

LEGAL MEMORANDUM

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Part I: Mental Illness, Firearms, And Violence John Malcolm and Amy Swearer

Abstract

This is Part I of a three-part series of papers examining the intersection of mental illness, violence, and firearms.

As the nation sits in the midst of a serious discussion about gun violence in general, and mass shootings in particular, we must ensure that policy decisions regarding Second Amendment rights reflect an accurate understanding of the role mental illness does and does not play in gun violence, as well as an accurate understanding of why the United States is suffering from a crisis of untreated serious mental illness.

I n order to understand the relationship between mental illness, violence, and firearms, we must first understand the complex phenomenon of "mental illness." Although many Americans will experience some degree of mental illness at least once in their lives, only a small percentage will develop serious, chronic mental illnesses that substantially impact their ability to function on a daily basis.

The most common interaction of mental illness and firearm-related violence is suicide, which accounts for two-thirds of all annual gun-related deaths. While the United States has a comparatively high percentage of suicides that are committed with firearms as opposed to other means, it does not have a particularly high overall suicide rate compared to countries that severely limit civilian access to firearms. It is clear that mental illness plays a key role in suicide, whether carried out with firearms or through other means, but policies seeking to reduce the overall suicide rate should account for the many factors associated with increased risks of suicide, not just the presence of mental illness. Similarly, broad limitations on firearm access for

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KEY POINTS

- Many Americans will experience some type of mental illness at least once in their lives, but only a fraction of these individuals will suffer from serious mental illness.
- Suicides account for two-thirds of annual firearm-related deaths in the United States, but the United States does not have a particularly high overall suicide rate.
- Serious mental illness is associated with a significantly increased risk of suicide, but policies seeking to reduce the overall suicide rate should account for the many factors associated with increased risks of suicide.
- Focusing solely on serious mental illness or general firearm access is unlikely to meaningfully reduce suicide rates.
- Individuals with serious mental illness are far more likely to harm themselves than they are likely to harm other people. Untreated serious mental illness, however, is a major factor behind the majority of mass public shootings in the United States.

individuals who are not necessarily at a heightened risk for committing suicide are unlikely to meaningfully impact overall suicide rates and should be viewed with a heavy dose of skepticism.

"Mental illness" is a complex topic that affects millions of Americans every year.

Finally, while most mentally ill individuals are not-and never will become-violent, certain types of untreated, serious mental illness are associated with a higher prevalence of interpersonal violent behaviors. In particular, untreated serious mental illness is prevalent in a substantial majority of individuals who commit mass public shootings. As with suicides, this does not suggest that mass killings by individuals with serious mental illness are likely to be reduced by broadly limiting civilian access to firearms. The connection between untreated serious mental illness and specific types of firearm-related violence cannot, however, be overlooked, and must be addressed as one of many factors in a truly holistic approach to understanding the interaction between mental illness and violence.

I. What Is Mental Illness?

In order to understand the role mental illness plays in violence generally, and in firearm-related violence specifically, we must first answer one important question: What is mental illness? This is no easy task, as mental illness is an extraordinarily complex phenomenon. "Mental illness" refers to a medical condition that causes significant behavioral or psychological symptoms that impair a person's ability to think, feel, and relate to others,1 which often causes "a diminished capacity for coping with the ordinary demands of life."2 The term "mental illness" is used interchangeably with "mental disorder," which the American Psychiatric Association defines as "a syndrome characterized by clinically significant disturbance in an individual's cognition, emotional regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning."3 Put more simply, mental illness is a medical condition that primarily affects a person's thought processes and emotions instead of his or her physical abilities.

Just as there are many different types of physical illnesses, there are many different types of mental illnesses. It is a broad definition that can include a number of subset mental illness "groupings," like affective disorders,⁴ personality disorders,⁵ anxiety disorders,⁶ and psychotic disorders.⁷ It covers such varied diagnoses as schizophrenia,⁸ depression,⁹ bipolar disorder,¹⁰ post-traumatic stress disorder (PTSD),¹¹ and agoraphobia.¹²

As with physical illness, the symptoms of mental illness can range from mild, temporary, and manageable to severe, life-long, and debilitating.13 And, similar to physical illnesses, mental illness is a very common occurrence, with anywhere from one-third to one-half of Americans experiencing mental illness at some point in their lives.¹⁴ Many of these individuals, however, will never present a danger to themselves or others, nor even find themselves significantly or chronically impaired.¹⁵ In other words, only a small subset of individuals with mental illness will suffer from "serious mental illness," which is generally defined as a "functional impairment which substantially interferes with or limits one or more major life activities."16 While any subset of mental illness can rise to the level of "serious mental illness," individuals with schizophrenia, bi-polar disorder, and major depression comprise the bulk of those suffering from serious mental illness.17 Fewer than 1 in 25 individuals in the United States will develop one of these serious mental illnesses.18

The breadth and complexity of mental illness present a major challenge to simplistic conceptions of mental illness and its relationship to violence. Proper care must be taken to distinguish among different types of mental illness, the circumstances under which some mentally ill individuals may become violent, and the policies that will prove most helpful to addressing this limited subset of seriously mentally ill individuals. It is important that all persons-whether medical professionals, policymakers, law enforcement, or just concerned citizens-refrain from categorizing and treating mentally ill persons as a group instead of as individuals with varied and complex histories, problems, and outlooks. That having been said, while there are still many unanswered questions regarding the role mental illness plays in violence trends, what is clear is that untreated serious mental illness does, indeed, play a significant role.

II. Mental Illness, Firearm Access, and Suicide

Most gun deaths in the U.S. are suicides, but there is little statistical connection between overall suicide rates, gun laws, and general firearm access.

By far, the most significant intersection of mental illness and violence-especially violence committed with firearms-is that of suicide. Almost two-thirds of annual firearm-related deaths in the United States are suicides, an average of about 21,000 suicides by firearm every year.¹⁹ Of course, not every suicide is necessarily related to an underlying mental illness,²⁰ but there can be little doubt that the presence of mental health disorders-particularly affective disorders such as PTSD and depression-contribute substantially to the suicide rate.²¹ The most commonly employed means of committing suicide in the United States is the use of a firearm, an unsurprising reality given that the United States has the highest number of privately owned firearms per capita in the world.²² Although some specific gun control policies may be effective at reducing the number of suicides committed with firearms, there is no evidence that these policies reduce the overall risk of suicide in the general population.²³

While there are still many unanswered questions regarding the role mental illness plays in violence trends, what is clear is that untreated serious mental illness plays a significant role.

Any suicide is tragic, regardless of the means used, and more can certainly be done to study why some people choose to end their own lives, including suicides committed by those with mental health issues.²⁴ But the reality is that the United States, even with its relatively high rate of firearm suicides, does not have a particularly high overall suicide rate compared to other developed countries.²⁵ In fact, our national suicide rate stands roughly at the world average and is comparable to the rate experienced by many European countries-despite their significantly lower rates of private firearm ownership.26 At the same time, a number of countries with severely restrictive gun control laws have significantly higher rates of suicide²⁷ than the United States, including France,28 Finland,29 Belgium,³⁰ Russia,³¹ Japan,³² and South Korea.³³

Suicide rates in the United States have remained relatively stable over the past 50 years,³⁴ even though the number of guns per capita has doubled.³⁵ Moreover, since 1999, while the number of privately owned firearms has increased by more than 100 million, the percentage of suicides committed with firearms has actually *decreased*.³⁶ Further, some states with permissive gun laws (like Texas and Nebraska)³⁷ and with some of the highest numbers of guns per capita (like Mississippi and Hawaii)³⁸ have comparatively low rates of suicide,³⁹ while other states with relatively restrictive gun laws (like Colorado and Washington)⁴⁰ and low rates of firearm ownership (like New Hampshire and Maine)⁴¹ have comparatively high rates of suicide.⁴²

As this data suggests, there are other socioeconomic factors beyond firearm possession rates that appear to account for differences in suicide rates. Several studies, for example, suggest that divorce rates are strongly linked to suicide rates.⁴³ Other studies have found strong relationships between suicides rates and other measures of social cohesion, such as unemployment, poverty, past trauma, resource shortages, family structure, immigration and cultural assimilation, and the size of one's social group.44 It is apparent that, regardless of which measure of social cohesion is used, more socially integrated societies tend to have lower suicide rates.45 Analyses of the relationship between firearm ownership rates and suicide rates regularly fail to account for these and other important factors that likely affect both firearm ownership rates and suicide rates.

When individuals have serious mental illness, firearm access may increase their risk of committing suicide.

As evidenced above, it is unlikely that general rates of gun ownership meaningfully affect overall suicide rates at a state or national level. That does not necessarily mean, however, that specific individuals are not at a greater risk of committing suicide if they have access to a firearm. Individuals with serious mental illness are at a substantially greater risk of committing suicide than are individuals without serious mental illness, irrespective of the means used.⁴⁶ And studies indicate that when individuals with serious mental illness have access to firearms, it further increases their individual risk of committing suicide.⁴⁷

But the reality of firearm access, mental illness, and suicide may also be a bit more complicated. One recent study analyzed the use of firearms to commit suicide by those with a mental illness or substanceabuse disorder compared to the use of firearms in suicides by those without a known history of mental illness or substance-abuse disorder.⁴⁸ It found that serious mental illness was associated with increased odds of committing suicide generally, but also that individuals with serious mental illness who committed suicide were less likely to use firearms than were individuals without serious mental illness who committed suicide.⁴⁹ In other words, while individuals with serious mental illness may have an increased risk for committing suicide when they have ready access to firearms, they may also be generally less likely to commit suicide with firearms.

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What might account for these apparent discrepancies? One of the reasons that individuals with serious mental illness may be less likely to commit suicide with a firearm is that they often have greater barriers to firearm access. For example, state and federal laws prohibit the purchase and possession of firearms by many individuals with serious mental illness,50 and such individuals are also more likely to have friends or family members who monitor or limit their unsupervised access to firearms.⁵¹ And yet despite the common limitations on firearm access imposed on individuals with serious mental illness, the study still found that roughly 40 percent of individuals with a known history of mental illness who committed suicide did so with a firearm.52 This suggests that the studies are not at odds with each other at all: It is precisely because firearm access increases the risk of suicide for those with mental illness that we have taken steps to reduce firearm access for these individuals, and this in turn appears to have lowered the use of firearms by those individuals to commit suicide-even if it has not prevented many others from committing suicide via other means.

Finally, the fact that significant numbers of suicides by both those with and without serious mental illness are carried out by means other than firearms indicates that the risk of suicide is far from limited to individuals with serious mental illness who also have access to firearms. Several studies suggest that reducing unsupervised access to commonly employed means of suicide (such as firearms, sharp objects, medications, and rope material) would likely reduce suicide rates for certain at-risk persons, regardless of whether they have serious mental illness.⁵³ In sum, policies designed to reduce suicide rates by limiting firearm access for mentally ill persons may be an important step in the right direction for reducing state and national suicide rates, but they are not comprehensive solutions to a much more complex problem.⁵⁴

III. Mental Illness, Firearms, and Interpersonal Violence

Untreated serious mental illness is associated with a higher likelihood of violent behavior.

There is no evidence to support a claim that all persons with mental illness constitute a "high-risk" population with respect to interpersonal violence in general and firearm-related interpersonal violence in particular. The vast majority of people suffering from mental illness will never become violent toward others, and are, in fact, much more likely to be the victims of violent crime.55 Most comprehensive studies estimate that mental illness is responsible for only 3 percent to 5 percent of all violent crimes committed in the United States, and an even smaller percentage of those crimes involve firearms.⁵⁶ Moreover, some current research suggests that the relationship between psychiatric disorders and violence is minimal in the absence of substance abuse-though there is significant disagreement on this subject.⁵⁷ Neither is there any evidence that people with serious mental illness who are receiving appropriate treatment are more dangerous than individuals in the general population.58 On the contrary, "most episodes of violence committed by mentally ill persons are associated with our failure to treat them."59

At the same time, a substantial body of research indicates that people who exhibit specific symptoms associated with serious mental illness are more likely to commit violent acts than the general population or other mentally ill people.⁶⁰ One study regarding the relationship between serious mental illnesses—like bipolar disorder and schizophrenia—concluded that "[o]nce gender, age, socio-demographic and socioeconomic status are taken into account, the overall

risk for physical assault is generally estimated to be 3 to 5 times higher [for those with major mental illness] than that of the general population."61 At least 20 different studies have found a positive relationship between psychotic delusions and violence, especially when those delusions involve paranoid beliefs about persecution and exaggerated perceptions of threat risks or involve "command hallucinations" in which voices inside their heads command them to commit violent acts.62 And while mental illness in general may have a limited relationship to violent crime in general, studies in both the United States and the international community routinely suggest that individuals with untreated schizophrenia and bipolar disorder are responsible for a disproportionate number of violent crimes,⁶³ and for roughly 10 percent of murders in particular.64 Although it is estimated that only one in 300 persons with schizophrenia will kill someone, research suggests that individuals with schizophrenia commit homicide at a rate 20 times greater than that of the general population.65

The risk of violent behavior is highest among individuals suffering from their first episode of psychosis,⁶⁶ and among mentally ill individuals with histories of non-adherence to medication treatment regimen or discontinuation of treatment altogether.⁶⁷ Unfortunately, as many as 50 percent of individuals with schizophrenia and bipolar disorder suffer from anosognosia—a lack of insight into the existence or severity of their illness—that is strongly associated with repeated refusals to take medication.⁶⁸ A number of studies indicate that substance abuse greatly increases the likelihood of violent behavior within populations of mentally ill individuals, even when compared to the increased likelihood it also causes within the general population.⁶⁹

Notably, mentally ill individuals who exhibit violent behaviors become no more likely than the average population to commit acts of violence once they are adequately treated for their illness.⁷⁰ This is consistent with analyses of mass killers with mental illness that have found that psychiatric treatment was either unavailable or underutilized in "virtually all cases of adult and adolescent mass murder."⁷¹ At least one recent study reinforces the link between a lack of adequate treatment and an increased risk of violent behavior among severely mentally ill individuals, finding that higher homicide rates are associated with stricter civil commitment laws that make it harder to get someone involuntarily committed.⁷² This suggests that when states make it easier to mandate mental health treatment for individuals suffering from a mental illness who otherwise refuse or neglect it, it significantly decreases the likelihood that those individuals commit violent crimes in the future.

