

REVIEW & OUTLOOK

The Public Health Priesthood

Public health experts are meeting in Atlanta over the next few days to decide whether to let Americans protect themselves against terrorism with a smallpox vaccine. We suggest they keep in mind last fall's anthrax chaos, when postal workers died and the U.S. Capitol was quarantined.

The smallpox choice comes down to this: The government can continue with the current policy, which is to wait until an outbreak occurs and then hope federal agencies do a better job than their floundering with anthrax. Or it can offer citizens the choice to get vaccinated now, dramatically decreasing the chances of a mass outbreak.

We would have thought that in a free society this was an easy call. Why should the government deny Americans the right to protect themselves with a voluntary vaccine, assuming they are ready to accept the risk? According to a recent Harvard School of Public Health survey, three in five Americans are willing to be vaccinated for smallpox as an anti-terror precaution.

But this sensible self-protection runs up against a public-health bureaucracy that likes to preserve all of these decisions for itself. The cornerstone of the vaccination bureaucracy is the Centers for Disease Control, which advocates an after-the-fact policy known as "ring vaccination." Health officials would attempt to quickly identify and quarantine the infected, and then progressively immunize people who could have had contact with the contagion.

The problem is that this approach is meant to tackle a small, localized outbreak in a community that is widely immune, notes Dr. William Bicknell of the Boston University of Public Health in a recent *New England Journal of Medicine*. But America no longer fits that profile.

The U.S. discontinued mass smallpox vaccinations in 1972, and no one knows if people vaccinated before then are still immune. We're also more mobile today. Mr. Bicknell writes that the CDC strategy is "based on the assumption that each infected person will infect only two or three others." Yet in the 1970s, when Yugoslavia and Germany had smallpox outbreaks, each infected person managed to infect 11 to 38 people.

We also aren't likely to see an isolated outbreak. "We have to assume that it would be a deliberate bioterror attack, coordinated to spread the virus as far and as wide as possible. And the notion that we could isolate it and contain it

is absurd," says Scott Gottlieb, a physician and fellow at the American Enterprise Institute.

Consider, however, the benefits of a voluntary, before-the-fact program. The most immediate would simply be deterrence. Terrorists might be less likely to unleash smallpox if it wasn't likely to cause real damage. Even if just a small percentage of Americans choose vaccination,

the effects of an outbreak decrease significantly, not least by easing the strain on the public-health system in case of an outbreak.

A voluntary program would also mitigate the biggest risk of vaccination: adverse side effects. The people most at risk include those with eczema and impaired immune systems, and voluntary vaccines would allow doctors to screen for these conditions in advance. "You'd be able to protect these people, as compared to an outbreak where everything would be willy nilly," says Dr. Gilbert Ross, medical director at the American Council on Science and Health.



Cartby/Bettman

All public-health decisions involve weighing risks against benefits. In the 1960s, when the country was still mass vaccinating, the smallpox vaccine carried a death rate of less than one per million. Nonetheless the program was abandoned; each year brought vaccine-related deaths and side effects, while there

was little or no risk of contracting the disease.

But with today's terror threat, we can't be so confident. Known stockpiles of the smallpox virus are few, but that's also what was said about anthrax. Mr. Bicknell posits a case where half of the population is put at risk. Assuming the lowest historical fatality rates, and (optimistically) good medical care, we could still see 100,000 to one million deaths. Compare that to the vaccination risk: A less-than-one-per-million death rate would mean about 180 total deaths if everyone chose to be vaccinated. This is about the number of people killed in traffic accidents every 1.5 days.

The Bush Administration is worried enough about the smallpox threat to start stockpiling the vaccine. We'd hate to be the Secretary of Health and Human Services (ahem, Tommy Thompson) who faced a smallpox attack after he had decided to keep the vaccine all locked up. His job is to protect the public, not the public-health bureaucracy.

*Want a smallpox vaccination?
Government shouldn't stop you.*