

Case No. 19-56004

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In the United States Court of Appeals  
for the Ninth Circuit

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STEVEN RUPP, et al.,  
*Plaintiffs-Appellants,*

v.

XAVIER BECERRA,  
in his official capacity as Attorney General of the State of California,  
*Defendant-Appellee.*

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On Appeal from the United States District Court  
for the Central District of California  
Case No. 8:17-cv-00746-JLS-JDE

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**APPELLANTS' EXCERPTS OF RECORD  
VOLUME XVI OF XXII**

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January 27, 2020

Under Federal Rules of Appellate Procedure for the Ninth Circuit, rule 30-1, Plaintiffs-Appellants Steven Rupp, Steven Dember, Cheryl Johnson, Michael Jones, Christopher Seifert, Alfonso Valencia, Troy Willis, Dennis Martin, and California Rifle & Pistol Association, Incorporated, by and through their attorney of record, confirm to the contents and form of Appellants' Excerpts of Record.

Date: January 27, 2020

**MICHEL & ASSOCIATES, P.C.**

s/ Sean A. Brady

Sean A. Brady

*Attorneys for Plaintiffs/ Appellants*

*Steven Rupp, et al.*

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### **CERTIFICATE OF SERVICE**

I hereby certify that on January 27, 2020, an electronic PDF of APPELLANTS' EXCERPTS OF RECORD, VOLUME XVI OF XXII was uploaded to the Court's CM/ECF system, which will automatically generate and send by electronic mail a Notice of Docket Activity to all registered attorneys participating in the case. Such notice constitutes service on those registered attorneys.

Date: January 27, 2020

**MICHEL & ASSOCIATES, P.C.**

s/ Sean A. Brady

Sean A. Brady

*Attorneys for Plaintiffs-Appellants*

*Steven Rupp, et al.*



## Exhibit 2

In the United States District Court  
For the Central District of California

RUPP, et al.,

Plaintiffs,

v.

XAVIER BECERRA, in his official  
capacity as Attorney General of the  
State of California; et al.,

Defendants.

8:17-cv-00746-JLS-JDE

EXPERT REPORT AND  
DECLARATION OF  
BLAKE GRAHAM

## BACKGROUND AND QUALIFICATIONS

1  
2 1. I am a Special Agent Supervisor for the California Department of  
3 Justice, Bureau of Firearms.

4 2. I received a Bachelor of Science degree in May 1992 in Criminal  
5 Justice at the California State University Sacramento. My coursework included  
6 forensics, corrections, and a number of classes in criminal justice-related topics.

7 3. Since 1994, I have worked as either an investigator for the California  
8 Department of Alcoholic and Beverage Control (ABC), or as a Special Agent for  
9 the California Department of Justice (DOJ). My job responsibilities in all of these  
10 positions have increasingly required the recovery, investigation, and identification  
11 of firearms, the ammunition used for those firearms, and the magazines used for  
12 feeding ammunition for such firearms.

13 4. My work as an Investigator for ABC between 1994 and 1999 included  
14 the recovery of firearms, magazines and ammunition.

15 5. Between 1999 and 2002, I worked as a Special Agent for DOJ, and was  
16 assigned to the Violence Suppression Program in the Bureau of Narcotic  
17 Enforcement. In this job, I investigated violent crimes and various violations  
18 occurring at California gun shows. As a gun show enforcement agent, I attended  
19 gun shows in the San Francisco Bay Area to monitor, and if necessary, seize,  
20 firearms, ammunition, and magazines sold illegally to felons, parolees, and  
21 probationers.

22 6. From October 2002 to the present, I have been a Special Agent and  
23 Special Agent Supervisor, for the DOJ's Bureau of Firearms (BOF). In this  
24 capacity, I am assigned to recover firearms from prohibited individuals, monitor  
25 gun shows for illegal activities, conduct surveillance on gun dealers suspected of  
26 illegal activity, and investigate illegal trafficking of firearms, manufacturing of  
27  
28

1 assault weapons, machine guns, and illegal possession of various magazines and  
2 ammunition.

3 7. Since 2008, I have been responsible for reviewing handguns that are  
4 submitted by manufacturers for inclusion in California's roster of handguns certified  
5 for sale. A copy of the roster can be found on the DOJ website:  
6 <http://certguns.doj.ca.gov/>.

7 8. In my career I have attended at least 40 gun shows and have become  
8 very knowledgeable on current laws pertaining to the sales of firearms, assault  
9 weapons identification, assault weapons registration, the Automated Firearms  
10 System (AFS), ammunition, and ammunition containers—including large-capacity  
11 magazines (LCMs)—in the State of California.

12 9. I have been trained and qualified to carry several different types of  
13 firearms, including: Glock Model 17 (9 mm semiautomatic pistol), multiple Glock  
14 .40 caliber semi automatic pistols, Heckler & Koch MP5 (9 mm submachine gun),  
15 Smith & Wesson, Model 60 (.38 Special revolver), multiple .45 caliber  
16 semiautomatic pistols, and a Colt, Model M4 (5.56 mm machine gun). I have  
17 access to other Department-owned handguns, shotguns, submachine guns, machine  
18 guns, rifles, shotguns and 40 mm "less lethal" launchers.

19 10. Throughout my career, I have conducted training programs in the  
20 identification and handling of firearms. I have also trained other Special Agents of  
21 BOF on assault weapons and firearms identification. I also have given firearms  
22 identification classes to members of the multiple District Attorney's offices in the  
23 State of California.

24 11. I have also completed at least 15 firearms training courses since 1994.  
25 These courses included the assembly and use of specific firearms, cartridge  
26 composition (bullet, the propellant, and the casing), common calibers used by law  
27 enforcement, and training on rifle and handgun ammunition. I have been certified  
28



1 as a California Peace Officer Standards and Training (POST) approved Firearms  
2 Instructor/Rangemaster since 2002.

3 12. During the course of my career and training I have become proficient in  
4 the use and disassembly of various revolvers, pistols, submachine guns, shotguns,  
5 and rifles. I have made or assisted in the arrest of at least thirty persons for  
6 violations involving illegal weapons possession. In the course of my employment I  
7 have participated in excess of thirty search warrants which involved the illegal  
8 possession of firearms.

9 13. I have been qualified as an expert witness regarding the use of firearms  
10 in 15 cases in both federal and state court since 2007.

### 11 **DISCUSSION**

#### 12 **LEGISLATION LIMITING ASSAULT WEAPONS.**

13 14. I am aware of the current state and former federal laws banning the sale  
14 assault weapons in California.

15 15. California's Roberti-Roos Assault Weapon Act (AWCA) prohibits the  
16 sale of assault weapons and ownership of unregistered assault weapons. The  
17 AWCA prohibits certain assault weapons as defined by their make and model. The  
18 lists of prohibited weapons are in Penal Code section 30510 and California Code of  
19 Regulations, Title 11, Division 5, Chapter 40, Section 5499 (Category 1 and  
20 Category 2 weapons). Some of the firearms listed in Penal Code section 30510 are  
21 weapons prohibited by the federal assault weapons ban in effect from 1994-2004.  
22 In general, the firearms listed in Penal Code section 30510 and the additional ones  
23 listed in the regulations could be considered semiautomatic versions of military  
24  
25  
26  
27  
28

1 weapons.<sup>1</sup> While it is not legally necessary for a Category 1 or Category 2 assault  
2 weapon to have certain features, they usually have one more of the features listed in  
3 Penal Code Section 30515 (Category 3 definition language). Probably the most  
4 common feature of prohibited assault weapons is the pistol grip. The next most  
5 common features are probably adjustable stocks (folding or telescoping) and flash  
6 suppressors.

7 16. The AWCA also prohibits certain weapons as defined by their features.  
8 Penal Code section 30515 defines an “assault weapon” to include “a semiautomatic,  
9 centerfire rifle that does not have a fixed magazine but has any one” of certain  
10 features.

#### 11 **ASSAULT WEAPON FEATURES<sup>2</sup>**

12 17. I understand that Plaintiffs in this case have challenged California’s  
13 prohibition on assault weapons based on features identified in Penal Code section  
14 30515(a)(1)(A-C), (a)(1)(E-F), and (a)(3):

15 PC 30515.

16 (a) Notwithstanding Section 30510, “assault weapon” also means any of the  
17 following:

18 (1) A semiautomatic, centerfire rifle that does not have a fixed magazine but has  
19 any one of the following:

20 (A) A pistol grip that protrudes conspicuously beneath the action of the weapon.

21 (B) A thumbhole stock.

22 (C) A folding or telescoping stock.

23 <sup>1</sup> The history of assault rifles, their military features, and their evolution from  
24 military weapons have been well documented. *See AR-15/M16 Sourcebook*, by  
25 Long (AG00003799-325); *Shooter’s Bible: Guide to AR-15S* by Howlett  
26 (AG00003827-3836); *Special Warfare: Special Weapons* by Dockery  
27 (AG00003839-3891); *Black Rifle II* by Bartocci (AG00003896-3952); The  
28 Militarization of the U.S. Civilian Firearms Market by the Violence Policy Center  
(AG00003955-40060); *Legends and Realities* by Shilin and Cutshaw  
(AG00004008-4040); *Assault Weapons Profile* by the U.S. Department of Treasury  
(AG00004311-4337); *Small Arms of the World* by Ezell (AG00004973-  
AG00005040); *Buyer’s Guide to Assault Weapons* by Peterson (AG00005059-  
5070).

<sup>2</sup> These features have been defined for purposes of assault weapon  
registration in California Code of Regulations, Title 11, Division 5, Chapter 39,  
Article 2, § 5471 (Exhibit A).



- 1 (E) A flash suppressor.  
2 (F) A forward pistol grip.

3 (3) A semiautomatic, centerfire rifle that has an overall length of less than 30  
4 inches.

5 18. "Centerfire" refers to the type of ammunition the firearms were built to  
6 fire. This excludes many semiautomatic rimfire (usually .22 caliber) rifles that  
7 might have had one or more listed features. Centerfire ammunition is more  
8 powerful than rimfire ammunition.

9 19. A "pistol grip that protrudes conspicuously beneath the action of the  
10 weapon" is a grip that allows for a pistol-style grasp in which the web of the trigger  
11 hand (between the thumb and index finger) can be placed beneath or below the top  
12 of the exposed portion of the trigger while firing. In my experience, this feature is  
13 the most prevalent feature of assault rifles prohibited under the AWCA. Pistol  
14 grips are used in most modern military machine guns and semiautomatic rifles. The  
15 designers of military-style firearms are including this feature more and more. A  
16 pistol grip on an assault rifle enhances the ergonomics of the weapon. A shooter  
17 using an assault rifle without a pistol grip may shoot less accurately if the shooter's  
18 trigger hand is in an awkward position for a significant amount of time. An assault  
19 rifle lacking a pistol grip would not necessarily be less accurate than an assault rifle  
20 with a pistol grip.

21 20. A "thumbhole stock" is a stock with a hole that allows the thumb of the  
22 trigger hand to penetrate into or through the stock while firing. It allows for a grip  
23 similar to that offered by a pistol grip. Below is a photograph showing a thumbhole  
24 stock on a rifle.



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1  
2       21. A “telescoping stock” is a stock that is shortened or lengthened by  
3 allowing one section to telescope into another portion. On AR-15 style firearms,  
4 the buffer tube or receiver extension acts as the fixed part of the stock on which the  
5 telescoping butt stock slides or telescopes. A “folding stock” is a stock that is  
6 hinged in some fashion to the receiver to allow the stock to be folded next to the  
7 receiver to reduce the overall length of the firearm. A folding stock or telescoping  
8 stock that still allows the shooter to fire the rifle while the stock is folded or  
9 shortened will have a tactical advantage because it is more versatile. The tactical  
10 advantage provided by a telescoping or folding stock include decreased overall  
11 length of the rifle by the shooter if desired for concealability. For example, when  
12 law enforcement personnel conduct room to room searches of a building, they  
13 would not want to give away their locations. More compact weapons with folding  
14 or telescoping stocks may maintain the advantage of surprise. Semiautomatic  
15 assault weapons deployed by law enforcement with extremely long overall lengths  
16 may be seen by antagonists who mean to do harm to law enforcement. Telescoping  
17 or folding stocks also allow for easier transportation and storage of the weapon and  
18 to more quickly allow the user to adjust the weapon for a better fit, but these are  
19 secondary considerations. Subjects intent on shooting one or more persons may  
20 have a tactical advantage by using a weapon with a shorter overall length. This  
21 tactical advantage described above for law enforcement can also be used by a  
22 shooter wishing to remain undetected for as long as possible. A weapon with a  
23 shorter overall length could also permit the shooter to smuggle the weapon  
24 undetected (by, for example, hiding the weapon in a backpack or bag) or to hide in  
25 the crowd without telegraphing the shooter’s location.<sup>3</sup> A smaller weapon can also  
26 be concealed on the shooter’s person underneath loose or bulky clothing.

27       <sup>3</sup> Some manufacturers design and market certain backpacks specifically to  
28 carry assault rifles with folding or telescoping stock while remaining



22. A “flash suppressor” is any device attached to the end of the barrel, that is designed, intended, or functions to perceptibly reduce or redirect muzzle flash from the shooter's field of vision. A hybrid device that has either advertised flash suppressing properties or functionally has flash suppressing properties would be considered a flash suppressor. A device labeled or identified by its manufacturer as a flash hider would also be considered a flash suppressor. Most everyone has experienced a flash from a camera in our lifetimes. This camera flash can cause vision problems for people viewing the flash. A firearm, in low light conditions may produce muzzle flash with each round fired. The muzzle flash may create vision problems for the shooter, which may cause the shooter to shoot less accurately. Two rifles, one with a flash suppressor and one without, shooting the same ammunition with the same length barrels should perform differently in terms of reducing the amount of flash created. The rifle with the flash suppressor should be easier to shoot in low light conditions because the shooter should have less problems aiming accurately.

23. A “forward pistol grip” is a grip that allows for a pistol style grasp forward of the trigger. Many modern military machine guns, submachine guns and assault rifles worldwide have built in forward pistol grips or locations that allow for forward pistol grips to be attached. This feature can aid the shooter by offering an optional grip location on the rifle for the shooter’s non-trigger hand.

24. Overall, in my experience, the challenged features described in Penal Code section 30515 on assault rifles may aid the shooters in being potentially more effective and efficient while shooting people. Semiautomatic assault rifles are generally modelled after successful military machine guns and submachine guns.<sup>4</sup>

inconspicuous. The 5.11 Tactical COVRT M4 Gun Bag with the “Roll-down Assault Compartment” is one example. See <http://www.armtactical.com/5-11-tactical-covrt-m4-gun-bag.html>; [https://www.youtube.com/watch?v=EaZ7s5mtA\\_o](https://www.youtube.com/watch?v=EaZ7s5mtA_o); see also <https://www.tactical-life.com/gear/6-discreet-carry-bags/>.

<sup>4</sup> See sources cited in footnote 1.

1 Target practice is done by militaries of the world so their soldiers are better able to  
2 shoot and kill or injure their opponents.

3 25. Generally, weapons currently deemed to be Assault Weapons under  
4 California law have had a similar version issued to a military or police force  
5 somewhere in the world. The main difference between those military or police  
6 forces machine guns and California assault weapons are that defined California  
7 assault weapons are semi automatic. In some cases, military or police forces might  
8 issue semi automatic rifles that are functionally the same as defined California  
9 assault weapons in terms of “rate of fire” or “capacity for firepower.”

10 26. Pistol grip that protrudes beneath the action of the weapon, thumbhole  
11 stock, and forward pistol grip may provide the shooter increased physical control of  
12 the rifle. These features also provide increased ergonomics, which can enhance  
13 more accurate rapid shooting.

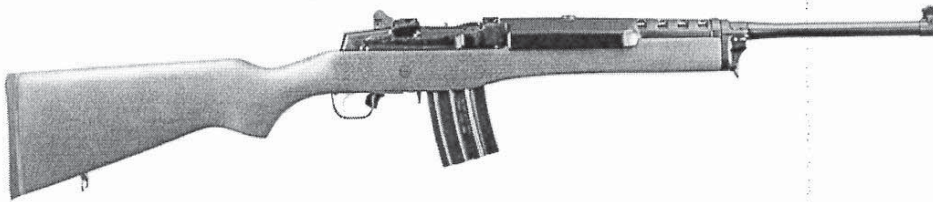
14 27. Folding or telescoping stock and a rifle with overall length under 30  
15 inches aid in the concealability of the weapon.

16 28. A flash suppressor may increase efficiency while the shooter is firing  
17 since the shooter’s vision is less likely to be impaired by excess flash in low light  
18 settings.

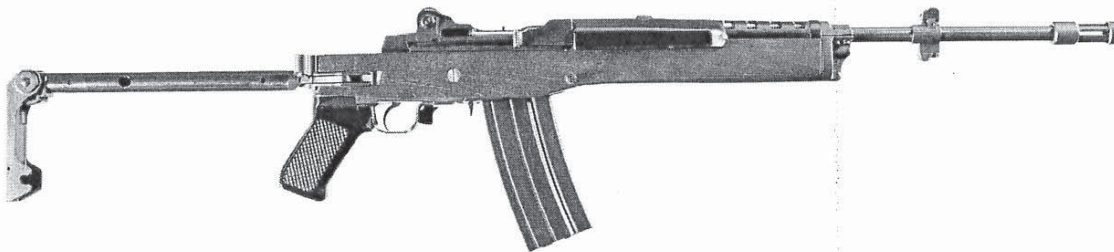
19 29. Militaries across the world have incorporated these features into their  
20 armed forces firearms for many years.

21 30. The photo below depicts a Sturm Ruger, Mini-14/Ranch Rifle with no  
22 prohibited features listed in Penal Code section 30515. It is a semiautomatic center  
23 fire rifle that is not an assault weapon. It is effectively “featureless” in terms of  
24 Penal code section 30515. These types of rifles are currently legal for sale in  
25 California and can be lawfully transferred and possessed by California residents  
26 who follow state and federal laws. It has a traditional wooden stock, no pistol grip  
27 and no muzzle device:  
28





31. The semi automatic centerfire rifle depicted below is a Sturm Ruger, Mini-14/Ranch Rifle with a folding stock, pistol grip and flash suppressor on the end of the barrel. These types of rifles are currently not legal for sale in California and cannot be lawfully transferred by California residents.<sup>5</sup>



32. Assault Rifles, as defined under Penal Code Section 30510, typically will have one or more features that are listed in Penal Code Section 30515 (pistol grip, etc.).

**ASSAULT RIFLES HAVE HIGHER CAPACITY FOR FIREPOWER.**

33. Assault rifles, as defined by California law, must be semiautomatic. One round per pull of the trigger will be fired as long as the rifle has available ammunition in its magazine. LCMs for assault weapons are present in California. As of this writing, certain persons can still legally possess LCMs.<sup>6</sup> Firearms-prohibited persons such as felons, and persons subject to a restraining order, gun violence restraining order, or certain mental health statuses may also choose to

<sup>5</sup> Although California residents who registered a rifle similar to the one depicted below during the one year (2000) registration window can still lawfully possess a firearm like this.

<sup>6</sup> California's prohibition on LCMs has been stayed, in part, by a federal court.

1 acquire LCMs for use in illegally possessed assault weapons. Non-prohibited  
2 persons may choose to use assault weapons illegally in conjunction with LCMs.  
3 Some LCMs can hold 20, 30, 50, 75 or 100 rounds of ammunition at a time. A  
4 person intent on doing harm to citizens or law enforcement will often pair assault  
5 weapons and multiple LCMs together. This individual will have a lot of available  
6 firepower. Many rounds can be fired quickly and the assault rifle can be rapidly  
7 reloaded with the magazines on hand.

8 34. Assault rifles as defined in Penal Code section 30515 are often used  
9 with rifle rounds that are associated with increased lethality. The United States  
10 military uses various centerfire rifle rounds (5.56 mm and 7.62 x 51, for example)  
11 in multiple weapons systems. Some California assault rifles are capable of firing  
12 the same centerfire rounds as these military weapons and could have the same high  
13 capacity for firepower as the military weapons. In my experience being around the  
14 California gun industry and gun culture for nearly 20 years, rounds most commonly  
15 used with assault rifles are rifle-caliber rounds such as .223 caliber, 5.56 mm, or  
16 7.62 x 39 mm. These rounds will typically defeat normal bullet resistant body  
17 armor used by law enforcement. While rifle resistant plates can be added to most  
18 law enforcement body armor, the rifle plates are not going to block or resist rifle-  
19 caliber rounds fired at all angles. Some rifle rounds are strong enough to defeat  
20 even the available rifle resistant plates available to law enforcement. Some assault  
21 weapons are chambered in traditional pistol caliber rounds such as 9mm, .40 and  
22 .45 calibers. Handgun caliber bullets fired from assault weapons chambered in  
23 these calibers may or may not be stopped by traditional law enforcement body  
24 armor. Generally, the longer the barrel the faster the bullet will travel. A rifle and  
25 handgun both shooting the same ammunition may have different results in terms of  
26 penetrating body armor of equal protection levels. The shorter barrel lengths  
27 usually associated with a normal semi automatic handgun might be 3-5 inches long.  
28 By state and federal law, a rifle must have at least a 16-inch long barrel. The rifle



1 barrel being at least three times longer than most semiautomatic handgun barrels  
2 leads to the bullet leaving the barrel at a higher rate of speed (or higher muzzle  
3 velocity). In general, the faster the bullet is traveling, the more likely it is to defeat  
4 body armor.

5 **USE OF ASSAULT WEAPONS IN MASS SHOOTINGS.**

6 35. Through the course of my career, I am familiar with the use of assault  
7 weapons by subjects intending to do harm to civilians and law enforcement.

8 36. Often assault weapons are paired with LCMs during these crimes by the  
9 suspects. LCMs are ammunition feeding devices that can hold more than ten  
10 rounds, and sometimes up to 100 rounds, of ammunition.

11 37. Semiautomatic assault weapons when loaded with LCMs enable a  
12 shooter to potentially fire more than 10 rounds without the need for the shooter to  
13 reload the weapon.

14 38. Because LCMs enable a shooter to fire repeatedly without needing to  
15 reload every 10 rounds, they significantly increase a shooter's ability to kill and  
16 injure large numbers of people quickly.

17 39. Assault weapons have been a popular weapon used in several mass  
18 shootings in California and elsewhere.

19 40. Based on my research, all of the shootings listed below involved  
20 persons who shot and wounded and/or killed one or more persons, including peace  
21 officers, while using assault weapons.

22 a. On January 17, 1989, Patrick Purdy, shot and killed 5 and wounded 32  
23 others at the Cleveland Elementary School in Stockton, California. He  
24 used an AK-47 style rifle and LCMs in the shooting. The Roberti-Roos  
25 Assault Weapon Control Act of 1989 was signed after this shooting.

26 b. On January 9, 2005, Andres Raya used a LCM and illegal assault  
27 weapon to shoot and kill Police Sgt. Howard Stevenson in Ceres,  
28 California.

- c. On June 15, 2008, Marco Topete used an assault rifle and LCM to shoot and kill Yolo County Sheriff's Deputy Tony Diaz after a traffic stop near Dunnigan, California.
- d. On February 25, 2010, Ricky Liles, used multiple weapons (including an assault weapon) and LCMs to shoot and kill two law enforcement officers and wounded one other in Minkler, California.
- e. On July 20, 2012, James Holmes used an assault weapon and LCMs to kill 12 people and wound 70 others in a movie theater in Aurora, Colorado.
- f. On December 14, 2012, Adam Lanza used LCMs and multiple firearms (including an assault weapon) to kill 20 children and six adults at Sandy Hook Elementary School in Newtown, Connecticut.
- g. On June 7, 2013, John Zawahri—who was previously denied purchase of a firearm by DOJ—used a home-built AR-15 rifle and LCMs to kill his father and brother at their family home, and then kill and wound others at the Santa Monica, California Community College.
- h. On December 2, 2015, Syed Farook and his wife, Tashfeen Malik, used assault weapons and LCMs in killing 14 people and wounding 22 others at the Inland Regional Center in San Bernardino, California.
- i. On June 12, 2016, Omar Mateen used an assault rifle and LCMs to shoot and kill 49 people and wound 53 others inside a nightclub in Orlando, Florida.
- j. On July 7, 2016, Micah Johnson used an assault rifle and a LCM to shoot and kill five police officers and wound nine others in Dallas, Texas.
- k. On July 17, 2016, Gavin Long used an assault rifle and LCMs to shoot and kill three police officers and wound three other officers in Baton Rouge, Louisiana.



1 l. On October 1, 2017, Stephen Paddock used assault rifles and LCMs to  
2 fire over 1,000 rounds on concertgoers at an outdoor music festival in  
3 Las Vegas, Nevada, killing 58 people and wounding more than 500  
4 others. To date, this is the deadliest mass shooting in U.S. history.

5 m. On October 3, 2018, Frederick Hopkins used an assault rifle in  
6 Florence, South Carolina to shoot and kill two law enforcement  
7 officers. Six other officers were also shot.

8 **ASSAULT RIFLES ARE SUITABLE FOR LAW ENFORCEMENT USE.**

9 41. Assault rifles are suitable for law enforcement use. As depicted above,  
10 there are many instances that law enforcement and civilians have been hurt and  
11 killed by subjects using assault weapons. Law enforcement needs to have equal or  
12 better weapons than those subjects they are confronting so that they are not  
13 outgunned by criminals with assault rifles.

14 42. Unlike civilians, law enforcement personnel are often required to enter  
15 into dangerous situations to take a shooter into custody. Law enforcement  
16 personnel must often affirmatively put themselves in dangerous situations to subdue  
17 shooters or other criminal suspects or to protect civilians.

18 43. Law enforcement personnel undergo regular, specialized training to  
19 safely and effectively use assault weapons. Each round fired by law enforcement  
20 has the potential to cause criminal and/or civil ramifications for individuals  
21 employed in this field and their agency they work for. We are trained to consider  
22 the backdrop (area behind whatever is being aimed at) to make sure persons or  
23 property are not needlessly injured or damaged. Regular qualifications with various  
24 duty firearms are standard procedure for law enforcement. These qualifications  
25 can sometimes include varied distances from the officer to the target, partially  
26 concealed targets, and scenarios in which the best option available to the officer is  
27 to not shoot the target. Verbal commands and less lethal options are among the  
28 options employed by law enforcement in conjunction with potentially lethal force.

1           44. Because Assault Weapons have been used in mass shootings that have  
2 occurred both in and outside of California for several years, the State of California  
3 has chosen to restrict access to them.

4           45. It is my opinion that the provisions of California Assault Weapons  
5 Control Act challenged by plaintiffs in this case enhances public safety by limiting  
6 prohibited weapons that are unreasonably dangerous for unrestricted civilian use  
7 and are often used by those who intend on committing crimes such as mass  
8 shootings.

9 I declare under penalty of perjury that the foregoing is true and correct.

10 Executed on October 25, 2018 at Sacramento, California.  
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15 Blake Graham  
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## Exhibit 3

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

**STEVEN RUPP; et al.,**

Plaintiffs,

v.

**XAVIER BECERRA, in his official  
capacity as Attorney General of the  
State of California et al.,**

Defendants.

8:17-cv-00746-JLS-JDE

**EXPERT REPORT AND  
DECLARATION OF DETECTIVE  
MICHAEL MERSEREAU OF THE  
LOS ANGELES POLICE  
DEPARTMENT**

I, Michael Mersereau, declare and state as follows:

1. I am a Detective employed by the Los Angeles Police Department (the "LAPD") as a sworn officer for approximately 22 years. I have personal knowledge of the facts set forth below except those stated on information and belief. As to those facts, I believe them to be true and if called as a witness, could and would testify competently thereto.

2. I am currently assigned to the LAPD Gun Unit and have been for approximately 15 years. The LAPD Gun Unit is involved exclusively in the enforcement of the California Dangerous Weapons Control Act and the Municipal Code of the City of Los Angeles as it pertains to firearms. Prior to this assignment, I worked uniform patrol, unformed gangs, and divisional gang detectives. In these assignments, I have encountered a wide variety of firearms and firearms accessories, including assault rifles, and I have made numerous arrests for firearms violations.

1           3. Pursuant to my current assignment, I received training from the Bureau  
2 of Alcohol, Tobacco, Firearms and Explosives (BATFE) on illegal firearms  
3 trafficking, firearms identification and tracing, undercover operations, hidden  
4 compartment identification and recognition, assault weapons, and Federal Firearms  
5 laws. I have also received informal training on the above- mentioned subjects from  
6 more experienced investigators. I routinely review California Department of  
7 Justice (DOJ) and BATFE publications related to firearm identification and  
8 transactions. I have attended numerous gun shows and firearms trade expositions.  
9 I routinely review Firearms Industry trade publications. I have spoken to hundreds  
10 of persons engaged in the business of firearms sales. I have also been involved in  
11 numerous investigations of illegally transferred firearms, possession of prohibited  
12 weapons including machine guns, assault weapons, and short barrel shotguns and  
13 rifles, as well as possession of firearms by prohibited persons. As a result of these  
14 investigations, I have seized or participated in the seizure of hundreds of assault  
15 rifles and numerous high capacity magazines. I am a court qualified firearms  
16 expert and have testified on multiple occasions as such. I have also fired many  
17 different firearms including various assault weapons and machine guns for training  
18 and court testimony.

19           4. Gun violence is a significant problem in Los Angeles. The LAPD lacks a  
20 central database of all firearms related statistics. The statistics set forth below are  
21 accumulated by many different entities within the department including the Gun  
22 Unit and Robbery Homicide division. Here are some statistics for the past several  
23 years regarding gun-related crimes in Los Angeles:

Year	Total Number of Gunshot Victims
2013	1012
2014	994
2015	1119
2016	1180
2017 (as of 9/6/17)	718

Year	Total Number of "Shots Fired" Calls
2013	2198
2014	2134
2015	2419
2016	2628
2017	N/A

Year	Total Number of Firearms Related Arrests
2013	1225
2014	1153
2015	1265
2016	1509
2017	N/A

5. Not surprisingly given the above statistics, the number of weapons seized both city-wide, and by the gun unit, are high as well. Here are some statistics for the past five years regarding gun-related seizures:

Year	Total Number of Firearms Booked Citywide
2013	5130
2014	5529
2015	6151
2016	5908
2017 (as of 9/6/17)	4513

6. Statistics regarding assault weapons and machine guns (as define in the California Penal Code) are provided because these guns typically use large-capacity magazines. The LAPD does not keep statistics on the number of assault weapons and machine guns recovered citywide due to the expertise needed to determine whether a weapon is actually an assault weapon or a machine gun. The below statistics represent Assault Weapons / Machine Guns recovered by the Gun Unit only. Citywide numbers are likely higher.

Year	Number of Assault Rifles/Machine Guns recovered by the Gun Unit
2013	123
2014	113
2015	145
2016	89
2017	125

7. With respect to large-capacity magazines specifically, the statistics provided below represent only the seizure of large capacity magazines by the Gun Unit. As with assault rifles, the LAPD does not keep statistics on the number of large-capacity magazines recovered citywide.

Year	Number of Large-Capacity Magazines Recovered by the Gun Unit
2013	601
2014	392
2015	8826 <sup>1</sup>
2016	224
2017	551

8. It is my opinion, based on my training and experience, that assault rifles (as defined by California Penal Code sections 30510 and 30515) pose a greater danger to both police officers and the public than other unrestricted semi-automatic, centerfire rifles with detachable (non-fixed) magazines. What distinguishes Assault Rifles from unrestricted rifles (as described above) is the presence of one or more features enumerated in the California Penal Code including a pistol grip (including a forward pistol grip) or thumbhole stock, adjustable stock, or flash suppressor. These features when attached to a semi-automatic, centerfire rifle with a detachable magazine make that rifle more dangerous to police offices and the public due to an increase in the lethality of the rifle. The purpose of each of these features is to increase the control of the rifle that they are attached too. Increased control leads to the ability of the shooter to fire rounds faster and with more accuracy. Any modification to a firearm that allows a shooter to fire rounds faster with increased accuracy leads to greater potential lethality.

9. The most ubiquitous feature of assault weapons is the pistol grip or thumbhole stock. Modern military battle rifles are almost universally equipped with pistol grips. Modern military battlefield tactics rely on the ability of troops to send, rapidly and accurately, a large number of rounds down range towards enemy positions. Pistol grips and thumbhole stocks provide the combatant with more

<sup>1</sup> This was due to an abnormal seizure regarding a deceased individual at a condominium in the Pacific Palisades.

1 control of the rifle and thus more accuracy during rapid fire. Pistol grips and  
2 thumbhole stocks also position the trigger finger relative to the trigger so that the  
3 trigger press is in a straight line. This allows the shooter to not only be more  
4 accurate but also increases the speed with which rounds can be fired. Pistol grips  
5 and thumbhole stocks serve the same purpose when installed on civilian semi-  
6 automatic rifles in that they increase the number and accuracy of rounds that can be  
7 fired by any given shooter in a given amount of time.

8 10. Adjustable stocks also contribute to the control of the rifle in that they  
9 allow the shooter to optimize the rifle to their arm length. This increases the  
10 shooter's ability to rapidly send rounds down range with increased accuracy. By  
11 collapsing the stock, the rifle becomes more concealable potentially allowing a  
12 suspect to introduce the firearm into a vulnerable location such a school or  
13 workplace with less fear of detection.

14 11. Flash suppressors also contribute to the potential lethality of a rifle.  
15 Flash suppressors function to reduce the "flash signature" in the shooter's field of  
16 vision in low light conditions. By reducing the effect of the muzzle flash on the  
17 shooter's night vision, the shooter can get back on target quicker. The ability to  
18 acquire one's sight picture faster allows the shooter to more rapidly deliver rounds  
19 to the target with greater accuracy. Many flash suppressors on the market are  
20 hybrid designs meant not only to reduce the flash signature of the rifle but to limit  
21 barrel rise which increases accuracy.

22 12. By definition, assault rifles are capable of accepting a detachable (non-  
23 fixed) magazine. These magazines can hold as many as 100 rounds. Large  
24 capacity magazines allow the shooter to fire more rounds at their target(s) before  
25 the need to stop and reload. The use of detachable large capacity magazines in  
26 conjunction with any semi-automatic or fully automatic rifle makes that rifle more  
27 lethal.  
28

1       13. Adding any of the features described above further increases the ability  
2 of the shooter to accurately and rapidly deliver rounds to the target, increasing the  
3 potential lethality of the firearm beyond that presented by a featureless rifle. There  
4 is a direct correlation between a shooter's ability to inflict more casualties on  
5 targeted persons and the number of rounds immediately available to a shooter to  
6 more rapidly and accurately deliver those rounds on target. This has been  
7 illustrated in various mass-shootings in and around the City of Los Angeles over  
8 the past twenty years.

9       14. For example, in one of the most brazen crimes ever committed, on  
10 February 28, 1997, two heavily armed men robbed a Bank of America in North  
11 Hollywood. According to reports that I have read, the bank robbers emptied more  
12 than one thousand rounds of ammunition using fully automatic pistol grip equipped  
13 machine guns with high-capacity drum magazines (holding 75 to 100 rounds), an  
14 AR-15 assault rifle equipped with a pistol grip and converted to fire automatically  
15 with two high-capacity magazines (holding 100 rounds each), a semi-automatic  
16 HK-91 rifle equipped with a pistol grip and several 30-round high-capacity  
17 magazines, and armor-piercing bullets. The LAPD officers responding to the scene  
18 were outgunned and injured as a result of this incident. Indeed, twelve police  
19 officers and eight civilians were injured.

20       15. On August 10, 1999, a white supremacist fired shots into the lobby of the  
21 North Valley Jewish Community Center in Granada Hills. According to reports I  
22 have read, the shooter was armed with a fully-automatic Uzi machine gun, a semi-  
23 automatic pistol, and large capacity magazines. Three children, a teenage  
24 counselor, and an office worker were injured.

25       16. On June 7, 2013, a shooter opened fire in and around the campus of Santa  
26 Monica College. According to reports that I have read, the shooter was armed with  
27 a semi-automatic rifle (similar in type to an AR-15) equipped with a pistol grip,  
28



1 1,300 rounds of ammunition, and forty 30-round magazines. Five people were  
2 killed and four people were injured.

3 17. On November 1, 2013, a gunman opened fire at the Los Angeles  
4 International Airport. According to reports that I have read, the shooter used a  
5 Smith & Wesson M&P15 semi-automatic rifle equipped with a pistol grip and  
6 loaded with a detachable 30-round large-capacity magazine. The shooter also had  
7 five additional 30-round large-capacity magazines and hundreds of rounds of  
8 ammunition in his carrying bag. One TSA agent was killed and several other  
9 people were injured.

10 18. On December 2, 2015, a married couple targeted a San Bernardino  
11 County Department of Public Health event and Christmas party, killing fourteen  
12 people and wounding twenty-two others. According to reports that I have read, the  
13 shooters were armed with semi-automatic pistols, a Smith & Wesson M&P15 rifle  
14 modified to make it fully automatic and equipped with a pistol grip and detachable  
15 large capacity magazine, a DPMS A-15 rifle with a pistol grip that was modified to  
16 accept a detachable large-capacity magazine, and at least four large-capacity  
17 magazines.

18 19. It is my opinion, based on my training and experience, that the above-  
19 described attacks would have been less deadly had the shooters not been armed  
20 with assault rifles or assault rifles converted to machine guns.

21 20. There are numerous devices on the market that when installed on a semi-  
22 automatic rifle, increase the rifle's rate of fire to that of some machine guns. These  
23 devices are easily installed on the rifle without special tools or training. Although  
24 these "multiburst trigger activators" are unlawful in the state of California, they are  
25 widely available in neighboring states and on the internet. The LAPD Gun Unit has  
26 encountered an increasing number of these devices in the last several years.  
27 Combining a multiburst trigger activator with a rifle equipped with the above-  
28

1 described features increases the lethality of the firearm many fold. This has been  
2 illustrated by a mass-shooting in the City of Las Vegas on October 1, 2017.

3 21. According to reports that I have read, a single shooter firing from a 32<sup>nd</sup>  
4 floor hotel window located some distance from a crowded outdoor concert venue  
5 was able to shoot to death 58 concert goers and injuring hundreds of others. This  
6 was the deadliest mass shooting in modern United States history. Reports about  
7 and photos of the gunman's weapons that I have viewed show that he was armed  
8 with numerous semi-automatic, centerfire rifles with detachable magazines and  
9 equipped with pistol grips. These firearms would meet the definition of an assault  
10 rifle if they were possessed within California. It is highly unlikely that this shooter  
11 could have inflicted as many casualties as he was able had his rifles not been  
12 equipped with features that were designed to help the shooter control his firearms  
13 with improved accuracy during rapid fire.

14 22. I have been involved in the seizure of assault weapons that have been  
15 converted into machine guns. This process is as simple as "dropping in" a few  
16 parts to a more involved process of drilling additional holes in the receiver of the  
17 rifle. Once modified in this manner, rifles equipped with the above-described  
18 features are indistinguishable from the battlefield rifles used by the world's military  
19 forces.

20 23. There is no evidence that assault rifles are "commonly" used for self -  
21 defense. While any firearm including an assault rifle could be used effectively in a  
22 self-defense scenario, handguns and shotguns are the more common and preferred  
23 choice. Legally sanction use of force including deadly force is commonly  
24 understood to be defense against an immediate and proximate threat of physical  
25 harm to one's self or others. In other words, the threat needs to be imminent and to  
26 some degree up close and personal. This proximity requirement makes a rifle an  
27 inappropriate and unnecessary choice of weapon. The evidence cited in articles and  
28 by internet bloggers to support the assertion that assault rifles are "commonly" used

1 by the public to defend themselves is mostly based on anecdotal evidence as there  
2 is no uniformed collection of data on the subject. Many of the anecdotes cited by  
3 proponents for the use of assault rifles as defensive weapons involve the mere  
4 pointing of the rifle at the suspect who then fled with no shots fired. Pointing a  
5 handgun at a suspect would have the same effect. Other anecdotes involve assault  
6 rifles used to fend off unarmed suspects. Again, a handgun or shotgun would have  
7 the same effect and of course there are numerous non-lethal options available. In  
8 many of these scenarios cited the use of deadly force would not have been legally  
9 sanctioned. The purpose of deploying a rifle as opposed to a handgun should be  
10 based on the fact that the target is beyond the reasonable effective range of a  
11 handgun. Other considerations are a need to defeat body armor, fortified  
12 concealment, a position of advantage (high ground), or a suspect armed with  
13 superior fire power such as a rifle. These are the criteria used by the LAPD when  
14 deciding to deploy a rifle. It is highly unlikely that citizens would face a situation  
15 where the threat is beyond the effective range of a handgun and certainly not with  
16 any great frequency. It is even less likely that the law would view such a distant  
17 perceived threat as justifying a use of force at all much less a use of lethal force  
18 delivered via a rifle. I do not believe, based on my training and experience, that  
19 there are frequent occasions when a member of the public would face threat by an  
20 armed suspect wearing body armor or concealed behind a barrier that would defeat  
21 handgun ammunition. Absent these factors a handgun, shotgun or non-lethal  
22 options should suffice in dealing with the vast majority of self-defense scenarios  
23 where force is legally justified.

24  
25 I declare under penalty of perjury that the foregoing is true and correct.

26  
27 Executed on October 25, 2018 at Los Angeles, California.

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Michael Mersereau  
MICHAEL MERSEREAU

## Exhibit 4

IN THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA  
SOUTHERN DIVISION

**STEVEN RUPP; STEVEN  
DEMBER; CHERYL JOHNSON;  
MICHAEL JONES; CHRISTOPHER  
SEIFERT; ALFONSO VALENCIA;  
TROY WILLIS; and CALIFORNIA  
RIFLE & PISTOL ASSOCIATION,  
INCORPORATED,**

Plaintiffs,

v.

**XAVIER BECERRA, in his official  
capacity as Attorney General of the  
State of California; and DOES 1-10,**

Defendants.

Case No. 8:17-cv-00746-JLS-JDE

**EXPERT REPORT OF CHRISTOPHER B. COLWELL, M.D.**

I, Christopher B. Colwell, M.D., under penalty of perjury, declare and state that I am over the age of 18 and am competent to testify to the matters stated below. I am currently the Chief of Emergency Medicine at Zuckerberg San Francisco General Hospital and Trauma Center and Professor and Vice Chair in the Department of Emergency Medicine at the University of California at San Francisco School of Medicine. I was previously the Chief of Emergency Medicine at Denver Health Medical Center and Professor and Executive Vice Chair in the

Department of Emergency Medicine at the University of Colorado School of Medicine. I received my Emergency Medicine training at Denver General Hospital in the Denver Affiliated Residency in Emergency Medicine and am board certified by American Board of Emergency Medicine (ABEM) in both Emergency Medicine and Emergency Medical Service (EMS). I am licensed to practice medicine in the states of California and Colorado.

I have over 25 years of experience treating gunshot wound victims in the Emergency Department at large urban level I trauma centers and in that time have treated over a thousand patients with gunshot wounds. I am qualified to offer opinions as to the physiologic trauma caused by gunshot wounds and other penetrating injuries. I have been retained by the California Attorney General in this case to provide expert testimony on my experience treating victims of gunshot wounds and am being compensated at a rate of \$350.00 per hour. A list of my work history, educational background, and publications, including any publications in the past 10 years and expert witness testimony in the past 4 years, is included in my curriculum vitae, which is attached to this report.

I have experienced first-hand the extensive damage caused by assault weapons, and I have witnessed both victims and on occasion even shooters experience the horror of what these weapons can do. In one instance a man who

had shot his girlfriend with an assault rifle said he had had no idea how destructive assault weapons can be. He admitted to me that he had used a newly acquired AR-15 in the shooting. I have seen the devastating impact these events have on the lives of my patients and their families. I have spoken extensively around the country on the experience of caring for victims of mass shootings and have testified as the treating physician on multiple occasions to describe the extent of injuries due to gunshot wounds from all weapons, including assault rifles, in criminal trials. I was subpoenaed in these cases by the prosecuting district attorney and was not compensated for that testimony.

Firearm injuries are an important public health problem in the United States, accounting for more than 30,000 deaths each year in addition to significant illness and disability. I have extensive experience with the different wounds caused by assault and non-assault weapons and the consistently more serious nature of the injuries from assault weapons. Gunshot wounds from assault rifles, such as AR-15s and AK-47s, tend to be higher in complexity with higher complication rates than such injuries from non-assault weapons, increasing the likelihood of morbidity in patients that present injuries from assault rifles. In my experience, assault rifles tend to cause far greater damage to the muscles, bones, soft tissue, and vital organs. They are too often shredded beyond repair. The greater complications are likely due to the



higher muzzle velocity and higher caliber of rounds involved in assault rifle shootings.


