United States Secret Service
NATIONAL THREAT ASSESSMENT CENTER
MASS ATTACKS IN PUBLIC SPACES - 2019

U.S. Department of Homeland Security
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U.S. Department of Homeland Security

August 2020

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The U.S. Secret Service's National Threat Assessment Center (NTAC) is an integral resource for the agency’s no-fail mission to safeguard this nation’s highest elected officials. NTAC’s continuous efforts to ensure the informed development of prevention strategies through research has also enabled outreach programs and publications that assist our protective and public safety partners in their missions to prevent targeted violence in communities across the United States.

This latest study, titled Mass Attacks in Public Spaces – 2019, examines 34 targeted attacks that occurred in public or semi-public spaces (e.g., schools, places of business, houses of worship, open spaces) from January through December 2019. This report is the agency’s third in a series of annual reports that have examined mass attacks in the United States, during which three or more individuals were harmed. Since this project began in 2017, there have been 89 mass attacks involving 92 attackers that occurred in various locations throughout the nation. Understanding the key factors in preventing these attacks is even more critical this year with the COVID-19 pandemic causing additional stressors in the lives of our citizens.

To inform prevention efforts, NTAC researchers studied the tactics, backgrounds, and pre-attack behaviors of the perpetrators to identify and affirm recommended best practices in threat assessment and prevention. Implications include the identification of potential threats and individuals exhibiting concerning behavior. Strategic development of interventions and risk mitigation efforts tailored to those specific individuals are also a core aspect of this study. We encourage our public safety partners to review the information and apply it to their own best practices for providing a safe environment for communities across the country.

Law enforcement officers, mental health professionals, workplace managers, school personnel, faith-based leaders, and many others all play a significant role in the multidisciplinary team approach that is the foundation of the field of threat assessment. The Secret Service is committed to facilitating information-sharing across all platforms of targeted violence prevention and public safety. Our longstanding collaborative partnerships with these valuable members of the community serve to enhance public safety, and strengthen our mandate to keep our nation’s leaders safe.

James M. Murray
Director

The U.S. Secret Service’s National Threat Assessment Center (NTAC) was created in 1998 to provide guidance on threat assessment both within the U.S. Secret Service and to others with criminal justice and public safety responsibilities. Through the Presidential Threat Protection Act of 2000, Congress formally authorized NTAC to conduct research on threat assessment and various types of targeted violence; provide training on threat assessment and targeted violence; facilitate information-sharing among agencies with protective and/or public safety responsibilities; provide case consultation on individual threat assessment investigations and for agencies building threat assessment units; and develop programs to promote the standardization of federal, state, and local threat assessment processes and investigations.
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INTRODUCTION

While our nation responds to the challenges of the COVID-19 pandemic, we must also contend with the tragic aftermath of mass violence that has impacted our communities. Acts of targeted violence affect cities and towns of all sizes, and impact individuals in the places where we work, learn, and otherwise carry out our daily activities. The response to this problem, like many others, requires a community-oriented approach. Although law enforcement agencies plays a central role in preventing targeted violence, they must be joined by government officials and policy makers, mental health providers, employers, schools, houses of worship, and the general public, all of whom have a role to play in keeping our communities safe.

Since its founding in 1998, the U.S. Secret Service National Threat Assessment Center (NTAC) has supported our federal, state, and local partners in the shared mission of violence prevention. NTAC’s research, which informs the U.S. Secret Service’s approach to countering targeted violence, called threat assessment, has been made available not only to public safety professionals, but also the general public. To enhance the impact of these research findings, NTAC has delivered more than 2,000 trainings to over 180,000 public safety professionals. In addition to law enforcement, these events benefit mental health workers, school officials, and other community stakeholders. NTAC has further offered direct consultation to law enforcement agencies and other partners on how to establish threat assessment programs, tailored to the needs of each community. These programs are designed to prevent targeted violence using the U.S. Secret Service’s behavior-based methodologies, which involve proactively identifying and intervening with individuals who pose a risk of violence.

What is Threat Assessment?

In the 1990s, the U.S. Secret Service pioneered the field of threat assessment by conducting research on the targeting of public officials and public figures. The agency’s threat assessment model offers law enforcement and others with public safety responsibilities a systematic investigative approach to identify individuals who exhibit threatening or concerning behavior; gather information to assess whether they pose a risk of harm; and identify the appropriate interventions, resources, and supports to manage that risk.
This report, NTAC’s third analysis of mass attacks that were carried out in public or semi-public spaces, builds upon *Mass Attacks in Public Spaces – 2017* (MAPS – 2017) and *Mass Attacks in Public Spaces – 2018* (MAPS – 2018). This report provides further analysis of the thinking and behavior of mass attackers, as well as operational considerations for our public safety partners. The study examines 34 incidents of mass attacks – in which three or more people, not including the attacker(s), were harmed – that were carried out by 37 attackers in public spaces across the United States between January and December 2019. In total, 108 people were killed and an additional 178 people were injured.

The findings from this report offer *critical information that can aid in preventing these types of tragedies*, and assist law enforcement, schools, businesses, and others in the establishment of appropriate systems to recognize the warning signs and intervene appropriately. Key findings from this analysis include:

- The attacks impacted a variety of locations, including *businesses/workplaces, schools, houses of worship, military bases, open spaces, residential complexes, and a commercial bus service*.
- Most of the attackers used firearms, and many of those firearms were *possessed illegally* at the time of the attack.
- Many attackers had experienced *unemployment, substance use or abuse, mental health symptoms, or recent stressful events*.
- Attackers often had a history of *prior criminal charges or arrests* and *domestic violence*.
- Most of the attackers had exhibited behavior that *elicited concern* in family members, friends, neighbors, classmates, co-workers, and others, and in many cases, those individuals *feared for the safety of themselves or others*.

These violent attacks impacted a variety of community sectors and were perpetrated by individuals from different backgrounds and with varying motives. However, similar to previous Secret Service research, common themes were observed in the behaviors and situational factors of the perpetrators, including access to weapons, criminal history, mental health symptoms, threatening or concerning behavior, and stressors in various life domains. The presence of these diverse themes shows the need for a multidisciplinary threat assessment approach to violence prevention. Community professionals, with the proper training to recognize the warning signs, can intervene and redirect troubling behavior before violence occurs. The Secret Service threat assessment approach encourages assessing each situation as it arises, and applying the appropriate interventions – which may include the involvement of family members and friends, social services, mental health professionals, faith-based organizations, or law enforcement when appropriate. This report is intended to inform those efforts, as we strive together to keep our communities safe.
OVERVIEW OF THE ATTACKS

Researchers identified 34 incidents in which three or more persons, not including the perpetrator, were harmed during a targeted attack in a public or semi-public space in the United States between January and December 2019. Three of these attacks were perpetrated by pairs of attackers. In this section, percentages are calculated based on the 34 attacks.

WEAPONS

Most of the attacks (n = 24, 71%) involved the use of one or more firearms, which included rifles, handguns, and a shotgun. Other weapons used included bladed weapons (n = 6, 18%), vehicles (n = 4, 12%), and blunt objects (n = 3, 9%). Three attacks involved a combination of weapons, including a firearm and a knife, a firearm and a vehicle, and a knife and glass bottles. Several incidents involved the attackers bringing weapons to the site (e.g., additional firearms, pipe bombs) that were not ultimately used.

[Diagram of Types of Weapons Used]

*Chart totals 37 as 3 attacks used 2 types.

[Diagram of Bladed Weapons and Blunt Objects]

Attacks Involving Firearms

Percentages shown are out of 24 incidents involving firearms

Seventeen (71%) attacks involved only handguns, six (25%) involved only long guns, and one (4%) involved both types. In four attacks, multiple firearms were used.

