



**Risk Mitigation Consulting Inc.**

*Intelligence and Analysis Division*

## OPEN SOURCE UPDATE

October 2018

### **INTENT**

This open source periodical is designed to provide an overview of relevant, publicly available information on threat and hazard events and analysis of potential impacts to the interests of the United States, both at home and abroad. This product is not intended to be a comprehensive overview of all threat and hazard news and inclusion in this product does not constitute a confirmation of credibility nor precedence by RMC.



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## Threats

### Hoax CBRN Incidents at White House, Pentagon, Senator's Office – *CBRN*

**Excerpt:** Packages with suspicious substances sent to the Pentagon, White House and Sen. Ted Cruz's office in Texas this week were part of a coordinated effort by a former Navy sailor, officials told Fox News.

Investigators said one of the envelopes, addressed to either Defense Secretary James Mattis or the Navy's top officer, Adm. John Richardson, contained a return address leading them to believe it came from the sailor, whose name has not been disclosed.

A Pentagon spokesperson told Fox News on Wednesday that at least two of the envelopes contained castor seeds -- the substance from which the poison ricin comes from.

Officials say a tip from the White House led the Pentagon to discover the two packages sent to the Pentagon -- and now both are in the hands of the FBI for further testing.

**Analyst Comment:** The three incidents are believed to be connected, with a former member of the U.S. Navy identified as the prime suspect. The incident at the White House was described by the Secret Service as a "suspicious letter," however they declined to elaborate further citing the investigation. Although initial tests at the Pentagon tested positive for ricin, further testing revealed that castor beans (a precursor to ricin) were present. Finally, the incident at Senator Cruz's office was quickly determined to be a hoax by emergency responders.

Per the CDC, ricin is one of the most toxic biological agents known, and is classified as a Category B Bioterrorism Agent and a Schedule Number 1 Chemical Warfare Agent. Ricin can be produced from castor beans, and is a byproduct of the production of castor oil. However, it is worth noting that ricin has been utilized in a number of targeted attack attempts utilizing parcel delivery as a vector, particularly incidents targeting the U.S. government. In 2003, ricin was detected in mail facilities at the White House and a Senator's office, with no casualties reported. In April and May 2013, two separate perpetrators sent letters laced with ricin to a number of high-profile political figures, to include President Obama and Mayor Bloomberg of New York City.

However, there is also an extensive history of hoax CBRN attacks in the U.S. and abroad that are intended to instill fear in the intended target and others. In a number of these incidents, some form of inert white powder (such as cornstarch), is typically placed in an envelope (sometimes containing a threatening letter or similar correspondence) and is sent to one or multiple targets. The white powder can be easily mistaken by the victim for a chemical/biological agent (such as anthrax). Thousands of these incidents have reportedly occurred since the 2001 anthrax attacks, although the practice of hoax anthrax attacks dates back to at least the 1990s.



Source: <https://www.foxnews.com/us/packages-sent-to-pentagon-that-had-suspicious-substance-are-believed-to-have-been-mailed-by-a-former-navy-sailor-officials-say>

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## Multiple Workplace Shootings – Active Shooter/Active Assailant

**Excerpt:** On Wednesday morning [18 September 2018], a 43-year-old man showed up at the software company where he works outside Madison, Wisconsin, and opened fire. Four people at WTS Paradigm were injured, three seriously. The gunman was shot by police and later died at a hospital.

Then Thursday morning, in Aberdeen, Maryland, outside Baltimore a 26-year-old woman attacked co-workers at a Rite Aid distribution center, killing three people before turning the gun on herself. She later died at a hospital. Three others were injured in the rampage.

**Analyst Comment:** Both shooters in Wisconsin and Maryland had been diagnosed with mental illness in the past and both targeted their workplace. No official motive has been found in either situation. In Maryland, friends of the shooter said she was increasingly agitated over the past few weeks and they were concerned for her well-being. Sheriff Jeffrey Gahler said the suspect used a handgun in the shooting and had several magazines on her. She used a 9mm Glock pistol that was registered and owned by her and had several magazines on her.

The Wisconsin gunman had "contact" with police in South Dakota in 2004 that involved a mental health issue, Middleton Police Chief Chuck Foulke said Friday. His concealed-carry permit had been revoked and he was unable to legally purchase a firearm, said Foulke, who cautioned against using Tong's illness as an excuse for the shooting. The shooter used a 9mm semiautomatic pistol. Inside his car, investigators found a black plastic gun case, five 30 round 9mm magazines, 150 unfired 9mm cartridges and a black magazine holder,

Also occurring on the 18<sup>th</sup>, a gunman opened fire outside a busy courthouse near Pittsburgh, shooting four people before a police officer shot and killed him. The shooting happened outside a courtroom at the Masontown Borough Municipal Center, where the suspect was scheduled for a hearing in a domestic violence case.