My first-hand experience treating victims of gunshot wounds includes being the physician at the scene of the Columbine High School shooting on April 20, 1999, in which a TEC-DC 9 pistol and a Hi-Point 995 rifle were used, and as an Emergency Department physician treating victims of the Aurora Theater shooting on July 20, 2012, in which an AR-15 was used. I have treated many other patients that have been both victims and shooters of assault weapons, including AK-47s and AR-15s, and have also treated many victims and shooters of non-assault weapons and other weapons. While significant injury can certainly result from non-assault weapons, my experience has been that individuals who have been shot by assault weapons tend to have more wounds and injuries that are far more extensive. These weapons cause significantly more damage and have resulted in higher morbidity and mortality than other weapons.

There is no doubt in my mind that victims of assault weapons, including assault rifles, are at far greater risk of both immediate and long term complications from the damage the velocity of these bullets cause. These complications include higher amputation rates and higher infection rates. A vivid example was a victim of a shooting from a Glock handgun who presented to our Emergency Department with

an elbow wound. We were able to treat this wound and release the patient from the Emergency Department. Just three months earlier, I had seen a patient shot in the exact same spot with an AK-47 and the arm needed to be amputated just below the shoulder. This is just one example of the additional damage and destruction assault weapons cause, which I have witnessed in the course of treating trauma patients. In each of these examples, law enforcement informed me of the weapon used in the shooting.

Assault rifles, especially when equipped with large capacity magazines, can fire more shots faster, causing more injuries per victim (and thus more complications) and many of the most devastating injuries I have managed in my over 25 years of experience treating gunshot wound victims. It is my opinion that while all weapons pose risk, assault rifles, especially when equipped with large capacity magazines, pose a far greater risk to the public from a medical standpoint than non-assault firearms.

Dated: October 25, 2018

  
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Christopher B. Colwell, M.D.

Curriculum Vitae  
Christopher Beall Colwell, M.D

**Personal History**

**Current Position:**

Chief, Department of Emergency Medicine  
Zuckerberg San Francisco General Hospital and Trauma Center  
Professor and Vice Chair, Department of Emergency Medicine  
UCSF School of Medicine

**Work Address:**

Zuckerberg San Francisco Hospital and Trauma Center  
Department of Emergency Medicine  
1001 Potrero Ave. #6A02  
San Francisco, CA 94110

Christopher.Colwell@ucsf.edu  
Phone: (415) 206-2518  
Fax: (415) 206-5818

**Board Certification:**

- 1) American Board of Emergency Medicine 1997  
Re-certification 2007, 2017
- 2) American Board of Emergency Medicine – Emergency Medical Services 2015

**Education:**

**Undergraduate:** University of Michigan  
Ann Arbor, Michigan  
Bachelor of Science Degree, 1988

**Medical School:** Dartmouth Medical School  
Hanover, New Hampshire  
Medical Doctorate, 1992

**Internship:** St. Joseph Mercy Hospital/University of Michigan  
Ann Arbor, Michigan  
Transitional Medicine, 1993

**Residency:** Denver Affiliated Residency in Emergency Medicine  
Denver, Colorado, 1993-1996  
Chief Resident 1995-1996

**Academic appointments:**

1. Professor and Vice Chair  
Department of Emergency Medicine  
University of California at San Francisco School of Medicine  
2016 - Present
2. Professor of Emergency Medicine  
Department of Emergency Medicine  
University of Colorado School of Medicine  
2012-2016
3. Executive Vice Chair, Department of Emergency Medicine, 2010 - 2016  
University of Colorado School of Medicine  
2010-2016
4. Associate Professor of Emergency Medicine  
Department of Emergency Medicine  
University of Colorado School of Medicine  
2010-2012
5. Associate Professor of Emergency Medicine  
Division of Emergency Medicine, Department of Surgery  
University of Colorado Health Sciences Center  
2004-2009
6. Assistant Professor of Emergency Medicine  
Division of Emergency Medicine, Department of Surgery  
University of Colorado Health Sciences Center  
Denver, Colorado  
1998-2004
7. Assistant Professor of Emergency Medicine  
Department of Emergency Medicine, University of Michigan School of Medicine  
Ann Arbor, Michigan  
1996-1998



**Clinical appointments:**

1. Chief of Emergency Medicine, 2016-present  
Department of Emergency Medicine  
Zuckerberg San Francisco General Hospital and Trauma Center  
San Francisco, California
2. Director of Emergency Medicine, 2010 – 2016  
Interim Director of the Department of Emergency Medicine, 2009-2010  
Associate Director, 2000-2009  
Attending Physician, 1998-2016  
Department of Emergency Medicine  
Denver Health  
Denver, Colorado
3. Program Director, EMS Fellowship  
2000-2012
4. Medical Director, Denver Paramedic Division  
2000-2012
5. Medical Director, Denver Fire Department  
2000-2010
6. Associate Director, Denver Paramedic Division  
1998-2000
7. Senior Associate Director, Denver Health Residency in Emergency Medicine  
2009 - 2016
8. Attending Physician, 1996-1998  
St. Joseph Mercy Hospital/University of Michigan  
Ann Arbor, Michigan

**Honors and Awards:**

2017-2018 Quarterly Resident Bedside Teaching Award  
UCSF Department of Emergency Medicine

Outstanding Contributions - Best Authors in Adult  
Emergency Medicine  
UpToDate – Wolters Kluwer  
March, 2017

2016 Career Service Award  
Denver Health and Hospital Association  
Medical Staff Awards  
September 21<sup>st</sup>, 2016

The Peter Rosen Leadership Award  
Presented by the 2016 Emergency Medicine Residency at  
Denver Health for Outstanding Departmental Leadership  
June 27<sup>th</sup>, 2016

2016 Financial Vitality Pillar Award  
For largest increase in charges and revenue while  
maintaining same cost  
June 9<sup>th</sup>, 2016

Meritorious Service Award  
Presented by the Colorado Chapter of the American  
College of Emergency Physicians for Achievements that  
have Enhanced Colorado's Health Care System and the  
Profession of Emergency Medicine in Colorado. January  
20<sup>th</sup>, 2015

2015 Patient Safety and Quality Pillar Award  
For meticulous, high-quality, and thoughtful design and  
implementation of Denver Health's Ebola Preparedness  
Plan  
June, 2015

The Corey M. Slovis Award for Excellence in Education.  
U.S. Metropolitan Municipalities EMS Medical Directors  
Consortium, February, 2015

Positively Collaborative Award for outstanding  
collaboration towards the improvement of Colorado's  
trauma system. Trauma Program, Colorado Department of  
Public Health and Environment, January, 2012

The Vincent J. Markovchick Program Director's Award  
2011

Distinctive Service Award – Denver Paramedic Division  
2010

Chief Executive Officer Special Commendation Award for expert medical leadership of Denver's 911 system, 2009

Mayor's Award of Appreciation for assistance and aid to Hurricane Katrina evacuees. 2005

Ernest E. Moore Award for Outstanding Contributions in Trauma Care, 2000

Outstanding Senior Resident, 1996

Chief Resident, Emergency Medicine Residency, 1995-1996

**Membership in professional organizations:**

1. American College of Emergency Physicians (ACEP), 1994-present
  - a. Fellow, 1999-present
  - b. Colorado ACEP, 1993-1996, 1998-present
  - c. Michigan ACEP, 1996-1998
2. American Medical Association (AMA), 1993-2000, 2006-present
3. National Association of EMS Physicians (NAEMSP), 2002-present
4. Society for Academic Emergency Medicine (SAEM), 1995-2000, 2008-present
5. Emergency Medicine Residents Association (EMRA), 1992-1997

**Major Committee, Teaching, and Service Responsibilities:**

1. Medical Executive Committee, Zuckerberg San Francisco General Hospital and Trauma Center. 2016-present
2. CPG Board of Directors. 2016-present
3. UCSF Department of Emergency Medicine Incentive Review Committee. 2016 – present
4. Zuckerberg San Francisco General Hospital and Trauma Center Trauma Peer Review Committee. 2016-present
5. Board of Directors, American College of Emergency Physicians – Colorado Chapter, 2007-2011
6. Conference Director, Annual Rocky Mountain Conference in Trauma and Emergency Medicine, 2003 – 2016
7. American Board of Emergency Medicine (ABEM) Oral Board Examiner, 2011 - present
8. Course Director, Introduction to Traumatic Emergencies, (SURG 6623) University of Colorado School of Medicine, 1999
  - a. A course for second year medical students that introduces the student to selected traumatic emergencies and their management

9. Course Director, Prehospital Medicine (SURG 6626), University of Colorado at Denver School of Medicine, 2005-2016
  - a. A course for first and second year medical students that introduces them to prehospital medicine and includes clinical time riding on an ambulance
10. Course Director, Flight Medicine (SURG 6628), University of Colorado at Denver School of Medicine, 2009-2016
  - a. A course for second year medical students (SURG 6626 is a pre-requisite) that introduces the student to flight medicine and includes clinical time riding in a helicopter as well as fixed wing airplane transport
11. Instructor, Introduction to Traumatic Emergencies, (SURG 6623) University of Colorado School of Medicine, 1999-2016
12. Lecturer, Injury Epidemiology and Control (PRMD 6637), University of Colorado School of Medicine, 2003
13. Instructor, Emergency Medicine at Denver Health Medical Center (SURG 8005), University of Colorado School of Medicine, 1998-2016
14. Instructor, Integrated Clinicians Course (ICC) 8005: Preparing for Internship: Reading and Understanding EKGs
15. Instructor, Integrated Clinicians Course (ICC) IDPT 7003: Management of Trauma, University of Colorado School of Medicine, 2011
16. Instructor, Integrated Clinicians Course (ICC) IDPT 7004: Management of Trauma, University of Colorado School of Medicine, 2010. Lecturer and small group leader
17. Instructor, Integrated Clinicians Course (ICC) IDPT 7004: Management of Trauma, University of Colorado School of Medicine, 2009. Lecturer and small group leader
18. Member, Medical Staff Executive Committee, 2009-present
19. Member, Denver Health Executive Committee for Patient Safety and Quality, 2006-present
20. Council Member, Colorado's Mile High Regional Emergency and Trauma Advisory Council (RETAC), Denver County appointed representative, 2000-present
21. Committee chair, Destination and Diversion committee, Mile High RETAC 2002-present
22. Member, State EMS Formulary Task Force, 2006 – 2009
23. Member, Pediatric Trauma Committee, 2006-present
24. Member, Rocky Mountain Center for Medical Response (RMCMR), 2002-present
25. Member, Colorado State Advisory Council on Emergency Medical Services, 1998-2000
26. Ute Mountain Ute EMS Program medical director, 1994-1996
27. Steering Committee member, Denver Health Residency in Emergency Medicine, 1998-present
28. Denver Health Residency in Emergency Medicine Compliance Committee, 2006-present



29. Pharmacy and Therapeutics Committee member, Denver Health Medical Center, 1998-2006
30. EMS Education committee member, Denver Health Medical Center, 1998-present
31. Safety Committee member, Denver Health Medical Center, 1998-2001
32. Residency Advisory Committee, Denver Health Medical Center Residency in Emergency Medicine, 1998-present
33. Moderator, Case Presentations, Rocky Mountain Critical Care Transport Conference, May, 2003
34. Instructor, Difficult Airway Lab, Rocky Mountain Critical Care Transport Conference, May, 2003
35. Trauma Center Site Surveyor, State of Florida Department of Health and Rehabilitative Services, Office of Emergency Medical Services, 2003-present
36. Member, Denver EMS Council, 1998-present
37. Member, Denver Metro Physician Advisors, 1999-present
38. Medical Expert and Faculty, Boulder Trial Academy, International Association of Defense Counsel, 1998-2002
39. Member, Medical Advisory Group (MAG), to the Colorado State EMS Director, 2003-2008
40. Transfusion Committee member, St. Joseph Mercy Hospital, Ann Arbor, Michigan. 1996-1998

### **Licensure and Board Certification**

- Licensure:
- 1) State of California (#G142756), 2016 – Present
  - 2) State of Colorado (#34341), 1993 - 1996, 1998 - present
  - 3) State of Michigan (#4301059401), 1996 - 1998

Board Certification: Emergency Medicine  
American Board of Emergency Medicine (1997)  
Recertification (2007)

### **Editorial Positions**

1. Section Editor, Trauma, UpToDate, 2009 - present
2. Section Editor, Abstracts  
The Journal of Emergency Medicine, 1999-2002
3. Review Editor, The Journal of Emergency Medicine, 1999-2008
4. Review Editor, Western Journal of Emergency Medicine, 2008 - present
5. Manuscript reviewer, Academic Emergency Medicine, 2003 – present
6. Manuscript reviewer, Critical Care, 2008-present
7. Manuscript reviewer, Patient Safety in Surgery, 2009-present
8. Guest Editor, EM International, Prehospital Care

## Prior Testimony as an Expert Witness

1. *Worman v. Healey*, Case No. 1:17-cv-10107-WGY (D. Mass. Nov. 8, 2017) (by deposition)

## Publications:

### Peer Reviewed Journal Articles

1. Shapiro M, Dechert, **Colwell C**, Bartlett R, Rodriguez: Geriatric Trauma: Aggressive Intensive Care Management is Justified. American Surgeon 1994;60(9):695-8
2. **Colwell C**, Pons PT, Blanchet J, Mangino C: Claims Against a Paramedic Ambulance Service: A Ten Year Experience. J Emerg Med 1999, 17(6):999-1002
3. Apfelbaum J, **Colwell C**, Roe E: Precipitous Breech Delivery of Twins: A Case Report. Prehospital Emerg Care 2000; 4(1):78-81
4. Gnadinger CA, **Colwell C**, Knaut AL: Scuba Diving-Induced Pulmonary Edema in a Swimming Pool. J Emerg Med 2001; 21(4):419-421
5. Houry D, **Colwell C**, Ott C: Abdominal Pain in a Child after Blunt Abdominal Trauma: An Unusual Injury. J Emerg Med 2001; 21(3):239-241
6. Barton E, Ramos J, **Colwell C**, Benson J, Bailey J, Dunn W: Intranasal Administration of Naloxone by Paramedics. Prehosp Emerg Care 2002; 6:54-8
7. **Colwell C**, Pons PT, Pi R: Complaints Against an EMS System. J Emerg Med 2003;25(4):403-408
8. **Colwell C**, McVaney K, Haukoos J, Wiebe D, Gravitz C, Dunn W, Bryan T: An Evaluation of Out-of-Hospital Advanced Airway Management in an Urban Setting. Acad Emerg Med 2005; 12(5):417-22
9. McVaney KE, Macht M, **Colwell CB**, Pons PT: Treatment of Suspected Cardiac Ischemia with Aspirin by Paramedics in an Urban Emergency Medical Services System. Prehospital Emerg Care 2005, 9(3):282-284
10. Barton E, **Colwell CB**, Wolfe TR, Fosnocht D, Gravitz C, Bryan T, Dunn W, Benson J, Bailey J: The Efficacy of Intranasal Naloxone as a Needleless Alternative for Treatment of Opiate Overdose in the Prehospital Setting. J Emerg Med 2005;29(3):265-71
11. Levine SD, **Colwell CB**, Pons PT, Gravitz C, Haukoos JS, McVaney KE: How Well do Paramedics Predict Admission to the Hospital? A Prospective Study. J Emerg Med 2006;31(1):1-5
12. **Colwell CB**: Case Studies in Infectious Disease: Travel-Related Infections. Emerg Med 2006;38(10):35-43
13. Bonnett CJ, Peery BN, Cantril SV, Pons PT, Haukoos JS, McVaney KE, **Colwell CB**: Surge capacity: a proposed conceptual framework. Am J Emerg Med 2007;25:297-306.
14. **Colwell C**. Initial evaluation and management of shock in adult trauma. In: UpToDate, Basow DS (Ed), UpToDate, Waltham, MA, 2007 - present

15. Bonnett CJ, **Colwell CB**, Schock T, McVaney KE, Depass C: Task Force St. Bernard: Operational Issues and Medical Management of a National Guard Disaster Response. Prehospital and Disaster Medicine 2007;22(5):440-447
16. **Colwell CB**: Heat Illness. Emerg Med 2008; 40(6): 33-39
17. **Colwell CB**, Cusick JC, Hawkes AP and the Denver Metro Airway Study Group: A prospective study of prehospital airway management in an urban EMS system. Prehosp Emerg Care 2009; 13:304-310
18. **Colwell CB**, Mehler P, Harper J, Cassell L, Vazquez J, Sabel A: Measuring quality in the prehospital care of chest pain patients. Prehospital Emerg Care 2009;13:237-240
19. Kashuk JL, Halperin P, Caspi G, **Colwell CB**, Moore EE: Bomb explosions in acts of terrorism: Evil creativity challenges our trauma systems. J Am Coll Surg 2009; 209(1):134-140
20. Stone SC, Abbott J, McClung CD, **Colwell CB**, Eckstein M, Lowenstein SR: Paramedic knowledge, attitudes, and training in end-of-life care. Prehospital Disaster Medicine 24(6):529-34, Nov-Dec 2009.
21. Gaither JB, Matheson J, Eberhardt A, **Colwell CB**: Tongue engorgement associated with prolonged use of the King-LT laryngeal tube device. Ann Emerg Med, 2009. Ann Emerg Med 2010; 55(4):367-9.
22. Bookman SJ, Eberhardt AM, Gaither JB, **Colwell CB**: Hospital Group Preparation for the 2008 Democratic National Convention. Journal of Homeland Security and Emergency Management 2010; Vol. 7: Iss. 1, Article 16.
23. Haukoos JS, Witt G, Gravitz C, Dean J, Jackson D, Candlin T, Vellman P, Riccio J, Heard K, Kazatomi T, Luyten D, Pineda G, Gunther J, Biloft J, **Colwell CB**: Out-of-hospital cardiac arrest in Denver, Colorado: Epidemiology and outcomes. Acad Emerg Med 2010; 17(4):391-8.
24. Haukoos JS, Byyny RL, Erickson C, Paulson S, Hopkins E, Sasson C, Bender B, Gravitz C, Vogel JA, **Colwell CB**, Moore EE. Validation and refinement of a rule to predict emergency intervention in adult trauma patients. Ann Emerg Med 2011;58:164-171
25. **Colwell CB**, Eberhardt A. Less Lethal Force. Emergency Medicine Reports 2011, 32(18):1-12
26. Soriya G, McVaney KE, Liao MM, Haukoos JS, Byyny RL, Gravitz C, **Colwell CB**. Safety of prehospital intravenous fentanyl for adult trauma patients. J Trauma Acute Care Surg 2012;72(3):755-59
27. Gudnik MR, Sasson C, Rea TD, Sayre MR, Zhang J, Bobrow BJ, Spaite DW, McNally B, Denninghoff K, Stolz U, Levy M, Barger J, Dunford JV, Sporer K, Salvucci A, Ross D, **Colwell CB**, Turnbull D, Rosenbaum R, Schrank K, Waterman M, Dukes R, Lewis M, Fowler R, Lloyd J, Yancey A, Grubbs E, Lloyd J, Morris J, Boyle S, Johnson T, Wizner C, White M, Braithwaite S, Dyer S, Setnik G, Hassett B, Santor J, Swor B, Chassee T, Lick C, Parrish M, Radde D, Mahoney B, Todd D, Salomone J, Ossman E, Myers B, Garvey L, Camerson J, Slattery D, Ryan J, McMullan J, Keseg D, Leaming J, Sherwood BK, Luther J, Slovis C, Hinchey P, Harrington M, Griswell J, Beeson J, Persse D, Gamber M, Ornato J. Increasing hospital volume is not associated

- with improved survival in out of hospital cardiac arrest of cardiac etiology. *Resuscitation* 2012; 83(7):862-8
28. Mascolo M, Trent S, **Colwell CB**, Mehler PS. What the Emergency Department needs to know when caring for your patients with eating disorders. *Int J Eat Disord* 2012;45(8):977-81
  29. **Colwell CB**, Bookman S, Johnston J, Roodberg K, Eberhardt AM, McVaney KE, Kashuk J, Moore EE. Medical Preparation for the 2008 Democratic National Convention. *J Trauma Acute Care Surg* 2012 Dec;73(6):1624-8
  30. Trent SA, Moreira ME, **Colwell CB**, Mehler P. ED management of patients with eating disorders. *Am J Emerg Med* 2013 May;31(5):859-65
  31. French AJ, **Colwell CB**. Atlas of Emergency Ultrasound. *J Trauma Acute Care Surg* 2013;75:919.
  32. Cleveland N, **Colwell C**, Douglass E, Hopkins E, Haukoos JS. Motor Vehicle Crash Severity Estimations by Physicians and Prehospital Personnel. *Prehosp Emerg Care* 2014;18(3):402-7
  33. Macht M, Mull AC, McVaney KE, Caruso EH, Johnston JB, Gaither JB, Shupp AM, Marquez KD, Haukoos JS, **Colwell CB**. Comparison of Droperidol and Halperidol for use by paramedics: Assessment of safety and effectiveness. *Prehosp Emerg Care* 2014;18(3):375-80
  34. Nassel AF, Root ED, Haukoos JS, McVaney K, **Colwell C**, Robinson J, Eigel B, Magid DJ, Sasson C. Multiple cluster analysis for the identification of high-risk census tracts for out-of-hospital cardiac arrest (OHCA) in Denver, Colorado. *Resuscitation* 2014;85:1667-73
  35. Vogel JA, Seleno N, Hopkins E, **Colwell CB**, Gravitz C, Haukoos JS. Denver Emergency Department Trauma Organ Failure Score outperforms traditional methods of risk stratification in trauma. *Am J Emerg Med* 2015;33(10):1440-4
  36. Vogel JA, Newgard CD, Holmes JF, Diercks DB, Arens AM, Boatright DH, Bueso A, Gaona SD, Gee KZ, Nelson A, Voros JJ, Moore EE, **Colwell CB**, Haukoos JS; Western Emergency Services Translational Research Network. Validation of the Denver Emergency Department Trauma Organ Failure Score to Predict Post-Injury Multiple Organ Failure. *J Am Coll Surg* 2016;222(1):73-82
  37. Joseph D, Vogel JA, Smith CS, Barrett W, Bryskiewicz G, Eberhardt A, Edwards D, Rappaport L, **Colwell CB**, McVaney KE. Alcohol as a Factor in 911 Calls in Denver. *Prehosp Emerg Care* 2018, 22(4):427-35

#### Invited Articles, Book Chapters, and Editorials

1. **Colwell C**, Harken A: *Cardiac Arrhythmias.* In: Markovchick V, Pons P(eds) Emergency Medicine Secrets. Hanley & Belfus, Inc., Philadelphia, PA; 2<sup>nd</sup> Edition, 1999, pp. 119-123
2. Murphy P, **Colwell C**: *Prehospital Management of Epiglottitis.* *EMS* 2000; 29(1):41-9
3. Murphy P, **Colwell C**: *Prehospital Management of Neck Trauma.* *EMS* 2000; 29(5):53-71



4. Murphy P, **Colwell C**: Heatwave: Prehospital Mangement of Heat Related Conditions. EMS 2000; 29(6):33-49
5. Murphy P, **Colwell C**: Prehospital Management of Diabetes. EMS 2000; 29(10):78-85
6. Murphy P, **Colwell C**, Bryan T: Noncardiac Chest Pain. EMS 2001; 30(4):66-71
7. Murphy P, **Colwell C**: Communication Breakdown: When Medic and Medical Control Don't Agree. Cover Story, EMS 2001 30(5):61-2
8. Murphy P, **Colwell C**, Linder G: Assessment Clues. EMS 2001; 30(7):45-8
9. **Colwell C**, Murphy P, Bryan T: Mechanism of Injury: An Overview Cover Story, EMS 2003; 32(5):52-64
10. **Colwell C**, Harken A: Cardiac Arrhythmias. In: Markovchick V, Pons P(eds) Emergency Medicine Secrets. Hanley & Belfus, Inc., Philadelphia, PA; 3<sup>rd</sup> Edition, 2003, pp. 140-143
11. Kendall J, **Colwell C**: Pericarditis and Myocarditis In: Markovchick V, Pons P (eds) Emergency Medicine Secrets. Hanley & Belfus, Inc., Philadelphia, PA; 3<sup>rd</sup> Edition, 2003, pp. 149-154
12. **Colwell CB**, Murphy P, Bryan T. Prehospital Management of the Pregnant Patient. EMS 2004; 33(3):59-67.
13. **Colwell CB**, Murphy P, Bryan T. Pulseless Electrical Activity. EMS 2004; 33(9):63-8.
14. **Colwell CB**, Murphy P, Bryan T, Nelson S. Psychological Disorders: A General Overview. EMS 2004;33(11):74-83.
15. **Colwell C**: Traumatic Shock In: Harwood-Nuss A, Wolfson A (eds) The Clinical Practice of Emergency Medicine. Lippincott Williams & Wilkins, Philadelphia, PA; 4<sup>th</sup> Edition, 2005; 907-12.
16. **Colwell C**, Murphy P, Bryan T. Pediatric Potpourri: An Overview of Select Pediatric Conditions. EMS 2005;34(7):50-58
17. **Colwell C**, Murphy P, Bryan T. Uncompleted Suicide Attempts. EMS 2005;34(11):73-86
18. Murphy P, **Colwell CB**, Pineda G, Bryan T: Breaking Down Barriers: How EMS providers can communicate with autistic patients. EMS 2006;35(4):84-89
19. Murphy P, **Colwell CB**, Pineda G, Bryan T: Traumatic Amputations. EMS 2006; 35(6):90-96
20. **Colwell CB**, Murphy P, Bryan T: Geriatric Trauma. EMS 2006;35(9):135-140
21. **Colwell CB**: Cardiac Dysrhythmias, Pacemakers, and Implantable Defibrillators In: Markovchick V, Pons P (eds) Emergency Medicine Secrets. Mosby Elsevier, Philadelphia, PA; 4<sup>th</sup> Edition, 2006: 194-204
22. Kendall JL, **Colwell CB**: Pericarditis and Myocarditis In: Markovchick V, Pons P (eds) Emergency Medicine Secrets. Mosby Elsevier, Philadelphia, PA; 4<sup>th</sup> Edition, 2006: 213-218
23. **Colwell CB**: Disasters In: Chapleau W, Pons P (eds) Emergency Medical Technician. Mosby JEMS Elsevier, St. Louis, MO, 2007:708-725

24. **Colwell CB:** *Hyperkalemia* In: Schaider J, Hayden SR, Wolfe R, Barkin RM, Rosen P (eds): Rosen and Barkin's 5-Minute Emergency Consult Lippincott Williams & Wilkins, Philadelphia, PA; 3<sup>rd</sup> Edition, 2007: 550-551
25. **Colwell CB:** *High Altitude Illness* In: Schaider J, Hayden SR, Wolfe R, Barkin RM, Rosen P (eds): Rosen and Barkin's 5-Minute Emergency Consult Lippincott Williams & Wilkins, Philadelphia, PA; 3<sup>rd</sup> Edition, 2007:522-523
26. **Colwell CB:** *Dialysis Complications* In: Schaider J, Hayden SR, Wolfe R, Barkin RM, Rosen P (eds): Rosen and Barkin's 5-Minute Emergency Consult Lippincott Williams & Wilkins, Philadelphia, PA; 3<sup>rd</sup> Edition, 2007:310-311
27. **Colwell CB:** *Gastroenterology* In: Chapleau W, Burba AC, Pons PT, Page D (eds): The Paramedic McGraw-Hill, New York, NY; 2008:839-861
28. **Colwell CB:** *Lightning and Electrical Injuries* In: Adams JG (Ed): Emergency Medicine Elsevier, Philadelphia, PA, 2008;131:1451
29. Murphy P, **Colwell CB**, Pineda G, Bryan T: *Cerebral hemorrhage. What EMS providers need to know about cerebral anatomy and common forms of cerebral hemorrhage.* EMS 2009; 38(5):46-55
30. **Colwell CB**, Johnston J, Schimpf B, Nieberlein D, Petre B, Bookman S, Robinson J, Jackamore S, Gaither J, Eberhardt A, Benson J, Crowl D. *The response and lessons learned from the crash at Denver International Airport.* JEMS 2009; 34(9):36-45.
31. Murphy P, **Colwell CB**, Pineda G, Bryan T. *Shortness of breath: A review of select conditions.* EMS 2009, 38(7):51-63.
32. **Colwell CB**, Moore EE: *Traumatic Shock* In: Wolfson AB (ed): Harwood-Nuss' Clinical Practice of Emergency Medicine Lippincott Williams & Wilkins, Philadelphia, PA, 5<sup>th</sup> Edition, 2009:142-148
33. **Colwell CB**, Markovchick V: *Radiation Injuries* In: Marx JA, Hockberger RS, Walls RM (eds): Rosen's Emergency Medicine: Concepts and Clinical Practice Mosby Elsevier Philadelphia, PA 7<sup>th</sup> Edition, 2009:1933-1941
34. Murphy P, **Colwell CB**, Pineda G, Bryan T: *Burning issues: By understanding the pathophysiology of burns, providers can give patients their best chance at good outcomes.* EMS 2009, 38(10):83-90.
35. Murphy P, **Colwell CB**, Pineda G, Bryan T: *Abdominal Pain: A review of select conditions.* EMS 2010, 39(1):68-74
36. Murphy P, **Colwell CB**, Pineda G, Bryan T: *A Shocking Call: Prehospital assessment and management of electrical injuries and lightning strikes.* EMS 2010, 39(2):46-53
37. Murphy P, **Colwell CB**, Pineda G, Bryan T: *Shootings: What EMS providers need to know: the assessment and treatment of victims of gunshot wounds.* EMS 2010, 39(4):37-45
38. **Colwell CB:** *Managing the Acutely Agitated Patient.* EMS Innovations 2010 EMS 2010, 39(7):I-8-I-9
39. Soriya G, **Colwell CB:** *Basic Life Support.* In: Moore EE (ed): Encyclopedia of Intensive Care Medicine Springer, 1<sup>st</sup> Edition, 2010
40. Soriya G, **Colwell CB:** *Emergency Medical Services* In: Moore EE (ed): Encyclopedia of Intensive Care Medicine Springer, 1<sup>st</sup> Edition, 2010

41. Mull A, **Colwell CB**: *Prehospital Care* In: Moore EE (ed): Encyclopedia of Intensive Care Medicine Springer, 1<sup>st</sup> Edition, 2010
42. Murphy P, **Colwell CB**, Pineda G, Bryan T: *Hemochromatosis*. EMS 2010; 39(10):53-57
43. **Colwell CB**: *Hyperkalemia* In: Schaidler JJ, Barkin RM, Hayden SR, Wolfe RE, Barkin AZ, Shayne P, Rosen P (eds): Rosen and Barkin's 5-Minute Emergency Medicine Consult Lippincott Williams & Wilkins, a Wolters Kluwer, PA 4<sup>th</sup> Edition, 2011: 552-553
44. **Colwell CB**: *High Altitude Illness* In: Schaidler JJ, Barkin RM, Hayden SR, Wolfe RE, Barkin AZ, Shayne P, Rosen P (eds): Rosen and Barkin's 5-Minute Emergency Medicine Consult Lippincott Williams & Wilkins, Wolters Kluwer, PA 4<sup>th</sup> Edition, 2011: 524-525
45. **Colwell CB**: *Dialysis Complications* In: Schaidler JJ, Barkin RM, Hayden SR, Wolfe RE, Barkin AZ, Shayne P, Rosen P (eds): Rosen and Barkin's 5-Minute Emergency Medicine Consult Lippincott Williams & Wilkins, a Wolters Kluwer, PA 4<sup>th</sup> Edition, 2011: 310-311
46. **Colwell CB**, Mull AC: *Cardiac Dysrhythmias, Pacemakers, and Implantable Defibrillators*. In: Markovchick VJ, Pons PT, Bakes KM (eds): Emergency Medicine Secrets Elsevier Mosby, St. Louis MO 5<sup>th</sup> Edition, 2011:208-218
47. Kendall JL, **Colwell CB**: *Pericarditis and Myocarditis* In: Markovchick VJ, Pons PT, Bakes KM (eds): Emergency Medicine Secrets Elsevier Mosby, St. Louis MO 5<sup>th</sup> Edition, 2011:229-234
48. **Colwell CB**, Soriya G: *Heat Illness* In: Markovchick VJ, Pons PT, Bakes KM (eds): Emergency Medicine Secrets Elsevier Mosby, St. Louis MO 5<sup>th</sup> Edition, 2011:407-410
49. Murphy P, **Colwell CB**, Pineda G: *Smoke Inhalation*. EMS World 2011; May issue
50. Eberhardt A, **Colwell CB**: *Prehospital Care*. In: Legome E, Shockley LW (eds): Trauma: A Comprehensive Emergency Medicine Approach Cambridge University Press, New York, 2011:653-662
51. Crowl D, **Colwell CB**, Mettera CJ: *Double trouble: Don't get fooled when assessing the pregnant trauma patient*. JEMS 2011; Sept:52-59
52. Mehler PS, **Colwell CB**, Stahel PF: *A structured approach to improving patient safety: Lessons from a public safety-net system*. Patient Safety in Surgery 2011; 5:32 (1 December, 2011)
53. Murphy P, **Colwell CB**, Pineda G: *Understanding the Trauma Triad of Death*. EMS World 2012, 41(2):44-51
54. Thomas SH, Colwell CB, Deslandes J, Dyer S, Goodloe JM. Prehospital Care. Emerg Med International 2012, Article ID 965480
55. **Colwell CB**. *On-Line Medical Direction*. In: Pons PT, Markovchick VJ (eds): Prehospital Care: Pearls and Pitfalls. People's Medical Publishing House, Shelton, CT, 2012:79-82
56. **Colwell CB**. *Incident Management*. In: Pons PT, Markovchick VJ (eds): Prehospital Care: Pearls and Pitfalls. People's Medical Publishing House, Shelton, CT, 2012:137-45

57. **Colwell CB.** *Chest Pain.* In: Pons PT, Markovchick VJ (eds): Prehospital Care: Pearls and Pitfalls. People's Medical Publishing House, Shelton, CT, 2012:239-44
58. Prehospital Care. Emergency Medicine International Special Edition. Thomas SH, **Colwell C**, Deslandes JC, Dyer S, Goodloe JM, Guest Editors. Hindawi Publishing Corp, 2012
59. Thomas SH, **Colwell C**, Deslandes JC, Dyer S, Goodloe JM. Prehospital Care. Emergency Medicine International 2012; article ID 965480
60. **Colwell CB.** *Lightning and Electrical Injuries.* In: Adams (ed): Emergency Medicine: Clinical Essentials Elsevier Saunders, Philadelphia, PA 2<sup>nd</sup> Edition 2013:1148-52
61. **Colwell CB.** Book review: *An Introduction to Clinical Emergency Medicine, 2<sup>nd</sup> ed.* In: J Trauma and Acute Care Surgery 2013 Jan;74(1):344
62. **Colwell CB.** *Radiation Injuries* In: Marx (ed): Rosen's Emergency Medicine: Concepts and Clinical Practice Elsevier Saunders, Philadelphia, PA 8<sup>th</sup> Edition, 2014:1945-53
63. Murphy P, **Colwell C**, Pineda G. *All You Need to Know About Bariatrics.* EMS World 2014, 43(3):26-35
64. **Colwell CB**, Moore EE. *Traumatic Shock.* In: Wolfson AB (ed): Harwood Nuss' Clinical Practice of Emergency Medicine Lippincott Williams & Wilkins, Philadelphia, PA, 6th Edition, 2014:137-142
65. **Colwell CB.** *High Altitude Illness* In: Schaidler et al (ed): Rosen and Barkin's 5- Minute Emergency Medicine Consult. Wolters Kluwer, Philadelphia, PA 5<sup>th</sup> Edition, 2015:534-5
66. **Colwell CB.** *Dialysis Complications* In: Schaidler et al (ed): Rosen and Barkin's 5- Minute Emergency Medicine Consult. Wolters Kluwer, Philadelphia, PA 5th Edition, 2015: 312-3
67. **Colwell CB.** *Hyperkalemia* In: Schaidler et al (ed): Rosen and Barkin's 5- Minute Emergency Medicine Consult. Wolters Kluwer, Philadelphia, PA 5th Edition, 2015: 562-3
68. **Colwell CB.** *Refusal in the Field: When can an uncooperative patient refuse care and transport?* Journal of Emergency Medical Services (JEMS) July, 2016
69. **Colwell CB**, Moore E. *Initial evaluation and management of abdominal gunshot wounds in adults.* In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed April 15th, 2017)
70. **Colwell CB**, Moore E. *Initial evaluation and management of abdominal stab wounds in adults.* In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed April 15<sup>th</sup>, 2017)
71. **Colwell CB.** *Initial evaluation and management of shock in adult trauma.* In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed April 15<sup>th</sup>, 2017)
72. **Colwell CB.** *Geriatric trauma: Initial evaluation and management.* In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (April 15<sup>th</sup>, 2017)

73. **Colwell CB.** *Supply, Demand, and Crisis: Emergency Department Diversion of Ambulances in San Francisco.* San Francisco Medicine (Journal of The San Francisco Medical Society), 90(3):15-17, April, 2017
74. **Colwell CB, Fox CJ.** *Abdominal Aortic Aneurysm.* In: Rosen's Emergency Medicine – Concepts and Clinical Practice. Elsevier, Philadelphia, PA. 9<sup>th</sup> Edition, 2018:1027-35.
75. **Colwell CB.** *Imaging in trauma.* Audio Digest Emergency Medicine 35:16 (August 21), 2018
76. **Colwell CB.** *Geriatric trauma.* Audio Digest Emergency Medicine 35:16 (August 21), 2018
77. Mason J, **Colwell CB**, Grock A. *Agitation Crisis Control.* Ann Emerg Med 2018;72:371-3
78. Mason J, Mallon B, **Colwell CB.** *Restraining the Agitated Patient.* EM:RAP October 2018, Volume 18, Issue 10.

### Letters to the Editor

1. **Colwell C, Markovchick V, Pons P: Drug Concern** J. Emerg. Med. Services 2000;25:10
2. Abboud P, **Colwell C: Critically reappraising the literature-driven practice of analgesia administration for acute abdominal pain in the emergency room prior to surgical evaluation.** Am J Surg, 2004; Jul 188(1):102-3, Author reply 103-4
3. **Colwell C, McVane K, Haukoos J: Reply to: Out-of-hospital Endotracheal Intubation-It's Time to Stop Pretending that Problems Don't Exist.** Acad Emerg Med 2005;12(12):1245-6
4. **Colwell C: Reply to: EMS Response to Columbine: Lessons Learned.** The Internet Journal of Rescue and Disaster Medicine 2006; Vol. 5, No. 2

### Abstracts Presented

1. **Colwell C, Wolfe R, Moore E, Cairns C: Differences in Hemodynamic Data Between Geriatric and Younger Adult Trauma Patients.** Poster Presentation; 21<sup>st</sup> Annual Rocky Mountain Conference on Emergency Medicine and Nursing, Jan. 30<sup>th</sup>, 1995
2. **Colwell C, Wolfe R, Moore E, Cairns C: Differences in Hemodynamic Data Between Geriatric and Younger Adult Trauma Patients.** Presented as an oral presentation at the 25<sup>th</sup> Annual Meeting of the Society for Academic Emergency Medicine, Denver, Colorado, May, 1995.
3. Branney S, **Colwell C, Aschenbrenner J, Pons P: Safety of Droperidol for Sedating Out-of-control ED Patients.** Presented at the Annual Meeting of the Society for Academic Emergency Medicine, Denver, Colorado, 1996. (Acad Emerg Med 1996; 3:527)



4. Barton E, Ramos J, **Colwell C: Intranasal Administration of Naloxone by Paramedics: Could this be a better practice?** Presented at American College of Emergency Physicians (ACEP) Research Forum, October 2001. (Ann Emerg Med 2001; 38(4):Supplement p. S18)
5. Barton E, **Colwell C**, Ramos J: **Intranasal Administration of Naloxone by Paramedics: Could this be a better practice?** Presented at The First Mediterranean Emergency Medicine Congress, Stressa Convention Center, Stressa, Italy, September 2001
6. Levine S, **Colwell C**, Pons P, Gravitz C, Haukoos J: **How well do paramedics predict admission to the hospital?** Presented at AAEM Resident Research Competition, San Diego, California, February 2005
7. **Colwell C**, Mehler P, Sabel A, Harper J, Johnson L, Cassell L: **Determining the Quality of Comprehensive Care for Non-Traumatic Chest Pain through a Composite Measure.** Presented at SAEM Western Regional Research Forum, Portland, Oregon, March, 2007.
8. **Colwell C**, Mehler P, Sabel A, Harper J, Johnson L, Cassell L. **Analysis of Ambulance Response for Patients with Medical Chest Pain Based on the Severity of Potential Cardiac Symptoms.** Presented at SAEM Western Regional Research Forum, Portland, Oregon, March 2007.
9. Haukoos JA, Witt G, **Colwell C. The Epidemiology of Out-of-Hospital Cardiac Arrest in Denver, Colorado. Results from Phase I of the Denver Cardiac Arrest Registry.** Presented at SAEM Annual Meeting, May 30<sup>th</sup>, 2008, Washington D.C.
10. Kashuk JL, Moore EE, Barnett C, Berlew CC, **Colwell CB**, Brody A, Johnson J, Biffl W, Sabel AL. **Implementation of an in-hospital mass casualty incident (MCI) plan based upon the Israeli model: The challenges of shifting to the battlefield mentality in the civilian setting.** International Preparedness & Response to Emergencies & Disasters Conference. Tel –Aviv, Israel. January 11<sup>th</sup>, 2010.
11. Moore EE, Kashuk JL, **Colwell CB**, Barnett C, Burlew CC, Biffl WL, Johnson JL, Brody A, Sabel A. **Live victim volunteers (LVV) enhance performance improvement for in-hospital mass casualty incident (MCI) drills: listen to the patient!** International Preparedness & Response to Emergencies and Disasters (IPRED). Tel-Aviv, Israel. January 12<sup>th</sup>, 2010.
12. Barnett C, Kashuk J, Moore EE, **Colwell CB**, Johnson JL, Biffl W, Burlew CC, Brody A, Sabel A. **Notification and Communication: Critical initial steps in mass casualty incident drills.** International Preparedness & Response to Emergencies and Disasters (IPRED). January 12<sup>th</sup>, 2010. Tel Aviv, Israel
13. **Colwell CB**, Moore EE, Kashuk J, Robinson J, Bookman S. **Lessons learned from the 2008 Democratic National Convention.** International Preparedness & Response to Emergencies and Disasters (IPRED). Tel-Aviv, Israel. January 12<sup>th</sup>, 2010.
14. Soriya G, **McVaney K**, Liao M, **Haukoos J**, **Byyny R**, **Colwell C. Safety of pre-hospital single-dose fentanyl in adult trauma patients.** 13<sup>th</sup> Annual Western Regional Society for Academic Emergency Medicine Meeting, Sonoma, CA, 2010 (Oral).

15. Soriya G, McVane K, **Liao M, Haukoos J, Byyny R, Colwell C. Safety of pre-hospital single-dose fentanyl in adult trauma patients.** Society for Academic Emergency Medicine Annual Meeting, Scottsdale, Phoenix, AZ, 2010 (Poster).
16. Sasson C, **Colwell C**, McNally B, Haukoos J. “**Associations Between Individual-level and Census Tract-level Characteristics and Performance of Bystander CPR Among Patients Who Experience Out-of-Hospital Cardiac Arrest.**” Oral Presentation American Heart Association November 2010.
17. Sasson C, **Colwell C**, McNally B, Dunford J, Haukoos J. “Using the Cardiac Arrest Registry to Enhance Survival to Examine Regional Variation in the Utilization of Automated External Defibrillators.” Poster Presentation Resuscitation Science Symposium American Heart Association November 2010.
18. Macht M, **Colwell CB**, Mull A, Johnston J B, Shupp A, Marquez KD, Gaither J, Haukoos J. “Droperidol versus haloperidol for prehospital sedation of acutely agitated patients.” Poster presentation at NAEMSP 2012 Annual Meeting, January 2012
19. Nassel A, Haukoos J, McNally B, **Colwell CB**, Severyn F, Sasson C. “Using Geographic Information Systems and Cluster Analysis to identify Neighborhoods with High Out of Hospital Cardiac Arrest Incidence and Low Bystander Cardiopulmonary Resuscitation Prevalence in Denver, Colorado.” Oral Presentation, Society of Academic Emergency Medicine Annual Meeting, May 2012, Chicago, Illinois. Acad Emerg Med 2012 19(4) Suppl.1, #513:S271-272
20. Vogel JA, Arens A, Johnson C, Ruygrok M, Smalley C, Byyny R, **Colwell CB**, Haukoos J. “Prehospital and Emergency Department Intubation is Associated with Increased Mortality in Patients with Moderate to Severe Traumatic Brain Injury”. Oral Presentation, Society of Academic Emergency Medicine Annual Meeting, May 2012, Chicago, Illinois. Acad Emerg Med 2012 19(4) Suppl. 1, #517:S273-S274
21. Vogel JA, Sasson C, Hopkins E, **Colwell CB**, Haukoos J. “Systems-Wide Cardiac Arrest Interventions Improve Neurologic Survival after Out-of-Hospital Cardiac Arrest”. Moderated Poster Presentation, Society of Academic Emergency Medicine Annual Meeting, May 2012, Chicago, Illinois. Acad Emerg Med 2012 19(4) Suppl. 1, #615:S324
22. Muramoto S, **Colwell C**, Mehler P, Bakes K. “Cost analysis of a hospital-based violence intervention program: At-risk intervention and mentoring program (AIM).” Poster presentation at 25<sup>th</sup> Annual Interprofessional Research and EBP Symposium, March 2014, Denver, CO.
23. Huang D, Niedzwiecki M, Mercer M, **Colwell CB**, Mann C, Hsia R. “Poor Neighborhoods Have Slower Response and Transport Times”. Oral Presentation, National Association of EMS Physicians (NAEMSP) 2017 Annual Meeting, New Orleans, LA, January 26<sup>th</sup>, 2017.
24. Kanzaria HK, Mercer MP, To J, Costa B, Luna A, Bilinski J, Staconis D, Pitts M, Dentoni T, Williams T, Singh MK, **Colwell CB**, Marks JD. “Using Lean

Methodology to Create a Care Pathway for Low Acuity Emergency Department Patients in a Safety-Net Hospital”. Poster presentation, Society for Academic Emergency Medicine (SAEM) 2017. Orlando, FL. May 17<sup>th</sup>, 2017.