In at least ten (42%) of the attacks involving firearms, one or more of the attackers possessed the firearm illegally at the time of the incident. In two incidents, an attacker was a minor in possession of a handgun, which is prohibited under federal law. In the remaining incidents, the attackers had prior felony convictions, had stolen the firearm, had not obtained a valid weapons license, had a previous involuntary commitment to a mental health facility, or had another factor present that prohibited them from purchasing or possessing a firearm based on federal and/or state laws.
The 34 attacks occurred in 21 states. Of these, 59% \((n = 20)\) took place at public sites that are freely accessible to the general population, including sidewalks, restaurants, retail stores, and a gas station. The remaining 41% \((n = 14)\) were carried out at semi-public sites, including workplaces, schools, houses of worship, and military bases. The locations of attacks in 2019, both public and semi-public, represent a variety of key sectors in our communities, including education, business, government, and religion.

The 34 incidents impacted 36 public sites, as two attacks were carried out at multiple locations. The type of locations most frequently impacted were places of business/service \((n = 15, 44\%)\) and open spaces \((n = 11, 32\%)\).

The remaining locations included three educational institutions \((9\%)\), including a high school, a K-12 public charter school, and a university; two houses of worship \((6\%)\); two military bases \((6\%)\); two residential complexes \((6\%)\); and one bus \((3\%)\).
TIMING

The attacks occurred on each day of the week and during every month of the year. Two-thirds of the attacks ($n = 22, 65\%$) took place during the day and early evening, between the hours of 7:00 a.m. and 7:00 p.m.

Consistent with previous studies on targeted violence, the attacks in this study were frequently short in duration. For example, one attack targeting a bar district lasted only 32 seconds, yet still resulted in 9 individuals killed and 20 more injured. Just under half ($n = 16, 47\%$) of the attacks in 2019 ended within five minutes from when the incident was initiated. However, over one-third ($n = 13, 38\%$) of the attacks in 2019 lasted 15 minutes or more, a larger percentage than those in 2017 and 2018. These incidents included attackers engaging in standoffs with law enforcement, moving through office buildings, and some who moved between locations by car or on foot.

LONGEST ATTACK: On December 10, 2019, at around 12:21 p.m., a 47-year-old male and a 50-year-old female opened fire on a kosher market, killing three and injuring at least three. By 12:30 p.m., 911 received calls regarding shots fired, and by 12:43 p.m., numerous law enforcement personnel responded to the scene. The ensuing gun battle lasted until 3:25 p.m., when police breached the storefront using an armored vehicle. In the end, both attackers were killed. The attack lasted 3 hours and 26 minutes.
TARGETING

The attacks resulted in harm to 286 people (108 killed and 178 injured). In three-quarters of the incidents ($n = 26, 76\%$), the attackers directed harm only at random persons. In the remaining one-quarter of the incidents ($n = 8, 24\%$), the attacker appeared to have pre-selected specific targets. In all of the incidents involving specific targets, at least one of the specifically targeted individuals was harmed, in addition to at least one random person. The eight incidents involving specific targets were also all motivated, at least in part, by some type of grievance that was related to a workplace, domestic, or other issue.

On February 21, 2019, a 35-year-old shot and killed his girlfriend near their residence. The attacker then walked approximately half a mile to a gas station/convenience store and opened fire on random people there, killing the co-owner of the store and injuring an employee and a customer. The attacker then returned to the scene of the first shooting, near his home. He threw away his handgun when he saw the police and was arrested just after midnight. Though police called the initial shooting of the girlfriend domestic in nature, they have not released any information to suggest any connection the attacker may have had to the gas station or any of the victims.

RESOLUTION

Almost half of the attacks ($n = 15, 44\%$) ended when the attackers departed the scene on their own. Four attackers called 911 to report their attack and identify themselves as the perpetrator.

Eight attacks (24\%) were brought to an end by law enforcement intervention at the scene, including one incident that was stopped by a private security guard at a school. In five of these incidents, the attackers were killed by law enforcement. The remaining attacks ended when the attacker’s weapon became inoperable ($n = 5, 15\%$), as a result of bystander intervention ($n = 3, 9\%$), or when the attacker committed suicide at the scene ($n = 3, 9\%$). Three additional attackers committed suicide after leaving the scene.$^{11}$
MOTIVES

Motives for violence are often multifaceted. The most common motives identified for mass attacks in 2019 were related to grievances, mental health symptoms, and ideological/racial bias.

Grievances

In nearly one-third of the incidents ($n = 11, 32\%$), attackers were retaliating for perceived wrongs related to specific issues in their lives. These grievances most often related to some type of personal factor ($n = 8, 24\%$), such as an ongoing feud with neighbors, being kicked out of a retail establishment, being teased or bullied, facing an impending eviction, or being angered and frustrated about college debt and job prospects. The remaining attacks were motivated by grievances related to workplace issues ($n = 3, 9\%$) or domestic situations ($n = 1, 3\%)$.

<table>
<thead>
<tr>
<th>COMPONENTS TO MOTIVE*</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grievances</td>
<td>46%</td>
<td>52%</td>
<td>32%</td>
</tr>
<tr>
<td>Personal</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Workplace</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Domestic</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Mental health/psychosis</td>
<td>14%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Ideological/racial bias</td>
<td>21%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>Fame</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Political</td>
<td>4%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Desire to kill</td>
<td>—</td>
<td>—</td>
<td>3%</td>
</tr>
<tr>
<td>Undetermined</td>
<td>14%</td>
<td>22%</td>
<td>32%</td>
</tr>
</tbody>
</table>

* The percentages for each year do not total 100 as some attackers had multiple motives.

On December 19, 2019, a 66-year-old resident entered the administrative office of his assisted living facility and opened fire, killing one and injuring two before returning to his apartment and fatally shooting himself. The attacker had been the subject of complaints for smoking in his apartment, which was prohibited. The complaints resulted in his rent being increased, and he was warned that he could be evicted if the violations continued.

Related to symptoms of mental health or psychosis

In seven incidents (21\%), the attackers’ motives were related to their symptoms of mental illness, including at least three who claimed to have heard voices commanding them to kill, and others who experienced delusional or paranoid beliefs.

On June 17, 2019, a 33-year-old male drove onto the sidewalk and struck a pedestrian, injuring him. He then drove down the street and onto the sidewalk again, this time killing a pregnant woman, her unborn child, and her two-year-old son before crashing into a business, injuring an employee. The attacker attempted to flee but was detained by bystanders until police arrived. The attacker later told police that just prior to the attack, he heard a voice in his head that told him to kill methamphetamine addicts and that the baby's stroller had meth in it.

Ideological/racial bias

Seven incidents (21\%) involved attackers who were motivated to violence by extreme or hateful views. Attackers targeted members of various groups including Jewish, Muslim, Asian, or Hispanic people, as well as police and U.S. soldiers. For three of these incidents, the attackers were also experiencing mental health symptoms that influenced their motives.
On April 23, 2019, during the evening rush hour, a 34-year-old male drove his car through a crowd of pedestrians, injuring eight at an intersection. He was allegedly targeting two people in the crowd, believing they were Muslim. The attacker's car ultimately jumped the curb and hit a tree. He then exited his vehicle, repeatedly said, “I love you Jesus,” and laid facedown until police arrived and arrested him. The attacker had a history of PTSD and psychotic symptoms.

Nine of the attackers were influenced by, or showed interest in, past perpetrators of mass violence. Some attackers documented their admiration of past attackers in their own manifestos or in social media postings, while others spent time consuming information about past attacks. Five of these attackers referenced other attackers from earlier in 2019 prior to committing their own acts of violence. While three of them referenced other incidents contained in this report, the remaining two named a mass attacker who targeted public places outside of the United States. One additional attacker researched a female who was so obsessed with the 1999 Columbine High School shooting that she traveled from Florida to the Columbine High School area in April 2019. She purchased a weapon, but committed suicide prior to initiating an attack.

At least six attackers made statements or engaged in prior behaviors that indicated they did not intend to survive their planned attack. Among these six attackers, four committed suicide after engaging in the attack.
The Attackers

All of the mass attacks previously studied by the U.S. Secret Service - those that occurred in 2017 and 2018 - were carried out by lone attackers. In 2019, however, three attacks were carried out by pairs of attackers.

For the remainder of this report, all percentages are calculated based on the 37 attackers.

