Key Planning Factors and Considerations for Response to and Recovery from a Biological Incident

Biological incidents remain a great threat to the United States due to their complex nature and unique challenges that impact traditional approaches to response and recovery planning. A biological incident is the occurrence of cases or outbreaks involving a biological pathogen that affects people, regardless of whether it is naturally occurring or deliberately caused. Because of the nature of biological incidents, emergency management will require close coordination with public health and other stakeholders for incident response and recovery.

The Key Planning Factors and Considerations for Response to and Recovery from a Biological Incident (Bio KPF; August 2022) document provides emergency planners with critical information and links to additional resources to facilitate preparedness planning and inform the response to and recovery from various types of biological incidents. The document is intended serve as a bridge between the public health, biological incident specific response community and the all-hazard incident response and recovery approach used by the emergency management and first responder communities. Additionally, it features “user-friendly” guidance to help emergency planners address the question: “How does the response to and recovery from biological incidents differ from the approaches and protocols used to manage the effects of more traditional incident types (e.g., hurricanes, floods, wildfires, etc.)?”

The Bio KPF document does not describe planning approaches to specific biological incident scenarios (e.g., template plans for various pathogens). Rather, it provides considerations applicable across a range of potential biological incident types. The Bio KPF also provides guidance for addressing “core capability” delivery as detailed in the Biological Incident Annex to the Response and Recovery Federal Interagency Operational Plans (BIA; FIOPs). The principal focus areas examined within the Bio KPF are summarized on the following page.
Biological incidents pose unique challenges that impact traditional approaches to key response and recovery goals such as the preservation of life, property, and the environment; promotion of economic stability; and meeting basic human needs.

Crosscutting Considerations

Detect and Characterize the Threat
Timely detection and accurate characterization of a biological incident are key components of an effective response. Early actions such as incident detection and characterization, resource mobilization, and disease containment can save lives.

Establishing and maintaining multi-channel communications during a biological incident ensures coordinated efforts among response and recovery agencies and supports government messaging to inform the public.

Communicate with External Partners and the Public

Control the Spread of Disease
Limiting the spread of disease is a critical response action that can save lives and ensure effective resource use by avoiding unnecessary exposure and preventing the onset of disease in those exposed. Disease control efforts may include non-pharmaceutical interventions, medical countermeasures, and/or environmental containment/source reduction.

Mass care during a biological incident may require significant operational adjustments to all-hazard mass care plans. Considerations for alterations in plans may include specific infection prevention procedures and protocols based upon the pathogen causing the incident.

Augment Provision of Mass Care and Human Services to Affected Population

Public health and medical services required during a biological incident may overwhelm existing capabilities and resources. Additional planning considerations include medical supply chain logistics, clinical care space, personnel, patient movement, fatality management, etc.

Recovery from a biological incident may encompass restoration of a community’s physical structures, continuity of essential services, and other needs of the affected communities. Proper incident recovery planning facilitates the achievement of recovery outcomes through rapid, effective operations.

Augment Essential Services to Achieve Recovery Outcomes

Augment Provision of Health and Medical Services to Affected Population

Planning, Decision Support, and Modeling Resources for Biological Incidents
Resources are available to support response to and recovery from a biological incident including planning tools, modeling/simulation tools, decision support/response tools, and biological knowledge databases.