

event of a domestic disaster, then combat units that might be deployed overseas. Meanwhile, officials are debating whether other Americans should receive the vaccination, which can be dangerous to infants, pregnant women and people with weakened immune systems.

Dr. John Modlin, head of the Centers for Disease Control and Prevention's advisory board on immunizations, is among the many experts who believe that until a safer medicine is developed a civilian vaccination campaign should be limited to health care workers who would have close contact with smallpox sufferers. Modlin, 56, who is medical director of Children's Hospital at Dartmouth-Hitchcock Medical Center, lives in Norwich, Vt., with his wife, Sharyn, 55, a part-time childcare worker, their daughter Chelsea, 12, and their son Andrew, 15. He spoke with PEOPLE contributor Kimberly Brown about the dangers posed by the smallpox virus.

## What is the risk of a smallpox attack?

We simply don't know, As far as we understand, no one has found a way of transmitting it to a large number of people at once. One scenario is someone might act like a suicide bomber, infecting themselves and then, say, walking up and down the aisle at a Knicks game. But such casual contact is a very inefficient way to spread the virushistorically, smallpox was spread by people in close quarters. The greater fear is that the virus could be concentrated and put into a weapon that could spread it in the air. But again, we don't know that anyone has successfully developed such a weapon.

#### How do you get smallpox?

The virus is thought to be airborne and inhaled, passing from a person who is usually very ill to one who is not immune. If smallpox were to resurface, as many as 25 to 30 percent of all the people who get it would die. Mortality could be very high among the elderly, the sick and the very young.

### What are the symptoms?

Flulike at first. Then a body rash, deepening into pustules, and a high ever. The illness lasts three to four weeks. Survivors are immune for life, but usually left with deep scars and perhaps brain damage and blindness.

#### Can smallpox be treated?

With modern medical care it's possible that mortality could be lower than it was 50 years ago-provided the health care system isn't overwhelmed with victims. English physician Edward Jenner discovered an effective vaccine in 1796-similar to the one we have today. No one in this country has contracted smallpox since 1949, and no one on the planet has had it since 1978. Because we stopped routinely immunizing children three decades ago, most Americans under 31 or 32 would have no protection from the disease. We suspect those who were vaccinated no longer have complete immunity. The vaccine is generally safe, but in rare cases can have serious side effects: About four or five people out of every million can develop a potentially deadly reaction. Scientists are working on safer vaccines but for now, the government is considering first immunizing health care workers who would be most needed during an outbreak.

# On Nov. 4 federal health officials proposed testing new vaccines on a group of children between ages 2 and 5. Is that safe?

Obviously there are ethical questions surrounding the testing of vaccines on children. But if there were a smallpox attack, children would be very vulnerable; I don't think we're doing them a favor by excluding them.

#### Are smallpox fears overblown?

Even if the risk of attack is low, the consequences could be devastating. It's crucial to be prepared. But it's important to put this in perspective. Every vear 20,000 to 40,000 Americans die of influenza, a preventable illness. The probability of a flu pandemic is far, far more likely than a smallpox event. .