

Accessibility Of Bomb Ingredients

Elizabeth D. Wilson

Liberty University, Lynchburg, Virginia
Helms School of Government

A National Divide: Assessing freedom & the rule of law in a post 2020 world.

March 24-26, 2022

Abstract

In part, “Homegrown” terrorism is on the rise because teenagers are being recruited on social platforms such as, Facebook, Twitter, and chat rooms to launch attacks on their country. While terrorist groups recruit some teenagers, other teenagers are inspired by their peers or images on social media. Homemade bombs are often constructed and detonated by these minors. The purpose of this paper addresses homemade bombs, the accessibility of their ingredients, and provides a brief history concerning their origin and deployment methods. Additionally, this report will reveal where “bomb makers” locate instructions and ingredients. Some of these household ingredients can be mixed with other ingredients to make detrimental bombs. While hijabs and radical Islamists are often the “poster child” for terrorism, the first bombs were not constructed in Islamist countries; rather, they were manufactured and developed on European and American soil. Bigotry has made individuals skeptical of Muslims at malls, airports, and other public places and unwittingly lowered one’s guard to customary clothed terrorists. Instead of attributing terrorist attacks to Islamists, individuals need to examine today’s society closely. Homegrown terrorism is becoming an endemic.

Introduction

History behind bombs

The manufacturing of bombs began in the 1900s when military forces experimented with chemicals in an attempt to drive back the enemy (Schneider, n.d.). For example, chemical weapons were developed during World War I (1914-18); at this time in history, chemical weapons were comprised of chlorine and phosgene (two industrial chemicals that existed during that time) (Schneider, n.d.; News and Terrorism, 2021). As the war progressed and new chemicals were experimented with on the front, the “King of battle Gases” was developed (Fitzgerald, 2008, para. 37). This new gas was called “mustard gas” and its effects were toxic and long lasting (Fitzgerald, 2008). Mustard gas – which was “heavier than air or water” – settled at the bottom of trenches leaving behind a perpetual haze (Fitzgerald, 2008, para. 44). If soldiers who were exposed to mustard gas bombs did not shower within thirty minutes of exposure to this chemical, they would develop burns (Fitzgerald, 2008). In order to prevent burns, “bath trucks” and “portable showers” were employed on the battle field (Fitzgerald, 2008, para. 41). Alarmingly, any disturbance to mud (that had absorbed mustard gas) immediately contaminated the individual (Fitzgerald, 2008). The demand for mustard gas was so high that in 1918, the U.S. began producing 30 tons of this gas each day (Fitzgerald, 2008). Sadly, not only were troops affected by these chemical weapons but vulnerable civilians in nearby towns were impacted, too (Fitzgerald, 2008). Gas masks were the only resources available to evade exposure to these detrimental chemical bombs (even masks were not effective at times). Researchers have discovered that since World War I, over one million global deaths have been the direct result of chemical weapons (UN, n.d.).

Not only were chemical weapons used in World War I, but they were also used in both the Cold War (1945-91) and the Iran-Iraq War (1980-88) (Schneider, n.d.). While the origin of chemical weapons can be traced back to World War I, many researchers trace the origin of radiological bombs to the 1960 Ind-Pak War (Khan, 2016).

Body

Chemical attacks

Disturbingly, recent studies have unveiled that “1,089 [chemical] bomb threat incidents were reported in 2019” on U.S. soil (USBDC, 2019, p. 13). Chemical attacks are divided into two different categories: chemical weapons and radiological weapons (White, 2017). Both types of weapons share many similarities; for example, they are easier “to control than biological weapons” (White, 2017, p. 108). Additionally, chemical and radiological weapons can cause many of the same symptoms (White, 2017, p. 108). However, chemical and radiological weapons contain different ingredients and face converse challenges (when launching the weapons in terrorist attacks) (White, 2017). For example, terrorists experience the following four issues when attempting to launch chemical weapons: how to deliver the chemical mechanism; how to avoid incinerating the chemical during the delivery process; how to prevent their chemical from being neutralized by weather, air, or water; and where to attack (White, 2017). According to Jonathan White (2017), small spaces are more effective when transmitting a chemical threat than large spaces; in other words, finding the right location is crucial for a chemical terrorist attack to be successful (White, 2018).

