

New Study Examines 25 Years of Mass Public Shootings to Enhance Pre-Attack Threat Detection

Findings highlight critical opportunities for prevention through comprehensive information sharing and public awareness education

Data from 171 incidents underscore that warning signs are observable and distributed across social networks

Albany, NY — A new [study](#) from the Regional Gun Violence Research Consortium at the Rockefeller Institute of Government reveals that perpetrators of mass public shootings consistently display observable warning signs across multiple areas of their lives prior to carrying out attacks. By analyzing 171 mass public shootings in the United States between 1999 and 2024, the report demonstrates that these incidents are rarely sudden or unpredictable. Instead, they represent the convergence of cumulative stressors, concerning behaviors, and explicit communications of intent that offer critical, missed opportunities for early intervention and prevention.

The report, titled *Sharing Information to Stop Mass Shootings (SISMS)*, examines 175 perpetrators who left behind identifiable pre-attack warning signs. Supported in part by the US Department of Homeland Security, the study shifts focus away from demographic profiling to closely evaluate actionable, observable communications and behaviors—such as grievance-driven planning, costuming, weapons practice, and verbal or online disclosures. Alongside the report, the project is launching an extensive open-source database derived from more than 154,000 pages of official investigative records, law enforcement data, court documents, and triangulated media reports. This data infrastructure—nearly 300 incident- and perpetrator-level variables—is designed to give policymakers, threat-assessment professionals, and community practitioners the evidence-based tools needed to interpret complex behavioral patterns and prevent future targeted violence.

Key findings from the report include:

- An overwhelming majority of perpetrators (85.7 percent) engaged in "leakage," communicating their violent thoughts or intentions to a third party prior to the attack. This leakage most frequently occurred through direct, in-person verbal interactions or text messages (69.1 percent) and was observed by people within the perpetrator's immediate social circle, including friends, parents, guardians, and coworkers. On average, these warning signs were distributed across more than two distinct categories of observers, meaning multiple individuals held fragmented pieces of a larger, escalating threat.
- Mass public shooters rarely act out of a single isolated grievance. Perpetrators experienced an average of five distinct, overlapping stressors, led by mental health concerns (64.6 percent), job-related difficulties (51.4 percent), and family troubles (50.3 percent). Additionally, individuals

demonstrated an average of 6.6 concerning behaviors, showing highly interconnected patterns of emotional distress (such as suicidal ideation, which was present in 55.4 percent of cases) and externalized aggression.

- Planning timelines varied significantly, but perpetrators spent an average of nearly 10 months researching and planning their attacks. The most common preparatory activities included researching location layouts (25.7 percent) and studying previous mass shooters (25.1 percent).
- Firearms were most frequently obtained through legal channels, with 59.6 percent purchased from federal firearms licensees (FFLs), meaning standard background checks were conducted; however, 33.7 percent of the total perpetrators had at least one disqualifying factor that legally should have prohibited them from possessing a firearm.

"Acts of mass public violence are frequently perceived as unpredictable anomalies, but the data tell a vastly different story," said Jaclyn Schildkraut, executive director of the Regional Gun Violence Research Consortium and lead author of the report. "Warning signs are regularly present, observable, and known to people in the perpetrator's social network long before the first shot is fired. The fundamental breakdown occurs because vital information is fragmented across different people and systems. By understanding how these indicators cluster and by building robust pathways for everyday bystanders to report what they see, we can connect the dots and intervene before a crisis turns into a tragedy."

The report details how information fragmentation remains a primary hurdle in modern threat management. While 64.0 percent of analyzed perpetrators had prior interactions with law enforcement for violent or nonviolent issues, and 37.7 percent had their pre-attack leakage reported, the lack of centralized information-sharing mechanisms often kept intervention teams from seeing the complete, escalating profile of risk.

In the coming months, Consortium researchers will use findings from this report to develop a series of interactive, web-based trainings to raise awareness about the leakage and pre-attack behaviors of mass public shooters.

[View the report on the Rockefeller Institute website.](#)