Active shooter scenarios can occur anywhere, but it is important to be aware of the potential threat from disgruntled employees, both previously and currently employed. A long-term NYPD analysis has shown that active shooters are often members of the communities they target. The majority of active shooter attacks in the active shooter data set occurred when the perpetrator had either a professional or academic relationship with at least one of the victims. Of the 87 attacks that involved professional relationships, fewer than 33% were perpetrated by individuals who were no longer employed by the organization at the time of the attack, implying that the threat from active shooter attacks is not limited to downsized employees. In many cases, active shooter attacks resulted from disagreements among current employees of the organization, a potential cause for these two incidents.



Source: <https://www.ajc.com/news/national/there-have-been-workplace-shootings-hours/CK4N1R8Uuo60hXfGOi6CCK/>

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## U.S. Army Reservist Accused of Spying for China – *Foreign Intelligence Entities*

**Excerpt:** A United States Army reservist from China was arrested Tuesday on allegations of secretly providing information about American defense contractor employees to a Chinese intelligence officer, law enforcement officials said. The Chinese government was trying to recruit them as informants, they said.

The suspect, Ji Chaoqun, 27, was arrested in Chicago, where he attended graduate school before joining the Army Reserves, and charged with violating the Foreign Agents Registration Act, or FARA.

Mr. Ji's handler at a regional arm of China's Ministry of State Security, which collects domestic and foreign intelligence, was also arrested, according to an F.B.I. affidavit. The officer, identified only as Intelligence Officer A, was arrested sometime before April. It is not clear where he was arrested or by whom.

An F.B.I. arrest of a Chinese intelligence officer would send a strong signal to China that American counterintelligence agents are keenly focused on its activities in the United States. Such an arrest would also be an embarrassment to Chinese intelligence, revealing sloppy tradecraft and exposing operations in the United States.

**Analyst Comment:** Ji's recent arrest highlights the persistent foreign intelligence threat from hostile nations to include China, as well as the potential insider threat from individuals with access to sensitive information. Additionally, individuals may be targeted for recruitment as a result of their access to other individuals (such as colleagues, friends, or family members who have access to sensitive information). In this particular case, a Chinese intelligence officer reportedly recruited Ji as a spy while posing as a professor. The intelligence officer reportedly tasked Ji with collecting information regarding eight individuals, including seven who worked for defense contractors. After collecting the requested information, Ji sent it to his Chinese handler in an email purporting to be questions about a midterm exam. While it is not clear yet whether any sensitive information was compromised, the discovery of the spy ring illustrates some of the tactics, techniques, and procedures used by foreign intelligence entities.

Source: <https://www.nytimes.com/2018/09/25/us/politics/ji-chaoqun-china-spy.html>

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## Facebook Data Breach Affects 50 Million Users – *Section*

**Excerpt:** Facebook's privacy problems severely escalated Friday when the social network disclosed that an unprecedented security issue, discovered September 25, impacted almost 50 million user accounts. Unlike the Cambridge Analytica scandal, in which a third-party company



erroneously accessed data that a then-legitimate quiz app had siphoned up, this vulnerability allowed attackers to directly take over user accounts.

The bugs that enabled the attack have since been patched, according to Facebook. The company says that the attackers could see everything in a victim's profile, although it's still unclear if that includes private messages or if any of that data was misused. As part of that fix, Facebook automatically logged out 90 million Facebook users from their accounts Friday morning, accounting both for the 50 million that Facebook knows were affected, and an additional 40 million that potentially could have been. Later Friday, Facebook also confirmed that third-party sites that those users logged into with their Facebook accounts could also be affected.

**Analyst Comment:** Although Facebook has not identified any hackers in the latest breach, the social media company is cooperating with U.S. federal authorities in an investigation. The breach involved the exploitation of a vulnerability in Facebook's "view as" feature, which allows users to "preview" their account's page as it would appear to a specified individual (for example, a teenager previewing what their page may look like to a parent or grandparent after tinkering with privacy settings). This vulnerability was exploited in tandem with another vulnerability related to "access tokens," which allow users to stay logged-in when the app is closed. As a result, attackers were able to take control of users' accounts.

The breach is known to have affected approximately 50 million users, and could have potentially affected 40 million others. Additionally, while Facebook has stated that attackers could see "everything in a victim's profile," it is too early to determine whether that includes private messages, which could contain far more personally-sensitive information than the information which users choose to share publicly on the site. Users of social media sites should be selective when sharing information on such sites (both publicly, and in ostensibly private interfaces such as private messaging) due to an extensive history of cybersecurity breaches.

