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Trends and Recommendations: Mass Public Shootings

VIOLENCE PREVENTION PROJECT RESEARCH CENTER HAMLINE UNIVERSITY

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Mass public shootings are rare relative to other forms of gun violence, but they produce disproportionate harm.[1] These attacks generate high casualty counts in short time frames, impose lasting psychological and economic costs on communities, and undermine perceptions of safety in routine public spaces.[2] Their apparent unpredictability makes them particularly destabilizing for local jurisdictions tasked with prevention and response.

The United States remains a global outlier in the prevalence of mass public shootings among high-income democracies, accounting for 16 to 26 percent of all public mass shootings globally but only about 4 percent of the world's population.[3] Approximately 7 percent of Americans have reported being on the scene of a mass shooting in their lifetime, with the vast majority experiencing mental health consequences such as anxiety, depression, and post-traumatic stress disorder (PTSD) as a result.[4]

What We Mean by *Mass Public Shooting*

Definitions vary across agencies and research traditions.[5] For consistency, this brief draws primarily on The Violence Project Mass Shooter Database (Version 10, 2026), which defines a *mass public shooting* as a single incident in which four or more people are killed with firearms (excluding the perpetrator); the incident also occurs primarily in a public location and is not primarily associated with another criminal activity, such as a robbery or domestic dispute. The database includes 198 mass public shootings from 1966 to 2025 perpetrated by 202 shooters, during which 1,410 people were killed (a mean of 7.12 killed per incident and a range of 4–60) and 2,189 people were injured (a figure that can include non-gunshot injuries in high-casualty events).

Where Mass Public Shootings Occur

Mass public shootings cluster in everyday, open-access locations where large numbers of people gather. Retail spaces (20 percent); restaurants, bars, and nightclubs (14 percent); factories and warehouses (12 percent); and other commercial settings account for a substantial share of incidents. K–12 schools (8 percent) and colleges and universities (5 percent) represent a small minority, despite intense public attention. Most incidents occur in urban areas (52 percent), though suburban and rural communities have been experiencing comparable per capita risk over time.

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Who Commits Mass Public Shootings

Perpetrators spanned a wide age range, from 11 to 72, but most were adult men, with notable clustering in early adulthood and midlife (a mean of 33.9 years of age with a standard deviation of 12.6 years). A majority (58 percent) had contact with the criminal justice system prior to their attack. Approximately one-quarter (26 percent) had some military service history—a rate substantially higher than the percentage of servicemembers in the general population. However, caution is required in interpreting this pattern because service history is varied.

A defining prevention-relevant feature is insider status (see Figure 2). About half of perpetrators had an existing relationship with the target location—especially factories and warehouses (100 percent insiders), K–12 schools and universities (around 90 percent insiders), and offices (75 percent insiders). As a result, the perpetrators were often familiar with security procedures and could bypass them. This

Figure 1. Key facts at a glance

198
mass public shootings identified since 1966

1,410
people killed
(mean of 7.2 deaths per incident)