25. Niedzwiecki M, Huang D, Mercer M, **Colwell CB**, Mann NC, Hsia RY. “Do Poor Neighborhoods Have Slower EMS Times? Oral presentation, Society for Academic Emergency Medicine (SAEM) 2017. Orlando, FL, May 18<sup>th</sup>, 2017

#### **Invited Lectures, Presentations, and Visiting Professorships:**

1. Hypertensive Emergencies  
Interdepartmental Grand Rounds, University of Michigan  
Ann Arbor, Michigan, May 1997
2. Pediatric Meningitis  
Emergency Medicine Grand Rounds, University of Michigan  
Ann Arbor, Michigan, October, 1997
3. Antibiotic Use in the Emergency Department  
Attending Lecture in Emergency Medicine  
Denver Health Medical Center, Denver, Colorado, October 1998
4. The Myth of EMS Response Times  
26<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado, July 1999
5. Geriatric Trauma  
26<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado, July 1999
6. Mass Casualty and Disaster Management: The Columbine Shootings  
Multidisciplinary Trauma Conference, Denver Health Medical Center  
Denver, Colorado, September 1999
7. Mass Casualty and Disaster Management: The Columbine Shootings  
Northeast EMS Conference  
Boston, Massachusetts, September 1999
8. Mass Casualty and Disaster Management: The Columbine Shootings  
Keynote Address, Winnipeg EMS Conference  
Winnipeg, Canada, October 1999
9. Mass Casualty and Disaster Management  
Grand Rounds  
Harvard Medical School and Harvard Affiliated Emergency Medicine  
Residency  
October 26<sup>th</sup>, 1999  
Boston, Massachusetts
10. Mass Casualty and Disaster Management: The Columbine Shootings  
Pediatric Emergency Care Conference  
Grand Rapids, Michigan, March 2000
11. Geriatric Trauma  
Trauma Care Appreciation Day  
Denver, Colorado, May 2000

12. Mass Casualty and Disaster Management: The Columbine Shootings  
 Fifth International Conference on Pediatric Trauma  
 Beaver Creek, Colorado, June 2000
13. Complaints Against EMS  
 27<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 Steamboat, Colorado, July 2000
14. Mass Casualty and Disaster Management: The Columbine Shootings  
 Sixth Annual Trauma Symposium, Cleveland Clinic Health System  
 Cleveland, Ohio, October 2000
15. Mass Casualty and Disaster Management: The Columbine Shootings  
 EMS TEST Conference  
 Columbus, Georgia, October 2000
16. Myocardial Infarction  
 Colorado State EMS Conference 2000  
 Breckenridge, Colorado, October 2000
17. Hypothermia  
 Colorado State EMS Conference 2000  
 Breckenridge, Colorado, October 2000
18. Complaints Against EMS  
 Colorado State EMS Conference 2000  
 Breckenridge, Colorado, October 2000
19. Hypothermia  
 Rocky Mountain Winter Trauma and Emergency Medicine Conference  
 Copper Mountain, Colorado, January 2001
20. Mechanism of Injury  
 Grand Rounds, Longmont Community Hospital  
 Longmont, Colorado, March 2001
21. Stabilization of the Trauma Patient  
 Trauma Care Appreciation Day, Denver Health Medical Center  
 Denver, Colorado, April 2001
22. Mass Casualty and Disaster Management: The Columbine Shootings  
 El Paso EMS Conference  
 El Paso, Texas, September 2001
23. Mass Casualty and Disaster Management: The Columbine Shootings  
 Memorial Medical Center Trauma Conference  
 Johnstown, Pennsylvania, October 2001
24. Mechanism of Injury  
 Colorado State EMS Conference 2001  
 Breckenridge, Colorado, October 2001
25. Mass Casualty and Disaster Management: The Columbine Shootings  
 Massachusetts EMS Conference  
 Worcester, Massachusetts, December 2001
26. Mass Casualty and Disaster Management: The Columbine Shootings  
 Sierra-Cascade Trauma Society  
 Crested Butte, CO, February, 2002
27. Mass Casualty and Disaster Management: The Columbine Shootings

- Emergency Medicine Grand Rounds, University of Massachusetts  
Worcester, Massachusetts, March 2002
28. Mass Casualty and Disaster Management: The Columbine Shootings  
Multidisciplinary Trauma Conference, Denver Health Medical Center  
Denver, Colorado, March 2002
  29. Mass Casualty and Disaster Management: The Columbine Shootings  
Grand Rounds, Day Kimball Hospital  
Putnam, Connecticut, May 2002
  30. Mass Casualty and Disaster Management: The Columbine Shootings  
Grand Rounds, Legacy Emanuel Hospital & Health Center  
Portland, Oregon, June 2002
  31. Mass Casualty and Disaster Management: The Columbine Shootings  
Trauma Grand Rounds, Scripps Memorial Hospital  
La Jolla, California, September 2002
  32. High Altitude Illness  
Annual Meeting, Sierra Cascade Trauma Society  
Vail, Colorado, January 2003
  33. ALS in Trauma: Should We Even Bother?  
30<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado, August 2003
  34. Hypothermia  
30<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado, August 2003
  35. Research in EMS  
Grand Rounds, Denver Paramedic Division  
Denver, Colorado September, 2003
  36. High Altitude Illness  
Colorado State EMS Conference 2003  
Keystone, Colorado, October, 2003
  37. Controversies in EMS  
Colorado State EMS Conference 2003  
Keystone, Colorado, October 2003
  38. Hypothermia  
Sierra Cascade Trauma Society, 2004  
Aspen, Colorado, February 9, 2004
  39. Current Research in Prehospital Care  
Rocky Mountain Critical Care Transport Conference  
Denver, Colorado, May 6<sup>th</sup>, 2004
  40. Blood Substitutes in the Field  
Clinical Conference on Pre-Hospital Emergency Care, 2004  
Orlando, Florida, July 10<sup>th</sup>, 2004
  41. Management of Potential C-spine Injuries: Clearance and Beyond.  
31<sup>st</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Copper Mtn, Colorado. July 18<sup>th</sup>, 2004
  41. Mass Casualty and Disaster Management: The Columbine Shootings.  
Grand Rounds, North Colorado Medical Center



- Greeley, Colorado. September 14, 2004
42. Research in EMS and Trauma  
 12<sup>th</sup> Annual EMS and Trauma Grand Rounds Conference  
 Aurora, Colorado. September 15, 2004
  43. Blood Substitutes in the Field: The Prehospital Trials  
 2004 Colorado State EMS Conference  
 Keystone, Colorado. November 5<sup>th</sup>, 2004
  44. Cadaver Anatomy Lab: Dissection and Procedure Review on a Human Cadaver. Preconference workshop, 2004 Colorado State EMS Conference  
 Keystone, Colorado. November 5<sup>th</sup>, 2004
  45. Prehospital Management of Trauma  
 32<sup>nd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 Breckenridge, Colorado. June 14<sup>th</sup>, 2005
  46. Difficult Airway Lecture/Lab  
 32<sup>nd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 Breckenridge, Colorado. June 15<sup>th</sup>, 2005
  47. Bleeding Disorders  
 32<sup>nd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 Breckenridge, Colorado. June 15<sup>th</sup>, 2005
  48. Travel-Related Infectious Disease  
 ACEP Scientific Assembly 2005  
 September 28<sup>th</sup>, Washington D.C.
  49. The Hot Joint  
 ACEP Scientific Assembly 2005  
 September 29<sup>th</sup>, Washington D.C.
  50. Mass Casualty and Disaster Management  
 Trauma and Critical Care Conference  
 San Juan Regional Medical Center, Farmington, New Mexico  
 February 18<sup>th</sup>, 2006
  51. Dialysis Related Emergencies  
 33<sup>rd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 Breckenridge, Colorado. June 14<sup>th</sup>, 2006
  52. Show Me Where it Hurts: Pain Management in the Field  
 33<sup>rd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 Breckenridge, Colorado. June 15<sup>th</sup>, 2006
  53. Environmental Emergencies  
 2006 Rocky Mountain Rural Trauma Symposium  
 September 14, 2006. Billings, Montana.
  54. Drugs of Abuse  
 2006 Rocky Mountain Rural Trauma Symposium  
 September 15, 2006. Billings, Montana.
  55. Cadaver Anatomy Lab: Dissection and Procedure Review on a Human Cadaver. Preconference workshop, 2006 Colorado State EMS Conference  
 Keystone, Colorado.
  56. Dialysis-Related Emergencies  
 2006 Colorado State EMS Conference

- November 3<sup>rd</sup>, 2006, Keystone, Colorado
57. High-Altitude Illness  
2006 Colorado State EMS Conference  
November 3<sup>rd</sup>, 2006. Keystone, Colorado
  58. Drugs of Abuse  
34<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado. June 20<sup>th</sup>, 2007
  59. Environmental Emergencies  
34<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado. June 22<sup>th</sup>, 2007
  60. Ultrasound Use in the Acutely Traumatized Patient  
Instuctor, Ultrasound Workshop  
34<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
Breckenridge, Colorado. June 22<sup>th</sup>, 2007
  61. Jigawatts: Back to the Future of Electrical Injuries  
American College of Emergency Physicians - Scientific Assembly,  
October 8-11, 2007. Seattle, Washington
  62. What's Hot, What's Not: Hypo to Hyperthermia, and All Things in Between  
American College of Emergency Physicians - Scientific Assembly,  
October 8-11, 2007. Seattle, Washington
  63. Environmental Emergencies  
Colorado State EMS Conference, November 8<sup>th</sup>-11<sup>th</sup>, 2007  
Keystone, Colorado
  64. Cadaver Anatomy Lab: Dissection and Procedure Review.  
Colorado State EMS Conference 2007 – Pre-conference Workshop  
Keystone, Colorado
  65. Drugs of Abuse  
Colorado Society of Osteopathic Medicine: The Medical “Home  
Improvements” Course. February 24<sup>th</sup>, 2008  
Keystone, Colorado
  66. Initial Evaluation of the Trauma Patient  
Colorado Society of Osteopathic Medicine: The Medical “Home  
Improvements” Course. February 24<sup>th</sup>, 2008  
Keystone, Colorado
  67. Geriatric Trauma  
35<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 25<sup>th</sup>, 2008  
Breckenridge, CO
  68. What's Hot, What's Not: Hypo to Hyperthemia and All Things in Between  
ACEP Scientific Assembly 2008, October 28<sup>th</sup>  
Chicago, Il
  69. Triage Out Debate: Efficient or Unethical?  
ACEP Scientific Assembly 2008, October 28<sup>th</sup>  
Chicago, Il
  70. Update in EMS Literature: What's Hot and What's Not  
ACEP Scientific Assembly 2008, October 29<sup>th</sup>

- Chicago, IL
71. Cadaver Dissection Lab  
2008 Colorado State EMS Conference, November 6th  
Breckenridge, CO
  72. Geriatric Trauma  
2008 Colorado State EMS Conference, November 7th  
Breckenridge, CO
  73. Lessons Learned from the DNC  
Colorado Front Range MMRS Hospital Response to a Mass Casualty  
Incident, December 8<sup>th</sup>, 2008  
Denver, CO
  74. Lessons Learned from the DNC  
The EMS State of the Sciences Conference: A Gathering of Eagles 2009  
February 20<sup>th</sup>, 2009  
Dallas, TX
  75. Nightmare EMS Communications  
The EMS State of the Sciences Conference: A Gathering of Eagles 2009  
February 21<sup>st</sup>, 2009  
Dallas, TX
  76. Mass Casualty and Disaster Management  
Trauma Perspectives 2009 (4/10/09)  
Durango, CO
  77. Airway Management and Pitfalls  
Trauma Perspectives 2009 (4/10/09)  
Durango, CO
  78. Trauma Management  
Integrated Clinicians Course (ICC) 7004  
University of Colorado at Denver School of Medicine  
May 5<sup>th</sup>, 2009
  79. EMS Update, 2009  
Grand Rounds, Beth Israel/Deaconess Department of Emergency Medicine  
May 6<sup>th</sup>, 2009
  80. EMS Update – Panel Discussion  
36<sup>th</sup> Annual Trauma and Emergency Medicine Conference  
June 18<sup>th</sup> 2009, Breckenridge, CO
  81. Trauma in Pregnancy  
36<sup>th</sup> Annual Trauma and Emergency Medicine Conference  
June 19<sup>th</sup> 2009, Breckenridge, CO
  82. Cadaver Lab: Anatomical Dissection  
2009 Colorado State EMS Conference  
November 5<sup>th</sup>, Keystone, Colorado
  83. Trauma in Pregnancy  
2009 Colorado State EMS Conference  
November 6<sup>th</sup>, Keystone, Colorado
  84. Update in EMS Literature: What's Hot and What's Not  
2009 Colorado State EMS Conference

- November 6<sup>th</sup>, Keystone, Colorado
85. Lessons Learned from the DNC  
International Preparedness and Response to Emergencies and Disasters (IPRED)  
January 12<sup>th</sup> 2010  
Tel Aviv, Israel
  86. Geriatric Trauma  
Second Annual BCFFA EMS Conference  
January 23<sup>rd</sup> 2010, Boulder, Colorado
  87. Pharmaceutical Restraints: A New Medication Approach to the Agitated Patient  
The EMS State of the Sciences Conference: A Gathering of Eagles 2010  
February 26<sup>th</sup>, 2010  
Dallas, Tx
  88. Transfer of the Rural Trauma Patient  
Second Annual Western Colorado Trauma Conference  
May 21<sup>st</sup> 2010, Delta, Colorado
  89. Moderator, EMS Medical Director Panel: "Refusal of Care in the Prehospital Setting"  
37<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 17<sup>th</sup> 2010, Breckenridge, Colorado
  90. Critical Issues in Triage  
37<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 18<sup>th</sup> 2010, Breckenridge, Colorado
  91. Field Triage Guidelines: State of the Art or State of the Science?  
ACEP Scientific Assembly 2010  
September 28<sup>th</sup>, Las Vegas, Nevada
  92. Less Lethal Force: An Emerging Problem in Prehospital Care  
ACEP Scientific Assembly 2010  
September 29<sup>th</sup>, Las Vegas, Nevada
  93. Trauma Case Panel: Stump the Experts  
Carlo Rosen (Moderator), Christopher B. Colwell MD, John Fildes MD, Julie A. Mayglothling MD.  
ACEP Scientific Assembly 2010  
September 29<sup>th</sup>, Las Vegas, Nevada
  94. Critical Issues in Triage  
Trauma and Critical Care Conference  
October 22<sup>nd</sup>, 2010  
Durango, Colorado
  95. Trauma Panel Case Review  
Christopher B. Colwell, Moderator  
October 23<sup>rd</sup>, 2010  
Durango, Colorado
  96. Lightning and Electrical Emergencies  
Trauma and Critical Care Conference  
October 23<sup>rd</sup>, 2010

- Durango, Colorado
97. Cadaver Dissection Lab  
Colorado State EMS Conference 2010  
November 4<sup>th</sup>, 2010  
Keystone, Colorado
  98. Accidental Hyper And Hypothermia And All Things In Between  
Colorado State EMS Conference 2010  
November 5<sup>th</sup>, 2010  
Keystone, Colorado
  99. Biophone Calls: The Good, The Bad, And The Ugly  
Colorado State EMS Conference 2010  
November 5<sup>th</sup>, 2010  
Keystone, Colorado
  100. Geocoding Cardiac Arrest in Denver  
ECCU 2010 (Emergency Cardiac Care Update)  
December 8<sup>th</sup>, 2010  
San Diego, California
  101. Management of the Agitated Patient  
ECCU 2010 (Emergency Cardiac Care Update)  
December 9<sup>th</sup>, 2010  
San Diego, California
  102. The Nose Knows: Intranasal Medication Options are Growing  
EMS State of the Sciences: A Gathering of Eagles XIII 2011  
February 26<sup>th</sup>, 2011  
UT Southwestern Medical Center, Dallas, Texas
  103. Beyond Agitated Delirium: Dealing with the Issue of In-Custody Deaths  
The EMS State of the Sciences: A Gathering of Eagles XIII 2011  
February 26<sup>th</sup>, 2011  
UT Southwestern Medical Center, Dallas, Texas
  104. ED Operations 101: Follow the Money  
Council of Emergency Medicine Residency Directors (CORD) Academic  
Assembly 2011 (March 4<sup>th</sup>)  
San Diego, California
  105. CPR, Defibrillation, and Drugs: What is the right VF mix?  
EMS Regional Conference: Resuscitation Excellence  
May 15<sup>th</sup>, 2011  
New York, New York
  106. We Don't Need No Stinking Breaths! Compressions Only Pre-Arrival Instructions.  
EMS Regional Conference: Resuscitation Excellence  
May 15<sup>th</sup>, 2011  
New York, New York
  107. Moderator – Panel Discussion: Optimizing Colorado's Trauma System  
38th Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 22<sup>nd</sup>, 2011  
Breckenridge, Colorado



108. Pitfalls in Trauma Care  
38<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 24<sup>th</sup>, 2011  
Breckenridge, Colorado
109. Deleterious Delirium Deliberations: Modern Pitfall is Managing Agitated EMS Patients  
Advanced EMS Practitioner's Forum and Workshop  
ACEP Scientific Assembly  
October 14<sup>th</sup>, 2011  
San Francisco, California
110. Certifiable Behaviors: Preparing for EMS Subspecialty Board Certification  
Advance EMS Practitioner's Forum and Workshop  
ACEP Scientific Assembly  
October 14<sup>th</sup>, 2011  
San Francisco, California
111. Cadaver Dissection and Anatomy Lab  
Colorado State EMS Conference 2011  
November 3<sup>rd</sup>, 2011  
Keystone, Colorado
112. On the Wings of Eagles: Hot Topics in EMS  
Colorado State EMS Conference 2011  
November 4<sup>th</sup>, 2011  
Keystone, Colorado
113. Droperidol for Agitation  
Advanced Topics in Medical Direction  
NAEMSP National Meeting, 2012  
January 11<sup>th</sup>, 2012  
Tucson, Arizona
114. Trauma in Pregnancy  
Children's Hospital EMS Conference  
Aurora, Colorado  
January 20<sup>th</sup>, 2012
115. Withdrawing Support: A Prehospital Protocol for Alcohol Withdrawal  
EMS State of the Science: A Gathering of Eagles XIV  
February 24<sup>th</sup>, 2012  
Dallas, Texas
116. A Sanguine Approach: The Use of Blood Products and Substitutes in the Field  
EMS State of the Science: A Gathering of Eagles  
February 24<sup>th</sup>, 2012  
Dallas, Texas
117. Blast Injuries  
1<sup>st</sup> Annual Trauma Symposium  
March 15<sup>th</sup>, 2012  
Burlington, Colorado

118. Rural Trauma  
1st Annual Trauma Symposium  
March 15<sup>th</sup>, 2012  
Burlington, Colorado
119. Trauma in Pregnancy  
2012 NE Colorado EMS Symposium  
April 21<sup>st</sup>, 2012  
Fort Morgan, Colorado
120. Hemorrhage Control in the Field: Tourniquets and Beyond  
Grand Rounds – St. Mary’s and Convent Health Care/Synergy Medical Center  
Hospitals  
May 10<sup>th</sup>, 2012  
Saginaw, Michigan
121. Mass Casualty and Disaster Management  
Invited Lecture – Convent Health Care/Synergy Medical Center  
April 21<sup>st</sup>, 2012  
Saginaw, Michigan
122. Trauma in Pregnancy  
39th Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 29<sup>th</sup>, 2012  
Breckenridge, Colorado
123. Taking it on the QT: What are the Cardiac Effects of Sedation Practices?  
Emergency Cardiac Care Update (ECCU) 2012  
Pre-conference Workshop  
September 12<sup>th</sup>, 2012  
Orlando, Florida
124. Withdrawing Support: Managing Alcohol Withdrawal in the Field  
Emergency Cardiac Care Update (ECCU) 2012  
Pre-conference Workshop  
September 12<sup>th</sup>, 2012  
Orlando, Florida
125. Making Waves Diagnostically: Identifying Subtle Critical Emergencies  
with Capnography  
Emergency Cardiac Care Update (ECCU) 2012  
Conference Session – Eagles: State of the Science  
September 13<sup>th</sup>, 2012  
Orlando, Florida
126. Two Carbon Fragmentations: A Prehospital Protocol for Ethanol  
Withdrawal.  
2012 ACEP Advanced EMS Practitioners’ Forum and Workshop  
October 7<sup>th</sup>, 2012  
Denver, Colorado
127. How to Break the Ache: 2012 Approaches to Prehospital Pain Control  
2012 ACEP Advanced EMS Practitioners’ Forum and Workshop  
October 7<sup>th</sup>, 2012  
Denver, Colorado

128. I'd Scan That! Effective Diagnostic Trauma Imaging  
ACEP Scientific Assembly  
October 9<sup>th</sup>, 2012  
Denver, Colorado
129. Evidence-Based Minor Trauma Management  
ACEP Scientific Assembly  
October 9<sup>th</sup>, 2012  
Denver, Colorado
130. Trauma Talk: The Latest and the Greatest Trauma Literature  
ACEP Scientific Assembly  
October 10<sup>th</sup>, 2012  
Denver, Colorado
131. The Combative, Uncooperative, Arrested, and Threatening Trauma Patient: A Legal, Ethical, and Medical Minefield  
ACEP Scientific Assembly  
October 10<sup>th</sup>, 2012  
Denver, Colorado
132. MCI Medical Response: Are We Prepared?  
Denver Health Critical Care Conference  
October 12<sup>th</sup>, 2012  
Denver, Colorado
133. The Colorado Shootings: Lessons Learned from Mass Casualty Events  
Grand Rounds – Beth Israel/Deaconess Medical Center  
November 7<sup>th</sup>, 2012  
Boston, Massachusetts
134. The Colorado Shootings: Lessons Learned from Mass Casualty Events  
Keynote Speaker: Hillsborough County Medical Association  
November 13<sup>th</sup>, 2012  
Tampa Bay, Florida
135. The Colorado Shootings: Lessons Learned on Disaster Management and Mass Casualty Events  
Grand Rounds: Scripps Memorial Hospital  
December 11<sup>th</sup>, 2012  
La Jolla, California
136. EMS in the Cross-Hairs: The Columbine, Aurora and Safeway Shootings  
EMS State of the Science: A Gathering of Eagles XV  
February 22<sup>nd</sup>, 2013  
Dallas, Texas
137. Oh, What a Relief It Is! Revisiting Pain Medication Use in EMS  
EMS State of the Science: A Gathering of Eagles XV  
February 22<sup>nd</sup>, 2013  
Dallas, Texas
138. ED Operations 101: Follow the Money  
Council of Emergency Medicine Residency Directors (CORD)  
Academic Assembly 2013  
March 7<sup>th</sup>, 2013

- Denver, Colorado
139. Disaster Planning & Response: Lessons Learned from the Colorado Shootings  
Trauma, Critical Care, and Acute Care Surgery 2013 – Medical Disaster Response  
March 17<sup>th</sup>, 2013  
Las Vegas, Nevada
  140. Case Management Interactive Session: Practical Issues & Dilemmas in Mass Casualty Preparedness  
Trauma, Critical Care, and Acute Care Surgery 2013 – Medical Disaster Response  
March 17<sup>th</sup>, 2013  
Las Vegas, Nevada
  141. Trauma Surgeons Emergency Physicians and Trauma Care  
Trauma, Critical Care, and Acute Care Surgery 2013  
March 20<sup>th</sup>, 2013  
Las Vegas, Nevada
  142. Mass Casualty and Disaster Management – The Colorado Shootings  
Visiting Professorship/Grand Rounds  
Southern Illinois University School of Medicine  
April 18<sup>th</sup>, 2013  
Springfield, Illinois
  143. Mass Casualty and Disaster Management – The Colorado Shootings  
Sangamon County Medical Society  
April 18<sup>th</sup>, 2013  
Springfield, Illinois
  144. Lessons Learned from the Colorado Shootings  
12<sup>th</sup> Annual Trauma Symposium  
Mississippi Coastal Trauma Region  
May 1<sup>st</sup>, 2013  
Biloxi, Mississippi
  145. Mass Casualty and Disaster Management – The Colorado Shootings  
Grand Rounds – Indiana University Hospital-Methodist  
May 10<sup>th</sup>, 2013  
Indianapolis, Indiana
  146. Prehospital Panel  
Moderator  
40th Annual Rocky Mountain Trauma & Emergency Medicine Conference  
June 27<sup>th</sup>, 2013  
Breckenridge, Colorado
  147. Environmental Emergencies  
40<sup>th</sup> Annual Rocky Mountain Trauma & Emergency Medicine Conference  
June 28<sup>th</sup>, 2013  
Breckenridge, Colorado
  148. Lessons Learned from the Colorado Shootings

- 43<sup>rd</sup> Annual Wyoming Trauma Conference  
August 16<sup>th</sup>, 2013  
Cheyenne, Wyoming
149. Oh What a Relief It Is: Evolving Trends in Prehospital Pain Management  
IAFF Advanced EMS Practitioners, Chiefs, & Medical Directors Forum  
August 24<sup>th</sup>, 2013  
Denver, Colorado
150. EMS in the Cross-Hairs: The Columbine, Aurora, and Safeway Shootings  
IAFF Advanced EMS Practitioners, Chiefs, & Medical Directors Forum  
August 24<sup>th</sup>, 2013  
Denver, Colorado
151. The Reality of the New Specialty: What Will Be the Impact of the New EMS Boards for Fire?  
IAFF Advanced EMS Practitioners, Chiefs, & Medical Directors Forum  
August 24<sup>th</sup>, 2013  
Denver, Colorado
152. I'd Scan That!: Use of CT Scans in Trauma Care  
Grand Rounds – University of Wisconsin School of Medicine  
August 29<sup>th</sup>, 2013  
Madison, Wisconsin
153. Evidence-Based Minor Trauma Management  
Grand Rounds – University of Wisconsin School of Medicine  
August 29<sup>th</sup>, 2013  
Madison, Wisconsin
154. Mass Casualty and Disaster Management: EMS Lessons from the Colorado Shootings  
EMS World Expo 2013  
September 11<sup>th</sup>, 2013  
Las Vegas, Nevada
155. 2013 Approaches to Pain Management and Sedation  
EMS World Expo 2013  
September 11<sup>th</sup>, 2013  
Las Vegas, Nevada
156. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
DuPage County Medical Society Annual Meeting  
October 9<sup>th</sup>, 2013  
Chicago, Illinois
157. Mass Casualty Management: The Colorado Shootings  
Northern Colorado Emergency and Trauma Care Symposium  
October 11<sup>th</sup>, 2013  
Loveland, Colorado
158. The Combative, Uncooperative, Arrested and Threatening Trauma Patient: A Legal, Ethical and Medical Minefield!  
ACEP Scientific Assembly 2013  
October 15<sup>th</sup>, 2013



- Seattle, Washington
159. Skip the Scan! Effective Diagnostic Trauma Imaging  
ACEP Scientific Assembly 2013  
October 16<sup>th</sup>, 2013  
Seattle, Washington
160. I Survived: Domestic Disasters – Lessons Learned from the Trenches  
ACEP Scientific Assembly 2013  
October 16<sup>th</sup>, 2013  
Seattle, Washington
161. Managing Ballistic Injuries in the Pre-Hospital Setting  
World Extreme Medicine Expo 2013  
Harvard Medical School  
October 28<sup>th</sup>, 2013  
Boston, Massachusetts
162. Cadaver Lab – Trauma Procedures  
Colorado State EMS Conference 2013  
November 7<sup>th</sup>, 2013  
Keystone, Colorado
163. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
2013 Trauma and Critical Care Conference  
November 8<sup>th</sup>, 2013  
Durango, Colorado
164. Mass Casualty and Disaster Management: The Colorado Shootings  
Lake County Medical Society Annual Meeting  
December 3<sup>rd</sup>, 2013  
Chicago, Illinois
165. Myths in Trauma Care  
Yampa Valley Medical Center Trauma Conference  
November 15<sup>th</sup>, 2013  
Steamboat Springs, Colorado
166. Myths in Pediatric Care  
The Brian Schimpf Memorial Prehospital Pediatric Care Conference  
February 8<sup>th</sup>, 2014.  
Denver, Colorado
167. Child-Like Behaviors: 10 Myths of EMS Pediatric Care  
EMS State of the Science: A Gathering of Eagles XVI  
February 28<sup>th</sup>, 2014  
Dallas, Texas
168. Epidemic Proportions: Dosing Ketamine in the Era of Mamba Dramas  
EMS State of the Science: A Gathering of Eagles XVI  
March 1<sup>st</sup>, 2014  
Dallas, Texas
169. Covering Mental Illness and Violence  
Health Journalism 2014 (Association of Health Care Journalism)  
March 29<sup>th</sup>, 2014

- Denver, Colorado
170. Wound Management: How Do you Manage Cuts and Burns  
American College of Emergency Physicians (ACEP) Advanced Practice  
Provider Academy  
April 15<sup>th</sup>, 2014  
San Diego, CA
  171. Evaluation of Patients with Blunt Multiple Trauma and Penetrating  
Trauma: A Systematic Approach  
American College of Emergency Physicians (ACEP) Advanced Practice  
Provider Academy  
April 15<sup>th</sup>, 2014  
San Diego, CA
  172. Preparedness Put to the Test: Lessons Learned from Major Events to  
Guide Hospital Disaster Preparedness  
Medical World Americas Conference and Expo  
April 28<sup>th</sup>, 2014  
Houston, TX
  173. Myths in Trauma Care  
13th Annual MS Coastal Trauma Symposium  
May 14<sup>th</sup>, 2014  
Biloxi, MS
  174. Anxiolysis for the Cardiac Care Provider: Easy Choices for Sedation in  
Emergency Care  
Emergency Cardiac Care Update (ECCU), EMS Preconference Workshop  
June 3rd, 2014  
Las Vegas, NV
  175. Taking it on the QT: What are the Cardiac Effects of Sedation Practices?  
Emergency Cardiac Care Update (ECCU), EMS Preconference Workshop  
June 3rd, 2014  
Las Vegas, NV
  176. Anxiolysis for the Cardiac Care Provider: Easy Choices for Sedation in  
Emergency Care  
Emergency Cardiac Care Update (ECCU), 2014 Citizens CPR  
Foundation: Clinical Solutions and Best Practices for EMS  
June 4th, 2014  
Las Vegas, NV
  177. Taking it on the QT: What are the Cardiac Effects of Sedation Practices?  
Emergency Cardiac Care Update (ECCU), 2014 Citizens CPR  
Foundation: Clinical Solutions and Best Practices for EMS  
June 4th, 2014  
Las Vegas, NV
  178. Hyperfibrinolysis, Physiologic Fibrinolysis, and Fibrinolysis Shutdown:  
The Spectrum of Postinjury Fibrinolysis and Relevance to Antifibrinolytic  
Therapy  
Moderator - Denver Health Trauma Services Continuing Education Series  
June 25<sup>th</sup>, 2014

Denver, CO

179. Myths in Pediatric Emergency Care  
41<sup>st</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
July 9<sup>th</sup>, 2014  
Breckenridge, CO
180. The Combative, Uncooperative, Intoxicated Patient: An Ethical, Moral  
and Legal Dilemma  
41<sup>st</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
July 11<sup>th</sup>, 2014  
Breckenridge, CO
181. Myths in Pediatric Care  
2014 University of Colorado Health and Denver Health Trauma Consortium:  
Acute Care Surgery, Trauma, and EMS Conference  
August 23<sup>rd</sup>, 2014  
Colorado Springs, CO
182. Rural Trauma Care  
Great Plains Trauma Conference  
September 18<sup>th</sup>, 2014  
North Platte, Nebraska
183. How to Break the Ache: 2014 Ways to Manage Prehospital Analgesia and  
Sedation  
Advanced EMS Practitioner's Forum and Workshop  
ACEP 2014  
October 26<sup>th</sup>, 2014  
Chicago, Illinois
184. No Small Lie: Debunking Myths in Pediatric EMS Care  
Advanced EMS Practitioner's Forum and Workshop  
ACEP 2014  
October 26<sup>th</sup>, 2014  
Chicago, Illinois
185. The Combative, Uncooperative, Arrested, and Threatening Trauma  
Patient: A Legal, Ethical, and Medical Minefield!  
American College of Emergency Physicians (ACEP) Scientific Assembly  
2014  
October 27<sup>th</sup>, 2014  
Chicago, Illinois
186. Cruising the Literature: The Most Influential EMS Articles of 2014  
American College of Emergency Physicians (ACEP) Scientific Assembly  
2014  
October 28<sup>th</sup>, 2014  
Chicago, Illinois
187. Tales from the Rig: EMS Medical Director Words of Wisdom  
American College of Emergency Physicians (ACEP) Scientific Assembly  
2014  
October 28<sup>th</sup>, 2014  
Chicago, Illinois

188. Imagine a World Without Backboards? Controversies in Spinal Immobilization  
American College of Emergency Physicians (ACEP) Scientific Assembly  
2014  
October 28<sup>th</sup>, 2014  
Chicago, Illinois
189. Disaster Management: Lessons Learned from the Colorado Shootings  
Keynote Address: 9th Annual NORTN Regional Trauma Conference  
November 7<sup>th</sup>, 2014  
Akron General Hospital, Akron, Ohio
190. The Combative, Uncooperative, Arrested, and Threatening Trauma Patient: A Legal, Ethical, and Medical Minefield!  
9<sup>th</sup> Annual NORTN Regional Trauma Conference  
November 7<sup>th</sup>, 2014  
Akron General Hospital, Akron, Ohio
191. Ketamine for Excited Delirium  
EMS World Expo  
November 11<sup>th</sup>, 2014  
Nashville, TN
192. 10 Myths of EMS Pediatric Care  
EMS World Expo  
November 11<sup>th</sup>, 2014  
Nashville, TN
193. Biophone Communications  
EMS World Expo  
November 11<sup>th</sup>, 2014  
Nashville, TN
194. EMS Medical Director Panel  
EMS World Expo  
November 12<sup>th</sup>, 2014  
Nashville, TN
195. The Combative, Uncooperative, Arrested, and Threatening Trauma Patient: A Legal, Ethical, and Medical Minefield!  
Boulder Community Hospital/AMR EMS Conference 2014  
December 6<sup>th</sup>, 2014  
Boulder, CO
196. Special K: Ketamine in EMS  
7<sup>th</sup> Annual Advanced Topics in Medical Direction  
NAEMSP 2015  
January 20<sup>th</sup>, 2015  
New Orleans, LA
197. First it was Backboards, now C-Collars  
EMS State of the Science: A Gathering of Eagles XVII  
February 20<sup>th</sup>, 2015  
Dallas, TX
198. Taking it to the Streets! Prehospital Infusion of Plasma

- EMS State of the Science: A Gathering of Eagles XVII  
February 20<sup>th</sup>, 2015  
Dallas, TX
199. Street Fighting Man! When the Combative Patient is Refusing Transport  
EMS State of the Science: A Gathering of Eagles XVII  
February 21<sup>st</sup>, 2015  
Dallas, TX
200. A Hurt-Full Remark: Supporting Ketamine Use for Pain Management  
EMS State of the Science: A Gathering of Eagles XVII  
February 21<sup>st</sup>, 2015  
Dallas, TX
201. Imagine a World Without Backboards? Controversies in Spinal Immobilization  
2nd Annual Brain Schimpf Memorial Pediatric EMS Conference  
February 28th, 2015  
Denver, CO
202. Providing for the Providers: Impact of Traumatic Events on Providers  
Keynote address: Colorado CPR Association Annual Meeting  
April 30<sup>th</sup>, 2015  
Denver, CO
203. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
North Trauma Care Region 2015 Trauma Symposium  
May 8<sup>th</sup>, 2015  
Tupelo, MS
204. Management of Excited Delirium in the Era of Legalized Marijuana  
Vanderbilt Residency in Emergency Medicine  
May 19<sup>th</sup>, 2015  
Nashville, TN
205. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
Grand Rounds Presentation, Vanderbilt University School of Medicine  
May 19<sup>th</sup>, 2015  
Nashville, TN
206. Active Shooter – Prehospital Forum (Moderator)  
42<sup>nd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 19<sup>th</sup>, 2015  
Vail, Colorado
207. Imagine a World without Backboards  
42<sup>nd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 20<sup>th</sup>, 2015  
Vail, Colorado
208. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
Ohio EMS Lecture Series – Keynote address  
August 20<sup>th</sup>, 2015



- Akron, Ohio
209. Myths in Pediatric Care  
Grand Rounds, Deaconess Regional Trauma Center  
EMS Trauma Symposium  
September 9<sup>th</sup>, 2015  
Evansville, Indiana
  210. Plasma Administration in the Field: The COMBAT Trial  
World Trauma Symposium  
September 16<sup>th</sup>, 2015  
Las Vegas, Nevada
  211. The Combative, Uncooperative, Intoxicated Trauma Patient: A Medical, Legal, and Ethical Nightmare!  
EMS World  
September 17<sup>th</sup>, 2015  
Las Vegas, Nevada
  212. The Medical Impact of Marijuana Legalization  
EMS World  
September 17<sup>th</sup>, 2015  
Las Vegas, Nevada
  213. How to Deploy a New Toy for Every Girl and Boy: Implementing a Simpler System for Treating Children  
ACEP 2015 Scientific Assembly Advanced EMS Practitioners Forum and Workshop  
October 25<sup>th</sup>, 2015  
Boston, Massachusetts
  214. For the Life of all Flesh is the Blood Thereof! Prehospital Use of Blood Products and Systemic Bleeding Control  
ACEP 2015 Scientific Assembly Advanced EMS Practitioners Forum and Workshop  
October 25<sup>th</sup>, 2015  
Boston, Massachusetts
  215. Trauma STAT! Don't Miss the Visual Cue  
ACEP Scientific Assembly 2015  
October 28<sup>th</sup>, 2015  
Boston, Massachusetts
  216. The Combative, Uncooperative Trauma Patient  
ACEP Scientific Assembly 2015  
October 28<sup>th</sup>, 2015  
Boston, Massachusetts
  217. How to Deploy a New Toy for Every Girl and Boy: Implementing a Simpler System for Treating Children  
EAGLES – Best Practices in Street Medicine: Implementing the New Guidelines and Several Exceptional Innovations in Out-of-Hospital Emergency Cardiac Care  
ECCU (Emergency Cardiovascular Care Update) 2015  
December 9<sup>th</sup>, 2015

- San Diego, California
218. Anxiolysis in Emergency Cardiac Care: 2015 Approaches to Safe Sedation  
 EAGLES – Best Practices in Street Medicine: Implementing the New Guidelines and Several Exceptional Innovations in Out-of-Hospital Emergency Cardiac Care  
 ECCU (Emergency Cardiovascular Care Update) 2015  
 December 9<sup>th</sup>, 2015  
 San Diego, California
219. Latest Drugs of Abuse: The Impact of Legalization of Marijuana and Testing of EMS Personnel  
 EMS Today (JEMS Conference and Exposition)  
 February 25<sup>th</sup>, 2016  
 Baltimore, Maryland
220. Chemical Suicides  
 EMS Today (JEMS Conference and Exposition)  
 February 25<sup>th</sup>, 2016  
 Baltimore, Maryland
221. Lightning Rounds: Ask the Eagles  
 EMS Today (JEMS Conference and Exposition)  
 February 26<sup>th</sup>, 2016  
 Baltimore, Maryland
222. Deliriously Yours: 2016 Approaches to Managing the Toxic Patients  
 First There First Care Regional EMS Conference  
 May 26<sup>th</sup>, 2016  
 Broward County, Florida
223. Promoting Post-Traumatic Provider Protection: Dealing with Depression, Anxiety, and Stress in EMS  
 First There First Care Regional EMS Conference  
 May 26<sup>th</sup>, 2016  
 Broward County, Florida
224. There Will Be Blood in the Streets: On-Scene Use of Plasma, Cells and Other Clot-Musters  
 First There First Care Regional EMS Conference  
 May 26<sup>th</sup>, 2016  
 Broward County, Florida
225. Trauma in Pregnancy  
 43<sup>rd</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
 June 18<sup>th</sup>, 2016  
 Denver, Colorado
226. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
 Zuckerberg San Francisco General Hospital and Trauma Center Department of Medicine Grand Rounds  
 September 6<sup>th</sup>, 2016  
 San Francisco, California

227. Primum Non Nocere – to Yourself: Responding to the Malicious Mayhem of Mentally-ill Menaces  
2016 ACEP Scientific Assembly – Advanced EMS Practitioner’s Forum and Workshop  
October 15<sup>th</sup>, 2016  
Las Vegas, Nevada
228. No Child (or Adult) Left Behind? The Complexities of Patient Refusal & Non-Transport Decisions  
2016 ACEP Scientific Assembly – Advanced EMS Practitioner’s Forum and Workshop  
October 15<sup>th</sup>, 2016  
Las Vegas, Nevada
229. Taking the Pressure Off Sedation: Why Ketamine is My Pet Amine  
2016 ACEP Scientific Assembly – Advanced EMS Practitioner’s Forum and Workshop  
October 15<sup>th</sup>, 2016  
Las Vegas, Nevada
230. Beyond the MVC: Burned, Blasted, and Bolted Trauma Victims  
2016 ACEP Scientific Assembly  
October 16<sup>th</sup>, 2016  
Las Vegas, Nevada
231. Fast Facts: Let’s Chat About Trauma  
2016 ACEP Scientific Assembly  
October 16<sup>th</sup>, 2016  
Las Vegas, Nevada
232. The Combative, Uncooperative, Trauma Patient  
2016 ACEP Scientific Assembly  
October 16<sup>th</sup>, 2016  
Las Vegas, Nevada
233. Managing the Malicious Mayhem from Mentally Ill Menaces: The Evolving Roles of EMS in Active Shooter Incidents  
41<sup>st</sup> Annual Alaska EMS Symposium  
November 4<sup>th</sup>, 2016  
Anchorage, Alaska
234. Grass Roots Experience with Swedish Fish: A Token Presentation on Marijuana Legalization  
41<sup>st</sup> Annual Alaska EMS Symposium  
November 4<sup>th</sup>, 2016  
Anchorage, Alaska
235. Promoting Post-Traumatic Provider Protection: Dealing with Depression, Anxiety, and Stress in EMS  
41<sup>st</sup> Annual Alaska EMS Symposium  
November 4<sup>th</sup>, 2016  
Anchorage, Alaska
236. Minding Your P’s and Q’s: What are the Actual Cardiac Effects of Sedation Practices?

