



# Federal Health Matters

## VA Study Emphasizes Importance of Timely Anthrax Treatment

When *Bacillus anthracis* spores were sent through the mail using the U.S. postal service in 2001, the mortality rate of those who contracted anthrax was substantially lower than historically reported. Infectious disease specialists attributed this difference to modern intensive care units and more powerful antibiotics. In the most comprehensive review of anthrax cases to date, however, researchers at the VA Palo Alto Health Care System, Palo Alto and Stanford University School of Medicine, Stanford, both in CA, found that the key to patient survival is rapid diagnosis and initiation of antibiotic treatment within the first few days of symptom onset. Even with this country's modern intensive care, anthrax has the potential to inflict a "spectacular amount of damage in a short period of time," said study author Douglas Owen, MD.

The researchers, whose study was published in the February 21 issue of the *Annals of Internal Medicine*, reviewed all published reports of inhalational anthrax from the time it could be accurately diagnosed (1900) to 2005 to determine how the type and timing of treatment and patient characteristics affected the disease course. They found 82 confirmed cases of inhalational anthrax from 15 countries, with an overall death rate of 85%. Yet, for patients who progressed beyond the initial, approximate four-day prodromal phase to the fulminant phase (in which the early flu-like symptoms advance to respiratory distress and shock), the death rate was 97%. Furthermore, when antibiotics were begun within

two days of initial symptoms, the mortality rate was 20%, compared to 58% at four days and 80% at six days. Among all of the patients who had survived infection, 80% underwent pleural fluid drainage, a procedure in which fluid from around the lungs is drained.

In comparing the cases of patients infected in the 2001 anthrax attacks to all of the published cases, the former were more likely to have received antibiotic treatment in the prodromal phase and have undergone pleural fluid drainage, and, as a result, were less likely to have progressed to the fulminant stage. Although it is crucial to begin treatment within the first few days of a patient's symptoms, anthrax infection is often difficult to diagnose. And because there is no definitive test for anthrax and symptoms often mimic the flu, Jon-Erik Holty, MD, lead author of the study, emphasizes that "doctors in the [emergency department] need to have a high degree of suspicion" when treating patients.

These study findings hold significant importance in bioterrorism response preparations. For example, medical personnel must be educated about the disease's symptoms and treatment and there must be efficient distribution systems that can ensure delivery of antibiotics to patients within hours of an attack. In addition, bioterrorism response stockpiles must include ample supplies of chest tubes for pleural fluid drainage.

## DoD Faces Rising Health Care Costs

On February 8, Secretary of Defense, Donald Rumsfeld, told a House panel that the DoD's escalating health care funding threatens to cut into funds

used for "training, equipment, and a range of other investments vital to winning the war on terror and maintaining the quality of life for our troops." The rising costs are attributed to the generosity of the TRICARE health system, which, unlike private companies, has not changed annual premiums since the program began 11 years ago. For example, annual enrollment fees for TRICARE Prime, the managed care option, are \$230 for individual coverage and \$460 for family coverage. In 1995, this was roughly a 27% contribution to the benefit, but today, it's closer to an 11% contribution.

Consequently, an increasing number of military retirees working in second careers are choosing TRICARE over employer-provided health insurance. Private companies and state and local governments also are encouraging military retirees to use TRICARE and are dropping their coverage for them. Currently, 72% of military retirees rely on the program, and it's expected that will increase to 85% by 2010.

DoD health care costs are estimated to reach \$37 billion in 2006—almost double the \$19 billion spent in 2001. At the current rate, Rumsfeld projects that military health costs will reach \$64 billion by 2015, accounting for 12% of the Pentagon's budget.

Rumsfeld proposed that military retirees using TRICARE pay increased premiums, copayments, and enrollment fees. If approved by Congress and the president, the proposed changes would be phased in over fiscal years 2007 and 2008 and would apply only to eligible military retirees under age 65 and their families. There is no proposed change in health care costs for active duty military or their families, or military retirees age 65 or older and their families. ●