Global Food and Health Security
IS National Security

David R. Franz
MRIGlobal and OSD/NCB
A ‘World’ of Health Risks

Chronic Disease

Infectious Disease

Food-Animal Disease

Biological Terrorism

Biological Warfare

Emerging Threat Space

“Generally Unintentional”

“Intentional”

50 million deaths

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“One child every 5 seconds.”

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The Carlson Curve

Measures of progress in biotechnology

Global Travel and Transport

Global Competition

International Air Travel % Increase, 12-Month Basis January 2007 to August 2010
Our National Experience

Observations
• Technical and Political Surprise
• Growing importance of Intent

“We don’t know more about the biological weapons threat than we did five years ago, and five years from now, we will know even less.”

Senior CIA Official/WMD Commission
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Opportunities...to work together

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Community Perspectives on Health Engagement

Security
“It won’t stop Terrorists.”

Health
“I don’t want to ‘do’ security.”

International Engagement in PH, VH and Life Sciences...now Food Security

International Colleague
“I trust you, but not your government.”

Legislator
“It’s not national security.”
The Space between Health and Security

- The ‘dual-benefit’ of countermeasures
  - Public health, diagnostics, disease surveillance
  - Education, basic research
- The same expertise and technologies
- The value of global health awareness
- Health as an engagement tool
- The soft power benefits
The Administration's Strategy for Countering Biological Threats

• **Goal:** **PROTECT** against the misuse of the life sciences to develop or use biological weapons.

• **Objectives:**
  – **P**romote global health security
  – **R**einforce norms of safe and responsible conduct
  – **O**btain timely and accurate insight on current and emerging risks
  – **T**ake reasonable steps to reduce the potential for exploitation
  – **E**xpand our capability to prevent, apprehend, and attribute
  – **C**ommunicate effectively with all stakeholders
  – **T**ransform the international dialogue on biothreats
Health & Food Engagement: What do we have to gain?

Hypothesis: The \textit{PROCESS} of working together, on \textit{HARD LIFE-SCIENCE PROBLEMS, INTERNATIONALLY, ACROSS THE SPECTRUM} of biological challenges will:

1) \textbf{Reduce the impact} of the left end of the disease/food/water-lack burden;
2) provide some \textit{transparency} regarding capabilities to do harm (with biology);
3) and, maybe, \textbf{undermine some popular support} for terrorism (broadly).
4) Therefore…. \textit{reduce the likelihood} of the misuse of all technologies…

Some are testable…
It’s not simple....
…and Non-traditional Relationships
for food safety and food defense

From hierarchy to network
New kinds of partnerships: "rough consensus"
  - business
  - government
  - civil society

Global Issues Networks: “Messy but Flexible”

Membership ~ Knowledge related

- Speed (minimize boot-up and delivery times)
- Legitimacy
- Diversity
- Compatibility with Traditional Institutions
“NGI”: each of us can be one...

“A person who strives for the betterment of society and believes in a good cause is an NGI.”

Dr. Anwar Nasim, National Commission on Biotechnology, Pakistan
Emerging Infectious Disease

- Cardiovascular conditions: 16.7 million
- Infectious diseases: 14.9 million
- Neoplastic diseases: 7.1 million
- Injuries: 5.2 million
- Asthma and chronic obstructive pulmonary disease: 3.0 million

Map of emerging infectious diseases around the world.
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