The relationship between mental illness and violence is further complicated by studies indicating that various socioeconomic factors can have significant mediating effects on whatever components of mental illness are associated with violence or crime.73 As one analysis of various studies concluded, it appears that "persons who suffer from serious mental illness, but who grew up in a healthy family environment (e.g., not violently victimized by family members), developed self-control and coping skills (no substance abuse), and who are able to maintain gainful employment (better able to afford living in a non-violent neighborhood) often seem to escape" any heightened risk of violence associated with mental illness.74 This appears to support assertions that the link between serious mental illness and violence is not clear-cut, even if it likely exists.

The majority of mass public killers exhibited clear signs of mental illness prior to their attacks, and some studies conclude that as many as two-thirds of all mass public killers suffered from a severe mental illness.

Finally, just because a person with a serious mental illness commits a violent act, it does not necessarily mean that the mental illness was the *cause* of the violent act.⁷⁵ It appears that psychotic symptoms may be more likely to be a direct cause of homicidal behavior in schizophrenic individuals,⁷⁶ but studies and the experiences of many in the law enforcement community also suggest that psychotic symptoms are not the immediate cause of most criminal acts committed by most mentally ill individuals.⁷⁷ Even though we may not fully understand the complex mechanisms linking psychotic and delusional symptoms of mental illness to violence, the fact remains that there is a clear statistical link between them.⁷⁸

Many mass public killings—including mass public shootings—are committed by individuals with untreated mental illness. Although most individuals suffering from a mental illness do not and will never pose a heightened risk of danger to the general public, there is a strong connection between mass public violence and mental illness that cannot be ignored. While acts of mass public violence are incredibly rare,⁷⁹ they are often high-profile events that deeply impact the national view of violent crime trends; moreover, mass public shootings in particular stoke national conversations about gun violence and gun control.

Many mass public killings—including mass public shootings—are committed by individuals with untreated mental illness.

The majority of mass public killers exhibited clear signs of mental illness prior to their attacks, and some studies conclude that as many as two-thirds of all mass public killers suffered from a serious mental illness,⁸⁰ although many of these individuals had not received an official diagnosis, much less treatment for a psychiatric condition.⁸¹ Consistent with research showing that personality disorders are the strain of mental illness most closely associated with violent tendencies, many high-profile mass public killers displayed obvious signs of paranoia, delusional thinking, and feelings of irrational oppression associated with schizophrenia or bipolar-related psychosis prior to their attacks.⁸²

Prominent examples of mass public killers exhibiting psychotic symptoms at the time of their attacks include:⁸³

 Jiverly Wong killed 13 people and then himself at an America Civic Association center in Binghamton, New York, and sent a letter to a news station prior to the attack, detailing the inner workings of a mind completely removed from reality.⁸⁴ Wong claimed he was being persecuted by undercover cops who caused him to lose his job by spreading rumors about him, touched him in his sleep, stole money from his wallet, and tried to force him into a car accident. Those close to Wong knew he was frustrated over losing his job and struggling with his English-language skills,⁸⁵ but the letter reveals Wong likely suffered a psychotic break from reality at some point during the days and weeks leading up to the violence.⁸⁶

- Jared Loughner killed six people, including Chief U.S. District Judge John Roll and nine-year-old Christina-Taylor Green, and wounded 13, including Rep. Gabrielle Giffords (D-AZ), in Tucson, Arizona.87 Loughner was almost certainly suffering from untreated schizophrenia in the year prior to the shooting.88 He exhibited such bizarre and concerning behavior that he was suspended from Pima Community College and told he could not return until he received a mental health evaluation "indicating his presence at the College does not present a danger to himself or others."89 Loughner's parents were so worried about his mental health that his father confiscated Loughner's shotgun, disabled his car, and tried to get him mental health treatment.90
- Seung-Hui Cho⁹¹ and James Holmes⁹²—similar to Loughner-were both referred to their respective colleges' mental health services due to concerns over their deteriorating mental states. Cho told his college roommate that he had a supermodel girlfriend who lived in outer space and traveled by spaceship, was known to fixate on female students, and had to be removed from his undergraduate poetry class over worrying behavior.93 After suggesting he might kill himself, he was determined to be "mentally ill and in need of hospitalization" for presenting a danger to himself or others, but received only minimal psychiatric treatment.⁹⁴ Holmes was receiving psychiatric treatment from Student Mental Health Services at the University of Colorado prior to murdering 24 individuals at an Aurora, Colorado, movie theater.95 One of his psychiatrists was so concerned about Holmes' mental state that she contacted University Police to discuss placing him under a psychiatric hold.96
- Jennifer San Marco's psychological problems were so pronounced in the years before she shot and killed six post office workers that she was granted early retirement from her job in a mail sorting center and placed on medical disability.⁹⁷ She was known to act erratically, including having rambling conversations with herself and taking off her shirt in public places.⁹⁸

Russell Weston killed two Capitol Police officers while under the delusion that the United States was on the verge of annihilation by a disease that turned people into cannibals.⁹⁹ He told his courtappointed psychiatrist that he went to the Capitol to access "the ruby satellite," the key to stopping the disease, which he believed was being kept in a Senate safe.¹⁰⁰

A significant number of mass public killers were not necessarily psychotic or delusional at the time of their attacks, but nonetheless exhibited increasingly troubled behavior strongly suggesting the presence of a severe mental disorder:

- Adam Lanza, who killed 20 first-graders and six adults at the Sandy Hook Elementary School, began exhibiting symptoms consistent with schizophrenia, such as excessive hand washing and smelling non-existent aromas, in pre-school.¹⁰¹ Lanza regularly took special classes focusing on his speech and language deficiencies through elementary school and was diagnosed with Asperger's Syndrome in the seventh grade.¹⁰² As an adolescent, he often refused to take medications or engage with behavioral therapists.¹⁰³ He became increasingly antisocial in the year leading up to the shooting, closing himself in his room for long periods of time and communicating with his mother only through text messages, even though they lived in the same house.¹⁰⁴ The final report from the State's attorney noted that it was "well known that [Lanza] had significant mental health issues that affected his ability to live a normal life and interact with others,"105 but he did not appear to have lost touch with reality to a degree indicating psychosis.
- Devin Kelley, who murdered 26 people at a Sutherland Springs, Texas, church in 2017, had a long history of non-psychotic mental illness. Kelley had been court martialed during his stint in the Air Force and confined to an on-base mental health facility for unspecified mental health disorders.¹⁰⁶ He was deemed a danger to himself and others for attempting to sneak weapons onto base and threatening superior officers—and even attempted to escape the mental health facility. Kelley's troubles continued after his 2012 bad-conduct discharge from the Air Force, which he received for serious domestic violence convictions. Two ex-girlfriends

told reporters that Kelley stalked them after their respective break-ups, to the point where one of the women was forced to change her cell phone number several times.¹⁰⁷ In 2014, Kelley was convicted of animal cruelty in Colorado, and police reports indicate that he "picked up the dog by the neck into the air and threw it onto the ground and then drug [the dog] away."¹⁰⁸ He was also investigated in Texas for allegations of sexual assault. While Kelley was not psychotic, he exhibited serious mental health red flags over a period of years indicating that he had paranoid and narcissistic tendencies that manifested themselves in violent ways.

- Stephen Paddock, who committed the worst mass public shooting in U.S. history when he murdered 58 and wounded another 851 individuals attending a Las Vegas country music concert in 2017, was never diagnosed with a mental health disorder and maintained steady employment throughout his life.¹⁰⁹ His primary care doctor, however, told police that he believed Paddock may have suffered from bipolar disorder, but Paddock had refused to discuss the subject.¹¹⁰ The few people close to Paddock described him as "standoff-ish," "disconnected," and "a man who had difficulty establishing and maintaining meaningful relationships."111 He would often gamble at casinos for hours on end with minimal human contact, and some law enforcement officials have opined that Paddock likely suffered from some form of undiagnosed mental illness.112
- Elliot Rodger killed six and wounded 13 in a 2014 rampage near the University of California, Santa Barbara.¹¹³ He was seeing multiple mental health care professionals at the time of the killing, and had been attending similar therapy sessions intermittently since he was a child.¹¹⁴ Less than a month before the violent attacks, a staff member at a mental health agency requested that law enforcement conduct a welfare check on the attacker after being alerted to his social media posts about suicide and killing people.¹¹⁵ Sheriff's deputies contacted the attacker at his apartment, but determined that his behavior did not meet the criteria for an involuntary psychiatric hold and did not conduct a search of his room, which would likely have revealed Rodger's cache of firearms.¹¹⁶

Then there is the case of Charles Whitman, who in 1966 created a "sniper's perch" atop a campus bell tower at the University of Texas at Austin, killing 15¹¹⁷ and wounding 31 with his bolt-action hunting rifle.¹¹⁸ Whitman was a 25-year-old former Marine and Eagle Scout who received a scholarship from the Naval Enlisted Science Education Program to study architectural engineering.¹¹⁹ His emotional state soon took a turn for the worse, and he lost his scholarship after struggling with gambling and bad grades.¹²⁰ Prior to the attack, he sought professional help for "overwhelming violent impulses"121 and left a note stating his wish that his brain be examined for "mental disorders" after his death.¹²² An autopsy revealed Whitman had a brain tumor that some have suggested could have affected his aggression levels and impulsecontrol capabilities.¹²³ This would indicate that Whitman may have suffered from neurological changes unrelated to-but perhaps mimickingserious mental illness.

Although many factors can combine in different ways to cause an individual to commit a violent act, when it comes to mass public shootings, it is increasingly clear that untreated mental illness is often a significant contributing factor. While such acts account for only a small percentage of all gun-related violent crime, they shake the national conscience and affect our feelings of general safety for understandable reasons.¹²⁴ By focusing on intervention and treatment for individuals exhibiting clear signs of serious mental illness that heightens their risk of danger to self or others, we can lower the risk of mass public violence without imposing broad restrictions on the rights of law-abiding citizens.

Other Factors Unrelated to Serious Mental Illness That Play Prominent Roles in Acts of Mass Public Violence

While a strong association between untreated serious mental illness and acts of mass public violence exists, not all public mass killers have a history of identifiable symptoms of mental illness. Some mass public killers commit acts of violence due to a set of repugnant but otherwise rationally derived beliefs. Dylann Roof, who murdered nine individuals at a predominantly African American church in Charleston, held views of extreme racism and white supremacy.¹²⁵ While his violent and extremist ideology is sickening, there are no indications that he exhibited delusional or psychotic symptoms that caused him to believe this ideology.

Similarly, Major Nidal Hassan, who killed 13 and wounded 32 during a violent attack at Fort Hood, Texas, may have been exceptionally angered by his perceived concerns over Muslim soldiers being deployed to fight other Muslims, and subscribed increasingly to radical jihadist beliefs. And Rizwan Farook and his wife Tasheen Malik were also motivated not by mental illness but by ideology when they murdered 14 and wounded 24 in San Bernardino, California, in 2015.¹²⁶ Like Roof, however, Hassan, Farook, and Malik had no discernable history or signs of mental illness.¹²⁷

When it comes to mass public shootings, it is increasingly clear that untreated mental illness is often a significant contributing factor.

A number of mass killers could also reasonably be described as "irrationally disgruntled and full of rage" but may not have been suffering from a diagnosable mental disorder. For example, in 2010, Omar Thornton shot and killed eight co-workers at Hartford Distributors in Manchester, Connecticut, before committing suicide.¹²⁸ On the day of the incident, Thornton had been forced to resign after he was caught on a surveillance video stealing beer from a warehouse and was implicated in the theft of empty beer kegs.129 After being escorted off the premises, he returned with two handguns and opened fire on his former co-workers.¹³⁰ Thornton called 911 and informed the operator that his shooting was motivated by racism he experienced in the workplace.131 There are no indications he suffered from a mental illness.

A similar incident occurred in 1986 in Edmond, Oklahoma. Postal worker Patrick Sherrill was facing possible dismissal due to management concerns over his job performance and reprimands for irritable behavior.¹³² One day after being verbally disciplined by his supervisors, Sherrill arrived at work with three handguns, shooting and killing 14 co-workers before killing himself.¹³³ Like Thornton, there is little evidence Sherrill was mentally ill in any clinical sense, and official reports on the shooting concluded it was likely the result of job-related frustrations.¹³⁴

Mentally Ill Individuals Prone to Violence Committing High-Casualty Acts of Mass Public Violence Without Access to Firearms

While there is certainly an association between untreated serious mental illness and specific types of firearm-related violence such as mass public shootings, this association is too commonly politicized into calls for broad prohibitions on certain types of firearms in the aftermath of mass public shootings. But it is a mistake to focus on the means of violence employed instead of focusing on the underlying untreated serious mental illness that led the individual to violent actions in the first place. Even if it were possible to remove every single one of the almost 400 million privately owned firearms in this country¹³⁵ and ensure that no firearms were reintroduced via the black market,136 there are a vast array of alternative means available by which a person can cause equal amounts of harm to himself or others. Mentally ill individuals prone to violence do not need firearms to commit devastating attacks. Consider the follow examples:

- In 2001, Damir Igric, a mentally disturbed Croatian immigrant with a long history of violent behavior and substance abuse¹³⁷ attempted to slit the throat of a Greyhound bus driver while traveling near Manchester, Tennessee. Igric eventually succeeded in causing the bus to collide with oncoming traffic, killing seven people (including Igric), and wounding another 35 passengers.
- That same year, college student David Attias known around campus as "Crazy Dave"—killed four people¹³⁸ and wounded nine by driving his car down a crowded sidewalk near the University of California, Santa Barbara. Witnesses recalled Attias exiting his car and shouting, "I am the Angel of Death!"¹³⁹
- In 2005, a suicidal man parked his Jeep on the tracks of a commuter train in California, intending to kill himself. Although he changed his mind at the last minute, he left his Jeep to be struck by an oncoming train, resulting in 11 deaths and almost 200 injuries when the train derailed.
- In 2015, four people were killed and 48 more injured when 25-year-old Adacia Chambers plowed her car through a crowd at Oklahoma

State University's homecoming parade.¹⁴⁰ Chambers was initially thought to have been intoxicated but appears instead to have suffered from severe psychosis brought about by undiagnosed bipolar disorder.¹⁴¹

It is a mistake to focus on the means of violence employed instead of on the underlying untreated serious mental illness that led the individual to violent actions in the first place.

