

Leading Causes of Death

**Leading Causes of Death
Baltimore City, 2006**

| <i>All Causes</i> | Total Number of Deaths | Age-Adjusted Rate per 100,000 |
|--|---------------------------|----------------------------------|
| Diseases of the Heart | 1742 | 266.7 |
| Cancer | 1468 | 228.9 |
| Cerebrovascular Disease (Stroke) | 344 | 52.6 |
| HIV/AIDS | 263 | 41.5 |
| Homicide | 248 | 38.5 |
| Chronic Lower Respiratory Disease | 230 | 35.9 |
| Diabetes Mellitus | 227 | 35.3 |
| Drug-Induced Death (undetermined manner)* | 223 | 35.9 |
| Septicemia | 210 | 32.9 |
| Accidents | 163 | 25.8 |
| Influenza and Pneumonia | 163 | 24.6 |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 141 | 21.7 |

Source: Department of Health and Mental Hygiene, Vital Statistics Administration

Causes are ranked by the total number of deaths

*Drug-Induced Deaths of undetermined manner or intent (not due to accident, suicide or homicide). ICD-10 codes Y10-Y14

For a complete list of ICD-10 code classifications see technical notes

**Leading Causes of Death
U.S., 2006**

| <i>All Causes</i> | Age-Adjusted Rate per 100,000 |
|--|----------------------------------|
| Diseases of the Heart | 199.4 |
| Cancer | 180.8 |
| Cerebrovascular Disease (Stroke) | 43.6 |
| Chronic Lower Respiratory Disease | 40.4 |
| Accidents | 38.5 |
| Alzheimer's Disease | 22.7 |
| Diabetes Mellitus | 23.3 |
| Influenza and Pneumonia | 17.7 |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 14.3 |
| Septicemia | 10.9 |
| Intentional Self-Harm (Suicide) | 10.6 |
| Chronic Liver Disease and Cirrhosis | 8.7 |

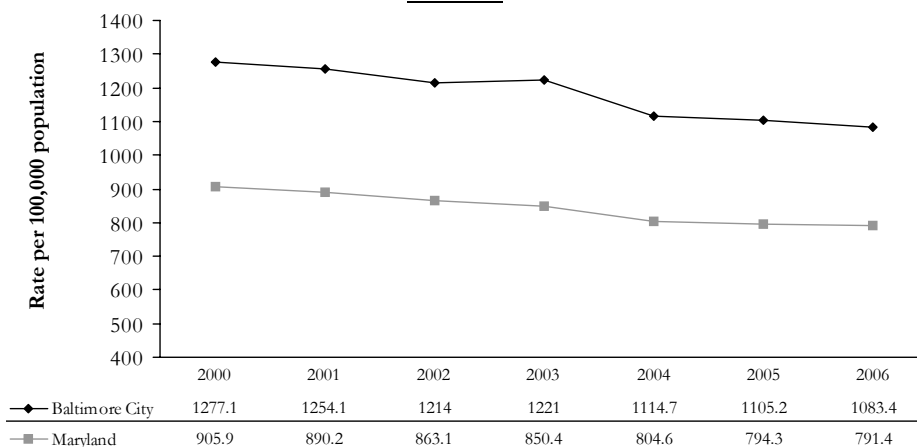
Source: Heron MP, Hoyert DL, Xu J, Scott C, Tejada-Veru B. Deaths: Preliminary data for 2006. National vital statistics reports; vol 56 no 16. Hyattsville, MD: National Center for Health Statistics. 2008.

- In 2006, heart disease, cancer, and cerebrovascular disease were the top three leading causes of death in Baltimore City and nationwide.
- HIV/AIDS and homicide were the fourth and fifth leading causes of death in Baltimore City in 2006. In contrast, nationwide homicide was the 15th leading cause; HIV/AIDS was not included in the top 15 causes nationwide for 2006.
- In 2006, drug induced deaths of undetermined manner (not accidents, homicides, or suicides) was the 8th leading cause of death in Baltimore City.
- Alzheimer's was the 6th leading cause of death nationwide, but did not figure in the top 12 in Baltimore. Similarly suicide and chronic liver disease are leading causes of death in the US but did not figure in Baltimore's top 12.

