## MITOCW | Lec 4 | MIT STS.069 Technology in a Dangerous World

## PROFESSOR:

This in mind, what technological responses do we have? As Hughes mentioned, they're fairly limited. My research has been on vaccines. And I have determined that they are not a first line of defense, particularly for civilian populations.

They are useful to stabilize the situation after an attack has occurred. For example, once an agent has been identified, it can be used-- a vaccine can be used to stem second waves of infection. Vaccines can be used to protect first responders, such as doctors, nurses, and emergency EMTs. This will allow the medical system to continue to function.

Vaccines can also be used to permit re-entry of residents into an infected city. Of course, a successful biodefense program using vaccines is predicated on the availability of vaccines. And my research has demonstrated that we've had a lot of problems with vaccine supply and innovation, particularly over the past 20 years, and particularly for a limited-use vaccines, such as anthrax and smallpox, which is what we would need to mitigate an attack.