

## Clinical Trial Registration

**TO THE EDITOR:** In reply to the letter from Grass (Jan. 13 issue),<sup>1</sup> we would like to clarify that [www.clinicaltrials.gov](http://www.clinicaltrials.gov) was expanded in October 2004 to allow for the registration of any clinical trial that has been approved by a human subjects review board (or the equivalent) and that conforms to the regulations of the appropriate national or international health authority. We encourage investigators and sponsors of clinical trials that meet these criteria to register their trials at this Web site. In addition, current U.S. law mandates the registration of trials that are designed to evaluate the efficacy of drugs for the treatment of serious or life-threatening diseases and that are intended to

support a new drug application to the Food and Drug Administration.<sup>2</sup> For more information about registration of clinical trials, see <http://prsinfo.clinicaltrials.gov>.

Deborah A. Zarin, M.D.

ClinicalTrials.gov  
Bethesda, MD 20894  
[dzarin@mail.nih.gov](mailto:dzarin@mail.nih.gov)

1. Grass G. Clinical trial registration. *N Engl J Med* 2005;352:198-9.
2. Food and Drug Administration. Guidance for industry: information program on clinical trials for serious or life-threatening diseases and conditions. Rockville, Md.: Department of Health and Human Services, March 2002. (Accessed March 16, 2005, at <http://www.fda.gov/cder/guidance/4856fnl.htm>.)

---

## Distribution of C-Reactive Protein Values in the United States

**TO THE EDITOR:** Recent studies suggesting that C-reactive protein (CRP) may be an important risk marker for cardiovascular disease have stimulated the demand for testing. Nevertheless, many physicians may be unfamiliar with high-sensitivity CRP measurements. In fact, no description of the distribution of CRP values for the entire adult population (and relevant subgroups) in the United States is readily available to clinicians. We therefore sought to summarize the distribution of CRP for all U.S. adults by age, sex, and race or ethnic background.

We analyzed components of the most recent data released from the National Health and Nutrition Examination Survey (NHANES), 1999 through 2002, which includes a sample of 21,004 people.<sup>1</sup> NHANES is conducted by the National Center for Health Statistics, Centers for Disease Control and Prevention, to assess the health and nutritional status of the civilian, noninstitutionalized population of the United States. The complex sampling design, data-collection methods, and weighting approach are described elsewhere.<sup>2</sup> We report on the 8874 adults (20 years of age or older) who underwent high-sensitivity CRP testing.

All analyses incorporated four-year sampling weights (WTMEC4YR) to account for the differential probability of selection among subjects and for

nonresponse, as well as design-effects variables—the stratum variable (SDMVSTRA) and the variable for the primary sampling unit (SDMVPSU)—in order to account for the survey's complex, multistage sampling strategy. All analyses used the SVY series of commands in the Stata program, version 8.2.

The levels of CRP range from 0.1 to 296.0 mg per liter, with a distribution highly skewed to the right (mean, 4.3; median, 2.1) (Fig. 1 and Table 1). The levels of CRP are higher among women than among men (median, 2.7 mg per liter vs. 1.6 mg per liter) and increase with age (median, 1.4 mg per liter among those 20 to 29 years of age vs. 2.7 mg per liter among those 80 years of age or older), but they vary less across categories of race or ethnic background. Recently, researchers have begun to use a CRP level of 2 mg per liter or greater as the threshold for defining high cardiovascular risk.<sup>3,4</sup> With use of this threshold, 52 percent of the adult population in the United States would be considered at high risk. The proportion of people with a level of 2 mg per liter or higher is substantial at all ages (e.g., 41 percent among those 20 to 29 years of age vs. 62 percent among those 80 years of age or older).

These data document that levels of CRP vary with sex and age. Half of U.S. adults have levels