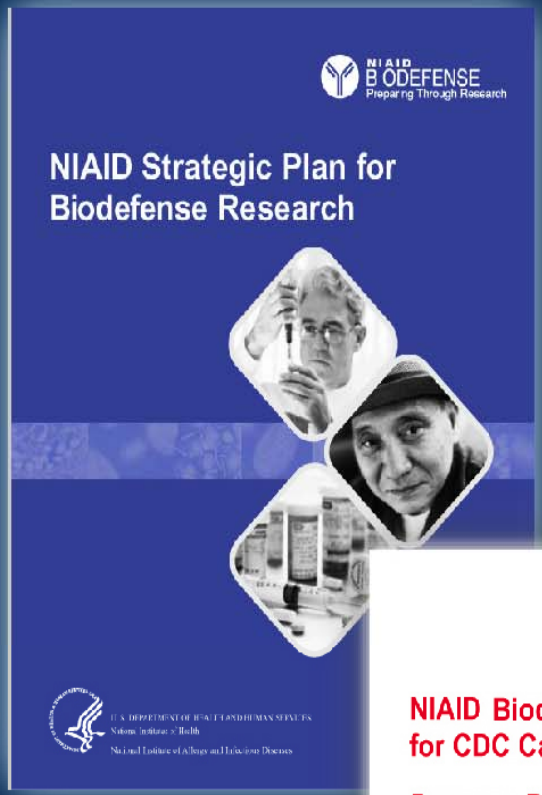
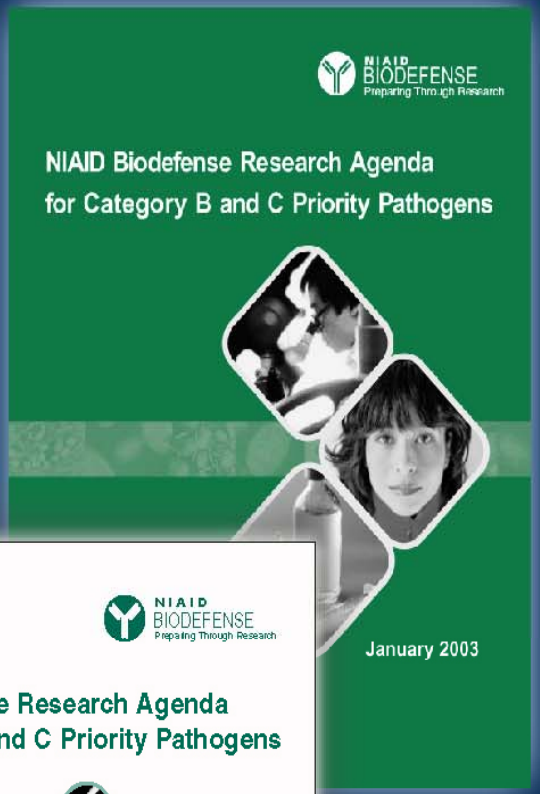
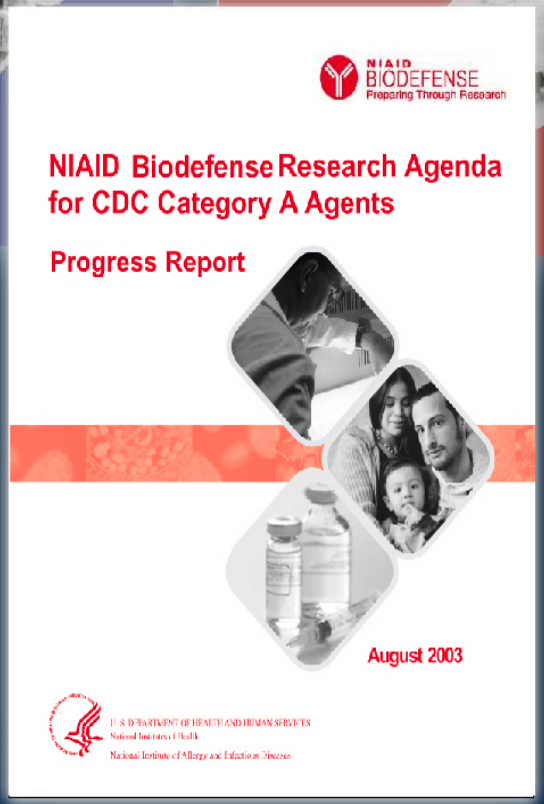
# Homeland Security Presidential Directive-10 "Biodefense for the 21st Century"