- 41<sup>st</sup> Annual Alaska EMS Symposium  
November 4<sup>th</sup>, 2016  
Anchorage, Alaska
237. It's No Small Matter: Implementing a Simpler System for Treating Children  
41<sup>st</sup> Annual Alaska EMS Symposium  
November 4<sup>th</sup>, 2016  
Anchorage, Alaska
238. Calling a Code Alert on our Mental Health: Suicide in EMS  
2017 NAEMSP Annual Meeting and Scientific Assembly  
January 26<sup>th</sup>, 2017  
New Orleans, Louisiana
239. Child Abuse  
2017 Iowa Emergency Medical Services Association Pediatric Conference  
February 25<sup>th</sup>, 2017  
Des Moines, Iowa
240. Apparent Life-Threatening Events  
2017 Iowa Emergency Medical Services Association Pediatric Conference  
February 25<sup>th</sup>, 2017  
Des Moines, Iowa
241. Impact of Marijuana Legalization  
2017 Iowa Emergency Medical Services Association Pediatric Conference  
February 25<sup>th</sup>, 2017  
Des Moines, Iowa
242. Myths in Pediatric Care  
2017 Iowa Emergency Medical Services Association Pediatric Conference  
February 25<sup>th</sup>, 2017  
Des Moines, Iowa
243. Traumatic Shock  
UCSF High Risk Emergency Medicine Conference  
April 9<sup>th</sup>, 2017  
Maui, Hawaii
244. Penetrating Abdominal Trauma  
UCSF High Risk Emergency Medicine Conference  
April 9<sup>th</sup>, 2017  
Maui, Hawaii
245. The Combative, Intoxicated Trauma Patient: A Medical, Legal, and Ethical Conundrum!  
UCSF High Risk Emergency Medicine Conference  
April 9<sup>th</sup>, 2017  
Maui, Hawaii
246. Geriatric Trauma  
UCSF High Risk Emergency Medicine Conference  
April 9<sup>th</sup>, 2017  
Maui, Hawaii
247. Accidental Hypothermia

- Wilderness Medicine: Avoiding and Managing Outdoor Medical Emergencies  
UCSF Wilderness Medicine Medical School Elective and Mini Medical  
School for the Public  
April 26<sup>th</sup>, 2017  
San Francisco, California
248. High Altitude Illness  
Wilderness Medicine: Avoiding and Managing Outdoor Medical Emergencies  
UCSF Wilderness Medicine Medical School Elective and Mini Medical  
School for the Public  
April 26<sup>th</sup>, 2017  
San Francisco, California
249. Managing the Crashing, Combative Trauma Patient  
High Risk Emergency Medicine San Francisco  
June 1<sup>st</sup>, 2017  
San Francisco, California
250. Imaging in Trauma  
High Risk Emergency Medicine San Francisco  
June 1<sup>st</sup>, 2017  
San Francisco, California
251. Safe Sedation in the Era of Legalized Marijuana  
National EMS Safety Summit  
August 21<sup>st</sup>, 2017  
Denver, Colorado
252. Safety in EMS – Panel Discussion  
National EMS Safety Summit  
August 22<sup>nd</sup>, 2017  
Denver, Colorado
253. Lessons Learned from Active Shooter Scenarios  
6<sup>th</sup> Annual Medical-Legal Forum  
Mile High Regional Medical and Trauma Advisory Council  
September 28<sup>th</sup>, 2017  
Lakewood, Colorado
254. Integration and Challenges of Local, State and Federal Medical Surge  
Resources – Perspectives on the SFFW Full Scale Exercise and Asset  
Integration  
Panelist – Medical Peer to Peer Exchange Seminar  
San Francisco Fleet Week 2017  
October 4<sup>th</sup>, 2017  
San Francisco, California
255. Trauma STAT! Don't Miss This Visual Cue!  
American College of Emergency Physicians (ACEP) Scientific Assembly  
October 31<sup>st</sup>, 2017  
Washington D.C.
256. FAST FACTS: Let's Chat About Adult Trauma  
American College of Emergency Physicians (ACEP) Scientific Assembly  
October 31<sup>st</sup>, 2017



- Washington D.C.
257. Advanced Wound Care Closure in the ED: Putting the Pieces Back Together  
American College of Emergency Physicians (ACEP) Scientific Assembly  
October 31st, 2017  
Washington D.C.
  258. Pediatric Resuscitation is No Small Matter: 2017 Approaches to Managing Cardiac Events in Children  
Emergency Cardiovascular Care Update (ECCU) 2017  
December 5<sup>th</sup>, 2017  
New Orleans, Louisiana
  259. De-MS in EMS: Fentanyl versus Morphine for Chest Pain Management  
Emergency Cardiovascular Care Update (ECCU) 2017  
December 5<sup>th</sup>, 2017  
New Orleans, Louisiana
  260. Toxic Remarks: Case Studies of Cardiac Effects of Drugs of Abuse  
Emergency Cardiovascular Care Update (ECCU) 2017  
December 6<sup>th</sup>, 2017  
New Orleans, Louisiana
  261. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings  
Grand Rounds – University of Michigan Department of Emergency Medicine  
January 10<sup>th</sup>, 2018  
Ann Arbor, Michigan
  262. Better Mind Your P's and Q's: Subtle Cardiac Effects of Drugs of Abuse  
EMS State of the Science: A Gathering of Eagles XX  
March 2<sup>nd</sup>, 2018  
Dallas, Texas
  263. DeMSing EMS: Why I'd Get Rid of Morphine Sulfate  
EMS State of the Science: A Gathering of Eagles XX  
March 3<sup>rd</sup>, 2018  
Dallas, Texas
  264. A Grass Roots Experience: The Medical Implications of Marijuana Legalization in Colorado  
ZSFG Medicine Grand Rounds  
March 27<sup>th</sup>, 2018  
San Francisco, California
  265. Pitfalls in the Trauma Airway  
UCSF High Risk Emergency Medicine Hawaii  
April 9<sup>th</sup>, 2018  
Maui, Hawaii
  266. Challenging Trauma Case Panel  
Moderator  
UCSF High Risk Emergency Medicine  
April 11<sup>th</sup>, 2018  
Maui, Hawaii

267. Pitfalls in Patients with Stab Wounds  
UCSF High Risk Emergency Medicine Hawaii  
April 10<sup>th</sup>, 2018  
Maui, Hawaii
268. Pitfalls in the Patient Found Down  
UCSF High Risk Emergency Medicine Hawaii  
April 10<sup>th</sup>, 2018  
Maui, Hawaii
269. The Combative, Uncooperative Trauma Patient  
SEMPA 360 – Society of Emergency Medicine Physician Assistants National Assembly  
May 5<sup>th</sup>, 2018  
San Antonio, Texas
270. Mass Casualty: Lessons Learned from the Colorado Shootings  
SEMPA 360 – Society of Emergency Medicine Physician Assistants National Assembly  
May 5<sup>th</sup>, 2018  
San Antonio, Texas
271. The Medical Impact of Marijuana Legalization  
SEMPA 360 – Society of Emergency Medicine Physician Assistants National Assembly  
May 5<sup>th</sup>, 2018  
San Antonio, Texas
272. Update on Urologic Emergencies  
Moderator – Panel Discussion on Testicular Torsion, Priapism, and Penile Fracture  
American Urological Association (AUA) Annual Meeting 2018  
May 20<sup>th</sup>, 2018  
San Francisco, California
273. Assessing Capacity in the Intoxicated Trauma Patient  
Keynote Address – 45<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 7<sup>th</sup>, 2018  
Vail, Colorado
274. Pitfalls in Patients with Stab Wounds  
45<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 8<sup>th</sup>, 2018  
Vail, Colorado
275. Trauma Panel of Experts  
45<sup>th</sup> Annual Rocky Mountain Trauma and Emergency Medicine Conference  
June 8<sup>th</sup>, 2018  
Vail, Colorado
276. Cruising the Literature: Trauma 2018  
American College of Emergency Physicians (ACEP) National Scientific Assembly 2018  
October 2<sup>nd</sup>, 2018

San Diego, California

277. Fast Facts: Let's Chat about Adult Trauma

American College of Emergency Physicians (ACEP) National Scientific  
Assembly 2018  
October 2<sup>nd</sup>, 2018  
San Diego, California

278. ED Thoracotomy: When, Who, and How

American College of Emergency Physicians (ACEP) National Scientific  
Assembly 2018  
October 3<sup>rd</sup>, 2018  
San Diego, California

279. Clear as Mud: C-Spine Clearance 2018

American College of Emergency Physicians (ACEP) National Scientific  
Assembly 2018  
October 3<sup>rd</sup>, 2018  
San Diego, California

### **Certifications**

- NRP, 2009
- ATLS, 2003
  - ATLS Instructor
    - November 18<sup>th</sup>, 2016
    - July 23<sup>rd</sup>, 2017
    - June 25<sup>th</sup>, 2018
- ACLS, 1996
- PALS, 1994
- ATLS instructor, 2010 – present
- BLS, 2016

### **Media**

- Tales From the Front Lines - San Francisco Magazine – September, 2017
- How to Control Bleeding – The New York Times Magazine – April 22<sup>nd</sup>, 2018
- Skinned Knees to Broken Heads: Tracking Scooter Injuries – The New York Times – August 3<sup>rd</sup>, 2018
- Interview – NBC – Scooter injuries – August 8<sup>th</sup>, 2018
- Interview – San Francisco Chronicle – Scooter Injuries – August 11<sup>th</sup>, 2018

### **Additional Activities**

- President, Sigma Phi Epsilon fraternity, Ann Arbor, MI 1987-1988  
Active Member: 1984-1988
- Varsity Tennis, University of Michigan, Ann Arbor, MI 1984-1988  
Big Ten Team Champions: 1985, 1986, 1988. NCAA Team Semifinals: 1988
- Psi Chi Honor Society 1987-1988
- Captain, Varsity Tennis Team, La Jolla High School, La Jolla, CA
- Michigan Alumnae Scholarship recipient, San Diego Chapter 1984-1985

**Languages**     Fluent in Spanish

## Exhibit 5



XAVIER BECERRA  
Attorney General of California  
MARK R. BECKINGTON  
Supervising Deputy Attorney General  
JOHN D. ECHEVERRIA  
Deputy Attorney General  
State Bar No. 268843  
PETER H. CHANG  
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E-mail: Peter.Chang@doj.ca.gov  
*Attorneys for Defendant Xavier Becerra*

**IN THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA  
SOUTHERN DIVISION**

STEVEN RUPP; STEVEN DEMBER;  
CHERYL JOHNSON; MICHAEL JONES;  
CHRISTOPHER SEIFERT; ALFONSO  
VALENCIA; TROY WILLIS; DOUGLAS  
GRASSEY; DENNIS MARTIN; and  
CALIFORNIA RIFLE & PISTOL  
ASSOCIATION, INCORPORATED,

Plaintiffs,

vs.

XAVIER BECERRA, in his official capacity  
as Attorney General of the State of California;  
and DOES 1-10,

Defendants.

CASE NO.: 8:17-cv-00746-JLS-JDE

**EXPERT REPORT OF  
LUCY P. ALLEN**

Action Filed: April 24, 2017

## **I. SCOPE OF ASSIGNMENT**

1. I have been asked by the Office of the Attorney General of California to analyze the use of assault weapons (as defined under California law), including assault rifles, in public mass shootings.<sup>1</sup> In addition, I have been asked to analyze the use of large-capacity magazines (magazines capable of holding more than ten rounds) in public mass shootings, particularly as they are used in conjunction with assault weapons in such mass shootings.

## **II. QUALIFICATIONS AND REMUNERATION**

### **A. Qualifications**

2. I am a Managing Director of NERA Economic Consulting (“NERA”), a member of NERA’s Securities and Finance Practice and Chair of NERA’s Product Liability and Mass Torts Practice. NERA provides practical economic advice related to highly complex business and legal issues arising from competition, regulation, public policy, strategy, finance, and litigation. NERA was established in 1961 and now employs approximately 500 people in more than 20 offices worldwide.

3. In my over 20 years at NERA, I have been engaged as an economic consultant or expert witness in numerous projects involving economic and statistical analysis. I have been qualified as an expert and testified in court on various economic and statistical issues relating to the flow of guns into the criminal market. I have testified at trials in Federal District Court, before the New York City Council Public Safety Committee, the American Arbitration Association and the Judicial Arbitration Mediation Service, as well as in depositions.

4. I have an A.B. from Stanford University, an M.B.A. from Yale University, and M.A. and M. Phil. degrees in Economics, also from Yale University. Prior to joining NERA, I was an Economist for both President George H. W. Bush’s and President Bill Clinton’s Council

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<sup>1</sup> It is my understanding that the primary provisions of California law that are relevant to this case are: California Penal Code sections 30510 and 30515, and California Code of Regulations, title 11, section 5499. See, for example, California Department of Justice: “What is considered an assault weapon under California law?” and “What are AK and AR-15 series weapons?” <https://oag.ca.gov/firearms/regagunfaqs>, accessed October 25, 2018.

of Economic Advisers. My resume with recent publications and testifying experience is included as Appendix A.

## **B. Remuneration**

5. NERA is being compensated for time spent by me and my team at standard billing rates and for out-of-pocket expenses at cost. NERA currently bills for my time at \$900 per hour. NERA's fees are not in any way contingent upon the outcome of this matter.

## **III. MATERIALS CONSIDERED**

6. In preparing this report, I considered the following materials, in addition to the materials cited in attached Appendix B and Appendix C:
  - a) Third Amended Complaint for Declaratory and Injunctive Relief, filed June 27, 2018 ("Complaint");
  - b) California Department of Justice: "What is considered an assault weapon under California law?" and "What are AK and AR-15 series weapons?"  
<https://oag.ca.gov/firearms/regagunfaqs>, accessed October 25, 2018;
  - c) Mother Jones: "US Mass Shootings, 1982-2018: Data From Mother Jones' Investigation," updated September 20, 2018,  
<http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data>, accessed September 25, 2018; "A Guide to Mass Shootings in America," updated September 20, 2018, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>, accessed October 22, 2018; "What Exactly is a Mass Shooting," *Mother Jones*, August 14, 2012, <http://www.motherjones.com/mojo/2012/08/what-is-a-mass-shooting>. Additional details for the mass shootings obtained through Factiva and Google searches;
  - d) Citizens Crime Commission of New York City: "Mayhem Multiplied: Mass Shooters and Assault Weapons," 2016, <http://www.nycrimecommission.org/pdfs/CCC-MayhemMultiplied-June2016.pdf>; "Mass Shooting Incidents in America (1984-2012)," <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>,

accessed June 1, 2017. Additional details for the mass shootings obtained through Factiva and Google searches; and

- e) Kleck, Gary, “Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages,” 17 *Justice Research and Policy* 28 (2016).

#### IV. BACKGROUND

7. California law “generally prohibits” the manufacture, distribution and possession of certain firearms, defined as assault weapons (“Assault Weapons”).<sup>2</sup> According to California law, firearms qualify as Assault Weapons based on either their “make and model” or on certain “features.”<sup>3</sup> Examples of Assault Weapons include the “UZI,” “AK series” and “Colt AR-15 series” rifles, and the “Bushmaster XM15.”<sup>4</sup> A semiautomatic, centerfire rifle (without a fixed magazine) can also be considered an Assault Weapon if it includes certain features, including a “pistol grip,” a “thumbhole stock,” a “flash suppressor,” or an “adjustable” (telescoping or folding) stock.<sup>5</sup> It is my understanding that Plaintiffs are challenging certain provisions of California law related to rifles that would qualify as Assault Weapons under California Penal Code sections 30510(a), 30515(a)(1)(A-C) and (E-F), and 30515(a)(3) and section 5499 of title 11 of the California Code of Regulations (“Assault Rifles”).<sup>6</sup> Therefore, for the purpose of this report, the term Assault Rifles does not include pistols, shotguns, rifles with fixed magazines, or rifles that are equipped with a grenade launcher.

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<sup>2</sup> Complaint, ¶¶19-21. See, also, California Department of Justice: “What is considered an assault weapon under California law?” and “What are AK and AR-15 series weapons?” <https://oag.ca.gov/firearms/regagunfaqs>, accessed October 25, 2018.

<sup>3</sup> Complaint, ¶2.

<sup>4</sup> California Penal Code section 30510 and California Code of Regulations, title 11, section 5499. See, also, Complaint, ¶¶23,24,26.

<sup>5</sup> California Penal Code section 30515. See, also, Complaint, ¶7.

<sup>6</sup> Complaint, ¶4.

## V. FINDINGS

### A. Methodology

8. We analyzed the use of Assault Weapons and large-capacity magazines in public mass shootings using two sources: Mother Jones<sup>7</sup> and the Citizens Crime Commission of New York City.<sup>8,9</sup> The analysis focused on public mass shootings because it is my understanding that the state of California is concerned about public mass shootings and enacted the challenged laws, in part, to address the problem of public mass shootings.

9. The definition of a mass shooting and the period covered differed somewhat for each of the sources. The Mother Jones data that we analyzed covers 104 mass shootings from 1982 to September 2018. Mother Jones includes mass shootings in which four or more people were killed in one incident in a public place and excludes crimes involving armed robbery or gang violence.<sup>10</sup> Starting in January 2013, Mother Jones changed its definition of a mass shooting to include instances when three or more people were killed, consistent with a change in the federal definition of a mass shooting.<sup>11</sup> The Citizens Crime Commission data that we

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<sup>7</sup> “US Mass Shootings, 1982-2018: Data From Mother Jones’ Investigation,” *Mother Jones*, updated September 20, 2018, <http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data>, accessed September 25, 2018.

<sup>8</sup> “Mayhem Multiplied: Mass Shooters and Assault Weapons,” *Citizens Crime Commission of New York City*, 2016. Additional details on the mass shootings were obtained from an earlier source by the Citizens Crime Commission. “Mass Shooting Incidents in America (1984-2012),” *Citizens Crime Commission of New York City*, <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>, accessed June 1, 2017.

<sup>9</sup> I found Mother Jones and Citizens Crime Commission to maintain the most comprehensive lists of relevant mass shootings when I began research in 2013 on mass shootings in response to a challenge to New York state law. I am not aware of any other source that is more applicable (including focusing on the type of mass shootings that I understand are of concern to New York and other states/municipalities). There is substantial overlap between the mass shootings in the Mother Jones and Citizens Crime Commission datasets. In particular, the Mother Jones data contains 93% of the mass shootings in the Citizens Crime Commission data for the years covered by both data sources, 1984 to 2016. Note that I have analyzed the mass shootings identified by Dr. Gary Kleck and found similar conclusions for mass shootings that involved large-capacity magazines.

<sup>10</sup> “A Guide to Mass Shootings in America,” *Mother Jones*, updated September 20, 2018, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>, accessed October 22, 2018. See also, “What Exactly is a Mass Shooting,” *Mother Jones*, August 14, 2012. <http://www.motherjones.com/mojo/2012/08/what-is-a-mass-shooting>.

The Mother Jones data contains 93% of the mass shootings in the Citizens Crime Commission data for the years covered by both data sources, 1984 to 2016.

<sup>11</sup> “A Guide to Mass Shootings in America,” *Mother Jones*, updated September 20, 2018, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>, accessed October 22, 2018. Note this



analyzed covers 73 mass shootings from 1984 to June 2016. Citizens Crime Commission includes mass shootings in which four or more people were killed in a public place and was unrelated to another crime (such as robbery or domestic violence).<sup>12</sup> We combined the data from both sources and searched news stories on each mass shooting to obtain additional details on the types of weapons used as well as data on shots fired where available. We compared the details on the weapons used in each shooting to the list of prohibited firearms and features specified in California law to identify, based on this publicly available information, which mass shootings involved the use of Assault Weapons or more specifically Assault Rifles. In addition, we identified, based on this publicly available information, which mass shootings involved the use of large-capacity magazines. See attached Appendix B for a summary of the combined data, and Appendix C for a summary of the weapons used in each public mass shooting based on Mother Jones, Citizens Crime Commission, and news reports.

### **B. Use of Assault Weapons in public mass shootings**

10. Based on the data, we found that Assault Weapons are often used in public mass shootings. Whether an Assault Weapon was used in a mass shooting can be determined in 104 out of the 109 incidents (95%) considered in this analysis. Out of these 104 mass shootings, 27 (or 26%) involved Assault Weapons. Even assuming the mass shootings where it is not known whether an Assault Weapon was used *all* did not involve an Assault Weapon, 27 out of 109 mass shootings, or 25%, involved Assault Weapons.

11. In addition, in 25 of the 27 mass shootings that involved an Assault Weapon (93%), the Assault Weapon used was an Assault Rifle (rather than a pistol or shotgun). In all, an Assault Rifle was used in 25 (or 23%) of the 109 public mass shootings analyzed.

12. Based on our analysis, casualties were higher in the mass shootings that involved Assault Weapons than in other mass shootings. In particular, we found an average number of fatalities or injuries of 46 per mass shooting with an Assault Weapon versus 12 for those

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analysis of the Mother Jones data may not match other analyses because Mother Jones periodically updates its historical data.

<sup>12</sup> “Mayhem Multiplied: Mass Shooters and Assault Weapons,” *Citizens Crime Commission of New York City*, 2016. Additional details, such as the number of shots fired, were obtained from an earlier source by the Citizens Crime Commission. “Mass Shooting Incidents in America (1984-2012),” *Citizens Crime Commission of New York City*, <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>, accessed June 1, 2017.

without. Focusing on just fatalities, we found an average number of fatalities of 12 per mass shooting with an Assault Weapon versus 7 for those without. (See table below.)

13. We also found that casualties were higher in public mass shootings that involved Assault *Rifles*. In particular, we found an average number of fatalities or injuries of 48 per mass shooting that involved Assault Rifles versus 12 for those that did not involve any kind of Assault Weapon. Focusing on just fatalities, we found an average number of fatalities of 13 per mass shooting with an Assault Rifle versus 7 for those that did not involve any kind of Assault Weapon. (See table below.)

### **C. Use of large-capacity magazines in public mass shootings**

14. Based on the data, we found that large-capacity magazines (those with a capacity to hold more than 10 rounds of ammunition) are often used in public mass shootings. Magazine capacity is known in 90 out of the 109 mass shootings (83%) considered in this analysis. We found that large-capacity magazines were used in the majority of mass shootings since 1982 regardless of how mass shootings with unknown magazine capacity are treated. In particular, of the 90 mass shootings with known magazine capacity, 59 (or 66%) involved large-capacity magazines. Even assuming the mass shootings with unknown magazine capacity *all* did not involve large-capacity magazines, the majority of mass shootings involved large capacity magazines (59 out of 109 mass shootings or 54%). (See table below.)

15. Based on our analysis of the public mass shootings data, casualties were higher in the mass shootings that involved weapons with large-capacity magazines than in other mass shootings. In particular, we found an average number of fatalities or injuries of 30 per mass shooting with a large-capacity magazine versus 10 for those without.<sup>13</sup> Focusing on just fatalities, we found an average number of fatalities of 10 per mass shooting with a large-capacity magazine versus 6 for those without. (See table below.)

16. In addition, we found that casualties were higher in the mass shootings that involved both Assault Weapons *and* large-capacity magazines. In particular, we found an

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<sup>13</sup> An analysis of the mass shootings detailed in an article by Gary Kleck yielded similar results (21 average fatalities or injuries in mass shootings involving large-capacity magazines versus 8 for those without). The article covered 88 mass shooting incidents between 1994 and 2013. Kleck, Gary, "Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages," 17 *Justice Research and Policy* 28 (2016).

average number of fatalities or injuries of 47 per mass shooting with both an Assault Weapon and a large-capacity magazine versus 9 for those without either. Focusing on just fatalities, we found an average number of fatalities of 12 per mass shooting with both an Assault Weapon and a large-capacity magazine versus 6 for those without either. (See table below.)

17. For mass shootings that involved both Assault *Rifles* and large-capacity magazines, we found an average number of fatalities or injuries of 50 per mass shooting with both an Assault Rifle and a large-capacity magazine versus 9 for mass shootings without either. Focusing on just fatalities, we found an average number of fatalities of 13 per mass shooting with both versus 6 for those without either. (See table below.)

<b>Numbers of Fatalities and Injuries in Public Mass Shootings</b>				
<b>Weapon Used</b>	<b># of Incidents</b>	<b>Average # of</b>		
		<b>Fatalities</b>	<b>Injuries</b>	<b>Total</b>
Assault Weapon	27	12	33	46
<i>Assault Rifle</i>	25	13	36	48
No Assault Weapon	77	7	5	12
Unknown	5	7	2	9
Large-Cap. Mag.	59	10	19	30
No Large-Cap. Mag.	31	6	3	10
Unknown	19	4	3	7
Assault Weapon & Large-Cap. Mag.	26	12	34	47
<i>Assault Rifle</i> & Large-Cap. Mag.	24	13	37	50
Large-Cap. Mag. only	30	9	8	17
No Assault Weapon or Large-Cap. Mag.	30	6	3	9
Unknown	23	5	3	8

#### **D. Number of rounds fired in public mass shootings with Assault Weapons or large-capacity magazines**

18. The data on public mass shootings indicates that it is common for offenders to fire more than ten rounds when using an Assault Weapon. Of the 27 mass shootings that involved an

Assault Weapon, there are 18 in which the number of shots fired is known. Shooters fired more than ten rounds in *all* 18 incidents, and the average number of shots fired was 170.

19. In addition, the data indicates that it is common for offenders to fire more than ten rounds when using a gun with a large-capacity magazine in mass shootings. Of the 59 mass shootings that involved a large-capacity magazine, there are 39 in which the number of shots fired is known. Shooters fired more than ten rounds in 37 of the 39 incidents, and the average number of shots fired was 107.

#### **E. Percent of mass shooters' guns legally obtained**

20. The data on public mass shootings indicates that the majority of guns used in these mass shootings were obtained legally.<sup>14</sup> According to the data, shooters in at least 68% of mass shootings obtained their guns legally (at least 74 of the 109 mass shootings) and at least 73% of the guns used in these 109 mass shootings were obtained legally (at least 177 of the 242 guns).<sup>15</sup>



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Lucy P. Allen

October 25, 2018

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<sup>14</sup> The determination of whether guns were obtained legally is based on Mother Jones reporting.

<sup>15</sup> Mother Jones did not indicate whether the guns were obtained legally for 13% of mass shootings (14 out of the 104 mass shootings covered by Mother Jones).



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## Appendix A

### MANAGING DIRECTOR

#### Education

##### **YALE UNIVERSITY**

M.Phil., Economics, 1990

M.A., Economics, 1989

M.B.A., 1986

##### **STANFORD UNIVERSITY**

A.B., Human Biology, 1981

#### Professional Experience

- 1994-Present      **National Economic Research Associates, Inc.**  
Managing Director. Responsible for economic analysis in the areas of securities, finance and environmental and tort economics.  
Senior Vice President (2003-2016).  
Vice President (1999-2003).  
Senior Consultant (1994-1999).
- 1992-1993      **Council of Economic Advisers, Executive Office of the President**  
Staff Economist. Provided economic analysis on regulatory and health care issues to Council Members and interagency groups. Shared responsibility for regulation and health care chapters of the *Economic Report of the President, 1993*. Working Group member of the President's National Health Care Reform Task Force.
- 1986-1988      **Ayers, Whitmore & Company (General Management Consultants)**  
1983-1984      Senior Associate. Formulated marketing, organization, and overall business strategies including:  
Plan to improve profitability of chemical process equipment manufacturer.  
Merger analysis and integration plan of two equipment manufacturers.  
Evaluation of Korean competition to a U.S. manufacturer.  
Diagnostic survey for auto parts manufacturer on growth obstacles.  
Marketing plan to increase international market share for major accounting firm.



Summer 1985      **WNET/Channel Thirteen, Strategic Planning Department**  
Associate. Assisted in development of company's first long-term strategic plan. Analyzed relationship between programming and viewer support.

1981-1983      **Arthur Andersen & Company**  
Consultant. Designed, programmed and installed management information systems. Participated in redesign/conversion of New York State's accounting system. Developed municipal bond fund management system, successfully marketed to brokers. Participated in President's Private Sector Survey on Cost Control (Grace Commission). Designed customized tracking and accounting system for shipping company.

Teaching  
1989- 1992      **Teaching Fellow, Yale University**  
Honors Econometrics  
Intermediate Microeconomics  
Competitive Strategies  
Probability and Game Theory  
Marketing Strategy  
Economic Analysis

## **Publications, Speeches and Conference Papers**

"Snapshot of Recent Trends in Asbestos Litigation: 2018 Update," (co-author), NERA Report, 2018.

"Trends and the Economic Effect of Asbestos Bans and Decline in Asbestos Consumption and Production Worldwide," (co-author), *International Journal of Environmental Research and Public Health*, 15(3), 531, 2018.

"Snapshot of Recent Trends in Asbestos Litigation: 2017 Update," (co-author), NERA Report, 2017.

"Asbestos: Economic Assessment of Bans and Declining Production and Consumption," World Health Organization, 2017.

"Snapshot of Recent Trends in Asbestos Litigation: 2016 Update," (co-author), NERA Report, 2016.

"Economic Dimension and Societal Costs and Benefits of Banning Asbestos," presented at the World Health Organization, Regional Office for Europe conference, Assessing the Economic Costs of the Health Impacts of Environmental and Occupational Factors: The Economic Dimension of Asbestos, Bonn, Germany, 2016.

"Snapshot of Recent Trends in Asbestos Litigation: 2015 Update," (co-author), NERA Report, 2015.

Participant in panel on “Expert Reports and Depositions” at PLI Expert Witness 2014, hosted by the Practising Law Institute, New York, New York, 2014.

“Snapshot of Recent Trends in Asbestos Litigation: 2014 Update,” (co-author), NERA Report, 2014.

“High Frequency Trading --A Primer in 1,800,000 Milliseconds” before the Litigation Group at Morrison Foerster, New York, New York, 2014.

“Snapshot of Recent Trends in Asbestos Litigation: 2013 Update,” (co-author), NERA Report, 2013.

“Asbestos Payments per Resolved Claim Increased 75% in the Past Year – Is This Increase as Dramatic as it Sounds? Snapshot of Recent Trends in Asbestos Litigation: 2012 Update,” (co-author), NERA Report, 2012.

“Snapshot of Recent Trends in Asbestos Litigation: 2011 Update,” (co-author), NERA White Paper, 2011.

Participant in panel at The Implications of Matrixx, hosted by NERA Economic Consulting, New York, New York, 2011.

“2011 & Beyond–Predicting Mass Tort Litigation: with a Focus on Pharmaceutical Torts” presented at Emerging Insurance Coverage and Allocation Issues, hosted by Perrin Conferences, New York, New York, 2011.

Presented recent trends in settlements, predicting settlement amounts, and the use of economic analysis at mediation in the “Settlement Trends & Tactics” panel at Securities Litigation & Enforcement: Current Developments & Strategies, hosted by the New York City Bar, New York, New York, 2010.

“Snapshot of Recent Trends in Asbestos Litigation: 2010 Update,” (co-author), NERA White Paper, 2010.

“Settlement Trends and Tactics” presented at Securities Litigation During the Financial Crisis: Current Development & Strategies, hosted by the New York City Bar, New York, New York, 2009.

“GM and Chrysler Bankruptcies: Potential Impact on Other Asbestos Defendants” presented at Asbestos Litigation Conference: A Comprehensive National Overview and Outlook, hosted by Perrin Conferences, San Francisco, California, 2009.

“Snapshot of Recent Trends in Asbestos Litigation,” (co-author), NERA White Paper, 2009.

“Emerging Economies and Product Recall -- Are the Claims Coming?” presented at The International Reinsurance Summit 2008, Hamilton, Bermuda, 2008.

“China Product Recalls: What’s at Stake and What’s Next,” (co-author), NERA Working Paper, 2008.

“Recent Trends in Securities Litigation” presented at Strategies, Calculations & Insurance in Complex Business Litigation, hosted by the Directors Roundtable, New York, New York, 2008.

“The Current Landscape” presented at Mealey's Product Recall Liability Conference: Made in China and Beyond, Washington, DC, 2007.

“China Product Recalls: What's at Stake and What's Next” presented at China Product Recalls, sponsored by National Economic Research Associates, New York, New York, 2007.

“Damages and Loss Causation in Shareholder Class Actions after Dura” presented at Securities Litigation: Emerging Trends in Enforcement and Winning Litigation Strategies hosted by the International Quality & Productivity Center, New York, New York, 2006.

“Forecasting Product Liability by Understanding the Driving Forces,” (co-author), The International Comparative Legal Guide to Product Liability, 2006.

“Recent Trends in Securities Class Action Litigation,” presented at The Class Action Litigation Summit Program Class Action in the Securities Industry, Washington, D.C., 2003.

“Product Liability Claims Estimation – Four Steps, Four Myths” presented at Standard & Poor’s Seminar, New York, New York, 2001.

“How Bad Can It Be? The Economics of Damages and Settlements in Shareholder Class Actions,” Balancing Disclosure and Litigation Risks for Public Companies (Or Soon-To-Be Public Companies) Seminar, sponsored by Alston & Bird LLP and RR Donnelley Financial, Nashville, Tennessee, 2000.

“Securities Litigation Reform: Problems and Progress,” Viewpoint, November 1999, Issue No. 2 (co-authored).

“Trends in Securities Litigation and the Impact of the PSLRA,” Class Actions & Derivative Suits, American Bar Association Litigation Section, Vol. 9, No. 3, Summer 1999 (co-authored).

“Random Taxes, Random Claims,” Regulation, Winter 1997, pp. 6-7 (co-authored).

“Adverse Selection in the Market for Used Construction Equipment,” presented at the NBER Conference on Research in Income and Wealth, Federal Reserve Board, June 1992.

## **Expert Reports, Depositions & Testimony (4 years)**

Rebuttal Report and Expert Reports before the Clark County District Court of Nevada in *Round Square Company Limited v. Las Vegas Sands, Inc.*, 2018.

Supplemental Report and Expert Report before the United States District Court Middle District of Tennessee in *Zwick Partners LP and Aparna Rao v. Quorum Health Corporation, et al.*, 2018.

Declaration before the Superior Court of the State of Vermont in *Vermont Federation of Sportsmen's Club et al. v. Matthew Birmingham et al.*, 2018.

Deposition Testimony and Expert Report before the United States District Court Middle District of Tennessee in *Nikki Bollinger Grae v. Corrections Corporation of America et al.*, 2018.

Expert Report before the United States District Court Northern District of Illinois Eastern Division in *In re Allstate Corporation Securities Litigation*, 2018.

Expert Report before the Eighth Judicial District Court for the State of Nevada in *Dan Schmidt v. Liberator Medical Holdings, Inc., et al.*, 2018.

Testimony and Expert Report before the American Arbitration Association in *Arctic Glacier U.S.A, Inc. and Arctic Glacier U.S.A., Inc. Savings and Retirement Plan v. Principal Life Insurance Company*, 2018.

Deposition Testimony and Expert Report before the United States District Court Southern District of New York in *Marvin Pearlstein v. Blackberry Limited et al.*, 2018.

Deposition Testimony and Expert Report before the United States District Court Eastern District of Texas in *Alan Hall and James DePalma v. Rent-A-Center, Inc., Robert D. Davis, and Guy J. Constant*, 2018.

Deposition Testimony, Surrebuttal Report, Rebuttal Report and Expert Report before the United States District Court Southern District of Iowa in *Mahaska Bottling Company, Inc., et al. v. PepsiCo, Inc. and Bottling Group, LLC*, 2018.

Testimony, Deposition Testimony and Declaration before the United States District Court District of New Jersey in *Association of New Jersey Rifle & Pistol Clubs, Inc. et al. v. Gurbir Grewal et al.*, 2018.

Deposition Testimony, Supplemental Report and Expert Report before the Supreme Court of the State of New York in *Bernstein Liebhard, LLP v. Sentinel Insurance Company, Ltd.*, 2018.

Expert Report before the District Court for Douglas County, Nebraska in *Union Pacific Railroad Company v. L.B. Foster Company and CXT Incorporated*, 2018.

Deposition Testimony and Declarations before the United States District Court Southern District of New York in *Andrew Meyer v. Concordia International Corp., et al.*, 2018.

Deposition Testimony before the United States District Court Southern District of California in *Virginia Duncan, et al. v. Xavier Becerra, et al.*, 2018.

Expert Report and Declaration before the United States District Court Southern District of California in *Virginia Duncan, et al. v. Xavier Becerra, et al.*, 2017.

Deposition Testimony and Expert Report before the United States District Court for the Western District of Texas, Austin Division in *City of Pontiac General Employees' Retirement System v. Dell, Inc., et al.*, 2017.

Deposition Testimony and Expert Report before the United States District Court for the Southern District of Texas, Houston Division in *In re Willbros Group, Inc. Securities Litigation*, 2017.

Declaration before the United States District Court Eastern District of California in *William Wiese, et al. v. Xavier Becerra, et al.*, 2017.

Deposition Testimony and Expert Report before the United States District Court for the Southern District of Texas, Houston Division in *In re Cobalt International Energy Inc. Securities Litigation.*, 2017.

Testimony, Deposition Testimony and Expert Report before the United States District Court for the Northern District of Texas, Dallas Division in *DEKA Investment GmbH, et al. v. Santander Consumer USA Holdings, Inc., et al.*, 2017.

Deposition Testimony before the Superior Court of the State of North Carolina for Mecklenburg County in *Next Advisor, Inc. v. LendingTree, Inc.*, 2017

Deposition Testimony and Expert Report before the Supreme Court of the State of New York, County of New York in *Iroquois Master Fund Ltd., et al. v. Hyperdynamics Corporation*, 2016.

Deposition Testimony and Expert Report before the United States District Court for the Northern District of Texas, Dallas Division in *The Archdiocese of Milwaukee Supporting Fund, Inc., et al. v. Halliburton Company, et al.*, 2016.

Expert Report before the United States District Court for the Northern District of Georgia, Atlanta Division, in *In re Suntrust Banks, Inc. ERISA Litigation*, 2016.

Deposition Testimony and Expert Report before the Superior Court of New Jersey, Union County, in *Syngenta Crop Protection, Inc. v. Insurance Company of North America et al.*, 2015.

Declaration before the United States District Court Northern District of Georgia, in *John Noble, et al. v. Premiere Global Services, Inc., et al.*, 2015.

Deposition Testimony and Expert Report before the United States District Court Central District of California, in *Amanda Sateriale, et al. v. RJ Reynolds Tobacco Co. et al.*, 2015.

Rebuttal Report and Expert Report in the United States of America before the Securities and Exchange Commission in *Houston American Energy Corp., et al.*, 2014.

Testimony, Deposition Testimony and Expert Report before the United States District Court for the Northern District of Texas, Dallas Division in *The Archdiocese of Milwaukee Supporting Fund, Inc., et al. v. Halliburton Company, et al.*, 2014.

Deposition Testimony and Expert Report before the United States District Court for the Eastern District of Pennsylvania in *Power Restoration International, Inc. v. PepsiCo, Inc., Bottling Group, LLC, and Frito-Lay Trading Company (Europe), GmbH*, 2014.

Deposition Testimony and Expert Reports before the United States District Court Southern District of New York in *In re Lower Manhattan Disaster Site Litigation*, 2014.

Deposition Testimony and Expert Report before the United States District Court Southern District of Florida in *Atul Kumar Sood, et al. v. Catalyst Pharmaceutical Partners Inc., et al.*, 2014.

Declaration before the Superior Court of Gwinnett County State of Georgia in *City of Riviera Beach General Employees Retirement System, et al. v. Aaron's Inc., et al., Norfolk County Retirement System, et al. v. Aaron's Inc., et al.*, 2014.

Deposition Testimony, Surrebuttal Report and Expert Report before the United States District Court Middle District of Tennessee Nashville Division in *Garden City Employees' Retirement System and Central States, Southeast and Southwest Areas Pension Fund, et al. v. Psychiatric Solutions, Inc., et al.*, 2014.

Declaration before the United States District Court Northern District of California San Jose Division in *Fyock, et al. v. The City of Sunnyvale, et al.*, 2014.

Deposition Testimony and Expert Report before the United States District Court for the District of Maryland (Northern Division) in *Kolbe, et al. v. O'Malley, et al.*, 2014.

Declaration before the United States District Court Northern District of California in *San Francisco Veteran Police Officers Association, et al. v. The City and County of San Francisco, et al.*, 2014.



