



4.3.15 Terrorism

This section provides a profile and vulnerability assessment of the terrorism hazard for the Chester County Hazard Mitigation Plan (HMP) update.

4.3.15.1 Description

According to the Federal Bureau of Investigation (FBI), terrorism is “the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives” (National Institute of Justice 2019). Acts of terrorism include threats of terrorism, assassinations, kidnappings, hijackings, bomb scares and bombings, cyber-attacks (computer-based attacks), and use of chemical, biological, nuclear, and radiological weapons (Federal Emergency Management Agency [FEMA] 2009). Various types of terrorism are discussed in the sections below.

Agroterrorism

Agroterrorism is the intentional use of plant or animal pathogens to cause devastating disease in the agricultural sector. Acts of agroterrorism share similarities with bioterrorism, but the aim of agroterrorism is to specifically target crops and livestock to cause a significant economic impact or to damage food supplies (FEMA 2007).

Armed Attacks and Assassinations

Armed attacks include raids and ambushes. An assassination is the killing of a selected victim, usually by bombings or small arms. A drive-by shooting is a common technique employed by unsophisticated or loosely organized terrorist groups. Historically, terrorists have assassinated specific individuals for psychological effect.

Arson and Firebombing

Incendiary devices are inexpensive and easy to hide. Arson and fire-bombings are easily conducted by terrorist groups that may not be as well organized, equipped, or trained as a major terrorist organization. An act of arson or firebombing against a utility, hotel, government building, or industrial center portrays an image to the public that the ruling government is incapable of maintaining order.

Bioterrorism

Bioterrorism refers to intentional release of toxic biological agents to harm and terrorize civilians, in the name of a political or other cause. The U.S. Centers for Disease Control and Prevention (CDC) has classified the viruses, bacteria, and toxins that could be used in an attack. Category A Biological Diseases are most likely to cause the greatest harm. They include:

- Anthrax (*Bacillus anthracis*)
- Botulism (*Clostridium botulinum toxin*)
- Plague (*Yersinia pestis*)
- Smallpox (*Variola major*)
- Tularemia (*Francisella tularensis*)
- Hemorrhagic fever caused by Ebola virus or Marburg virus

Bombings

Bombings are the most common type of terrorist act. Typically, improvised explosive devices (IED) are inexpensive and easy to make. Bombs can range from smaller packages to vehicle-borne bombs that are capable of catastrophic damage. Modern devices are smaller and harder to detect and have destructive capabilities.



Terrorists responsible for this bombing can use materials readily available to the average consumer to construct a bomb.

Cyber Terrorism

Cyber terrorists use information technology to attack civilians and draw attention to the terrorists' cause. They may use information technology, such as computer systems or telecommunications, as a tool to orchestrate a traditional attack. More often, cyber terrorism refers to an attack on information technology itself in a way that would radically disrupt networked services. For example, cyber terrorists could disable networked emergency systems or hack into networks that house critical financial information. There is wide disagreement about the extent of the existing threat by cyber terrorists.

Hijackings and Skyjackings

Hijacking is seizure by force of a surface vehicle, its passengers, or its cargo. Skyjacking is the overtaking of an aircraft, which creates a mobile, hostage barricade situation. A skyjacked aircraft has the potential to provide terrorists with hostages from many nations and draws heavy media attention. Skyjacking also provides mobility for the terrorists to relocate the aircraft to a country that supports their cause and provides them with a human shield, making retaliation difficult.

Intentional Hazardous Materials Release

Intentional hazardous materials release is intentional leak, spillage, discharge, or disposal of hazardous materials or substances (such as explosives, toxic chemicals, and radioactive materials) (U.S. Department of Homeland Security [DHS] 2018). This could include the intentional release of chemicals commonly used in industry, or the release of chemical agents as a weapon. This might involve attacking hazardous material storage facilities or attacking storage containers in transit. Intentional hazardous materials releases can have a significant impact on human health and the environment.

Kidnappings and Hostage-Takings

Terrorists use kidnapping and hostage-taking to establish a bargaining position and to elicit publicity. Kidnapping is one of the most difficult acts for a terrorist group to accomplish, but a successful kidnapping can gain terrorists money, release of jailed comrades, and publicity for an extended period. Hostage-taking involves seizure of a facility or location and taking hostages present in that facility. Unlike a kidnapping, hostage-taking provokes a confrontation with authorities. It forces authorities to make dramatic decisions or to comply with the terrorist's demands. It is overt and designed to attract and hold media attention. The intended target is the audience affected by the hostage's confinement, not the hostage.