Bomb making information

The internet and social media contain in-depth instructions and videos on how to make bombs (Dodd, 2018). Not only does the internet provide citizens with the tools necessary to construct bombs, but it also subtly recruits individuals to become terrorists. For example, recent studies have discovered that terrorists are using social networks to recruit individuals, gain “virtual” entry into U.S. homes, and “[encourage] sympathizers to carry out simple attacks” (FBI, n.d., para. 6). Terrorists are empowered by these methods and capable of obstructing FBI investigations (FBI, n.d., para. 6). Additionally, researchers have established a link between social media and teen terrorist attacks; it is believed that these lone-wolf terrorist attacks are associated with “online radicalization” (Pandith, 2021, para. 5). Proverbs 29:15 says, “The rod and reproof give wisdom, but a child left to himself brings shame to his mother (English Standard Version, 2001). Evidently, teenagers are left to their own devices and are subsequently being radicalized and brain washed to think that jihadism is trendy (Pandith, 2021). Additionally, the internet and social media allow information to be passed between bomb makers (Dodd, 2018).

Ingredients for chemical bombs

Homemade chemical bombs (HCB) are concocted from various ingredients; for instance, some of these ingredients include “commercial

household items,” such as toilet bowl cleaner, hydrogen peroxide, and hair bleach (CDC, 2013, para. 8; Dodd, 2018). Furthermore, chemical bombs are formed, when “acids or bases are mixed with metal” (CDC, 2013, para. 8). Calcium, hypochlorite, hydrochloric acid, aluminum, carbon dioxide, and ammonium nitrate are the most common ingredients used to construct HCB (CDC, 2013, para. 8; Dodd, 2018). Interestingly, ammonium nitrate was first used by the IRA in the 1970s to make chemical bombs (Dodd, 2018).

Examples of Homemade Chemical Bombs

The (2013) Boston Bombing is an excellent example of the detrimental impact a homemade chemical bomb can have on a community. Additionally, the construction of the chemical bomb used at the Boston Bombing demonstrates the radicalization that occurs on U.S. soil by radical Islamic groups. For example, the AQAP terrorist group’s multiple-failed terrorist attacks against the U.S. were publicized in a “glossy *Inspire* Internet magazine,” unwittingly motivating two American brothers (Tamerlan Tsarnaev, 26, and Dzhokhar Tsarnaev, 19) “to place homemade bombs at the finish line during the 2013 Boston Marathon (White, 2017). The magazine also gave them the instructions for building the bombs” (White, 2017, p. 11-4a). When detonated, this homemade bomb spewed “BB-like pellets and nails” causing irreversible damage (CNN, 2021). In the wake of the twelve second bombing, three individuals died and more than 260 were injured (17 lost limbs) (CNN, 2021; Hayes, 2017). Lastly, the magazine used to inspire these American men is an example of how accessible bomb instructions are, and how one article can change the course of a man’s life.

Ingredients for radiological bombs

Radiological weapons include two main ingredients – dynamite and explosives (U.S. NRC, 2018). When “explosives, such as dynamite, [are mixed] with radioactive powder or pellets” and then these explosives are ignited, one can say that a “dirty bomb” has been launched (CDC, n.d., para. 2). Dirty bombs release radioactive material and cause horrific damage (CDC, n.d.; U.S. NRC, 2018).

Side effects from bombs

Victims of bomb explosions experience various side effects; these side effects are determined by the individual’s proximity to the chemical attack and the potency of the bomb. For example, “respiratory symptoms, burns, and skin irritation” are the most common side effects experienced by victims of chemical bombs (CDC, 2013, para. 8). Additionally, individuals who are victims of chemical bomb explosions risk “exposure to blast shrapnel and

hazardous substance” (CDC, 2013, para. 8). Similarly, victims of radiological bombs experience burns, illness, and in some instances – death (White, 2017).

