



EPIDEMIOLOGY

VA Advisers Link Gulf War Illnesses to Neurotoxins

A panel of outside experts chosen by the Department of Veterans Affairs (VA) has concluded that there is a “probable link” between neurotoxins such as sarin gas and the mysterious ailments that struck veterans of the 1990–91 Gulf War. This conclusion—in a draft report obtained by *Science* and scheduled for release later this month—is at odds with other analyses of Gulf War illness, including an August report from the Institute of Medicine (IOM). The VA study also recommends that the VA invest at least \$60 million over the next 4 years for additional Gulf War illness research. VA officials declined to comment prior to the report’s release on how they might respond.

The VA panel, chaired by former Defense Department official and Vietnam veteran James Binns, was formed in 2002, more than 3 years after Congress passed a law mandating both a new research panel to advise the VA secretary and an expansive IOM review of Gulf War research and treatments. The VA has been under pressure from veterans to de-emphasize the view that stress and trauma were chief drivers of Gulf War illness. “It’s clear that something different happened to 1991 Gulf War veterans,” says veteran Stephen Robinson, executive

director of the National Gulf War Resource Center in Silver Spring, Maryland, and a member of the VA panel.



Exposed? A VA panel says nerve gas in Iraq’s Khamisiyah weapons depot, shown here after it was demolished, likely contributed to Gulf War illness.

The authors of the new report argue that neurotoxins are the likeliest explanation for the fatigue, muscle and joint pain, memory loss, and dizziness that has plagued tens of thousands of Gulf War veterans. On the 11-member panel are several veterans and six physician-scientists, including a well-known advocate for this controversial theory: Epidemiologist Robert Haley of the University of Texas Southwestern Medical Center in Dallas. Haley says he was added to the panel after VA Secretary Anthony Principi learned of his views and spent a half-day with him in Texas discussing his work in May of 2001.

But many scientists who study Gulf War cases are unconvinced that low levels of sarin gas, pesticides, or the pyridostigmine bromide pills that troops took to protect them from nerve gas can explain Gulf War illness. For one, they say, it’s difficult to determine which troops were exposed to what. Furthermore, many animal and human studies have failed to show that low doses of neurotoxins can cause the kind of problems Gulf War veterans experience (*Science*, 2 February 2001, p. 812).

“I don’t know of any serious expert review that has come to these conclusions,” says Simon Wessely, director of the King’s Centre for Military Health Research in London. Wessely, like many researchers in the field, believes that Gulf War illness arose from a combination of the stress of war, the use of experimental vaccines, and possibly exposures to environmental hazards such as oil-well fires. Because Gulf War ailments are spread evenly across different branches of ▶

FUSION SCIENCE

Europe May Break Out of ITER Partnership

CAMBRIDGE, U.K.—Europe is ready to scrap the planned collaboration on what is supposed to be a global fusion reactor. That’s the message from a meeting last week of research ministers from the 25 European Union (E.U.) countries, who set a late-November deadline for deciding whether to press ahead with a French site for the \$5 billion International Thermonuclear Experimental Reactor (ITER).

Last month, outgoing E.U. research commissioner Philippe Busquin expressed regret for not having “closed the file” on ITER, whose partners—the E.U., China, Japan, Russia, South Korea, and the United States—have been split for nearly a year over whether to locate the reactor in France or Japan. But in a parting shot, Busquin drafted

a letter saying that several ITER partners have a “very strong preference” for the site of Cadarache in southern France and “would support an initiative from the Union to unblock the situation.” Last week the ministers appear to have followed his advice, calling on the European Commission to make every effort to negotiate an agreement to build at Cadarache involving “as many partners as possible” and to report back at the council’s next meeting on 25–26 November.

The council also ordered the commission to figure out how to fund the project without taking any extra money from E.U. coffers. After the council meeting, French research minister François d’Aubert told reporters that France would double its ITER funding to

\$1.12 billion, accounting for roughly 20% of the costs. With the E.U. having pledged 40% and Russia and China likely to stake 10% each, that leaves 20% to make up through cost savings or by enlisting new members such as Canada, India, and Switzerland.

The United States and South Korea have voiced support for building ITER at a site in northern Japan. And the E.U.’s solo approach carries increased risk that the success of the project could be compromised. “It would be a tragedy if this leads to an ITER without the United States and Japan,” says one European fusion scientist. Worse still, however, would be the possibility of two rival ITERs, one in France and one in Japan—or none at all.

—DANIEL CLERY

CREDIT: DEFENSE DEPARTMENT/AP PHOTO