

False Comfort From the Smallpox Vaccine

By Marc Siegel

Ever since word filtered out this week that President Bush was going to make the smallpox vaccine available on a limited basis, many of my patients have been asking me the same question: Should they get the smallpox vaccine?

Anyone who has ever seen a picture of what smallpox can do — the lesions practically exploding over the face and body — can understand why the level of fear is so high. But a

Marc Siegel is associate professor of medicine at the New York University School of Medicine.

medical or public health analysis must, as always, weigh risks and benefits. And for now the vaccine's risks outweigh its benefits for the general population.

Not everyone
needs to be
inoculated.

For military personnel and health-care and emergency workers, immediate vaccination is probably prudent. The old live-virus vaccine offers some immunity against smallpox. Those who received this vaccine

more than 30 years ago probably still have some protection. But the old vaccine has a real downside. It can cause brain swelling, skin problems and infection, problems that are not insignificant when millions of people are being vaccinated.

There are other smallpox vaccines in the works that appear to be safer. In two of these vaccines the viral particles used are not live. One version is undergoing clinical trials at the National Institutes of Health. Another version has been used in Japan to immunize hundreds of thousands of people. It would be foolish to vaccinate millions of people here in a panic, only to discover that a better, safer vaccine is on the verge of being approved.

If smallpox hits, the most important response will be to quarantine

those who have been infected, since smallpox generally spreads from person to person via airborne droplets. The second most important response will be to administer the live vaccine in areas where the disease has appeared, for immunization after infection reduces the mortality rate to less than 10 percent. No matter how smallpox arrives — if it does arrive — there will be plenty of time to react before a large population is affected.

Which is why the president was right to make it clear in his speech yesterday that he was not recommending the old smallpox vaccine for the entire population. Doing so would have limited the ability of doctors to counsel their patients on whether they should subject themselves to a somewhat risky vaccine.

In my experience, if people know that a vaccine or a treatment is out there, they are probably going to want it — whether it will be helpful or not. With new, safer vaccines around the corner, doctors should be in as strong a position as possible to persuade people who are not at risk from using the live vaccine.

Smallpox is one of our oldest scourges. It should scare us. But we would do well to remember that even before there was a vaccine, smallpox never spread as widely as influenza and other contagious diseases.

In the past, vaccines have inoculated against fear as much as disease. But in this case the vaccine offered isn't risk free. Instead of taking it, we must treat our fear with reason — and we must wait. □