

The Homegrown Violent Extremist Radiological Threat and the Psychosocial Impact on the Affected Population

Research Question

How likely is a Homegrown Violent Extremist (HVE) Radiological Attack?

How will a radiological HVE event impact the affected community?

- Psychology of hostile actors' use of a radiological attack
 - Intent, capability, and opportunity
- The psychological impact of a radiological attack
 - Emotion and Motivation
 - Group Processes
 - Intergroup Conflict
- Government response to a radiological attack
 - First response and disaster recovery
 - Communication
 - Public trust

Research Methodology and Limitations

Qualitative Case Study Analysis

- Rajneeshees Salmonella Poisonings
 - Oregon 1984
- Aum Shinrikyo Sarin Gas Attack
 - Tokyo 1995
- Bruce Ivins
 - Amerithrax 2001
- Covid-19 Pandemic

Limitations

- High Impact/Low Probability
 - Information gaps
- What If...?
 - Unpredictability of variables

Analysis

HVE Intent, Capability, and Opportunity

- Increased ideological extremism
- "Lone Wolves" versus groups
- Highly educated HVEs
- HVEs access to chemical, biological, radiological, and nuclear materials

"Worried Well" versus Collective Calm

- Goiânia (radiological), Tokyo (chemical), and Covid-19 (biological)
- 9/11 (airplanes), 7/7 (SIED), and Boston Marathon Bombing (IED)

Government Response, Recovery Plan, and Communication/Public Trust

- Appropriate and effective first response and criminal investigation
- Effective disaster recovery plan (decontamination, economic, and medical treatment)
- Timely, reliable, and accurate/valid messaging

Notable Findings

HVE Intent, Capability, and Opportunity

- Radiological Dispersal Device (RDD; "dirty bomb") and Radiological Exposure Device (RED) methods of deployment
- Alternative vectors of deployment (agro-terrorism, water contamination, aerosolized)
- Cyber-Terrorism

"Worried Well" versus Collective Calm

- Biological agents and radiological sources dramatically increase public fear
- Conventional extremist attacks improve collective calm in the affected population

Government Response, Recovery Plan, and Communication/Public Trust

- Strains on other forms of critical infrastructure (communications, transportation, government)
- Jurisdictional competition and investigational challenges
- A disconnect between public affairs office statements and media reporting

Recommendations

- 1. Timely and accurate dissemination of information is the most critical component to mitigating the negative psychological and sociological impact following a CBRN event.
 - The best estimate of the scale and scope of the contamination (i.e., Hot, Warm, and Cold Zones), the type of agent involved and symptoms of exposure, and publicly available prevention, protection, and mitigation techniques and materials.
- 2. Information briefs to the population should include messages that reinforce community cohesiveness and solidarity within the impacted community and seek to combat the association of blame during the response phase and early recovery efforts.
 - Groupthink can manifest in creating in-group/out-group social divisions resulting in scapegoating and other acts of hostility.
- 3. Challenge violent extremists' narratives and discourage using CBRN agents as an attack vector against civilian and military targets.
 - Focus on counter-extremism messaging and deradicalization of disaffected sub-national identity
 groups and undermine the level of radical pragmatism associated with the intentional release of
 a CBRN agent against civilians.

Implications at Local, State, and Federal Levels

Incident Response

Disaster Recovery

Criminal Investigation

Public Trust

Local

- Focus on first response and evidence preservation
- Community engagement and solidarity
- Escalate when and where it is needed (NIMS/ICS)

State

- Provide additional resources to affected local government
- Coordinate response, recovery, and public affairs statements between local and federal entities

Federal

- Disaster recovery
- Investigatory responsibility
- Avoid politicization of attack

Questions