Nuclear/Radiological Terrorism

Nuclear and radiological terrorism refers to a number of different ways nuclear materials might be exploited as a terrorist tactic. These methods include attacking nuclear facilities, purchasing nuclear weapons, or building nuclear weapons or otherwise finding ways to disperse radioactive materials.

4.3.15.2 Location and Extent

Terrorism can occur anywhere within Chester County depending on an individual's or organization's agenda. Any facility or structure is vulnerable to a terrorist attack, as terrorists have historically sent chemical or biological agents through the mail. High-risk targets include local, county, state, or federal government facilities; major venues and gathering places; sites with historical, cultural, or other significance; and critical infrastructure. Damage to or disruption of operations at government facilities could profoundly impact Chester County's population, even if the terrorism event is relatively small scale.



An important consideration in evaluating terrorism hazards is the existence of facilities, landmarks, or other buildings of international, national, or regional importance. While Chester County has many notable landmarks from a local historical perspective, no sites within the county are considered significant landmarks in terms of national or international importance. Nonetheless, terrorism can take many forms, and terrorists have a wide range of personal, political, or cultural agendas. Therefore, no location within Chester County is immune from being a potential terrorist target.

A few types of terrorist activities are particularly relevant to Chester County: cyber terrorism, conventional/improvised bomb threat, and armed attacks. A cyber-attack can take the form of data breaches, crippling computer viruses, or even damage to physical technology infrastructure (Chester County 2015). A bomb threat can be verbal or written to ignite an explosive device to cause property damage, death or injuries to victims, and/or to incite fear. An armed attack is using a weapon to cause property damage, death, injuries, and/or incite fear.

Although Chester County does not have a large number of facilities that could be considered nationally important targets, it does have critical infrastructure that, if attacked, could have significant effects at the local or regional level. Critical infrastructure can include financial center, government buildings, media outlets, transportation authorities, power/utilities companies, and telecommunications networks (Chester County 2015). Several major transportation routes and gas transmission pipelines traverse Chester County, making intentional hazard material releases a potential threat to citizens and the environment. This hazard is addressed in this HMP in Section 4.3.12, Pipeline Incidents. In addition, several bridges and railways (discussed in Section 4.3.17, Transportation Accidents) connect Chester County to the Philadelphia metropolitan area that could be considered potential targets. A complete list of critical facilities is included in Appendix I.

Acts of terrorism can occur anywhere, at any time of day. The National Terrorism Advisory System (NTAS) communicates information about terrorist threats by providing detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector. Information can be distributed through two mediums: Bulletins or Alerts. NTAS Bulletins are used to disseminate critical information regarding terrorism that may not relate to a specific threat (DHS 2018).

When a threat arises, the Secretary of Homeland Security announces an NTAS Alert and shares the news with the public. The alert may include specific information about the nature of the threat, including the geographic region, mode of transportation, or critical infrastructure potentially affected as well as steps that individuals and communities can take to protect themselves and help prevent, mitigate, or respond to the threat. The alert indicates whether the threat is elevated or imminent. Elevated threats are those that include no specific information about the timing or location. Imminent threats are threats believed to be impending or occurring very soon. DHS will issue an NTAS advisory through their website, news media, and its social media channels such as Facebook and Twitter (DHS 2018).

4.3.15.3 Range of Magnitude

The magnitude of a terrorism event depends on the scale of the attack, population involved, equipment and other key assets affected, and duration of the incident or exposure to the agent used. The effect of a terrorism event can vary depending on the type of attack and the magnitude of the event or events. Terrorism events can cause public fear regarding the use of mass transportation or leaving their homes in the event of a biological or nuclear attack. Communication systems, both public and private, can fail because of an overwhelming amount of usage or damage to its infrastructure. Healthcare facilities can become quickly inundated and must be prepared to triage injured patients, handle mass casualties, and conduct decontamination operations. The secondary hazards resulting from a terrorist attack depend on the size and scope of the incident. Some possible secondary hazards



include widespread utility failure, health effects such as epidemics or pandemics, flooding (if a dam was destroyed), and environmental contamination.

The worst-case scenario for a terrorism event in Chester County would be an active threat incident or a mass casualty event. The active threat incident would be a shooting or stabbing resulting in mass casualties—similar to the West Nickel Mines School in Bark Township, Pennsylvania, which occurred on October 2, 2006. Another type of worst-case scenario would be a mass casualty event in the form of a vehicular attack or an improvised explosive device that could result in a combination of mass casualties and fatalities. Generally speaking, any event that results in mass casualties or fatalities could overwhelm the capabilities of Chester County, emergency services, and healthcare facilities and hospitals.

