

Handout 2. Death Rates for HIV by Sex, Race, Ethnicity, and Age Group 1987-2002

(Data are based on death certificates)

<i>Sex, race, Hispanic origin, and age</i>	<i>1987</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>
All persons	Deaths per 100,000 resident population											
All ages, age adjusted ²	5.6	6.9	9.0	10.2	11.7	13.1	14.4	16.0	16.2	11.5	6.0	4.9
All ages, crude	5.6	6.8	8.9	10.1	11.7	13.1	14.3	16.0	16.2	11.6	6.1	4.9
Under 1 year	2.3	2.2	3.1	2.7	2.3	2.5	2.2	2.5	1.5	1.1	*	*
1-4 years	0.7	0.8	0.8	0.8	1.0	1.0	1.3	1.2	1.3	0.9	0.3	0.2
5-14 years	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.3	0.1
15-24 years	1.3	1.4	1.6	1.5	1.7	1.6	1.7	1.8	1.7	1.1	0.7	0.5
25-34 years	11.7	14.0	17.9	19.7	22.0	24.2	26.5	28.6	28.3	19.2	9.7	7.1
35-44 years	14.0	17.6	23.5	27.4	31.2	35.5	38.9	43.9	44.2	31.3	16.0	12.8
45-54 years	8.0	9.8	13.3	15.2	18.3	20.2	22.5	25.3	26.0	19.1	10.3	8.9
55-64 years	3.5	4.0	5.4	6.2	7.4	8.5	8.8	10.3	10.9	8.3	4.8	4.3
65-74 years	1.3	1.6	1.8	2.0	2.4	2.8	2.9	3.1	3.6	2.7	1.8	1.6
75-84 years	0.8	0.8	0.7	0.7	0.9	0.8	0.8	0.9	0.7	0.8	0.6	0.5
85 years and over	*	*	*	*	*	*	*	*	*	*	*	*
Male												
All ages, age adjusted ²	10.4	12.6	16.5	18.5	21.0	23.3	25.1	27.5	27.3	19.0	9.6	7.6
All ages, crude	10.2	12.4	16.4	18.5	21.1	23.4	25.3	27.7	27.6	19.2	9.7	7.6
Under 1 year	2.2	2.5	2.7	2.4	2.1	2.3	2.1	2.1	1.7	1.1	*	*
1-4 years	0.7	0.8	0.7	0.8	1.0	1.1	1.3	1.2	1.2	0.9	0.3	*
5-14 years	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.3	0.1
15-24 years	2.2	2.3	2.6	2.2	2.4	2.2	2.2	2.2	2.0	1.3	0.8	0.5
25-34 years	20.7	24.5	31.5	34.5	37.9	41.6	45.0	47.2	45.5	30.2	14.4	10.0
35-44 years	26.3	32.6	43.6	50.2	56.8	63.3	68.2	75.9	75.5	51.7	25.4	20.0
45-54 years	15.5	19.0	25.6	29.1	34.2	37.9	41.3	45.8	46.2	33.1	17.1	14.8
55-64 years	6.8	7.8	10.5	12.0	14.0	15.8	16.4	18.9	19.7	14.7	8.3	7.2
65-74 years	2.4	2.9	3.3	3.7	4.5	5.3	5.4	5.8	6.4	5.0	3.4	2.9
75-84 years	1.2	1.5	1.2	1.1	1.5	1.6	1.4	1.4	1.3	1.5	1.0	0.9
85 years and over	*	*	*	*	*	*	*	*	*	*	*	*
Female												
All ages, age adjusted ²	1.1	1.4	1.8	2.2	2.7	3.2	3.9	4.8	5.3	4.2	2.6	2.2
All ages, crude	1.1	1.4	1.8	2.2	2.7	3.2	3.9	4.8	5.3	4.3	2.6	2.2
Under 1 year	2.5	1.7	3.5	3.0	2.4	2.7	2.4	2.9	1.2	*	*	*
1-4 years	0.7	0.7	0.8	0.8	1.1	1.0	1.3	1.3	1.5	1.0	0.4	*
5-14 years	*	0.1	0.1	0.2	0.2	0.2	0.4	0.5	0.5	0.4	0.2	0.2
15-24 years	0.3	0.5	0.6	0.7	0.9	0.9	1.1	1.2	1.4	0.9	0.7	0.5
25-34 years	2.8	3.5	4.4	4.9	5.9	6.8	7.9	9.9	10.9	8.2	4.9	4.2
35-44 years	2.1	3.0	3.9	5.2	6.1	8.2	10.2	12.4	13.3	11.2	6.7	5.7
45-54 years	0.8	1.1	1.6	1.9	3.1	3.3	4.4	5.7	6.6	5.6	3.7	3.1
55-64 years	0.5	0.7	0.8	1.1	1.5	1.9	1.9	2.5	2.8	2.5	1.6	1.6
65-74 years	0.5	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.4	0.8	0.5	0.6
75-84 years	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.3	0.3	0.4	0.3
85 years and over	*	*	*	*	*	*	*	*	*	*	*	*
All ages, age adjusted²												
All persons	8.7	10.4	13.8	15.7	17.5	18.9	19.8	21.0	20.4	13.1	5.9	4.5
White male	26.2	32.8	42.1	46.3	55.8	65.1	73.8	86.2	89.0	70.3	40.9	33.2
Black or African American male	*	2.8	3.5	3.3	6.6	4.8	7.9	8.9	10.5	6.4	3.3	3.5
American Indian or Alaska Native male	2.5	3.1	3.8	4.3	4.3	4.6	5.3	6.7	6.0	4.4	1.6	1.3
Asian or Pacific Islander male	18.8	21.5	28.5	28.8	31.9	35.1	35.2	41.5	40.8	28.0	14.0	10.2
Hispanic or Latino male ³	10.7	11.2	12.7	14.1	15.5	16.7	17.4	18.5	17.9	11.2	4.8	3.7