Source: <https://www.wired.com/story/facebook-security-breach-50-million-accounts/>

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## Hazards

### Natural Gas Explosions in Massachusetts – *Accidental Event*

**Excerpt:** A natural gas leak fiasco sparked fires in at least 39 homes throughout northeast Massachusetts communities, killing a man, causing explosions, and creating widespread "Armageddon," police and local officials said Thursday.

The fires, which erupted after suspected gas leaks around Lawrence, Massachusetts, are still unexplained. Authorities say one of the homes that exploded sent a chimney hurtling through the air and onto a car, fatally injuring the driver.

State Police say at least 39 fires erupted Thursday afternoon in the communities of Lawrence, Andover and North Andover. It's unclear how many of the fires were in homes or other locations. The Associated Press reported that all of the fires were in homes.

The Massachusetts Emergency Management Agency blamed the fires on gas lines that had become over-pressurized, but officials who responded to the area were still investigating the cause. State officials said Columbia Gas was working to ease pressure on gas lines following the fires.

Columbia had announced earlier Thursday that it would be upgrading gas lines in neighborhoods across the state, including the area where the explosions happened. It was not clear whether work was happening there Thursday, and a spokeswoman did not immediately return calls.

**Analyst Comment:** The series of gas explosions killed a teenager, injured about 25 others, damaged dozens of homes and forced the evacuation of thousands in Lawrence, North Andover and Andover. Massachusetts Gov. Charlie Baker declared a state of emergency in all three counties. It is believed that the cause of the explosion was too much pressure surging through a natural gas pipeline. It was reported that the pressure in the natural gas pipelines under the three counties had spiked to 12 times their normal level. An investigation is underway.

The area affected is currently in the midst of a 20-year plan to upgrade its pipelines street-by-street and neighborhood-by-neighborhood across the seven states. The approximately 1-inch diameter plastic mainlines, and customer-service lines will replace outdated cast-iron and steel pipes, some of which are a century old. Prior to the explosion, a subcontractor had capped a pressure line seven blocks from the pressure sensor equipment on the decommissioned line.

There have been natural gas explosions before within the U.S. A buildup of natural gas triggered an explosion and fire that killed seven people in apartments in Silver Spring, Maryland, in 2016. In 2014, a gas explosion in New York City's East Harlem neighborhood killed eight people and injured about 50. A gas leak had been reported before that blast. A 2011 natural gas explosion killed five people in Allentown, Pennsylvania. In September 2010, a Pacific Gas and Electric gas pipeline exploded in San Bruno, California, killing eight people and destroying 38 homes.



Source: <https://www.usatoday.com/story/news/2018/09/13/gas-explosions-massachusetts-leave-homes-fire/1295706002/>

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## Influenza Season Begins – *Biological Hazard*

**Excerpt:** Flu killed and hospitalized more people in the United States last winter than any seasonal influenza in decades, according to new data released Thursday. It's the most detailed picture of the devastating reach of the respiratory virus, which sickened millions of people as overwhelmed hospitals pitched tents to treat patients.

As a new flu season gets underway, public health officials say last year's toll underscores the importance of getting a flu vaccine each year. The shot can prevent infections and reduce the severity of complications from the disease.

Influenza killed about 80,000 people in the 2017-2018 season, according to figures released by the Centers for Disease Control and Prevention. The previous high for a regular flu season, based on analyses dating back more than three decades, was 56,000 deaths.

Last season, more than 900,000 people were hospitalized, double the number of many regular seasons.

**Analyst Comment:** Despite last year's dreadful season, overall vaccination coverage remained flat; as in previous years, less than half of the U.S. population was vaccinated. But most concerning to officials was a drop in coverage among the youngest children — those under 5 — who are at highest risk for serious flu complications.

As flu season begins, several instances have been reported of passengers on airplanes carrying and potentially spreading the flu. Eleven people were treated at a New York City hospital after reports of sick passengers and crew on an Emirates flight from Dubai. The next day, a total of 12 passengers on two flights into Philadelphia International Airport showed flu-like symptoms. CDC spokesman Benjamin Haynes said three of the passengers from Dubai tested positive for flu and/or a separate respiratory illnesses and one person in Philadelphia tested positive for flu.

The common thread were influenza A cases among Muslim pilgrims returning from the Hajj in Mecca, he said. The hajj, an annual pilgrimage for practicing Muslims, this year reportedly drew more than 2 million people to Mecca, Saudi Arabia. As with any event that involves large crowds in confined spaces, outbreaks of communicable diseases such as the flu are common at the hajj — with this year as no exception.

