sartan group than in the captopril group (1.4 percent vs. 0.8 percent; excess, 6 per 1000; P<0.05). However, discontinuation because of any adverse event was more frequent in the captopril group (7.7 percent, vs. 5.8 percent in the valsartan group; excess, 19 per 1000; P<0.05). We are conducting a more detailed analysis to attempt to identify patient characteristics associated with a heightened risk of specific drug-related adverse events. The different side-effect profiles of these two effective alternative approaches should assist clinicians in individualizing therapy to extend the appropriate use of these livesaving interventions to more survivors of myocardial infarction.

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The Toxicology of Mercury

TO THE EDITOR: As a public health official who has been raising the consciousness of my community with regard to the potential hazards of eating mercury-containing fish, I am disturbed by the review article on mercury by Clarkson and colleagues (Oct. 30 issue). The Environmental Protection Agency, the Food and Drug Administration, and the health departments of most states have not published advisories or reference doses on mercury in fish, for nebulous reasons. Over the past 30 years, the level of mercury that we know is associated with a harmful effect has declined significantly, as has the regulatory standard for what is considered a “safe” level of exposure. Certainly there are safe and healthy alternatives to the use of mercury-containing dental amalgams, as there are to the consumption of fish containing high mercury levels. The authors’ conclusions that the health effects of a low level of mercury exposure are “open to wide interpretation” and that “attempts to reduce such exposure may pose greater health risks than those hypothesized to occur from mercury” sound like conclusions that might be drawn by the electric power or tuna industry.

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TO THE EDITOR: Clarkson et al. find no hazard to adults or children in the United States from routine dietary, dental, or pharmaceutical sources of mercury. The authors discount the findings of neurobehavioral and cardiovascular abnormalities in the offspring of women with blood mercury levels at the upper limit for American women of childbearing age. However, each year, an estimated 84,300 pregnant women eat more than 100 g of fish per day. Pregnant and lactating women should not have to limit their intake of economical, healthy protein. Environmental policymakers must strive to reduce environmental mercury levels so that existing fish-consumption advisories will not be needed. The Massachusetts Medical Society has advocated for reductions in mercury emissions from power plants, a major source of environmental mercury in fish. We support strict efforts to control mercury and other hazardous emissions from coal- and oil-fired power plants. The adoption of less strict emission standards could result in higher mercury levels in the food supply of Americans.

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TO THE EDITOR: Magical-religious and ethnomedical use of elemental mercury is a major source of exposure in some Caribbean and Hispanic communities. Clarkson et al. refer to these exposures only in passing, although they are widespread and clinically significant. Between 25,000 and 155,000 mercury capsules (mean weight per capsule, 9 g) were sold for ritualistic use in the Bronx, New York, in 1995, with some 30 percent of informants recommending that mercury be sprinkled on floors. Another study found that 5 of 100 Bronx children had elevated urinary mercury levels. Mercury vapor levels in Hispanic housing were elevated in comparison with those in control housing. Ritualistic use of mercury was the median source of mercury influx to the New York–New Jersey harbor. Clarkson et al. state that “ingested liquid mercury [is] essentially unabsorbed,” whereas 0.01 percent is absorbed (or 1 mg retained) of a 10-g dose ethnomedically administered to an infant for stomach upset. The National Center for Environmental Health of the Centers for Disease Control and Prevention will shortly measure urinary mercury levels in 250 Hispanic children in the Bronx. Clinicians serving Hispanic and Caribbean communities should be alert to signs and symptoms of these exposures.

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Gene Silencing

TO THE EDITOR: Herman and Baylin (Nov. 20 issue)¹ provide an excellent review of gene silencing in cancer in association with promoter hypermethylation. However, some readers who are new to the field will be confused by the introductory section of their article — in particular, the authors’ explanation of the term “epigenetic,” which suggests that this term describes “a heritable change in the pattern of gene expression.” In fact, in this context, promoter hypermethylation is a somatic event, and although it may be passed on to daughter somatic cells, it is not heritable in the germ line. Although it is later stated that “epigenetic change is not a mechanism of the first hit” in familial cancer, the introductory summary may be misleading.

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THE AUTHORS REPLY: We thank Dr. Kirk for her thoughtful comments regarding the definition of the term “epigenetic” in our review. She is certainly correct in stating that the heritable patterns defined by this term generally refer to gene-expression changes not based on changes in the DNA base sequence and that they are passed on to daughter cells in a somatic-cell, rather than a germ-cell, context. Thus, DNA-methylation patterns are heritable through cell division but are usually not hereditary in the sense of being passed on through meiosis. It should be noted, however, that there are DNA-methylation patterns, and attendant gene silencing, that are perpetuated in somatic cells from


Two letters alert us to other routes of exposure to mercury vapor — namely, the use of liquid mercury to extract gold from river sediments and the ethnoreligious uses of quicksilver in homes. We agree that these two uses can lead to high exposures and overt poisoning, but they do not present a dilemma to the health profession. Such uses of mercury clearly should be discontinued.

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