

WMD: The Bio Dimension – Challenges, Obligations, Opportunities

SAND2010-0512C

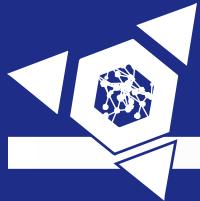
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www.biosecurity.sandia.gov

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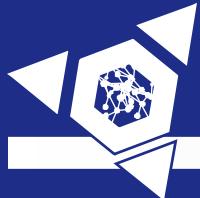
Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company,
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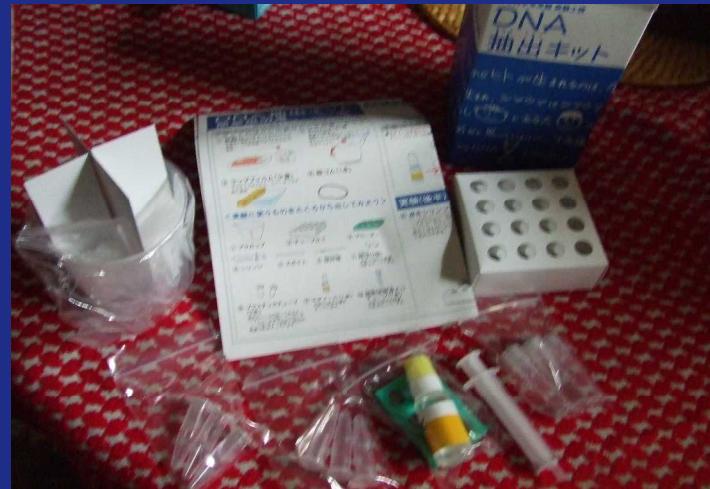
**“Infectious diseases make no distinctions among people and
recognize no borders”**

President George Bush, November 2001



Nature of Biology is Changing

- **Rapid technological advances**
- **Technologies becoming more available**
 - Geographically
 - Individuals



DNA extraction kit for 10 year old kids, sold by
Japanese National Museum of Emerging Science and Innovation

Spectrum of Biological Risks



Naturally occurring diseases

Re-emerging infectious diseases

Unintended consequences of research

Laboratory accident

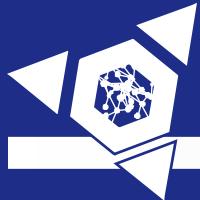
Lack of awareness

Negligence

Deliberate misuse

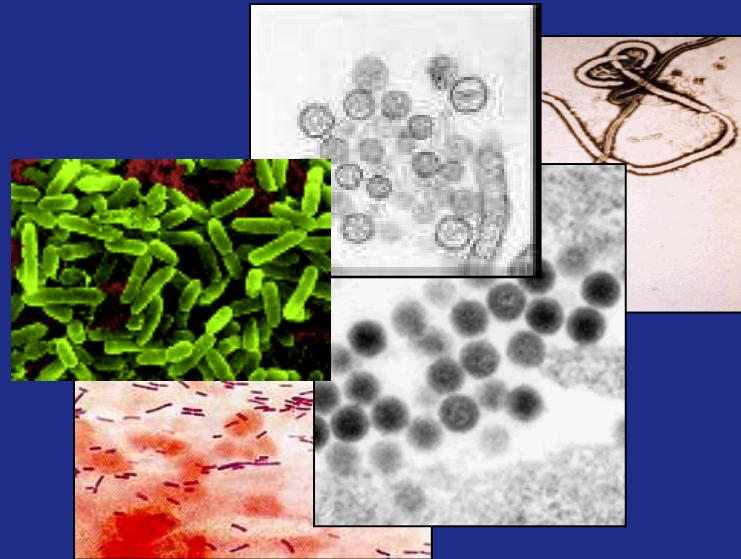


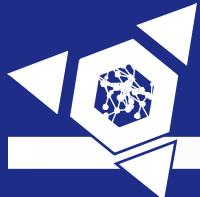
Wilton Park, September 2009



Biological Weapons Definition

“Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes.”