White, not Hispanic or Latino male ³	0.6	0.7	0.9	1.1	1.4	1.6	1.9	2.3	2.5	1.9	1.0	0.8
White female	4.6	6.2	8.2	10.1	12.2	14.7	17.6	22.4	24.4	20.8	13.7	12.0
Black or African American female	*	*	*	*	1.0	0.5	1.0	1.4	2.5	1.4	1.0	0.6
American Indian or Alaska Native female	*	*	*	*	0.4	0.5	0.8	0.7	0.6	0.5	0.2	0.3
Asian or Pacific Islander female	2.1	3.1	4.1	3.8	4.9	5.7	6.8	8.0	8.8	6.3	3.3	2.8
Hispanic or Latino female ³	0.5	0.6	0.6	0.7	0.9	1.0	1.3	1.6	1.7	1.3	0.7	0.5
White, not Hispanic or Latino female ³												

Age 25-44 years

All persons	12.7	15.6	20.5	23.2	26.3	29.7	32.6	36.2	36.3	25.4	12.9	10.1
White male	19.2	23.0	30.8	35.0	39.1	42.5	44.9	47.7	46.1	29.1	12.9	9.6
Black or African American male	60.2	74.3	94.1	102.0	117.2	136.5	154.0	176.1	179.4	136.8	75.2	58.1
American Indian or Alaska Native male	*	*	7.4	7.7	13.7	13.0	19.9	22.0	28.5	16.6	9.5	7.5
Asian or Pacific Islander male	4.1	6.3	7.5	8.1	8.9	9.2	10.4	13.2	12.1	7.7	3.3	2.4
Hispanic or Latino male ³	36.8	43.5	58.2	59.3	63.0	67.2	68.1	73.9	73.9	48.0	23.3	16.6
White, not Hispanic or Latino male ³	23.3	24.7	28.2	31.6	34.8	37.9	40.0	43.1	41.2	25.6	10.9	8.1
White female	1.2	1.6	1.9	2.3	3.0	3.6	4.4	5.5	5.9	4.3	2.3	1.8
Black or African American female	11.6	15.5	20.1	23.6	27.0	34.1	40.0	49.2	53.6	45.7	28.6	25.5
American Indian or Alaska Native female	*	*	*	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander female	*	*	*	*	*	*	1.2	1.4	1.2	*	*	*
Hispanic or Latino female ³	4.9	7.2	9.3	8.9	10.0	12.3	13.8	16.6	17.2	12.0	6.2	4.6
White, not Hispanic or Latino female ³	1.0	1.2	1.3	1.5	1.9	2.3	2.9	3.9	4.2	3.1	1.7	1.3