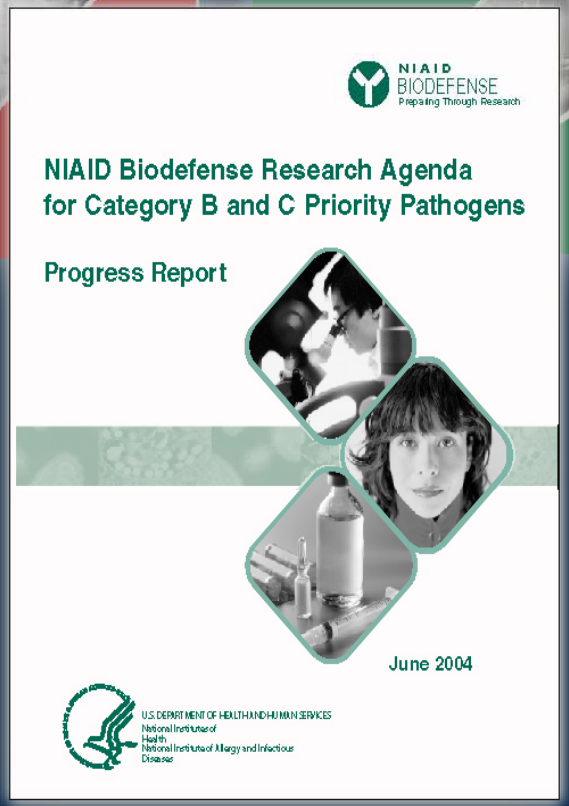
- Threat Awareness
- Prevention and Protection
- Surveillance and Detection
- Response and Recovery
  - Response Planning
  - Mass Casualty Care
  - Risk Communication
  - Medical Countermeasure Development
  - Decontamination


NIAID
BIODEFENSE
Preparing Through Research
NIAID Strategic Plan for Biodefense Research

NIAID
BIODEFENSE
Preparing Through Research
NIAID Biodefense Research Agenda for CDC Category A Agents

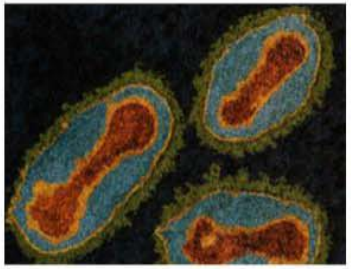

NIAID
BIODEFENSE
Preparing Through Research
NIAID Biodefense Research Agenda for Category B and C Priority Pathogens
January 2003


NIAID
BIODEFENSE
Preparing Through Research
NIAID Biodefense Research Agenda for CDC Category A Agents
Progress Report
August 2003


NIAID
BIODEFENSE
Preparing Through Research
NIAID Biodefense Research Agenda for Category B and C Priority Pathogens
Progress Report
June 2004
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Institute of Allergy and Infectious Diseases

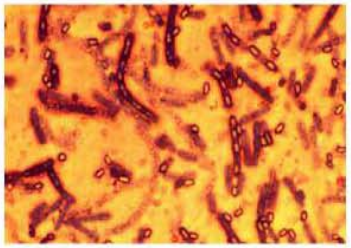
# Biodefense Countermeasure Development: Key Achievements

## Smallpox



- More than 300 million doses of smallpox vaccine now available
- "Next-generation" vaccine (MVA) in advanced testing
- Antiviral drug development, e.g. oral cidofovir

## Anthrax

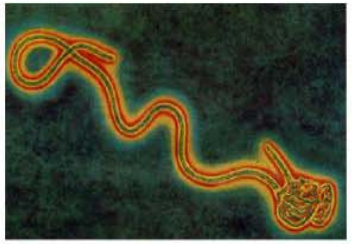


- New vaccine (rPA) tested and procured under Project Bioshield
- Development of novel antitoxins, e.g. monoclonal/polyclonal antibodies

