Data Sources on Mortality Rates for New York City

Jason Barr,
Rutgers University-Newark

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I. Mortality Rates

1. New York City


https://babel.hathitrust.org/cgi/pt?id=nyp.33433075972772&view=1up&seq=55.

1922 – 1935: Rosenwaike, Table A-3


2018 – 2019: Death rate assumed to be 6.3 deaths per 1,000 residents (same as 2017)

2019: Mortality Rate = estimated deaths divided estimated population (in thousands). See below for assumptions and calculations on deaths.

2. United States


1998 – 2019: https://www.macrotrends.net/countries/USA/united-states/death-rate

II. New York City Number of Deaths

1804 – 1900: Rosenwaike, Table A-1

1901 – 1935: Rosenwaike, Tables A-4 & A-9


2018 – 2019: Estimated Deaths=(Population x Mortality Rate)/1000
2020: Began with assumption that the number of deaths, and population are the same as 2019. Death rate then was assumed death plus additional deaths from COVID-19 from https://www1.nyc.gov/site/doh/covid/covid-19-data.page (accessed on June 13, 2020). Death rate then was total deaths divided by population. This is thus the death rate for 2020, assuming no more COVID-19 deaths and no bump in deaths from untreated illnesses that arisen from people without COVID-19 who were fearing getting medical treatment because of the virus. In short, this death rate is an undercount and is used as likely minimum death rate for 2020.

III. NYC Population

1804 – 1865: Duffy, Appendix 1

1866 – 1935: Population = (1000*Mortality Rate)/(# Deaths)


2018: https://www1.nyc.gov/site/planning/planning-level/nyc-population/current-future-populations.page


2020: Assumed same population as 2019

IV. NYC Homicides

1797 – 1999: Data assembled by Eric Monkkonen, UCLA. https://www.icpsr.umich.edu/icpsrweb/NACJD/studies/03226


V. Other NYC Deaths:


2018 – 2020: Based on average reduction in number of HIV/AIDS deaths from 2015-2018, I assumed that the number of deaths would decline by 10% each year as compared to the prior year. So estimated deaths in 2018 = .9(Deaths in 2017) and so on.


VI. Epidemic Dates for New York City