Age 45-64 years

All persons	5.8	7.1	9.7	11.1	13.4	15.2	16.7	19.1	19.9	14.8	8.1	7.0
White male	9.9	11.9	16.4	18.6	21.2	23.3	24.5	26.2	26.0	17.3	7.9	6.6
Black or African American male	27.3	34.5	46.1	53.0	70.9	85.5	99.6	124.5	133.2	110.7	69.3	60.9
American Indian or Alaska Native male	*	*	*	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander male	*	4.3	6.1	6.5	5.3	7.1	9.0	10.3	9.1	7.9	2.3	2.4
Hispanic or Latino male ³	25.8	29.0	37.0	37.9	45.2	53.0	52.5	69.4	67.1	49.7	25.1	18.3
White, not Hispanic or Latino male ³	12.6	13.0	15.3	16.9	18.8	20.2	21.4	22.4	22.4	14.2	6.3	5.4
White female	0.5	0.6	0.7	0.9	1.2	1.5	1.8	2.1	2.4	1.9	1.1	0.9
Black or African American female	2.6	4.0	5.6	7.5	12.2	12.9	16.5	24.0	27.0	24.3	17.5	15.4
American Indian or Alaska Native female	*	*	*	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander female	*	*	*	*	*	*	*	*	*	*	*	*
Hispanic or Latino female ³	*	2.6	3.5	3.1	6.2	6.9	8.3	10.0	12.6	9.8	5.4	4.9
White, not Hispanic or Latino female ³	0.5	0.4	0.5	0.7	0.8	1.0	1.1	1.3	1.5	1.2	0.7	0.5

*Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹Starting with 1999 data, cause of death is coded according to ICD-10. To estimate change between 1998 and 1999, compare the 1999 rate with the comparability-modified rate for 1998. See Appendix II, Comparability ratio and tables V and VI.

²Age-adjusted rates are calculated using the year 2000 standard population. See Appendix II, Age adjustment.

³Prior to 1997, excludes data from States lacking an Hispanic-origin item on the death certificate. See Appendix II, Hispanic origin.

NOTES: Starting with Health, United States, 2003, rates for 1991-99 were revised using intercensal population estimates based on census 2000. Rates for 2000 were revised based on census 2000 counts. Rates for 2001 and 2002 were computed using 2000-based postcensal estimates.

See Appendix I, Population Census and Population Estimates.

The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin.

Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See Appendix II,

Race, for a discussion of sources of bias in death rates by race and Hispanic origin.

Categories for the coding and classification of human immunodeficiency virus (HIV) disease were introduced in the United States in 1987.

Underlying cause of death code numbers are based on the applicable revision of the International Classification of Diseases (ICD) for data years shown.

See Appendix II, tables IV and V.

Data for additional years are available. See Appendix III.

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from table 1 and unpublished Hispanic population estimates for 1987-96 prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census; additional mortality tables are available at www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm;

Kochanek KD, Murphy SL, Anderson RN, Scott C. Deaths: Final data for 2002.
National vital statistics reports. Vol 53 no 5. Hyattsville, Maryland:
National Center for Health Statistics. 2004.