## Appendix B

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Source	Large			Assault Rifle? <sup>b</sup>	Assault Weapon? <sup>b</sup>	Total		Gun(s) Obtained Legally? <sup>d</sup>	Offenders' Number of Guns
				Cap. Mag.? <sup>a</sup>	Fatalities <sup>c</sup>	Injuries <sup>c</sup>			Fatalities & Injuries <sup>c</sup>	Shots Fired		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Rite Aid Warehouse	Perryman, MD	9/20/2018	MJ	-	No	No	3	3	6	-	Yes	1
2. T&T Trucking	Bakersfield, CA	9/12/2018	MJ	No	No	No	5	0	5	-	-	1
3. Fifth Third Center	Cincinnati, OH	9/6/2018	MJ	-	No	No	3	2	5	-	-	1
4. Capital Gazette	Annapolis, MD	6/28/2018	MJ	-	No	No	5	2	7	-	Yes	1
5. Santa Fe High School	Santa Fe, TX	5/18/2018	MJ	No	No	No	10	13	23	-	-	2
6. Waffle House	Nashville, TN	4/22/2018	MJ	Yes	Yes	Yes	4	4	8	-	Yes	1
7. Yountville Veterans Home	Yountville, CA	3/9/2018	MJ	-	-	-	3	0	3	-	Yes	2
8. Stoneman Douglas HS	Parkland, FL	2/14/2018	MJ	Yes	No	No	17	14	31	-	Yes	1
9. Pennsylvania Carwash	Melcroft, PA	1/28/2018	MJ	Yes	-	-	4	1	5	-	-	3 <sup>e</sup>
10. Rancho Tehama	Rancho Tehama, CA	11/14/2017	MJ	Yes	Yes	Yes	5	10	15	30 <sup>f</sup>	No	2
11. Texas First Baptist Church	Sutherland Springs, TX	11/5/2017	MJ	Yes	Yes	Yes	26	20	46	450 <sup>g</sup>	Yes	1
12. Suburban Denver Walmart	Thornton, CO	11/1/2017	MJ	-	No	No	3	0	3	30 <sup>h</sup>	-	1
13. Edgewood Business Park	Edgewood, MD	10/18/2017	MJ	-	No	No	3	3	6	-	No	1
14. Las Vegas Strip	Las Vegas, NV	10/1/2017	MJ	Yes	Yes	Yes	58	546	604	1100 <sup>i</sup>	Yes	23
15. San Francisco UPS	San Francisco, CA	6/14/2017	MJ	Yes	Yes	No	3	2	5	-	No	2
16. Pennsylvania Supermarket	Tunkhannock, PA	6/7/2017	MJ	No	No	No	3	0	3	59 <sup>j</sup>	-	2
17. Fiamma Workplace	Orlando, FL	6/5/2017	MJ	-	No	No	5	0	5	-	-	1
18. Ohio Nursing Home	Kirkersville, OH	5/12/2017	MJ	-	No	No	3	0	3	-	-	2
19. Fresno Downtown	Fresno, CA	4/18/2017	MJ	No	No	No	3	0	3	16 <sup>k</sup>	-	1
20. Fort Lauderdale Airport	Fort Lauderdale, FL	1/6/2017	MJ	-	No	No	5	6	11	15 <sup>l</sup>	Yes	1
21. Cascade Mall	Burlington, WA	9/23/2016	MJ	-	No	No	5	0	5	-	-	1
22. Baton Rouge Police	Baton Rouge, LA	7/17/2016	MJ	Yes	Yes	Yes	3	3	6	43 <sup>m</sup>	-	3
23. Dallas Police	Dallas, TX	7/7/2016	MJ	Yes	Yes	Yes	5	11	16	-	Yes	3
24. Orlando Nightclub	Orlando, FL	6/12/2016	MJ/CC	Yes	Yes	Yes	49/50	53	102/103	110 <sup>n</sup>	Yes	2
25. Excel Industries	Hesston, KS	2/25/2016	MJ	Yes	Yes	Yes	3	14	17	-	Yes	2
26. Kalamazoo	Kalamazoo County, MI	2/20/2016	MJ	-	No	No	6	2	8	-	Yes	1
27. San Bernardino	San Bernardino, CA	12/2/2015	MJ/CC	Yes	Yes	Yes	14/16	21	35/37	150 <sup>o</sup>	Yes	4
28. Planned Parenthood Clinic	Colorado Springs, CO	11/27/2015	MJ	-	Yes	Yes	3	9	12	-	-	1
29. Colorado Springs	Colorado Springs, CO	10/31/2015	MJ	Yes	Yes	Yes	3	0	3	-	Yes	3

## Appendix B

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Large			Offenders						
			Cap. Mag. <sup>a</sup>	Assault Weapon <sup>b</sup>	Assault Rifle <sup>b</sup>	Fatalities & Injuries <sup>c</sup>	Shots Fired	Obtained Legally? <sup>d</sup>	Number of Guns			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
30. Umpqua Community College	Roseburg, OR	10/1/2015	MJ/CC	Yes	No	No	9/10	9	18/19	-	Yes	6
31. Chattanooga Military Center	Chattanooga, TN	7/16/2015	MJ/CC	Yes	Yes	Yes	5/6	2/3	7/9	-	Yes	3
32. Charleston Church	Charleston, SC	6/17/2015	MJ/CC	Yes	No	No	9	1	10	-	Yes	1
33. Trestle Trail Bridge	Menasha, WI	6/11/2015	MJ	-	No	No	3	1	4	-	Yes	2
34. Marysville High School	Marysville, WA	10/24/2014	MJ/CC	Yes	No	No	5	1	6	-	Stolen	1
35. Isla Vista	Santa Barbara, CA	5/23/2014	MJ	Yes	No	No	6	13	19	50 P	Yes	3
36. Fort Hood	Fort Hood, TX	4/3/2014	MJ	-	No	No	3	12	15	-	Yes	1
37. Alturas Tribal	Alturas, CA	2/20/2014	MJ	-	No	No	4	2	6	-	-	2
38. Washington Navy Yard	Washington, D.C.	9/16/2013	MJ/CC	No	No	No	12/13	8/7	20	-	Yes	2
39. Hialeah	Hialeah, FL	7/26/2013	MJ/CC	Yes	No	No	7	0	7	10 q	Yes	1
40. Santa Monica	Santa Monica, CA	6/7/2013	MJ/CC	Yes	Yes	Yes	6	3/4	9/10	70 r	Yes	2
41. Federal Way	Federal Way, WA	4/21/2013	MJ	-	No	No	5	0	5	-	Yes	2
42. Upstate New York	Herkimer County, NY	3/13/2013	MJ	-	No	No	5	2	7	-	Yes	1
43. Newtown School	Newtown, CT	12/14/2012	MJ/CC	Yes	Yes	Yes	28	2	30	154	Stolen	4/3
44. Accent Signage Systems	Minneapolis, MN	9/27/2012	MJ/CC	Yes	No	No	7	1/2	8/9	46	Yes	1
45. Sikh Temple	Oak Creek, WI	8/5/2012	MJ/CC	Yes	No	No	7	3	10	-	Yes	1
46. Aurora Movie Theater	Aurora, CO	7/20/2012	MJ/CC	Yes	Yes	Yes	12	70	82	80	Yes	4
47. Seattle Café	Seattle, WA	5/30/2012	MJ/CC	No	No	No	6	1	7	-	Yes	2
48. Oikos University	Oakland, CA	4/2/2012	MJ/CC	No	No	No	7	3	10	-	Yes	1
49. Su Jung Health Sauna	Norcross, GA	2/22/2012	MJ	-	No	No	5	0	5	-	Yes	1
50. Seal Beach	Seal Beach, CA	10/14/2011	MJ/CC	No	No	No	8	1	9	-	Yes	3
51. IHOP	Carson City, NV	9/6/2011	MJ/CC	Yes	Yes	Yes	5	7	12	-	Yes	3
52. Grand Rapids	Grand Rapids, MI	7/7/2011	CC	Yes	No	No	8	2	10	10	-	1
53. Tucson	Tucson, AZ	1/8/2011	MJ/CC	Yes	No	No	6	13	19	33	Yes	1
54. Hartford Beer Distributor	Manchester, CT	8/3/2010	MJ/CC	Yes	No	No	9	2	11	11	Yes	2
55. Yoyito Café	Hialeah, FL	6/6/2010	CC	No	No	No	5	3	8	9 s	-	-
56. Coffee Shop Police	Parkland, WA	11/29/2009	MJ/CC	No	No	No	4/5	1/0	5	-	Stolen	2
57. Fort Hood	Fort Hood, TX	11/5/2009	MJ/CC	Yes	No	No	13	30/32	43/45	214	Yes	1
58. Binghamton	Binghamton, NY	4/3/2009	MJ/CC	Yes	No	No	14	4	18	99	Yes	2

**Combined Public Mass Shootings Data  
1982 – September 2018**

Case	Location	Date	Source	Large			Fatalities <sup>c</sup>	Injuries <sup>c</sup>	Total	Shots Fired	Offenders'	
				Cap. Mag. <sup>a</sup>	Assault Weapon? <sup>b</sup>	Assault Rifle? <sup>b</sup>					Gun(s) Obtained Legally? <sup>d</sup>	Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
59. Carthage Nursing Home	Carthage, NC	3/29/2009	MJ/CC	No	No	No	8	3/2	11/10	-	Yes	2
60. Atlantis Plastics	Henderson, KY	6/25/2008	MJ/CC	No	No	No	6	1	7	-	Yes	1
61. Northern Illinois University	DeKalb, IL	2/14/2008	MJ/CC	Yes	No	No	5/6	21	26/27	54	Yes	4
62. Kirkwood City Council	Kirkwood, MO	2/7/2008	MJ/CC	No	No	No	6	2	8	-	Stolen	2
63. Westroads Mall	Omaha, NE	12/5/2007	MJ/CC	Yes	Yes	Yes	9	4/5	13/14	14	Stolen	1
64. Crandon	Crandon, WI	10/7/2007	MJ/CC	Yes	-	-	6/7	1	7/8	30 <sup>t</sup>	Yes	1
65. Virginia Tech	Blacksburg, VA	4/16/2007	MJ/CC	Yes	No	No	32/33	23/17	55/50	176	Yes	2
66. Trolley Square	Salt Lake City, UT	2/12/2007	MJ/CC	No	No	No	6	4	10	-	No	2
67. Amish School	Lancaster County, PA	10/2/2006	MJ/CC	No	No	No	6	5	11	-	Yes	3
68. Capitol Hill	Seattle, WA	3/25/2006	MJ/CC	Yes	Yes	Yes	7	2	9	-	Yes	4
69. Goleta Postal	Goleta, CA	1/30/2006	MJ/CC	Yes	No	No	8	0	8	-	Yes	1
70. Red Lake	Red Lake, MN	3/21/2005	MJ/CC	No	No	No	10	5/6	15/16	-	Stolen	3
71. Living Church of God	Brookfield, WI	3/12/2005	MJ/CC	Yes	No	No	7/8	4	11/12	-	Yes	1
72. Damageplan Show	Columbus, OH	12/8/2004	MJ/CC	No	No	No	5	7/3	12/8	15 <sup>u</sup>	Yes	1
73. Hunting Camp	Meteor, WI	11/21/2004	CC	Yes	Yes	Yes	6	3	9	20	-	1
74. Windy City Warehouse	Chicago, IL	8/27/2003	CC	No	No	No	7	0	7	-	-	-
75. Lockheed Martin	Meridian, MS	7/8/2003	MJ/CC	Yes	No	No	7	8	15	-	Yes	5
76. Navistar	Melrose Park, IL	2/5/2001	MJ/CC	Yes	No	No	5	4	9	-	Yes	4
77. Wakefield	Wakefield, MA	12/26/2000	MJ/CC	Yes	-	-	7	0	7	37	Yes	3
78. Hotel	Tampa, FL	12/30/1999	MJ/CC	No	No	No	5	3	8	-	Yes	2
79. Xerox	Honolulu, HI	11/2/1999	MJ/CC	Yes	No	No	7	0	7	28	Yes	1
80. Wedgwood Baptist Church	Fort Worth, TX	9/15/1999	MJ/CC	Yes	No	No	8	7	15	30	Yes	2
81. Atlanta Day Trading	Atlanta, GA	7/29/1999	MJ	-	No	No	9	13	22	-	Yes	4
82. Columbine High School	Littleton, CO	4/20/1999	MJ/CC	Yes	Yes	Yes	13/15	24	37/39	188	No	4
83. Thurston High School	Springfield, OR	5/21/1998	MJ/CC	Yes	No	No	4	25	29	50	No	3
84. Westside Middle School	Jonesboro, AR	3/24/1998	MJ/CC	Yes	No	No	5	10	15	26	Stolen	9/10
85. Connecticut Lottery	Newington, CT	3/6/1998	MJ/CC	Yes	No	No	5	1/0	6/5	5	Yes	1
86. Caltrans Maintenance Yard	Orange, CA	12/18/1997	MJ/CC	Yes	Yes	Yes	5	2	7	144	Yes	1
87. R.E. Phelon Company	Aiken, SC	9/15/1997	MJ/CC	No	No	No	4	3	7	-	No	1

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Large				Total			Gun(s)		Offenders
			Cap. Mag. <sup>a</sup>	Assault Weapon? <sup>b</sup>	Assault Rifle? <sup>b</sup>	Fatalities <sup>c</sup>	Injuries <sup>c</sup>	Fatalities & Injuries <sup>c</sup>	Shots Fired	Obtained Legally? <sup>d</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
88. Fort Lauderdale	Fort Lauderdale, FL	2/9/1996	MJ/CC	No	No	No	6	1	7	14 <sup>v</sup>	Yes	2
89. Piper Technical Center	Los Angeles, CA	7/19/1995	CC	Yes	No	No	4	0	4	-	-	-
90. Walter Rossler Company	Corpus Christi, TX	4/3/1995	MJ/CC	No	No	No	6	0	6	-	Yes	2
91. Air Force Base	Fairchild Base, WA	6/20/1994	MJ/CC	Yes	Yes	Yes	5/6	23	28/29	50 <sup>w</sup>	Yes	1
92. Chuck E. Cheese	Aurora, CO	12/14/1993	MJ/CC	No	No	No	4	1	5	-	-	1
93. Long Island Railroad	Garden City, NY	12/7/1993	MJ/CC	Yes	No	No	6	19	25	30	Yes	1
94. Luigi's Restaurant	Fayetteville, NC	8/6/1993	MJ/CC	No	No	No	4	8	12	-	Yes	3
95. 101 California Street	San Francisco, CA	7/1/1993	MJ/CC	Yes	Yes	No	9	6	15	75	No	3
96. Watkins Glen	Watkins Glen, NY	10/15/1992	MJ/CC	No	No	No	5	0	5	-	Yes	1
97. Lindhurst High School	Olivehurst, CA	5/1/1992	MJ/CC	No	No	No	4	10	14	-	Yes	2
98. Royal Oak Postal	Royal Oak, MI	11/14/1991	MJ/CC	No	No	No	5	5/4	10/9	-	Yes	1
99. University of Iowa	Iowa City, IA	11/1/1991	MJ/CC	No	No	No	6	1	7	-	Yes	1
100. Luby's Cafeteria	Killeen, TX	10/16/1991	MJ/CC	Yes	No	No	24	20	44	100	Yes	2
101. GMAC	Jacksonville, FL	6/18/1990	MJ/CC	Yes	No	No	10	4	14	14	Yes	2
102. Standard Gravure Corporation	Louisville, KY	9/14/1989	MJ/CC	Yes	Yes	Yes	9	12	21	21	Yes	5
103. Stockton Schoolyard	Stockton, CA	1/17/1989	MJ/CC	Yes	Yes	Yes	6	29/30	35/36	106	Yes	2
104. ESL	Sunnyvale, CA	2/16/1988	MJ/CC	No	No	No	7	4	11	-	Yes	7
105. Shopping Centers	Palm Bay, FL	4/23/1987	MJ/CC	Yes	No	No	6	14/10	20/16	40 <sup>x</sup>	Yes	3
106. United States Postal Service	Edmond, OK	8/20/1986	MJ/CC	No	-	No	15	6	21	-	Yes	3
107. San Ysidro McDonald's	San Ysidro, CA	7/18/1984	MJ/CC	Yes	Yes	Yes	22	19	41	257	Yes	3
108. Dallas Nightclub	Dallas, TX	6/29/1984	MJ/CC	Yes	No	No	6	1	7	-	No	1
109. Welding Shop	Miami, FL	8/20/1982	MJ	No	No	No	8	3	11	-	Yes	1
Assault Weapon Average							12.1	33.4	45.5	170.1		
Non-Assault Weapon Average							6.8	5.1	11.9	45.5		
Large-Capacity Magazine Average							10.3	19.4	29.7	106.5		
Non-Large Capacity Magazine Average							6.4	3.2	9.5	22.6		

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Source	Large		Assault Weapon? <sup>b</sup>	Assault Rifle? <sup>b</sup>	Fatalities <sup>c</sup>	Injuries <sup>c</sup>	Total Fatalities & Injuries <sup>c</sup>	Shots Fired	Gun(s) Obtained Legally? <sup>d</sup>	Offenders' Number of Guns
				Cap. Mag.? <sup>a</sup>	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

## Notes and Sources:

Data from Mother Jones ("US Mass Shootings, 1982-2018: Data from Mother Jones' Investigation," accessed September 25, 2018) and the Citizens Crime Commission of New York City ("Mayhem Multiplied: Mass Shooters and Assault Weapons," 2016, and "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017). MJ indicates Mother Jones data.

CC indicates Citizens Crime Commission of New York City data. If sources differ on data, "-" is added between values. In these instances, values from MJ are listed first. Except where noted, all data on shots fired obtained from CC.

<sup>a</sup> Large capacity magazines are those with a capacity to hold more than 10 rounds of ammunition.

<sup>b</sup> See Appendix C for details.

<sup>c</sup> Offender(s) included in counts of fatalities and injuries.

<sup>d</sup> The determination of whether guns were obtained legally is based on Mother Jones reporting.

<sup>e</sup> Number of guns from: "Suspect in quadruple killing at car wash dies," CNN, January 30, 2018.

<sup>f</sup> Shots fired from: "California gunman fired 30 rounds at elementary school, left when he couldn't get inside," *ABC News*, November 15, 2017.

<sup>g</sup> Shots fired from: "Be quiet! It's him!" Survivors say shooter walked pew by pew looking for people to shoot," *CNN*, November 9, 2017.

<sup>h</sup> Shots fired from: "Three dead after 'around 30' shots fired at Walmart supermarket in Thornton," *Evening Standard*, November 2, 2017.

<sup>i</sup> Shots fired from: "Sheriff Says More than 1,100 Rounds Fired in Las Vegas," *Las Vegas Review-Journal*, November 22, 2017

<sup>j</sup> Shots fired from: "Killer in Supermarket Shooting Posted Chilling Videos Online, Lauding Columbine Massacre," *Washington Post*, June 9, 2017.

<sup>k</sup> Shots fired from: "Hate Crime is Suspected After Gunman Kills 3 White Men in Downtown Fresno," *Los Angeles Times*, April 19, 2017.

<sup>l</sup> Shots fired from: "Fort Lauderdale Shooting Suspect Appears in Court, Ordered Held Without Bond," *Washington Post*, January 9, 2017.

<sup>m</sup> Shots fired from: "Baton Rouge Cop Killer Left Note, Fired At Least 43 Rounds," *CNN*, July 9, 2017.

<sup>n</sup> Shots fired from: "We Thought It Was Part of the Music': How the Pulse Nightclub Massacre Unfolded in Orlando," *The Telegraph*, June 13, 2016.

<sup>o</sup> Shots fired from: "San Bernardino Suspects Left Trail of Clues, but No Clear Motive," *New York Times*, December 3, 2015.

<sup>p</sup> Shots fired from: "Sheriff: Elliot Rodger Fired 50-plus Times in Isle Vista Rampage," *Los Angeles Times*, June 4, 2014.

<sup>q</sup> Shots fired from: "Shooter Set \$10,000 on Fire in Hialeah Shooting Rampage," *NBC News*, July 28, 2013.

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Case	Location	Date	Source	Large			Assault Weapon? <sup>b</sup>	Assault Rifle? <sup>b</sup>	Fatalities <sup>c</sup>	Injuries <sup>c</sup>	Total Fatalities & Injuries <sup>c</sup>	Shots Fired	Gun(s) Obtained Legally? <sup>d</sup>	Offenders' Number of Guns
				Cap. Mag.? <sup>a</sup>	(5)	(6)								
(1)	(2)	(3)	(4)		(5)	(6)		(7)	(8)	(9)	(10)	(11)	(12)	(13)

<sup>r</sup> Shots fired from: "Police Call Santa Monica Gunman 'Ready for Battle,'" *New York Times*, June 8, 2013.

<sup>s</sup> Shots fired from: "Hialeah Gunman's Rage Over Estranged Wife Leaved 5 Dead," *Sun-Sentinel*, June 7, 2010.

<sup>t</sup> Shots fired from: "Small Town Grieves for 6, and the Killer," *Los Angeles Times*, October 9, 2007.

<sup>u</sup> Shots fired from: "National Briefing | Midwest: Ohio: Shooter At Club May Have Reloaded," *New York Times*, January 15, 2005.

<sup>v</sup> Shots fired from: "5 Beach Workers in Florida are Slain by Ex-Colleague," *New York Times*, February 10, 1996.

<sup>w</sup> Shots fired from: "Man Bent On Revenge Kills 4, Hurts 23 -- Psychiatrist Is First Slain In Rampage At Fairchild Air Force Base," *The Seattle Times*, June 21, 1994.

<sup>x</sup> Shots fired from: "6 Dead in Florida Sniper Siege; Police Seize Suspect in Massacre," *Chicago Tribune*, April 25, 1987.



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Case (1)	Location (2)	Date (3)	Weapon Description From			Assault Weapon? c	Assault Rifle? d
			CCC a	Mother Jones b	(5)	(6)	(7)
1. Rite Aid Warehouse	Perryman, MD	9/20/2018	-	Glock 9 mm		No	No
2. T&T Trucking	Bakersfield, CA	9/12/2018	-	-		No e	No e
3. Fifth Third Center	Cincinnati, OH	9/6/2018	-	9mm handgun		No	No
4. Capital Gazette	Annapolis, MD	6/28/2018	-	12-gauge pump-action shotgun		No	No
5. Santa Fe High School	Santa Fe, TX	5/18/2018	-	shotgun; .38 revolver		No	No
6. Waffle House	Nashville, TN	4/22/2018	-	AR-15		Yes f	Yes f
7. Yountville Veterans Home	Yountville, CA	3/9/2018	-	semiautomatic rifle; shotgun		- g	- g
8. Stoneman Douglas HS	Parkland, FL	2/14/2018	-	AR-15		No h	No h
9. Pennsylvania Carwash	Melcroft, PA	1/28/2018	-	semiautomatic rifle and semiautomatic handgun		- i	- i
10. Rancho Tehama	Rancho Tehama, CA	11/14/2017	-	Two illegally modified rifles		Yes j	Yes j
11. Texas First Baptist Church	Sutherland Springs, TX	11/5/2017	-	Ruger AR-556; Kelley also possessed semiautomatic handguns		Yes k	Yes k
12. Suburban Denver Walmart	Thornton, CO	11/1/2017	-	semiautomatic handgun		No	No
13. Edgewood Business Park	Edgewood, MD	10/18/2017	-	.380-caliber; make unclear		No l	No l
14. Las Vegas Strip	Las Vegas, NV	10/1/2017	-	AR-15-style and AK-47-style rifles and "a large cache of ammunition"; four Daniel Defense DDM4 rifles, three FN-15s and other rifles made by Sig Sauer.		Yes m	Yes m
15. San Francisco UPS	San Francisco, CA	6/14/2017	-	MAC-10-style "assault pistol"; 30-round magazine. An additional box of ammunition.		Yes n	No n
16. Pennsylvania Supermarket	Tunkhannock, PA	6/7/2017	-	shotguns		No o	No o
17. Fiamma Workplace	Orlando, FL	6/5/2017	-	semiautomatic handgun		No	No
18. Ohio Nursing Home	Kirkersville, OH	5/12/2017	-	handgun, shotgun		No	No

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Case	Location	Date	Weapon Description From				Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>				
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
19. Fresno Downtown	Fresno, CA	4/18/2017	-	.357 revolver	No	No		
20. Fort Lauderdale Airport	Fort Lauderdale, FL	1/6/2017	-	Walther 9mm semi-automatic pistol	No	No		
21. Cascade Mall	Burlington, WA	9/23/2016	-	Ruger .22-caliber	No	P	No	P
22. Baton Rouge Police	Baton Rouge, LA	7/17/2016	-	IWI Tavor SAR 5.56 caliber rifle, Springfield XD 9, 9mm	Yes	q	Yes	q
23. Dallas Police	Dallas, TX	7/7/2016	-	Izhmash-Saiga 5.45mm (AK-style) semiautomatic rifle with large capacity magazines; Glock 9mm handgun, .25-caliber semiautomatic handgun	Yes	r	Yes	r
24. Orlando Nightclub	Orlando, FL	6/12/2016	-	Sig Sauer MCX rifle, Glock 17 9mm; high-capacity magazines (30 rounds)	Yes	s	Yes	s
25. Excel Industries	Hesston, KS	2/25/2016	-	Zastava Serbia AK-47-style rifle, Glock Model 22 .40-caliber handgun; high-capacity magazines (30 rounds)	Yes	t	Yes	t
26. Kalamazoo	Kalamazoo County, MI	2/20/2016	-	9 mm handgun (ammo used unclear)	No		No	
27. San Bernardino	San Bernardino, CA	12/2/2015	-	Two semiautomatic AR-15-style rifles—one a DPMS A-15, the other a Smith & Wesson M&P15, both with .223 calibre ammunition. Two 9mm semiautomatic handguns. High capacity magazines.	Yes	u	Yes	u
28. Planned Parenthood Clinic	Colorado Springs, CO	11/27/2015	-	Reportedly an AK-47 style semiautomatic rifle and others. Authorities had not released details on Dear's weapons as of April 2016.	Yes	v	Yes	v
29. Colorado Springs	Colorado Springs, CO	10/31/2015	-	AR-15 rifle, a 9 mm pistol, and a .357 revolver	Yes	w	Yes	w

## Appendix 1925

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Case (1)	Location (2)	Date (3)	Weapon Description From			Assault Weapon? <sup>c</sup> (6)	Assault Rifle? <sup>d</sup> (7)
			CCC <sup>a</sup> (4)	Mother Jones <sup>b</sup> (5)			
30. Umpqua Community College	Roseburg, OR	10/1/2015	-	9 mm Glock pistol, .40 caliber Smith & Wesson, .40 caliber Taurus pistol, .556 caliber Del-Ton; (ammo details unclear)		No	No
31. Chattanooga Military Center	Chattanooga, TN	7/16/2015	-	AK-47, AR-15, and 30-round magazines; 9mm handgun		Yes	Yes
32. Charleston Church	Charleston, SC	6/17/2015	-	.45-caliber Glock (model 41, with 13-round capacity magazine)		No	No
33. Trestle Trail Bridge	Menasha, WI	6/11/2015	-	Two handguns; Details unclear, but after the shooting, police found eight guns in total in Valencia del Toro's home, including handguns, shotguns, and rifles, plus and more than 1,000 rounds of ammunition. He took two weapons and ammunition to the bridge.		No	No
34. Marysville High School	Marysville, WA	10/24/2014	-	Beretta .40-caliber handgun		No	No
35. Isla Vista	Santa Barbara, CA	5/23/2014	-	Two Sig Sauer P226 semiautomatic pistols and Glock 34 pistol, and hundreds of rounds of ammo. A 6- inchand 8-inch "SRK" and "Boar Hunter" hunting knives.		No	No
36. Fort Hood	Fort Hood, TX	4/3/2014	-	.45-caliber Smith & Wesson handgun		No	No
37. Alturas Tribal	Alturas, CA	2/20/2014	-	9mm semi-automatic handgun		No	No
38. Washington Navy Yard	Washington, D.C.	9/16/2013	-	Remington 870 Express 12-gauge shotgun; Beretta handgun		No	No
39. Hialeah	Hialeah, FL	7/26/2013	-	Glock 17		No	No

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Case	Location	Date	Weapon Description From		Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
40. Santa Monica	Santa Monica, CA	6/7/2013	-	.223-caliber semi-automatic assault rifle, about 40 high capacity magazines, "black powder" handgun (likely antique)	Yes	Yes
41. Federal Way	Federal Way, WA	4/21/2013	-	.40 caliber semi-automatic handgun, pistol grip shotgun	No	No
42. Upstate New York	Herkimer County, NY	3/13/2013	-	Unknown	No	No
43. Newtown School	Newtown, CT	12/14/2012	An unknown make and model .22-caliber rifle, a <b>Bushmaster XM15 .223-caliber semiautomatic assault rifle</b> equipped with a 30-round large capacity ammunition magazine, and a GLOCK 10mm handgun were used. According to the Danbury State's Attorney, police also recovered in Lanza's possession a SIG SAUER P226 9mm handgun and three loaded 30-round large capacity ammunition magazines for the Bushmaster. Six additional 30-round large capacity ammunition magazines were recovered at the scene. A loaded unknown make and model 12-gauge shotgun was found in the passenger compartment of the car (later moved to the trunk by police). All of the guns used in the shooting were purchased by Lanza's mother.	10mm Glock, 9mm SIG Sauer P226 semiautomatic handguns; <b>.223 Bushmaster XM15-E2S semiautomatic rifle</b> ; Izhmash Saiga-12 12-gauge semiautomatic shotgun	Yes	Yes
44. Accent Signage Systems	Minneapolis, MN	9/27/2012	GLOCK 19 9mm semiautomatic pistol equipped with a 15-round large capacity ammunition magazine. Engeldinger purchased the firearm one year before the shooting at KGS Guns and Ammo in Minneapolis after passing a background check and obtaining a permit to purchase. Police reportedly found packaging for 10,000 rounds of ammunition and another handgun in Engeldinger's home.	9mm Glock semiautomatic handgun	No	No

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Case	Location	Date	Weapon Description From		Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
45. Sikh Temple	Oak Creek, WI	8/5/2012	Springfield Armory XD(M) 9mm semiautomatic handgun equipped with a 19-round large capacity ammunition magazine. Weeks before the shooting, Wade legally purchased the handgun and three 19-round large capacity ammunition magazines from a federal firearms licensed dealer in nearby West Allis, WI. According to media reports, Wade served in the U.S. Army from 1992 until 1998, when he was given an other-than-honorable discharge or general discharge. In 1994, while stationed at Fort Bliss in Texas, he was arrested by El Paso police, and pled guilty to a misdemeanor charge of criminal mischief. Federal law does not prohibit persons with convictions for misdemeanors other than domestic violence misdemeanors or persons who have been discharged from the military for reasons other than "dishonorably" from purchasing firearms.	9mm Springfield Armory XDM semiautomatic handgun	No	No
			A Smith & Wesson M&P15 assault rifle equipped with a 100-round drum large capacity ammunition magazine, a Remington Model 870 12-gauge pump shotgun, and two GLOCK .40 caliber handguns, were recovered at the scene by police. In the months leading to the shooting, Holmes purchased the weapons and 6,000-rounds of ammunition at gun shops and over the Internet. In addition to the weapons used in the shooting, Holmes booby-trapped his apartment, rigging trip wire to detonate 30 plastic shells stuffed with gunpowder, several glass jars filled with gasoline and gunpowder, and 10 gallons of gasoline in canisters.	Two .40-caliber Glock semiautomatic handguns; <b>.223-caliber Smith &amp; Wesson M&amp;P15 semiautomatic rifle</b> ; 12-gauge Remington 870 pump-action shotgun	Yes	ad Yes
46. Aurora Movie Theater	Aurora, CO	7/20/2012				
47. Seattle Café	Seattle, WA	5/30/2012	-	Two .45-caliber semiautomatic handguns	No	No
48. Oikos University	Oakland, CA	4/2/2012	-	.45-caliber semiautomatic handgun	No	No
49. Su Jung Health Sauna	Norcross, GA	2/22/2012	-	.45-caliber semiautomatic handgun	No	No
50. Seal Beach	Seal Beach, CA	10/14/2011	-	.45-caliber Heckler & Koch, 9mm Springfield semiautomatic handguns; 44 Magnum Smith & Wesson revolver	No	No

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Case (1)	Location (2)	Date (3)	Weapon Description From		Assault Weapon? <sup>c</sup> (6)	Assault Rifle? <sup>d</sup> (7)
			CCC <sup>a</sup> (4)	Mother Jones <sup>b</sup> (5)		
51. IHOP	Carson City, NV	9/6/2011	AK-47 type assault rifle equipped with a 30-round large capacity ammunition magazine. Two additional guns and two more magazines were found in his vehicle.	AK-47 Norinco Arms variant, AK-47 Romarm Cugir variant rifles; .38-caliber Colt revolver	Yes ae	Yes ae
52. Grand Rapids	Grand Rapids, MI	7/7/2011	GLOCK 9mm semiautomatic pistol (unknown model) equipped with a 30-round large capacity ammunition magazine.	-	No	No
53. Tucson	Tucson, AZ	1/8/2011	GLOCK 19 9mm semiautomatic pistol equipped with a 33-round large capacity ammunition magazine. Loughner was also carrying two 15-round large capacity ammunition magazines, and a knife. The ATF determined Loughner legally purchased the GLOCK pistol with an extended magazine and one box of Winchester ammunition on November 30, 2010, from Sportsman's Warehouse in Tucson.	9mm Glock 19 semiautomatic handgun	No	No
54. Hartford Beer Distributor	Manchester, CT	8/3/2010	Two Ruger SR9 9mm semiautomatic pistols equipped with 17-round magazines. Thornton purchased both firearms legally from an East Windsor, CT gun dealer.	Two 9mm Ruger SR9 semiautomatic handguns	No	No
55. Yoyito Café	Hialeah, FL	6/6/2010	-	-	No af	No af
56. Coffee Shop Police	Parkland, WA	11/29/2009	-	9mm Glock 17 semiautomatic handgun; .38-caliber Smith & Wesson revolver	No	No
57. Fort Hood	Fort Hood, TX	11/5/2009	FN Herstal 5.7 Tactical Pistol equipped with 20-round large capacity ammunition magazine. When Hasan was apprehended, investigators found in his possession 177-rounds in 30-round and 20-round large capacity ammunition magazines, another handgun, a revolver, and two gunsights (for different lighting conditions). Hasan purchased the FN Herstal 5.7 Tactical Pistol legally at Guns Galore, a shop in Killeen, TX	FN Five-seven semiautomatic handgun	No	No
58. Binghamton	Binghamton, NY	4/3/2009	Beretta .45-caliber semiautomatic pistol, Beretta 9mm semiautomatic pistol (models unknown), and two 30-round large capacity ammunition magazines and two 15-round large capacity ammunition magazines.	9mm Beretta, .45-caliber Springfield semiautomatic handguns	No	No



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(1) Case	(2) Location	(3) Date	Weapon Description From		(5) Mother Jones <sup>b</sup>	Assault	
			CCC <sup>a</sup>	(4)		Weapon? <sup>c</sup>	Rifle? <sup>d</sup>
59. Carthage Nursing Home	Carthage, NC	3/29/2009	-		Winchester 1300 pump-action shotgun; .357 Magnum revolver	No	No
60. Atlantis Plastics	Henderson, KY	6/25/2008	-		.45-caliber Hi-Point semiautomatic handgun	No	No
61. Northern Illinois University	DeKalb, IL	2/14/2008		SIG SAUER Kurz 9mm semiautomatic pistol, Hi-Point CF380 .380 caliber semiautomatic pistol, GLOCK 19 9mm semiautomatic pistol, Remington Sportsman 48 12-gauge shotgun, and 33-round and 15-round large capacity ammunition magazines. Kazmierczak purchased all four weapons from Tony's Gun & Ammo in Champaign, IL between August 3, 2007 and February 9, 2008. Kazmierczak also purchased gun accessories from a website operated by TGSCOM, Inc., the same company patronized by the VA Tech shooter.	9mm Glock 19, Hi-Point CF380, 9mm Kurz SIG Sauer P232 semiautomatic handguns; 12-gauge Remington Sportsman 48 saved-off shotgun	No	ag No ag
62. Kirkwood City Council	Kirkwood, MO	2/7/2008	-		.40-caliber Smith & Wesson semiautomatic handgun; .44 Magnum Smith & Wesson Model 29 revolver	No	No
63. Westroads Mall	Omaha, NE	12/5/2007		WASR-10 semiautomatic assault rifle and two 30-round large capacity ammunition magazines.	<b>WASR-10 Century Arms semiautomatic rifle</b>	Yes	ah Yes
64. Crandon	Crandon, WI	10/7/2007	-		AR-15 SWAT semiautomatic rifle	-	ai - ai

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Case (1)	Location (2)	Date (3)	Weapon Description From				Assault	
			CCC <sup>a</sup> (4)	Mother Jones <sup>b</sup> (5)	Weapon? <sup>c</sup> (6)	Rifle? <sup>d</sup> (7)		
65. Virginia Tech	Blacksburg, VA	4/16/2007	<p>GLOCK 19 9mm semiautomatic pistol and Walther P22 .22-caliber semiautomatic pistol. Investigators found a total of 17 empty magazines at the scene of the shooting, a mix of several 15-round, and 10-round magazines loaded with hollow-point rounds (bullets with the tip hollowed out, designed to expand upon impact). He possessed over 400 rounds of ammunition. Cho ordered the Walther P22 from a website operated by TGSCOM, Inc. Kazmierczak patronized the same company before the NIU shooting. On February 9, 2007, Cho picked up the pistol from J-N-D Pawn-brokers, located across the street from the V A Tech campus. In compliance with the state law limiting handgun purchases to one every 30 days, Cho purchased the GLOCK 19 on March 13, 2007. He also purchased five 10-round magazines from eBay in March. Cho's purchase of these firearms was in violation of federal law; he was disqualified from purchasing or possessing a firearm and ammunition, because a special justice of the Montgomery County General District Court had found him to be a danger to himself on December 14, 2005.</p>	9mm Glock 19, .22-caliber Walther P22 semiautomatic handguns	No	No		
66. Trolley Square	Salt Lake City, UT	2/12/2007		Mossberg Maverick 88 Field shotgun; .38-caliber Smith & Wesson M36 revolver	No	No		
67. Amish School	Lancaster County, PA	10/2/2006		Springfield semiautomatic handgun; .30-06 Ruger bolt-action rifle; 12-gauge Browning pump-action shotgun	No	aj	No	aj
68. Capitol Hill	Seattle, WA	3/25/2006		.40-caliber Ruger, one other semiautomatic handgun; <b>Bushmaster XM15 E2S semiautomatic rifle</b> ; 12-gauge Winchester Defender pump-action shotgun with extended tube and pistol grip	Yes	ak	Yes	ak
69. Goleta Postal	Goleta, CA	1/30/2006	Smith & Wesson 915 9mm semiautomatic handgun equipped with a 15-round large capacity ammunition magazine. San Marco purchased the firearm at a pawn shop in New Mexico in August 2005.	9mm Smith & Wesson 915 semiautomatic handgun	No	No	No	No

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Case	Location	Date	Weapon Description From			Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(7)
70. Red Lake	Red Lake, MN	3/21/2005	-	.40-caliber Glock 23, .22-caliber Ruger semiautomatic handguns; 12-gauge Remington 870 shotgun	No	No	No
71. Living Church of God	Brookfield, WI	3/12/2005	-	9mm Beretta semiautomatic handgun	No	No	No
72. Damageplan Show	Columbus, OH	12/8/2004	-	9mm Beretta 92FS semiautomatic handgun	No	No	No
73. Hunting Camp	Meteor, WI	11/21/2004	SKS 7.62mm semiautomatic assault rifle equipped with a 20-round large capacity ammunition magazine.	-	Yes	al	Yes
74. Windy City Warehouse	Chicago, IL	8/27/2003	-	-	No	am	No
75. Lockheed Martin	Meridian, MS	7/8/2003	-	.45-caliber Ruger P90 semiautomatic handgun; .22- caliber rifle with scope, .223- caliber Ruger Mini-14 rifle; 12- gauge Winchester 1300 shotgun; .22 Magnum derringer	No	an	No
76. Navistar	Melrose Park, IL	2/5/2001	-	SKS 1954R, .30-caliber Winchester rifles; 12-gauge Remington pump-action shotgun; .38-caliber revolver	No	ao	No
77. Wakefield	Wakefield, MA	12/26/2000	AK-47-type semiautomatic assault rifle, unknown make and model 12-gauge shotgun, unknown make and model .32- caliber semiautomatic pistol, and 60-round large capacity ammunition magazine.	.32-caliber Retolaza semiautomatic handgun; AK-47 variant semiautomatic rifle; 12- gauge Winchester 1300 pump- action shotgun	-	ap	-
78. Hotel	Tampa, FL	12/30/1999	-	9mm Lorcin semiautomatic handgun; .38-caliber Charter Arms revolver	No	No	No

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Case	Location	Date	Weapon Description From		Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
79. Xerox	Honolulu, HI	11/2/1999	GLOCK 17 9mm semiautomatic pistol and three 17-round large capacity ammunition magazines, loaded with hollow point bullets (bullets with the tip hollowed out, designed to expand upon impact). Uyesugi legally purchased the GLOCK in 1989.	9mm Glock 17 semiautomatic handgun	No	No
80. Wedgwood Baptist Church	Fort Worth, TX	9/15/1999	Ruger P85 9mm semiautomatic pistol, unknown make and model .380 caliber semiautomatic pistol, and three 15-round large capacity ammunition magazines. Ashbrook legally acquired both weapons from federally licensed firearms dealers in 1992.	.380-caliber, 9mm Ruger P85 semiautomatic handguns	No	No
81. Atlanta Day Trading	Atlanta, GA	7/29/1999	-	.45-caliber Colt 1911-A1, 9mm Glock 17, .25-caliber Raven Arms MP-25 semiautomatic handguns; .22-caliber Harrington & Richardson revolver	No	No
82. Columbine High School	Littleton, CO	4/20/1999	Savage Springfield 67H 12-gauge pump-action shotgun, Savage Stevens 311D 12-gauge sawedoff shotgun, <b>Hi-Point 995 9mm semiautomatic rifle</b> , INTRATEC TEC-DC9 9mm semiautomatic pistol, and thirteen 10-round magazines, one 52-, one 32-, one 28-round large capacity ammunition magazines. Harris and Klebold illegally acquired the shotguns and Hi-Point rifle through a "straw purchase" (a transaction in which a legal buyer makes a purchase for someone who cannot legally purchase the firearm). Their friend, Robyn Anderson, purchased the three firearms at the Tanner Gun Show from unlicensed sellers in December of 1998. A pizza shop employee, Mark Manes, illegally sold them the INTRATEC TEC-DC9.	<b>9mm Intratec DC-9 semiautomatic handgun; 9mm Hi-Point 995 carbine rifle; 12-gauge sawed-off Savage Stevens 311D, 12-gauge sawed-off Savage Springfield 67H pump-action shotguns</b>	Yes aq	Yes aq
83. Thurston High School	Springfield, OR	5/21/1998	GLOCK 19 9mm semiautomatic pistol, Ruger (unknown model) .22-caliber semiautomatic pistol, Ruger (unknown model) .22-caliber rifle, and a 50-round large capacity ammunition magazine. The GLOCK and rifle were legally purchased by Kinkel's father.	9mm Glock, .22-caliber Ruger semiautomatic handguns, .22-caliber Ruger rifle	No ar	No ar

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Case	Location	Date	Weapon Description From		Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
84. Westside Middle School	Jonesboro, AR	3/24/1998	Universal M1 Carbine .30-caliber replica, Davis Industries .38-caliber two-shot derringer, Double Deuce Buddie .22-caliber two-shot derringer, Charter Arms .38-caliber revolver, Star .380-caliber pistol, FIE .380-caliber pistol, Ruger Security Six .357-caliber revolver, Ruger .44 magnum rifle, Smith & Wesson .38-caliber revolver, Remington 742 .30-06-caliber rifle, 15-round large capacity ammunition magazines, three 30-round large capacity ammunition magazines, and over 150-rounds of ammunition.	FIE 380, .380-caliber Star semiautomatic handguns; .44 Magnum Ruger, .30-06 Remington 742, .30-caliber Universal M-1 carbine replica rifles; .38-caliber Charter Arms, .357-caliber Ruger Security Six, .38-caliber Smith & Wesson revolvers; .22-caliber Double Deuce Buddie two-shot, .38-caliber Davis Industries two-shot derringers	No	as No
85. Connecticut Lottery	Newington, CT	3/6/1998	GLOCK model unknown 9mm semiautomatic pistol equipped with a 19-round large capacity ammunition magazine. Beck had a permit for the 9mm pistol used in the shooting.	9mm semiautomatic handgun	No	No
86. Caltrans Maintenance Yard	Orange, CA	12/18/1997	<b>Chinese-made AK-47-type 7.62mm semiautomatic assault rifle</b> and five 30-round large capacity ammunition magazines. Torres legally purchased the rifle on April 30, 1988, from B&B Gun Sales in Orange County, CA.	7.62mm <b>AK-47 Chinese variant semiautomatic rifle</b>	Yes	Yes
87. R.E. Phelon Company	Aiken, SC	9/15/1997	-	9mm semiautomatic handgun	No	No
88. Fort Lauderdale	Fort Lauderdale, FL	2/9/1996	-	9mm Glock semiautomatic handgun; .32-caliber revolver	No	No
89. Piper Technical Center	Los Angeles, CA	7/19/1995	-	-	No	at No
90. Walter Rossler Company	Corpus Christi, TX	4/3/1995	-	9mm Ruger semiautomatic handgun; .32-caliber revolver	No	No
91. Air Force Base	Fairchild Base, WA	6/20/1994	<b>Chinese-made Mak-90 semiautomatic assault rifle</b> equipped with a 75-round drum large capacity ammunition magazine. He purchased the assault rifle on June 15, 1994, five days before the shooting, and the following day purchased 80 rounds of 7.62x39mm ammunition and a 75-round drum large capacity ammunition magazine.	<b>MAK-90 semiautomatic rifle</b>	Yes	au Yes

**List of Firearms Used in Public Mass Shootings  
1982 – September 2018**

Case (1)	Location (2)	Date (3)	Weapon Description From			Assault Weapon? <sup>c</sup> (6)	Assault Rifle? <sup>d</sup> (7)
			CCC <sup>a</sup> (4)	Mother Jones <sup>b</sup> (5)			
92. Chuck E. Cheese	Aurora, CO	12/14/1993	-	.25-caliber semiautomatic handgun		No	No
93. Long Island Railroad	Garden City, NY	12/7/1993	Ruger P89 9mm semiautomatic pistol and four 15-round large capacity ammunition magazines. Ferguson legally acquired the weapon in California at an outlet of Turner's Outdoorsman.	9mm Ruger P89 semiautomatic handgun		No	No
94. Luigi's Restaurant	Fayetteville, NC	8/6/1993	-	.22-caliber rifle; two 12-gauge shotguns		No	av No
95. 101 California Street	San Francisco, CA	7/1/1993	<b>Two INTRATEC TEC-DC9 semiautomatic pistols</b> , Colt (unknown model) .45-caliber semiautomatic pistol, and 40-round and 50-round large capacity ammunition magazines loaded with a mix of Black Talon and standard ammunition. According to the Las Vegas Metropolitan Police Department, Ferri purchased the pistols from two stores in Las Vegas: Super Pawn and Pacific Tactical Weapons.	<b>Two Intratec DC-9, .45-caliber</b> Colt semiautomatic handguns	Yes	aw	No aw
96. Watkins Glen	Watkins Glen, NY	10/15/1992	-	9mm Llama semiautomatic handgun		No	No
97. Lindhurst High School	Olivehurst, CA	5/1/1992	-	.22-caliber sawed-off rifle; 12-gauge pump-action shotgun		No	ax No
98. Royal Oak Postal	Royal Oak, MI	11/14/1991	-	.22-caliber Ruger sawed-off semiautomatic rifle		No	ay No
99. University of Iowa	Iowa City, IA	11/1/1991	-	.38-caliber Taurus revolver		No	No
100. Luby's Cafeteria	Killeen, TX	10/16/1991	GLOCK 17 9mm semiautomatic pistol, Ruger P89 semiautomatic pistol, and 17-round and 15-round large capacity ammunition magazines. Hennard legally purchased the weapons from Mike's Gun Shop in Henderson, NV, in February and March of 1991.	9mm Glock 17, 9mm Ruger P89 semiautomatic handguns		No	No
101. GMAC	Jacksonville, FL	6/18/1990	Universal M1 .30-caliber semiautomatic assault rifle, unknown make and model .38-caliber revolver, and a 30-round large capacity ammunition magazine.	.30-caliber Universal M1 carbine rifle; .38-caliber revolver		No	az No



List of Firearms Used in Public Mass Shootings  
1982 – September 2018

Case	Location	Date	Weapon Description From		Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
102. Standard Gravure Corporation	Louisville, KY	9/14/1989	Chinese-made AK-47-type semiautomatic assault rifle, two INTRATEC MAC-11 semiautomatic assault pistols, SIG SAUER unknown model 9mm semiautomatic pistol, unknown make and model .38-caliber revolver, and 30-round large capacity ammunition magazines. Wesbecker legally purchased the AK-47-type assault rifle from Tilford's Gun Sales in Louisville.	Two Intratec MAC-11, 9mm SIG Sauer semiautomatic handguns; AK-47 Chinese variant semiautomatic rifle; .38-caliber revolver	Yes	Yes
103. Stockton Schoolyard	Stockton, CA	1/17/1989	Chinese-made AK-47-type semiautomatic assault rifle, Taurus unknown model 9mm semiautomatic pistol, a 75-round large capacity ammunition drum magazine, a 75-round large capacity ammunition rotary magazine, and four 35-round large capacity ammunition banana magazines. Purdy legally purchased the AK-47-type rifle at Sandy Trading Post, in Sandy, OR on August 3, 1988, and the Taurus 9mm pistol at Hunter Loan and Jewelry Co. in Stockton, CA on December 28, 1988.	9mm Taurus semiautomatic handgun; AK-47 Chinese variant semiautomatic rifle	Yes	Yes
104. ESL	Sunnyvale, CA	2/16/1988	-	.380 ACP Browning, 9mm Smith & Wesson semiautomatic handguns; Ruger M-77 .22-250 bolt-action rifle with scope; Mossberg 12-gauge pump-action, 12-gauge Benelli semiautomatic shotguns; .357 Magnum Smith & Wesson, .22 Sentinel WMR revolvers	No	No
105. Shopping Centers	Palm Bay, FL	4/23/1987	Strum, Ruger Mini-14 semiautomatic assault rifle equipped with a 30-round large capacity ammunition magazine, five 30-round large capacity ammunition magazines, 180 rounds of ammunition, a shotgun (unknown make and model), and a pistol (unknown make and model). Cruse ordered the assault rifle on March 21, 1987. On April 17, 1987, he purchased 100-rounds of ammunition and six 30-round large capacity ammunition magazines.	Sturm, Ruger Mini-14 semiautomatic rifle; 20-gauge Winchester pump-action shotgun; .357 Ruger Blackhawk revolver	No	No
106. United States Postal Service	Edmond, OK	8/20/1986	-	.22-caliber, two .45-caliber Colt Model 1911-A1 semiautomatic handguns	-	No

# List of Firearms Used in Public Mass Shootings 1982 – September 2018

Case (1)	Location (2)	Date (3)	Weapon Description From		Assault Weapon? <sup>c</sup> (6)	Assault Rifle? <sup>d</sup> (7)
			CCC <sup>a</sup> (4)	Mother Jones <sup>b</sup> (5)		
107. San Ysidro McDonald's	San Ysidro, CA	7/18/1984	-	9mm Browning P35 Hi-Power semiautomatic handgun; 9mm Israeli Military Industries Uzi Model A carbine semiautomatic rifle; 12-gauge Winchester 1200 pump-action shotgun	Yes	Yes
108. Dallas Nightclub	Dallas, TX	6/29/1984	-	9mm Smith & Wesson 459 semiautomatic handgun	No	bd
109. Welding Shop	Miami, FL	8/20/1982	-	Mossberg 500 Persuader pump-action shotgun with pistol grip	No	No

## Notes and Sources:

Public Mass Shootings from Mother Jones ("US Mass Shootings, 1982-2018: Data from Mother Jones' Investigation," accessed September 25, 2018) and the Citizens Crime Commission of New York City ("Mayhem Multiplied: Mass Shooters and Assault Weapons," 2016, and "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017). Identified Assault Weapons are in bold.