# Biodefense Countermeasure Development: Key Achievements

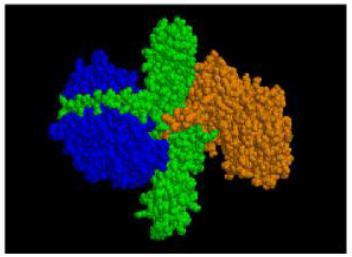
## Ebola

- Vaccine in human trials at NIAID Vaccine Research Center



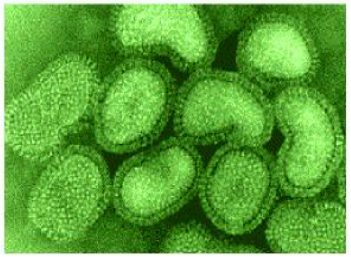
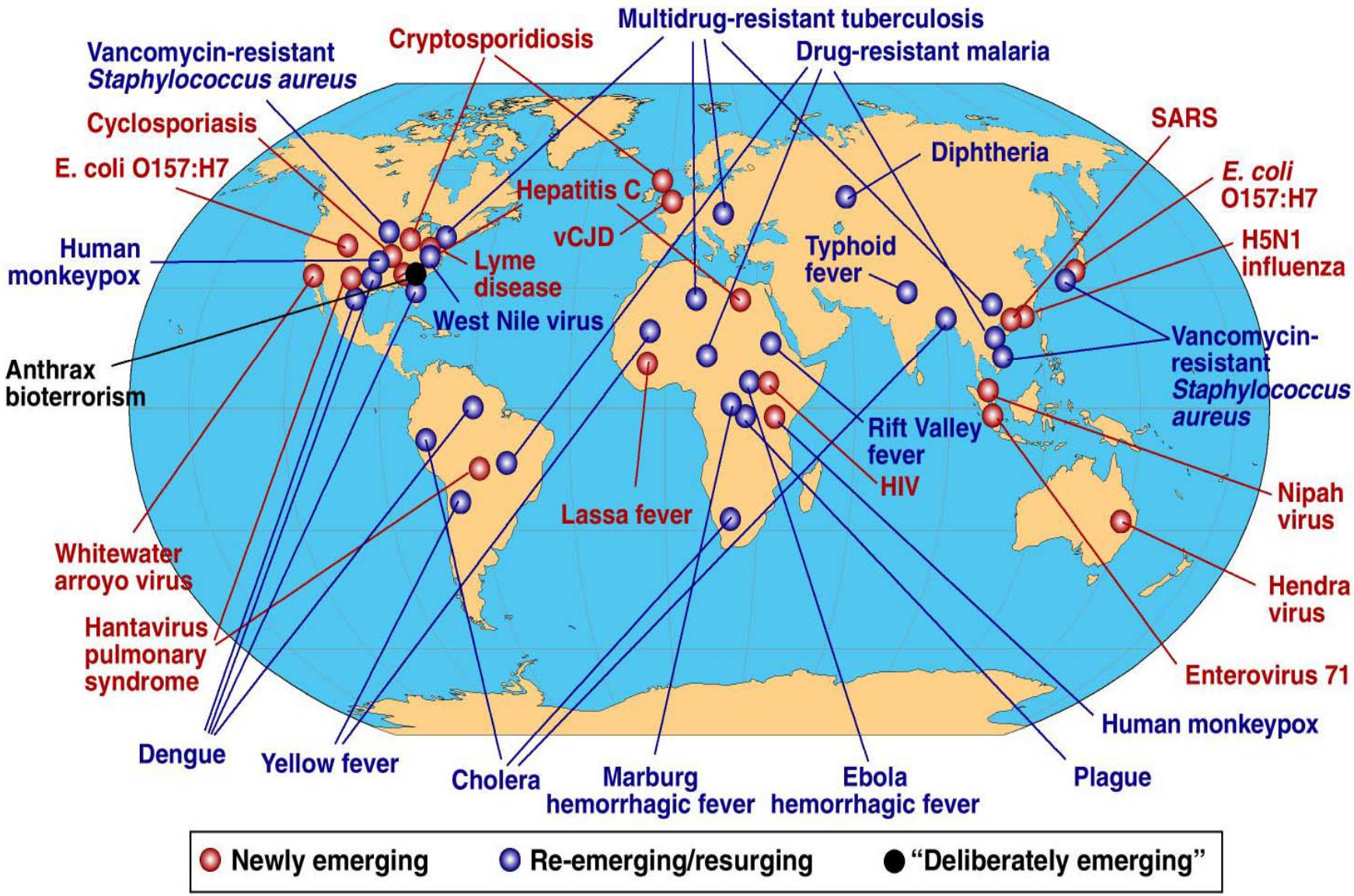
## Botulinum Toxin

- Development of vaccine and monoclonal/polyclonal antibodies



## Influenza

- Development of vaccines against potential pandemic strains



# Global Examples of Emerging and Re-Emerging Infectious Diseases