Mortality

All Causes

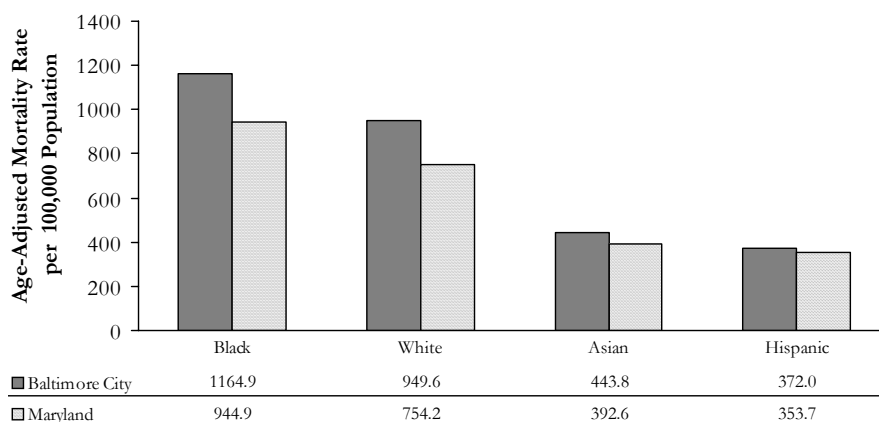
All Cause Age-Adjusted Mortality Rates, Baltimore City and Maryland, 2000-2006



Source: Maryland Department of Health and Mental Hygiene - Maryland Vital Statistics Annual Report; Baltimore City Health Department analysis of data from the Baltimore City Vital Statistics Profile.

- In 2006, there were 7,017 deaths among Baltimore City residents (resulting in an all-cause mortality rate of 1083.4 per 100,000).
- Age-adjusted mortality rates for all causes of death have declined by 15% since 2000 among Baltimore City residents, which is slightly greater than the rate of decline statewide for this same period (13%).
- Despite these declines, mortality in Baltimore remains 37% higher than the statewide rate.
- Baltimore residents of all race/ethnicities have rates of mortality that are higher than those of their statewide counterparts (see below).
- Among race/ethnic groups, African Americans had the highest mortality rate both in Baltimore and statewide.

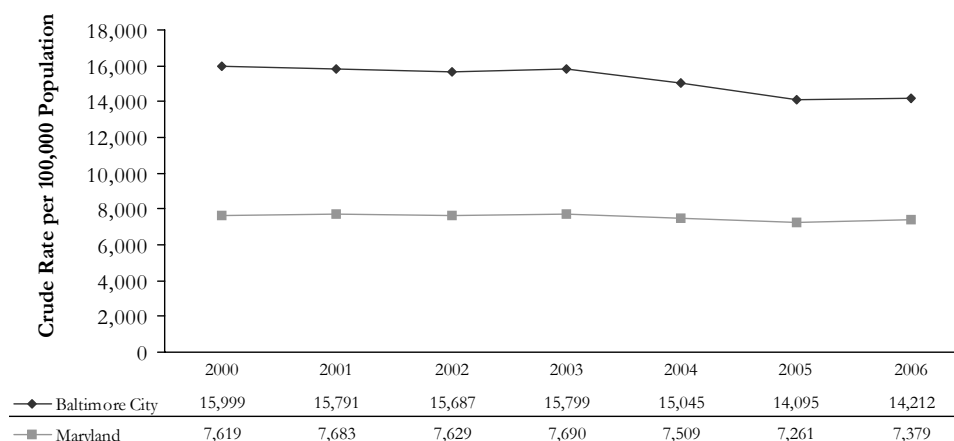
All Cause: Age-Adjusted Mortality Rates by Race, Baltimore City and Maryland, 2006



Source: Maryland Department of Health and Mental Hygiene, Vital Statistics Administration - 2006 Maryland Vital Statistics Annual Report; and Baltimore City Health Department analysis of data from the 2006 Maryland Vital Statistics Profile and the 2006 Baltimore City Vital Statistics Profile.

Years of Potential Life Lost (YPLL)

Years of Potential Life Lost per 100,000, Baltimore City and Maryland, 2000-2006



Source: Baltimore City Health Department analysis of data from the Maryland Department of Health and Mental Hygiene, Vital Statistics Administration; Baltimore City Vital Statistics Profile and the Maryland Vital Statistics Reports. Years of Potential Life Lost calculated using cut-off of age 75 years.

