

HOME

JOB MARKET

REAL ESTATE

AUTOMOBILES

NEWS

International

National

- Columns

Politics

Business

Technology

Science

Health

Sports

New York Region

Education

Weather

Obituaries

NYT Front Page

Corrections

OPINION

Editorials/Op-Ed

Readers' Opinions



FEATURES

Arts

Books

Movies

Travel

Dining & Wine

Home & Garden

Fashion & Style

New York Today

Crossword/Games

Cartoons

Magazine

Week in Review

Photos

College

Learning Network

SERVICES

Archive

Classifieds

Personals

Theater Tickets

Premium Products

NYT Store **NEW**

NYT Mobile

E-Cards & More

About NYTDigital

Jobs at NYTDigital

Online Media Kit

Our Advertisers

MEMBER CENTER

Your Profile

E-Mail Preferences

News Tracker

Premium Account

Site Help

Privacy Policy

NEWSPAPER

Home Delivery

Customer Service

Electronic Edition

Media Kit

Text Version

Advertiser Links:

Small Business

SEARCH [Go to Advanced Search/Archive](#)

Past 30 Days

[GO TO MEMBER CENTER](#)[LOG OUT](#)Welcome, [kaplaneh](#)[E-Mail This Article](#)[Printer-Friendly Format](#)[Most E-Mailed Articles](#)[Reprints](#)ARTICLE TOOLS
SPONSORED BY

STARBUCKS.COM

U.S. to Vaccinate 500,000 Workers Against Smallpox

By WILLIAM J. BROAD

The federal government will soon vaccinate roughly a half-million health care and emergency workers against smallpox as a precaution against a bioterrorist attack, federal officials said. The government is also laying the groundwork to carry out mass vaccinations of the public — a policy abandoned 30 years ago — if there is a large outbreak.

Until last month, officials had said they would soon vaccinate a few thousand health workers and would respond to any smallpox attack with limited vaccinations of the public. Since 1983, only 11,000 Americans who work with the virus and its related diseases have received a vaccination, according to the Centers for Disease Control and Prevention.

The plan to increase the number of "first responders" who receive the vaccination to roughly 500,000 from 15,000 and to prepare for a mass undertaking of vaccinations in effect acknowledges that the government's existing program is insufficient to fight a large outbreak.

The government's new vaccination safeguards come amid continued talk in Washington of war against Iraq, which terrorism experts suspect of maintaining clandestine stocks of the virus, as well as growing criticism of the government's limited plan. Only Russia and the United States have declared stocks of the virus.

A highly contagious disease, smallpox was declared eradicated globally in 1980, eight years after the United States stopped routine vaccinations.

Until its eradication, smallpox killed roughly one in three people who were infected but not vaccinated. Because immunity is believed to diminish with time, most people alive today are



Associated Press

Dr. Donald A. Henderson, science adviser to the secretary of health and human services.

RELATED ARTICLES

[Smallpox Proposal Raises Ethical Issues](#) (June 22, 2002)

[The Bioterror Threat: Panel Rejects Immunizing All Against a Smallpox Outbreak](#) (June 21, 2002)

TIMES NEWS TRACKER

Topics

Smallpox

[Create](#)

Terrorism

[Create](#)

Biological and Chemical Warfare

[Create](#)

United States Politics and Government

[Create](#)[Create Your Own](#) | [Manage Alerts](#)[Take a Tour](#)[Sign Up for Newsletters](#)

Advertisement

Your Holiday Tech Headquarters

TECHNOSCOUT

SPECIAL HOLIDAY DISCOUNTS

[Look out Big Foot, this binocular takes pictures!](#)

[A portable hard drive that fits in your pocket?](#)

[Get a zero impact workout...while flying!](#)

[Look and feel of natural daylight...inside!](#)

[Satellite technology pinpoints your location with this advanced dashboard computer](#)

[Atomic accuracy in any U.S. time zone](#)

[Fast, Easy - CD Duplicator for Audio, Video and Data!](#)

[The good night's sleep you need is finally found on InnerSpace...](#)

[Bring this incredibly portable digital camera everywhere!](#)

[Center: OPEN
NetworkSM
tools](#)

[No Inactivity
Fees; Just
\\$500 to Start](#)

[25
COMMISSION-
FREE
TRADES Join
Ameritrade
today!](#)

considered vulnerable to smallpox. But federal officials have long resisted the resumption of

mass smallpox vaccinations, citing the probable risk of serious side effects, even death.