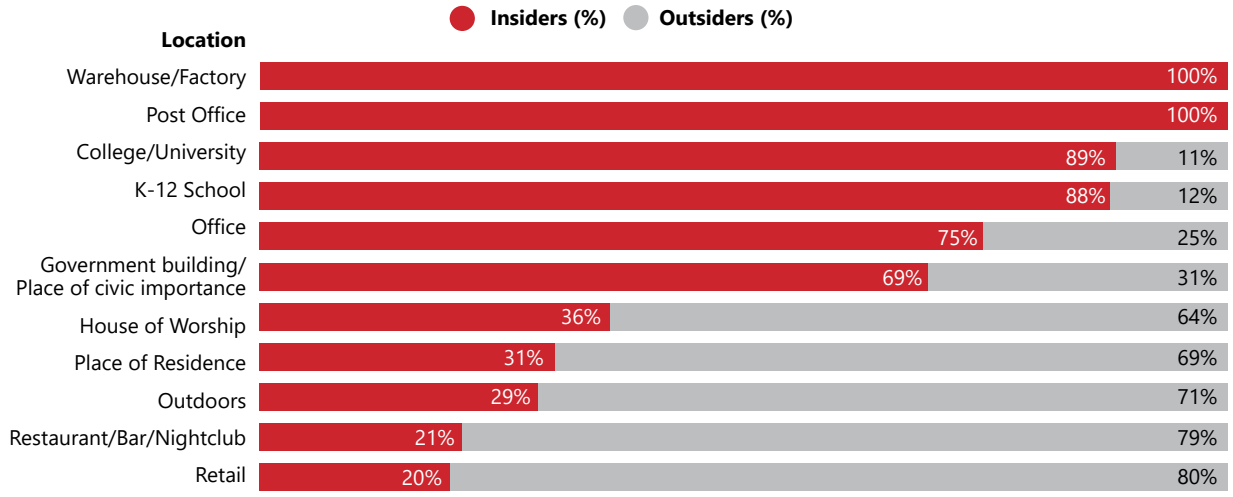
2,189+
additional victims injured

98%
of perpetrators were male
(mean age of 33.9 years)

- 20 percent occurred in retail settings
- 8 percent occurred in K–12 schools
- 52 percent occurred in urban areas
- 55 percent of perpetrators had a direct connection to the location
- Assault-style weapons were used in 60 percent of incidents since 2020

Source: Jillian Peterson and James Densley, *The Mass Shooter Database,* Violence Prevention Project, 2026, https://www.theviolenceproject.org.

Figure 2. Mass shooters are predominately insiders for most locations



Source: Jillian Peterson and James Densley, *The Mass Shooter Database,* Violence Prevention Project, 2026, https://www.theviolenceproject.org.

finding emphasizes the importance of institutions noticing and acting upon warning signs among known individuals who could become perpetrators.

Suicidality, Mental Health Conditions, and Mass Public Shootings

Mass public shootings are frequently discussed as a result of untreated mental health conditions.[6] However, the pattern emerging from the evidence is more nuanced. Suicidality and acute psychological crisis are common among mass public shooters and are more relevant to prevention efforts than mental health diagnoses alone.

Before an attack, most mass public shooters displayed observable warning signs, including depression, paranoia, withdrawal, agitation, and suicidal ideation.[7] More than one-third died by suicide (35.5 percent) during the incident, and an additional one-fifth (20 percent) provoked a lethal response from law enforcement. These statistics distinguish mass public shootings from most other forms of homicide, in which perpetrator suicide is rare.

Mental health conditions were present in a substantial subset of cases, but the manifestation of these conditions varied. Some perpetrators had documented psychiatric diagnoses or treatment histories, whereas others showed clear behavioral deterioration without formal diagnosis. Psychotic disorders do appear at higher rates in mass shooters than in the general population, but psychosis directly contributed to a minority of mass shootings.[8] In most cases, violence emerged from the interaction of crisis, grievance, loss, isolation, radicalization, access to firearms, and escalating instability rather than from a mental health condition alone.

From a prevention perspective, mass public shootings often resemble suicide crises with outward-directed violence layered on top. This framing helps explain why warning signs are frequently visible in advance and why interventions that reduce suicide risk can also reduce mass shooting risk.

Contagion and Amplification

Research indicates that mass shootings may be temporally clustered, with elevated risk for copycat or emulative attacks following high-profile incidents.[9] Media and social media coverage that emphasizes perpetrators, body counts, or tactical details may unintentionally contribute to this effect. Research also indicates that some mass public shooters study previous attackers and draw on earlier incidents as behavioral and symbolic reference points. Prior shootings can function as informal scripts, shaping expectations about targets, tactics, and outcomes.[10]

Online environments can intensify these effects.[11] Within some social media spaces (such as the True Crime Community), mass shooters may be discussed in ways that heroize, aestheticize, or mythologize their actions; in particular, social media users might fixate on casualty counts, circulate attacker-generated materials, or frame perpetrators as symbols of grievance. For a small subset of individuals already in crisis or seeking recognition, this attention can reinforce the perception that mass violence offers notoriety, validation, or posthumous identity.

This dynamic does not affect most people who consume crime-related content. However, for individuals exhibiting grievance, isolation, or identity threat, repeated exposure—particularly when amplified by algorithmic recommendation systems—may lower barriers to violence and increase imitation risk, especially following highly publicized attacks.