- Years of potential life lost (YPLL) is a measure of premature mortality: using age 75 as the cut-off, a person who dies at age 65 has lost ten years of potential life.
- Since 2000, years of potential life lost have declined by 11% among Baltimore City residents and by 3% statewide. While only 12% of Maryland's population, Baltimore City made up 22% of the statewide YPLL in 2006.
- In 2006, heart disease and cancer were the top two leading causes of YPLL in Baltimore City and in Maryland. Cancer was the leading cause statewide (21% of all-cause YPLL) and the second leading cause in Baltimore (15% of all-cause YPLL).
- In 2006, homicide comprised 13% of total all-cause YPLL among Baltimore City residents compared to 6% among residents statewide. In Maryland accidents were the third leading cause of YPLL (9% of total all-cause YPLL); in Baltimore City accidents were the fifth leading cause (4% of total all-cause YPLL).

| Baltimore City, 2006 | | | | | Maryland, 2006 | | | | |
|----------------------|-----------------------------------|---------------|------------------|---------------------------|----------------|-----------------------------------|----------------|------------------|---------------------------|
| Rank | Cause of Death | Total YPLL | YPLL per 100,000 | % of Total All-Cause YPLL | Rank | Cause of Death | Total YPLL | YPLL per 100,000 | % of Total All-Cause YPLL |
| 1 | Heart Disease | 13,479 | 2,134.9 | 15% | 2 | Heart Disease | 64,160 | 1,142.5 | 15% |
| 2 | Cancer | 13,039 | 2,065.2 | 15% | 1 | Cancer | 85,548 | 1,523.4 | 21% |
| 3 | Homicide | 11,372 | 1,801.2 | 13% | 4 | Homicide | 25,036 | 450.6 | 6% |
| 4 | HIV/AIDS | 7,066 | 1,119.0 | 8% | 5 | HIV/AIDS | 13,543 | 241.2 | 3% |
| 5 | Accidents | 3,743 | 592.8 | 4% | 3 | Accidents | 35,890 | 639.1 | 9% |
| 6 | Cerebrovascular Disease | 2,653 | 420.2 | 3% | 6 | Cerebrovascular Disease | 10,880 | 193.7 | 3% |
| 7 | Diabetes | 1,728 | 273.6 | 2% | 7 | Diabetes | 8,876 | 158.0 | 2% |
| 8 | Septicemia | 1,631 | 258.3 | 2% | 9 | Septicemia | 6,374 | 113.5 | 2% |
| 9 | Chronic Lower Respiratory Disease | 1,316 | 208.4 | 1% | 8 | Chronic Lower Respiratory Disease | 7,233 | 128.8 | 2% |
| 10 | Influenza and pneumonia | 1,207 | 191.1 | 1% | 10 | Influenza and pneumonia | 5,175 | 92.1 | 1% |
| | Drug-induced (all manners) | 7,678 | 1,216.0 | 9% | | Drug-induced (all manners) | 26,653 | 474.6 | 6% |
| | Alcohol-induced (all manners) | 1,409 | 223.2 | 2% | | Alcohol-induced (all manners) | 6,342 | 112.9 | 2% |
| | All Causes | 89,729 | 14,211.9 | 100% | | All Causes | 414,509 | 7,381.2 | 100% |

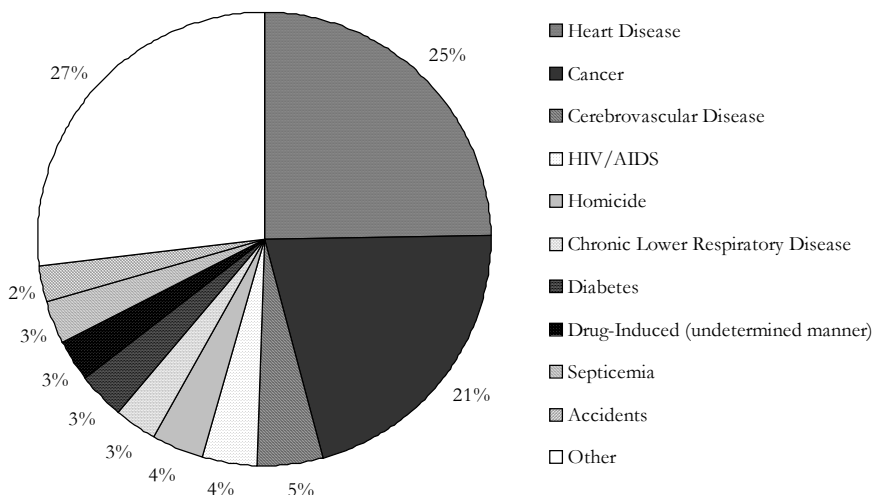
Source: Baltimore City Health Department analysis of data from the Maryland Department of Health and Mental Hygiene's Vital Statistics Administration; 2000 Maryland Vital Statistics Report; 2006 Baltimore City Profile. While the drug-induced death and alcohol-induced death categories are not mutually exclusive with the causes listed in the top 10 ranking (they include deaths of all manners—i.e. accident, homicide, suicide, and undetermined manner), they represent substantial causes of YPLL. (Approximately 90% of drug induced deaths are of undetermined manner—these deaths comprise 8% of YPLL among Baltimore city residents).