Further, mentally ill individuals intent on committing violence frequently find ways to commit mass killings in countries with even the most restrictive gun control laws. While some of these individuals still have access to firearms,¹⁴² as in the United States, there are many available alternatives:

- In 2010, Zhenf Minsheng, a former community doctor known to suffer from mental illness, went on a stabbing rampage in a Nanping, China, elementary school,¹⁴³ killing eight children and wounding five after despairing that "life was meaningless."¹⁴⁴
- In 2014, an Australian single mother named Raina Thaiday suffered an acute schizophrenic breakdown, during which she stabbed to death all seven of her children. Shortly before the killings, Thaiday's behavior changed noticeably—she began street preaching about "Papa God," threw her family's possessions onto the front lawn, and began "cleansing" her house.¹⁴⁵
- In 2015, co-pilot Andreas Lubitz locked the captain of Germanwings Flight 9525 out of the cockpit, then deliberately crashed the plane into the French Alps.¹⁴⁶ All 150 individuals on board were killed instantly. Lubitz had previously been treated for suicidal tendencies and was declared "unfit to work" by a doctor.¹⁴⁷
- In 2017, Dimitrious Gargasoulas killed six and wounded another 36 in a vehicular attack on a crowded street in Melbourne, Australia. Investigators disclosed that Gargasoulas had a history

of mental health problems and family violence, including stabbing his younger brother for being gay. In the days before the attack, he wrote several "rambling and often nonsensical" posts on social media and made similarly bizarre rants during his court hearings.¹⁴⁸

In 2018, just 24 hours after the U.S. media reported the deaths of four individuals at the hands of a mentally disturbed young man at a Tennessee Waffle House,¹⁴⁹ a similarly disturbed individual in Toronto, Canada, used a large van to mow down pedestrians, killing 10 and wounding 15.¹⁵⁰

Dealing with the consequences of untreated, serious mental illness necessitates a comprehensive approach that cannot focus simply on the prevalence of firearms within a given community.

Dealing with the consequences of untreated, serious mental illness necessitates a comprehensive approach that cannot focus simply on the prevalence of firearms within a given community. That does not mean there may not be effective and constitutionally sound mechanisms by which to limit a specific individual's access to lethal means when he or she evidences a heightened risk of danger to self or others.

It does mean, however, that activist groups and politicians who point to mass public shootings as a reason for broad restrictions on firearm access by the general public largely miss the underlying reality: *The real problem is not the prevalence of firearms in particular, but the prevalence of untreated serious mental illness that causes some individuals to become violent in catastrophic ways, regardless of lawful access to firearms.*

Conclusion

Serious Mental Illness Plays a Significant Role in Violent and Firearm-Specific Crime that Should Not Be Ignored. Taken together, the broader research and specific incidents presented above evidence a strong correlation between serious mental illness—especially when untreated—and specific types of firearm-related violence, such as suicide and mass public shootings. This is not to suggest that individuals with serious mental illness should be treated as community pariahs or that they are the cause of most firearm-related violence in the United States. The connection between the two, however, is not insignificant, and must be accounted for as part of any holistic approach to reducing the prevalence of violent crime in our communities.

The data show that:

- Most gun deaths in the United States are the result of suicide, not homicide or accident.
- General rates of firearm access are not significantly related to general suicide rates, even though the risk of suicide for particular at-risk individuals may be lowered by reducing their individual access to prevalent means of committing suicide—including firearms. Several factors other than general firearm access appear to have much more meaningful connections to suicide rates.
- The presence of serious mental illness substantially increases the risk that a person will commit suicide. Further, access to firearms increases the likelihood that a person with serious mental illness will commit suicide, and many mentally ill individuals who do commit suicide use firearms despite the fact that firearms may generally be less accessible to them.
- Most people with mental illness are not and will never become violent toward others, but some types of serious mental illness, when untreated, are associated with certain types of violent crime. In particular, the majority of mass public killers suffer from untreated serious mental illness.
- Even without firearm access, individuals with untreated serious mental illness can and do find ways to commit mass public killings.

This strongly suggests that:

 While the broad reduction of gun access is not likely to reduce suicide rates, a reduction in suicide rates is likely to correspond with a reduction in firearm-related death rates. This makes suicide prevention a key component of any plan to reduce gun violence. Meanwhile, policies focusing on the reduction of firearm access broadly, across an entire population, are not necessary for the successful reduction of the suicide rate.

- Policies that focus solely on reducing access to firearms by the seriously mentally ill as a means of lowering their individual risk of suicide may be worthwhile and decrease the likelihood of suicide for some people under some circumstances, but they also fail to grasp the complexity of the issue and should not be the sole means employed to reduce suicide rates.
- The reduction of suicide rates requires a comprehensive approach that addresses all of the various factors related to suicide risk, such as serious mental illness, socioeconomic variations, and access

to support systems—not the broad-scale disarmament of a given population.

 Policies to reduce the rate of mass public killings in the United States must account for the significant role played by untreated serious mental illness in such killings, instead of focusing largely on the broader availability of firearms.

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Endnotes

- 1. Mental Disorders, WORLD HEALTH ORGANIZATION (Apr. 28, 2017), http://www.who.int/mediacentre/factsheets/fs396/en/.
- 2. Our Philosophy, NAT'L ALLIANCE ON MENTAL ILLNESS, http://www.namimobile.org/about-us.html (last visited Apr. 24, 2018); see also Mental Illness, NAT'L INST. OF MENTAL HEALTH, https://www.nimh.nih.gov/health/statistics/mental-illness.shtml (last visited Apr. 24, 2018). The term is also occasionally used interchangeably with "psychiatric disorder" and "psychological disorder," though these references are less common. Underlying all of these terms is the same basic reality of an individual whose mental or emotional systems are not operating in a healthy way, to the point that it negatively impacts his or her normal day-to-day functioning.
- 3. AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (5th ed. 2013). This definition comes from the fifth and latest edition of the Association's *Diagnostic and Statistical Manual of Mental Disorders*, often referred to as DSM-5. Both the fifth edition and earlier editions of the DSM have received (sometimes appropriate) criticism for various faults, including the creation of too many diagnostic categories and labelling apparent non-conformity or political incorrectness as indicative of psychiatric illness as indicative of psychiatric illness. See, e.g., Dan J. Stein et al., *What is a Mental/Psychiatric Disorder? From DSM-IV to DSM-V*, 40 Psychol. MED. 1759 (2010), https://www.ncbi. nlm.nih.gov/pmc/articles/PMC3101504/pdf/nihms291831.pdf; *News Analysis: Controversial Mental Health Guide DSM-5*, NATIONAL HEALTH SERVICE (Aug. 15, 2013), https://www.nbs.uk/news/mental-health/news-analysis-controversial-mental-health-guide-dsm-5/. These criticisms, however, do not detract from the DSM-5's position as the standard treatise on mental disorders, and the manual still provides a useful basis for understanding and analyzing afflictions long recognized as genuine mental disorders, such as schizophrenia and bipolar disorder.
- 4. Affective disorders, also known as mood disorders, are characterized by extended periods of depressed, euphoric, or irritable moods that cause significant interference with a person's daily life. See Mood Disorders, MAYO CLINIC (Oct. 25, 2017), https://www.mayoclinic. org/diseases-conditions/mood-disorders/symptoms-causes/syc-20365057. They include major depressive disorder, bipolar disorder, and seasonal affective disorder. See Mood Disorders, U.S. DEP'T OF HEALTH & HUMAN SERVS. (last updated Aug. 22, 2017), https://www. mentalhealth.gov/what-to-look-for/mood-disorders. Occasionally, some individuals with bipolar disorder will become psychotic—meaning they have lost touch with reality as a result of their illness. See Bipolar Disorder, NAT'L INST. OF MENTAL HEALTH (last updated Apr. 2016), https:// www.nimh.nih.gov/health/topics/bipolar-disorder/index.shtml.
- 5. Personality disorders cover a broad swath of various maladaptive personality traits that result in significant distress, social impairment, or occupational impairment. See Personality Disorders, NAT'L INST. OF MENTAL HEALTH (last updated Nov. 2017), https://www.nimh.nih.gov/health/statistics/personality-disorders.shtml. Common personality disorders include borderline personality disorder (characterized by impulsive behavior, unstable relationships, and frequent displays of intense anger), antisocial personality disorder (characterized by consistent irresponsible or violent behaviors that disregard the rights, safety, or feelings of others without remorse), and obsessive-compulsive personality disorder (characterized by a preoccupation with details, rigid control, and orderliness that is unusually inflexible). See Personality Disorders, MAYO CLINIC (Sept. 23, 2016), https://www.mayoclinic.org/diseases-conditions/personality-disorders/symptoms-causes/syc-20354463.
- 6. Anxiety disorders are the most common group of mental illnesses, and are characterized by the association of intense fear or anxiety with a certain object or situation, often involving frequent episodes of sudden, acute feelings of terror that interfere with everyday life. See Anxiety Disorders, MAYO CLINIC (last updated May 4, 2018), https://www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961. Diagnoses can include panic disorder—which describes sudden onsets of paralyzing terror or impending doom that cause physical symptoms mimicking a heart attack—post-traumatic stress disorder, and various phobias. *Id*. Some professionals characterize obsessive-compulsive disorder as an anxiety order, because for many people the repetitive actions are an attempt to alleviate distressing thoughts. *See, e.g., What Is Psychiatric Disability and Mental Illness?*, BOSTON U. CTR. FOR PSYCHIATRIC REHABILITATION (last visited Aug. 15, 2018) (listing obsessive compulsive disorder as an anxiety disorders for these reasons), https://cpr.bu.edu/resources/reasonable-accommodations/what-is-psychiatric-disability-and-mental-illness/.
- Psychotic disorders are those in which a person experiences delusions, hallucinations, disorganized thoughts, repetitive or nonsensical verbal patterns, or abnormal motor behavior over a prolonged period of time. See Jeffrey A. Leiberman & Michael B. First, *Psychotic Disorders*, 379 N. ENG. J. MED. 270 (2018).
- 8. Schizophrenia is a serious, complex mental illness that "interferes with a person's ability to think clearly, manage emotions, make decisions, and relate to others." See Schizophrenia, NATIONAL ALLIANCE ON MENTAL ILLNESS (last visited Aug. 15, 2018), https://www.nami.org/Learn-More/Mental-Health-Conditions/Schizophrenia. It is characterized by the persistent occurrence of at least two of the following symptoms to a degree of reduced functioning: delusions, hallucinations, disorganized speech, disorganized or catatonic behavior, negative symptoms like emotional disconnect or flat affect. See id.; Schizophrenia, MAYO CLINIC (last updated Apr. 10, 2018), https://www.mayoclinic.org/diseases-conditions/schizophrenia/symptoms-causes/syc-20354443.
- 9. Depression is classified as a mood disorder in which a person experiences constant or near-constant feelings of sadness, hopelessness, worthlessness, or anxiety for a prolonged period of time, often without knowing why these feelings are occurring. These feelings are usually significant enough to interfere with everyday activities, sleep patterns, and social relationships. It is also common for people suffering from depression to have suicidal thoughts or exhibit suicidal behaviors. See Depression (Major Depressive Disorder), MAYO CLINIC (Feb. 3, 2018), https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007.
- 10. Bipolar Disorder is also known as "manic-depressive disorder," and all four of its basic types are characterized by unusual but clear and intense changes in mood, energy, and activity levels. *See Bipolar Disorder: Overview*, NAT'L INST. MENTAL HEALTH (last visited Jan. 3, 2019), https://www.nimh.nih.gov/health/topics/bipolar-disorder/index.shtml.