<sup>a</sup> Description of weapons from "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017.

<sup>b</sup> Description of weapons from Mother Jones ("US Mass Shootings, 1982-2017: Data from Mother Jones' Investigation," accessed September 25, 2018).

<sup>c</sup> California Penal Code sections 30510 and 30515 and California Code of Regulations, title 11, section 5499.

<sup>d</sup> California Penal Code sections 30510(a), 30515(a)(1)(A-C) and (E-F), and 30515(a)(3) and California Code of Regulations, title 11, section 5499. See, also, Complaint <sup>¶</sup>4.

<sup>e</sup> "Bakersfield mass shooting 'very calculated,' came after ugly divorce, officials say," *Los Angeles Times*, September 14, 2018; "Model S&W500," *Smith & Wesson*, <https://www.smith-wesson.com/firearms/model-sw500-0>, accessed September 25, 2018.

<sup>f</sup> "Authorities seized Waffle House shooting suspect's AR-15 after arrest, dad gave them back," *The Mercury News*, April 23, 2018; "Family of murder victim sues Waffle House suspect and his father for \$100 million," *CBSWJTV* July 11, 2018; "Family of Waffle House victim in Nashville sues accused shooter's father," *Reuters*, May 15, 2018.

<sup>g</sup> "Gunman, 3 Hostages Found Dead at Yountville Veterans Home," *KQED News*, March 9, 2018.

<sup>h</sup> "Florida shooting suspect bought gun legally, authorities say," *USA Today*, February 15, 2018; "Florida school shooter's AR-15 may have jammed, saving lives, report says," *Miami Herald*, February 27, 2018.

<sup>i</sup> "Suspect in quadruple killing at car wash dies," *CNN*, January 30, 2018.

<sup>j</sup> "California mass shooter made his own rifles," *NBC News*, November 16, 2017; "California shooter built his own illegal guns, officials say," *USA Today*, November 15, 2017.

<sup>k</sup> "What we know about the rifle used in the Texas church massacre," *CNN*, November 6, 2017; "The Latest: 2 men who pursued gunman attend shooting vigil," *The Associated Press*, November 6, 2017; "Ruger AR-556," *Ruger*,

Case	Location	Date	Weapon Description From			Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>			
(1)	(2)	(3)	(4)	(5)		(6)	(7)

https://ruger.com/products/ar556/specSheets/8500.html, accessed October 22, 2018.

- l "Suspected gunman Radee Prince, who killed co-workers, gathered them together in office," *NZ Herald*, October 20, 2017.
- m "List: Guns and evidence from Las Vegas shooter Stephen Paddock," *KTNV*, January 19, 2018; "47 guns, loaded high-capacity magazines found in Vegas shooter's hotel suite and Nevada home," *ABC News*, October 4, 2017;
- n "The 'tricked out' guns Las Vegas shooter used in massacre," *New York Post*, October 3, 2017.
- o "Police: UPS Shooter in San Francisco Armed With Stolen Guns," *U.S. News*, June 23, 2017.
- p "Supermarket killer outlined plan before attack at Tunkhannock market," *Press & Sun-Bulletin*, June 8, 2017; "Pennsylvania supermarket shooter left chilling online trail," *Associated Press*, June 8, 2017.
- q "Washington shooting victims ranged in age from 16 to 95, coroners say," *CNN*, September 27, 2016; Brown, Jason, "What You Should Know About .22 Rimfire," *NRA*, August 16, 2017; Ruger Homepage, https://ruger.com/, accessed October 24, 2018.

r "Tavor SAR- 5.56 NATO 16.5" Barrel," *IWI*, https://iwi.us/product/tavor-sar-556-w16-barrel/, accessed September 26, 2018; "Civilians carrying 'ultimate weapon' Gavin Long used in Baton Rouge would be regarded worldwide as insane," *The Advocate*, August 10, 2016.

s "Exclusive: Photo of the Saiga AK-74 Rifle Used at Dallas Shooting," *Law Officer*, July 10, 2016.

t "Sig MCX Owners Manual: Handling & Safety Instructions," *Sig Sauer*, https://www.sigsauer.com/wp-content/uploads/2016/07/MCX.pdf, accessed October 23, 2018; *Sig Sauer website*, https://www.sigsauer.com/products/firearms/rifles/?state\_compliant=1103, accessed October 24, 2018.

u "Ex-Girlfriend Charged With Providing Guns to Kansas Shooter Cedric Ford," *NBC News*, February 26, 2016.

v "San Bernardino Guns Originally Bought Legally, Later Modified," *The Wall Street Journal*, December 4, 2015.

w "Robert Dear: No remorse for shootout at Colorado Springs Planned Parenthood clinic," *Colorado Springs Gazette*, February 26, 2016.

x "Family sought help shortly before Halloween attack," *9News.com*, June 28, 2016; "Investigative Report from 10/31/2015 Incident Pursuant to C.R.S. §§16-2.5-301 and 20-1-114," *4th Judicial District Attorney's Office*;

y "Unpqua Community College 2015 shooting report: What we've learned," *The Oregonian*, September 8, 2017.

z "Chattanooga Shooting Reignites Gun Control Debate After Mohammad Youssef Abdulazez Used AK-47 Assault Weapon To Kill Marines," *International Business Times*, July 17, 2015; "Purple Hearts just approved for Marines and sailor targeted in Chattanooga attack," *The Washington Post*, December 17, 2015.

aa "John Zawahri, suspected gunman in deadly Santa Monica shooting, left farewell note, police say," *CBS News*, June 14, 2013.

ab "Names of victims emerge after deadly Federal Way shooting," *Federal Way Mirror*, April 24, 2013.

ac "Upstate New York Shooting Update: Kurt Myers, suspected gunman, killed by police in shootout," *CBS News*, March 14, 2013.

Case	Location	Date	Weapon Description From			Assault Weapon? <sup>c</sup>	Assault Rifle? <sup>d</sup>
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

ac "Fate of Sandy Hook lawsuit against gun maker could be decided by a slingshot," *NBC News*, November 14, 2017; "Embargo firing a run on Russian-made guns: Added restrictions put arms in short supply," *San Antonio Express-News*, August 11, 2014.

ad "Aurora Gunman's Arsenal: Shotgun, Semiautomatic Rifle and, at the End, a Pistol," *New York Times*, July 24, 2012; "M&P15 Centerfire Rifles Safety & Instruction Manual," *Smith & Wesson*, [https://www.smith-wesson.com/sites/default/files/owners-manuals/M%26P15\\_CF\\_Rifle\\_Manual\\_10-20-15.pdf](https://www.smith-wesson.com/sites/default/files/owners-manuals/M%26P15_CF_Rifle_Manual_10-20-15.pdf), accessed October 25, 2018.

ae "IHOP gunman used illegally altered AK-47, sheriff says," *Las Vegas Review-Journal*, October 5, 2011.

af "Hialeah: Only the Latest Mass Shooting by a Concealed Carry Killer," *Huffington Post*, July 30, 2013; "Hialeah gunman's rage over estranged wife leaves 5 dead," *Sun Sentinel*, June 7, 2010.

ag "Instructions for Operation and Care of the Remington Model 11-48, Sportsman-48 Autoloading Shotguns," <https://www.remington.com/sites/default/files/Model%2011-48.pdf>, accessed October 24, 2018.

ah "Images, suicide note released in mall massacre," *Nation World News*, December 7, 2007; "Romanian Kalashnikov Rifles," *guns.net*, accessed at <http://www.gunsnet.net/Linx310/model.htm> on July 28, 2005 via the Internet Archive WayBack Machine (accessed September 26, 2018).

ai "What happened in Crandon on Oct. 7," *Los Angeles Times*, June 8, 2008.

aj "Firearms Tutorial: Terminology," <https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html>, accessed October 24, 2018.

ak "Police: Seattle shooter said 'plenty for everyone'," *NBC News*, March 27, 2006.

al "Both sides cite anger, hostility in killings; Hearings begin with law officers' testimony, grisly images," *Pioneer Press*, September 11, 2005.

am "Seven die in Chicago warehouse shooting," *CNN*, August 27, 2003.

an "Man Kills 5 Co-Works at Plant and Himself," *New York Times*, July 9, 2013; "Instruction Manuals & Product History," *Ruger*, <https://ruger.com/service/productHistory.html>, accessed October 23, 2018; *Ruger Mini-14* manuals [https://ruger-docs.s3.amazonaws.com/\\_manuals/mini14-180.pdf](https://ruger-docs.s3.amazonaws.com/_manuals/mini14-180.pdf), [https://ruger-docs.s3.amazonaws.com/\\_manuals/mini14-181-186.pdf](https://ruger-docs.s3.amazonaws.com/_manuals/mini14-181-186.pdf), [https://ruger-docs.s3.amazonaws.com/\\_manuals/mini14-580.pdf](https://ruger-docs.s3.amazonaws.com/_manuals/mini14-580.pdf), accessed October 23, 2018; "What You Should Know About .22 Rimfire," *NRA*, August 16, 2017; *Ruger Homepage*, <https://ruger.com/>, accessed October 24, 2018.

ao "Workplace Deaths Leave No One Untouched," *Chicago Tribune*, February 7, 2001; "Update 1-Source of guns used in US factory shootings sought," *Associated Press*, February 6, 2011; "SKS Rifle: Simonov Type 56," *Department of the Army*, October 1969, [http://pdf.textfiles.com/manuals/FIREARMS/sks\\_56.pdf](http://pdf.textfiles.com/manuals/FIREARMS/sks_56.pdf), accessed October 24, 2018; "Why 30-30 Winchester Will Never Die," *NRA*, February 2, 2016; "Firearms Tutorial: Terminology," <https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html>, accessed October 24, 2018.

ap "Man Charged in Killings Evaded Strict Gun Laws," *New York Times*, December 28, 2000.

aq "How they were equipped that day," *Jefferson County Sheriff*, [http://www.cnn.com/SPECIALS/2000/columbine.cd/Pages/EQUIPMENT\\_TEXT.htm](http://www.cnn.com/SPECIALS/2000/columbine.cd/Pages/EQUIPMENT_TEXT.htm), accessed September 26, 2018.

ar "What You Should Know About .22 Rimfire," *NRA*, August 16, 2017, *Kipland Philip Kinkel v. Rob Persson*, 13C13698; A155449 (2018); *Ruger Homepage*, <https://ruger.com/>, accessed October 24, 2018.

List of Firearms Used in Public Mass Shootings  
1982 – September 2018

Case	Location	Date	Weapon Description From			Assault	
			CCC <sup>a</sup>	Mother Jones <sup>b</sup>		Weapon? <sup>c</sup>	Rifle? <sup>d</sup>
(1)	(2)	(3)	(4)	(5)		(6)	(7)
as	"Powerful, semiautomatic rifles in Jonesboro killers' arsenal," <i>Associated Press</i> , April 3, 1998; "Post WWII Commercially Manufactured M1 Carbines," <i>Universal Firearms</i> , <a href="http://www.m1carbinesinc.com/carbine_universal.html">http://www.m1carbinesinc.com/carbine_universal.html</a> , accessed September 26, 2018; "77-Series Ruger 77/44," <i>Ruger</i> , <a href="https://ruger.com/products/77Series7744/models.html">https://ruger.com/products/77Series7744/models.html</a> , accessed October 24, 2018; "Model 742," <i>Remington</i> , <a href="https://www.remington.com/sites/default/files/Model742.pdf">https://www.remington.com/sites/default/files/Model742.pdf</a> , accessed October 24, 2018.						
at	"High-Capacity Ammunition Magazines are the Common Thread Running Through Most Mass Shootings in the United States," <i>Violence Policy Center</i> , accessed September 9, 2018.						
au	"An Airman's Revenge: 5 Minutes of Terror," <i>The New York Times</i> , June 22, 1994.						
av	"Soldier from Pasco held in N.C. killings," <i>St. Petersburg Times</i> , August 8, 1993; "What You Should Know About .22 Rimfire," <i>NRA</i> , August 16, 2017.						
aw	"San Francisco massacre prompts families' suits," <i>The Las Vegas Review-Journal</i> , May 19, 1994; "Death Over the Counter," <i>The Washington Post</i> , July 27, 1993; "TEC-DC9 Manual," <i>Intratec Firearms</i> , <a href="http://pdf.textfiles.com/manuals/FIREARMS/intratec_tec_dc9.pdf">http://pdf.textfiles.com/manuals/FIREARMS/intratec_tec_dc9.pdf</a> , accessed October 22, 2018.						
ax	"Gunman may have blamed teacher who flunked him," <i>Houston Chronicle</i> , May 3, 1992; "What You Should Know About .22 Rimfire," <i>NRA</i> , August 16, 2017.						
ay	"3 Killed, 8 Injured in Shooting Rampage at Post Office Crime," <i>Los Angeles Times</i> , November 15, 1991; "A 'Primer' About Rimfire Vs. Centerfire Ammunition," <i>NRA</i> , November 21, 2017; Ruger Homepage, <a href="https://ruger.com/">https://ruger.com/</a> , accessed October 24, 2018.						
az	"Post WWII Commercially Manufactured M1 Carbines," <i>Universal Firearms</i> , <a href="http://www.m1carbinesinc.com/carbine_universal.html">http://www.m1carbinesinc.com/carbine_universal.html</a> , accessed September 26, 2018.						
ba	"Firearms Tutorial: Terminology," <a href="https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html">https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html</a> , accessed October 24, 2018.						
bb	"Sales Of Exotic Weapons Are Mostly Cash And Carry," <i>Orlando Sentinel</i> , May 18, 1987; "Instruction Manuals & Product History," <i>Ruger</i> , <a href="https://ruger.com/service/productHistory.html">https://ruger.com/service/productHistory.html</a> , accessed October 23, 2018; and Ruger Mini-14 manuals, <a href="https://ruger-docs.s3.amazonaws.com/_manuals/mini14-180.pdf">https://ruger-docs.s3.amazonaws.com/_manuals/mini14-180.pdf</a> , <a href="https://ruger-docs.s3.amazonaws.com/_manuals/mini14-181-186.pdf">https://ruger-docs.s3.amazonaws.com/_manuals/mini14-181-186.pdf</a> ; <a href="https://ruger-docs.s3.amazonaws.com/_manuals/mini14-580.pdf">https://ruger-docs.s3.amazonaws.com/_manuals/mini14-580.pdf</a> , accessed October 23, 2018.						
bc	"Authorities Piece Together Tragedy Gunman at Edmond Post Office 'Knew Where to Shoot People,'" <i>The Oklahoman</i> , August 22, 1986.						
bd	"6 Die in Dallas Club as Enraged Man Fires Wildly," <i>New York Times</i> , June 30, 1984.						

## Exhibit 6



## Numbers of Fatalities and Injuries in Public Mass Shootings - Updated<sup>1</sup>

Weapon Used	# of Incidents	Average # of		
		Fatalities	Injuries	Total
Assault Weapon	28	11	28	39
Assault Rifle	26	12	30	41
No Assault Weapon	77	6	5	11
Unknown	4	8	2	10
Large-Cap. Mag.	59	10	17	27
No Large-Cap. Mag.	33	6	3	9
Unknown	17	4	4	8
Assault Weapon & Large-Cap. Mag.	26	12	29	41
Assault Rifle & Large-Cap. Mag.	24	12	32	44
Large-Cap. Mag. only	31	8	8	16
No Assault Weapon or Large-Cap. Mag.	32	6	3	9
Unknown	20	5	4	9

### Notes and Sources:

<sup>1</sup> Casualty figures *exclude* the shooter. LCM classification and casualties updated based on review of stories from Factiva/Google searches. Assault weapon classification updated for news released in November 2018 re incident #7, Yountville Veterans Home.



<https://www.mercurynews.com/2018/11/06/report-pathway-home-shooter-ordered-all-vets-out-before-killing-three-clinicians/>

News > **California News** • News

## Yountville Veterans Home shooter ordered all vets out of room before executing three clinicians, report says

By **MATTHIAS GAFNI** | [mgafni@bayareanewsgroup.com](mailto:mgafni@bayareanewsgroup.com) | Bay Area News Group  
PUBLISHED: November 6, 2018 at 4:58 pm | UPDATED: November 7, 2018 at 3:53 pm

YOUNTVILLE — After leaving an apology note with his landlord, Albert Wong walked into the Yountville Veterans Home carrying a loaded 12-gauge shotgun and a .308 caliber semi-automatic rifle with a 20-round magazine. He wore safety glasses and ear protection.

It was shortly after 10 a.m. on March 9 and the 36-year-old Army combat veteran went to the second floor “Group Room,” where a small gathering of Pathway Home staff and residents were enjoying a going-away party. Wong ordered the veterans to exit the room, according to a report issued Tuesday evening by the Napa County District Attorney’s Office. Then, Wong released the staff members, one-by-one, until only three were left: Dr. Jennifer Gonzales Shushereba, who was seven months pregnant; Dr. Jennifer Golick; and Pathway Home Executive Director Christine Loeber.

Within 12 minutes, all three women and Wong would be dead in the mass shooting, despite the efforts of a single Napa County Sheriff’s deputy, the only law enforcement officer who arrived in time.

The report, along with a summary of the incident released by the CHP, provides the most extensive details to date of what happened on March 9 at the bucolic veteran's home and the Pathway Home nonprofit that helps traumatized veterans of Iraq and Afghanistan return to civilian life. The Napa County DA determined Sheriff's Deputy Steven Lombardi was justified in shooting through a door at Wong during a brief, but hellacious firefight.

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The report said Wong killed himself and acted alone in the shooting.

Wong, who drove a rental car to Madison Hall on the Yountville campus, was a former resident who was discharged Feb. 20 due to "his refusals to comply with program policies and treatment plan," according to the report.

"Wong had expressed extreme anger and frustration toward the clinical staff due to many prior disagreements and his recent discharge from the program," the report said.

He previously had made death threats against the three women he targeted.

"These death threats were not generalized; rather, he had specifically (threatened) to kill members of the clinical staff by coming onto the premises and shooting them with a gun," the report said.

Wong carried three extra 20-round magazines in a tactical belt around his waist, along with a dozen shotgun shells. He entered the room at 10:19 a.m. Staff members who were allowed to leave the room called 911 two minutes later reporting: "We have an active shooter."

Deputy Lombardi, a 26-year veteran of the sheriff's office, was on patrol in Yountville and reached the veteran's home in four minutes. Lombardi — who had served as the department's range instructor for almost a decade — had a rifle and two handguns. A staff member flagged him down and directed him to a stairwell to reach the second floor, where Wong had taken hostages.

"Deputy Lombardi refused to allow the Pathway Home employee to accompany him to the second floor because he feared for the employee's safety," the report said. He was the only officer at the facility at that point and was "gravely concerned for the safety of the hostages."

When he reached the second floor Lombardi could not locate the gunman, and began clearing rooms by himself. He reached the "Group Room" and partially pushed open the closed metal door, spotting the suspect holding a rifle. He let go of the door and backed up to take cover, the report said.



“Deputy Lombardi then heard the rifle held by the gunman being racked and the scream of a woman,” the report said. “Deputy Lombardi feared for the safety of the screaming woman and determined he needed to kill the suspect to save her life, stating ‘I didn’t want her to die.’ ”

At 10:31 a.m., Lombardi fired his .223 rifle through the metal door at the last location where he saw the suspect. The suspect began firing back through the door at him and Lombardi returned more fire and retreated to a safe position, according to the report. A photo of the door is attached to the DA’s report, showing about 20 bullet holes in the door and adjacent wall.

Lombardi reloaded his rifle and waited for Wong to exit the room. What he didn’t know then was everyone inside the room was already dead.

Physical evidence at the scene determined that immediately after the shootout with the deputy, Wong executed the three women using his rifle, before killing himself with the shotgun, the report said.

Lombardi fired a total of 13 rounds from his rifle during the 10-second gun battle. Wong fired 22 rounds from his .308 caliber rifle. Autopsies found no bullets fired by Lombardi struck the three women.

Six minutes after the first shot was fired, more officers arrived but the gunfight was over.

Investigators later found an apology by Wong to his landlord, implying he would not return. The DA determined Wong planned the murders. She determined Lombardi’s decision to fire through the door was a “reasonable and lawful response under the totality of the circumstances.”

The final report also included photos of Wong’s rifle and shotgun, along with his ammo belt.

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**Matthias Gafni** Matthias Gafni is a Pulitzer Prize winning investigative reporter for the Bay Area News Group. He has reported and edited for Bay Area newspapers since he graduated from UC Davis, covering courts, crime, environment, science, child abuse, education, county and city government, and corruption. A Bay Area native, he loves his Warriors, Giants and 49ers. Send tips to 925-952-5026 or [mgafni@bayareanewsgroup.com](mailto:mgafni@bayareanewsgroup.com). Send him an encrypted text on Signal at 408-921-8719.

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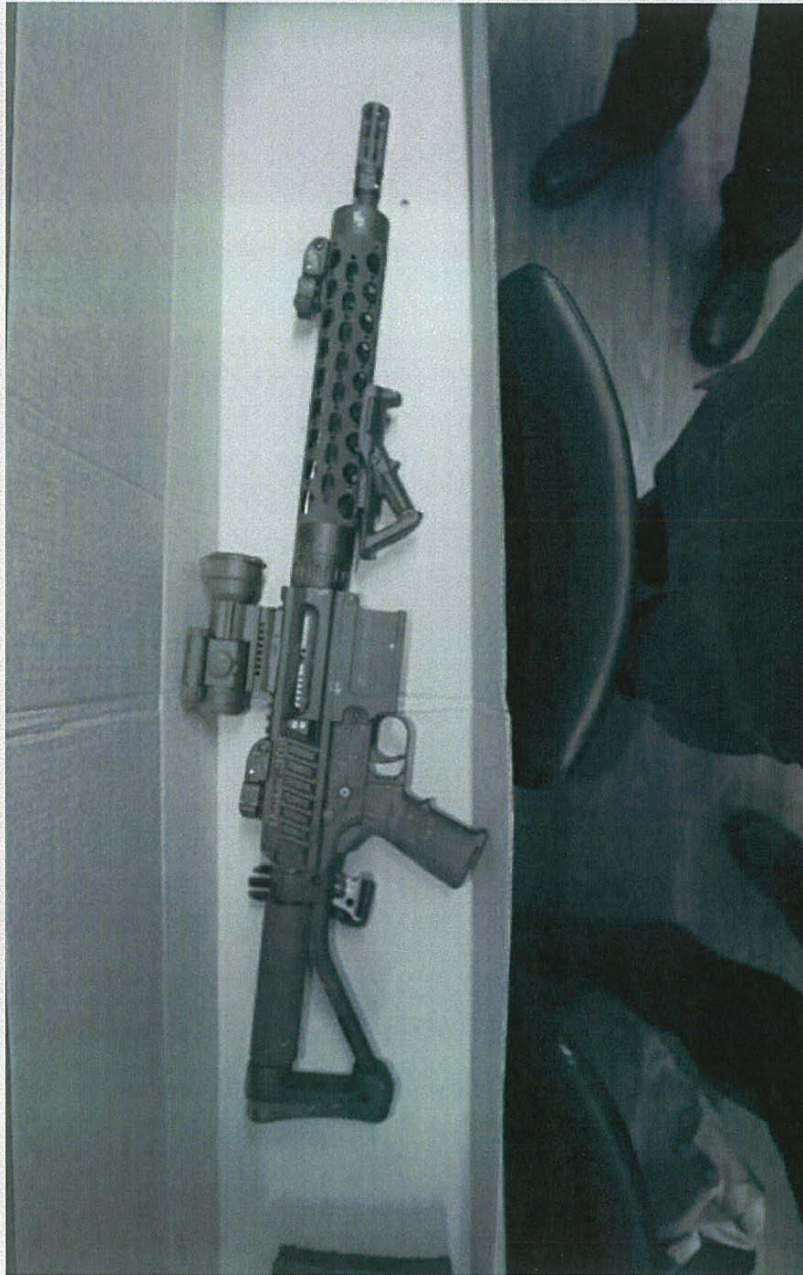
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The Mercury News  
Yountville Veterans Home shooter ordered all...

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## Yountville Veterans Home shooter order executing three clinicians, report says



1 of 4

The 308 caliber semi-automatic rifle used by Albert Wong in the deadly Yountville Veterans Home 2018 shooting. Attorney's Office released its final report on the March 9 shooting at the Yountville Veterans Home providing deta employees. (Napa County District Attorney, Courtesy)

By **MATTHIAS GAFNI** | mgafni@bayareanewsgroup.com | Bay Area News Group  
PUBLISHED: November 6, 2018 at 4:58 pm | UPDATED: November 7, 2018 at 3:53 pm





## Appendix B #1948

## Combined Public Mass Shootings Data

1982 – September 2018

Case	Location	Date	Source	Large Cap Mag. <sup>a,b</sup>	Assault Weapon <sup>c</sup>	Assault Rifle <sup>c</sup>	Fatalities Excluding Shooter <sup>d</sup>	Injuries Excluding Shooter <sup>d</sup>	Total Fatalities & Injuries <sup>d</sup>	Shots Fired	Gun(s) Obtained Legally <sup>e</sup>	Offenders' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Rite Aid Warehouse	Perryman, MD	9/20/2018	MJ	-	No	No	3	3	6	-	Yes	1
2. T&T Trucking	Bakersfield, CA	9/12/2018	MJ	No	No	No	5	0	5	-	-	1
3. Fifth Third Center	Cincinnati, OH	9/6/2018	MJ	-	No	No	3	2	5	-	-	1
4. Capital Gazette	Annapolis, MD	6/28/2018	MJ	-	No	No	5	2	7	-	Yes	1
5. Santa Fe High School	Santa Fe, TX	5/18/2018	MJ	No	No	No	10	13	23	-	-	2
6. Waffle House	Nashville, TN	4/22/2018	MJ	-	Yes	Yes	4	4	8	-	Yes	1
7. Yountville Veterans Home	Yountville, CA	3/9/2018	MJ	Yes	Yes	Yes	3	0	3	-	Yes	2
8. Stoneman Douglas HS	Parkland, FL	2/14/2018	MJ/CC	Yes	No	No	17	17	34	-	Yes	1
9. Pennsylvania Carwash	Meleroft, PA	1/28/2018	MJ	-	-	-	4	1	5	-	-	3 f
10. Rancho Tehama	Rancho Tehama, CA	11/14/2017	MJ	Yes	Yes	Yes	4	10	14	30 g	No	2
11. Texas First Baptist Church	Sutherland Springs, TX	11/5/2017	MJ/CC	Yes	Yes	Yes	26	20	46	450 h	Yes	1
12. Suburban Denver Walmart	Thornton, CO	11/1/2017	MJ	-	No	No	3	0	3	30 i	-	1
13. Edgewood Business Park	Edgewood, MD	10/18/2017	MJ	-	No	No	3	2	5	-	No	1
14. Las Vegas Strip	Las Vegas, NV	10/1/2017	MJ/CC	Yes	Yes	Yes	58	422	480	1100 j	Yes	23
15. San Francisco UPS	San Francisco, CA	6/14/2017	MJ	Yes	Yes	No	3	2	5	-	No	2
16. Pennsylvania Supermarket	Tunkhannock, PA	6/7/2017	MJ	No	No	No	3	0	3	59 k	-	2
17. Fiamma Workplace	Orlando, FL	6/5/2017	MJ/CC	No	No	No	5	0	5	-	-	1
18. Ohio Nursing Home	Kirkersville, OH	5/12/2017	MJ	-	No	No	3	0	3	-	-	2
19. Fresno Downtown	Fresno, CA	4/18/2017	MJ	No	No	No	3	0	3	16 l	-	1
20. Fort Lauderdale Airport	Fort Lauderdale, FL	1/6/2017	MJ/CC	No	No	No	5	6	11	15 m	Yes	1
21. Cascade Mall	Burlington, WA	9/23/2016	MJ/CC	Yes	No	No	5	0	5	-	-	1
22. Baton Rouge Police	Baton Rouge, LA	7/17/2016	MJ	Yes	Yes	Yes	3	3	6	43 n	-	3
23. Dallas Police	Dallas, TX	7/7/2016	MJ/CC	Yes	Yes	Yes	5	11	16	-	Yes	3
24. Orlando Nightclub	Orlando, FL	6/12/2016	MJ/CC	Yes	Yes	Yes	49	53	102	110 o	Yes	2
25. Excel Industries	Hesston, KS	2/25/2016	MJ	Yes	Yes	Yes	3	14	17	-	Yes	2
26. Kalamazoo	Kalamazoo County, MI	2/20/2016	MJ	Yes	No	No	6	2	8	-	Yes	1
27. San Bernardino	San Bernardino, CA	12/2/2015	MJ/CC	Yes	Yes	Yes	14	22	36	150 p	Yes	4
28. Planned Parenthood Clinic	Colorado Springs, CO	11/27/2015	MJ	-	Yes	Yes	3	9	12	-	-	1
29. Colorado Springs	Colorado Springs, CO	10/31/2015	MJ	Yes	Yes	Yes	3	0	3	-	Yes	3

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Source	Large Cap Mag. <sup>a,b</sup>	Assault Weapon <sup>c</sup>	Assault Rifle <sup>c</sup>	Fatalities Excluding Shooter <sup>d</sup>	Injuries Excluding Shooter <sup>d</sup>	Total Fatalities & Injuries <sup>d</sup>	Shots Fired	Gun(s) Obtained Legally <sup>e</sup>	Offenders' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
30. Unpqua Community College	Roseburg, OR	10/1/2015	MJ/CC	-	No	No	9	9	18	-	Yes	6
31. Chattanooga Military Center	Chattanooga, TN	7/16/2015	MJ/CC	Yes	Yes	Yes	5	2	7	-	Yes	3
32. Charleston Church	Charleston, SC	6/17/2015	MJ/CC	Yes	No	No	9	3	12	-	Yes	1
33. Trestle Trail Bridge	Menasha, WI	6/11/2015	MJ	Yes	No	No	3	1	4	-	Yes	2
34. Marysville High School	Marysville, WA	10/24/2014	MJ/CC	Yes	No	No	4	1	5	-	Stolen	1
35. Isla Vista	Santa Barbara, CA	5/23/2014	MJ	No	No	No	6	13	19	50 <sup>q</sup>	Yes	3
36. Fort Hood	Fort Hood, TX	4/3/2014	MJ	-	No	No	3	12	15	-	Yes	1
37. Alturas Tribal	Alturas, CA	2/20/2014	MJ	-	No	No	4	2	6	-	-	2
38. Washington Navy Yard	Washington, D.C.	9/16/2013	MJ/CC	No	No	No	12	8	20	-	Yes	2
39. Hialeah	Hialeah, FL	7/26/2013	MJ/CC	Yes	No	No	6	0	6	10 <sup>r</sup>	Yes	1
40. Santa Monica	Santa Monica, CA	6/7/2013	MJ/CC	Yes	Yes	Yes	5	3	8	70 <sup>s</sup>	Yes	2
41. Federal Way	Federal Way, WA	4/21/2013	MJ	-	No	No	4	0	4	-	Yes	2
42. Upstate New York	Herkimer County, NY	3/13/2013	MJ	-	No	No	4	2	6	-	Yes	1
43. Newtown School	Newtown, CT	12/14/2012	MJ/CC	Yes	Yes	Yes	27	2	29	154	Stolen	4/3
44. Accent Signage Systems	Minneapolis, MN	9/27/2012	MJ/CC	Yes	No	No	6	2	8	46	Yes	1
45. Sikh Temple	Oak Creek, WI	8/5/2012	MJ/CC	Yes	No	No	6	4	10	-	Yes	1
46. Aurora Movie Theater	Aurora, CO	7/20/2012	MJ/CC	Yes	Yes	Yes	12	70	82	80	Yes	4
47. Seattle Café	Seattle, WA	5/30/2012	MJ/CC	No	No	No	5	1	6	-	Yes	2
48. Oikos University	Oakland, CA	4/2/2012	MJ/CC	No	No	No	7	3	10	-	Yes	1
49. Su Jung Health Sauna	Norcross, GA	2/22/2012	MJ	-	No	No	4	0	4	-	Yes	1
50. Seal Beach	Seal Beach, CA	10/14/2011	MJ/CC	No	No	No	8	1	9	-	Yes	3
51. IHOP	Carson City, NV	9/6/2011	MJ/CC	Yes	Yes	Yes	4	7	11	-	Yes	3
52. Grand Rapids	Grand Rapids, MI	7/7/2011	CC	Yes	No	No	7	2	9	10	-	1
53. Tucson	Tucson, AZ	1/8/2011	MJ/CC	Yes	No	No	6	13	19	33	Yes	1
54. Hartford Beer Distributor	Manchester, CT	8/3/2010	MJ/CC	Yes	No	No	8	2	10	11	Yes	2
55. Yoyito Café	Hialeah, FL	6/6/2010	CC	No	No	No	4	3	7	9 <sup>t</sup>	-	-
56. Coffee Shop Police	Parkland, WA	11/29/2009	MJ/CC	No	No	No	4	0	4	-	Stolen	2
57. Fort Hood	Fort Hood, TX	11/5/2009	MJ/CC	Yes	No	No	13	32	45	214	Yes	1
58. Binghamton	Binghamton, NY	4/3/2009	MJ/CC	Yes	No	No	13	4	17	99	Yes	2

## Combined Public Mass Shootings Data

1982 – September 2018

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Case	Location	Date	Source	Large Cap Mag. <sup>a,b</sup>	Assault Weapon <sup>c</sup>	Assault Rifle <sup>c</sup>	Fatalities Excluding Shooter <sup>d</sup>	Injuries Excluding Shooter <sup>d</sup>	Total Fatalities & Injuries <sup>d</sup>	Shots Fired	Gun(s) Obtained Legally <sup>e</sup>	Offenders' Number of Guns
59. Carthage Nursing Home	Carthage, NC	3/29/2009	MJ/CC	No	No	No	8	2	10	-	Yes	2
60. Atlantis Plastics	Henderson, KY	6/25/2008	MJ/CC	No	No	No	5	1	6	-	Yes	1
61. Northern Illinois University	DeKalb, IL	2/14/2008	MJ/CC	Yes	No	No	5	21	26	54	Yes	4
62. Kirkwood City Council	Kirkwood, MO	2/7/2008	MJ/CC	No	No	No	6	1	7	-	Stolen	2
63. Westroads Mall	Omaha, NE	12/5/2007	MJ/CC	Yes	Yes	Yes	8	5	13	14	Stolen	1
64. Crandon	Crandon, WI	10/7/2007	MJ/CC	Yes	-	-	6	1	7	30 <sup>u</sup>	Yes	1
65. Virginia Tech	Blacksburg, VA	4/16/2007	MJ/CC	Yes	No	No	32	17	49	176	Yes	2
66. Trolley Square	Salt Lake City, UT	2/12/2007	MJ/CC	No	No	No	5	4	9	-	No	2
67. Amish School	Lancaster County, PA	10/2/2006	MJ/CC	No	No	No	5	5	10	-	Yes	3
68. Capitol Hill	Seattle, WA	3/25/2006	MJ/CC	Yes	Yes	Yes	6	2	8	-	Yes	4
69. Goleta Postal	Goleta, CA	1/30/2006	MJ/CC	Yes	No	No	7	0	7	-	Yes	1
70. Red Lake	Red Lake, MN	3/21/2005	MJ/CC	No	No	No	9	7	16	-	Stolen	3
71. Living Church of God	Brookfield, WI	3/12/2005	MJ/CC	Yes	No	No	7	4	11	-	Yes	1
72. Damageplan Show	Columbus, OH	12/8/2004	MJ/CC	No	No	No	4	3	7	15 <sup>v</sup>	Yes	1
73. Hunting Camp	Meteor, WI	11/21/2004	CC	Yes	Yes	Yes	6	2	8	20	-	1
74. Windy City Warehouse	Chicago, IL	8/27/2003	CC	No	No	No	6	0	6	-	-	-
75. Lockheed Martin	Meridian, MS	7/8/2003	MJ/CC	-	No	No	6	8	14	-	Yes	5
76. Navistar	Melrose Park, IL	2/5/2001	MJ/CC	Yes	No	No	4	4	8	-	Yes	4
77. Wakefield	Wakefield, MA	12/26/2000	MJ/CC	Yes	-	-	7	0	7	37	Yes	3
78. Hotel	Tampa, FL	12/30/1999	MJ/CC	No	No	No	5	3	8	-	Yes	2
79. Xerox	Honolulu, HI	11/2/1999	MJ/CC	Yes	No	No	7	0	7	28	Yes	1
80. Wedgwood Baptist Church	Fort Worth, TX	9/15/1999	MJ/CC	Yes	No	No	7	7	14	30	Yes	2
81. Atlanta Day Trading	Atlanta, GA	7/29/1999	MJ	-	No	No	9	13	22	-	Yes	4
82. Columbine High School	Littleton, CO	4/20/1999	MJ/CC	Yes	Yes	Yes	13	23	36	188	No	4
83. Thurston High School	Springfield, OR	5/21/1998	MJ/CC	Yes	No	No	4	25	29	50	No	3
84. Westside Middle School	Jonesboro, AR	3/24/1998	MJ/CC	Yes	No	No	5	10	15	26	Stolen	9/10
85. Connecticut Lottery	Newington, CT	3/6/1998	MJ/CC	Yes	No	No	4	0	4	5	Yes	1
86. Caltrans Maintenance Yard	Orange, CA	12/18/1997	MJ/CC	Yes	Yes	Yes	4	2	6	144	Yes	1
87. R.E. Phelon Company	Aiken, SC	9/15/1997	MJ/CC	No	No	No	4	3	7	-	No	1

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Source	Large Cap Mag. <sup>a,b</sup>	Assault Weapon <sup>c</sup>	Assault Rifle <sup>c</sup>	Fatalities Excluding Shooter <sup>d</sup>	Injuries Excluding Shooter <sup>d</sup>	Total Fatalities & Injuries <sup>d</sup>	Shots Fired	Gun(s) Obtained Legally <sup>e</sup>	Offenders' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
88. Fort Lauderdale	Fort Lauderdale, FL	2/9/1996	MJ/CC	No	No	No	5	1	6	14 <sup>w</sup>	Yes	2
89. Piper Technical Center	Los Angeles, CA	7/19/1995	CC	Yes	No	No	4	0	4	-	-	-
90. Walter Rossler Company	Corpus Christi, TX	4/3/1995	MJ/CC	No	No	No	5	0	5	-	Yes	2
91. Air Force Base	Fairchild Base, WA	6/20/1994	MJ/CC	Yes	Yes	Yes	4	23	27	50 <sup>x</sup>	Yes	1
92. Chuck E. Cheese	Aurora, CO	12/14/1993	MJ/CC	No	No	No	4	1	5	-	-	1
93. Long Island Railroad	Garden City, NY	12/7/1993	MJ/CC	Yes	No	No	6	19	25	30	Yes	1
94. Luigi's Restaurant	Fayetteville, NC	8/6/1993	MJ/CC	No	No	No	4	8	12	-	Yes	3
95. 101 California Street	San Francisco, CA	7/1/1993	MJ/CC	Yes	Yes	No	8	6	14	75	No	3
96. Watkins Glen	Watkins Glen, NY	10/15/1992	MJ/CC	No	No	No	4	0	4	-	Yes	1
97. Lindhurst High School	Olivehurst, CA	5/1/1992	MJ/CC	No	No	No	4	10	14	-	Yes	2
98. Royal Oak Postal	Royal Oak, MI	11/14/1991	MJ/CC	Yes	No	No	4	4	8	-	Yes	1
99. University of Iowa	Iowa City, IA	11/1/1991	MJ/CC	No	No	No	5	1	6	-	Yes	1
100. Luby's Cafeteria	Killeen, TX	10/16/1991	MJ/CC	Yes	No	No	23	20	43	100	Yes	2
101. GMAC	Jacksonville, FL	6/18/1990	MJ/CC	Yes	No	No	9	4	13	14	Yes	2
102. Standard Gravure Corporation	Louisville, KY	9/14/1989	MJ/CC	Yes	Yes	Yes	8	12	20	21	Yes	5
103. Stockton Schoolyard	Stockton, CA	1/17/1989	MJ/CC	Yes	Yes	Yes	5	29	34	106	Yes	2
104. ESL	Sunnyvale, CA	2/16/1988	MJ/CC	No	No	No	7	4	11	-	Yes	7
105. Shopping Centers	Palm Bay, FL	4/23/1987	MJ/CC	Yes	No	No	6	14	20	40 <sup>y</sup>	Yes	3
106. United States Postal Service	Edmond, OK	8/20/1986	MJ/CC	No	-	No	14	6	20	-	Yes	3
107. San Ysidro McDonald's	San Ysidro, CA	7/18/1984	MJ/CC	Yes	Yes	Yes	21	19	40	257	Yes	3
108. Dallas Nightclub	Dallas, TX	6/29/1984	MJ/CC	Yes	No	No	6	1	7	-	No	1
109. Welding Shop	Miami, FL	8/20/1982	MJ	No	No	No	8	3	11	-	Yes	1
<hr/>												
Assault Weapon Average							11.2	27.8	39.0	170.1		
Non-Assault Weapon Average							6.4	5.1	11.5	45.5		
Large-Capacity Magazine Average							9.6	16.9	26.6	108.0		
Non-Large Capacity Magazine Average							5.9	3.4	9.2	25.4		

Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Source	Large Cap Mag. <sup>b</sup>	Assault Weapon <sup>c</sup>	Assault Rifle <sup>c</sup>	Fatalities Excluding Shooter <sup>d</sup>	Injuries Excluding Shooter <sup>d</sup>	Total Fatalities & Injuries <sup>d</sup>	Shots Fired	Gun(s) Obtained Legally <sup>e</sup>	Offenders' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

## Notes and Sources:

Public Mass Shootings from Mother Jones ("US Mass Shootings, 1982-2018: Data from Mother Jones' Investigation," accessed September 25, 2018) and the Citizens Crime Commission of New York City ("Mayhem Multiplied:

Mass Shooters and Assault Weapons," 2018, and "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017). MJ indicates a mass shooting identified by Mother

Jones. CC indicates a mass shooting identified by Citizens Crime Commission of New York City data. Except where noted, all data on shots fired obtained from CC.

<sup>a</sup> Casualty figures *exclude* the shooter. LCM classification and casualties updated based on review of stories from Factiva/Google searches. Assault weapon classification updated for news released in November 2018 re incident #7, Yountville Veterans Home.

<sup>b</sup> Large capacity magazines are those with a capacity to hold more than 10 rounds of ammunition. Stories from Factiva and Google searches reviewed to determine whether an LCM was involved.

<sup>c</sup> See Appendix C for details.

