

# **SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION**

## **EXCECUTIVE SUMMARIES BY HAZARD**

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### **I. INTRODUCTION**

- A. The following incident scenarios are used as a tool to facilitate preparedness planning:
1. Nuclear Detonation - 10-Kiloton Improvised Nuclear Device
  2. Biological Attack - Aerosol Anthrax
  3. Biological Disease Outbreak - Pandemic Influenza
  4. Biological Attack - Plague
  5. Chemical Attack - Blister Agent
  6. Chemical Attack - Toxic Industrial Chemicals
  7. Chemical Attack - Nerve Agent
  8. Chemical Attack - Chlorine Tank Explosion
  9. Natural Disaster - Major Earthquake
  10. Natural Disaster - Major Hurricane
  11. Radiological Attack - Radiological Dispersal Device
  12. Explosives Attack - Bombing Using Improvised Explosive Devices
  13. Biological Attack - Food contamination
  14. Biological Attack - Foreign Animal Disease (Foot-and-Mouth Disease)
  15. Cyber Attack
- B. Executive summaries for each scenario provide guidance for initial disaster intelligence when not much about the incident is known.
- C. This Annex does not include Scenarios 3, 9, 10, and 15 because the South Carolina Emergency Response Plan (SCEOP) contains detailed, comprehensive plans to address Pandemic Influenza [see Annex 2 (Pandemic Influenza) to Appendix 14 (SC Infectious Disease Plan)], Hurricanes [see Appendix 1 (SC Hurricane Plan)], Earthquakes [see Appendix 3 (SC Earthquake Plan)], and Cyber Attacks [see Appendix 16 (Cyber Incident Consequence Management Plan)].

## II. EXECUTIVE SUMMARIES

### 10 Kiloton Uranium Improvised Nuclear Device

<b>Casualties</b>	111,967 fatalities
<b>Infrastructure Damage</b>	Massive damage in a 1-3 mile area
<b>Evacuations/Displaced Persons</b>	Will vary widely. Many citizens impacted by the initial exposure to radiation will shelter-in place and/or may be contained in the area to prevent contamination of other areas.
<b>Contamination</b>	Long-term within 30-50 miles
<b>Economic Impact</b>	Hundreds of millions of dollars
<b>Potential for Multiple Events</b>	No
<b>Recovery Timeline</b>	Years, in some areas potentially never

### Biological Attack – Aerosol Anthrax

<b>Casualties</b>	10,000 fatalities
<b>Infrastructure Damage</b>	Minimal, other than contamination
<b>Evacuations/Displaced Persons</b>	Not likely
<b>Contamination</b>	Extensive (at site of attack)
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Weeks

### Biological Attack – Plague

<b>Casualties</b>	3,000 fatalities
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<b>Infrastructure Damage</b>	None
<b>Evacuations/Displaced Persons</b>	Possible
<b>Contamination</b>	Several hours duration
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Weeks

## Chemical Attack – Blister Agent

<b>Casualties</b>	Over 100 fatalities
<b>Infrastructure Damage</b>	Minimal
<b>Evacuations/Displaced Persons</b>	More than 80,000
<b>Contamination</b>	Structures affected
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Weeks or months

## Toxic Chemical Attack

<b>Casualties</b>	137 fatalities
<b>Infrastructure Damage</b>	50% of structures in area of explosion
<b>Evacuations/Displaced Persons</b>	50,000 are asked to shelter-in-place
<b>Contamination</b>	10,000 are evacuated
<b>Economic Impact</b>	Billions of dollars

<b>Potential for Multiple Events</b>	Yes
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## Nerve Agent Attack

<b>Casualties</b>	2,375 casualties
<b>Infrastructure Damage</b>	Minimal, but building where attack occurs have to be destroyed
<b>Evacuations/Displaced Persons</b>	Evacuation and sheltering of approximately 3,000 may be required
<b>Contamination</b>	One building and contents
<b>Economic Impact</b>	\$150 million to replace building
<b>Potential for Multiple Events</b>	Some businesses may never recover

## Chlorine Tank Explosion

<b>Casualties</b>	3,750 fatalities
<b>Infrastructure Damage</b>	Multiple buildings, a trestle and a section of road in immediate explosion area
<b>Evacuations/Displaced Persons</b>	Up to 10,000 (self-evacuate); 5,000 will need assistance to evacuate
<b>Contamination</b>	At explosion site and waterways
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes

## Radiological Attack – Radiological Dispersal Devices

<b>Casualties</b>	140 Casualties
<b>Infrastructure Damage</b>	Moderate to blast area
<b>Evacuations/Displaced Persons</b>	Yes, potentially 20,000

<b>Contamination</b>	Detectable contamination found in over 50 buildings and on 4 major roads including part of an interstate highway.
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Years

## Explosives Attack – Bombing Using Improvised Explosive Devices

<b>Casualties</b>	200 fatalities
<b>Infrastructure Damage</b>	Several structures affected by blast and fire
<b>Evacuations/Displaced Persons</b>	Minimal
<b>Contamination</b>	None
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Months

## Biological Attack – Food Contamination

<b>Casualties</b>	300 fatalities
<b>Infrastructure Damage</b>	None
<b>Evacuations/Displaced Persons</b>	None
<b>Contamination</b>	Sites where contamination was dispersed
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes

<b>Recovery Timeline</b>	Weeks
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## Biological Attack – Foreign Animal Disease (Foot and Mouth Disease)

<b>Casualties</b>	None
<b>Infrastructure Damage</b>	Significant loss of livestock
<b>Evacuations/Displaced Persons</b>	None
<b>Contamination</b>	None
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Months