6.2
Hamilton	82.1	76.8	5.3
Lewis	82.7	77.7	5.0
Genesee	81.7	76.7	5.0
Chautauqua	81.4	76.6	4.8
Steuben	81.0	76.3	4.8
Greene	81.1	76.4	4.7
Kings	82.7	77.9	4.7
Ontario	82.2	77.6	4.6
Queens	84.0	79.4	4.6

SOURCE: Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*. Data available at: <http://ghdx.healthdata.org/record/united-states-life-expectancy-and-age-specific-mortality-risk-county-1980-2014>.

More Information on Data and Methods

- Life Expectancy and Mortality data was estimated by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington

- Detailed description of the methods, as well as downloadable data files, visualizations, and county profiles are available at the IHME Global Health Data Exchange (GHDx): <http://ghdx.healthdata.org/>

- Analysis of life expectancy and mortality trends across the country are also described in two recent peer-reviewed publications:
 - Dwyer-Lindgren, L., Bertozzi-Villa, A., Stubbs, R. W., Morozoff, C., Mackenbach, J. P., van Lenthe, F. J., ... & Murray, C. J. (2017). Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. *JAMA Internal Medicine*. Data available at: <http://ghdx.healthdata.org/record/united-states-life-expectancy-and-age-specific-mortality-risk-county-1980-2014>
 - Dwyer-Lindgren L, Bertozzi-Villa A, Stubbs RW, Morozoff C, Kutz MJ, Huynh C, Barber RM, Shackelford KA, Mackenbach JP, van Lenthe FJ, Flaxman AD, Naghavi M, Mokdad AH, Murray CJL. US County-Level Trends in Mortality Rates for Major Causes of Death, 1980-2014. *JAMA*. 2016;316(22):2385-2401. Data available at: <http://ghdx.healthdata.org/record/united-states-mortality-rates-county-1980-2014>



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