Source: [https://www.washingtonpost.com/national/health-science/last-years-flu-broke-records-for-deaths-and-illnesses-new-cdc-numbers-show/2018/09/26/97cb43fc-c0ed-11e8-90c9-23f963eea204\\_story.html?utm\\_term=.61574fe1a8b7](https://www.washingtonpost.com/national/health-science/last-years-flu-broke-records-for-deaths-and-illnesses-new-cdc-numbers-show/2018/09/26/97cb43fc-c0ed-11e8-90c9-23f963eea204_story.html?utm_term=.61574fe1a8b7)

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## In the Spotlight

'In the Spotlight' is designed to highlight a threat or hazard event, or associated events, that have been observed over recent history, and provide contextual analysis and trend based analysis on these events.

### Hurricane Florence Flooding

As of 11 September, Hurricane Florence was a Category 4 storm tracking toward the East Coast of the U.S. Florence had rapidly intensified from Category 1 to Category 4 in the days prior, although the storm was expected to make landfall as a Category 3 somewhere in the Carolinas. Additionally, several experts assessed that Florence could "stall" off the coast and move more slowly, dumping excessive amounts of rainfall around the region. Hurricane Florence ultimately made landfall as a Category 1 hurricane on 14 September, before weakening to Tropical Storm-strength. However, although Florence brought winds upwards of 90mph, the storm did stall, increasing the threat of heavy rain, flooding, and storm surge.

Florence lingered over the eastern seaboard for several days, resulting in record tropical cyclone-related rainfall in parts of North and South Carolina, with many areas receiving between 1-3ft of rain. Rivers crested to record levels in the Carolinas, with flood stage conditions persisting over two weeks after the storm initially made landfall. Storm surge levels also reached upward of 10ft in some areas. The flooding associated with Florence has resulted in widespread flood damage, and in some cases, loss of life (for example, when flood waters swept away individuals in vehicles). The stalling and heavy flooding experienced during Florence has been compared to Hurricane Harvey, which hit the Houston, TX area in 2017.

Hurricane Florence's flooding also resulted in water contamination due to the presence of facilities storing hazardous waste within the storm's path. Two particular areas of concern are hog farms, as well as coal ash pits. Hog farms generally have "lagoons" which store large quantities of hog manure, which can carry viruses and bacteria. On the other hand, coal ash pits can contain heavy metals and other harmful byproducts of coal burning. These and other hazardous materials can be absorbed into floodwater, which may enter rivers or other waterways, spreading contamination far beyond the original source. While several assessments of this kind of damage are ongoing in North Carolina and other areas, this scenario highlights the secondary and tertiary effects of flooding associated with tropical cyclones.

Furthermore, climate change models indicate the temperature of the sea's surface will likely continue to warm over the coming decades. The warmer the sea's surface, the greater the atmospheric moisture content. Warmer air can also carry more moisture, which manifests as rainfall within a storm, tropical cyclone, or hurricane. A tropical cyclone/storm/hurricane formed over these warm waters will likely carry a larger amount of rain within, rapidly intensifying the storm and producing greater rainfall rates. Modeling studies from The National Oceanic and Atmospheric Administration have projected an increase of 10-15% for rainfall rates averaged within about 100 km of the storm for a 2C° global warming scenario.



The extreme rainfall brought by recent hurricanes such as Harvey and Florence may be seen in more hurricanes as climate change continues. Still, the connection between tropical cyclone/storm/hurricanes ‘stalling’ and global warming remains uncertain.

Sources: <https://www.usatoday.com/story/news/nation/2018/09/11/hurricane-florence-category-5-north-carolina-south-carolina/1264377002/>

<https://www.cbsnews.com/news/hurricane-florence-could-stall-offshore-experts-fear-doing-more-damage/>

<https://www.npr.org/2018/09/14/647767424/hurricane-florence-is-making-landfall-in-n-c-as-category-1-storm-grinds-ashore>

<https://www.usatoday.com/story/news/nation/2018/09/14/hurricane-florence-dangerous-storm-surge-continue-after-landfall/1301806002/>

<https://www.cbsnews.com/live-news/hurricane-florence-aftermath-weather-flooding-power-outage-death-toll-fema-latest-forecast-live/>

<https://psmag.com/environment/hurricane-florence-has-flooded-pits-of-toxic-waste-in-north-carolina>

<https://www.gfdl.noaa.gov/global-warming-and-hurricanes/>

<https://insideclimatenews.org/news/13092018/hurricane-florence-climate-change-rainfall-storm-surge-risk-attribution-forecast>

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