Demographics

Consistent with previous Secret Service analyses of mass attacks, nearly all of the attackers from 2019 were born male (n = 34, 92%). There was one female attacker, and two attackers were born female but identified as male at the time of the attacks. The attackers’ ages ranged from 16 to 80, with an average age of 33. Over two-thirds of the attackers (n = 25, 68%) were under the age of 35. More attackers in 2019 were in the 15-24 age range than the previous two years combined.

Youngest: On November 14, 2019, on his 16th birthday, a student opened fire at his high school and fatally shot two students and injured three others before fatally shooting himself. The attacker had struggled with his alcoholic father’s death two years before and was reportedly having recent problems with his girlfriend. In the months and days leading up to the attack, some classmates described the attacker as acting strangely or appearing depressed while others observed him cracking jokes and described him as acting normally.

Oldest: On October 3, 2019, an 80-year-old resident walked into the lobby of his access-controlled senior apartment complex and opened fire, fatally shooting one fellow resident, and injuring another and his former caretaker. About a month prior, the attacker had been turned down when he asked his former caretaker to become his mistress, and he had an ongoing feud with the resident he killed.

According to public information, half of the attackers were White non-Hispanic (n = 19, 51%), 10 attackers (27%) were Black/African American, and 5 attackers (14%) were Hispanic. Two (5%) of the attackers belonged to multiple categories, and the racial identity of one attacker (3%) could not be determined.

Ages of the Attackers, 2017-2019

<table>
<thead>
<tr>
<th>Ages of the Attackers</th>
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<th>2018</th>
<th>2017</th>
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</thead>
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<tr>
<td>15-24</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25-34</td>
<td>6</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>35-44</td>
<td>5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>45-54</td>
<td>3</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>55+</td>
<td>4</td>
<td>5</td>
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Race/Ethnicity

<table>
<thead>
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<th>Race/Ethnicity</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
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<tbody>
<tr>
<td>White non-Hispanic</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Black/African American</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Two or more</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Undetermined</td>
<td>1</td>
<td>1</td>
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</tr>
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**EMPLOYMENT HISTORY**

Nearly one-third of the attackers \( (n = 11, 30\%) \) were known to be employed at the time of the attack, while approximately the same percentage \( (n = 11, 30\%) \) were unemployed. Those employed held a variety of positions, including two military personnel, two fast food employees, a city engineer, a vocal instructor and delivery driver, a chiropractor, a tech support representative, a defense auditor, a handyman, and a manufacturing assemblyman. The employment status of the remaining 13 (35%) attackers could not be determined because of limited publicly available information.

**SUBSTANCE USE**

Nearly half of the attackers \( (n = 17, 46\%) \) had a history of using illicit drugs (e.g., cocaine, methamphetamine, LSD, Ecstasy) or misusing prescription medications (e.g., Xanax, Adderall, Vyvanse). For two-fifths of the attackers \( (n = 15, 41\%) \), the use of these substances and/or alcohol and marijuana may have reached the level of abuse causing negative consequences in their lives, including criminal charges, academic failures, court-ordered treatment, and eviction. One of the attackers later claimed to have no memory of his attack, alleging he had been drinking heavily at the time and had blacked out. In this sample of attackers, a significant relationship was observed between substance abuse and domestic violence. Ten attackers (27%) had histories of both domestic violence and substance abuse.

On August 4, 2019, a 24-year-old male fatally shot 9 and injured 20 in a popular bar district before being killed by responding law enforcement. Friends reported the attacker regularly used amphetamines, marijuana, cocaine, and LSD for at least five years leading up to the attack. The attacker was found to have had Xanax and cocaine in his system at the time of the shooting. He also had a history of assaulting women he dated.
PRIOR CRIMINAL CHARGES

Half of the attackers (n = 19, 51%) had a criminal history, not including minor traffic violations. All nineteen had previously been arrested or faced charges for non-violent offenses, including drug charges, evading arrest, and reckless driving. Nearly one-third of the attackers (n = 11, 30%) faced prior charges for violent offenses including assault, robbery, and domestic violence. In one case, an attacker was arrested and released after committing felony assault on a deputy sheriff one month before perpetrating his mass attack.

Some of the attackers had extensive criminal histories before reaching the age of 30. Examples included:

On July 9, 2019, a 29-year-old male used a 3.5-inch folding knife to stab three people on a downtown city street in front of the corporate headquarters for a department store. The attacker had over 30 prior arrests. At the time of the incident, he was under supervision in the community by the Department of Corrections, who, as early as 2017, designated the attacker as highly violent with multiple violent offenses and likely to re-offend.

On October 5, 2019, a 24-year-old homeless man used a 15 lb. piece of scrap metal to attack other homeless men sleeping on the streets, killing four and injuring one. The attacker had a history of at least 14 prior arrests, four of which occurred within a year of the attack. His three most recent assault charges were dropped because the victims stopped cooperating, and another charge was dismissed due to a technicality. At the time of the offense, the attacker had two warrants for failure to appear in court and at a court-appointed program.

On January 29, 2019, a 29-year-old male injured four people by driving his vehicle into a homeless encampment. The attacker had over 10 prior arrests and numerous probation violations. About two months before the attack, he assaulted two homeless people while intoxicated and was arrested shortly after fleeing the scene in his car. He was released on pretrial supervision after receiving multiple charges, including DUI, driving on a suspended license, and battery. He was later charged with a felony related to obstruction and resisting arrest. He was released back on pretrial supervision. At the time of the attack, he had an active warrant for missing a court date five days prior.
On October 6, 2019, a 23-year-old male opened fire with an accomplice inside a bar, killing four and injuring five. The attacker had a history of at least 10 prior arrests for various offenses, including illegally carrying a concealed weapon, drug possession, and failure to appear for court. At the time of the attack, he had pending felony cases for possession of a controlled substance, fleeing from police, and tampering with a motor vehicle.

Several attackers engaged in criminal behavior that resulted in contact with police but did not always result in an arrest. One attacker had over two dozen contacts with a local police department due to his involvement in disputes with his neighbor, fights, and driving without a license and/or insurance. In another case, an attacker had law enforcement called on him at least four times over a period of nine months because he fired shots from his residence; a report was never made for any of the calls. Police contacted the mother of a third attacker after her son sent another student a message saying he was thinking of committing suicide-by-cop and taking hostages. Police were also contacted about a fourth attacker after he told a peer that he fantasized about slitting her throat.

**HISTORY OF VIOLENCE AND DOMESTIC VIOLENCE**

Nearly half of the attackers (n = 17, 46%) had a history of violence toward others, though only some of them faced criminal charges for the behavior. Thirteen attackers (35%) committed prior acts of domestic violence, only seven of whom were charged for those acts. This finding is consistent with the rates of domestic violence seen in attackers from 2017 (32%) and 2018 (30%).

On February 15, 2019, a 45-year-old male shot and killed four co-workers and injured one other, after he was fired during a disciplinary meeting. He proceeded to chase the injured employee into an adjacent warehouse, where he killed another co-worker. The attacker then opened fire on responding police officers before he was fatally shot by police. Despite being the subject of a protective order by an ex-girlfriend based on allegations of stalking, the attacker continued to harass her. This continued harassment resulted in a fine and a supplemental restraining order. He also assaulted another ex-girlfriend, on one occasion stabbing her multiple times with a butcher’s knife in the back and neck. For this assault, he served 3 years of a 10-year prison sentence. Both former girlfriends said he would threaten them in order to manipulate and control them.

While a history of domestic violence does not precede every mass attack, the frequency with which these crimes are observed should highlight for law enforcement and other public safety professionals the importance of providing appropriate interventions in scenarios involving physical or verbal abuse directed at partners. As a reminder, federal law prohibits the possession of a firearm by any person who:

- is subject to a court order restraining the person from harassing, stalking, or threatening an intimate partner or child of the intimate partner; or
- has been convicted of any crime of domestic violence.
MENTAL HEALTH

The vast majority of individuals in the United States who display the symptoms of mental illness discussed in this section do not commit acts of crime or violence. The symptoms described in this section constitute potential contributing factors and should not be viewed as causal explanations for the attacks.