Furthermore, the threat of a nuclear attack is rare but should not be eliminated. Numerous countries in the world have nuclear warfare capability, and other nations continue to try to obtain that capability. Areas such as cities or buildings that are identified as high-risk areas or target areas would experience the direct effects of the weapon, including blast, radiation, extreme temperatures, wind, and light that is brighter than the sun. Depending on its size, a device could cause total destruction within a 4-mile radius of the blast. Any survivors within a 20-mile radius can expect residual effects including fires, flooding, loss of power, and fuel and water shortages, with addition risk of a release of other hazardous materials that may be in the area. People close to the blast would be killed. As the distance increases, more people will survive; however, people who do survive the initial blast may die due to an increase in exposure to gamma rays.

Because of its location within the Philadelphia metropolitan area, Chester County should expect to receive some exposure from radioactive fallout should a major attack occur. Chester County should also expect to see a surge of people from the Philadelphia metropolitan area seeking safety.

4.3.15.4 Past Occurrence

Chester County has never suffered an international terrorist attack. However, Chester County has experienced domestic terrorism incidents. Nuisance cyber-attacks, viruses, and attempts at phishing are part of daily operations for many information technology departments. Recently, Chester County residents experienced a few instances of Denial of Service attacks, which is a type of cyber-attack in which the perpetrator attempts to overwhelm an online service and render it unstable. These attacks occurred throughout the southeastern Pennsylvania region. No major successful attacks against large systems or computer networks have occurred that caused an impact to the community (Chester County 2015).

From 2010 to 2013, the county has had a total of 35 criminal homicides, 731 robberies, and 4,403 assaults (Chester County 2015). Chester County is rural in nature and for most of its history, residents have not experienced any major civil disorders. Most of the incidents that have happened are localized in an urban area and short lived. Table 4.3.15-1 lists civil disorders that have happened in the county between 2014-2019.

Table 4.3.15-1. Terrorism Incidents/Suspicious Activity in Chester County from 2014-2019

Date of Event	Event Type	Location	Description of Incident
March 14, 2014	Terrorist Activity	North Coventry Township	Explosive discovered
April 4, 2014	Terrorist Activity	West Chester Borough	Bomb threat
April 15, 2014	Terrorist Activity	Westtown Township	Bomb threat
April 15, 2014	Terrorist Activity	Chester County	Bomb threat at a school



Date of Event	Event Type	Location	Description of Incident
May 30, 2014	Terrorist Activity	New Garden Township	Suspicious Conditions
June 28, 2014	Terrorist Activity	Various municipalities	A series of bomb threats at CVSs in East Goshen Township, East Bradford Township, Thornury Township, Birmingham Township, Upper Uwchlan Township, and Uwchlan Township.
June 28, 2014	Terrorist Activity	Caln Township	Bomb threat at Hospital
September 11, 2014	Terrorist Activity	Chester County	KMS bomb threat
September 18, 2014	Terrorist Activity	Phoenixville Borough	Bomb threat to residence
September 19, 2014	Terrorist Activity	Uwchlan Township	Suspicious conditions
October 10, 2014	Terrorist Activity	Tredyffrin Township	Suspicious activity at PECO facility
October 17, 2014	Terrorist Activity	Kennett Township	Bomb threat
October 22, 2014	Terrorist Activity	Chester County	Bomb threat
October 23, 2014	Terrorist Activity	Upper Uwchlan Township	Bomb/explosives found
October 29, 2014	Terrorist Activity	New Garden Township	Found ammunition
November 10, 2014	Terrorist Activity	Chester County	Avon Grove High School bomb threat
November 29, 2014	Terrorist Activity	West Brandywine Township	Bomb threat
January 23, 2015	Civil Disorder	West Goshen Township	Officer injury
February 14, 2015	Terrorist Activity	Chester County	Explosive found in a residence
March 17, 2015	Terrorist Activity	Westtown Township	Bomb threat
March 23, 2015	Terrorist Activity	Parkeburg Borough	Barricaded subject
July 4, 2015	Terrorist Activity	Chester County	Poisoning
September 24, 2015	Terrorist Activity	Chester County	Bomb threat
September 25, 2015	Terrorist Activity	Willistown Township	Bomb threat
October 5, 2015	Terrorist Activity	Tredyffrin Township	Suspicious conditions and suspicious package
October 19, 2015	Terrorist Activity	West Whiteland Township	Bomb threat
November 2, 2015	Terrorist Activity	Oxford Borough	Bomb threat
November 4, 2015	Terrorist Activity	New Garden Township	Bomb threat
December 18, 2015	Terrorist Activity	Oxford Borough	School bomb threat
December 21, 2015	Terrorist Activity	East Marlborough Township	School bomb threat
December 21, 2015	Terrorist Activity	Caln Township	Hospital bomb threat
December 22, 2015	Terrorist Activity	Phoenixville Borough	School bomb threat



