

Technical Notes

Age-adjustment weights used to compute age-adjusted rates by category of marital status

Age-adjusted prevalence estimates, inpatient hospitalization and mortality rates by marital status were computed based on the age-specific rates and the standard population for ages 18 years or older. Ages 17 years or younger were excluded because of their high variability, particularly for the widowed population. The age-adjustment weights shown below follow the Distribution #9 (See: Klein RJ, Schoenborn CA. Age-adjustment using the 2000 projected U.S. population. Healthy People Statistical Note, no. 20. Hyattsville, Maryland: National Center for Health Statistics. January 2007).

	Population in thousands	Adjustment weight
Total	203,851	1.000000
18-24	26,258	0.128810
25-34	37,233	0.182648
35-44	44,659	0.219077
45-64	60,991	0.299194
65+	34,710	0.170271

Computation of standard errors and confidence intervals

Both mortality and inpatient hospitalization data may be affected by random variation. Standard errors and 95 percent confidence limits are shown in **Table 7-1, Table 7-8, Table 8-1, Table 8-2, Table 8-3,** and **Table 8-6.**

Our computations are based on the following formulas published in Minino AM, Heron MP, Murphy SL, Kochanek, KD "Deaths: Final Data for 2004". National vital statistics reports: vol. 55 no 19. Hyattsville, MD. National Center for Health Statistics. 2007:

- Formula 2, p. 113 for standard errors associated with age-specific hospitalization and mortality rates;
- Formula 4, p. 114 for standard errors associated with the age-adjusted hospitalization and mortality rates;
- When the number of deaths is 100 or greater;

$L(R) = R - 1.96 (SE(R))$ and $U(R) = R + 1.96 (SE(R))$
where $L(R)$ and $U(R)$ are the lower and upper limits of the confidence interval, respectively. The resulting 95 percent confidence interval can be interpreted to mean that the chances are 95 out of 100 that the "true" death rate falls between $L(R)$ and $U(R)$;

- For the number of deaths and death rates when the number of deaths is less than 100, 95 percent confidence limits were estimated using the lower and upper confidence limit factors shown in [Table XIV](#) on p. 118.

Diagnostic categories

The inpatient hospitalization data **Section 7** use diagnostic groupings and codes based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). Detailed information about the diagnostic categories we analyze in this report is provided on our website at <http://www.azdhs.gov/plan/index.htm>.

The death certificate database **Section 8** uses diagnostic groupings and codes based on the Tenth Revision of the International Classification of Diseases (ICD-10). Detailed information about the ICD-10 codes for all of the cause-of-death categories analyzed in this report also is available online at <http://www.azdhs.gov/plan/report/ahs/ahs2006/pdf/compratios.pdf>.