Mortality

Mortality vs. Years of Potential Life Lost (YPLL)

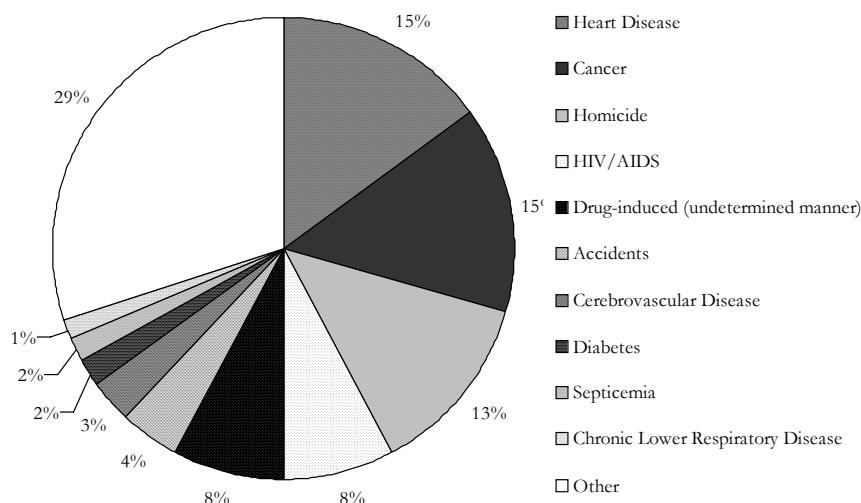
- Years of potential life lost (YPLL) reflect both how many people are dying of a certain cause as well as the age at which they die. In contrast mortality only reflects the number of people dying of a certain cause. As a result, diseases or conditions that lead to death at a younger age will constitute a larger proportion of YPLL than of mortality. Comparing YPLL and mortality can therefore help identify causes that are killing people earlier in life.
- While homicide accounted for only 4% of deaths in 2006, it accounted for 13% of YPLL among Baltimore City residents. Conversely, heart disease (the leading cause of death in terms of number of deaths) accounted for 25% of all deaths, but only 15% of total YPLL.
- Similar to homicide, HIV/AIDS, drug-induced deaths, and accidents accounted for a larger proportion of total all-cause YPLL compared to their relative contributions to total all-cause mortality.

Mortality - Top 10 Causes of Death, Baltimore City, 2006



Source: Baltimore City Health Department analysis of data from the Maryland Department of Health and Mental Hygiene, Vital Statistics Administration: 2006 Baltimore City Profile. Drug-Induced Deaths of undetermined manner - this category does not include deaths due to accident, suicide or homicide ICD-10 codes Y10-Y14. See technical notes for more information on cause of death categories.

Years of Potential Life Lost for the Top 10 Causes of Death, Baltimore City, 2006