Date of Event	Event Type	Location	Description of Incident
January 11, 2016	Terrorist Activity	Oxford Borough	School bomb threat
January 21, 2016	Terrorist Activity	East Marlborough Township	School bomb threat
January 21, 2016	Terrorist Activity	Penn Township	Suspicious package at school
March 31, 2016	Terrorist Activity	Uwchlan Township	Suspicious package found
May 4, 2016	Terrorist Activity	Oxford Borough	School bomb threat
May 12, 2016	Terrorist Activity	Phoenixville Borough	School incident
May 23, 2016	Terrorist Activity	West Goshen Township	Bomb threat
October 18, 2016	Terrorist Activity	Oxford Borough	Terrorist activity
November 24, 2016	Terrorist Activity	West Whiteland Township	Terrorist activity
December 16, 2016	Terrorist Activity	East Marlborough Township	Terrorist activity
March 14, 2017	Terrorist Activity	Coatesville City	Bomb threat
March 26, 2017	Civil Disorder	Pocopson Township	Prison disturbance
March 28, 2017	Terrorist Activity	West Goshen Township	Bomb threat
April 13, 2017	Terrorist Activity	Upper Uwchlan Township	Possible bottle bomb found
April 30, 2017	Terrorist Activity	West Whiteland Township	Bomb threat
May 13, 2017	Terrorist Activity	Parkesburg Borough	Barricaded subject
May 30, 2017	Terrorist Activity	East Whiteland Township	Threat received
July 10, 2017	Terrorist Activity	West Sadsbury Township	Parkesburg Walmart bomb threat
July 26, 2017	Terrorist Activity	Uwchlan Township	Hostage situation
August 2, 2017	Civil Disorder	Downingtown Borough	Frogs invade Downingtown
August 31, 2017	Terrorist Activity	Uwchlan Township	Bomb found
November 1, 2017	Terrorist Activity	West Goshen Township	Bomb threat
December 7, 2017	Terrorist Activity	West Chester Borough	Bomb threat
December 19, 2017	Terrorist Activity	West Goshen Township	Suspicious package
February 28, 2018	Terrorist Activity	Caln Township	School lock-down
April 15, 2018	Terrorist Activity	West Whiteland Township	Walmart bomb threat
June 9, 2018	Terrorist Activity	Caln Township	Bomb threat
August 12, 2018	Terrorist Activity	Parkesburg Borough	ERT Team Activation
August 16, 2018	Terrorist Activity	Sadsbury Township	Bomb threat



Date of Event	Event Type	Location	Description of Incident
September 6, 2018	Terrorist Activity	Willistown Township	Possible explosive found
October 9, 2018	Terrorist Activity	West Caln Township	Explosives discovered
October 13, 2018	Civil Disorder	Lower Oxford Township	Large fight
November 9, 2018	Civil Disorder	Lower Oxford Township	Large fight at Lincoln University
November 27, 2018	Terrorist Activity	Penn Township	Bomb threat
December 13, 2018	Terrorist Activity	Various municipalities	Bomb threats in Willistown Township, West Goshen Township, Uwchlan Township, Tredyffrin Township, Kennett Township, Honey Brook Borough, and Birmingham Township
February 15, 2019	Terrorist Activity	Chester County	Chester County Cyber Security Event

Source: Chester County DES

4.3.15.5 Future Occurrence

Based on historical events, Chester County can expect to experience several terrorist threats or suspicious activities each year; however, few will result in an actual terrorist incident. Previous events in Chester County have not resulted in significant terrorist attacks; however, the severity of a future incident cannot be predicted with a sufficient level of certainty. Based on the recent incident events, the future occurrence of terrorism in Chester County can be considered *highly likely* as defined by the Risk Factor Methodology probability criteria (discussed in Section 4.4).

4.3.15.6 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed or vulnerable in the area identified. The following sections discuss the potential impact of the terrorism hazard on Chester County, including:

- Impact on (1) life, health, and safety; (2) general building stock and critical facilities; and (3) the economy
- Future growth and development
- Effect of climate change on vulnerability
- Additional data and next steps

Impact on Life, Health, and Safety; General Building Stock and Critical Facilities, and the Economy

The probability of Chester County becoming a terrorist target should remain relatively low; however, because of its proximity to other more vulnerable areas, its vulnerability and potential for secondary impacts is increased. Chester County may experience some serious issues caused by an influx of people from the larger metropolitan areas to the east in situations of terrorism and/or nuclear threats to these areas. This influx of population in these critical situations would stress the facilities of Chester County, its municipalities, and first responders. First responders' safety may be at risk during on-scene operations, and there would be a higher than normal call volume/demand. First Responders may have to perform additional duties such as traffic control and responding to traffic incidents.