According to estimates from the Centers for Disease Control and Prevention (CDC), over half of the population in the United States will be diagnosed with a mental health disorder at some point in their lifetime, with 20% of adults experiencing mental health symptoms each year. Of the 37 attackers in this study, at least 17 (46%) experienced mental health symptoms prior to their attacks.

The most common symptoms experienced by the attackers in 2019 were psychotic symptoms \((n = 11, 30\%)\), including hallucinations, paranoia, and delusions. The next most common symptom was depression, which was exhibited by one-quarter of the attackers \((n = 9, 24\%)\). Five attackers \((14\%)\) had a history of suicidal thoughts.

Some attackers experienced multiple types of mental health symptoms. For example, one attacker experienced paranoid delusions and also experienced symptoms of depression, suicidal thoughts, and aggression.

**Psychotic Symptoms**

While the percentage of attackers who experienced any mental health issue in 2019 (46%) was lower than the percentages from 2017 (64%) and 2018 (67%), the percentage of attackers who experienced psychotic symptoms, specifically, was about the same in each year. A third of the attackers \((n = 11, 30\%)\) in this study experienced these symptoms.

Compared to the rates of depression and anxiety in the general population, psychotic disorders (e.g., schizophrenia) are relatively rare occurrences. It is estimated that around 3.5% of the population experiences symptoms of psychosis. In this sample, the age of onset varied, with some attackers experiencing symptoms in adolescence while others began experiencing symptoms later in life. The types of psychotic symptoms experienced by the attackers included:

- **Hallucinations**, or sensory perceptions that seem real but occur without any external stimulation. The most common type of hallucination is auditory (e.g., hearing voices).

- **Paranoia**, or feelings of pervasive distrust and suspiciousness that one is being harmed, deceived, persecuted, or exploited by others.
Delusions, or false/idosyncratic beliefs that are firmly maintained despite evidence to the contrary.

On December 28, 2019, a 37-year-old male entered a rabbi's house, where a congregation had just finished celebrating the last night of Hanukkah. He attacked congregants with a machete before being drawn outside and fleeing. Five congregants were injured with one eventually dying from his wounds. The attacker had a long history of mental health issues, including a diagnosis of schizophrenia. His symptoms included paranoia and auditory hallucinations that sometimes commanded him to take certain actions. He also displayed a number of compulsive behaviors, such as washing his hands multiple times a day with bleach, wrapping his items in plastic, washing dollar bills, and pouring bleach in front of car wheels.

Depression
One-quarter of the attackers \( (n = 9, 24\%) \) experienced symptoms of depression prior to the attack. Symptoms of depression included insomnia, changes in appetite, feelings of sadness, difficulty concentrating, and thoughts of suicide.

While psychotic symptoms remain the most common mental health symptom observed among mass attackers in 2019, it is worth noting that the two adolescent attackers in this report who targeted K-12 schools are reported to have experienced symptoms of depression prior to their attacks. Symptoms of depression in adolescent attackers were also described in a previous U.S. Secret Service study, titled Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence,\(^{17}\) which found that two-thirds of the student attackers exhibited some sign or symptom of depression prior to their attacks.

On May 7, 2019, a 16-year-old student and an 18-year-old student entered a classroom in their high school, where they fatally shot one and injured six. One of the attackers was reported to have experienced multiple symptoms of depression, including self-harm, suicidal ideations and statements, and negative self-talk that he mistook for command hallucinations.

Mental Health Treatment
Nearly one-third of the attackers \( (n = 12, 32\%) \) were previously diagnosed with or treated for a mental health condition. Only five attackers with histories of mental health symptoms had no known history of diagnosis or treatment based on open sources. The timing of when attackers were first diagnosed or began receiving treatment ranged from early childhood to within months of the attack.

The treatment received by the attackers varied widely and was not always sustained. The type of treatment received ranged from counseling or medication management to involuntary hospitalization. This highlights the importance of not only engaging those with mental health symptoms in treatment, but also ensuring that they maintain access to treatment over time.

On August 31, 2019, a 36-year-old male opened fire at pedestrians and vehicles from his car, fatally shooting 7 and injuring 25 others. He had contacted both 911 and the FBI before his attack and claimed that there was a conspiracy (or multiple conspiracies) to cyberstalk him, kidnap him, make him watch child pornography, and kill him. He had a history of mental health issues, paranoia, and violent acts against himself and others, which caused him to be institutionalized in 2001, 2006, and 2011.
BELIEFS

One-quarter (n = 9, 24%) of attackers held ideological beliefs, some of which were hate-focused and associated with violence. These beliefs were often multifaceted and covered a range of issues, including anti-Semitism, white supremacy, Nazism, xenophobia, antifascism, jihadism, and anti-immigration. The prevalence of diverse ideological beliefs among mass attackers studied by the Secret Service has remained between 24% and 30% from 2017 to 2019.

On April 27, 2019, a 19-year-old male entered a synagogue and opened fire, killing one and injuring three others. Nearly a year and a half prior to the attack, the attacker began to explore and post anti-Semitic and white supremacist online content. His posts culminated in a seven-page manifesto where he explicitly documented his hatred for other races, his willingness to violently fight for his beliefs, and the justifications for his actions.

FIXATIONS

Seven (19%) of the attackers exhibited a fixation, defined as an intense or obsessive preoccupation with a person, activity, or belief to the point that it negatively impacted aspects of their lives. Fixations often carried an angry or emotional undertone and usually involved one of several themes, including ideological beliefs, an intense interest in death or violence, preoccupation with previous mass attackers, and obsession with a previous romantic partner. Behaviors associated with fixations included stalking and/or harassment, violent verbal or online rhetoric, and writing manifestos. These fixations were observed by others and, in some cases, extended for a number of years. One attacker was fascinated with firearms, violence, death, and suicide-by-cop. Those who knew him were well aware of his interest. At one point, after telling a counselor that he dreamed of carrying out a school shooting, he was expelled from school. Other attackers kept their fixations to themselves.

On April 30, 2019, a 22-year-old male entered a university campus he had previously attended. Upon entering a classroom, the attacker killed two students and injured four more. At least a year and a half prior to the attack, the attacker began to watch videos of previous school attacks and specifically researched the 2012 school shooting in Newtown, CT which resulted in the deaths of 20 children and 6 staff. He spent hours a day conducting these searches.
ONLINE INFLUENCE

The internet allows individuals from across the globe to virtually connect and share ideas in a profound way. This connectedness has also allowed those with fringe or extremist ideologies to converge and promote their beliefs to a wider audience. Some of the attackers in this study were influenced by hateful content shared on “chan sites” and other websites.

**8chan**

For two of the attackers in this study, their actions were influenced by content they consumed online related to 8chan, an imageboard website. An imageboard is a type of online forum where images are posted with accompanying text that stimulate comments and discussion. The attackers’ consumption of 8chan material influenced their beliefs, as both attackers described being inspired by the actions and writings of the individual who attacked mosques in New Zealand on March 15, 2019. They described this influence in their manifestos, which were posted to 8chan prior to their attacks.

On August 3, 2019, a 21-year-old male drove over ten hours from his home and opened fire at individuals shopping at a large chain retail store. He specifically targeted the Hispanic community, killing 23 people and injuring 22 others. The attacker had actively posted on his Twitter account and on 8chan about his xenophobic anti-immigration beliefs. In the minutes before his attack, he posted a manifesto on 8chan in which he outlined his political and economic reasons behind the attack, and what he described as the “Hispanic invasion of Texas.” He encouraged others to spread his message if his attack was successful.

**Online Misogyny**

While much of the extremist rhetoric espoused online is racially or ethnically based, another concerning online community involves men who use digital platforms to voice misogynistic views and general animosity toward women. Incels, a term referring to those who are involuntarily celibate, are mostly heterosexual males who view themselves as undesirable to females and therefore unable to establish romantic or sexual relationships, to which they feel entitled. Those who self-identify as incels have gravitated toward the Internet to promote their ideology.

