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IN RESPONSE

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Our analysis of approximately 22 million multiple-cause death certificates from 1999 to 2007 showed increasing mortality among persons noted to have HCV infection; by 2007, there were more recorded deaths among HCV-infected persons than among HIV-infected persons. We have since received data on deaths in 2008 and have recorded an extension of the same trends as shown in that article (Figure).

Dr. Murphy and colleagues analyzed a small sample of 453 HCV-infected blood donors who died between 1991 and 2002. This analysis was of only a single cause of death and found a very high rate of trauma and suicide in persons who died at an average age of 50 years (1). This does not seem to be a representative sample (2), and we think that comparing that study with ours is inappropriate. In any case, such deaths among HCV-infected blood donors would be subsumed in our analysis of all deaths of U.S. residents for the years of study. As indicated in Table 1 of our article, national death certificates indicate that 57% of decedents who had hepatitis C noted as an underlying or contributing cause of death also had a diagnosis of “chronic liver disease.”

In answer to Dr. Murphy’s question about a cohort effect, our analyses clearly indicated age-adjusted mortality rates in the text, figure, and tables.

We respectfully assert that there is indeed “an epidemic of deaths from HCV” in the United States, especially among baby boomers now aged 47 to 66 years. Rate increases only appear gradual because they are flattened by using a 100 000 person population as a denominator for the rates. More important, as we discussed, death certificates actually underenumerate HCV-related (or HBV-related) deaths because various studies now show that hepatitis C is diagnosed in half or fewer of patients before death. Even when patients are diagnosed, physicians and others filling out death certificates are often not the primary clinicians and may not be aware of the decedent’s HCV infection.

We do agree that nonhepatic mortality among persons with HCV infection—including those with trauma, suicide, and substance abuse, as well as from effects of the virus on other organ systems—may not be adequately appreciated.

Potential Conflicts of Interest: Disclosures can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M11-1649.

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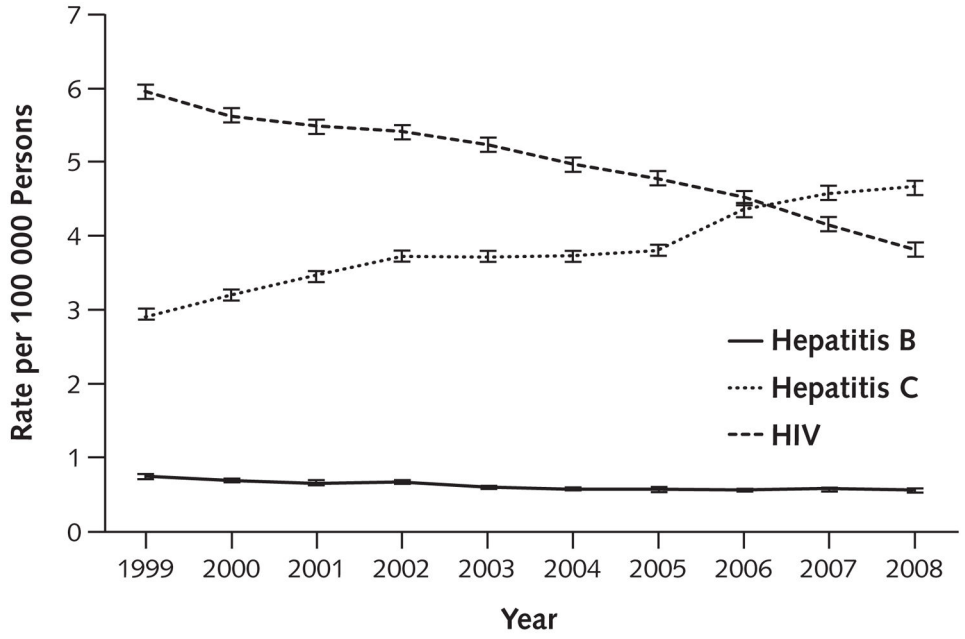

Figure. Annual age-adjusted rates of mortality and 95% CIs of hepatitis B, hepatitis C, and HIV listed as a cause of death* in the United States, 1999–2008

* Cause of death is defined as the underlying cause or one of the multiple causes of death.