- 11. PTSD is a mental disorder that a person may develop after exposure to a traumatic event, often inhibiting his or her ability to mentally and emotionally cope with the event's occurrence. Symptoms vary over time and by person, but can include flashbacks of the traumatic event, nightmares, emotional distress or numbness, irritability or angry outbursts, engaging in self-destructive behavior, and being easily startled or frightened. See Post-Traumatic Stress Disorder (PTSD), MAYO CLINIC (July 6, 2018), https://www.mayoclinic.org/diseases-conditions/posttraumatic-stress-disorder/symptoms-causes/syc-20355967.
- 12. Agoraphobia is an anxiety disorder in which a person experiences an actual or anticipated fear of feeling trapped, helpless, or embarrassed, which often causes them to avoid public places. *See Agoraphobia*, MAYO CLINIC (Nov. 18, 2017), https://www.mayoclinic.org/diseases-conditions/agoraphobia/symptoms-causes/syc-20355987.
- 13. See David B. Kopel & Clayton E. Cramer, *Reforming Mental Health Law to Protect Public Safety and Help the Mentally III*, 58 How. L. J. 716, 719-20 (2015).
- 14. See Nathaniel S. Lehrman, *The Dangers of Mental Health Screening*, 11 J. OF AM. PHYSICIANS & SURGEONS 80 (2006) (giving a general overview of how the alleged increasing prevalence of mental illness is not truly indicative of a long-term, widespread, and growing problem, but is instead reliant on changing definitions of the problem), http://www.jpands.org/vol11no3/lehrman.pdf.
- 15. Id.
- 16. See Serious Mental Illness, NAT'L INST. MENTAL HEALTH (last updated Nov. 2017), https://www.nimh.nih.gov/health/statistics/mental-illness. shtml.
- 17. See What is "Serious Mental Illness" and What Is Not?, MENTAL ILLNESS POLICY ORG (last visited Aug. 27, 2018), https://mentalillnesspolicy.org/ serious-mental-illness-not/.
- 18. According to the U.S. Department of Health and Human Services, in 2016 approximately 4.2 percent of American adults experienced a "serious mental illness" within the last year, which it defined similarly to the National Institute for Mental Health as "a diagnosable mental, behavioral or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-IV that has resulted in serious functional impairment, which substantially interferes with one or more major life activities." Rebecca Ahrnsbrak et al., *Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health*, U.S. DEP'T OF HEALTH & HUM. SERVS (Sept. 2017), https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf. It is estimated that 1 percent of American adults live with schizophrenia, while another 2.6 percent live with bipolar disorder. *See Mental Disorders*, SUBSTANCE ABUSE & MENTAL HEALTH SERVS. ADMIN. (last updated Oct. 27, 2015), https://www.samhsa.gov/disorders/mental.
- See Drew Desilver, Suicides Account for Most Gun Deaths, PEW RESEARCH CENTER (May 24, 2013), http://www.pewresearch.org/facttank/2013/05/24/suicides-account-for-most-gun-deaths/; Sherry L. Murphy et al., Deaths: Final Data for 2015, 66 NATIONAL VITAL STATISTICS REPORT No. 6, 39, Table 8 (Nov. 27, 2017), https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_06.pdf.
- 20. For example, one comprehensive study by the Harvard Institute of Economic Research on factors associated with suicide rates over a 40-year period found that: (1) rural, western states have the highest and fastest-growing rates of youth suicide; (2) blacks attempted and completed suicide much less frequently than whites; and (3) economic differences were moderately correlated with suicide rates. David M. Cutler, Edward Glaeser & Karen Norberg, Explaining the Rise in Youth Suicide, HARVARD INST. OF ECON. RES. DISCUSSION PAPER NO. 1917 (Mar. 2001), https://crimeresearch.org/wp-content/uploads/2018/01/Explaining-the-Rise-in-Youth-Suicide-Cutler-Glaeser-Norberg.pdf. An analysis of the CDC's National Violent Death Reporting System indicates that while a substantial proportion of suicide victims had identified mental health problems (21 percent-44 percent) or a documented history of psychiatric treatment (16 percent-33 percent), these factors varied according to race and ethnic background and do not account for all suicides. D. L. Karch et al., Race/Ethnicity, Substance Abuse, and Mental Illness Among Suicide Victims in 13 US States: 2004 Data from the National Violent Death Reporting System, 12 INJURY PREVENTION 22 (2006), http://injuryprevention.bmj.com/content/12/suppl_2/ii22. Alcohol and drug use, academic failure, histories of trauma or abuse, and physical illness or chronic pain are also risk factors for suicide, regardless of the presence of a diagnosable mental illness. See Substance Abuse and Mental Health Services Administration, Substance Use and Suicide: A Nexus Requiring a Public Health Approach, 10 (2016), https://store.samhsa. gov/product/In-Brief-Substance-Use-and-Suicide-/sma16-4935. When including substance abuse disorders as a qualifying mental health condition, the World Health Organization estimates that approximately 90 percent of suicide victims had some kind of underlying mental health condition at the time of their attempts. American Psychological Association, World Mental Health Day Emphasized the Link Between Suicide and Mental Illness, 37 MONITOR ON PSYCHOLOGY 14 (Dec. 2006), http://www.apa.org/monitor/dec06/healthday.aspx. But a recent report from the Centers for Disease Control and Prevention analyzed 2015 data and concluded that more than half of suicide victims did not have a known diagnosed mental health condition at the time of death, and that other factors—such as relationship problems, career or financial stress, and physical ailments—often contributed to the suicide risk. Suicide Rates Rising Across the U.S., CTR. FOR DISEASE CONTROL & PREVENTION (last updated June 7, 2018), https://www.cdc.gov/media/releases/2018/p0607-suicide-prevention.html.
- 21. See Jeffrey W. Swanson et al., Mental Illness and Reduction of Gun Violence and Suicide: Bringing Epidemiologic Research to Policy, 25 ANNALS OF EPIDEMIOLOGY 366, 370 (2016), https://www.sciencedirect.com/science/article/pii/S1047279714001471. Swanson unfortunately also refers to several studies purporting to show a causal link between firearm access and suicide rates, which critics have rightly pointed out contain flawed assumptions and do not actually show the existence of this link. See, e.g., Gary Kleck, Did Australia's Ban on Semiauto Firearms Really Reduce Violence? A Critique of the Chapman et al. (2016) Study (Jan. 12, 2018), https://dx.doi.org/10.2139/ssrn.3086324.

- 22. It is important to note, however, that even though the number of privately owned firearms in the United States increased nearly 30 percent between 1999 and 2014, and the suicide rate increased 24 percent, the percentage of suicides involving firearms has actually *decreased* by roughly 6 percent among both men and women. See Sally C. Curtin, Margarey Warner & Holly Hedegaard, *Increase in Suicide in the United States, 1999–2004*, NCHS DATA BRIEF No. 241 (Apr. 2016), https://www.cdc.gov/nchs/products/databriefs/db241.htm; Christopher Ingraham, *There Are Now More Guns Than People in the United States,* WASH. Post (Oct. 5, 2015), https://www.washingtonpost.com/news/ wonk/wp/2015/10/05/guns-in-the-united-states-one-for-every-man-woman-and-child-and-then-some/?utm_term=.545c3c1ab020. The number of privately owned firearms in the United States has continued to climb since 2014, with the most recent Small Arms Survey—which comprehensively tracks international firearms ownership data—estimating that American civilians collectively owned almost 400 million firearms by 2018. See Aaron Karp, *Estimating Global Civilian-Held Firearms Numbers,* SMALL ARMS SURVEY BRIEFING PAPER (June 2018), http:// www.smallarmssurvey.org/fileadmin/docs/T-Briefing-Papers/SAS-BP-Civilian-Firearms-Numbers.pdf.
- 23. Don B. Kates & Gary A. Mauser, Would Banning Firearms Reduce Murder and Suicide? A Review of International Evidence 30 HARV. J. L. & PuB. POL'Y 649 (2007), https://www.americanbar.org/content/dam/aba/migrated/2011_build/law_national_security/boeving_right_tobe_present_harvard_ jlpp.authcheckdam.pdf; NATIONAL RESEARCH COUNCIL, FIREARMS AND VIOLENCE: A CRITICAL REVIEW 192 (Charles F. Wellford et al., eds., 2005), https://www.nap.edu/read/10881/chapter/9#192. The researchers evaluated all relevant studies on the relationship between firearms and suicide, concluding: (1) Current associations between gun ownership and the overall risk of suicide are modest at best, and are not consistently observed across time, place, and persons; (2) The causal relationship between firearms and suicide remains unclear; (3) Research suggests that some individuals purchase some forearms specifically for the purpose of committing suicide; and (4) Gun control policies have not yet been shown to reduce the overall risk of suicide, even if they may reduce the number of gun suicides. Some may argue that more recent studies have connected gun ownership rates across communities with overall suicide rates, but these studies run into many of the same problems detailed by the 2005 report: They cannot show a causal relationship; the association can be more readily explained by the presence of other factors that simultaneously affect both rates; and they fail to account for whether individual gun ownership is related to higher suicide rates (instead of just community rates of ownership). Even studies by anti-gun researchers fail to find significant correlations between gun ownership levels and total suicide rates. See Martin Killias et al., *Guns, Violent Crime, and Suicide in 21 Countries*, 43 CANADIAN J. oF CRIMINOLOGY 429 (2001) (concluding in the article's abstract that "no significant correlations [of gun ownership levels] with total suicide or homicide rates were found.").
- 24. See generally E. Fuller Torrey, How to Bring Sanity to Our Mental Health System, HERITAGE FOUND. DISCUSSION PAPER No. 2 (December 19, 2011), https://www.heritage.org/health-care-reform/report/how-bring-sanity-our-mental-health-system; Severe Mental Illness: Are Policies Helping or Hurting Those in Need?, HERITAGE FOUND. EVENT (May 11, 2018), https://www.heritage.org/public-health/event/severe-mental-illness-arepolicies-helping-or-hurting-those-need; DJ JAFFE, INSANE CONSEQUENCES: How THE MENTAL HEALTH INDUSTRY FAILS THE MENTALLY ILL (2017); John Snook & E. Fuller Torrey, America Badly Needs More Psychiatric-Treatment Beds, NAT'L REV. (Feb. 23, 2018), https://www.nationalreview. com/2018/02/america-badly-needs-more-psychiatric-treatment-beds/.
- 25. Some organizations that advocate for stricter gun control will often point out that the United States has a higher rate of suicides carried out by firearms, but this has limited—if any—relevance compared to the overall suicide rate. See, e.g., Firearm Suicide in the United States, EVERYTOWN FOR GUN SAFETY (Aug. 30, 2018), https://everytownresearch.org/firearm-suicide/. If the focus is on ensuring that fewer Americans take their own lives every year, it hardly matters whether they choose death by firearms or death by other means. Any effective approach to suicide must focus on reducing the overall rate, not just the percentage of the overall rate attributable to a particular means.
- 26. In 2015, the United States had a national suicide rate of 15.0 per 100,000 inhabitants, roughly equal to that experienced by Sweden (15.7), Luxembourg (14.7), and Finland (14.4). World Health Organization, *Suicide Rate Estimate, Crude: Estimates by Country*, Global Health Observatory data repository (last updated Mar. 5, 2018), http://apps.who.int/gho/data/node.main.MHSUICIDE?lang=en. The 2016 rate for the United States was 15.3, still below the European average of 15.8, and lower than Austria (15.6), Finland (15.9), Switzerland (17.2), France (17.7), and Belgium (20.7). See *id*. The United States is generally considered to have more privately owned guns than it does people, while the latest Small Arms Survey estimates that there are roughly 23.1 privately owned firearms per 100 Swedes, 27.6 per every 100 Swiss, and 30.0 per every 100 Austrians. *See* Karp, *supra* note 22, at 4. Meanwhile, Canada's national suicide rate was 10.9 in 2015 and 10.4 in 2016—significantly lower than Belgium—despite having a roughly three times the number of privately owned guns per 100 inhabitants (34.7 per 100 residents v. 12.68 per 100 residents). *See Global Firearms Holdings Dynamic Map*, SMALL ARMS SURVEY (last visited Aug. 15, 2018), http://www.smallarmssurvey.org/weapons-and-markets/tools/global-firearms-holdings.html.
- 27. These rates are for raw numbers, though the results for age-standardized suicide rates are comparable. According to the World Health Organization, the United States had a 2015 age-adjusted suicide rate of 12.6 per 100,000 inhabitants, on par with Sweden (12.7), Iceland (11.8), France (12.3), and Austria (11.7), while remaining lower than Belgium (16.1), Finland (14.2), Japan (15.4), Russia (17.9), and South Korea (24.1). See World Health Organization, *Suicide Rate Estimates, Age-Standardized: Estimates by Country*, Global Health Observatory Data Repository (last updated Apr. 4, 2017), http://apps.who.int/gho/data/node.main.MHSUICIDEASDR?lang=en. Meanwhile, Germany (9.1), Norway (9.3), Switzerland (10.7), the Netherlands (9.4), and Canada (10.4) have only slightly lower age-adjusted suicide rates, despite much lower rates of gun ownership and gun-suicide in those countries. *Compare id. with Rate of Gun Suicide per 100,000 People*, GuNPOLICY.ORG (last visited Aug. 15, 2018), http://www.gunpolicy.org/firearms/compare/31/rate_of_gun_suicide/11,18,65,66,69,232,91,125,170,177,178,194,136.
- 28. France's 2016 national suicide rate was 17.7 per 100,000 inhabitants, even though it is only estimated to have 19.6 civilian-owned firearms per 100 people. See Global Firearms Holding Dynamic Map, supra note 26; Suicide Rate Estimate: Crude, supra note 26. Prospective gun owners in France must be licensed by the state, which includes presenting a "genuine reason" to possess a firearm, such as sport shooting or hunting. General self-defense is not considered a "genuine reason." Generally, an individual must be affiliated with a shooting or hunting club and present a medical certificate attesting to their mental stability. All firearms must be registered, and every sale or transfer recorded. See France—Gun Facts, Figures and the Law, GUNPOLICY.ORG (last visited Sept. 21 2018), http://www.gunpolicy.org/firearms/region/france.