Health, United States, 2004

Table based from "Table 42. Death rates for human immunodeficiency virus (HIV) disease, according to sex, race, Hispanic origin, and age: United States, selected years 1987-2002"

Lesson Plan: HIV/AIDS and Contemporary Population Dynamics, Activity One

Comparability
modified

	1998 ¹	1999 ¹	2000	2001	2002
	5.6	5.3	5.2	5.0	4.9
	5.6	5.3	5.1	5.0	4.9
	*	*	*	*	*
	0.2	0.2	*	*	*
	0.1	0.2	0.1	0.1	0.1
	0.6	0.5	0.5	0.6	0.4
	8.1	6.8	6.1	5.3	4.6
	14.7	13.8	13.1	13.0	12.7
	10.2	10.7	11.0	10.5	11.2
	4.9	4.8	5.1	5.2	5.1
	1.8	2.2	2.2	2.1	2.2
	0.6	0.6	0.7	0.7	0.8
	*	*	*	*	*
	8.7	8.2	7.9	7.5	7.4
	8.7	8.2	7.9	7.6	7.4
	*	*	*	*	*
	*	*	*	*	*
	0.1	0.2	0.1	0.1	*
	0.6	0.5	0.5	0.5	0.4
	11.4	9.5	8.0	7.1	5.9
	22.9	21.0	19.8	19.5	18.8
	16.9	17.5	17.8	16.8	17.7
	8.2	8.3	8.7	8.6	8.5
	3.3	3.8	3.8	3.5	3.9
	1.0	1.0	1.3	1.5	1.4
	*	*	*	*	*
	2.5	2.5	2.5	2.5	2.5
	2.5	2.5	2.5	2.5	2.5
	*	*	*	*	*
	*	*	*	*	*
	0.2	0.2	0.1	*	*
	0.6	0.5	0.4	0.6	0.4
	4.8	4.1	4.2	3.5	3.3
	6.5	6.7	6.5	6.7	6.7
	3.5	4.1	4.4	4.4	4.8
	1.8	1.6	1.8	2.0	1.9
	0.7	0.8	0.8	0.9	0.8
	0.3	0.3	0.3	*	0.3
	*	*	*	*	*
	5.2	4.9	4.6	4.4	4.3
	38.0	36.1	35.1	33.8	33.3
	4.0	4.2	3.5	4.2	3.4
	1.5	1.4	1.2	1.2	1.5
	11.7	10.9	10.6	9.7	9.1
	4.2	4.0	3.8	3.6	3.5

0.9	1.0	1.0	0.9	0.9
13.7	13.1	13.2	13.4	13.4
*	1.0	1.0	*	*
*	0.2	0.2	*	*
3.2	3.0	2.9	2.7	2.6
0.6	0.7	0.7	0.6	0.6

11.6	10.5	9.8	9.4	8.9
11.0	9.7	8.8	8.3	7.7
66.5	59.3	55.4	53.5	49.9
8.6	9.1	5.5	7.3	8.3
2.7	2.4	1.9	2.1	1.8
19.0	16.5	14.3	12.4	11.5
9.3	8.2	7.4	7.2	6.6
2.1	2.2	2.1	1.9	1.8
29.2	26.6	26.7	26.0	25.9
*	*	*	*	*
*	*	*	*	*
5.3	5.3	4.6	4.3	3.8
1.5	1.6	1.6	1.3	1.3

8.0	8.4	8.7	8.4	8.7
7.6	7.8	8.1	7.7	7.8
69.7	70.7	71.6	68.8	70.7
*	*	*	7.8	*
2.7	2.3	2.1	1.9	3.4
20.9	21.2	23.3	21.5	20.3
6.2	6.4	6.5	6.1	6.4
1.0	1.2	1.3	1.2	1.4
17.6	18.6	19.6	20.8	21.4
*	*	*	*	*
*	*	*	*	*
5.6	5.1	5.8	5.4	5.7
0.6	0.8	0.9	0.8	0.9