

Hospitals talk at smallpox vaccine. More doctors consider risk to staff too great

Written by National Health Federation

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RICHMOND, Va. -- When doctors at the Medical College of Virginia Hospitals here announced in December that they would not participate in the Bush administration's program to vaccinate 11 million Americans against smallpox, they were criticized for making a deplorable decision that could undermine the president's plan.

It turns out they were just the first.

More than 80 hospitals from every region in the USA, including leading teaching hospitals and large, urban public hospitals, are forgoing the vaccinations. The dissenters are a fraction of the 3,000 hospitals recruited by state health officials to vaccinate doctors, nurses and other hospital staff members who are most likely to care for smallpox patients.

But their numbers are growing as doctors and administrators at hospitals around the USA are concluding that the known health risks from the vaccine, which can cause illness and even death, outweigh the unquantifiable risks of smallpox being used as a terrorist weapon.

The refusal to vaccinate raises questions about the president's plan just as the first phase is expected to begin this week. Some health care experts and government officials fear that any reluctance to participate in the first phase could lessen the willingness of others to participate in the second phase -- and undermine the administration's goal of eliminating smallpox as a viable option for terrorists.

Richard Wenzel, chairman of internal medicine at Virginia Medical College, the teaching arm of the University of Virginia, finds the resistance neither surprising nor unwarranted.

"This is not an issue that should be framed in terms of patriotism," he says. "This is an issue that's medical risk-benefit. We haven't seen this disease for more than 25 years. We are reacting to a perceived threat that's not well defined."

The hospitals are reaching their decisions individually after their own in-house infectious diseases specialists study the Bush plan.

Almost as a rule, hospital administrators say they are reluctant to make some of their employees sick to protect them from a disease that no longer exists and would reappear only in the chance of a terrorist act.

"The thing that stops you from doing this is the complexity of the smallpox vaccine, which is not a safe vaccine," says William Schaffner, head of the preventive medicine department at Vanderbilt University Medical Center in Nashville, one of the hospitals that is opting out. "There's a real disease that kills people unnecessarily: the flu. Mr. President, I would love to see you endorse a national flu vaccine campaign with the same vigor."

Studies in the 1960s show that 15 to 49 of every million people vaccinated for smallpox for the first time will suffer serious side effects, some of them life-threatening. One or two will die. The vaccinia virus used in the vaccine can also threaten the elderly, infants or anyone else with weakened immunity who comes into contact with those who are vaccinated.

The administration plans to vaccinate 440,000 frontline health care workers within the next four to six weeks and then begin vaccinating 10 million additional health care workers, police officers, firefighters and other emergency personnel by late summer. The program for health care workers is voluntary. Mandatory vaccinations of 500,000 military personnel began last month.

The administration plans to make the vaccine available to the general public next year, but for now, it is not recommending it.

The count of the hospitals taking a pass was conducted by USA TODAY in a telephone survey of public health officials in all 50 states and selected cities. The health officials provided names of hospitals in some cases and just numbers in others, but the overall count should be considered a conservative estimate. Many officials were unable to provide specifics because hundreds of hospitals around the country have not yet decided what to do.

Nonetheless, the phone survey shows scattered opposition to smallpox vaccinations before an attack. Hospital chains in Charlotte, N.C., and Denver are taking a pass, as well as hospitals in Atlanta, San Francisco and suburban Minneapolis. Additionally, some hospitals participating in the plan report that many of their employees are declining to be vaccinated.

"There aren't a lot of people volunteering," says Susan Fernyak, director of communicable-disease prevention at the San Francisco Department of Public Health. "If you look at the guidelines for a moderate hospital, 100 to 150 people would be vaccinated. But even at the larger hospitals, there aren't going to be that number of volunteers."

Although the primary issue for most hospital officials is the safety of the vaccine, some say unresolved issues over funding must be addressed before they can decide whether to proceed.

Hospitals, which already must cope with a nursing shortage, are concerned about the cost of replacing nurses who might become sick from the vaccine. Other hospitals are considering furloughing vaccinated employees for up to three weeks to assure that they don't spread the vaccinia virus to any patients. Yet the Bush plan does not address how the employees will be paid while they are off.

A number of unions and medical societies, such as the American Nurses Association, have asked that the program be delayed until the concerns about furloughs and pay can be resolved. Others, such as the American Hospital Association, have endorsed the administration's plan.

In Spokane, Wash., public health officials say the cost of the smallpox vaccination program has siphoned precious money away from other medical programs. "We have many more pressing public health needs than to get a few people vaccinated against smallpox," says Kim Thorburn, the public health officer for the Spokane district. "Right now, we've got influenza that just hit."