In this report, two attackers shared traits consistent with incel ideology, including an intense animosity toward women. For example, one attacker often referred to women by derogatory slurs and, while in high school, had composed a “rape list” of girls who had turned down his advances. He also fantasized about sexual violence against women and had choked females on multiple occasions in adolescence.
Those tasked with assessing threats and preventing violence will benefit from familiarizing themselves with the incel movement. Special focus should be given to understanding the traits and terminology of this belief system, such as the “manosphere,” a term for the websites and digital forums on which these views are shared. While some discussions in the manosphere involve topics of “men’s rights” and “fathers’ rights” that sometimes dehumanize women, other discussions attempt to legitimize violence against women outright.

Another emerging philosophy, not only within incel and manosphere forums but also within forums related to far-right or alt-right communities, is the concept of “the red pill,” which was taken from a popular movie. The main character in that movie is given the choice between a red pill and a blue pill. Those who take the red pill choose to wake up to the harsh truths of reality, while those who choose the blue are shielded from the truth and remain oblivious and complacent. One attacker in this study referenced “redpill threads” in a post about his manifesto on 8chan before he killed one and injured three more at a synagogue.

STRESSORS WITHIN FIVE YEARS

Most of the attackers (n = 32, 87%) had at least one significant stressor occur within the five years leading up to the attack, and for 30 (81%) attackers, the stressor(s) experienced occurred within one year. Some attackers experienced a persistent pattern of life stressors that lasted several years, up to the time of their attacks. These stressors, among others, included significant medical issues, turbulent home lives, and strained relationships. In addition to the criminal charges described earlier, stressors affected different areas of the attackers’ lives, including:

- **Family/romantic relationships**, such as a break-up, divorce, physical or sexual abuse, family health issues, the death of a loved one, or dealing with protective orders filed against them by their partners.
- **Social interactions**, such as the ending of friendships or being bullied in school.
- **Work or school issues**, such as disciplinary actions, conflicts with colleagues, losing a job, failing classes, or being expelled from school.
- **Contact with law enforcement or the courts that did not result in arrests or charges**, such as law enforcement responding to reports of peeping through windows, fights, or law enforcement being called for neighbor disputes.
- **Personal issues**, such as evictions, homelessness, struggles with sexuality, being assaulted, or physical injury.

**Financial Instability**

Half of the attackers (n = 20, 54%) had a history of financial instability within five years of the attack. Indicators of such instability included an inability to sustain employment, loss of income, and being evicted.

On May 29, 2019, a 65-year-old male shot three people at a plumbing company, then stole a victim’s car and fled the scene. After a gun-battle with off-duty police, during which a deputy was severely injured, the attacker was found hiding under a boat approximately one mile from the business. As officers approached, the attacker shot and killed himself. Years prior, the attacker fought the city over property he owned that was to be condemned. Unable to afford the costs involved, the attacker ultimately lost the property. In 2009, when the owners of the plumbing company purchased the lot behind their store, they allowed the attacker to live there for free on the condition that he kept it clean. He stayed there in a van or small shed, and the owner would often bring him food and water. To make money, the attacker sold water heaters and scrap metal and over time the property became filled with vehicles, barrels, and debris. When asked to keep the property clean, the attacker refused. Three months before the attack, the owner secured an eviction in court, but he delayed the notification. The attacker was served with eviction papers by the sheriff’s department around 48 hours before beginning his attack.
Home Life Factors

Many of the attackers had a history of negative home life factors. For about one-quarter ($n = 9, 24\%$) of them, this included some form of adverse childhood experience, such as the death of a parent; suffering abuse; or exposure to alcoholism, drug addiction, or domestic violence. Fifteen of the attackers (41\%) had an unstable home life at the time of the attack. This was evidenced by evictions, homelessness, the absence of a parental figure, and a parent struggling with mental health symptoms. Seven of the attackers were homeless at the time of the attack, and two more had received a second or third notice regarding an impending or possible eviction.

On January 23, 2019, a 21-year-old male entered a bank, made the five women inside lie facedown on the floor, and fatally shot each one. He then called 911 and stated that he had shot five people. The attacker was taken into custody after a nearly two-hour standoff with police. The attacker had experienced several negative home life factors growing up. His parents divorced when he was young and his father remarried and divorced again during the attacker's childhood. Both parents had significant financial issues with liens, foreclosures, and court judgments against them. His father had a number of criminal charges and was at one point delinquent in his child support to two different women. According to friends from high school, the attacker had a difficult relationship with his father, and his mother did not take his mental health problems seriously.

Triggering Event

Ten (27\%) of the attackers appeared to experience a triggering event prior to perpetrating an attack. This included having their rent increased, being evicted, being kicked out of a business, and being fired from a job. For eight (22\%) of these attackers, the triggering event appeared directly related to who they targeted or where they perpetrated the attack. For the remaining attackers, one attacked random individuals unrelated to his workplace after he was fired, and the other attacked former coworkers after a judge issued a second eviction notice.

On October 3, 2019, a 64-year-old male opened fire at a cemetery where he formerly worked, killing one and injuring two others. He had threatened his apartment's management and left multiple incendiary devices at or near his residence. The attacker, who had a history of concerning behaviors, was fired seven years prior and sought revenge against his former employer due to the subsequent financial hardships he faced. The attack appeared to be triggered by his eviction from his apartment.

THREATS AND OTHER CONCERNING COMMUNICATIONS

Two-thirds of the attackers ($n = 24, 65\%$) engaged in prior threatening or concerning communications. Many had threatened someone ($n = 16, 43\%$), including threats against the target in eight cases (22\%). The attackers who made threats against someone they later targeted ranged from those who threatened a specific individual (e.g., a co-worker) to those who threatened an entire group (e.g., Jewish people, the homeless).

On August 4, 2019, a 24-year-old male opened fire in a busy nightclub district, killing 9 (including his sibling) and injuring 20 before officers shot and killed him. The attacker had a history of concerning communications, including harassing female students in middle and high school, making a hit list and a rape list in high school, telling others he had attempted suicide, and showing footage of a mass shooting to his girlfriend. Months before the attack, he went to bars and would tell his friends that he could have “done some damage” there.
Over half of the attackers (n = 21, 57%) made some type of communication, in the form of written, visual, verbal, or online statements, that was not a threat but should have elicited concern in others. These concerning communications included making paranoid statements, sharing videos of previous mass attacks, vague statements about their imminent death, and one attacker telling his school counselor that he had a dream about killing his classmates.

BEHAVIORAL CHANGES
Two-fifths of the attackers (n = 15, 41%) exhibited changes in behavior that were observable to others, including new or increased substance use, feelings of depression, isolating from family and friends, engaging in self-harm, spontaneously quitting a job or withdrawing from school, and changes in appearance. These changes in behavior were observed by family members, friends, and co-workers. In seven of these cases, the behavior changes occurred within a year of the attack.

On October 5, 2019, a 24-year-old homeless man used a 15 lb. piece of scrap metal to attack other homeless men sleeping on the streets, killing four and injuring one. He had exhibited behavioral changes as far back as five years, and as recently as the day prior to the attack. In 2014, his family noted that he became depressed and started using drugs, after which he became paranoid, violent, and lost his job in construction. Over time, he stopped living with his mother and began staying in shelters and living on the streets. More recently, not only did his family note that he was further deteriorating mentally, but neighbors for whom he performed odd jobs also noted some changes. The attacker spoke to them about feeling stressed, and then suddenly stopped coming by. The day before the attack, a neighbor who saw him lying in a stairwell of his mother’s building noted that he looked more withdrawn than usual, just laid there, and avoided eye contact. She would later state that he just seemed different, not normal, and that when she saw his eyes, it seemed like he was not there.

Although a behavioral change does not indicate someone is planning a mass attack, it does provide a window of opportunity to engage with that individual, gather insight into why that behavior change occurred, and identify appropriate responses.
SOCIAL ISOLATION

Nearly one-third ($n = 11, 30\%$) of the attackers self-identified or were described by others as withdrawn, loners, or anti-social. For some, these behaviors were noted by those who knew them from an early age. For others, the behaviors were observed during their school or college years, at their places of work, or in their neighborhoods. Attackers were classified as socially isolated for behaviors that went beyond simply not having many friends or choosing not to participate in various social activities. Rather, they were considered socially isolated for a range of behaviors, from consistently showing a clear discomfort around others in different contexts or ignoring social cues, to more overt behaviors like actively or physically avoiding contact with others. Many attackers studied by the Secret Service over the previous three years have displayed these types of socially isolating behaviors.

