Trends in Stroke Mortality

To the Editor:

The AHA Scientific Statement on improving cardiovascular health at the community level published in the February 4 issue of Circulation contains the following misleading statement on trends in stroke mortality: “The rate of stroke has not declined since 1990, for the first time in 100 years.”1 The source cited for this statement is an article published in Circulation in December 2000, of which the undersigned and some of the authors of the Scientific Statement were coauthors.2 The relevant wording from the source article is, “...stroke mortality, which had sizable reductions in both the 1970s and 1980s but much more modest reductions since 1990. Others have documented this flattening of the stroke trend.” Table 1 in that article shows annual average declines of 4.9%, 3.5%, and 0.7%, for 1970 to 1980, 1980 to 1990, and 1990 to 1997, respectively, for age-adjusted mortality rates.

More importantly, it appears that the flattening in stroke mortality in the early 1990s was a temporary phenomenon. The age-adjusted death rate declined an average of 2.4% between 1995 and 2000.3 The robust decline resumed in all 4 of the major race-gender groups, similar to that in previous decades. These sequential changes in rates of decline are not completely understood, but part of the explanation may be a pause in the secular increase in hypertension control rates during 1991 to 19944 followed by further improvement in 1999 to 2000 (M. Wolz, unpublished table distributed at the National High Blood Pressure Education Program Coordinating Center meeting, Bethesda, Md, February 2002), as suggested by data from the National Health and Nutrition Examination Survey.

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