



Route 66 to medical literature



DFGSM3 Free Ride - Saloon

« Bioterrorism - Preparing to Fight the Next War »

NEJM 354;2, January 12, 2006,
<http://content.nejm.org/cgi/reprint/354/2/113.pdf>

Fighting bioterrorism requires being ready to cope with the threats that are coming, hence the logic behind biowarfare programs of the past is not right for those of the future.

As political choices have repercussions on research and international scientific cooperation, it is of paramount importance to examine how well funded the concern is, how to best allocate resources, and on what principles a biodefense strategy should be built.

Today the number of possible agents is expanding greatly. The means of propagation are accessible to non specialists thanks to the advances in materials and nanoscale sciences. Biologic agents can cause beyond limited harm now that there are more informed groups and more effective routes of dissemination. Fewer resources are now required thanks to miniaturization, and it is possible to create genetic or molecular diversity not found in nature and select for virulence-associated traits with unknown potency.

A key challenge will be the optimal balance between fixed and flexible defenses. The creation of static defenses is justified for clear imminent and potentially catastrophic biological threats. For the rest, flexible, dynamic defenses should be privileged. These are methods that can generate diagnostics, therapeutics and prophylactics against new or variant infectious agents within days or weeks.

Anticipation, flexibility and rapid response are the key words, as early diagnosis is essential. Consequently, more money should be put into broad approaches to mechanisms and structures shared by a variety of agents. The US public health infrastructure must be strengthened, with scientists and clinicians playing a bigger role in biodefense planning

255 words

NB: "defense" in American English (NEJM is an American journal), "defence" in British English

<http://medicalenglish.univ-nantes.fr>