- 29. Finland's 2016 national suicide rate was 15.9 per 100,000 inhabitants even though it is estimated to have 32.36 civilian-owned firearms per 100 people—significantly more than in France but significantly fewer than in the United States. See Global Firearms Holding Dynamic Map, supra note 26; Suicide Rate Estimate: Crude, supra note 26. Finland only allows licensed individuals to buy or possess firearms or ammunition, and these individuals must present a valid reason for possession, such as hunting, target shooting, or firearm collection. The majority of firearms licenses are granted for purposes of hunting, all firearms are tracked in a national registry, and firearms in public, whether openly or concealed. See Finland—Gun Facts, Figures and the Law, GUNPOLICY.ORG (last visited Sept. 21, 2018), http://www.gunpolicy.org/firearms/region/finland.
- 30. Belgium's 2016 national suicide rate was 20.7 per 100,000 inhabitants, even though it has fewer than 13 civilian-owned firearms per 100 people. See Global Firearms Holding Dynamic Map, supra note 26; Suicide Rate Estimate: Crude, supra note 26. All firearm owners must receive a permit for each firearm they own and have that permit renewed every three years. Prospective gun owners must present a medical certificate certifying that they are physically and mentally capable of handling a firearm without endangering themselves or others and must pass fairly extensive firearms training exams. The gun possessed must correspond with the reason given for possession (i.e., if individuals assert they want a permit for hunting, the firearm must be one recognized as useful for hunting). Semi-automatic rifles and all handguns are generally categorized such that most civilians cannot receive a permit to possess them. See Belgium—Gun Facts, Figures and the Law, GUNPOLICY.ORG (last visited Sept. 21, 2018), http://www.gunpolicy.org/firearms/region/belgium.
- 31. Russia has incredibly restrictive gun control policies for civilians, who own approximately 12.2 firearms per 100 people. See Global Firearms Holding Dynamic Map, supra note 26. The 2016 national suicide rate, however, was 31.0 per 100,000 inhabitants. See Suicide Rate Estimate: Crude, supra note 26.
- 32. Japan's 2016 national suicide rate was 18.5 per 100,000 residents, but the country is estimated to have fewer than one civilian-owned firearm per 100 people. See Global Firearms Holding Dynamic Map, supra note 26; Suicide Rate Estimate: Crude, supra note 26. The civilian possession of semi-automatic rifles and all handguns is strictly prohibited, with the exception of certain handguns designed for international athletic competitions. Rifle owners cannot purchase more than 50 rounds of ammunition without a separate permit, which requires the submission of a "plan for bullet use." See Firearms—Control Legislation and Policy: Japan, LIBRARY OF CONGRESS (last updated July 30, 2015), https://www.loc.gov/law/help/firearms-control/japan.php#skip_menu.
- 33. South Korea has long had one of the highest suicide rates in the world, with roughly 27 suicide deaths per 100,000 inhabitants in 2016. Suicide Rate Estimate: Crude, supra note 26. Only one in 100 South Koreans, however, is estimated to possess a privately owned firearm, and the majority of those are hunting rifles because the private possession of handguns has been de facto prohibited since 2008. See Global Firearms Holding Dynamic Map, supra note 26; South Korea—Gun Facts, Figures and the Law, GuN Policy (last visited June 19, 2018), http:// www.gunpolicy.org/firearms/region/south-korea. The country's gun control laws are so restrictive that biathletes competing at the 2018 Winter Olympic Games in Seoul were required to keep their competition rifles in a guarded warehouse. See Jim Michaels & Aamer Madhani, Keeping Olympics Safe: South Korean Gun Laws Make A Mass Shooting Nearly Unfathomable, USA Today (updated Feb. 18, 2018 5:53 PM EST), https://www.usatoday.com/story/sports/winter-olympics-2018/2018/02/18/winter-olympics-south-korea-tough-gun-laws-massshooting/349138002/.
- 34. Between 1970 and the early 2000s, the rate steadily declined, but has slowly trended upward over the past 15 years. Since 1950, fluctuations in the national suicide rate have occurred incrementally, and high and low rates differ by only 6 deaths per 100,000 residents. See Sally C. Curtin et al., *Increase in Suicide in the United States*, 1999-2014, NATIONAL CENTER FOR HEALTH STATISTICS DATA BRIEF NO. 241 (Apr. 2016), https:// www.cdc.gov/nchs/products/databriefs/db241.htm; Robert E. McKeown et al., US Suicide Rates by Age Group, 1970-2002: An Examination of Recent Trends, 96 AM. J. PUB. HEALTH 1744 (2006), https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2005.066951.
- 35. William J. Krouse, *Gun Control Legislation*, CONGRESSIONAL RESEARCH SERVICE 7-5700 (Nov. 14, 2012), https://fas.org/sgp/crs/misc/RL32842. pdf ("Per capita, the civilian gun stock has roughly doubled since 1968, from one gun per every two persons to one gun per person."). This ratio has increased even more since this 2012 report, and though the exact number is unclear, the FBI has noted significant increases in the number of background requests from licensed firearms dealers, indicating that Americans are purchasing firearms at an even faster rate than in previous years. See Stephen Gutowski, *May 2017 Sets Gun Sales Record*, WASH. FREE BEACON (June 1, 2017), http://freebeacon.com/issues/may-2017-sets-gun-sales-record/. Further, the firearm-homicide rate has seen both dramatic increases and dramatic decreases over this time period. Alexia Cooper & Erica L. Smith, *Homicide Trends in the United States*, 1980–2008, BUREAU OF JUSTICE STATISTICS NCJ 236018 (Nov. 2011), https://www.bjs.gov/content/pub/pdf/htus8008.pdf#page=27. This difference in various firearm-related trends tends to suggest that the steady increase in firearm access is not the driving force behind either trend.
- 36. According to the Centers for Disease Control and Prevention, the percentage of suicides committed with firearms dropped from 61.7 percent for men in 1999 to 55.4 percent for men in 2014. Curtin et al., *supra* note 34. For women, the percentage of suicides committed with firearms also dropped, though less substantially: In 1999, 36.9 percent of women who committed suicide did so with firearms, compared to 31.0 percent in 2014. *Id.* During that same time period, the number of civilian-owned firearms in the United States increased from roughly 250 million in 1999 to over 350 million in 2013. See Ingraham, *supra* note 22. The total population increased from 281.5 million in 2000 to 318.6 million in 2014.
- 37. The Giffords Law Center to Prevent Gun Violence, a prominent gun control advocacy group, produces an annual "Gun Law Scorecard" in which the organization grades and ranks states according to the strictness of their gun laws. In its most recent annual scorecard, Texas received an "F" while Nebraska received a "D," meaning that the organization considers their respective gun laws to be permissive and "weak." See Annual Gun Law Scorecard, Giffords Law Center to Prevent Gun Violence (last visited Dec. 28, 2018), https://lawcenter.giffords.org/scorecard/.

- 38. Accurately gauging state-by-state rates of private gun ownership is extremely difficult because neither the federal government nor state governments keep a true database of gun owners, and such a database would likely fail to include substantial numbers of unregistered or unlawfully owned firearms. One of the few recent large-scale attempts to analyze private gun ownership at the state level concluded that the national gun ownership average was 29.9 percent, with 19 states falling within +/-5 percentage points of this average. According to this study, both Mississippi and Hawaii have gun ownership rates significantly above the median and the mean. See Bindu Kalesan et al., *Gun Ownership and Social Gun Culture*, INJURY PREVENTION (June 29, 2018), https://injuryprevention.bmj.com/content/injuryprev/early/2015/06/09/injuryprev-2015-041586.full.pdf?keytype=ref&ijkey=doj6vx0laFZMsQ2.
- 39. Both Hawaii and Mississippi fall within the top one-third of states with the highest rate of private gun ownership per capita, and yet they have comparatively low suicide rates. In 2016, the latest year for which the CDC has available information, Mississippi had the 11th-lowest suicide rate among all states, while Hawaii had the 10th-lowest rate. In fact, for the three-year period of 2014 to 2016, Mississippi's suicide rate remained roughly the equivalent of Georgia's suicide rate, despite the fact that Georgia has a relatively average number of privately owned guns per capita—nearly 10 percentage points lower than Mississippi. *Compare Suicide Mortality by State: 2016*, CTRS. FOR DISEASE CONTROL (last updated Jan. 11, 2018), https://www.cdc.gov/nchs/pressroom/sosmap/suicide-mortality/suicide.htm with Kaleson et al., *supra* note 38.
- 40. Washington received a "B" from the Giffords Law Center, and Colorado received a "C," making them the 13th and 15th most restrictive gun control states, respectively. See Annual Gun Law Scorecard, supra note 37.
- 41. According to the gun ownership rates compiled by Kalesan et al., New Hampshire has a gun ownership rate less than half the national average, while Maine also falls more than 5 percentage points below the national average. See Kalesan et al., supra note 38 at Fig. 3.
- 42. In 2016, New Hampshire's suicide rate was 17.2 and Maine's was 15.9, compared to the national average of 13.5, making them the 32nd and 29th worst suicide rates, respectively. See Suicide Mortality by State: 2016, supra note 39, https://www.cdc.gov/nchs/pressroom/sosmap/suicide-mortality/suicide.htm.
- 43. See, e.g., Betsy Stevenson & Justin Wolfers, Bargaining in the Shadow of the Law: Divorce Law and Family Distress, 121 QUART. J. ECON. 267 (2006); Eric Neumayer, Are Socioeconomic Factors Valid Determinants of Suicide? Controlling for National Cultures of Suicide with Fixed-Effects Estimation, 37 CROSS-CULTURAL RESEARCH 307 (2003); Steven Stack, The Effect of Marital Dissolution on Suicide, 42 J. MARRIAGE & FAMILY (82) (1980).
- 44. See, e.g., Allison Milner et al., Long-Term Unemployment and Suicide: A Systematic Review and Meta-Analysis, 8 PLoS ONE (2013); Aaron Reeves et al., Increase in State Suicide Rates in the USA During Economic Recession, 380 LANCET 1813 (Nov. 24, 2012), https://www. thelancet.com/journals/lancet/article/PIIS0140-6736%2812%2961910-2/fulltext; Konstantinos N. Fountoulakis et al., *Relationship of Suicide Rates to Economic Variables in Europe: 2000-2011*, 205 BRIT. J. PSYCHIATRY 486 (Dec. 2014), https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/relationship-of-suicide-rates-to-economic-variables-in-europe-20002011/ BED5FCDDA918CE73A5390249B83F0C57; Carlos Nordt et al., *Modelling Suicide and Unemployment: A Longitudinal Analysis Covering 63 Countries, 2000-11*, 2 LANCET 239 (Mar. 2015); Justin T. Denney et al., *Adult Suicide Mortality in the United States: Marital Status, Family Size, Socioeconomic Status, and Differences by Sex*, 90 Soc. Sci. Q. 1167 (Dec. 1, 2009), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2818047/; Nathan Daniel, Lucia Smith & Ichiro Kawachi, *State-Level Social Capital and Suicide Mortality in the 50 U.S. States*, 120 Soc. Sci. & MED. 269 (Nov. 2014), https://www.sciencedirect.com/science/article/pii/S0277953614005747; Daniel T. Rasic et al., *Spirituality, Religion and Suicidal Behavior in a Nationally Representative Sample*, 114 J. AFFECTIVE DISORDERS 32 (Apr. 2009), https://www.jad-journal.com/article/S0165-0327(08)00344-3/abstract.
- 45. See Charis E. Kurbin & Tim Wadsworth, Explaining Suicide Among Blacks and Whites: How Socioeconomic Factors and Gun Availability Affect Race-Specific Suicide Rates, 90 Soc. Sci. Q. 1203, 1205 (Dec. 2009).
- 46. See Edward Chesney et al., Risks of All-Cause and Suicide Mortality in Mental Disorders: A Meta-Review, 13 WORLD PSYCHIATRY 153 (2014), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4102288/; Jeffrey W. Swanson et al., Mental Illness and Reduction of Gun Violence and Suicide: Bringing Epidemiologic Research to Policy, 25 ANNALS OF EPIDEMIOLOGY 366 (2015), https://www.sciencedirect.com/science/article/ pii/S1047279714001471; Zhuoyang Li et al., Attributable Risk of Psychiatric and Socio-Economic Factors for Suicide from Individual-Level, Population-Based Studies: A Systematic Review, 72 Social Sci. & MED. 608 (2011), https://www.sciencedirect.com/science/article/pii/ S0277953610007896.
- See Miranda Lynne Baumann & Brent Teasdale, Severe Mental Illness and Firearm Access: Is Violence Really the Danger, 56 INT'L J. L. & PSYCHIATRY 44 (2018) (finding that firearm access was not associated with suicidal thoughts for individuals without mental health problems, but that firearm access almost doubled the likelihood of experiencing suicidal thoughts for individuals with mental illness).
- 48. Jennifer M. Boggs et al., General Medical, Mental Health, and Demographic Risk Factors Associated with Suicide by Firearm Compared with Other Means, 69 Psychiatric Servs. 677 (2018), https://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201700237?journalCode=ps.

