

POLS 429: International Terrorism

Lecture 32 (04.17.2020): CBRN (WMD) Terrorism

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Overview

- 1 Quick review
- 2 Introduction
- 3 CBRN Terrorism Research
- 4 Extra Material

Review

WHAT WE COVERED LAST MEETING?

- Cyber Terrorism: definition, main vulnerabilities.
- Appeal of cyber terrorism.
- Lack of expertise, effects less grandiose and not immediate.
- Current state: most attacks are indirect and no loss of life.
- Cyber-attacks, credit claiming, and terror group attribution: compensate for less resources, stronger signal of credibility.
- Public view: concern is higher when threat is personal, not enough to garner change in behavior.

Questions??

CBRN: Chemical, Biological, Radiological, Nuclear

DEFINITIONS

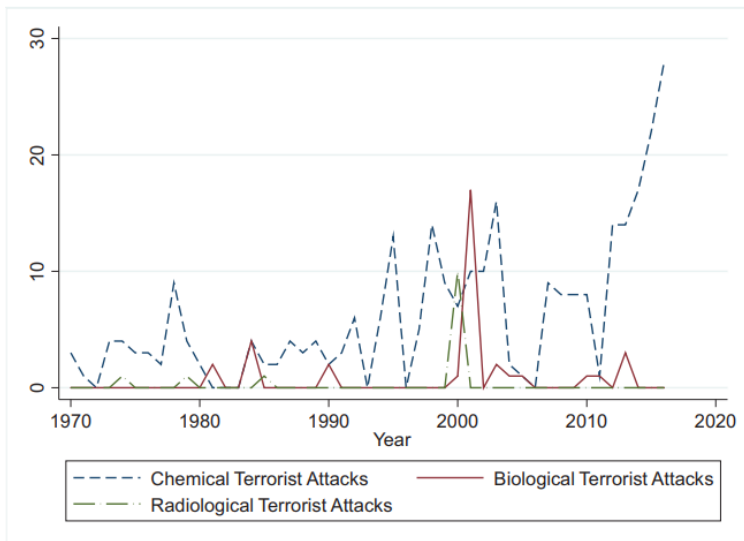
- **Nuclear:** an explosive device that derives its destructive power from a nuclear reaction.
- **Chemical:** weapon that uses chemicals formulated to cause harm to human beings. (various nerve and blister agents, pepper spray).
- **Biological:** weapon that uses biological toxins of infectious agents as bacteria, viruses etc.

CBRN Terrorism

HISTORY, FAMOUS CASES

- **USA, October 2001:** Anthrax scare. (Anthrax2001Link)
- 5 dead, perpetrator never charged.
- **Japan, March 1995:** Sarin Gas attack.
- 12 dead, more than 50 severely injured, mass public fear.
- **India, 2010 (CPIM):** Poison drinking water.
- **Syria, 2014:** al-Nusra Front (Chlorine gas).
- Evidence for use by ISIS.

CBRN Terrorism Data



CBRN Terrorism Research

- Tucker (2000): use or plan to use chemical or biological weapons (comparing 12 cases).
- Common attributes:
 - 1 Apocalyptic Ideology.
 - 2 Charismatic, authoritarian leadership.
 - 3 Isolation from supporting society.
 - 4 Paranoia and need for grandiosity.
 - 5 Perception of "nothing to lose".
 - 6 Innovation and willingness to take risks.
- Study limitations:
 - 1 No comparison to overall terror groups.
 - 2 Measures (Paranoia?).

CBRN Terrorism Research

WHY USE OR OBTAIN WEAPONS?

- Strategic: costly signal (mass casualties).
- Provoke overreaction in response to CBRN attack.
- CBRN capabilities → organizational prestige and superiority.
- Ideology: prophesied vision or apocalyptic worldview justify mass casualties.
- Psychological: generate mass public fear.
- Why refrain from CBRN?
 - ① Alienation of supporters.
 - ② Uncertainty of outcomes (compared to conventional weapons).

CBRN Terrorism: systematic studies

Asal et al. (2012)

- The structural and organizational factors that impact the decision to pursue CBRN (1998-2005).
- The conditions that trigger the decision to pursue CBRN.
- Less attention to the type of weapon acquired, or the conditions that motivate employing this method.
- Describe 3 'classes' of factors:
 - ① Structural and contextual.
 - ② Organizational.
 - ③ Ideological and psychological.

CBRN Terrorism: Asal et al. (2012)

Environmental-Structural Factors

- **State Sponsorship:** group that receives support (financial, weapons, logistical and technical). Why?
 - ① More resources (funds and technical skills).
 - ② Less restriction with respect to secure support of a particular constituency.
- Example: AQ and the support from Taliban and Sudanese government in setting the bio-labs in Afghanistan.
- **Technical Skills:** a society with a higher degree of base level technological skills (recruits).

CBRN Terrorism: Asal et al. (2012)

Environmental-Structural Factors

- **Global Integration:** greater access to technical knowledge (most in Western education and research centers).
- A related factor → access to developed economics to obtain the machinery needed to use these weapons.
- Smuggle necessary material within legitimate trade flows.
- The more a host country is integrated into the global economy by trade, the easier access terror groups have.

CBRN Terrorism: Asal et al. (2012)

Environmental-Structural Factors

- **Culture:** Western culture and the perception of "what is achievable".
- **Regime Type:** dictators extent of control and policing makes it harder to terror groups to prepare and execute CBRN attacks.
- **Civil Unrest:** multiple contradictory effects.
- In the aggregate → lower the likelihood of CBRN acquisition. Why negative effects?
- Experts flee the country (loss of knowledge), reduce trade flows, external investments and cultural integration.