Firearms and Lethality

Many mass public shooters obtain firearms through legal channels; as a result, prevention cannot rely solely on prohibited persons and the detection of "illegal guns." It must also focus on identifying high-risk trajectories early and restricting access during periods of acute crisis through lawful mechanisms.

According to The Violence Project's firearm-level data, the share of incidents involving at least one assault-style weapon has increased over time. This finding matters because weapon and magazine capacity influence casualties, particularly when the attacker is mobile, victims are densely gathered, or responders face delayed access.

State-level research has consistently found higher rates of mass shootings in jurisdictions with more permissive firearm laws and higher rates of gun ownership, suggesting that the availability and ease of access shape both frequency and lethality.[12]

Implications for Practitioners and Policy-Makers

Local governments cannot eliminate risk by hardening every potential target. The most effective prevention strategies focus on early identification, coordinated intervention, and temporary risk reduction during periods of crisis.

1. **Integrate suicide prevention into Behavioral Threat Assessment and Management (BTAM) processes and extend behavioral threat assessment and management beyond schools**

   Prevention systems should explicitly account for the high prevalence of suicidality in mass public shooting trajectories. Because most mass public shootings occur in workplaces and commercial settings, jurisdictions should expand BTAM capacity beyond K–12 schools. Large employers, health care systems, and faith-based organizations are logical starting points. The goal is to create clear pathways for reporting concerns, multidisciplinary teams to assess risk, and means for coordinating intervention and management strategies across sectors.

2. **Center prevention systems on cooperation, not coercion**

   Because most potential attackers lack a criminal record, the strongest tools for reaching them will be relationships, coordination, and service engagement—not arrest. Jurisdictions should train BTAM partners in approaches that increase voluntary participation (e.g., motivational interviewing, warm handoffs, family engagement) and clarify thresholds for when law enforcement is needed so that law enforcement is available for imminent threats but the overall system remains focused on prevention.

3. **Build a deep, cross-sector resource bench**

   For prevention efforts to be effective, potential attackers require rapid access to services that extend well beyond a core BTAM team. Jurisdictions should identify and integrate mental health providers, crisis response teams, substance-use services, disability supports, housing resources, and legal expertise before a crisis occurs. If such services have already built a relationship with an individual, responders will be better able to act when time is limited. For further reading, see CNA's *BTAM: A Deep Bench of Resources*.

4. **Use time-limited firearm access restrictions during acute crises**

   Extreme Risk Protection Orders give courts a targeted tool for temporarily removing firearms from people who pose a demonstrated risk. But having the law on the books matters less than it working in practice—which depends on training, clear referral pathways, and tight coordination between courts, law enforcement, and service providers.[13]

5. **Make "leakage" actionable, especially after high-profile events**

   Research consistently shows that mass shooters rarely act without warning; rather, they leak their intentions beforehand through threats, social media posts, or direct statements to peers. In the weeks following a highly publicized attack, the risk of both imitation and new leakage spikes, so

jurisdictions need a plan for that surge.[14] That means simplifying how people report threats, making sure someone is staffed to triage reports quickly, and keeping schools, large employers, major venues, and law enforcement in close contact with each other when the threat environment is elevated.

Public communication after an attack should inform without elevating the perpetrator. For example, communications should limit circulation of the shooter's name, image, and backstory—not to suppress the truth but rather to avoid the contagion dynamic that research links to copycat attacks.[15] Inside prevention systems, fixation on prior attackers is itself a warning sign—particularly when someone repeatedly expresses admiration for past shooters, draws comparisons to earlier attacks, or obsessively engages with attacker narratives. That pattern matters most when it shows up alongside grievance, personal crisis, or deteriorating behavior. BTAM partners should discourage sharing attacker-generated materials such as manifestos and videos, while preserving access to them for investigators and analysts. And they should keep reporting pathways for credible threats visible and easy to use.

6. Pair prevention with trauma care for survivors and affected communities

Mass shootings create long-term detriments, including PTSD, complicated grief, fear avoidance, job loss, and educational disruption.[16] Local planning should integrate recovery support mechanisms (e.g., survivor services, evidence-based trauma care, continuity supports for schools and employers) within prevention infrastructure. Doing so is both a public health responsibility and a way to reduce downstream harms that can compound community instability.

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