49. Id.

- 50. Federal law prohibits the purchase or possession of firearms by any person who has been adjudicated as a "mental defective" or who has been involuntarily committed to a mental health institution by a court, unless and until their Second Amendment rights are restored by that same court. Many states impose even greater legal barriers to firearm access for the mentally ill, such as Hawaii, which prohibits firearm possession by anyone diagnosed with a mental disorder regardless of court adjudication, and Mississippi, which bans firearm possession for those who voluntarily committed themselves to a mental health treatment facility. See HAW. REV. STAT. § 134-7(c)(3) (2016); MISS. STAT. REV. § 45-9-101 (2016). Increasingly, states are also enacting "Red Flag Laws," which enable courts to issue temporary emergency orders disarming individuals who, due to mental health or other crises, pose a substantial risk of danger to themselves or others. See Lenny Bernstein, *Five States Allow Guns to Be Seized Before Someone Can Commit Violence*, WASH. Post (Feb. 16, 2018), https://www.washingtonpost.com/national/health-science/five-states-allow-guns-to-be-seized-before-someone-can-commit-violence/2018/02/16/78ee4cc8-128c-11e8-9570-29c9830535e5_story.html?utm_term=.2e890aadf153; Nicole Gaudiano, *"Red Flag" Laws That Allow For Temporary Restrictions On Access To Guns Gain Momentum Across Nation*, USA TODAY (Mar. 25, 2018), https://www.usatoday.com/story/news/politics/2018/03/25/red-flag-laws-allow-temporary-restrictions-access-guns-gain-momentum-across-nation/454395002/.
- 51. The argument that individuals in the midst of a mental health crisis (or having recently suffered a mental health crisis) are less likely than other individuals to have access to a firearm is actually corroborated by a study purporting to show that individuals with mental illness are equally likely to report access to firearms as are individuals without mental illness. See Mark A. Ilgen et al., *Mental Illness, Previous Suicidality, and Access to Guns in the United States*, 59 PSYCHIATRIC SERVS. 198 (2008). The study itself suffered from numerous limitations, including analyzing only lifetime prevalence of mental illness instead of current presence of mental illness—an important factor given the transient nature of mental illness in the lives of many people. It also failed to distinguish between the serious mental illness and less-serious diagnoses. But where the study analyzed findings from just those individuals who had reported prior suicide attempts, it found that these individuals were significantly less likely to report access to a firearm than were individuals who did not have a prior suicide attempt. In other words, individuals with mental illness were less likely to report having access to a firearm in precisely those situations in which their friends and family members were more likely to have considered the mental illness to be serious or life-threatening. This would appear to support the argument that individuals with serious mental illness or in the midst of an ongoing mental health crisis are likely to face more barriers to firearm access, accounting for their lower rate of suicide by firearm.
- 52. Boggs et al., supra note 48.
- 53. See E. Michael Lewiecki & Sara A. Miller, Suicide, Guns, and Public Policy, 103 AM. J. PUBLIC HEALTH 27 (2013), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3518361/ ("Suicidal ideation may quickly pass and remain unfulfilled if the means of suicide is not easily available. For a person in a suicidal state of mind, problem-solving skills are likely to be poor, rendering it difficult to process a detailed consideration of alternative means of suicide when the initial choice is unavailable."); Jennifer M. Boggs, et al., *The Association of Firearm Suicide with Mental Illness, Substance Use Conditions, and Previous Suicide Attempts*, 167 ANNALS OF INTERNAL MED. 287 (2017) ("Our findings show that, even if successful, current efforts to limit firearm access only for persons with a mental health condition [including substance use disorders] or those who previously attempted suicide would prevent few suicide deaths by firearm. We suggest that prevention of firearm suicide should be expanded beyond the current focus on these patients to include other persons with mental health or substance abuse conditions—to include other common means of suicide, such as instruments used for suffocation [for example, rope for hanging] and poison [for example, medications, alcohol, and recreational drugs]."), http://annals.org/aim/fullarticle/2636753/association-firearm-suicide-mental-illness-substance-use-conditions-previous-suicide.
- 54. See, e.g., Deborah M. Stone et al., Vital Signs: Trends in State Suicide Rates—United States, 1999–2016 and Circumstances Contributing to Suicide—27 States, 2015, 67 MORBIDITY & MORTALITY WEEKLY REPORT (June 8, 2018) ("Comprehensive statewide suicide prevention activities are needed to address the full range of factors contributing to suicide. Prevention strategies include strengthening economic supports [e.g., housing stabilization policies, household financial support]; teaching coping and problem-solving skills to manage everyday stressors and prevent future relationship problems, especially early in life; promoting social connectedness to increase a sense of belonging and access to informational, tangible, emotional, and social support; and identifying and better supporting persons at risk [e.g., military veterans, persons with physical/mental health conditions]."), https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6722a1-H.pdf.
- See Casey Crump et al., Mental Disorders and Vulnerability to Homicidal Death: Swedish National Cohort Study, 2013 BRIT. MED. J. 346 (2013); Linda A. Teplin et al., Criminal Victimization in Adults with Severe Mental Illness: Comparison with the National Crime Victimization Survey, 62 ARCH. GEN. PSYCHIATRY 911 (2005); J. S. Brekke et al., Risks for Individuals with Schizophrenia Who Are Living in the Community, 52 PSYCHIATRIC SERVS. 1358 (2001).
- 56. See, e.g., J. W. Swanson, Mental Disorder, Substance Abuse, and Community Violence: An Epidemiological Approach (1994), https://www.ncbi.nlm. nih.gov/pmc/articles/PMC4211925/#bib12.
- 57. Compare R. A. Van Dorn et al., Mental Disorder and Violence: Is There a Relationship Beyond Substance Abuse?, 47 Soc. Psychiatry & Psychiatric Epidemiology 487 (2012) with Christian C. Joyal et al., Major Mental Disorders and Violence: A Critical Update, 3 Current Psychiatry Reviews 33 (2007).
- 58. See E. Fuller Torrey, Stigma and Violence: Isn't It Time to Connect the Dots?, 37 SCHIZOPHRENIA BULLETIN 892 (2011) (reviewing the scientific literature regarding the connection between untreated mental illness and violence), https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3160234/pdf/sbr057.pdf. But see Jeffrey Swanson et al., Comparison of Antipsychotic Medication Effects on Reducing Violence in People with Schizophrenia, 193 BRIT. J. PSYCHIATRY 37 (July 2008), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2801826/ (examining the effectiveness of antipsychotic medications at reducing the prevalence of violent behavior in people with schizophrenia, and concluding such medications "may not reduce violence unrelated to acute psychopathology").

- 59. Torrey, Stigma and Violence, supra note 58, at 893.
- 60. For an analysis of dozens of studies examining the relationship between mental illness, specific symptoms, and violence, see RISK FACTORS FOR VIOLENCE IN SERIOUS MENTAL ILLNESS, TREATMENT ADVOCACY CTR. (June 2016), http://www.treatmentadvocacycenter.org/storage/documents/backgrounders/smi-and-risks-for-violence.pdf.
- 61. Christian C. Joyal et al., Mental Disorders and Violence: A Critical Update, 3 CURRENT PSYCHIATRY REVS. 33, 34 (2007).
- 62. Seena Fazel et al., Schizophrenia and Violence: Systematic Review and Meta-Analysis, 6 PLoS MED. 1 (2009). See also Katrina Witt, Richard van Dorn & Seena Fazel, Risk Factors for Violence in Psychosis: Systematic Review and Meta-Regression Analysis of 110 Studies, 8 PLoS ONE 1 (2013), https://www.ncbi.nlm.nih.gov/pubmed/23418482; J. W. Coid et al., The Relationship Between Delusions and Violence: Findings from the East London First Episode Psychosis Study, 70 JAMA PsycHIATRY 465 (2013), https://www.ncbi.nlm.nih.gov/pubmed/23467760; C. C. Joyal et al., Characteristics and Circumstances of Homicidal Acts Committed by Offenders with Schizophrenia, 34 PsycHol. & MEDICINE 433 (2004). But see Paul S. Appelbaum et al., Violence and Delusions: Data from the MacArthur Violence Risk Assessment Study, 157 Am. J. PsycHIATRY 566 (2000).
- See studies referred to in Fazel, supra note 64; Seena Fazel et al., Bipolar Disorder and Violent Crime: New Evidence from Population-Based Longitudinal Studies and Systematic Review, 67 ARCH. GEN. PSYCHIATRY 931 (2010), https://www.ncbi.nlm.nih.gov/pubmed/20819987; Frederick E. Vars & Amanda Adcock Young, Do the Mentally III Have a Right to Bear Arms?, 48 WAKE FOREST L. Rev. 1. 14–16 (2013).
- 64. See SERIOUS MENTAL ILLNESS AND HOMICIDE, TREATMENT ADVOCACY CTR. (June 2016), http://www.treatmentadvocacycenter.org/key-issues/ violence/3627.
- 65. Id.
- See M. M. Large & O. Nielssen, Violence in First-Episode Psychosis: A Systematic Review and Meta-Analysis, 125 SCHIZOPHRENIA RES. 208 (2010);
 O. Nielssen & M. Large, Rates of Homicide During the First Episode of Psychosis and After Treatment: A Systematic Review and Meta-Analysis, 36 SCHIZOPHRENIA BULLETIN 702 (2010).
- 67. See ANOSOGNOSIA, NON-TREATMENT, AND VIOLENT BEHAVIOR, TREATMENT ADVOCACY CTR. (Sept. 2016), http://www.treatmentadvocacycenter. org/storage/documents/backgrounders/anosognosia-and-violent-behavior.pdf; Witt, van Dorn & Fazel, *supra* note 62.
- 68. ANOSOGNOSIA, NON-TREATMENT, AND VIOLENT BEHAVIOR, Supra note 67.
- 69. Substance abuse by itself increases an individual's risk for violence by seven to nine times and has a much more robust relationship to future violent actions that does mental illness by itself. See Fazel et al., *supra* note 62. But studies have also shown when mental illness is combined with substance abuse—and it often is—the likelihood of future violent activity triples. See Van Dorn et al., *supra* note 57; Cameron Wallace et al., *Criminal Offending in Schizophrenia Over a 25-Year Period Marked by Deinstitutionalization and Increasing Prevalence of Comorbid Substance Use Disorders*, 161 Am. J. PSYCHIATRY 716 (2004).
- 70. For an overview of relevant studies on the relationship between treatment noncompliance and violent behavior in mentally ill individuals, see *Risk Factors for Violence, supra* note 62, at 6–9.
- 71. J. Reid Meloy et al., A Comparative Analysis of North American Adolescent and Adult Mass Murderers, 22 BEHAV. Sci. & L. 291, 297 (2004). A general review of mass public killers since 2004 indicates this is still the case, as evidenced by those individuals examined throughout this Article.
- 72. Steven P. Segal, Civil Commitment Law, Mental Health Services, and U.S. Homicide Rates (Apr. 17, 2011).
- 73. See Eric B. Elbogen & Sally C. Johnson, The Intricate Link Between Violence and Mental Disorder: Results from the National Epidemiologic Survey on Alcohol and Related Conditions, 66 ARCH. GEN. PSYCHIATRY 152 (2009); J. W. Swanson et al., The Social-Environmental Context of Violent Behavior in Persons Treated for Severe Mental Illness, 92 AM. J. PUB. HEALTH 1523 (2002), https://www.ncbi.nlm.nih.gov/pubmed/12197987. See also Joyal, Major Mental Disorders and Violence, supra note 57, at 34 ("Factors associated with violence in the community also influence psychiatric outpatients, both at sociodemographic (e.g., neighborhood, socioeconomic status, education levels, unemployment) and individual (e.g., alcohol or drug disorders, a history of antisocial behaviors) levels, especially among men.").
- 74. David B. Kopel & Clayton E. Cramer, *Reforming Mental Health Law to Protect Public Safety and Help the Mentally III*, 58 How. L. J. 716, 719–20 (2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2564680.
- 75. See, e.g., Jillian K. Peterson et al., How Often and Consistently Do Symptoms Directly Precede Criminal Behavior Among Offenders with Mental Illness? 38 LAW & HUM. BEHAV. 439 (2014) (finding that only 17 percent of 429 crimes perpetrated by individuals with mental illness were directly caused by the symptoms of that illness).
- 76. Joyal et al., supra note 62.
- 77. Id.
- 78. This reality is understood even by many advocates for people suffering from mental illness. See D. J. JAFFE, INSANE CONSEQUENCES 32–33 (2017). Jaffe refers to Dr. Thomas Israel, a former director of the National Institute on Mental Health (NIMH), who admits that the evidence is extensive: "[T]he data I believe are fairly unambiguous.... An active psychotic illness is associated with irrational behavior and violence can be part of that. The numbers are stunning.... There is a fifteenfold reduction in risk of homicide, with and without treatment." *Id.* at 33. Meanwhile, violence researcher John Monahan has concluded that, despite his desire for the data to suggest otherwise, "no matter how many social and demographic factors are statistically taken into account, there appears to be a relationship between mental disorder and violent behavior." *Id.*

- 79. Mass killings in general account for only 0.2 percent of all annual homicide incidents and roughly 1 percent of all annual homicide victims. Mass public shootings are one subset of the broader category of mass killings and constitute only 12 percent of annual mass killings. In other words, mass public shootings are responsible for only a fraction of one percent of homicide incidents and homicide victims—and are not statistically significant causes of intentional death in the United States. See Grant Duwe, The Patterns and Prevalence of Mass Public Shootings in the United States, 1915–2013, 22 WILEY HANDBOOK (2015).
- 80. See, e.g., A. G. Hempel et al., Offenders and Offense Characteristics of a Nonrandom Sample of Mass Murders, 27 J. AM. ACAD. PSYCHIATRY & L. 213 (1999) (analyzing 30 perpetrators of mass killings that occurred in the United States between 1949 and 1998, and finding that 20 (67 percent) had definite or probable psychosis); F. Fessenden, They Threaten, Seethe and Unhinge, Then Kill in Quantity, N.Y. TIMES (Apr. 9, 2000) (finding that 48 of 100 "rampage killers" in the United States between 1949 and 1999 had a formal mental health diagnosis, often schizophrenia, and that even more had "histories of serious mental health problems"); Duwe, supra note 79 (reviewing all mass public shootings in the United States between 1915 and 2013 and concluding that "[w]hile not all mass public shooters have a history of mental illness, a little more than 60% had either been diagnosed with a mental disorder or demonstrated signs of serious mental illness prior to the attack."). Some studies report lower, but still significant, percentages of mentally ill mass shooters. For instance, the New York Times recently reported on Dr. Michael Stone's database of 350 mass killers going back more than a century, and according to Stone, only around one in five mass killers (22 percent) likely suffered from psychosis, delusional thinking, or hallucination. See, e.g., Benedict Carey, Are Mass Murderers Insane? Usually Not, Researchers Say, N.Y. TIMES (Nov. 8, 2017), https://www.nytimes.com/2017/11/08/health/mass-murderers-mental-illness. html. Another 13 percent likely had depressive or antisocial traits but were not "insane" as the term is generally understood. Id. While these estimates are certainly lower, it is important to note that Stone also differentiated between psychosis-related diagnoses and broader, but still significant, mental health problems. He found that the overall rate of psychiatric history among mass killers—including depression, learning disabilities, and ADHD—was 48 percent, and that two-thirds of mass killers faced "long-term stress" that more generally related to unhealthy mental states. Id.
- 81. See Duwe, *supra* note 79, at 30 (Of these mentally ill mass public shooters, roughly one-third sought or received mental health care prior to the attack—meaning two-thirds of them did not.).
- 82. According to prominent criminologist Grant Duwe, who reviewed all known mass public shootings in the United States between 1915 and 2013, of the 60 percent of mass public shooters who exhibited signs of mental illness prior to their attack, almost all of them had symptoms consistent with paranoid schizophrenia. *Id.* at 29–30. "Perhaps as a consequence of the relatively high rate of mental illness and, more narrowly, paranoid schizophrenia, mass public shooters often believe they have been persecuted. For the vast majority of mass public shooters, the attack is an act of vengeance against those whom the shooter holds responsible for his or her perceived mistreatment." *Id.* This is consistent with the research by forensic psychologist J. Reid Meloy, who concluded that most mass killers fall somewhere on a "paranoid spectrum," including psychosis on one extreme, but also those Meloy terms "injustice collectors." *See* Carey, *supra* note 80. While not necessarily "mentally ill" in the sense of having a diagnosable disorder, these "injustice collectors" are prone to sensing an accumulation of insults and persecution and develop an intense urge to stop it. *Id.*
- 83. Over the past decade, numerous studies indicate that at least some mass public attackers are motivated, in part, by the media attention and notoriety given to high-casualty mass killers. The authors are very aware of this fact, and do not make the choice to use the names of these individuals lightly. However, given the academic nature of this report and the significant difficulty of writing a scholarly, coherent article describing a large number of similar events without distinguishing the attackers by name, the benefits of clear articulation are perceived to substantially outweigh any potential risks from further publication of their names in this manner.
- 84. See Associated Press, Letter Says Rampage Killer Felt Persecuted, NBC NEws (updated Apr. 6, 2009 8:38 PM ET) http://www.nbcnews.com/ id/30066772/ns/us_news-crime_and_courts/t/letter-says-rampage-killer-felt-persecuted/#.WtdSuajwbcs.
- 85. Michael Hill et al., NY Gunman Angry Over Poor English Skills, Job Loss, NBC 24 News (Apr. 4, 2009), http://nbc24.com/news/local/ny-gunman-angry-over-poor-english-skills-job-loss.
- 86. Catherine Donaldson-Evans & Associated Press, Binghamton Police Don't Doubt Chilling Letter Was Written by Immigration Center Gunman, Fox News (Apr. 7, 2009), http://www.foxnews.com/story/2009/04/07/binghamton-police-dont-doubt-chilling-letter-was-written-byimmigration-center.html; Police Say N.Y. Immigrant Shooter's Act No Surprise, REUTERS (Apr. 4, 2009 2:32 AM), https://www.reuters.com/ article/us-newyork-shooting/police-say-n-y-immigrant-shooters-act-no-surprise-idUSTRE5324JP20090404.
- 87. See Drew Griffin, Kathleen Johnston & Scott Zamost, Massacre Suspect "Mentally Disturbed," Former Teacher Says, CNN (Jan. 10, 2011 8:56 a.m. ET), http://www.cnn.com/2011/CRIME/01/09/arizona.shooting.investigation/index.html.
- 88. Loughner exhibited hallmark signs of psychosis, including disorganized thoughts and speech, an inability to function according to social norms in social settings, and paranoia. See Kate Pickert & John Cloud, *If You Think Someone is Mentally III. Loughner's Six Warning Signs*, TIME (Jan. 11, 2011). Others have argued that Loughner was not suffering from "paranoid schizophrenia" but from "schizotypal personality disorder," which is still within the schizophrenia domain. See Peter Langman, Jared Loughner: What Kind of Psychosis?, PSYCHOL. TODAY (Jan. 16, 2011).
- 89. Jared Loughner Had 5 Run-Ins with College Police, CBS NEWS (Jan. 10, 2011), https://www.cbsnews.com/news/jared-loughner-had-5-run-ins-with-college-police/.
- 90. Michael Martinez & Chelsea J. Carter, New Details: Loughner's Parents Took Gun, Disabled Car to Keep Him Home, CNN (updated 11:45 AM ET, Mar. 28, 2013), https://www.cnn.com/2013/03/27/justice/arizona-loughner-details/index.html.
- 91. Cho committed the worst school shooting in U.S. history, killing 27 students and five teachers before taking his own life. See Virginia Tech Shooting Fast Facts, CNN (updated May 2, 2018 2:17 PM ET), https://www.cnn.com/2013/10/31/us/virginia-tech-shootings-fast-facts/index.html.