**ISOLATING BEHAVIORS:** On May 31, 2019, a 40-year-old male opened fire at a city municipal center, killing 12 and injuring 5, before he was killed by police. The attacker had given his two-week notice earlier in the day and was reportedly distressed in the days leading up to the attack. Though the attacker appeared to have been social in his youth, he was more isolated in the last decade of his life. At work, he would keep his office door closed and was described as private, shy, and reserved. One co-worker noted that he was selective about with whom he would speak. He rarely attended work events, and when he did, he kept to himself. Estranged from his biological father’s side of the family for many years, relatives noted that he could be “paranoid, introverted, and uncomfortable around people.” Though some neighbors said he seemed nice, others noted he never smiled at them and they rarely saw him outside of his residence.

**PHYSICAL AVOIDANCE:** On July 28, 2019, a 19-year-old male opened fire at a local community festival, killing 3 and injuring 17 others. Less than one minute after he began firing, police confronted him and shot him multiple times before he fatally shot himself in the head. Students and teachers from his high school, who were interviewed after the attack, noted that he did not make much of an impression at the school. Three months prior to the attack, he moved to a small town and had very little contact with others. At one point, he moved into an unfurnished triplex with few belongings and paid three months’ rent in cash. Speaking of his tenants, the property manager said, “I don’t think anybody knows anybody [at this property] because they’re there to get away from everybody else.” Residents would later report that they noticed his presence as a new person in the sparsely populated area, but they seldom saw him. One neighbor said he saw the attacker walk to the mailbox and occasionally leave his apartment, but never spoke to him or even heard his voice.
ELICITED CONCERN

Two-thirds of the attackers (n = 24, 65%) in this report exhibited behaviors that elicited concern in other people. Those who were concerned had various degrees of association with the attackers, from those with whom the attacker was close (e.g., family and friends) to those with whom they had infrequent or peripheral contact. Most often, the attackers elicited concern from multiple people in their lives. For over half of the attackers (n = 21, 57%), the behaviors they engaged in concerned others to the point that the observer feared for the safety of themselves or others.

The behaviors that elicited concern in others varied across the attackers. They included:

- Expressions of homicidal/suicidal ideations
- Domestic violence
- Social media posts with concerning content
- Threatening statements toward others
- Weapons purchases
- Harassing or stalking behaviors
- Bizarre/incoherent behavior
- Non-compliance with mental health medication
- Signs of depression
- Increased isolation
- Acts of self-harm
- Poor school attendance
- No longer paying bills

Concerned bystanders offered a variety of responses to these behaviors, from avoiding the attacker to voicing their concern to others. Some bystanders engaged in more overt efforts to seek help, like transporting the attacker for a mental health evaluation. Other responses included:

- **Romantic partners** filing for protective orders, getting a divorce, or otherwise ending the relationship;
- **Parents** seeking therapy for the attacker, reminding them to take prescribed mental health treatment, requiring them to move out of the house, or calling law enforcement;
- **Colleagues** avoiding the attacker, firing them, or confronting them with their concerns;
- **Fellow students** telling school staff about their concerns, reporting the behavior to a designated central reporting mechanism, or speaking with the attacker about their concerns;
- **School personnel** notifying parents about their concern or expelling the attacker from school.
CONCLUSION

Tragically, many communities across the country were impacted by mass violence in 2019. All available data indicates that these acts of violence are rarely spontaneous and are almost always preceded by warning signs, thereby offering opportunities for prevention. The U.S. Secret Service stands ready to support our community partners in this vital public safety mission, with the same effort we dedicate to our no-fail mission of protecting the nation’s highest elected officials. These tragedies are preventable if the appropriate community systems are in place. This report supports the Secret Service’s long-standing recommendation that multidisciplinary threat assessment programs should be part of any violence prevention plan. A threat assessment is designed to identify and intervene with individuals who pose a risk of engaging in targeted violence, regardless of motive, target, or weapon used.

This approach requires an enhanced understanding and awareness of the types of behaviors that tend to precede acts of violence. NTAC’s research into mass attacks has demonstrated that no two attacks or attackers are exactly alike. For example, all of the mass attacks that occurred in 2017 or 2018 were carried out by lone attackers, while this year’s analysis included three attacks that were carried out by pairs of attackers. However, NTAC continues to identify commonalities that frequently appear in attackers’ backgrounds and provide public safety officials an opportunity for intervention. For example, this study identified a significant relationship between substance abuse and domestic violence in the histories of the 37 attackers, two areas deserving of enhanced community resources. While a history of drug abuse or domestic violence does not precede every mass attack, the frequency with which these factors are observed highlights the importance of providing appropriate interventions in these situations.

The findings from this report reinforced similar findings from previous NTAC studies on mass attacks, including the prevalence of ideological beliefs, grievance-based motives, and a history of violence, among others factors. This year’s study expands on these findings by examining additional factors, such as home life and current living situations, behavioral changes, social isolation, employment status, and online activity. During the analysis of these 34 attacks from 2019, NTAC researchers identified key findings that should immediately influence the violence prevention strategies used by communities across the United States. These findings include:

- The attacks impacted a variety of locations, including businesses/workplaces, schools, houses of worship, military bases, open spaces, residential complexes, and transportation.
- Most of the attackers used firearms, and many of those firearms were possessed illegally at the time of the attack.
- Many attackers had experienced negative home life factors, unemployment, substance use, mental health symptoms, or recent stressful events.
- Attackers often had a history of prior criminal charges or arrests and domestic violence.
- Most of the attackers had exhibited behavior that elicited concern in family members, friends, neighbors, classmates, co-workers, and others, and in many cases, those individuals feared for the safety of themselves or others.
In order to address each of these key findings, the U.S. Secret Service offers the following for consideration:

**ESTABLISH THREAT ASSESSMENT PROGRAMS:** The attacks examined in this report affected the places where we work, learn, and otherwise live our daily lives. Threat assessment teams can be established in many of these environments, with the goal of identifying and intervening with individuals who may pose a risk of harm to themselves or others. Police departments, workplaces, military installations, government agencies, universities, and K-12 schools can implement these types of programs as part of an overall violence prevention strategy.

For the past 20 years, the U.S. Secret Service has provided guidance on the establishment of threat assessment programs to law enforcement, schools, government agencies, and others, beginning with the publication of the agency's first threat assessment guide, *Protective Intelligence & Threat Assessment Investigations: A Guide for State and Local Law Enforcement Officials*. The North Carolina State Bureau of Investigation's Behavioral Threat Assessment (BeTA) Unit is an example of a state law enforcement agency using a proactive approach to prevent violence in the community, by intervening with those individuals identified as having the means and motive to perpetrate an act of targeted violence. Similarly, the U.S. Department of Veterans Affairs operates a Workplace Violence Prevention Program (WVPP), which incorporates threat assessment and management practices as part of a robust workplace safety plan.

More recently, the Secret Service published updated guidance for K-12 violence prevention programs, titled *Enhancing School Safety Using a Threat Assessment Model: An Operational Guide for Preventing Targeted School Violence*. These types of programs operate in many schools across the country and regularly facilitate students receiving counseling services or other interventions when they are in crisis.

**ENFORCE EXISTING FIREARMS LAWS:** The majority of mass attacks in the United States are carried out using firearms. In each of the past three years, the Secret Service found that at least 40% of these shootings in public spaces involved a firearm that was illegally possessed at the time. Federal law establishes several prohibiting factors that make it unlawful for an individual to purchase or possess a firearm. These factors include a prior felony conviction, a dishonorable discharge from the military, and being the subject of a current restraining order. Other noteworthy prohibiting factors include illegal drug use within the past year and any prior conviction for a crime of domestic violence. All law enforcement and other public safety officials must be aware of these longstanding federal restrictions, as well as any additional state or local restrictions, and take steps to ensure these laws are enforced.

