

Ricin Letters Mailed to President and Senator

Letters addressed to President Barack Obama and Senator Roger Wicker (R-Miss.) preliminarily tested positive for ricin, authorities said April 17. To help provide context to these incidents, START has compiled background information on the history of terrorism involving biological agents and toxins, particularly ricin.

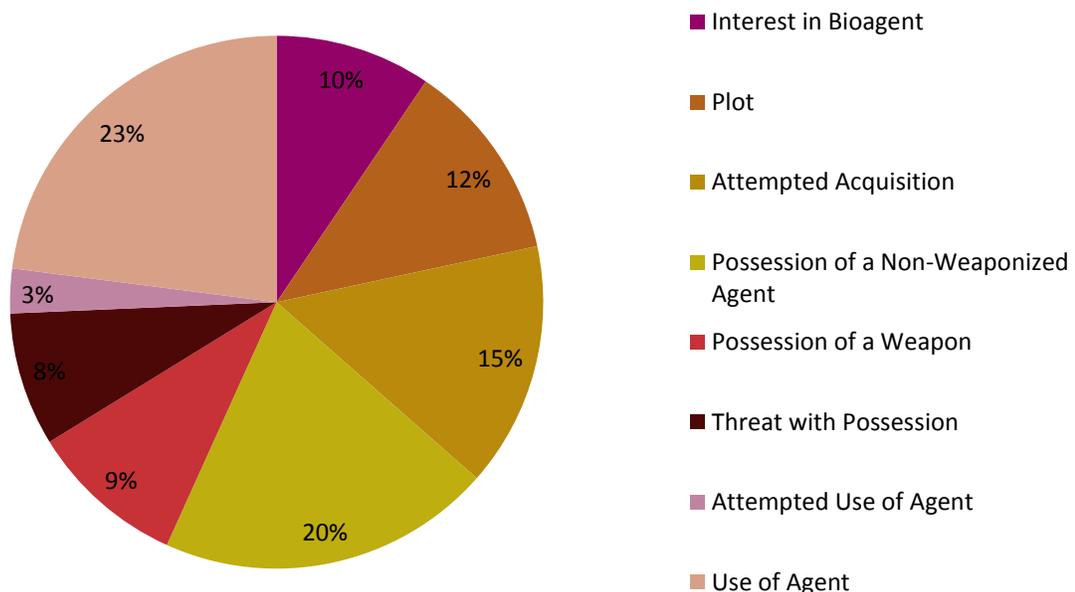
The ricin mailings echo a similar 2004 incident that targeted then-Senator Bill Frist (R-Tenn.). While the 2004 letter made it to a Senate mailroom before the substance was detected, the letters to Obama and Wicker were intercepted at off-site screening facilities. The use of such facilities became common after the 2001 Amerithrax attacks that utilized anthrax.

Ricin has long been an attractive option to violent extremists because it requires little technical skill to create from the castor bean plant and large quantities can be produced inexpensively. Castor bean plants can be grown throughout the world and online recipes provide instructions on how to derive the toxin using easy-to-obtain items. The toxin's most notable use by a nation state was the infamous 1978 London assassination of Bulgarian dissident Georgi Markov, who died after being injected with a ricin pellet via modified umbrella.

TERRORIST PLOTS AND ATTACKS INVOLVING BIOLOGICAL AGENTS 1990-2011

From 1990-2011, terrorist organizations, cells and lone actors with political or ideological motives expressed interest in or plotted (22%), pursued acquisition of (44%), threatened (8%) or used (26%) 21 different biological agents in 74 separate incidents.¹ Of these cases, 31 also involved a chemical agent.

Progression of Ideologically-Motivated Events involving Biological Agents



N=74

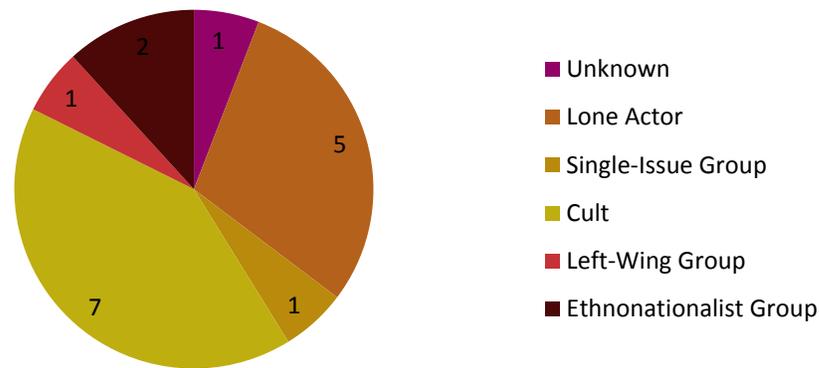
¹ These agents include abrin, *Bacillus anthracis*, *Bacillus licheniformis*, *Bacillus subtilis*, *C. botulinum toxin*, cobra venom, *Coxiella burnetii*, Bigoxin, Ebola, *Escherichia coli*, foot and mouth virus, hepatitis C, HIV, influenza, *Mycobacterium tuberculosis*, ricin, *Salmonella typhimurium*, solanine, *Staphylococcus*, strychnine, terodotoxin and *Yersinia pestis*. START typically classifies toxins as biological agents.