Common locations for terrorist attacks using chemical bombs

Homemade chemical bombs are often launched on school premises, inside of mailboxes, or in residential backyards (CDC, 2013, para. 8). While chemical weapons are more effective in “confined spaces” or in a concentrated radius, radiological weapons are more effective when launched outside (White, 2017, p. 108).

Bomb transportation

Artillery shells, land mines, aerial bombs, missile warheads, mortar shells, grenades, and spray tanks – these are just a few examples of the various methods used to launch/deliver chemical bombs (Schneider, n.d., para.4). Conversely, radiological bombs are predominantly launched and transported by one or more members of a terrorist group (Khan, 2016). When an individual carries a radiological bomb on their person and then detonates the bomb, this is known as “suicide bombing” (Khan, 2016). Suicide bombing can be used interchangeably with the term “human bomb” (Khan, 2016). Suicide bombing first originated in Pakistan; many individuals believe that this practice evolved in the 1980s after the 1960 Ind-Pak War (Khan, 2016). From 1981-2008, there were approximately 1,950 global suicide-terrorist attacks (Moghadam, 2009). Disturbingly, researchers have discovered that “since 1981, 91.5% (1,779) of all suicide attacks have been executed in the current decade” (Moghadam, 2009, para. 9).

Combating Terrorism

In order to combat the manufacturing of chemical or radiological bombs, new restrictions need to be applied to the importation, distribution, and consumption of ingredients that could potentially be used to construct a bomb. For example, Europe has employed stricter regulations on the wholesale of ingredients like rubbing alcohol (Dodd, 2018).

Lastly, the publication of terrorist propaganda needs to be blocked in order to prevent the radicalization of more impressionable teens (which ultimately leads to the construction of bombs). For example, Europe has decreased terrorist propaganda on its social media platforms drastically by implementing artificial intelligence and “hash sharing” (Bipartisan Policy Center, 2018). While these methods would likely reduce terrorism, many U.S. citizens oppose the implementation of these methods because they believe regulating social media networking is a direct violation of the First Amendment (White, 2017). Therefore, the only acceptable way to combat

terrorism – using a method that U.S citizens would approve – is to encourage the press “to regulate itself” (White, 2017, p. 98). Ecclesiastes 9:18 says, “Wisdom is better than weapons of war, but one sinner destroys much good” (English Standard Version). May God grant America the wisdom it needs to combat the weapons of war that are being employed on U.S. soil. May the wise prosper and the sinners (terrorists) be demolished. Micah 2:1 says, “Woe to those who devise wickedness and work evil on their beds! When the morning dawns, they perform it, because it is in the power of their hand” (English Standard Version). Hopefully one day, the scheming plans of terrorists will be revealed, and terrorism will become non-existent.

Conclusion

Since the manufacturing of bombs during the 1900s when nations were at war, countries have been trying to prevent non-government officials from making their own bombs and launching these bombs at the public. Many vulnerable individuals are harmed by the toxins emitted by the bombs or the force of the blast when these bombs are launched. Surprisingly, most ingredients found in bombs can be located inside of one’s household.