**PROVIDE CRISIS INTERVENTION, DRUG TREATMENT, AND MENTAL HEALTH TREATMENT:** Many attacks in 2019 were perpetrated by individuals who had experienced unemployment, substance use, mental health symptoms, and/or recent stressors. While there is no sure way to predict human behavior or attribute violence to a single cause, early intervention is a demonstrated best practice for preventing unwanted behavior. Providing resources to address factors like drug abuse, mental illness, unemployment, and other personal crises is of utmost importance at the community level. Workplaces, schools, and communities at large should provide support for individuals experiencing these types of distress. For example, many universities operate behavioral intervention teams to promote well-being within the campus community. These cross-campus groups collaboratively facilitate access to mental health and substance abuse treatment, financial and academic supports, and other necessary resources for members of the campus community. Early intervention not only improves the outlook for the individual in need, but also reduces the likelihood of further escalation or future conflicts.
Threat assessment refers to a proactive approach to violence prevention. It is an investigative model originally developed by the U.S. Secret Service to prevent assassinations, but has since been adapted to prevent all forms of targeted violence, regardless of motivation. This includes K-12 school shootings and acts of workplace violence. When implemented effectively, a threat assessment generally involves three key components:

Identify ➔ Assess ➔ Manage

U.S. Secret Service research indicates that the majority of perpetrators of targeted violence elicit concern in others prior to the attack. We rely on the people who observe such concerns to identify the individual to law enforcement or to someone else with a public safety responsibility. In educational settings or workplaces, concerns may be reported to a multidisciplinary threat assessment team that works in conjunction with law enforcement when needed. The responsible public safety entity is then tasked to assess the situation to determine how it can manage any risk of violence posed by the individual. With a focus on early intervention, this systematic approach is an important component of any safety plan. It allows communities to respond appropriately to a broad range of situations, from individuals who are displaying a low-level concerning behavior to those who may pose an immediate and imminent risk of violence.
**Behavioral Overview**

The majority of attackers had:  
Significant stressors within five years, and over half had financial instability

Most attackers had:  
Prior threatening or concerning communications  
Elicited concern from others

About half had histories of:  
Substance use or abuse  
Criminal charges  
Violence toward others (including domestic violence)

Just under half of the attackers had:  
Threatened someone in the past  
An unstable home life at the time  
Exhibited changes in behavior

Some attackers:  
Were known to be unemployed  
Were considered isolated, withdrawn, or loners  
Had experienced a triggering event  
Subscribed to ideological/hateful beliefs  
Had adverse childhood experiences

**Most Prevalent Locations in 2019**

*In 2019, 24 attacks (71%) took place at business/service-related sites and/or open spaces.*

<table>
<thead>
<tr>
<th>2019 FINDINGS</th>
<th>Business/Service</th>
<th>Open Spaces</th>
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<tbody>
<tr>
<td><strong>Attackers</strong></td>
<td>17 persons, 15 attacks</td>
<td>11 persons, 11 attacks</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>range of 20-65; avg. 36</td>
<td>range of 19-36; avg. 29</td>
</tr>
<tr>
<td><strong>Harm</strong></td>
<td>1/2 of those harmed were killed</td>
<td>3/4 of those harmed, survived</td>
</tr>
<tr>
<td><strong>Mental health</strong></td>
<td>Over 1/4 had symptoms</td>
<td>Over 1/2 had symptoms</td>
</tr>
<tr>
<td><strong>Intended targets</strong></td>
<td>1/3 had intended targets</td>
<td>Only 1 had an intended target</td>
</tr>
<tr>
<td><strong>Grievances</strong></td>
<td>Nearly half had grievance as part of the motive</td>
<td>Only 1 had grievance as part of the motive</td>
</tr>
</tbody>
</table>

* Two attackers were in both categories.
### INCIDENT OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>2017 ( n = 28 )</th>
<th>2018 ( n = 27 )</th>
<th>2019 ( n = 34 )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weapons</strong>³⁰</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Firearms</strong></td>
<td>82%</td>
<td>89%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Possessed illegally</strong>³¹</td>
<td>10 of 23 firearms cases</td>
<td>10 of 24 firearms cases</td>
<td>10 of 24 firearms cases</td>
</tr>
<tr>
<td><strong>Bladed weapons</strong></td>
<td>7%</td>
<td>—</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Vehicles</strong></td>
<td>11%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Blunt objects</strong></td>
<td>—</td>
<td>—</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Less than 5 min.</strong></td>
<td>50%</td>
<td>63%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>5 – 14 min.</strong></td>
<td>21%</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>15 min. or more</strong></td>
<td>29%</td>
<td>15%</td>
<td>38%</td>
</tr>
<tr>
<td><strong>Locations:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>89 incidents, 95 public or semi-public sites</strong>²²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business/services</strong></td>
<td>46%</td>
<td>74%</td>
<td>44%</td>
</tr>
<tr>
<td>Services</td>
<td>11%</td>
<td>22%</td>
<td>18%</td>
</tr>
<tr>
<td>Restaurants/bars</td>
<td>7%</td>
<td>22%</td>
<td>9%</td>
</tr>
<tr>
<td>Health services</td>
<td>7%</td>
<td>15%</td>
<td>—</td>
</tr>
<tr>
<td>Retail</td>
<td>11%</td>
<td>—</td>
<td>12%</td>
</tr>
<tr>
<td>Manufacturing and distribution</td>
<td>4%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Government</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Open spaces</strong></td>
<td>29%</td>
<td>15%</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Education-related</strong></td>
<td>14%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Communal space</strong></td>
<td>4%</td>
<td>—</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Houses of worship</strong></td>
<td>7%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Military</strong></td>
<td>—</td>
<td>—</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>11%</td>
<td>—</td>
<td>3%</td>
</tr>
<tr>
<td>GENERAL BACKGROUNDS</td>
<td>2017 n = 28</td>
<td>2018 n = 27</td>
<td>2019 n = 37</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Sex - Male</td>
<td>100%</td>
<td>93%</td>
<td>92%</td>
</tr>
<tr>
<td>Age: range</td>
<td>15-66</td>
<td>15-64</td>
<td>16-80</td>
</tr>
<tr>
<td>average</td>
<td>37</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>Illicit drug use or substance abuse</td>
<td>54%</td>
<td>22%</td>
<td>46%</td>
</tr>
<tr>
<td>History of criminal charge(s)</td>
<td>71%</td>
<td>48%</td>
<td>51%</td>
</tr>
<tr>
<td>Non-violent</td>
<td>57%</td>
<td>37%</td>
<td>51%</td>
</tr>
<tr>
<td>Violent</td>
<td>54%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Overall history of violence</td>
<td>64%</td>
<td>44%</td>
<td>46%</td>
</tr>
<tr>
<td>History of domestic violence</td>
<td>32%</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>Mental health symptoms</td>
<td>64%</td>
<td>67%</td>
<td>46%</td>
</tr>
<tr>
<td>Known treatment or diagnosis</td>
<td>25%</td>
<td>44%</td>
<td>32%</td>
</tr>
<tr>
<td>Beliefs</td>
<td>25%</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Fixation</td>
<td>39%</td>
<td>41%</td>
<td>19%</td>
</tr>
<tr>
<td>Stressors</td>
<td>100%</td>
<td>89%</td>
<td>87%</td>
</tr>
<tr>
<td>Financial instability</td>
<td>57%</td>
<td>56%</td>
<td>54%</td>
</tr>
<tr>
<td>Threatening or concerning</td>
<td>86%</td>
<td>93%</td>
<td>65%</td>
</tr>
<tr>
<td>communications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of making threats</td>
<td>50%</td>
<td>37%</td>
<td>43%</td>
</tr>
<tr>
<td>Threats specific to the target</td>
<td>36%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Concerning communications</td>
<td>82%</td>
<td>85%</td>
<td>57%</td>
</tr>
<tr>
<td>Elicited concern</td>
<td>79%</td>
<td>78%</td>
<td>65%</td>
</tr>
<tr>
<td>Concern about safety</td>
<td>46%</td>
<td>70%</td>
<td>57%</td>
</tr>
</tbody>
</table>
LIST OF INCIDENTS