CBRN Terrorism: Asal et al. (2012)

Organizational Factors

- **Size:** CBRN require investment of substantial resources (acquisition, production and testing).
- **Age:** older groups have more resources, important for the "R&D phase" of preparation.
- Age has detrimental effect: older groups are more institutionalize and less open to new and risky tactics.
- Long tenured leaders wish to be seen as 'representative statesmen'.

CBRN Terrorism: Asal et al. (2012)

Organizational Factors

- **Experience:** sophisticated weapon as CBRN requires experience in employing violence for political purposes.
- Relevant factors:
 - ① Frustration with the failure of conventional tools in achieving the stated goals.
 - ② Convince sponsor to support the acquisition of CBRN requires a "track record" of competency and success.

CBRN Terrorism: Asal et al. (2012)

Organizational Factors

- **Networks and Alliances:** networks are invaluable source to overcome barriers (skills, technical tools).
- **Territory Control:** a 'safe haven' for groups to develop CBRN skills and capabilities.
- Example: "black holes" - areas with limited state scrutiny and control offer hiding places for groups (like Afghan mountains region).

CBRN Terrorism: Asal et al. (2012)

Ideology & Psychology

- **Religion:** increase the appeal of CBRN weapons:
 - ① The audience → 'supernatural', less constraints (connections with constituency).
 - ② Kill anyone who is external to the religious ideology.
 - ③ Parallels with divine related actions that result in mass killings (plague or divine punishment).
- Groups engaged with CBRN (1998-2005) [▶ Data](#)

CBRN Terrorism: Asal et al. (2012)

Main Results & Implications

- Factors associated with the pursuit of CBRN:
 - ① Greater economic integration.
 - ② Size: large organizations.
 - ③ Inexperienced groups are less likely to pursue CBRN.
 - ④ Alliance integration.
- Non effects:
 - ① Sponsorship (state sponsor are not eager to offer CBRN tools).
 - ② Religion → surprising result.
- Religion is too broad of a category.

CBRN Terrorism: An over-hyped threat?

- **(1) Lack of interest:** terrorists prefer large audience (maximize fear) to mass casualties.
- AQ → an outlier, set a precedent and evidence for seeking technology.
- **(2) Difficult to procure and obtain materials.**
- Multiple stockpiles of nuclear materials are not secured (USSR), illegal trafficking.
- **(3) Building the weapons is extremely complicated:** the need for a technical knowledge.
- Most technical knowledge is open and available today (Pakistan).

CBRN Terrorism: An over-hyped threat?

- **(4) Groups can acquire these weapons from a state with hostile intentions:** prevent by targeting the 'seller' states.
- Practical implications: since 9.11, focus was on pre-emptive invasion to Iraq (instead of securing material).
- No incentives for 'seller' → likely retaliation.

POLICY FOCUS:

- Nonproliferation.
- Secure and monitor nuclear material, especially in sensitive locations (reduce the risk of theft and trafficking of these material).

CBRN Terrorism: A case study of AQ

- Strong evidence for the willingness of AQ to extend great efforts trying to acquire and develop these capabilities.
- Before 9.11 → purchase uranium from S. Africa.
- AQ operatives were arrested in Germany for trying to obtain enriched uranium.
- Develop Chemical and Biological warfare capabilities.
- Establishment of training and research labs in Afghanistan.
- Recruit a US-trained microbiologist from Malaysia.
- No positive outcomes, but the technological advancements make this threat more salient.
- Yet, adopt the right perspective: a significant threat, but not the most likely or proximate.

Recommended readings

More studies on CBRN Terrorism:

- ① Early, Bryan R., Matthew Fuhrmann, and Quan Li. "Atoms for Terror? Nuclear Programs and Non-Catastrophic Nuclear and Radiological Terrorism." *British Journal of Political Science*, Vol. 43, no. 4 (2013): 915-936.
- ② Campbell, Blake, and Amanda Murdie. "Keep the Informants Talking: The Pursuit and Use of CBRN Weapons by Terrorist Organizations." *Studies in Conflict & Terrorism*, (2018): 1-20.
- ③ Ivanova, Kate, and Todd Sandler, "CBRN Attack Perpetrators: An Empirical Study," *Foreign Policy Analysis*, Vol. 3, no. 4 (2007): 273-294

CBRN Terrorism Data

Organization	Used or pursued CBRN 1998–2005
Al Qaeda	Pursued
Animal Liberation Front (ALF)	Pursued
Ansar al-Islam	Pursued
Armed Islamic Group	Pursued
Babbar Khalsa International (BKI)	Pursued
Basque Fatherland and Freedom	Used
East Turkistan Liberation Organization	Used
Hamas	Used
Hezbollah	Pursued
Jaish-e-Mohammad (JeM)	Pursued
Jamiatul-Mujahedin (JuM)	Pursued
Jemaah Islamiya (JI)	Pursued
Kurdistan Workers' Party	Pursued
Lashkar-e-Jhangvi (LeJ)	Pursued
Lashkar-e-Taiba (LeT)	Used
Mujahedin-e-Khalq (MeK)	Pursued
Palestinian Islamic Jihad (PIJ)	Pursued
Real Irish Republican Army (RIRA)	Pursued
Revolutionary Armed Forces of Colombia (FARC)	Used
Riyad us-Saliheyn Martyrs' Brigade	Used
Tawhid and Jihad	Pursued
UNITA	Pursued