Statewide Fact Sheets

Massachusetts HIV/AIDS Data Fact Sheet
Who is dying with HIV/AIDS and how has this changed over time?

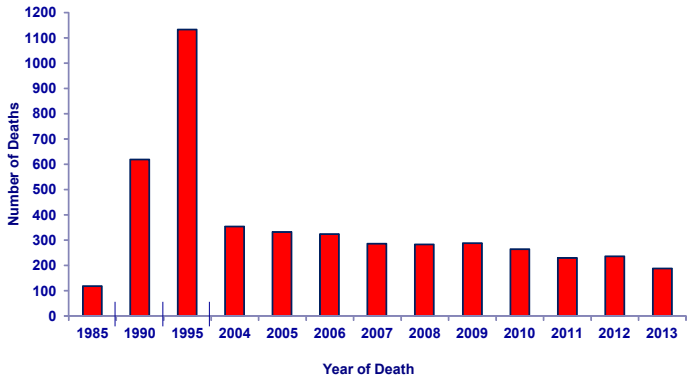
Fast Facts

- 2013 saw the lowest number of deaths among persons with HIV/AIDS since these deaths peaked in 1994. This trend represents improvements in care and treatment resulting in longer survival, as well as reducing incidence of HIV infection.
- Disparities in mortality among people living with HIV/AIDS were not observed related to gender, race, ethnicity, place of birth or reported risk but rather paralleled known disparities in infection rates.
- Survival time from diagnosis continues to increase in all people in Massachusetts living with HIV/AIDS.

Introduction

The number of deaths among people reported with HIV/AIDS declined 47% from 391 in 2004 to a low of 188 deaths in 2013 (Figure 1).[i] In 2012, less than half of deaths among people reported with HIV/AIDS were directly HIV-related (N=100). [ii]

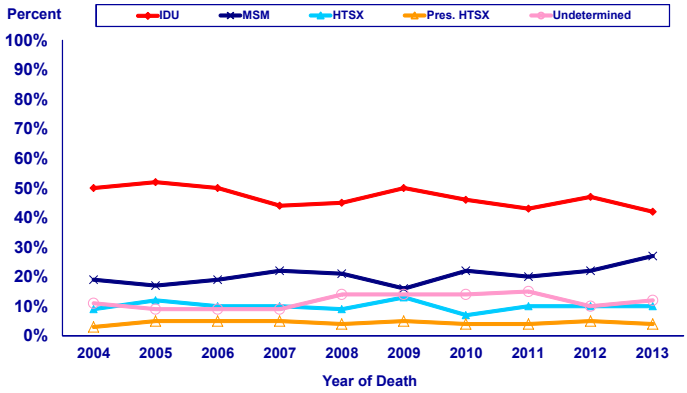
Figure 1. Number of Deaths Among People Reported with HIV/AIDS by Year of Death: Massachusetts, Selected Years, 1985–2013



Note: Death data for people with HIV who had not yet progressed to AIDS are not available before 1999 and therefore not included here. Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

From 2004 to 2013, the greatest proportion of deaths among people with HIV was in persons reported with a risk of injection drug use, which remained fairly stable at over 40% annually (Figure 2). In the past five years (2009 to 2013), the proportion of deaths among people with HIV reported with a risk of male-to-male sex increased from 16% to 27%.

Figure 2. Percent of Deaths among People Reported with HIV/AIDS by Selected Reported Risk and Year of Death: Massachusetts, 2004–2013



IDU= Injection Drug Use, MSM=Male-to-Male Sex, HTSX=Heterosexual Sex, Pres.=Presumed; Data Source: MDPH HIV/AIDS Surveillance Program; data as of 1/1/15

Members of black (non-Hispanic) and Hispanic/Latino populations are living and diagnosed with HIV infection at higher rates than those of the white (non-Hispanic) population, so they also experience higher mortality rates. But, black (non-Hispanic) and Hispanic/Latino individuals do not experience differential survival compared to white (non-Hispanic) individuals once diagnosed. Deaths among people reported with HIV/AIDS from 2004 to 2013 declined for all race/ethnicities.

Rank of HIV/AIDS among Leading Causes of Death in 2012: [iii]

- In 2012, HIV/AIDS was the 28th leading cause of death in Massachusetts.
- HIV/AIDS was the 14th leading cause of death for Hispanic/Latino individuals, the 16th leading cause of death for black (non-Hispanic) individuals, and the 31st leading cause of death for white (non-Hispanic) individuals.
- Among 25–44 year olds, HIV/AIDS was the 11th leading cause of death in 2012; seventeen years prior (1995), it was the leading cause of death in this age group.