1) On January 15, a male used a hammer to kill three at a restaurant in Brooklyn, NY.
2) On January 23, a male fatally shot five women inside a bank in Sebring, FL.
3) On January 24, a male injured his former girlfriend and killed two when he opened fire at a bar and grill in State College, PA.
4) On January 29, a male drove his vehicle into people at a homeless encampment, injuring four in Modesto, CA.
5) On February 15, a male fatally shot five and injured one before injuring five responding officers at a warehouse in Aurora, IL.
6) On February 21, a male fatally shot his girlfriend before killing one and wounding two at a gas station in Elizabethtown, KY.
7) On March 27, a male fatally shot one and injured two in vehicles and on a bus, before killing another with a vehicle in Seattle, WA.
8) On April 1, a male fatally stabbed and/or shot four employees at a property management company in Mandan, ND.
9) On April 23, a male used his vehicle to hit and injure eight in a crosswalk in Sunnyvale, CA.
10) On April 27, a male fatally shot one and injured three at a synagogue in Poway, CA.
11) On April 30, a former student fatally shot two and injured four in a classroom at a university campus in Charlotte, NC.
12) On May 7, two students fatally shot one classmate and injured six at their high school in Highlands Ranch, CO.
13) On May 29, a male fatally shot two and injured one, before injuring a responding officer, at a plumbing company in Cleveland, TX.
14) On May 31, a male fatally shot 12 and injured 5 at his office building in Virginia Beach, VA.
15) On June 17, a male drove onto sidewalks and into a building, injuring two and killing a woman, her son, and unborn child in Jefferson City, TN.
16) On July 4, a male injured three using a knife at a plasma center in Petersburg, VA.
17) On July 9, a male injured three using a 3.5-inch folding knife on the street in Seattle, WA.
18) On July 28, a male fatally shot 3 and injured 17 at a public agricultural festival in Gilroy, CA.
19) On August 3, a male fatally shot 23 and injured 22 at a superstore in El Paso, TX.
20) On August 4, a male fatally shot 9 and injured 20 in a bar district in Dayton, OH.
21) On August 31, a male fatally shot 7 and injured 25 as he drove through Midland and Odessa, TX.
22) On September 28, a male injured five, stabbing three and bludgeoning two, at an outdoor shopping center in Cockeysville, MD.
23) On October 3, a male fatally shot one and injured two at a cemetery in Wausau, WI.
24) On October 3, a male fatally shot one and injured two in the lobby of a senior-living apartment complex in Vancouver, WA.
25) On October 5, a male used a 15 lb. piece of metal to kill four and injure one in New York City, NY.
26) On October 6, two males opened fire in a bar, killing four and injuring five in Kansas City, KS.
27) On October 21, a male stabbed and injured three on a bus on the Pennsylvania Turnpike.
28) On October 21, a male shot and injured four in two locations in Sumter, SC.
29) On November 14, a student fatally shot two classmates and injured three at his high school in Santa Clarita, CA.
30) On December 4, a male fatally shot one and injured two at a naval base in Honolulu, HI.
31) On December 6, a male fatally shot three and injured eight at a naval base in Pensacola, FL.
32) On December 10, a male and a female fatally shot three and injured three at a kosher market in Jersey City, NJ.
33) On December 19, a male resident opened fire in the administrative office of his apartment complex, killing one and injuring two in Westerly, RI.
34) On December 28, a male used a machete to injure four and kill one at a rabbi's home adjacent to a synagogue in Monsey, NY.
The incidents included in this report were identified and researched through open source reporting (e.g., media sources and publicly available law enforcement records); therefore, it is possible that more took place than were discovered at the time of this writing. Further, the limitations of open source information should be considered when reviewing the findings contained in this report. Since information for a few of the attackers was limited, it is likely that a larger number than reported here may have displayed the behaviors, symptoms, and other background elements.

This report was prepared for educational and research purposes. The background and behaviors reported herein are of those individuals who: 1) were arrested for the act; 2) died at the scene; or 3) died immediately following the attack. Actions attributed to individuals who have been arrested, indicted, or charged in these incidents are merely allegations, and all are presumed innocent until proven guilty beyond a reasonable doubt in a court of law.

When identifying cases for inclusion in this report, there were several attacks in public spaces worth noting that did not meet one or more of the criteria, or had insufficient information to confirm their inclusion. These cases included: 1) a man who opened fire at a moving company, injuring five (four from gunfire) – there was insufficient information to confirm that this was not a spontaneous altercation or part of a criminal act for monetary gain; 2) a man who opened fire in a bookstore, causing minor injuries to several patrons – the weapon used was a pellet gun; 3) a man who fired into a crowd at a concert, injuring six – there was insufficient information to confirm it was not a spontaneous altercation or gang-related; and 4) a recently suspended employee opened fire at a large retail store, injuring two employees and a responding police officer – though this was a targeted attack at a public space, it did not meet the definition of a mass attack for the purpose of this report, which excludes injuries to first responders occurring after the initiation of the attack.

In one incident, the attacker used a long gun to inflict harm on others and used a handgun to kill himself. As the handgun was not used to harm others, it was not included amongst the handguns noted here. However, it was counted in the total number of weapons brought to the site.

Though illegal drug use within the previous year is one of the disqualifying factors for possessing a firearm under federal law, it was not included as a prohibiting factor here, as information was not always available to confirm active use within one year of the incident prior to its initiation. In at least one case beyond those counted here, an attacker had illegal drugs in his system at the time of the shooting, thereby rendering his possession of the firearm illegal under federal law.

One additional attacker used a switchblade, which was illegally possessed as state law prohibits such knives.

For 2017–19, 89 attacks took place at 95 public sites as several of the attackers caused harm at more than one distinct location. For the 2019 attack that took place at a shopping center, for the purposes of this report, the site was considered a business.

The percentages for the locations in this section were calculated based on the 34 incidents.

Attacks at residential locations were only included if the attack took place in a communal area of a residential complex (e.g., an apartment building lobby).

The number of resolutions described in this section equals 35 as for one of the incidents with two attackers, one of them was stopped by a bystander and the other by private security. The percentages presented were calculated using the 34 attacks.

For one attack, it was not clear in open sources if the attacker ended the attack on his own or was stopped by a bystander.

Analysis to evaluate whether the relationship between domestic violence and substance abuse was statistically significant involved a two-sided Fisher’s exact test. Histories of domestic violence and substance abuse were both present in over a quarter of the attackers, while half had no history of either. The relationship was statistically significant ($p = .002$).

The lower percentage of any mental health symptom may be attributed to the lack of substantive information available in open source of some of the incidents.


Paranoia may also be indicative of other types of conditions such as personality disorders, mood disorders (e.g., bipolar disorder), an adverse effect of substance use/abuse, or even a symptom of an underlying medical condition. For the purposes of this study, it is captured within psychotic symptoms due to the context of the subject’s life and the information available in open sources.


See North Carolina State Bureau of Investigations. *Behavioral Threat Assessment (BeTA)* Unit. Available from https://ncsbi.gov/BeTA.

See U.S. Department of Veterans Affairs *operates a Workplace Violence Prevention Program (WVPP)*. Available from https://www.publichealth.va.gov/about/occhealth/violence-prevention.asp.

Percentages for 2019 exceed 100 as three of the attacks involved a combination of weapons, including one involving a firearm and a knife, another committed with a firearm and a vehicle, and another in which a knife and glass bottles were used to cause harm.

Though illegal drug use within the previous year is one of the disqualifying factors for possessing a firearm under federal law, it was not considered in this review as information was not always available to confirm active use in that timeframe prior to the initiation of the attack.

The 95 types of locations include the general category of business/services, not the individual sub-sectors.

This percentage, which changed from 85% to 89%, was updated to reflect additional information identified since *Mass Attacks in Public Spaces - 2018* was released.