Last month, a federal advisory panel backed a plan for "ring vaccinations," in which health workers would isolate infected patients and vaccinate people in close contact with them, forming a ring of immunization around an outbreak and a barrier to its spread. In theory, such a strategy can work because the vaccine, if given within four days of exposure to the virus, protects people from the disease.

Some experts on infectious disease said the plan's main virtue was that it required little smallpox vaccine.

The government's more aggressive plans are possible because vaccine supplies are rapidly increasing as a result of crash manufacturing and stockpiling efforts begun soon after last fall's terrorist strikes, officials said. Also, studies have found that existing vaccine doses can be diluted without loss of effectiveness.

"Now we can act differently because we have more vaccine," Dr. Donald A. Henderson, senior science adviser to Tommy G. Thompson, the secretary of health and human services, said in an interview. Dr. Henderson, who led the global smallpox eradication effort, added that in a crisis "we can make vaccine available on request throughout the community."

Officials said that about 100 million doses of the smallpox vaccine (160 million if diluted) are in hand and that by late this year or soon thereafter enough will be available for every American, more than 280 million people.

Health and military experts, citing new models of how the contagion can spread and new disclosures about how the weaponized virus can sail on the wind, have recently argued that limited, local vaccinations could produce thousands if not millions of needless infections and deaths. Most critics of the ring vaccination plan advocate mass vaccinations of the United States population — but often before a smallpox attack, not after, as the government is now planning.

In addition to vaccinating more "first responders," the government plans to develop ways to speed vaccine deliveries around the country and help states plan how to carry out mass vaccinations after an attack.

Officials said the vaccinations of hospital workers and smallpox response teams, to begin fairly soon, would help train health professionals in smallpox vaccination and educate the public to the attendant risks.

The White House, Defense Department and other federal agencies are involved in the vaccination planning. "Everyone is aware," an administration official said.

Jerome M. Hauer, acting assistant secretary for emergency preparedness at the Department of Health and Human Services, said the agency hoped to send planning documents on how to best conduct mass vaccinations to

DID YOU KNOW?

You can know play NYTimes.com's Featured Special Crossword **"Airports Around the Country"**. Are you game? [Click here](#) and find out more.

PERSONALS

SEARCH FOR SINGLES

I am a Seeking a

Male ▼

Female ▼



[Create a free photo profile](#)

[Contact others now!](#)
(under \$25/month)

[Read dating success stories](#)

presented by match

cities and states in the next week or two. Mr. Hauer added that logistics changes to that end were under way at the Centers for Disease Control and Prevention in Atlanta, which oversees the production, safekeeping and distribution of the nation's stockpile of smallpox vaccine.

Other details of the plans, such as who would receive peacetime vaccinations, have yet to be approved by Mr. Thompson, officials said.

In interviews last week, health officials said the government had not abandoned its longstanding plan for ring vaccinations of people near a smallpox outbreak, the approach health workers used decades ago to eradicate the highly contagious disease from human populations. But the added steps, officials said, will make it possible to move far more aggressively if a terrorist attack ends up infecting more than 100 people or so.

Critics had said the ring approach, while useful in battling natural outbreaks, would do little or nothing against a moderately skilled enemy intent on mayhem.

"Unless the initial attack is very small and the infectiousness of the agent is quite mild, ring vaccination is not going to do much good," said Edward H. Kaplan, a Yale public health specialist who questioned the method's value at a federal meeting in Washington three weeks ago.

In a report, the Cato Institute, a policy group in Washington, called ring vaccination "woefully inadequate for countering a direct attack."

Critics argued that a number of factors had diminished the method's effectiveness since the disease was eradicated in 1980: populations are now increasingly mobile, levels of immunity are very low and advanced technologies have become commonplace, raising the odds that a smallpox attacker would be at least moderately skilled.

"Today it's a totally different scenario," said William J. Bicknell, an international health expert at Boston University who recently faulted federal smallpox policy at a Cato meeting. The ring plan, he declared flatly in an interview, "will not work."

Federal officials said the rising criticism played no direct role in shaping preparations for mass vaccinations.

"The key to responding to any public health emergency is flexibility," Mr. Hauer said. "You listen to critics, but you can't let that drive policy. You have to do what's best for public health and national security."

Ring vaccination, he added, was envisioned as simply a first line of defense that could quickly expand to much wider immunizations if necessary.