<sup>d</sup> Offender(s) are not included in counts of fatalities and injuries. Stories from Factiva and Google searches reviewed to determine number of fatalities and injuries.

<sup>e</sup> The determination of whether guns were obtained legally is based on Mother Jones reporting.

<sup>f</sup> Number of guns from: "Suspect in quadruple killing at car wash dies," CNN, January 30, 2018.

<sup>g</sup> Shots fired from: "California gunman fired 30 rounds at elementary school, left when he couldn't get inside," *ABC News*, November 15, 2017.

<sup>h</sup> Shots fired from: "Be quiet! It's him!" Survivors say shooter walked pew by pew looking for people to shoot," *CNN*, November 9, 2017.

<sup>i</sup> Shots fired from: "Three dead after 'around 30' shots fired at Walmart supermarket in Thornton," *Evening Standard*, November 2, 2017.

<sup>j</sup> Shots fired from: "Sheriff Says More than 1,100 Rounds Fired in Las Vegas," *Las Vegas Review Journal*, November 22, 2017

<sup>k</sup> Shots fired from: "Killer in Supermarket Shooting Posted Chilling Videos Online, Lauding Columbine Massacre," *Washington Post*, June 9, 2017.

<sup>l</sup> Shots fired from: "Hate Crime is Suspected After Gunman Kills 3 White Men in Downtown Fresno," *Los Angeles Times*, April 19, 2017.

<sup>m</sup> Shots fired from: "Fort Lauderdale Shooting Suspect Appears in Court, Ordered Held Without Bond," *Washington Post*, January 9, 2017.

<sup>n</sup> Shots fired from: "Baton Rouge Cop Killer Left Note, Fired At Least 43 Rounds," *CNN*, July 9, 2017.

<sup>o</sup> Shots fired from: "'We Thought It Was Part of the Music': How the Pulse Nightclub Massacre Unfolded in Orlando," *The Telegraph*, June 13, 2016.

<sup>p</sup> Shots fired from: "San Bernardino Suspects Left Trail of Clues, but No Clear Motive," *New York Times*, December 3, 2015.

<sup>q</sup> Shots fired from: "Sheriff: Elliot Rodger Fired 50-plus Times in Isla Vista Rampage," *Los Angeles Times*, June 4, 2014.

<sup>r</sup> Shots fired from: "Shooter Set \$10,000 on Fire in Hialeah Shooting Rampage," *NBC News*, July 28, 2013.



Combined Public Mass Shootings Data  
1982 – September 2018

Case	Location	Date	Source	Large Cap Mag. <sup>a,b</sup>	Assault Weapon <sup>c</sup>	Assault Rifle <sup>c</sup>	Fatalities Excluding Shooter <sup>d</sup>	Injuries Excluding Shooter <sup>d</sup>	Total Fatalities & Injuries <sup>d</sup>	Shots Fired	Gun(s) Obtained Legally <sup>e</sup>	Offenders' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

<sup>s</sup> Shots fired from: "Police Call Santa Monica Gunman 'Ready for Battle,'" *New York Times*, June 8, 2013.

<sup>t</sup> Shots fired from: "Hialeah Gunman's Rage Over Estranged Wife Leaved 5 Dead," *Sun-Sentinel*, June 7, 2010.

<sup>u</sup> Shots fired from: "Small Town Grieves for 6, and the Killer," *Los Angeles Times*, October 9, 2007.

<sup>v</sup> Shots fired from: "National Briefing | Midwest: Ohio: Shooter At Club May Have Reloaded," *New York Times*, January 15, 2005.

<sup>w</sup> Shots fired from: "5 Beach Workers in Florida are Slain by Ex-Colleague," *New York Times*, February 10, 1996.

<sup>x</sup> Shots fired from: "Man Bent On Revenge Kills 4, Hurts 23 -- Psychiatrist Is First Slain In Rampage At Fairchild Air Force Base," *The Seattle Times*, June 21, 1994.

<sup>y</sup> Shots fired from: "6 Dead in Florida Sniper Siege; Police Seize Suspect in Massacre," *Chicago Tribune*, April 25, 1987.

## Exhibit 7

THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA

**RUPP, et al.,**

Plaintiffs,

**v.**

**XAVIER BECERRA, in his official capacity  
as Attorney General of the State of  
California; et al.,**

Defendants.

8:17-cv-00746-JLS-JDE

**REBUTTAL REPORT OF  
JOHN J. DONOHUE**

1. I have been asked to review the report of William E. English submitted by the plaintiffs in this case, which I find to be misguided in a number of respects.

2. One of the many flaws in English's report is revealed in his very first sentence, which states that he will look at "ownership and use rate by the law-abiding American public." In fact, he has no information whatsoever on the lawfulness or criminality of anyone and simply assumes without any basis that every AR-15 he counts is held by a law-abiding citizen. Of course, the criminal attraction to AR-15s cannot be ignored, so his estimates (even if his numbers were accurate, which they are not) do not support his conclusions.

3. Moreover, the catchphrase "law-abiding citizen" is not meaningful in the context of addressing the mass shooting problem in California, which is a core rationale for the restriction on assault weapons at issue in this case. If California could eliminate mass shootings by those who plaintiffs consider to be "law-abiding citizens," but who ultimately commit mass

shootings, the state would dramatically reduce the death toll from this serious and growing public concern. Just as a reminder, the recent shooting at a bar that killed 12 people in Thousand Oaks, California on Nov. 7, the San Bernardino shooting that left 14 dead in 2015, and the Santa Monica shooting that killed 5 in 2013 were all committed by citizens who were “law-abiding” – until the massacres started. In fact, the three most widely reported active-shooter events of this month from a synagogue in Pennsylvania (11 dead, five injured) to a yoga studio in Florida (two dead, five injured) to the bar in Southern California, all were committed by “law-abiding citizens,” in English’s lexicon, as were the two deadliest mass shooters in U.S. history (the Las Vegas gunmen who killed 58 and injured hundreds in 2017 and the Orlando Pulse Nightclub shooter who killed 49 and injured 53 in 2016).<sup>1</sup>

4. English’s apparent goal of asserting that assault weapons “are commonly owned and used by millions of law-abiding Americans for a variety of lawful purposes” is also misguided because it is not plausibly maintained that AR-15s are commonly owned and used for self-defense in the home. Indeed, while the *Heller* decision stated that “[t]he American people consider the handgun to be the quintessential self-defense weapon” for use in the home, the AR-15 was developed for battlefield use and is particularly ill-suited for home defense.

5. In fact, the entire focus of English’s report – that there are lots of assault weapons in circulation in the United States – is misconceived. If assault weapons are contributing to the rising problem of mass shootings in the United States,<sup>2</sup> the fact that they are more rather than less

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<sup>1</sup> Indeed, there are many other individuals who in English’s definition were “law-abiding citizens” yet went on to commit mass murder with assault weapons: obviously, school shooters Adam Lanza who killed 26 at Sandy Hook School in 2012 and Nicholas Cruz who killed 17 and injured 17 others at a Parkland, Florida High School earlier this year are two horrific examples.

<sup>2</sup> The FBI recently reported that the 30 active shooter incidents in 2017 set a U.S. record for both the highest number and the greatest number killed and wounded. See, <https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-incidents-graphics>.

common is a source of a bigger problem rather than an indication that the problem is beyond legislative redress.

6. The bulk of English's report is engaged in an exercise apparently designed to approximate the number of assault weapons that would be restricted under the AWCA but are in circulation in the United States – whether (as noted above) in the hands of active criminals, convicted felons, other banned firearm possessors, those who will eventually (or are actively plotting to) commit crimes in the future, and all others. But this effort fails entirely for an array of reasons.

7. First, English counts AR-15 style rifles as assault weapons whether they are rimfire rifles (and thus not prohibited under California law) or centerfire rifles (which may be restricted). Thus, English's focus on modern sporting rifles includes many weapons that are simply not restricted under the AWCA. Similarly, English includes in his counts AR-15 style rifles that are either featureless or equipped with fixed magazines. In neither case would these weapons be considered assault weapons under California law.

8. English relies on a series of surveys by the National Shooting Sports Foundation (NSSF) in making his claims, but there are strong reasons for concern about this reliance. The NSSF is a trade association that has a strong interest in influencing gun litigation, so before one would rely on such evidence one would need a great deal of detail concerning the nature of these surveys. The NSSF surveys appear to have surveyed only hunters and target shooters, owners of “modern sporting rifles,” or firearms retailers.<sup>3</sup> These surveys naturally reflect selection-bias and are unreliable as an indicator of the prevalence of AR-15 style rifles or the uses for the AR-15 style rifles by the general public, much less for assault weapons. English also provides no

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<sup>3</sup> I have not had an opportunity to review the NSSF reports that English relies on. My understanding is that, as of the date of this report, Plaintiffs have not provided a copy of those reports to Defendant.

evidence regarding these or other surveys he purports to rely on. We don't know if these are random surveys or some other less reliable type of surveys, at what venue the surveys were conducted or under what circumstances. Are the surveys conducted similarly over time? It is claimed that these are surveys of hunters and shooters, but English gives us no accurate indication of the number of hunters and shooters there are in the U.S. It is highly unlikely that the views of these populations would reflect the views of Americans at large.

9. English does cite to an article discussing these surveys, which claims that over the five-year period from 2010 to 2015 “the actual use of the AR15 platform for hunting has gone down 6%.”<sup>4</sup> We know that there are long term declines in the population of hunters in the United States, so claims about increases in the percentage of “hunters and shooters” with AR-15s tell us very little about prevalence of such weapons without knowing whether the base population is declining.

10. Looking more closely at the figures that English presents only serves to heighten concerns. For example, English provides some confusing numbers for hunters and target shooters in his report that are hard to interpret. It is possible that he is suggesting that there are roughly 50 million hunters and target shooters.<sup>5</sup> He tells us that the percentage of this group with assault weapons was less than 20 percent in 2010 but that by 2015 the percentage rose to 50 percent – in itself a highly implausible increase. In other words, English's numbers would suggest there was an increase of 15 million assault weapons (from 10 million to 25 million) in five years for just hunters and shooters. But a 15 million increase in these five years dwarfs the 4.6 million figure that English claims were produced over the entire period from 2004-2013. In

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<sup>4</sup> English cites the following: “NSSF Survey Shows Growing Approval of AR15 Use for Hunting” September 23, 2015, <http://ar15hunter.com/nssf-survey-shows-growing-approval-of-ar15-use-for-hunting/>.

<sup>5</sup> At one point he says 49.4 million participated in any target shooting or shooting sports in 2016. If this figure is supposed to include hunters, these numbers make even less sense.



other words, English is relying on numbers of uncertain provenance, which are both highly implausible and inconsistent with each other. He neither acknowledges nor accounts for these implausible and inconsistent numbers, which leads to his conclusions being unreliable and invalid.

11. While English tries to estimate how many assault weapons are in civilian hands by starting with an estimate of how many of these weapons are manufactured in the United States and then reducing that number by various outflows, such as sales to law enforcement or exports to foreign countries, many of his numbers are very wide of the mark.

12. For example, English inflates his estimate of the number of assault weapons by considerably understating the number of law enforcement officers. English tells us that there are 422,869 full-time law enforcement officers in the United States. But this is certainly a substantial undercount. An August 2018 Bureau of Justice Statistics (BJS) publication, entitled “Full-Time Employees in Law Enforcement Agencies, 1997-2016,”<sup>6</sup> indicates there were 701,169 sworn officers in the United States in 2016, excluding federal law enforcement agency employees and thus only covering state and local law enforcement. If we add in the 120,000 federal law enforcement officers from the 2008 census of Federal Law Enforcement Officers by the BJS, the latest report publicly available,<sup>7</sup> this suggests that there are approximately 821,169 sworn officers in the United States – almost double the number that English provides.

13. As another example, English posits that only a small number of AR-15s are exported out of the United States each year, suggesting the annual number is about 8,750. However, a vastly higher number of U.S.-manufactured firearms are exported (whether legally or

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<sup>6</sup> <https://www.bjs.gov/content/pub/pdf/ftelea9716.pdf>.

<sup>7</sup> June 2012 BJS report, "Federal Law Enforcement Officers, 2008," <https://www.bjs.gov/content/pub/pdf/fleo08.pdf>.

illegally) each year. To see this, let us look at only one country receiving U.S. guns: Mexico. The Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF) traces rifles seized in Mexico to determine if they come from the United States, and it finds that 12,000 guns fall into this category each year.<sup>8</sup> There are likely many more guns that originated from the United States that have not been seized or successfully traced back to the United States. If assault weapons are as common in rifle sales as English suggests, it would not be surprising that the number of assault rifles moving from the United States to Mexico could exceed the estimated number of all assault weapons that English claims are exported from the United States. When one adds in all the other countries in the world to which American guns flow, it becomes obvious that exports of assault weapons from the United States must be vastly higher than English's paltry figure and that his estimate of domestic AR-15s must be much lower.

14. While English concedes that it is difficult to estimate the number of assault weapons in this country, he relies heavily on a paper by Nick Clossman and Chris Long entitled "A Business Case Analysis of the M4/AR-15 Market," which attempts to do just that. While English refers to this as a "published" paper, it is in reality a student paper that has not been published in a peer-reviewed (or in fact any) journal. As with the English report, the Clossman and Long paper has some puzzling elements. For example, Clossman and Long estimated that only 24,000 M4 rifles were manufactured for the entire U.S. military in 2013. They derived this number by looking only at the number of M4 carbines Congress procured for the Army by the DOD in that year. (Clossman and Long at 25-26.) But given that there were a total of 1.3 million active duty military and more than 800,000 reserve forces as of September 2017,<sup>9</sup> the

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<sup>8</sup> The 2016 GAO report is "U.S. Efforts to Combat Firearms Trafficking to Mexico Have Improved, but Some Collaboration Challenges Remain."

<sup>9</sup> Military Active-Duty Personnel, <http://www.governing.com/gov-data/public-workforce-salaries/military-civilian-active-duty-employee-workforce-numbers-by-state.html>.

24,000 figure seems to be a gross underestimation and yet Clossman and Long relied on that number for the remainder of their paper. (Clossman and Long at 26, 29-30.)

15. Clossman and Long concede that the BATF reports on the number of rifles manufactured for the sale in the United States do not break down the data to specify the types of rifles. (Clossman and Long at 16.) To bridge that gap, Clossman and Long, by some unidentified criteria, selected companies that “primarily manufactured M4/AR-15s.” (Clossman and Long at 16.) Clossman and Long then counted all of the rifles manufactured by those companies as M4/AR-15s. (Clossman and Long at 17-18, Appx A.)<sup>10</sup>

16. Clossman and Long’s estimate is bound to be an overestimate since they count as AR-15s *all* rifles manufactured by companies that they deemed to “primarily” make AR-15s. Clossman and Long did not count certain other large manufacturers or small manufacturers, but there seems to be no rational basis to determine how the numbers they count and those they omit might offset each other. Moreover, since Clossman and Long’s estimates included both weapons manufactured for sale in the United States and for export abroad (Clossman and Long at 17) and since English has very poor export data, English’s estimates of the number of AR-15s sold in the United States are far from reliable.

17. To give more concrete numbers based on actual California data, we know that there are approximately 166,000 assault rifles currently registered with the California DOJ, and there have only been approximately 175,000 assault rifles that have ever been registered with the California DOJ (some registered rifles become unregistered if, say, the owner died, owner became prohibited, or owner relinquished the rifle). These actual registration numbers suggest that in a state with approximately 30,840,000 residents over the age of 18, assault weapons are

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<sup>10</sup> Another over-estimation that creeps into the Clossman and Long analysis stems from the fact that their paper estimated the number of “AR-15 platform rifles,” even though not all AR-15 platform rifles are assault rifles under the AWCA, as discussed above.

quite uncommon and indeed play virtually no role in the state, or indeed the entire country, in furthering self-defense within the home.<sup>11</sup>

18. Even assuming that each of the approximately 166,000 assault rifles is owned by a separate adult individual in California, it would mean that 0.5% of Californians possess an assault rifle (166,000/30.84 million) – an ownership rate that is far from what may be considered as “common use.” That ownership rate is likely even lower because, as my initial report noted, gun ownership is growing increasingly concentrated. This implies that whatever the number of assault rifles is, it is a far smaller number of households in California and in the United State that have such weapons. English confuses the number of guns with the number of *owners* of guns, with the latter considerably smaller than the former.

19. Clossman and Long looked at National Instant Criminal Background Check System (NICS) data and reported that California has the third highest demand for long-guns in the United States, behind Texas and Florida. (Clossman and Long at 31.) Clossman and Long estimated that Californians purchased over 150,000 AR-15s in 2013 alone, and 526,000 AR-15s between 2004-2013. (Clossman and Long at 33-35.) The wide discrepancy between Clossman and Long’s estimated figures and the actual registration numbers demonstrates that his methodology for estimation is unreliable.<sup>12</sup> Therefore, his overall numbers are too flawed and inaccurate to make any claim about the prevalence of assault weapons in the state or the nation, let alone who is using them for lawful self-defense in the home.

20. English speaks of the AR-15 as a “fine little weapon” and one that is “easy, pleasant, and accurate to shoot.” But this ignores the report from the Department of Defense

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<sup>11</sup> <https://www.census.gov/quickfacts/ca>.

<sup>12</sup> English’s estimates are either grossly exaggerated or indicate that the vast majority of “law abiding” assault-rifle owners in the state are in fact violating the law. He cannot have it both ways.

from which I quoted extensively in my initial affidavit in this case, which describes why this weapon was chosen for use on the battlefield: because it greatly increased the killing capacity of soldiers in combat. In other words, the very features that made this weapon attractive to the military (absent the ability to switch to automatic fire, which is not the standard military mode) now makes it the weapon of choice for many mass shooters across the country. This is what has prompted the California legislature to want to restrict civilian possession of assault weapons to reduce the harm from the growing danger of mass shooting.

21. In this regard, it is useful to look at the pattern of mass public shootings where 4 or more victims were killed over the periods 1982-2000 and 2001-2017.<sup>13</sup> California has tried to address the mass shooting problem with a variety of measures ranging from assault weapons restrictions to limits on the size of magazines and restrictions on carrying weapons outside the home. Other states, such as Florida, have not pursued these measures – to their detriment. If we examine the fatality rate from these public mass shootings, California's per capita fatality rate from mass public shootings fell by 2 percent after 2000, while Florida's fatality rate increased by 50 percent over the same period. Comparing the public mass shooting fatality rate of California to Florida in the post-2000 period, the fatality rate of California is less than half of the fatality rate of Florida.<sup>14</sup> Given the progress that California has made and is trying to build upon in

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<sup>13</sup> My data comes from Follman, Mark, Gavin Aronsen, and Deanna Pan. 2018. "US Mass Shootings, 1982-2018: Data From Mother Jones' Investigation." Mother Jones. <https://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data/> (accessed November 13, 2018). In computing the fatality rates from mass shootings in this paragraph, I also used the population data from the U.S. Census Bureau, "State Population Totals and Components of Change."

<sup>14</sup> My initial affidavit in this case highlighted the problem of the enormous number of guns stolen in the United States, thereby transferring hundreds of thousands of weapons each year from "law-abiding citizens" to criminals. A vivid reminder of this troubling peril is provided by the recent theft of a \$50,000 assault weapon (with ammunition, a silencer, and a rifle bag) soon after it was purchased and left in an unlocked car by NBA Miami Heat basketball player Hassan Whiteside. Fortunately, the police were able to recover the weapon weeks later in

reducing gun violence, it would be highly imprudent to undercut the policies that have been designed to reduce the devastation from public mass shootings that burdens our state and our country.

Date: November 21, 2018



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John J. Donohue III

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a stolen car in North Miami. "Hassan Whiteside buys \$50K assault rifle, immediately has it stolen after leaving it in unlocked Rolls Royce," <https://www.yahoo.com/news/hassan-whiteside-buys-50k-assault-rifle-immediately-stolen-leaving-unlocked-rolls-royce-020551481.html>.



## Exhibit 8

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In the United States District Court  
For the Central District of California

RUPP, et al.,

Plaintiffs,

v.

XAVIER BECERRA, in his official  
capacity as Attorney General of the  
State of California; et al.,

Defendants.

8:17-cv-00746-JLS-JDE

REBUTTAL EXPERT REPORT AND  
DECLARATION OF  
BLAKE GRAHAM

1 I am a Special Agent Supervisor for the California Department of  
2 Justice, Bureau of Firearms.

3  
4 2 I have previously submitted an expert report and declaration dated  
5 October 25, 2018, which describes my background and qualifications.

6  
7 3 I provide this rebuttal report and declaration in response to the  
8 opinions presented in the expert reports submitted by Plaintiffs, specifically reports  
9 by J. Buford Boone III, Stephen Helsley, and William English.

### 10 DISCUSSION

#### 11 RESPONSE TO REPORT BY J. BUFORD BOONE III.

12 4 I disagree with several opinions reached by Mr. Boone in his report.

13  
14 5 Boone opined that the AR-15 is an appropriate firearm for self-defense  
15 by civilians based an inference that the FBI “believes” the AR-15 is an appropriate  
16 firearm for defensive purposes solely because FBI Agents receive training on the  
17 use of AR-15 rifles, they are issued to some Agents, and some Agents used AR-15  
18 rifles in the 1990’s. Boone Report at p. 7. Mr. Boone’s opinion is not supported by  
19 evidence. As Mr. Boone conceded, the FBI does not endorse any particular  
20 firearms. Boone Report at p. 11.

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23 6 18. According to Mr. Boone’s report, his opinion that handgun rounds  
24 underperform “regardless of circumstance” is based on a test conducted during his  
25 time with the Ballistic Research Facility (BRF) that showed a “particular 115 grain  
26 +P+ 9mm bullet,” presumably fired out of an unnamed type of handgun, penetrated  
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1 approximately 11 inches in a bare tissue simulant. Boone Report at p. 6. There are  
2 several flaws with Mr. Boone's opinion in this respect.

3  
4 7 First, how a projectile performs when fired depends on the type of  
5 projectile and the gun it is fired from. Mr. Boone identified a specific type of bullet  
6 (115 grain +P+ 9mm) but did not address the performance or test results of other  
7 types of handgun rounds such as the 10mm or the .40, which the FBI and other law  
8 enforcement agencies use. Mr. Boone also did not identify the type of handgun  
9 from which the projectile was fired in his test. The penetration ability of a  
10 projectile depends not only on the projectile itself, but depends on a number of  
11 variables that Mr. Boone did not address. They include the barrel length of the gun  
12 from which the projectile is fired, the specific type of projectile, and the distance to  
13 the target. Therefore, it is erroneous to draw the broad conclusion that handgun  
14 rounds underperform based solely on the data relied upon by Mr. Boone.

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18 8 Second, Mr. Boone explained that the BRF was created following a  
19 1986 shootout wherein the projectiles used by FBI agents did not penetrate the  
20 target sufficiently. Boone Report at p. 3. After 1986, the FBI and other law  
21 enforcement agencies began to move away from using 9mm rounds towards larger  
22 caliber rounds such as the .40 Smith & Wesson. However, since that time, and  
23 further since Mr. Boone retired from the BRF, ballistics technology has vastly  
24 improved. Since 2007, the terminal effectiveness of projectiles has dramatically  
25 increased.  
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1           9       A 2014 FBI report indicates that 9mm Luger projectiles outperform  
2       .40 S&W and .45 auto projectiles tested by the FBI, and further offers less recoil,  
3  
4       lower cost, and higher functional reliability rates in FBI weapons.<sup>1</sup> According to  
5       the report, the majority of FBI shooters are able to shoot faster and more accurately  
6       with the 9mm Luger than handgun rounds of larger caliber. The report concludes  
7       that “[w]ith modern properly designed, expanding handgun bullets,” the objective  
8       of penetrating 12-18 inches, depending on the size of the individual and the angle of  
9       bullet path, “is realized.” The report describes a test conducted by the BRF that  
10      concluded that, compared to the .40 S&W projectile, the “9mm provides struggling  
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12     shooters the best chance of success while improving the speed and accuracy of the  
13  
14     most skilled shooters.”

15  
16           10      Third, I note that Mr. Boone did not opine that assault weapons, as  
17     defined under the AWCA, are suitable for civilian self-defense or home defense.  
18     He opined broadly as to AR-15 rifles, which is a much broader category of firearms  
19     than weapons defined as assault rifles by the AWCA. AR-15 rifles, AR-15  
20     platform rifles, or rifles with AR-15 lower receivers, are not necessarily assault  
21     rifles under the AWCA. These types of rifles and lower receivers may be  
22     assembled to be featureless rifles, or they may also be assembled as rimfire rifles.  
23  
24     Rimfire rifles that contain detachable magazine and features such as the flash  
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27     <sup>1</sup> <https://www.scribd.com/document/355927271/Executive-Summary-of-Justification-for-Law-Enforcement-Partners>  
28

1 suppressor, pistol grip, thumbhole stock, and telescoping or folding stock, are not  
2 considered to be assault weapons under the AWCA. In my belief, many AR-15  
3 rifles in California are rimfire rifles. My belief, based on my experience and  
4 knowledge, is that most AR-15 firearms possessed in California are not assault  
5 rifles under the AWCA.  
6

7  
8 11 Fourth, Mr. Boone speculated that an AR-15 is more intimidating than  
9 a handgun. That is irrelevant. The 2014 FBI report states that “the psychological  
10 effects of being shot can never be counted on to stop an individual from continuing  
11 conscious voluntary action.” It is intimidating to an individual for any firearm to  
12 pointed at the individual.  
13

14 12 Fifth, Mr. Boone opined that some features such as a pistol grip may  
15 allow an AR-15 platform weapon to be used more easily by those less trained in  
16 firearms for self-defense purposes. While this may be true, those same features are  
17 what makes assault weapons attractive to potential mass shooters or criminals  
18 because they would be more likely to cause massive casualties with very little  
19 training.  
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22 **RESPONSE TO REPORT BY STEPHEN HELSLEY.**

23 13 Mr. Helsley opined that adjustable stocks have a short adjustment  
24 range of 3-4 inches that has little, if any, effect on a user’s ability to conceal an AR  
25 rifle. Helsley Report at 10. Mr. Helsley’s opinion is incorrect for two reasons.  
26  
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1           14     First, Mr. Helsley's opinion does not apply to folding stocks, a type of  
2 adjustable stock. Folding stocks could reduce the length of a rifle by 10-12 inches.  
3

4           15     Second, contrary to Mr. Helsley's opinion, even a 3-4 inch reduction  
5 in the length of a rifle would make the rifle easier to conceal. As I discussed in my  
6 initial report, a weapon with a shorter overall length could permit a shooter to  
7 smuggle the weapon undetected in a bag or backpack, to hide in the crowd without  
8 telegraphing the shooter's location, or to conceal the weapon underneath loose or  
9 bulky clothing. Graham Initial Report at ¶ 21. As I also noted in my report, some  
10 manufacturers design and market backpacks specifically to carry assault rifles with  
11 folding or telescoping stock. Graham Initial Report at ¶ 21, fn. 3.  
12

13  
14           16     Mr. Helsley's opinion addressed semiautomatic, centerfire rifles with  
15 detachable magazines—these, however, are not necessarily assault weapons under  
16 the AWCA.  
17

18           17     Mr. Helsley stated on page 11 of his report that “[s]emiautomatic,  
19 centerfire rifles with detachable magazines have been in safe and effective use by  
20 civilians in this country for over a century.” Mr. Hesley did not specify whether the  
21 rifles he reference are assault weapons under the AWCA (since he could be opining  
22 on featureless rifles). To the extent he was referencing assault weapons under the  
23 AWCA, I disagree with his opinion. As I noted in my initial report, I am familiar  
24 with the use of assault weapons by subjects intending to do harm to civilians and  
25 law enforcement. Graham Initial Report at ¶ 35. Assault weapons have been a  
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1 popular weapon used in mass shootings in California and elsewhere. Graham  
2 Initial Report at ¶ 35. My initial report specifically identified 13 examples of mass  
3 shootings committed by shooters who used assault weapons. Graham Initial Report  
4 at ¶ 40. So assault weapons have not been used safely in at least those instances,  
5 but they were, unfortunately, used effectively by the mass shooters.  
6

7  
8 **RESPONSE TO REPORT BY WILLIAM ENGLISH.**

9       18     In his report, Mr. English estimated that there are around 15 million  
10 AR style rifles in circulation by the end of 2018. English Report at p. 6. Mr.  
11 English based his estimate on a report by Clossman and Long, which itself  
12 estimated that approximately 4.6 million AR-15s were manufactured in the U.S.  
13 between 2004 and 2013. English Report at p. 5.  
14


15       19     I note that not all AR-15 rifles or AR platform rifles or AR lower  
16 receivers are assault rifles under the AWCA. AR platform rifles comprise a  
17 much larger category of firearms than assault weapons under the AWCA. AR  
18 platform rifles may be featureless or may be rimfire rifles or may have a fixed  
19 magazine with less than a 10 round capacity. Any of these AR rifles would  
20 generally not be an assault weapon under the AWCA.<sup>2</sup> And AR lower receiver may  
21 be assembled into an assault rifle, or not. As Mr. Helsley acknowledged in his  
22 report, an AR platform rifle is highly configurable. Helsley Report at p. 11. Mr.  
23  
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26  
27 <sup>2</sup> There may be certain assault weapons identified in Penal Code section  
28 30510 that are rimfire rifles or have fixed magazines. These, however, are  
extremely rare and I have yet to encounter one in my career.

1 Helsley provided examples in his report of an AR configured as .22 rimfire rifle or  
2 as a 12lb single-shot rifle for competition. Helsley Report at p. 11. An AR  
3 platform rifle in these configurations or in many other configurations would not be  
4 an assault rifle under the AWCA.  
5

6  
7 I declare under penalty of perjury that the foregoing is true and correct.

8 Executed on November 21, 2018 at Sacramento, California.  
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12   
13 Blake Graham  
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## Exhibit 9

THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA

\_\_\_\_\_  
RUPP, et al., )  
Plaintiffs, )  
vs. ) Case No.:  
XAVIER BECERRA, in his ) 8:17-cv-00746-JLS-JDE  
official capacity as Attorney )  
General of the State of )  
California; et al., )  
Defendants. )  
\_\_\_\_\_)

VIDEOTAPED DEPOSITION OF JOHN J. DONOHUE  
San Francisco, California  
Thursday, December 6, 2018  
Volume 1

Reported by:  
RACHEL FERRIER, CSR No. 6948  
Job No. 3135713  
PAGES 1 - 244

Page 1



THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA

\_\_\_\_\_  
RUPP, et al., )  
Plaintiffs, )  
vs. ) Case No.:  
XAVIER BECERRA, in his ) 8:17-cv-00746-JLS-JDE  
official capacity as Attorney )  
General of the State of )  
California; et al., )  
Defendants. )  
\_\_\_\_\_)

VIDEOTAPED DEPOSITION OF JOHN J. DONOHUE,  
VOLUME 1, taken on behalf of the Plaintiffs, at  
Office of the Attorney General, 455 Golden Gate Avenue,  
Site 11000, San Francisco, California, beginning at  
10:12 a.m. and ending at 6:23 p.m. on Thursday,  
December 6, 2018, before RACHEL FERRIER, Certified  
Shorthand Reporter No. 6948.



1 APPEARANCES :

2

3 For Plaintiffs:

4 MICHEL & ASSOCIATES, PC

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6 Attorney at Law

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22 Videographer:

23 VISUAL DISCOVERY

24

25

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1 San Francisco, California; Thursday, December 6, 2018

2 10:12 a.m.

3 10:11:35

4 THE VIDEOGRAPHER: Good morning. 10:11:35

5 We are going on the record at 10:12 on 10:11:57

6 December 6, 2018. 10:12:02

7 Please note that microphones are sensitive and 10:12:03

8 may pick up whispering, private conversations, and 10:12:06

9 cellular interference. 10:12:09

10 Please turn off all cell phones or place them 10:12:10

11 away from the microphones as they can interfere with the 10:12:12

12 deposition audio. 10:12:16

13 Audio and video recording will continue to take 10:12:17

14 place unless all parties agree to go off the record. 10:12:20

15 This is Media Unit 1 of the video-recorded 10:12:23

16 deposition of John J. Donohue taken by counsel for 10:12:26

17 Plaintiff in the matter of Rupp versus Becerra filed in 10:12:29

18 the United States District Court, Central District of 10:12:35

19 California. 10:12:37

20 This deposition is being held at the Department 10:12:38

21 of Justice, Office of the Attorney General, located at 10:12:41

22 455 Golden Gate Avenue, San Francisco, California 94102. 10:12:44

23 My name is Reynaldo Salas, Junior, from the firm 10:12:49

24 Veritext, and I am the videographer. The Court Reporter 10:12:53

25 today is Rachel Ferrier, from the firm Veritext. 10:12:56

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1 I'm not authorized to administer an oath. I'm 10:13:00  
2 not related to any party in this action, nor am I 10:13:02  
3 financially interested in the outcome. 10:13:05  
4 Counsel and all present in the room and everyone 10:13:07  
5 attending remotely will now state their appearances and 10:13:10  
6 affiliations for the record, beginning with the 10:13:15  
7 questioning attorney. 10:13:16  
8 MR. BRADY: Sean Brady for Plaintiffs. 10:13:17  
9 MR. CHANG: Peter Chang, Department of Justice 10:13:18  
10 for Defendant Xavier Becerra. 10:13:23  
11 THE VIDEOGRAPHER: If there are any objections to 10:13:26  
12 proceeding, please state them at the time of your 10:13:28  
13 appearance, beginning -- excuse me. 10:13:30  
14 Will the Court Reporter please swear in the 10:13:32  
15 witness. 10:13:33  
16 JOHN J. DONOHUE, 10:13:33  
17 having been administered an oath, was examined and 10:13:33  
18 testified as follows: 10:13:40  
19 THE WITNESS: I do. 10:13:40  
20 THE VIDEOGRAPHER: Please begin. 10:13:42  
21 EXAMINATION 10:13:43  
22 BY MR. BRADY: 10:13:43  
23 Q Good morning, Professor Donohue. 10:13:43  
24 You have been designated as an expert witness by 10:13:45  
25 the California Attorney General's Office in the matter 10:13:48

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1       that people who acquired these firearms would -- that       12:28:39  
2       would be No. 1 -- the No. 1 response or reason that       12:28:42  
3       people who acquired these firearms would give?       12:28:45  
4       A     Well, this is the point of why I'm skeptical       12:28:48  
5       about survey data for certain things. If they answered       12:28:53  
6       truthfully, sure, lots of them would say that, but most       12:28:58  
7       of them would say, hey, I don't want to look like a       12:29:01  
8       weenie here, so the reason why I got the gun is so       12:29:04  
9       people wouldn't think I'm a weenie. So you are not       12:29:07  
10      going to get a -- a truthful answer on this question.       12:29:09  
11      And you don't even give them a choice for that,       12:29:12  
12      so how could this possibly be useful?       12:29:15  
13      Q     Have you reviewed the survey that went out to       12:29:20  
14      collect these responses?       12:29:24  
15      A     I've not.       12:29:25  
16      Q     And you don't know the methodology for which       12:29:27  
17      they -- the NSSF?       12:29:33  
18      A     I mean, you know, I remember when Microsoft was       12:29:37  
19      being sued, and Bill Gates sent out an e-mail saying,       12:29:39  
20      you know, "Get me some survey that says we need the       12:29:44  
21      browser connected to the search engine," and, you know,       12:29:50  
22      a few weeks later, they concocted a survey that said the       12:29:57  
23      browser should be connected to the search engine, but --       12:30:01  
24      so you have to be very cautious about these industry       12:30:08  
25      groups creating surveys to -- you know, I mean,       12:30:11

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1 obviously they want to say it's good for home defense. 12:30:16

2 You know, most real gun experts will tell you, "No. 12:30:21

3 This is not only not necessary for self-defense, but is 12:30:24

4 not an important factor for people who understand 12:30:29

5 guns" -- 12:30:34

6 Q Most gun experts would say that? On what do you 12:30:35

7 base that? 12:30:39

8 A Conversations with gun experts -- 12:30:39

9 Q How many? 12:30:44

10 A Hundreds. Hundreds. 12:30:47

11 Q Can you name one gun expert that said that an 12:30:50

12 AR-15 is not important for self-defense? 12:30:53

13 A Yeah, I can name plenty, but let me give you 12:30:56

14 someone of some prominence. 12:31:02

15 Dean Winslow, he is former colonel in the Army 12:31:06

16 and was nominated by James Mattis to be the assistant 12:31:15

17 secretary of defense for medical affairs, and I 12:31:23

18 reference him in my report, and he is very clear about 12:31:28

19 the absolute inappropriate nature of these weapons for 12:31:37

20 both home defense and for civilian use in an 12:31:46

21 unrestrained and unrestricted way. "So, yeah, shooting 12:31:50

22 is a blast, and I -- I enjoy shooting," he'll -- he'll 12:31:54

23 say, but the idea you need this for anything other than 12:31:59

24 having fun is -- is really quite a stretch. 12:32:03

25 Q And he's a self-defense expert? 12:32:06

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1	A	Yeah, I mean, he's --	12:32:08
2	Q	What are his credentials in self-defense	12:32:12
3		expertise?	12:32:15
4	A	You know, I -- I can amend my report if you would	12:32:15
5		like me to include all of his credentials on that, but	12:32:25
6		it is --	12:32:30
7	Q	No. I'm sure you could find an expert to say	12:32:31
8		anything.	12:32:36
9		What you said was that most gun experts say that	12:32:37
10		these rifles are not important for self-defense, and it	12:32:42
11		sounds to me that you are -- then you said you are	12:32:46
12		basing that on your conversations with these experts,	12:32:48
13		hundreds of them.	12:32:52
14	A	Yeah.	12:32:53
15	Q	You have given one example, and --	12:32:53
16	A	And -- and -- so --	12:32:53
17	Q	-- but you don't know his self-defense	12:32:57
18		credentials?	12:32:59
19	A	Yeah, and I --	12:32:59
20	MR. CHANG:	Objection as to "self-defense	12:33:00
21		credentials" as vague and ambiguous.	12:33:03
22	BY MR. BRADY:		12:33:04
23	Q	Does he train people on self-defense, to your	12:33:04
24		knowledge?	12:33:06
25	A	No. No.	12:33:06

1 Q And were those assault weapons? 03:56:23

2 A You know, I -- I haven't made a full 03:56:25

3 investigation of -- of that, but we -- we certainly know 03:56:30

4 that there -- there were cases of exactly that 03:56:34

5 happening. 03:56:39

6 Q Handguns seem very concealable; right? 03:56:39

7 A That's -- that's their -- their greatest virtue 03:56:44

8 for criminals. 03:56:49

9 Q Are more mass shootings performed with handguns 03:56:50

10 or rifles, in your study? 03:56:53

11 A Well, now, we do have to be careful because we 03:56:56

12 have this issue about all of the conflicting definitions 03:57:08

13 of -- of "mass shootings," but certainly, you know, 03:57:13

14 handguns are -- are much more common weapon in -- in 03:57:18

15 criminal activity overall. 03:57:24

16 Q So would it be fair to say that the definition of 03:57:33

17 "assault weapon" under the federal law is somewhat 03:57:37

18 confusing? 03:57:47

19 MR. CHANG: Objection; vague and ambiguous. 03:57:51

20 THE WITNESS: Yeah, so there -- there are -- 03:57:56

21 there are two issues here. 03:57:59

22 We -- we know, with 100 percent clarity, what's 03:58:00

23 the best thing to do in theory, and then there are 03:58:05

24 questions about how we implement it. 03:58:09

25 So there's no question that limiting the power 03:58:11

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1 and constructiveness of civilian weaponry is beneficial. 03:58:17

2 There's no question to that, zero doubt. 03:58:22

3 There are questions about how one gets to that. 03:58:26

4 Nobody who's serious -- although, I will say, more than 03:58:30

5 one NRA member has questioned me when I said this. 03:58:35

6 Nobody thinks -- again, except for a number of NRA 03:58:40

7 members who question it -- that you should be able to 03:58:46

8 have nuclear arms at your disposal. Couple of NRA 03:58:48

9 people said the Second Amendment says you have the right 03:58:55

10 to keep and bear arms. Nuclear arms are arms, so I 03:58:59

11 should have the right. But that is crazy, and I think 03:59:01

12 we can all agree civilian arms have to be limited, and 03:59:03

13 the question is: How do we achieve that goal so that we 03:59:09

14 limit the criminal use of these guns as much as possible 03:59:16

15 without undermining the ability to engage in, you know, 03:59:21

16 either helpful or at least not hurtful uses of these 03:59:29

17 guns. 03:59:33

18 Most of the time when a AR-15 is being used, it's 03:59:34

19 being used for fun, and so, you know, nobody wants to be 03:59:39

20 a killjoy. We want people to have fun. But we also 03:59:44

21 have to trade off against that. The fact that when 03:59:48

22 people are getting killed in school shootings and other 03:59:53

23 venues, that's a very socially costly use of these guns, 03:59:59

24 so that's the trade-off, restricting power and 04:00:02

25 effectiveness that will promote mass shootings versus 04:00:06

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1 inhibiting fun, and that's what -- that's what the law 04:00:11  
2 has to struggle with. 04:00:16  
3 It turns out it's not easy to define and limit 04:00:17  
4 the -- the destructiveness and power of weapons when you 04:00:24  
5 have, you know, dedicated efforts to circumvent any 04:00:29  
6 limit that -- that you are putting into place by 04:00:34  
7 manufacturers who are trying to get around the law and 04:00:38  
8 other efforts of that sort. 04:00:43  
9 But -- but, in theory, the goal is clear and 04:00:47  
10 unassailable. You want to limit the power and 04:00:49  
11 effectiveness of guns for use by mass killers. 04:00:53  
12 BY MR. BRADY: 04:00:56  
13 Q Even if that means limiting the effectiveness for 04:01:05  
14 the good guys? 04:01:10  
15 MR. CHANG: Objection; vague and ambiguous as to 04:01:14  
16 "the good guys." 04:01:16  
17 THE WITNESS: Yeah. 04:01:20  
18 BY MR. BRADY: 04:01:20  
19 Q People who aren't trying to kill people 04:01:21  
20 criminally. 04:01:24  
21 A Yeah, I mean, the problem is, most of the mass 04:01:26  
22 killers were the good guys until they started to be the 04:01:28  
23 mass killers, so it's very hard to separate out these 04:01:32  
24 two groups. 04:01:35  
25 Q That could be said about anything; right? 04:01:35

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1 A Well, not -- no, not really. 04:01:37

2 Q A guy wasn't a drunk driver until he drove drunk. 04:01:46

3 A Right, but that's why we prohibit drunk driving, 04:01:51

4 so we're -- we're trying to stop some of these behaviors 04:01:54

5 and -- 04:01:58

6 Q The behavior, but you are not taking away power 04:01:58

7 steering that makes a car much easier, and you are not 04:02:01

8 taking away horsepower that makes a car go and allows a 04:02:05

9 bad guy to evade police and potentially crash into a 04:02:09

10 bunch of pedestrians; right? 04:02:14

11 A Well, you know, it probably is true that we 04:02:16

12 should regulate guns more like we regulate cars, but you 04:02:20

13 can't do everything, and you -- you don't want to -- you 04:02:25

14 don't want to inhibit too much fun uses of guns, but 04:02:29

15 you -- you also want to inhibit power and capacity to -- 04:02:35

16 to limit the pernicious use of the guns. And since it's 04:02:43

17 going to be almost impossible to sort out who the good 04:02:47

18 guy and the bad guy is beforehand for mass shootings, 04:02:50

19 there are a limited set of tools that the government has 04:02:57

20 to address this growing problem. 04:03:02

21 Q Okay. Getting back to your report, paragraph 112 04:03:05

22 on page 46 -- 04:03:12

23 A Mm-hmm. 04:03:12

24 Q -- the last sentence of paragraph 112 you say: 04:03:16

25 The Police Executive Research Forum found that the 04:03:19

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1 relative usage of assault weapons in crime increased 04:03:24  
2 after the ban's end with 38 percent of police agencies 04:03:28  
3 reporting that criminals' use of assault weapons had 04:03:32  
4 increased. 04:03:34

5 Did I accurately quote you there? 04:03:36

6 A That assumes to be correct. 04:03:38

7 Q Okay. What methodology did the Police Executive 04:03:42  
8 Research Forum use in making that finding? 04:03:49

9 A You know, back to what we were talking about 04:03:51  
10 earlier, they were just looking at, you know, these 04:03:56  
11 agency reports and giving us the percentage of police 04:04:01  
12 agencies reporting that criminal use of assault weapons 04:04:08  
13 had increased. 04:04:11

14 Q In your work, is it common for police agencies to 04:04:13  
15 keep track of assault weapons that they take into 04:04:19  
16 custody? 04:04:25