Of the 74 biological incidents, there were 17 actual attacks (23 percent) while a further 15 (20 percent) involved a perpetrator that obtained an agent without the ability to weaponize it. Seven of the 17 biological attacks involved more than one target.

In incidents that progressed to full attack, the most common among the 37 known targets* were: private citizens (26), government (13) and news media (7). In the incidents that did not progress to a full attack, 99 unique targets* were identified. Private citizens (59), businesses (19), government (13), public transportation (8) and monuments (6) were the most common target types in these non-attack events.

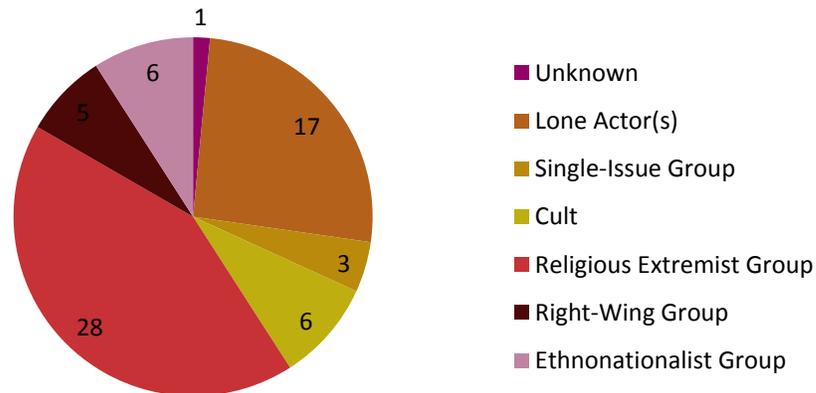
Of the 17 biological attacks, seven were perpetrated by the cult, Aum Shinrikyo, in Japan in the mid-1990s. Five biological attacks were perpetrated by lone actors or unaffiliated cells. Of the 66 cases that did not reach the level of an attack, 28 involved religious extremist groups (not including cults like Aum Sinrikyo) and 17 incidents involved lone actors and unaffiliated cells.

Types of Perpetrators involved in Biological Attacks
1990-2011



N=17

Types of Perpetrators involved in Biological Non-Attacks
1990-2011



N=66

* Each incident can have multiple targets and each target can be classified in multiple categories.

RICIN INFORMATION

Ricin, a toxin derived from the seeds of castor plant beans (*Ricinus communis*), is extremely lethal when ingested, injected, or inhaled. The toxin works quickly, inhibiting protein synthesis within the body; symptoms include nausea, difficulty breathing and pulmonary edema and even a tiny dose can be fatal in less than 72 hours. Ricin poisoning is not contagious, however there are currently no treatments or countermeasures available for those exposed to the toxin.

RICIN-RELATED INCIDENTS FROM 1990-2011

Based on open sources, from 1990-2011, a variety of perpetrators have been tied to 21 ideologically-motivated cases involving ricin, none of which are known to have caused injuries or casualties. A brief history of these 21 events is presented below.

However, there are indications of more plots that have not been made public. Beyond the ideologically-motivated cases, at least 16 criminally-motivated individuals have pursued or used ricin during this time period, in addition to the occurrence of many hoax cases, often involving white powders or substances. Irrespective of perpetrator, ricin has never been used successfully as a genuine mass casualty agent.

2011: WAFFLE HOUSE CELL

Four Georgia men pleaded guilty for plotting to use ricin and explosives to attack federal buildings, Justice Department officials, federal judges and IRS agents, in addition to planning to attack multiple cities and potentially release ricin on highways. Castor beans, ricin production instructions and trace amounts of ricin were found in their homes.

2011: MORGAN

Mary Ann Morgan, the secretary of the Alaska Peacemakers Militia, was searched and arrested at the Alaska/Canada border. Research on extracting ricin was discovered among the contents of her vehicle. It is unknown if there was actually any further plot involving the ricin.

2010: AQAP TARGETING THE US

Based on government reports, al-Qaida in the Arabian Peninsula (AQAP) was interested in attacking hotels and restaurants in the U.S. with ricin and cyanide, potentially applied to salad bars and buffets. Related information suggests AQAP may also have wanted to pack ricin around explosives and target shopping malls, airports and subway stations.