Mr. Hauer added that the ring strategy was inherently small-scale because it required health professionals to carefully trace the whereabouts and contacts of infected people. Such work is so hard and time consuming, he noted, that ring vaccination is unsuitable as the only means of fighting a wide epidemic.

He said another complication could arise if the disease broke out simultaneously in multiple cities, suggesting a strike of unknown size and danger. In that case, he said, "the forces pressing you to mass vaccinate become greater."

Dr. Henderson, the chairman of the Secretary's Council on Public Health Preparedness at the Department of Health and Human Services, said critics have falsely portrayed the government as relying exclusively on ring vaccination.

"Let me be clear," he said. "If there is an emergency, and if we have to vaccinate widely, we need to be ready for it. That's what we're doing."

Mass vaccinations are not without risk because the smallpox vaccine uses a live virus, vaccinia, a cousin of smallpox, that on occasion can cause brain damage or even kill. In the days of wide vaccination, roughly one person in a million died.

The risk may be greater for people with weakened immune systems, like AIDS patients or people undergoing chemotherapy.

The government is seeking more supplies of vaccinia immune globulin, a substance now in short supply that can prevent severe reactions in people with immune problems as well as the healthy. Officials said 700 doses are in hand and 3,000 will be available by the year's end.

Despite the vaccine's well-known dangers, federal critics have increasingly called for various styles of mass vaccination — including doing it on a voluntary or mandatory basis, before or after a smallpox attack.

At a June 15 public forum in Washington on federal smallpox vaccination policy, Dr. Kaplan, of Yale, presented a study done with colleagues from the Massachusetts Institute of Technology that described how a smallpox attack could affect a crowded metropolitan region like New York City. What began as 1,000 infections at a train station or airport, he said, would spiral over weeks and months into 97,000 deaths if fought with ring vaccination alone.

"By contrast," he said, "post-attack mass vaccination would result in only 525 deaths" from the smallpox virus, which takes about two weeks to develop in the body before symptoms become obvious.

Some federal officials call this study unrealistic. But at the meeting, such ideas gained force as new evidence came to light on how powdered smallpox can be used as a biological weapon.

Dr. Alan P. Zelicoff, a smallpox expert at the Sandia National Laboratories, reported that he and experts from the Monterey Institute of International Studies had linked a 1971 outbreak in the Kazakh Republic to a Soviet field test of weaponized smallpox.

Dr. Zelicoff, a physician, quoted a former Soviet official as saying the accident occurred when a plume of smallpox germs sailed about nine miles on the wind.

By the meeting's end, medical experts were questioning not only the ring plan but also federal assertions that the smallpox threat is low.

Dr. Kenneth I. Berns, president of the Mount Sinai Medical Center in New York City, said he judged the probability that Iraq possessed weaponized smallpox as "reasonably high" and that Saddam Hussein would use such germs in a war against the United States as "quite high."

"That's the confounding issue that we all face," Dr. Berns told the forum, according to a transcript.

Frank public discussion of the Iraqi threat, he added, "is absolutely essential."

In interviews, officials of the Department of Health and Human Services declined to comment on federal threat assessments but detailed wide contingency planning for mass smallpox vaccinations.

On June 20, a federal panel known as the Advisory Committee on Immunization Practices backed the idea of immunizing some emergency workers before any attack. Experts estimated that the immunizations would go to some 15,000 health care and law enforcement workers who would be most likely to respond to a biological attack and come in contact with victims.

But Dr. Henderson, the health department's senior adviser on bioterrorism, said the tentative new plan was for many more to be vaccinated. "We could easily be at a half-million without too much difficulty," he said.

Wide peacetime vaccinations, he said, would help educate not only the nation's medical community on the practical aspects of smallpox immunization but also the public.

If the peacetime group suffers a couple of deaths, "there will be a lot of publicity and concern," Dr. Henderson said. "It's a question of how people are going to respond."

-
-
-  [E-Mail This Article](#)
 -  [Printer-Friendly Format](#)
 -  [Most E-Mailed Articles](#)
 -  [Reprints](#)

ARTICLE TOOLS
SPONSORED BY

STARBUCKS.COM



Expect the World every morning with home delivery of The New York Times newspaper.

[Click Here](#) for 50% off.

[Home](#) | [Back to National](#) | [Search](#) | [Corrections](#) | [Help](#) | [Back to Top](#)

Find your Dream Car

Visit our new autos section and search our huge inventory of new and used cars.

[nytimes.com/autos](#)



Copyright 2002 The New York Times Company | [Permissions](#) | [Privacy Policy](#)