References

- Bipartisan Policy Center. (2018). Digital counterterrorism: Fighting against jihadists online from <https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2019/03/BPC-National-Security-Digital-Counterterrorism.pdf>
- Center for Disease Control and Prevention. (2013). *Homemade chemical bomb incidents: 15 states, 2003-2011*. Accessed on December 12, 2021, from <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6224a4.htm>
- Center for Disease Control and Prevention. (n.d.). Frequently asked questions (FAQs) about dirty bombs. Accessed on December 12, 2021, from <https://www.cdc.gov/nceh/radiation/emergencies/dirtybombs.htm>
- CNN. (2021). Boston marathon terror attack fast facts. Accessed on December 12, 2021, from <https://www.cnn.com/2013/06/03/us/boston-marathon-terror-attack-fast-facts/index.html>
- Dodd, H. (2018). Why is it so easy to buy bomb ingredients? *BBC News*. Accessed on December 12, 2021, from <https://www.bbc.com/news/uk-42690177>
- English Standard Bible. (2001). Crossway Bibles. Accessed on December 12, 2021, from <https://app.wordsearchbible.lifeway.com/library>
- FBI. (n.d.). Terrorism. Accessed on December 12, 2021, from <https://www.fbi.gov/investigate/terrorism>
- Fitzgerald, G.J. (2008). Chemical warfare and medical response during World War I. *NCBI*. Accessed on December 12, 2021, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376985/>
- Guarrier, J., & Meisel, C.J. (2019). Extremists and unconventional weapons: examining the pursuit of chemical and biological agents. *Behavioral science of terrorism and political aggression*. Accessed on December 12, 2021, from <https://www-tandfonline-com.ezproxy.liberty.edu/doi/full/10.1080/19434472.2019.1698633>
- Hayes, M. (2015). Photos of 17 amputees shown at Boston marathon bombing trial. *Buzz Feed News*. Accessed on December 12, 2021, from <https://www.buzzfeednews.com/article/mikehayes/photos-of-17-amputees-shown-at-boston-marathon-bombing-trial>

- Khan, M.T.F. (2019). The making of Pakistani human bombs. Khuram Iqbal, London: Lexington books, 2016, 212. *Strategic Studies*, 39(2), 102. Accessed on December 12, 2021, from <https://www.proquest.com/docview/2333579728?pq-origsite=summon&accountid=12085>
- Moghadam, A. (2009). Shifting trends in suicide attacks. *Combatting Terrorism Center*. Accessed on December 12, 2021, from <https://ctc.usma.edu/shifting-trends-in-suicide-attacks/>
- New and Terrorism. (2021). *Communicating in a crisis: Chemical attacks, warfare agents, industrial chemicals, and toxins*. Accessed on December 12, 2021, from https://www.dhs.gov/xlibrary/assets/prep_chemical_fact_sheet.pdf
- Pandith, F. (2021). Teen terrorism inspired by social media is on the rise. Here's what we need to do. NBC News. Accessed on December 12, 2021, from <https://www.nbcnews.com/think/opinion/teen-terrorism-inspired-social-media-rise-here-s-what-we-ncna1261307>
- Schneider, B.R. (n.d.). Chemical weapons. Britannica. Accessed on November 28, 2021, from <https://www.britannica.com/technology/chemical-weapon>
- Technical Resources for Incident Prevention. (n.d.). *Bomb making materials awareness program (BMAP)*. Accessed on December 12, 2021, from <https://tripwire.dhs.gov/readiness-preparedness/bomb-making-materials-awareness-program-bmap>
- The National Academies of Sciences, Engineering, Medicine. (2017). *Containing the threat from illegal bombings*. Accessed on December 12, 2021, from <https://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=5966>
- United Nations. (n.d.). Chemical weapons. Accessed on December 12, 2021, from <https://www.un.org/disarmament/wmd/chemical/>
- United States Bomb Data Center. (2019). Explosive incident report. Accessed on December 12, 2021, from <https://www.atf.gov/file/143481/download>
- United States Nuclear Regulatory Commission NRC (2018). *Background on dirty bombs*. Accessed on December 12, 2021, from <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-dirty-bombs.html>
- White, J.R. (2017). *Terrorism and homeland security*. (9th ed.). Cengage. Accessed on December 12, 2021, from <https://ng.cengage.com/static/nb/ui/evo/index.html?deploymentId=5035532456081341089686453292&eISBN=9781305640665&id=1342735951&snapshotId=2682217&dockAppUid=16&nbId=2682217&>