Reported Risk:

- From 2004 to 2013, the number of deaths among people reported with HIV/AIDS with injection drug use decreased by 56% (from 178 to 79); male-to-male sex by 26% (from 68 to 50); heterosexual sex by 41% (from 32 to 19); presumed heterosexual sex by 42% (from 12 to 7); and undetermined risk by 43% (from 40 to 23).[iv]

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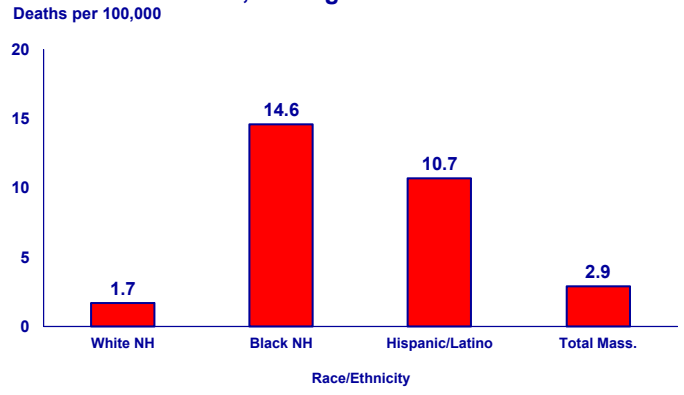
Race/Ethnicity:

- The number of deaths among people reported with HIV/AIDS who were white (non-Hispanic) decreased by 43% (from 175 to 99) from 2004 to 2013, black (non-Hispanic) by 43% (from 88 to 50), and Hispanic/Latino by 57% (from 87 to 37).

Average Annual Rate of Death Among People Reported with HIV/AIDS by Race/Ethnicity, 2011–2013:

- An average of 2.9 per 100,000 people in Massachusetts died with HIV/AIDS each year within the years 2011 to 2013 (rate age-adjusted).
- The age-adjusted average annual death rates within the three-year period 2011 to 2013 among the black (non-Hispanic) (14.6 per 100,000) and the Hispanic/Latino (10.7 per 100,000) populations reported with HIV/AIDS are nine and six times greater than for the white (non-Hispanic) population (1.7 per 100,000), respectively. These rates reflect longstanding disparities in HIV infection incidence by race/ethnicity: the black (non-Hispanic) population is diagnosed with HIV infection at ten times and the Hispanic/Latino population at six times the rate of the white (non-Hispanic) population.

Figure 3. Age-Adjusted Rate of Death per 100,000 Population[1] Among People Reported with HIV/AIDS by Race/Ethnicity: Massachusetts, Average Annual Rate 2011–2013



[1] Population sizes for rate calculations are from the Massachusetts (Department of Public Health) Modified Age, Race/Ethnicity, & Sex Estimates 2010, all rates are age-adjusted using the 2000 US standard population; NH= Non-Hispanic; Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/15

Gender:

- In 2013, 74% of deaths among individuals reported with HIV/AIDS were men and 26% were women. [v] These proportions have been relatively stable over time and are consistent with the distribution of HIV/AIDS by gender.
- From 2004 to 2013, the number of deaths among men reported with HIV/AIDS decreased by 46% (from 258 to 139) and among women by 49% (from 96 to 49).

Place of Birth:

- In 2013, 79% of deaths among individuals reported with HIV/AIDS were among people born in the U.S., 11% were among people born in Puerto Rico or another U.S. dependency, and 10% were among people born outside the U.S. These proportions have been relatively stable over time.
- From 2004 to 2013, the number of deaths among people reported with HIV/AIDS who were born in the U.S. decreased by 44% (from 266 to 149), among people born in Puerto Rico or another U.S. dependency by 63% (from 57 to 21), and among people born outside the U.S by 42% (from 31 to 18).

Age at Death:

- The proportion of deaths among people with HIV/AIDS who were between 25 and 44 years of age decreased from 38% in 2004 to 9% in 2013. During the same time period, the proportion of deaths among people with HIV/AIDS who were age 45 years old and older increased from 60% to 90%. Thus, the pattern of deaths among people with HIV/AIDS is beginning to resemble that of the general Massachusetts population. For comparison, in 2012, 4% (N=1,880) of all deaths in Massachusetts (N=53,169) were among 25 to 44 year olds and 95% (N=50,460) were among those age 45 years old and older.