Calculating the risks

Smallpox largely disappeared from the world more than three decades ago. The last known case was in Somalia in 1977. The World Health Organization declared the disease eradicated in 1980. Smallpox is known to exist today only in laboratories in Moscow and at the Centers for Disease Control and Prevention in Atlanta. But the United States has long suspected that Iraq and North Korea have obtained stocks of smallpox -- stocks that could be used by terrorists.

After 9/11, Vice President Cheney headed up the administration's effort to prepare for a possible bioterrorist attack using smallpox. The debate centered on the safety of the vaccine when weighed against the risk of a terrorist attack. The administration has said the risk of attack is low.

"If we had a smallpox vaccine that was akin to our routine tetanus vaccine, we would have been finished by now," Vanderbilt's Schaffner says. "We would have vaccinated the country."

Any effort to protect Americans against a widespread attack is complicated additionally by the makeup of the population today. It is vastly different from what it was in 1972, when the smallpox vaccinations were last routinely given in the USA.

An estimated 60 million people have weakened immune systems and should not receive the vaccination at all, including cancer patients, AIDS patients, those who have received organ transplants and those who have eczema or other skin disorders.

These groups also are at risk of contracting the vaccinia virus from close contact with someone who had been vaccinated. "I would feel very uncomfortable if one transplant patient somehow inadvertently picked this up, or one pregnant nurse or one patient with cancer or AIDS," Wenzel says.

Many of the issues being raised now in hospitals across the country were debated by the team of experts assembled to write the Bush policy.

Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases and a key adviser in drafting the plan, says the vaccine's risks have been well known for

decades. He says the panel decided it was prudent to vaccinate a small cadre of health care workers on a volunteer basis to prepare the nation.

"Nobody has a foolproof answer in an area of uncertainty like this," he says. "But the federal government had to make a decision. The threat of bioterrorism is real. If you guess wrong, and say there is no chance of an attack, then you've been irresponsible to the American public."

No U.S. cases since 1949

In Richmond, Wenzel says that what he would like instead are 4,000 vaccines locked in a hospital refrigerator. If a smallpox case then turned up at the hospital, there would be time to vaccinate the staff. The vaccine can be taken up to four days after exposure and still be effective. And, if a case turned up, he says, he'd encourage widespread vaccination.

"Show me one case of smallpox anywhere in the world, and I would change my mind immediately," he says. "Or come up with new evidence that the threat is more serious and imminent."

He and the hospital's epidemiologist, Michael Edmond, got a glimpse of how a smallpox case would be dealt with when anthrax that had been sent through the mail infected mail workers who handled it and killed five people in the fall of 2001. At the height of the anthrax scare, when rumors were running wild, Edmond got a call that a smallpox patient was about to be transferred to his hospital. There hadn't been a smallpox case in the USA since 1949. Edmond, who graduated from medical school in 1986, had never studied the disease. It sounded crazy. "This was right when anything was believable," he says. Wenzel had seen smallpox during the '60s when he was working in Bangladesh to treat cholera victims.

The two doctors cobbled together a plan to minimize exposure to the hospital staff and other patients and treat the rumored smallpox case. To treat the patient, they identified a doctor and a nurse who had been vaccinated as children.

But first they had to figure out where to put the patient. They identified hospital rooms vented to the outside and which rooms had negative air pressure, so that when the door was opened, air would flow from the hallway into the room. They also had to figure out a way to move the patient without exposing anyone else. At the time, the hospital was in the midst of a remodeling, and the builders had built an enclosed contraption used to remove contaminated ceiling tile. It was big enough to hold a stretcher, solving the transportation problem.

As the doctors drew up their plan, they received word that there was no smallpox patient after all. It was just another rumor amid the panic of the anthrax attacks. Nonetheless, the exercise showed them that they could handle a real case if it ever happened, without having to vaccinate people beforehand.

When the White House began work last summer to write a smallpox vaccination plan, Wenzel and Edmond went into the file cabinet and pulled out their emergency plan that had been developed during their smallpox scare in 2001.

In October, they used that plan as a basis for their policy of not vaccinating employees unless there was a real smallpox case. They then shared policy with other hospitals. When the two went public, they were denounced in the national media for undermining the president's plan. But they still believe they're right.

"The more people have become educated about side effects instead of generic preparedness statements, when they add it up, they don't want those risks," Wenzel says. "We really don't like to take risks in this country."