Because the probability of terrorism occurring cannot be quantified in the same way as that of many natural hazards, it is not possible to assess vulnerability in terms of likelihood of occurrence. Instead, vulnerability is assessed in terms of specific assets. By identifying potentially at-risk terrorist targets in a community, planning efforts can be put in place to reduce the risk of attack. All communities in Chester County are vulnerable on



some level, directly or indirectly, to a terrorist attack. However, communities where the previously mentioned potential targets are located should be considered more vulnerable. Site-specific assessments should be based on the relative importance of a particular site to the surrounding community or population. Assessment questions to consider when assessing inherent and tactical vulnerabilities to specific Chester County assets are listed below:

- Inherent vulnerability:
 - Visibility – How aware is the public of the existence of the facility?
 - Utility – How valuable might the place be in meeting the objectives of a potential terrorist?
 - Accessibility – How accessible is the place to the public?
 - Asset mobility – Is the asset’s location fixed or mobile?
 - Presence of hazardous materials – Are flammable, explosive, biological, chemical, and/or radiological materials present on-site? If so, are they well secured?
 - Potential for collateral damage – What are the potential consequences for the surrounding area if the asset is attacked or damaged?
 - Occupancy – What is the potential for mass casualties based on the maximum number of individuals on-site at a given time?

- Tactical vulnerability:
 - Site Perimeter*
 - Site planning and Landscape Design – Is the facility designed with security in mind—both site-specific and with regard to adjacent land uses?
 - Parking Security – Are vehicle access and parking managed in a way that separates vehicles and structures?
 - Building Envelope*
 - Structural Engineering – Is the building’s envelope designed to be blast-resistant? Does it provide collective protection against chemical, biological, and radiological contaminants?
 - Facility Interior*
 - Architectural and Interior Space Planning – Does security screening cover all public and private areas?
 - Mechanical Engineering – Are utilities and heating, ventilation, and air conditioning (HVAC) systems protected and/or backed up with redundant systems?
 - Electrical Engineering – Are emergency power and telecommunications available? Are alarm systems operational? Is lighting sufficient?
 - Fire Protection Engineering – Are the building’s water supply and fire suppression systems adequate, code-compliant, and protected? Are on-site personnel trained appropriately? Are local first responders aware of the nature of the operations at the facility?
 - Electronic and Organized Security – Are systems and personnel in place to monitor and protect the facility?

To reduce their vulnerability to terrorism hazards, Chester County belongs to the Southeastern Pennsylvania (SEPA) Regional Task Force (RTF), a group of five counties that collaborate to prevent, protect against, prepare for, respond to, recover from, and mitigate against terrorism and other hazards on a regional level. Like the other regional task forces in Pennsylvania, SEPA-RTF is funded by the Pennsylvania Emergency Management Agency (PEMA) using DHS’s Homeland Security Grant Program’s State Homeland Security Program (SHSP). The counties of SEPA-RTF, including Chester County, use this funding to conduct emergency planning, training, and exercise activities, and to purchase equipment to reduce the region’s vulnerability to terrorism.



Impact on the Environment

The impacts of terrorism can vary in severity from nominal to catastrophic and are contingent upon the method of the attack, the volume of force applied, and the population density of the attack site. A terrorist event may cause significant loss of life for humans and animals as well as economic losses. Additionally, the impact of the attack itself may be exacerbated by the fact that human services agencies like community support programs, health and medical services, public assistance programs, and social services organizations can experience physical damage to facilities, supplies, and equipment as well as disruption of emergency communications. Ancillary effects of terrorism may also occur, such as urban fires or, in the case of a radiological device, radioactive fallout that can multiply the impact of a terrorist event (PEMA 2018).

Future Growth and Development

Areas targeted for potential future growth and development in the next 5 to 10 years have been identified across Chester County (further discussed in Section 2.4 of this HMP). Any areas of growth could be potentially impacted by the terrorism hazard because Chester County is exposed and potentially vulnerable.

Effects of Climate Change on Vulnerability

Because terrorism is a human-caused hazard, climate change is not anticipated to affected vulnerability associated with terrorism.

Additional Data and Next Steps

Any additional information regarding localized concerns and past impacts will be collected and analyzed for the HMP update. These data will be developed to support future revisions to the plan.