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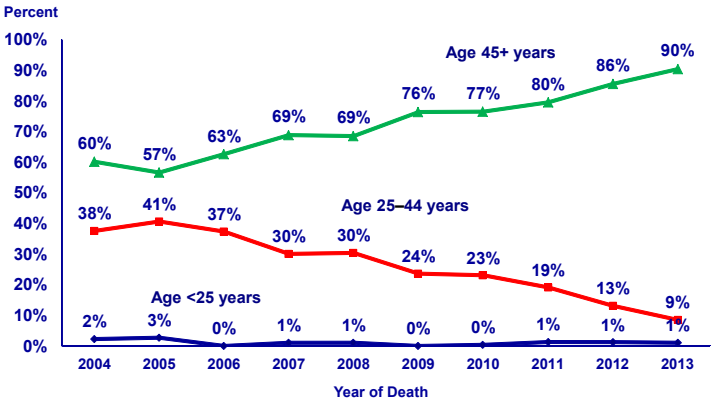
Figure 4. Percent of Deaths among People Reported with HIV/AIDS by Age at Death and Year of Death: Massachusetts, 2004–2013

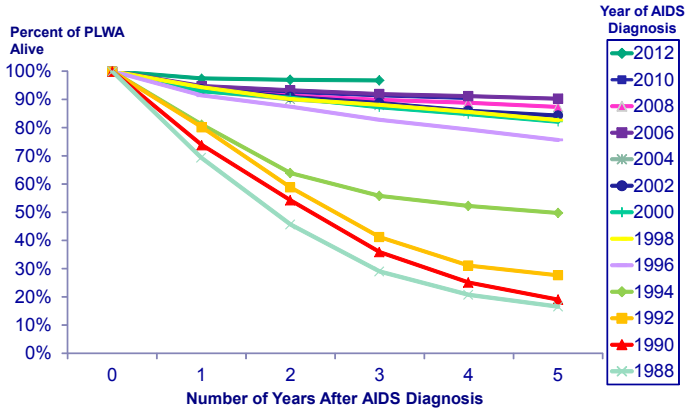


Data Source: MDPH HIV/AIDS Surveillance Program; data as of 1/1/15

Trends in survival After an AIDS Diagnosis:

- Compared to survival of people diagnosed in 1988, the proportion of people who survive with AIDS increased over successive years (Figure 5).

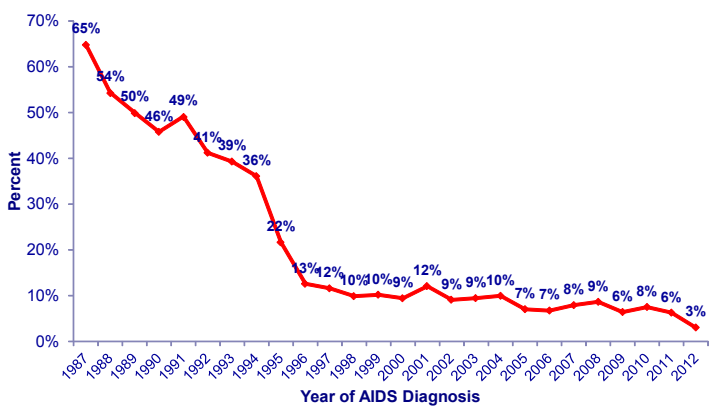
Figure 5. Percent of People Living with AIDS (PLWA) Who Are Alive 1–5 Years After an AIDS Diagnosis by Year of AIDS Diagnosis: Massachusetts, 1988–2012



NOTE: Trend lines are incomplete for more recent years of diagnosis because fewer years of observation are available; Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

- From 1987 to 1996, the proportion of people diagnosed with AIDS who died within two years of their diagnosis declined from 65% to 13% (Figure 6).
- From 1997 to 2004, the proportion of people diagnosed with AIDS who died within two years of their diagnosis ranged from 12% to 9%, and stayed below 10% thereafter.

Figure 6. Percent of People Who Died Within 2 Years of an AIDS Diagnosis by Year of AIDS Diagnosis: Massachusetts, 1987–2012



Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

Data Sources

All HIV/AIDS Case Data: Massachusetts Department of Public Health (MDPH) HIV/AIDS Surveillance Program, Data as of 1/1/15

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[i] Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

[ii] This fact sheet describes all deaths among people reported with HIV/AIDS in Massachusetts from all causes, including cardiovascular disease, liver disease, cancer, accidental injury, or poisoning inclusive of drug overdose. Therefore, the number of deaths here (N=208 in 2012) will differ from the number of deaths with HIV/AIDS as the cause of death (N=100 in 2012) reported in Massachusetts Provisional Deaths by the Massachusetts Department of Public Health, Registry of Vital Records and Statistics, Bureau of Health Information, Statistics, Research and Evaluation.

[iii] Data included here represent HIV/AIDS-related deaths from: Massachusetts Deaths 2010. Boston, MA: Division of Research and Epidemiology, Bureau of Health Information, Statistics, Research, and Evaluation, Massachusetts Department of Public Health. January 2013

[iv] The category of presumed heterosexual is used exclusively for women, to define reported risk in cases when sex with men is the only reported risk factor for HIV infection.

[v] Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=26 children living with HIV/AIDS under age 13 as of 1/1/14).