2010: AQAP INTERNATIONALLY

The Saudi Arabian Interior Ministry announced that AQAP planned to kill government officials using multiple tactics including sending them ricin-infused perfume; over 100 individuals belonging to multiple cells were arrested.

2010: HASSOUN

Sami Samir Hassoun was arrested after discussing plans for potentially utilizing ricin with an undercover FBI agent.

2009: ARYAN STRIKE FORCE

Father and son Ian and Nicky Davison were jailed for allegedly plotting to use ricin to attack ethnic minorities in the United Kingdom. A jam jar of ricin was found in a raid related to the Aryan Strike Force, a white supremacist group, of which the Davisons were members.

2009: SEATTLE

Eleven gay and lesbian bars in Seattle received letters threatening to target the establishments' clients with ricin. No attack took place and final reports from authorities indicated it was likely a hoax.

2008: VON BERGENDORFF

Roger Von Bergendorff pleaded guilty to possession of a biological toxin after he was admitted to a Las Vegas hospital and later ricin and castor beans were found in his hotel room in Las Vegas. He claimed to possess the ricin for protection against unspecified enemies. Von Bergendorff was sentenced to three years in federal prison.

2005: HUGHES

Denys Ray Hughes was arrested for possession of instructions for making ricin along with several castor bean plants and supplies. No ricin was found and any plot intentions are unknown. The self-identified survivalist was sentenced to 87 months in prison for attempting to produce a biological toxin.

2004: OPERATION CREVICE

A number of men of Pakistani origin were arrested in London. Several of the men had previously travelled to Pakistan and allegedly learned how to use ricin. One perpetrator discussed details on how to make ricin along with potential plans to disperse ricin in water supplies and/or use it to poison people.

2004: CROOKER

In a raid of Michael Crooker's home in Agawam, Massachusetts, authorities found castor beans along with materials for extraction. After the raid, he sent a letter to a local news agency and the U.S. attorney prosecuting his case threatening to mail the toxins and/or give the ricin to terrorist organizations. His father-in-law also found a vial containing enough ricin to kill over 150 people. Crooker was sentenced to jail for 15 years in 2011.

2004: TARGETING SENATOR FRIST

Traces of ricin were found on a mail opening machine in the office of Senator Frist (R-TN). No source letter or perpetrator was determined.

2004: AL-ABUD NETWORK

The Al-Abud network in Fallujah (which potentially had connections to al-Zarqawi) allegedly had some success in producing ricin but failed to produce more complex agents.

2003: "FALLEN ANGEL"

Two letters, including one addressed to the White House, threatened the use of ricin and were found in postal facilities. The letters were signed by "Fallen Angel" and were determined to have traces of ricin. The alleged grievance was related to federal trucking regulations. No perpetrator was identified.

2003: SALAFIST GROUP FOR PREACHING AND COMBAT (GSPC)

A single source reported that several raids targeting the GSPC in Spain produced containers of ricin; however, a lack of confirmation makes it likely the single ricin report was a transliteration error.

2002: ANSAR AL-ISLAM

Reports suggested that Ansar al-Islam was involved with testing ricin in northern Iraq. One report states the group tested aerosolized ricin on animals and perhaps a human subject.

2002: "CHECHEN NETWORK"

Several men of North African origin were arrested in London. Dubbed the "Chechen Network," the religious extremist cell was allegedly trained or inspired by al-Qaida and plotted using ricin to poison people in small random attacks in London and potentially Paris. Specific targets remain unclear and may have included the London Underground. Only one perpetrator, Kamel Bourgass, was convicted for the ricin plot, though materials and directions for producing ricin were found. Charges against most of the arrested individuals were dropped after a lengthy investigation.

2001: CHITIGOV

A Russian government agency reported that “Chitigov,” part of a Chechen rebel group, was discussing using ricin against Russian troops.

1998: KUEHL

Dwayne Lee Kuehl was arrested for the production of and intent to use ricin to target a building inspector in Escanaba, Michigan.

1998: NAM SPLINTER GROUP

Three members of a splinter group of the North American Militia (NAM) were arrested while plotting several attacks. However, the only link to ricin in this incident was a videotape with instructions on extracting ricin.

1994: MINNESOTA PATRIOT'S COUNCIL

Four members of the Minnesota Patriot's Council extracted ricin from castor beans using a mail order ricin kit. The plot was likely not orchestrated by the organization itself. The men were turned in by one of the culprit's wives and convicted under the 1989 Biological Weapons Anti-Terrorism Act.

ABOUT THIS REPORT

The primary authors of this report are Lauren Pinson, Mila Johns and Gary Ackerman. Questions should be directed to infostart@start.umd.edu.

The data presented here are drawn from the Profiles of Incidents involving CBRN by Non-State Actors Database (POICN). POICN contains information on 458 terrorism-related occurrences involving CBRN that have occurred around the world from 1990-2011.



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