- Holmes opened fire on a sold-out movie in Aurora, Colorado, in 2012, killing 12 and wounding 58 moviegoers. See Miguel Bustillo, Shelly Banjo & Tamara Audi, Theater Rampage Jolts Nation, WALL ST. J. (updated July 21, 2012 9:55 AM ET), https://www.wsj.com/articles/SB1000087239 6390444464304577538292604705890?ns=prod/accounts-wsj.
- 93. See N. R. Kleinfield, Before Deadly Rage, a Life Consumed by a Troubling Silence, N.Y. TIMES (Apr. 22, 2007), https://www.nytimes. com/2007/04/22/us/22vatech.html; Allen G. Breed, Professor Had Expelled Gunman from Class, WASH. POST (Apr. 18, 2007), http://www. washingtonpost.com/wp-dyn/content/article/2007/04/18/AR2007041802117_pf.html.
- 94. See Shaila Dewan & Marc Santora, Officials Knew Troubled State of Killer in '05, N.Y. TIMES (Apr. 19, 2007), https://www.nytimes. com/2007/04/19/us/19gunman.html.
- 95. See Ann O'Neill & Sara Weisfeldt, Psychiatrist: Holmes Thought 3-4 Times a Day about Killing, CNN (updated June 17, 2015), https://www.cnn. com/2015/06/16/us/james-holmes-theater-shooting-fenton/index.html.
- 96. Id.
- 97. Francie Grace, *Postal Shooter's Bizarre Behavior*, CBS NEws (Feb. 2, 2006), https://www.cbsnews.com/news/postal-shooters-bizarre-behavior/. San Marco exhibited some of these concerning behaviors while on the job, and a 2003 work disturbance was only resolved when sheriff's deputies pulled her out from under a mail-sorting machine. *Id*.
- See Dan Frosch, Woman in California Postal Shootings Had History of Bizarre Behavior, N.Y. TIMES (Feb. 3, 2008), https://www.nytimes. com/2006/02/03/us/woman-in-california-postal-shootings-had-history-of-bizarre-behavior.html.
- 99. See Bill Miller, *Capitol Shooter's Mind-Set Detailed*, WASH. Post (Apr. 23, 1999), https://www.washingtonpost.com/wp-srv/national/longterm/ shooting/stories/weston042399.htm.

100. Id.

- 101. CONNECTICUT OFFICE OF THE CHILD ADVOCATE, FINAL REPORT: SHOOTING AT SANDY HOOK ELEMENTARY SCHOOL 31 (Nov. 21, 2014), http://www. ct.gov/oca/lib/oca/sandyhook11212014.pdf [hereinafter Office of the Child Advocate, Final Report]; Stephen J. Sedensky III, Office of THE STATE'S ATTORNEY, REPORT OF THE STATE'S ATTORNEY FOR THE JUDICIAL DISTRICT OF DANBURY ON THE SHOOTINGS AT SANDY HOOK ELEMENTARY SCHOOL AND 36 YOGANANADA STREET, NEWTOWN, CONNECTICUT ON DECEMBER 14, 2012 34 (Nov. 25, 2013), http://www.ct.gov/csao/lib/csao/ Sandy_Hook_Final_Report.pdf [hereinafter REPORT OF THE STATE'S ATTORNEY]. The connection of these behaviors to schizophrenia may have been masked by early diagnoses of Asperger's Disorder and sensory integration disorder.
- 102. Office of the Child Advocate, Final Report, supra note 101, at 18, 26-27, 41.

103. Id. at 50.

- 104. Id. at 103.
- 105. Report of the State's Attorney, *supra* note 101, at 3.
- 106. Mario Diaz, Cathy Tatom & Aaron Wische, Sutherland Springs Church Shooter Escaped Mental Health Facility Months After Attack on Wife, Child, NBC NEWS HOUSTON KPRC (updated Nov. 7, 2017 7:20 PM), https://www.click2houston.com/news/sutherland-springs-church-shooterescaped-mental-health-facility-months-after-attack-on-wife-child.
- 107. Emanuella Grinberg & Eliott C. McLaughlin, Texas Church Shooter Devin Patrick Kelley's Troubled Past Emerges, CNN (Nov. 8, 2017), https://www. cnn.com/2017/11/06/us/devin-kelley-texas-church-shooting-suspect/index.html. Not all stalkers are mentally ill, but stalking can indicate paranoid tendencies.
- 108. Id.
- 109. Paddock first worked as an Internal Revenue Agent, then as an auditor for Lockheed Martin and Boeing. He also spent time purchasing real estate properties and renovating them. LVMPD PRELIMINARY INVESTIGATIVE REPORT 1 OCTOBER/MASS CASUALTY SHOOTING, LAS VEGAS METROPOLITAN POLICE DEP'T (Jan. 1, 2018), https://www.scribd.com/document/369536524/Oct-1-Report#from_embed.
- 110. Id. at 24.
- 111. See Jake Gibson, Stephen Paddock: What We Know About Vegas Shooter, 'High Stakes Gambler', Fox NEws (last visited May 2, 2018), http://www. foxnews.com/us/2017/10/02/stephen-paddock-suspected-las-vegas-gunman-stashed-weapons-in-room-police-say.html.
- 112. Pierre Thomas, Investigators Believe Las Vegas Gunman Had Severe Undiagnosed Mental Illness: Sources, ABC News (Oct. 7, 2017), http://abcnews. go.com/US/investigators-las-vegas-gunman-severe-undiagnosed-mental-illness/story?id=50346433.
- 113. See Santa Barbara Shooter Planned Killing Spree to Exact Revenge, Fox 31 DENVER (updated May 26, 2014), http://kdvr.com/2014/05/25/reportdeputies-nearly-caught-santa-barbara-shooter-before-his-rampage/.
- 114. See Holly Yan, Steve Almasy & Sara Sidner, California Mass Killer Thought Plan Was Over During April Visit by Deputies, CNN (May 27, 2014), https://www.cnn.com/2014/05/25/justice/california-shooting-deaths/index.html.

115. Id.

116. *Id*.

- 117. This number includes the unborn child of Claire Wilson, who was shot in the stomach while six months pregnant. The mother survived, but the child did not. See Joan Neuberger et al., *The Victims*, BEHIND THE TOWER PROJECT, http://behindthetower.org/the-victims/ (last visited Apr. 30, 2018). It also includes David Gunby, who died in 2001 as a direct result of the injuries he sustained during the shooting. See Dennis McLellan, *David H. Gunby*, 58; *Hurt in '66 Texas Shooting Rampage*, L.A. TIMES (Nov. 16, 2001), http://articles.latimes.com/2001/nov/16/local/ me-4897. Gunby had been born with only one functioning kidney, which was left riddled with lead fragments after one of Whitman's bullets severed his small intestines. *Id*.
- 118. See Michael S. Rosenwald, The Loaded Legacy of the UT Tower Shooting, WASH. POST (July 31, 2016), https://www.washingtonpost.com/sf/ local/2016/07/31/the-loaded-legacy-of-the-ut-tower-shooting/?utm_term=.3726e89e7833; Associated Press, Beginning of an Era: The 1966 University of Texas Clock Tower Shooting, NBC NEWS (updated Aug. 1, 2016 3:45 PM ET), https://www.nbcnews.com/news/us-news/beginningera-1966-university-texas-clock-tower-shooting-n620556 [hereinafter Beginning of an Era]. Whitman also killed his wife and mother prior to the shooting rampage, bringing the total number of murder victims that day to 17. See This Day In History (1966): An Ex-Marine Goes on a Killing Spree at the University of Texas, HISTORY CHANNEL (last visited Apr. 30, 2018), https://www.history.com/this-day-in-history/an-ex-marine-goeson-a-killing-spree-at-the-university-of-texas.
- 119. Beginning of an Era, supra note 118; Austin (Tex.) Police Department Records of the Charles Whitman Mass Murder Case, AUSTIN HISTORY CENTER (last visited Aug. 17), https://legacy.lib.utexas.edu/taro/aushc/00489/ahc-00489.html [hereinafter Police Department Records].
- 120. Police Department Records, supra note 121.
- 121. See Lauren Silverman, Gun Violence and Mental Health Laws, 50 Years After Texas Tower Sniper, NPR (July 29, 2016), https://www.npr.org/ sections/health-shots/2016/07/29/487767127/gun-violence-and-mental-health-laws-50-years-after-texas-tower-sniper; David Eagleman, The Brain on Trial, THE ATLANTIC (July/Aug. 2011), https://www.theatlantic.com/magazine/archive/2011/07/the-brain-on-trial/308520/.
- 122. Eagleman, supra note 121.
- 123. Id.; Silverman, supra note 121; Rosenwald, supra note 118.
- 124. They also affect the safety of law enforcement officers. According to one 2013 study, at least half of all physical attacks on police officers are by individuals suffering from mental illness, many of whom are untreated. Other studies suggest that as many as one-third of shootings by law enforcement officers are the result of victims attempting "suicide by cop." See E. Fuller Torrey et al., Justifiable Homicides by Law Enforcement Officers: What Is the Role of Mental Illness?, TREATMENT ADVOCACY CENTER & NATIONAL SHERIFF'S ASS'N (2013).
- 125. See Mark Berman, Prosecutors Say Dylann Roof 'Self-Radicalized' Online, Wrote Another Manifesto in Jail, WASH. POST (Aug. 22, 2016), https:// www.washingtonpost.com/news/post-nation/wp/2016/08/22/prosecutors-say-accused-charleston-church-gunman-self-radicalizedonline/?utm_term=.e63d502bc050; Ralph Ellis, Greg Botelho & Ed Payne, Charleston Church Shooter Hears Victim's Kin Say, 'I Forgive You', CNN (updated June 19, 2015), https://www.cnn.com/2015/06/19/us/charleston-church-shooting-main/.
- 126. See Mark Berman, One Year After the San Bernardino Attack, Police Offer a Possible Motive as Questions Still Linger, WASH. POST (Dec. 2, 2018), https://www.washingtonpost.com/news/post-nation/wp/2016/12/02/one-year-after-san-bernardino-police-offer-a-possible-motiveas-questions-still-linger/?utm_term=.df867e450bad; Everything We Know About the San Bernardino Terror Attack Investigation So Far, L.A. TIMES (Dec. 14, 2015), http://www.latimes.com/local/california/la-me-san-bernardino-shooting-terror-investigation-htmlstory.html; Greg Botelho & Ralph Ellis, San Bernardino Shooting Investigated as 'Act of Terrorism', CNN (updated 12:42 AM ET, Dec. 5, 2015), https://www.cnn. com/2015/12/04/us/san-bernardino-shooting/index.html.
- 127. Jeff Brady, Portrait Emerges of Hasan as Troubled Man, NPR (Nov. 11, 2009), https://www.npr.org/templates/story/story. php?storyId=120317524.
- 128. Associated Press, 9 *Dead in Shooting at Conn. Beer Distributor*, NBC NEws (updated Aug. 4, 2010), http://www.nbcnews.com/id/38535909/ ns/us_news-crime_and_courts/t/dead-shooting-conn-beer-distributor/#.WtZihqjwbcs.
- 129. See Zach Howard, No Proof of Racism at Site of 2010 Shooting Rampage: Police, REUTERS (May 12, 2011), https://www.reuters.com/article/usconnecticut-racism/no-proof-of-racism-at-site-of-2010-shooting-rampage-police-idUSTRE74C04P20110513; Emily Cohen, Chilling 911 Tapes from Connecticut Shooting Describe Gunman's Deadly Rampage, ABC News (Aug. 4, 2010), http://abcnews.go.com/US/connecticut-shooteromar-thornton-chased-victims-beer-distributor/story?id=11322281.
- 130. See Kevin Hayes, Omar Thornton: "I Killed the Five Racists", CBS News (Aug. 4, 2010), https://www.cbsnews.com/news/omar-thornton-i-killed-the-five-racists/; Gunman 'Cold as Ice' Before Killing 8 in Workplace Shooting Spree, CNN (Aug. 4, 2010 12:24 p.m. EDT), http://www.cnn. com/2010/CRIME/08/03/connecticut.business.shootings/index.html.
- 131. See Hayes, supra note 130; Gunman 'Cold as Ice' Before Killing 8 in Workplace Shooting Spree, supra note 130.
- 132. See Jacob V. Lamar Jr., Crazy Pat's Revenge, TIME (June 24, 2001), http://content.time.com/time/magazine/article/0,9171,144859,00.html.
- 133. Id.
- 134. See William Robbins, The Loner: From Shy Football Player to 'Crazy Pat', N.Y. TIMES (Aug. 22, 1986), https://www.nytimes.com/1986/08/22/ us/the-loner-from-shy-football-player-to-crazy-pat.html. But see Nolan Clay, Sherrill Feared Mental Illness, Rejected, THE OKLAHOMAN (Feb. 28, 1987) (explaining that Sherrill "worried he had inherited 'serious mental problems'" but that he refused to seek psychiatric counseling in the four years prior to the attack), http://newsok.com/article/2177416.