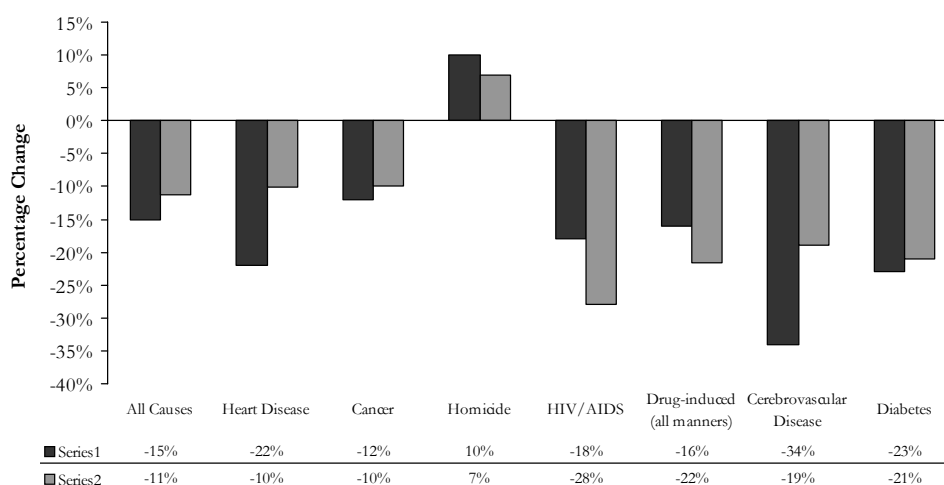


Source: Baltimore City Health Department analysis of data from the Maryland Department of Health and Mental Hygiene, Vital Statistics Administration: 2006 Baltimore City Profile. Years of Potential Life Lost calculated using cut-off of age 75 years. Drug-Induced Deaths of undetermined manner - this category does not include deaths due to accident, suicide or homicide ICD-10 codes Y10-Y14. See technical notes for more information on cause of death categories.

Mortality and YPLL in Baltimore vs. Maryland

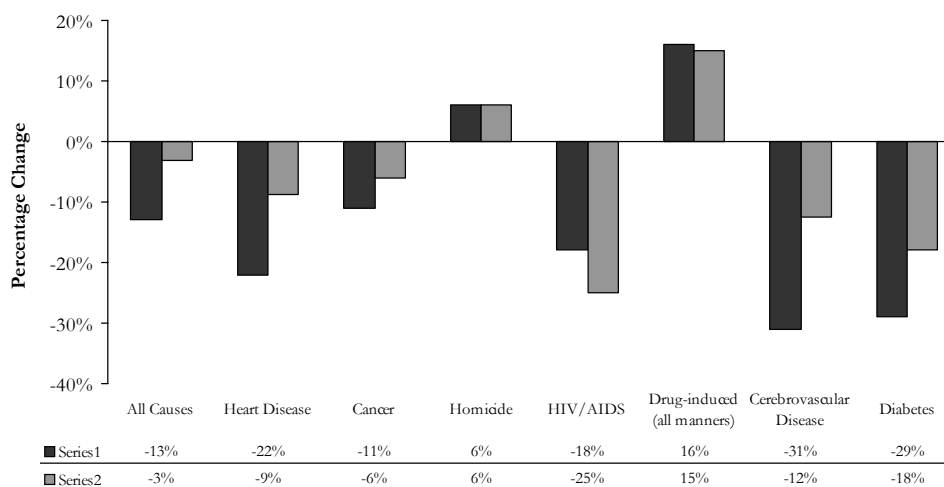
- The graphs above compare the percentage change in years of potential life lost (YPLL) and the percentage change in mortality by cause between 2000 and 2006 for Baltimore City and Maryland.
- Comparing 2006 to 2000, homicide was the only cause of death that increased among Baltimore City residents.
- During this same period statewide, homicides as well as and drug-induced deaths (undetermined manner) increased.
- Causes of death where changes in YPLL exceed changes in mortality are causes that are more likely to impact younger as opposed to older people; for example HIV/AIDS and drug-induced deaths.

**Percentage change in Mortality and YPLL by Cause,
Baltimore City, 2000 to 2006**



Source: Baltimore City Health Department analysis of data from the Maryland Department of Mental Hygiene's Vital Statistics Administration: 2000 and 2006 Maryland Vital Statistics Report; 2000 and 2006 Baltimore City Profile. The drug-induced death category is not mutually exclusive (it includes deaths of all manners—i.e. accident, homicide, suicide, and undetermined manner).

**Percentage change in Mortality and YPLL rate per 100,000 residents,
Maryland 2000 to 2006**



Source: Baltimore City Health Department analysis of data from the Maryland Department of Mental Hygiene's Vital Statistics Administration: 2000 and 2006 Maryland Vital Statistics Report; 2000 and 2006 Baltimore City Profile. The drug-induced death category is not mutually exclusive (it includes deaths of all manners—i.e. accident, homicide, suicide, and undetermined manner).