

# Smallpox vaccine 'could kill hundreds'

[http://news.bbc.co.uk/1/hi/english/health/newsid\\_1973000/1973070.stm](http://news.bbc.co.uk/1/hi/english/health/newsid_1973000/1973070.stm)

May 2002

Giving millions of people a vaccine against smallpox bioterrorism would end up killing hundreds and making thousands seriously ill, says a report. The US Government is planning the mass vaccination campaign to head off the threat of a biological strike.

Some estimates suggest that as many as a million people could die following a major smallpox outbreak in an urban area.

However, no vaccine comes without a small risk of side-effects.

A small proportion of patients would suffer severe, even life-threatening, reactions to the vaccine.

Scientists from the University of Michigan have calculated that targeting young people - those under the age of 30 - would mean the vaccination of approximately 82.5m Americans.

Of these, say the researchers, approximately 190 people might be expected to die from vaccine complications.

An even more comprehensive campaign, covering almost 180m people, would cause 285 deaths, they say.

In addition, serious but survivable side effects would occur in 1,600 people in the smaller campaign - and 4,600 in the larger one.

Dr Alex Kemper, who led the project, said: "The risk posed by smallpox vaccination is greater than the risk from other recommended vaccines, such as the MMR vaccine or the varicella vaccine against chickenpox.

"The public should be aware of these risks. Any decision to resume routine smallpox vaccination before a bioterror attack must carefully weigh these risks against the benefit of protection."

The researchers found that the economic and human advantages of mass vaccination would be vast in the event of any smallpox bioterror attack.

However, they suggested that up to a quarter of those eligible for jabs might have to be excluded from the programme because they might be susceptible to extreme reactions to the vaccine.

People with eczema, or who are immunosuppressed, are those most likely not to be given the vaccine.

Many polls in the US say that there would be a high demand for smallpox vaccination should it become available - perhaps fuelled by the anthrax scares in the wake of 11 September.

The research found that a mass vaccination programme would cost the US \$270m, compared with \$340,000 for a system of quarantine and vaccination in the event of an attack.