- 135. This is an almost impossible task, even in those states with de facto firearm registries. For example, California requires that every firearm owner be licensed—creating a database of gun owners—and every sale or transfer of firearms be made through a licensed dealer, thereby logging a record of who, exactly, is in legal possession of which firearms. Further, California has this gun licensing system fully linked up with its criminal and mental health databases. The state has a list of over 21,000 individuals with gun permits who are known to actually possess firearms, but who have since been disqualified from firearm possession under state and federal law. See Senate Bill 140: Legislative Report Number One—Calendar Year 2014 Armed and Prohibited Persons System, California Dep't of Justice (Mar. 1, 2015), https://www.oag. ca.gov/sites/all/files/agweb/pdfs/publications/armed-prohib-person-system.pdf. In 2013, state lawmakers infused more than \$24 million into an already funded program to seize these firearms from individuals they knew were in illegal possession of guns. In one year, only 3,286 individuals had their firearms seized, while another 7,000 disqualified gun owners were added to the list. The state had spent almost half of the extra \$24 million, but barely made a dent in the original list of individuals illegally possessing guns. See Jeff Guo, California Discovers It's Really Expensive to Confiscate People's Guns, WASH. POST (May 5, 2015), https://www.washingtonpost.com/blogs/govbeat/wp/2015/05/05/ california-discovers-its-really-expensive-to-confiscate-peoples-guns/?utm_term=.cea4359a22e1. Almost five years later, more than 10,000 individuals remain on the list, but the additional funding has long since run out. Patrick McGreevy, 10,000 Californians Barred From Owning Guns Are Still Armed. This Law Aims to Change That. L.A. TIMES (Jan. 19, 2018), http://www.latimes.com/politics/la-pol-ca-gun-seizures-felons-20180119-story.html. Any attempt by the federal government to engage in the mass seizure of firearms would almost certainly be even less effective, as the ATF is prohibited from using any of its funds to create a national gun registry for non-NFA firearms.
- 136. For examples of just how difficult it is to shut down illegal firearms trafficking and how prevalent illegal trafficking is for purposes of violent crime, see Thom Patterson, *Inside the Illegal Online Weapons Trade*, CNN (updated Aug. 11, 2016), https://www.cnn.com/2016/08/10/us/ declassified-illegal-online-weapons-trade/index.html; Christopher Ingraham, *New Evidence Confirms What Gun Rights Advocates Have Said for a Long Time About Crime*, WASH. Post (July 27, 2018), https://www.washingtonpost.com/news/wonk/wp/2016/07/27/new-evidence-confirms-what-gun-rights-advocates-have-been-saying-for-a-long-time-about-crime/?utm_term=.7a03716fd91b. Despite one of the most restrictive gun control frameworks in Europe, including the prohibition of all handguns and semi-automatic rifles, confiscation programs, and illegal weapons crackdowns, experts estimate that there are almost 3 million illegal firearms in England and Wales. *See* Adam Aspinall, *There Are 4 Million Guns on UK Streets—and 4,000 Youngsters Have Shotgun Licenses*, U.K. MIRROR (Mar. 20, 2018), https://www.mirror.co.uk/news/uk-news/4-million-guns-uk-streets-7598164. Australia similarly struggles with a significant black market for illicit firearms, despite several amnesty buyback programs over the past few decades. *See* LLICIT FIREARMS IN AUSTRALIA, AUSTRALIA CRIMINAL INTELLIGENCE COMM'N (2016), https://www.acic.gov.au/sites/g/files/net3726/f/2016/10/illicit_firearms_in_australia_0.pdf?v=1477016769.
- 137. See Bus Slasher a Troubled Croatian, CBS News (Oct. 6, 2001), https://www.cbsnews.com/news/bus-slasher-a-troubled-croatian/. Igric had been discharged from the Croatian army after only two years due to his behavior. Id. He entered the United States on a 30-day transit visa, which he overstayed for two years. Id. Igric was described as a "mental wreck" in the weeks leading up to the attack, and exhibited clear signs of psychotic behavior, including "nervously waiving with his hands, mumbling that he's being hunted." Id. It is possible that Igric suffered from undiagnosed post-traumatic stress disorder as a result of his military experience, which included combat during Croatia's 1991 war for independence from Yugoslavia. Id.
- 138. See Joel Arak, Driver Who Killed 4 Ruled Insane, CBS News (June 20, 2002), https://www.cbsnews.com/news/driver-who-killed-4-ruledinsane/. A fifth victim died in 2016 as a result of complications from critical injuries suffered during the attack. See Funeral for Albert Levy, SINAI MEMORIAL CHAPEL, http://sinaichapel.org/obituarydetails.aspx?did=cf17507e-e8b2-4a49-b24b-b426faad6396 (last visited Apr. 30, 2018).
- 139. See Arak, supra note 138. Attias' father testified at trial regarding his son's long battles with his mental health, detailing a history of increasingly explosive behavior, attendance at special schools, and even a period of institutionalization for attempting to strangle his sister. John Johnson, *TV Director Testifies in Son's Murder Trial*, L.A. TIMES (May 29, 2002), http://articles.latimes.com/2002/may/29/local/me-attias29. Various therapists and psychiatrists also testified that Attias likely suffered from some sort of psychosis, whether from schizophrenia or manic-depressive disorder. *Id.*
- 140. See Adacia Chambers Charged in Oklahoma State University Parade Crash that Killed 4, NBC NEws (updated Nov. 4, 2015 10:57 AM ET), https://www.nbcnews.com/news/us-news/adacia-chambers-charged-oklahoma-state-university-parade-crash-killed-4-n457226.
- 141. See Silas Allen, Psychologist: Driver in OSU Crash is Bipolar, Not Competent to Stand Trial, THE OKLAHOMAN (updated Nov. 4, 2015 5:08 PM CDT), http://newsok.com/article/5458221. A forensic psychologist who evaluated Chambers' mental state shortly after the incident described the encounter: "Her emotional state ranged from uncontrollable sobbing to inappropriate, hysterical laughter." *Id.* Chambers frequently made "nonsensical, irrelevant religious references" and went for days without sleeping. *Id.*
- 142. In 1996, Thomas Hamilton used several legally owned handguns to murder 16 school children and one teacher. Subsequent investigations determined his handgun license should not have been renewed in the years prior to the shooting, because Hamilton was "unfitted" under English law—he had been removed from his position as a Scout leader for concerns over his behavior around children, had used firearms to threaten people in the past, and had been charged with assault (conviction was not pursued). See THE HON. LORD CULLEN, THE PUBLIC INQUIRY INTO THE SHOOTINGS AT DUNBLANE PRIMARY SCHOOL ON 13 MARCH 1996 (Sept. 30, 1996), https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/file/276631/3386.pdf. In 2001, a Swiss man who legally owned firearms despite a diagnosis of paranoid personality disorder and a history of threatening behavior shot 32 people. In 2002, Richard Dunn opened fire at a city council meeting in Nanterre, France, murdering eight city officials and wounding another 19 with two handguns. Dunn had a troubled past filled with bouts of depression and suicidality but was able to legally possess a firearm despite France's stringent gun control laws. See John Henley, *Eight Die in Council Chamber Massacre*, THE GUARDIAN (Mar. 27, 2002), https://www.theguardian.com/world/2002/mar/28/france.jonhenley1. In 2011, Tristan van der Vlis shot six people to death in a Dutch mall, wounding another 15. He had a gun license despite a history of mental hospitalization and suicide attempts, as well as strict Dutch licensing laws. Associated Press, *Dutch Mourn 6 Shopping Mall Shooting Victims*, Fox NEWS (Apr. 10, 2011), http://www.foxnews.com/world/2011/04/10/dutch-mourn-mall-shooting-victims.html?test=latestnews.

- 143. See Gordon Fairclough, *Eight China Students Stabbed to Death*, WALL ST. J. (updated Mar. 23, 2010), https://www.wsj.com/articles/SB10001424 052748704211704575139500440463336?mod=WSJ_hpp_MIDDLENexttoWhatsNewsThird&ns=prod/accounts-wsj.
- 144. Anita Chang, Life 'Meaningless' for China School Attack Suspect, AssociAted PRESS (Mar. 24, 2010), http://archive.boston.com/news/world/ asia/articles/2010/03/24/life_meaningless_for_china_school_attack_suspect/. Minsheng allegedly told investigators that he was upset over relationship problems with his girlfriend and his peers, and that he was struggling to find a job. *Id*.
- 145. See Kristian Silva, Cairns Children Killings: What Drove Raina Thaiday to Slay Eight Kids?, AUSTRALIAN BROADCASTING COMPANY (May 4, 2017), http://www.abc.net.au/news/2017-05-04/cairns-children-killings-what-drove-raina-thaiday-slay-8-kids/8492742.
- 146. Dan Bilefsky & Nicola Clark, *Fatal Descent of Germanwings Plane was 'Deliberate,' French Authorities Say*, N.Y. TIMES (Mar. 26, 2015), https://www.nytimes.com/2015/03/27/world/europe/germanwings-crash.html.
- 147. See Doctors Felt Germanwings Co-Pilot was Unfit to Fly, Prosecutor Says, CBS NEws (updated June 11, 2015 1:47 PM EDT), https://www.cbsnews. com/news/doctors-felt-germanwings-co-pilot-andreas-lubitz-unfit-to-fly-prosecutor-says/. Lubitz was suspended from his pilot training program in 2008 after being hospitalized for an episode of severe depression. He was cleared by a psychiatrist to complete the program a year later. Lubitz's personal diary records that, in the months leading up to the crash, he suffered from severe insomnia and was again being treated for depression by a psychiatrist. Just weeks before the crash, his doctor referred him to a psychiatric outpatient clinic over concerns of "imminent psychosis," but Lubitz did not attend the clinic and airline authorities were apparently not informed of this development. See Rene Marsh & Wesley Bruer, FAA Questioned Mental Health of Germanwings Pilot, CNN (updated Apr. 30, 2015), https://www.cnn. com/2015/04/29/politics/germanwings-pilot-faa-mental-health/index.html; Justin Huggler, Germanwings Pilot Andreas Lubitz Kept Diary that Shows His Descent into Depression, THE TELEGRAPH (Sept. 21, 2015), https://www.telegraph.co.uk/news/worldnews/germanwings-planecrash/11880154/Germanwings-pilot-Andreas-Lubitz-kept-diary-that-shows-his-descent-into-depression.html; Harriet Alexander et al., *Germanwings Plane Crash: Andreas Lubitz 'Rehearsed Descent' on Previous Flight, Says French Report*, THE TELEGRAPH (May 6, 2015), https://www. telegraph.co.uk/news/worldnews/germanwings-plane-crash/11585709/Germanwings-plane-crash-French-investigators-release-report-into-Andreas-Lubitz-live.html.
- 148. See Ben Westcott, Melbourne Attack Driver Had Mental Health Issues but No Terror Connection, CNN (updated Dec. 21, 2017), https://www. cnn.com/2017/12/21/asia/melbourne-car-pedestrians-crash/index.html. At various points during his court hearings, Gargasoulas declared himself "the savior," told the judge his life was being controlled by the government and blamed his actions on the Illuminati. James Hancock, Accused Bourke St Driver Dimitrious Gargasoulas Tells Court 'Illuminati' Cause Breakdown, AUSTRALIAN BROADCASTING COMPANY (May 25, 2017), http://www.abc.net.au/news/2017-05-26/bourke-street-accused-james-gargasoulas-outburst-in-court/8561630.
- 149. See Kalhan Rosenblatt & Daniella Silva, Waffle House Shooting: Suspect in Killing of Four Taken Into Custody After Manhunt, CBS News (updated Apr. 23, 2018 5:28 PM ET), https://www.nbcnews.com/news/us-news/waffle-house-shooting-manhunt-underway-suspect-spree-killed-4-n868411. The man had a long history of mental health issues, leading to the revocation of his Illinois firearms license and seizure of his firearms. See Amy Swearer, *If Current Laws Had Been Followed, There Would Have Been No Waffle House Shooting*, DAILY SIGNAL (Apr. 23, 2018), https://www.dailysignal.com/2018/04/23/if-current-laws-had-been-followed-there-would-have-been-no-waffle-house-shooting/.
- 150. See Eric Levenson, A Van Speeds Across Toronto Sidewalks, Leaving 10 Pedestrians Dead, CNN (updated Apr. 24, 2018 11:41 PM ET), https://www. cnn.com/2018/04/23/world/toronto-collision-pedestrians/index.html. It was later discovered that the young man praised misogynistic "incel" groups and leaders, known for their animosity toward women over their own status as "involuntary celibates," and may have purposefully targeted women during his ramming attack. See Alek Minassian Toronto Van Attack Suspect Praised "Incel" Killer, BBC NEws (Apr. 25, 2018), https://www.bbc.com/news/world-us-canada-43883052.