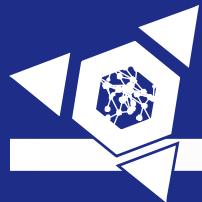
International Obligations

- **Biological Weapons Convention**
 - Prohibits the development, production, and stockpiling of biological weapons agents, toxins, equipment, and means of delivery by State Parties
 - Opened for signature April 1972; entered into force March 1975
 - No provisions for verification of compliance
 - Focus is on confidence building measures
- **UNSCR 1540**
 - “Take and enforce effective measures to establish domestic controls to prevent the proliferation of . . . biological weapons . . .; including by establishing appropriate controls over related materials”
 - Requires States to report efforts to 1540 Committee

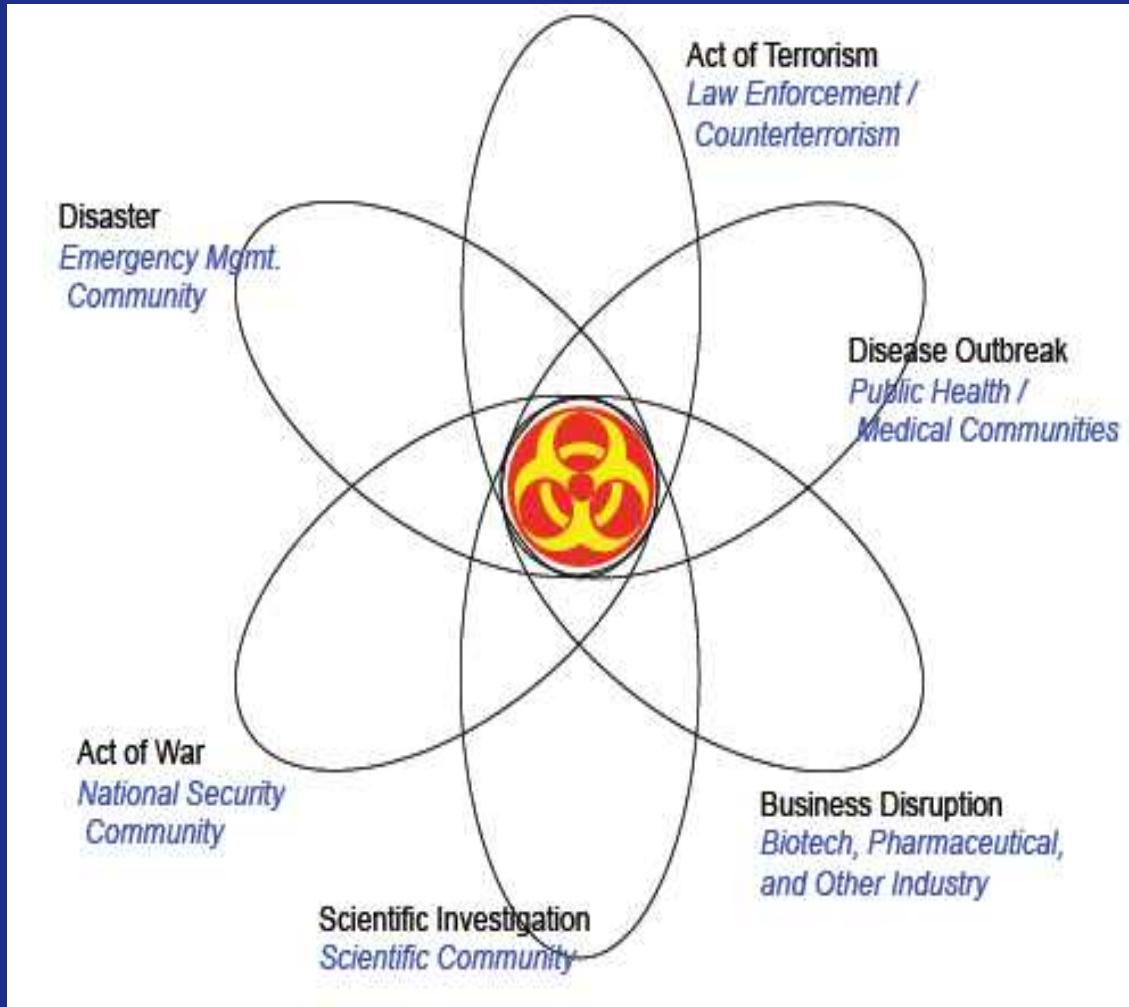


Fermentation Vessels





Opportunity: Engaging a Multi-sectoral, Global Community





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