17 A Well, some -- some do and some -- some don't, 04:04:25  
18 and, you know, as I said, the paragraph starts off: 04:04:33  
19 There is evidence that the federal assault weapon ban 04:04:42  
20 was effective in limiting criminal use of assault 04:04:44  
21 weapons. I -- I wasn't saying that, you know, a study 04:04:47  
22 of the quality of my study on right-to-carry laws has 04:04:53  
23 established, with a high degree of confidence, that 04:05:01  
24 right-to-carry laws -- or that assault weapons, you 04:05:05  
25 know, had this impact. I'm just saying there is 04:05:10

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1 application; is that correct? 06:05:56

2 A Yes. 06:05:56

3 Q Now, looking at the top of this worksheet, just 06:05:56

4 to make a -- speed up the process, I'll read it to you. 06:06:00

5 It says "Dealer's Record of Sale (DROS) Worksheet"; 06:06:03

6 correct? 06:06:07

7 A You are talking about the California one? 06:06:07

8 Q Exactly. Exactly. Exhibit 19. 06:06:09

9 A Yeah. 06:06:11

10 Q So does -- have you seen this worksheet before? 06:06:11

11 A No. 06:06:17

12 Q Okay. So based on that title, does it suggest to 06:06:17

13 you that this is a dealer's worksheet, something that 06:06:20

14 the dealer fills out? 06:06:24

15 A Yes. 06:06:25

16 Q Okay. And it's a record of sale; correct, as 06:06:25

17 indicated by its title? 06:06:30

18 A Yes. 06:06:32

19 Q So does -- would this suggest -- you know, is -- 06:06:32

20 so I would -- you know, this is a record of sale made at 06:06:38

21 the time that the firearm was sold. 06:06:45

22 Would it be reasonable for someone who, you know, 06:06:47

23 had one of these worksheets filled out at the time they 06:06:50

24 purchased the weapon to think, perhaps, you know, years 06:06:53

25 later, that this would be a registration application of 06:06:57

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1 their assault weapon? 06:07:01

2 A Yeah, if -- if you have a car, for example, you 06:07:02

3 might think when -- when the dealer sells it to me, we 06:07:06

4 are going to get through one set of paperwork, but then 06:07:11

5 I have to register -- register the car through another 06:07:14

6 set -- set of documents. So, of course, some people 06:07:17

7 make a mistake about everything, but it's not as though 06:07:22

8 it would be a reasonable mistake to make. 06:07:27

9 Q So looking at -- I want to switch to Exhibit 17, 06:07:30

10 and this is your rebuttal report. 06:07:34

11 A Yeah. 06:07:35

12 Q You were -- you were previously questioned on 06:07:36

13 paragraph 17 on page 7. 06:07:41

14 A Mm-hmm. 06:07:43

15 Q You know, in your -- in paragraph 17, you are 06:07:43

16 saying there are approximately 166,000 assault rifles 06:07:49

17 currently registered with the California DOJ. 06:07:53

18 A Mm-hmm. 06:07:53

19 Q And Mr. Brady mentioned that, you know, there 06:07:54

20 are -- I believe there's approximately 52,000 06:07:59

21 applications pending at the time. 06:08:01

22 You know, and even assuming all 52,000 06:08:06

23 applications were approved, that would bring -- in doing 06:08:08

24 some quick math, that would bring -- bring the total 06:08:13

25 number of registered assault rifles to 218,000 -- 06:08:15

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1	A	Mm-hmm.	06:08:15
2	Q	-- or thereabouts.	06:08:19
3	A	Yeah.	06:08:20
4	Q	Would that change your opinion that the estimate	06:08:21
5		made by Klausman [phonetic] and Long as to the number of	06:08:29
6		AR-15s in California was a gross estimation?	06:08:34
7	A	No.	06:08:37
8	Q	Now, still on paragraph 17, you know, I think you	06:08:43
9		concluded in the paragraphs above --	06:08:46
10	A	Mm-hmm.	06:08:46
11	Q	-- and correct me if I'm wrong, that you	06:08:49
12		concluded that Klausman and Long's estimate for number	06:08:51
13		AR-15s in the U.S. is -- was an overestimation; correct?	06:08:57
14	A	Yes.	06:09:02
15	Q	And -- and then you -- does that include Klausman	06:09:02
16		and Long's estimation of the number of AR-15s in	06:09:07
17		California?	06:09:10
18	A	Yes.	06:09:10
19	Q	So given that the number of assault rifles	06:09:10
20		actually registered with California DOJ is less than	06:09:15
21		what Klausman and Long estimated, is it reasonable --	06:09:20
22		does it -- is it evidence that Klausman and Long's	06:09:28
23		estimate for nationwide numbers were also an	06:09:31
24		overestimation?	06:09:38
25		MR. BRADY: Objection; calls for speculation,	06:09:38

1 beyond the scope of what the expert was called to 06:09:40  
2 testify about, irrelevant. 06:09:42  
3 MR. CHANG: Well, Mr. Brady, you -- you asked him 06:09:46  
4 about California versus national rates. 06:09:48  
5 MR. BRADY: And he said it didn't apply. He said 06:09:50  
6 he wasn't expanding it to that, but go ahead. 06:09:53  
7 MR. CHANG: Well, I'm asking him to clarify now. 06:09:54  
8 Q So Mr. -- 06:09:59  
9 MR. BRADY: He clarified it. 06:09:59  
10 BY MR. CHANG: 06:10:00  
11 Q Professor Donohue, so, you know, does -- does the 06:10:01  
12 actual California data and what it says about Klausman 06:10:02  
13 and Long's estimate for Cal- -- AR-15s in California -- 06:10:07  
14 does that provide any type of evidence with regard to 06:10:11  
15 Klausman and Long's estimate for nationwide data? 06:10:13  
16 MR. BRADY: Objection; beyond the scope of the 06:10:16  
17 deposition. I didn't ask him anything about Klausman 06:10:17  
18 and Long. Redirect should be limited to questions 06:10:20  
19 about -- on -- on direct deposition. 06:10:24  
20 BY MR. CHANG: 06:10:28  
21 Q You were asked about the paragraphs above 06:10:29  
22 paragraph 17; correct? 06:10:31  
23 A Yes. 06:10:33  
24 Q I mean, Klausman and Long weren't specifically 06:10:33  
25 mentioned, but paragraphs -- your paragraphs 15 and 16 06:10:36

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1 discussed Klausman and Long's estimates; correct? 06:10:39

2 A Yes. 06:10:42

3 Q So would you -- do you still need to repeat my 06:10:42

4 question [sic], or do you understand my question? 06:10:47

5 A No, I think I understand. 06:10:48

6 So -- so what I had said in response to Sean's 06:10:49

7 question was that, you know, the -- the -- the factors 06:10:53

8 that suppress ownership in California don't apply across 06:11:00

9 the country, but the elements of the Klausman and Long 06:11:07

10 estimate that lead to overestimation of the number of 06:11:12

11 assault weapons applies whether you are talking about 06:11:18

12 nationally or within California. 06:11:21

13 Q All right. Thank you, Professor Donohue. 06:11:26

14 If we can move to Exhibit 15, and this is the 06:11:29

15 Adam Lankford article -- 06:11:34

16 A Yes. 06:11:34

17 Q -- paper. 06:11:37

18 A Where is my -- oh, here it is. Got it. 06:11:37

19 Q And do you have Exhibit 16 on hand as well? 06:11:44

20 A I think I do. 06:11:46

21 Q Okay. Now, do you know one way or the other -- 06:11:47

22 A Mm-hmm. 06:11:47

23 Q -- for certain that Exhibit 16 was the NYPD data 06:11:54

24 set that Adam Lankford reviewed and relied on for his 06:12:03

25 paper that's Exhibit 15? 06:12:09

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1           A    I mean, he says that he relied on -- let me just       06:12:10  
2       quote.  He said:  Data for this study were first drawn       06:12:21  
3       from the New York City Police Department's 2012 Active       06:12:29  
4       Shooter Report.  So that -- that's the first place that       06:12:36  
5       he -- he started with when he was compiling his overall       06:12:42  
6       data set.                                                               06:12:45

7           Q    Right.                                                       06:12:45

8                   Professor Donohue, my question is:  Do you know       06:12:46  
9       for certain, one way or the other, whether Exhibit 16 is       06:12:48  
10      the same data set that Adam Lankford relied on for his       06:12:52  
11      paper?                                                               06:12:57

12          A    No.                                                           06:12:57

13          Q    There is some discussion earlier, if you can turn       06:12:57  
14      to page 194 -- well, I just -- before you do that,       06:13:02  
15      there's some discussion about non-English-speaking       06:13:07  
16      countries and whether the data set includes that.       06:13:09

17          A    Mm-hmm.                                                   06:13:09

18          Q    You know, this is a study -- according to the       06:13:14  
19      title, this is a study of 171 countries --       06:13:15

20          A    Mm-hmm.                                                   06:13:15

21          Q    -- correct?                                               06:13:18

22          A    Yes.                                                       06:13:18

23          Q    Do you know if there are 171 English-speaking       06:13:18  
24      countries, or more or less than that?       06:13:21

25          A    Less than that.                                           06:13:23

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1 Q Okay. Does that suggest to you this study 06:13:24  
2 includes non-English-speaking countries? 06:13:27  
3 A Yes. 06:13:29  
4 Q Okay. Now, if we turn to page 194, I'll direct 06:13:29  
5 your attention to the first paragraph under 06:13:36  
6 "Discussion" -- 06:13:38  
7 A Mm-hmm. 06:13:38  
8 Q -- and I'll just read the sentence. It's the 06:13:41  
9 second -- third -- it's the third sentence. It says: 06:13:43  
10 Some of the most dangerous countries in terms of 06:13:47  
11 homicide risk, such as Venezuela, Nigeria, and Mexico, 06:13:49  
12 had very few offenders; is that correct? 06:13:53  
13 A Yes. 06:13:55  
14 Q Okay. Now I'm going to skip down to the last 06:13:55  
15 full paragraph, about, you know, the fourth line down. 06:13:59  
16 It says: For example, the Small Arms Survey, 2007, 06:14:05  
17 lists the United States, Yemen, Switzerland, Finland, 06:14:10  
18 and Serbia as the top five countries in civilian firearm 06:14:13  
19 ownership rates, and all five countries also ranked in 06:14:15  
20 the top 15 in public mass shooters per capita; is that 06:14:18  
21 correct? 06:14:21  
22 A Yes. 06:14:21  
23 Q And then, two sentences down: In fact, 06:14:21  
24 Switzerland and Finland are commonly assumed to be 06:14:24  
25 extremely peaceful nations, and there may be much merit 06:14:26

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1 to those generalizations. However, this study's 06:14:29  
2 findings and the availability of firearms within their 06:14:32  
3 borders suggest that their relatively high rate of 06:14:35  
4 public mass shootings may not simply be attributed to 06:14:37  
5 bad luck. 06:14:40

6 Is that a correct quote? 06:14:42

7 A Yes. 06:14:43

8 Q Now, you know, reviewing his discussions there, 06:14:43  
9 there are a number of countries that are mentioned. 06:14:47

10 A Mm-hmm. 06:14:47

11 Q Are there -- do they include non-English-speaking 06:14:50  
12 countries? 06:14:53

13 A Yes. 06:14:53

14 Q Does this suggest to you that his data set 06:14:53  
15 includes non-English-speaking countries? 06:14:56

16 MR. BRADY: Objection; calls for speculation, 06:14:58  
17 beyond the scope. 06:14:59

18 THE WITNESS: Yes. 06:15:01

19 BY MR. CHANG: 06:15:03

20 Q Okay. And I want to also ask you -- so here we 06:15:04  
21 are talking about public mass shootings in the context 06:15:10  
22 of gun policy. 06:15:15

23 A Mm-hmm. 06:15:15

24 Q Now, if there's a shooting, say, for example, in 06:15:19  
25 Somalia by a Somalian warlord who raids a local village 06:15:23

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1 and shoots a number of people, would that incident be 06:15:28  
2 relevant for a -- a public policy study on -- on public 06:15:32  
3 mass shootings and firearms? 06:15:39

4 A No. 06:15:41

5 Q And why not? 06:15:42

6 A Well, what we are trying to think about is what 06:15:43  
7 in the context of the United States will be the impact 06:15:48  
8 of these types of regulations. And so when making that 06:15:52  
9 determination, you can look to sort of comparable 06:15:58  
10 countries to evaluate, you know, how the relative 06:16:01  
11 countries are doing in this respect, but if you have a 06:16:08  
12 country like Yemen, which, essentially, has no 06:16:12  
13 functioning criminal justice system and probably does 06:16:15  
14 have the type of warlord activity that you alluded to, 06:16:19  
15 it's simply not a good comparator set. And, of course, 06:16:25  
16 this has been an enormous problem with, you know, much 06:16:29  
17 work by John Lott and others that have tried to make it 06:16:33  
18 seem that the U.S. is -- is a relatively low-risk 06:16:39  
19 country in terms of some of these gun crimes when he's 06:16:47  
20 often comparing countries that have no effective 06:16:51  
21 criminal justice system operating, and, therefore, they 06:16:55  
22 are simply not good comparator states. 06:16:59

23 Q Okay. And your answer would be true if -- if 06:17:01  
24 there's a mass shooting by, for example, rebel 06:17:03  
25 guerrillas in the jungles of some country without an 06:17:06

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1 effective functioning government? 06:17:09

2 A Yeah, so that would be the same. 06:17:11

3 Q If we could you turn to page -- 06:17:28

4 (Discussion off the stenographic record.) 06:17:28

5 MR. CHANG: Could you turn to -- I'm trying to be 06:17:30

6 concise. 06:17:31

7 THE WITNESS: Mm-hmm. 06:17:31

8 BY MR. CHANG: 06:17:31

9 Q If you could turn to paragraph 46 -- 06:17:32

10 MR. BRADY: Maybe we could stipulate to the 06:17:32

11 warlords not being relevant. 06:17:34

12 BY MR. CHANG: 06:17:36

13 Q The -- page 46 of your report. 06:17:36

14 A Page 46 the big report, yes. 06:17:38

15 Q Paragraph 112. 06:17:41

16 A Okay. Got it. 06:17:45

17 Q There's some discussions about whether, you know, 06:17:50

18 the evidence -- or discussion about the evidence that 06:17:53

19 federal assault weapons ban was effective in limiting 06:17:56

20 criminal use of assault weapons. 06:17:59

21 A Mm-hmm. 06:17:59

22 Q To be clear, is it -- as you sit here today, is 06:18:03

23 it your expert opinion that federal assault weapon ban 06:18:06

24 was effective in limiting criminal use of assault 06:18:09

25 weapons? 06:18:12

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1 MR. BRADY: Objection; asked and answered. 06:18:12

2 THE WITNESS: Yes, I think that's what the 06:18:13

3 evidence shows. 06:18:18

4 BY MR. CHANG: 06:18:19

5 Q Now, if we could turn to Exhibit 12. 06:18:20

6 Okay. Exhibit 12, this is the Reason-Rupp 06:18:26

7 survey. 06:18:31

8 A Yes. Got it. 06:18:32

9 Q You were questioned about the -- on page 10, 06:18:38

10 Question 37. 06:18:42

11 A Mm-hmm. Page 10, okay, 37. Yes. 06:18:49

12 Q Right. 06:18:55

13 So in previous discussion, I think at one 06:18:56

14 point -- and correct me if I'm wrong, at one point the 06:18:58

15 discussion -- there was some discussion that, you know, 06:19:02

16 based on the answer to the question -- to Question 37 -- 06:19:05

17 A Mm-hmm. 06:19:05

18 Q -- that, you know, a quarter of the people 06:19:12

19 surveyed -- or slightly more than a quarter of the 06:19:16

20 people surveyed thought that an assault weapon was an 06:19:19

21 automatic weapon. 06:19:20

22 Is that how you recalled it? 06:19:20

23 A Yeah. 06:19:22

24 MR. BRADY: Objection; misstates test- -- 06:19:22

25 testimony, misstates evidence. 06:19:23

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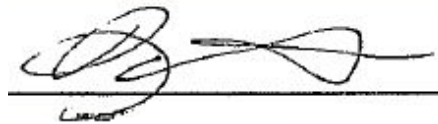
1  
2  
3  
4 I, the undersigned, a Certified Shorthand  
5 Reporter of the State of California, do hereby certify:

6 That the foregoing proceedings were taken before  
7 me at the time and place herein set forth; that any  
8 witnesses in the foregoing proceedings, prior to  
9 testifying, were placed under oath; that a verbatim  
10 record of the proceedings was made by me using machine  
11 shorthand which was thereafter transcribed under my  
12 direction; further, that the foregoing is an accurate  
13 transcription thereof.

14 I further certify that I am neither financially  
15 interested in the action nor a relative or employee of  
16 any attorney or any of the parties.

17 IN WITNESS WHEREOF, I have this date subscribed  
18 my name.

19  
20 Dated: December 24, 2018

21  
22   
23

24 RACHEL FERRIER

25 CSR No. 6948

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# **Exhibit 10**

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA  
SOUTHERN DIVISION

STEVEN RUPP, et al., )  
)  
Plaintiffs, )  
)  
vs. )  
) Case No.:  
XAVIER BECERRA, in his official ) 8:17-cv-00746-JLS-JDE  
capacity as Attorney General of )  
the State of California, )  
)  
)  
Defendant. )  
\_\_\_\_\_ )

DEPOSITION OF BLAKE GRAHAM  
Sacramento, California  
Wednesday, December 19, 2018  
Volume I

Reported by:  
Kaitlyn B. Houston, CSR No. 14170  
Job No. 3135718  
PAGES 1 - 223

Page 1

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA  
SOUTHERN DIVISION

STEVEN RUPP, et al.,

Plaintiffs,

vs.

XAVIER BECERRA, in his official  
capacity as Attorney General of  
the State of California,

Defendant.

Case No.:

8:17-cv-00746-JLS-JDE

Deposition of BLAKE GRAHAM, Volume I, taken on behalf of  
Plaintiffs, at 1300 I Street, Sacramento, California,  
beginning at 10:53 a.m. and ending at 5:57 p.m. on  
Wednesday, December 19, 2018, before Kaitlyn B. Houston,  
Certified Shorthand Reporter No. 14170.

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---oOo---



1 Sacramento, California; Wednesday, December 19th, 2018

2 10:53 a.m.

3 BLAKE GRAHAM,

4 having been administered an oath, was examined and

5 testified as follows:

6 (Whereupon Exhibit 95 was premarked for  
7 identification.)

8 EXAMINATION BY MR. BRADY

9 Q. Good morning, Mr. Graham.

10 A. Good morning.

11 Q. I believe you recall who I am, but in case you  
12 don't, my name is Sean Brady. I am an attorney for the  
13 plaintiffs in the matter of Rupp v Becerra, which you are  
14 here designated as an expert witness on behalf of the  
15 defendant, Attorney General Xavier Becerra.

16 Is that your understanding?

17 A. Yes, sir.

18 Q. Good morning, by the way.

19 A. Good morning.

20 Q. I have marked as Exhibit 95 a document entitled  
21 Plaintiff's Amended Notice of Deposition of Defendant's  
22 Expert Witness Blake Graham.

23 Have you seen this document?

24 A. Let me look at the date.

25 (Pause on the record.)

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1 possession of weapons. Those types of things.

2 Q. So you were dealing with real bad, violent guys?

3 A. Yes.

4 Q. Okay. Were assault weapons a common feature of  
5 those investigations? Did you come across them often in  
6 those investigations?

7 A. I would say they were present, but I don't know  
8 if I've ever tried to -- you know, capture -- that was  
9 several years ago. If they had -- half of the guys that  
10 we arrested or investigated had them or -- I don't really  
11 know. I know that some of them did, but I would probably  
12 have, I think, trouble putting down a number of, you  
13 know, five of these guys per year did or didn't have it  
14 or, you know, something like that.

15 Q. Okay. So you can't really say whether assault  
16 weapons were common in those investigations? Commonly  
17 come across in those investigations?

18 MR. CHANG: Objection. Vague and ambiguous as  
19 to "assault weapons" and as to timing.

20 BY MR. BRADY:

21 Q. During your investigations between 1999 and  
22 2002, would you say it was common for you to come across  
23 rifles defined as assault weapons in your investigations  
24 of violent crimes?

25 MR. CHANG: Objection. Vague and ambiguous as

Page 10

1 to "common" and also as to the timing of the definition  
2 of "assault weapons."

3 THE WITNESS: I'm still allowed to answer,  
4 correct?

5 MR. CHANG: Please.

6 THE WITNESS: Just so I don't get ahead of  
7 myself. So after all that back and forth, can you repeat  
8 the question? Sorry.

9 MR. BRADY: Can you read it back?

10 (Whereupon the record was read back.)

11 MR. CHANG: Same objections.

12 THE WITNESS: Understood. Okay.

13 I can say that assault weapons were present to  
14 some degree. Firearms were -- the generic term of  
15 firearms would be the most common factor. Some of which  
16 -- some of those firearms would have met the definition  
17 of an assault weapon under 30510 because of the time in  
18 early '99, that would have been the only game in town as  
19 far as state law.

20 Later on in that period of time that you spoke  
21 of, we had the three -- what are now called the 30515  
22 generic characteristics sort of standards. At the time,  
23 it was 12276 and 12276.1 in that window of time.

24 BY MR. BRADY:

25 Q. Would you say that rifles meeting the definition

Page 11

1 of assault weapon under Penal Code Section 30515 now were  
2 -- commonly come across in your investigations of violent  
3 crime during the period of 1999 to 2002?

4 A. To some degree, yes.

5 Q. You also say as a special agent during that  
6 period, you worked on various violations occurring at  
7 California gun shows.

8 How many gun shows were you attending during  
9 that period?

10 A. Good question. Probably somewhere in the  
11 neighborhood of one a month. Maybe one every other  
12 month. I had a particular region, so that's why it's a  
13 little bit vague. I had from the San Jose area and then  
14 some of the Bay area -- I'm sorry, the North Bay.  
15 Depending on what gun shows were on calendar, it might  
16 vary.

17 Q. Were rifles that meet the definition of assault  
18 weapon prevalent at these gun shows?

19 A. In 1999, they would have been -- probably --  
20 actually, in '99, we wouldn't have been doing a ton of  
21 gun shows because the gun show stuff sort of picked up  
22 probably late 2000 or 2001. So starting in 2000, there  
23 was a registration window for the Category 3 or, at the  
24 time, the 12276.1 identified weapons. So they were  
25 controlled. There shouldn't have been a lot of them out

Page 12

1 particular mission. You might have to have some other  
2 function. You may be in charge of carrying a fire  
3 extinguisher in case there's pit bulls. You may have to  
4 just be that, and then you're going to have your handgun  
5 available to deal with it that way.

6 Q. During this training, is -- are the buildings  
7 that you're entering generally close quarters?

8 A. Yes.

9 MR. CHANG: Objection. Vague and ambiguous.

10 BY MR. BRADY:

11 Q. Would you say that, generally, it's within  
12 handgun range? Every -- every -- wall to wall? Would  
13 you ever enter a building where the wall furthest away  
14 from you was beyond effective handgun range?

15 A. In -- during the training class or in reality?

16 Q. Let's start with the training class.

17 A. In the training classes, it would be rare for us  
18 to have access to a facility that would be some kind of a  
19 giant warehouse, let's say, where it's just a big shell  
20 and no smaller walls, you know, dividing up in between  
21 those exterior four walls. Maybe like -- I mean, I had  
22 to think about, like, what you -- what you meant like  
23 that, but I'm going to say like an airplane hanger where  
24 it's just a giant empty box.

25 Q. Sure.

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1           A.     Something like that, that might be a scenario in  
2     the real world where we have to go for some reason.  
3     Maybe there's a marijuana grow in the hanger. It's just  
4     a great place to grow weed. That might be a reality, but  
5     we probably wouldn't have a lot of access to something  
6     like that, but it might be a reality, but...

7           Q.     I was just -- so -- but when they're training  
8     you, it is to do entry weapons training. Is it generally  
9     within walls that are confined to effective handgun  
10    range?

11          A.     Typically, yes. But part of that same school is  
12    how do you approach the building first, which you might  
13    start a hundred yards down a dirt road, walk up to that  
14    facility that you're going to, in a sense, assault  
15    because of a search warrant, and the -- this training  
16    class usually incorporates the simulation of a breacher  
17    that's going to break the door, and then the first -- you  
18    know, basically all the team will flow in and conduct the  
19    search of those rooms inside the location.

20                So there are plenty of times where you have to  
21    get from your vehicles up to the building and there's  
22    long distances where a handgun would not be a great -- a  
23    great weapon if that's your only weapon.

24          Q.     Did this course train you that when entering a  
25    house or a similar structure, when you're entering with a



1 rifle, to continue with the rifle or to put the rifle  
2 away and retrieve a handgun?

3 A. If there was a malfunction of the long gun,  
4 we're trained to transition to our handgun. If there's a  
5 scenario in which the long gun is too -- too long, pardon  
6 the pun, but if it's too cumbersome to use in a tight  
7 space, we're trained to transition to a handgun.  
8 Sometimes on staircases, it's best to incorporate a  
9 handgun and a long gun. Sometimes going around corners,  
10 it's easier to use a handgun than a long gun in some  
11 instances. Going into an attic, for example.

12 Q. But entering a home necessarily does not mean  
13 transition to a handgun, right?

14 A. No. No.

15 Q. Two items down, you say on January 20th, 2002,  
16 you completed a 24-hour class in assault rifle training.

17 Can you describe what that training was about?

18 A. Yeah. That was -- I believe that was at either  
19 Camp Roberts -- I'm trying to think here -- or Fort  
20 Hunter Liggett down in maybe like San Luis Obispo area off  
21 the Highway 101, and that class was for those people that  
22 had an M4 issued to them.

23 It was about basically teaching long distance  
24 marksmanship to, like, say, like, 400 yards with iron  
25 sights. That kind of stuff. We have access to the

Page 37

1 to right at 30, whether it be a fixed or telescoping  
2 stock version, making something smaller, it makes it more  
3 versatile if I'm going to try to get it into a -- maybe a  
4 -- I don't know -- a school zone or something like that.  
5 It gives flexibility as far as the shooter. They can  
6 customize it to their body fit, as well.

7 Q. But my point is that you can buy with a fixed  
8 stock at 30 inches, right?

9 A. Yes.

10 Q. So it's already as concealable as it's going to  
11 get with the fixed stock or -- whether it has a fixed  
12 stock or an adjustable stock, at 30 inches, that's as  
13 concealable as it gets?

14 MR. CHANG: Objection. Asked and answered.

15 THE WITNESS: So larger frame shooters may  
16 choose to have longer weapons because of their body type.  
17 They may seek a telescoping stock variant to -- when I  
18 say concealability, that might be because they have some  
19 bad intent to do. Get it into a building or something  
20 like that.

21 Granted, you can buy a weapon with a fixed  
22 stock, and it's locked in at 30 or 31 inches. Whatever  
23 it's going to be. But having the freedom to telescope it  
24 down and back it off so that it's longer to fit the  
25 shooter's needs, it's an advantage.

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1 BY MR. BRADY:

2 Q. You don't think that a change of three to four  
3 inches is fairly negligible when you're talking about  
4 concealment of a firearm?

5 A. No. I think it's kind of significant. The AR  
6 platforms come in various lengths. Barrel lengths are  
7 around 16 for the standard ones. And then if you go down  
8 to the short barrel rifle or machine gun versions,  
9 they're 14-and-a-half-inch barrel, and then a 10- or  
10 11-inch barrel, too. Different stages of those upper  
11 receivers.

12 The smaller you get, the -- those chunks taken  
13 off the end of the barrel, as you're -- if you're  
14 clearing houses, like what I do for a living sometimes,  
15 having the shorter barrel will aid you in not giving away  
16 your position if you're creeping around trying to clear a  
17 house. That is an advantage. I'm not going to give  
18 myself away by having a long barrel sticking out in front  
19 of me.

20 Q. So there are -- you have an adjustable stock on  
21 your rifle?

22 A. On my M4, yes.

23 Q. So they are of -- why do you have an adjustable  
24 stock on your rifle?

25 A. Why do I?

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1 Q. Yes.

2 A. The department issued me that rifle, and it had  
3 it when I got it.

4 Q. Would you prefer a rifle that did not have an  
5 adjustable stock?

6 A. No. I'm happy with it having an adjustable one  
7 because I have different levels of body armor, thickness  
8 levels. So between the heaviest armor that I wear for  
9 search warrants, it's definitely thicker, and I have to  
10 put it on a different setting. Otherwise it causes me  
11 problems.

12 Q. Okay. And why -- why do you need different --  
13 different lengths of the rifle? Why do you need to  
14 change the stock to accommodate the body armor? Why  
15 can't it just be a fixed stock?

16 A. Ergonomics because sometimes I have a helmet on.  
17 Sometimes I have Level 4 body armor on with a rifle  
18 plate. I'm very -- my girth increases, if that makes  
19 sense. So I need to shorten the stock so I can have the  
20 same sight picture, the same eye relief, etcetera.

21 So if I have a T-shirt on, I might change the  
22 position because I don't have, you know, two or  
23 three inches of body armor on.

24 Q. So you're saying that the length of stock can  
25 affect your ability to -- to effectively use the firearm?

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1 Q. And your department use of force policy is -- is  
2 what? Can you explain?

3 A. Yeah. I'll give it a shot. I'm not the  
4 department's expert.

5 Q. What is your understanding of when you are able  
6 to use up to deadly force?

7 A. If you boil it down, it's basically to prevent  
8 serious bodily injury to myself, other law enforcement,  
9 or other members of the public that might be subject to  
10 an immediate attack. Somebody may be swinging a weapon  
11 or throwing a brick or shooting at one of us, and there's  
12 nothing else that can potentially stop that from  
13 happening. So you have to stop the threat by potentially  
14 using lethal force against the aggressor.

15 Q. Is that standard any different than for a  
16 non-law enforcement member of the public, to your  
17 knowledge?

18 A. There's -- there's a specific Penal Code that  
19 breaks down justified homicide, and there might be a  
20 separate exemption that is carved out for law enforcement  
21 versus civilian. I'm not an expert on that area, so I  
22 don't want to comment, but I think there might be some  
23 differentiation, at least a separate exemption broken  
24 down there.

25 Q. Generally, you're only using lethal force to

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1 protect a threat to life or great bodily injury; is that  
2 fair to say?

3 A. Yes.

4 Q. Have you ever had to use lethal force?

5 A. No.

6 Q. Have you ever discharged your weapon in the line  
7 of duty towards a human being?

8 A. No.

9 Q. Have you ever pointed your gun at anybody in the  
10 line of duty?

11 A. Hundreds of times.

12 Q. Hundreds of times.

13 Why didn't you shoot in any of those hundreds of  
14 times?

15 A. I didn't feel a threat that would justify me  
16 pulling the trigger.

17 Q. Was that -- out of those hundreds of times, was  
18 it with your pistol or with your rifle or both?

19 A. Both.

20 Q. Do you notice a difference in the response from  
21 the suspects when you're pointing a pistol versus a rifle  
22 at them in their reaction to you?

23 A. No, not really. I would say in every occurrence  
24 that this has happened, I've usually had one or more  
25 partners with me also doing the same thing, and they may

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1 have had a pistol or a rifle whereas I had the opposite.  
2 Sometimes it was all of us had rifles. Sometimes all of  
3 us had pistols.

4 So when you're in that moment, I've never  
5 noticed someone all of a sudden their eyes get bigger  
6 than they already are if somebody with a rifle walks into  
7 the room and there's already a Glock or two pointed at  
8 them. I've never noticed that.

9 Q. Have you ever had a situation where a suspect  
10 was not complying because they didn't realize you had a  
11 gun out?

12 A. No.

13 Q. No?

14 A. Huh-uh.

15 (Pause on the record.)

16 BY MR. BRADY:

17 Q. Okay. So we went through the features that are  
18 restricted on a semiautomatic centerfire rifle that does  
19 not have a fixed magazine as defined in California Penal  
20 Code Section 30515 that you describe in your report.  
21 I'll note that we did not go through thumbhole stocks  
22 because would you agree that those are essentially pistol  
23 grips?

24 A. Agreed.

25 Q. And forward pistol grips are essentially the

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1 same as pistol grips?

2 A. Agreed.

3 Q. So that is why we did not discuss those, but  
4 they're implicit in the pistol grip analysis.

5 And in discussing those -- correct me if I'm  
6 wrong, but it is my understanding that you believe that  
7 each of those features is beneficial to the user of a  
8 firearm; is that fair to say?

9 A. Yes.

10 Q. But is it then your opinion that because those  
11 features are beneficial to bad guys as well as good guys,  
12 that that's why they should be restricted?

13 A. Well, it's not really up to -- sorry.

14 MR. CHANG: Objection. Lacks foundation.

15 THE WITNESS: It's not really up to me to say  
16 what is permissible, per se, under state law. The  
17 legislature sets that up. So I'm not sure if that's  
18 responsive to your question.

19 BY MR. BRADY:

20 Q. I'm not asking your opinion on the law unless  
21 you want to give it. I was planning to not put you in  
22 that position because I'm friendlier than that, but I  
23 understand that you're dealing with the law that is in  
24 front of you, but you are making the -- the case for why  
25 each of these features in Penal Code Section 30515 is

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1     problematic from the state's view. From a public safety  
2     perspective, right?

3           A.     Yes. So I'm making the point that each of those  
4     features, in my eyes, has some kind of advantage that it  
5     gives to the shooter. It's not necessarily, you know --  
6     bad things can happen with guns.

7           We have the so -- on page 9, we have Rifle A and  
8     Rifle B. They both fire the same ammunition. They're  
9     both semiautomatic. The magazines are interchangeable.  
10    Rifle B has some of the features. I wouldn't want to get  
11    shot by either Rifle A or Rifle B. And depending on the  
12    skill level of my opponent, it may not make a difference.  
13    But the average person picking up Rifle A or Rifle B, I  
14    would probably prefer them to have Rifle A.

15          Q.     Why?

16          A.     Because they -- Rifle A lacks a few ergonomic  
17    features that I would want myself, so doesn't have a  
18    flash suppressor. If this guy is shooting at me in a low  
19    light situation, I do want him to be maybe -- his vision  
20    to be impaired probably because there's no flash  
21    suppressor there.

22                 Maybe this person stole the weapon and maybe  
23    their arms are so short that they're having a hard time  
24    shooting or aiming this thing, so I don't necessarily  
25    want them to be able to collapse the stock down or to,

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1     you know, make the weapon smaller or to conceal it or  
2     something like that.

3             The pistol grip, earlier I gave examples of  
4     magazine exchange being slightly faster for me which  
5     could apply to another person. With that pistol grip,  
6     they can keep their gun on site, which might be aimed at  
7     me. I would want them to come off of target while  
8     they're trying to fumble to get their mag exchange and  
9     then come back up and find me to start shooting at me  
10    again.

11            So the Rifle B, to me, has tactical advantages  
12    over Rifle A. So that's my point in calling out those  
13    features as perhaps why the legislature called out  
14    certain features.

15            We didn't -- in California law, we never worried  
16    about bayonet lugs. The federal law did at one point.  
17    Rifle B -- the picture has a bayonet plug, but I didn't  
18    it speak to it. I'm not aware of any people getting  
19    bayoneted, so -- but other things do happen. A lot of  
20    shootings happen with, you know, various weapons.  
21    Rifle A and B, there's a lot more Rifle As out there in  
22    the general population. They're still legal for sale  
23    just like that.

24            Q.    And features on Rifle B that make it easier for  
25    a bad guy to use would likewise make the rifle easier for

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1 a good guy to use, right?

2 A. Potentially, yeah. It's a double-edged sword.

3 Q. And by taking away the features from Rifle B,  
4 that could potentially contribute to a better fit of  
5 firearm for a user. The state is basically saying that  
6 the general public should have less effective weapons  
7 than -- because the most effective ones could be misused  
8 by criminals, right?

9 MR. CHANG: Objection. Lacks foundation.  
10 Speculative. Argumentative.

11 THE WITNESS: Since 1989, the legislature has  
12 called out certain military-style weapons. Albeit,  
13 they've been semiautomatic ones. Most of the ones called  
14 out in 30510 have been ones that had one or more of the  
15 features on Rifle B. Some of them have multiple features  
16 like that.

17 The 30510 sort of scheme for registration and  
18 the control and lack of sales of those after that lawsuit  
19 was settled in 1991, I think, didn't quite work, so the  
20 legislature sort of reinvented the wheel and went down  
21 the path of what the federal government had done by  
22 calling out certain generic characteristics.

23 Probably neither of these is a perfect sort of  
24 fix to what they perceive is a problem. They obviously  
25 have evolved over time with the Senate Bill 880 being the

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1 most recent version of the assault weapons changes over  
2 time. The weapons over time are changing, and the laws  
3 are slowly changing behind them, sometimes ten years or  
4 later after a significant change has occurred like the  
5 bullet button sort of change.

6 BY MR. BRADY:

7 Q. So you gave some examples of why you would  
8 prefer a bad guy shooting at you having Rifle A versus  
9 Rifle B and that had to do with maybe they stole it, so,  
10 you know, the stock doesn't fit them right. That makes  
11 sense. You know, if it's in low light, it doesn't have a  
12 flash suppressor, they may lose their night vision and  
13 not be able to see you for the follow-up shot. Okay.

14 But in a general daytime situation with an  
15 average -- average build person with Rifle A versus  
16 Rifle B, how much of a difference do these features  
17 really make for accuracy?

18 A. Could you discuss the range of which -- let's  
19 say two people squared off. One with Rifle A and one  
20 with Rifle B.

21 How far apart are they?

22 Q. Why don't you tell me what the difference would  
23 be.

24 A. If the shooters were -- I don't know -- 50 to  
25 100 yards apart and shooting each other, the shooter with

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1 Rifle B would probably want to have the stock extended  
2 out like in the picture because they're going to want to  
3 have the best and most accurate shot. The longer -- with  
4 the stock extended like this, it's going to mimic the  
5 stock on Rifle A. The advantage that this weapon here  
6 will have is during the reload, they're going to have the  
7 pistol grip. They can keep the weapon up and roughly  
8 pointed at the target when the mag exchange happens --

9 Q. You can't do that with Rifle A?

10 A. You can. I find it troublesome with this  
11 specific weapon. I've fired both versions of this the  
12 department owns. And to me, it's just harder to reload  
13 this while keeping the weapon up.

14 Q. Have you ever done a side-by-side comparison  
15 of -- of Rifle A and Rifle B? Obviously not those  
16 specific rifles, but a -- a featureless rifle, which is  
17 Rifle A, and a featured assault rifle, which is Rifle B?

18 A. Yes.

19 Q. You've done a side-by-side comparison?

20 A. Yes. Folsom prison. We did it there with a  
21 bunch of other guns that we had laid out for a training  
22 day to get people accustomed to as we seize these, "Hey,  
23 you're going to find these weapons. And some will be  
24 loaded. Some will be not loaded." We've done it with  
25 AKs so that people are used to shooting and hearing the

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1 sounds of certain weapons if they're fired at you.

2 Submachine guns, machine guns, etcetera.

3 So our agents -- we try to train them so that  
4 they can safely -- when they recover weapons, they're  
5 making sure they're clearing the chamber, making sure  
6 we're not taking loaded guns home -- or back to the  
7 office for our evidence technicians to have an accidental  
8 discharge or things like that. So there's a good reason  
9 to have these out there and shoot various ones.

10 We have a -- one that looks a lot like Rifle B,  
11 and then there's a one that looks a lot like Rifle A, and  
12 I think there's one or two other variants that are sort  
13 of in between with, like, a flash suppressor attached,  
14 and then there's another version that has some other  
15 change to it. I think it might be stainless or  
16 something.

17 Q. And you shot those side by side on the same day  
18 at the same targets?

19 A. Yeah. Yeah.

20 Q. And what was the difference in your groupings?

21 A. It was -- I don't know that it was a groupings  
22 difference. It was my speed to which -- it wasn't a  
23 timed test, per se, but it was how quickly could I fire  
24 enough rounds to stop the threat. That type of thing.

25 If I was doing two rounds, mag change, put the

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1 new mag in, charge it, and then two more rounds, it was  
2 three or four seconds slower with the rifle that was  
3 similar to Rifle A.

4 Q. Okay. So then your effective rate of fire was  
5 not as -- was slower than the actual rate of fire.

6 Is that fair to say with Rifle A versus Rifle B?

7 A. Yes. Rifle A, I was a little bit slower. The  
8 distance in which we were shooting was seven yards.

9 Q. Okay.

10 A. So the distance -- it was negligible.

11 Q. So accuracy did not change between the two?

12 A. I didn't notice a much larger pattern.

13 Q. It was the magazine change that made the  
14 difference there?

15 A. Yeah. The speed in which I could reload and  
16 just do similar drills that we do with our M4s and stuff.  
17 We were just having the agents mimic that.

18 Q. And that was because of the pistol grip, right?

19 A. That's what -- yeah. I found that to be more  
20 similar to my M4 which I've used for many years, so it  
21 just seemed more natural.

22 Q. Okay. So between Rifle A and Rifle B, when you  
23 did a side-by-side comparison, you weren't really looking  
24 for accuracy because you were at short distances, right?  
25 But -- so accuracy was really -- couldn't be

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1 distinguished at that...

2 A. Yeah. At that short range, seven yards, it's  
3 not going to make a difference.

4 Q. So on what do you base your opinion that the  
5 features on Rifle B increase accuracy on a rifle?

6 A. So I was in a -- I was in a scenario which I  
7 didn't have people shooting back at me. I had -- I  
8 basically could go as fast as I felt comfortable going.  
9 I was at my own pace, in other words. So if I'm going to  
10 be in a stressful situation trying to shoot, reload,  
11 shoot again, and repeat that cycle as long as I needed  
12 to, Rifle B would be my choice. I might be 10 percent  
13 more effective because especially in low light with the  
14 flash suppressor change. And when I say effective, I  
15 mean quicker and potentially more accurate.

16 Another factor with Rifle B -- it wouldn't come  
17 to play with a 50- to 100-yard or longer -- but if I'm up  
18 close, say seven yards, I could probably even fire this  
19 thing with no stock, meaning it's been folded to collapse  
20 it down, and I could still probably hit the target with  
21 all my rounds, and just coming up like this without  
22 actually a brace or a sling on there.

23 I'm going to -- I may lose a little bit of  
24 accuracy there, but the -- the difference being is I  
25 would be sort of simulating coming out from maybe -- I

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1     don't know -- a trench coat or some other -- maybe out of  
2     a bag, and I didn't see the need at that point to flip  
3     the stock out. I just wanted to start shooting. The  
4     concealability factor there would override the accuracy  
5     at a close range.

6             Does that make sense?

7             Q.     Yeah. I believe so. It makes sense. I don't  
8     know if it was completely responsive to my question about  
9     why you think the features -- or what you base your  
10    opinion that the features make Rifle B more accurate than  
11    Rifle A, because that is your opinion in your report,  
12    correct?

13            A.     Right.

14            Q.     So I'm just wondering, do you -- do you base  
15    that opinion that Rifle B is going to be more accurate  
16    than Rifle A on just your personal preference for these  
17    features or on testing that you've seen? That's what I'm  
18    trying to get at.

19            A.     I would say, like, the only time I've done that  
20    side by side with weapons similar to Rifle A and Rifle B  
21    would be that one time. I've fired a weapon like Rifle A  
22    a few other times, but we didn't have the Rifle B clone  
23    out there, and it was sufficient. I was able to hit, you  
24    know, things on target, but I just felt like I was  
25    more -- when the stock would be extended, I was more

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1 comfortable shooting Rifle B. And if I had to shoot for  
2 some kind of a score between the two and a timed score, I  
3 think I'm going to do better with Rifle B.

4 Q. Okay. How much better, do you think?

5 A. Perhaps 10 percent. Something like that. Each  
6 of these features maybe is going to give you a few maybe  
7 percentage points of improvement. Small little things.  
8 The professional or semipro shooters out there, they do  
9 all kinds of things to their guns, whether it be handgun  
10 or long gun, from grip wraps so they get a perfect grip  
11 and different, you know, carvings on the wood stocks and  
12 all this other stuff.

13 So little ergonomic differences make a  
14 difference if you're really into having a high score if  
15 it's a, you know, paper target scenario where you're  
16 shooting metal plates and, you know, things like that at  
17 a competition.

18 Q. And accuracy is a good thing, right?

19 A. Yes.

20 Q. You train to be accurate, right?

21 A. Yeah. You want to have the highest score  
22 possible if you're shooting for a qualification, for  
23 example.

24 Q. And that's because -- well, also, you want to  
25 hit your target in the real world if you need to, right?

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1           A.     Uh-huh.   Same thing would apply.

2           Q.     And we would want somebody who is shooting  
3     somebody in self-defense to hit their target and not miss  
4     and hit something else, right?

5           A.     Legitimate --

6           Q.     Yeah, we're assuming legitimate.

7           A.     Yes.

8           Q.     Yes.   Bad guys coming down the hallway with the  
9     knife in hand.   You want the homeowner to put two in his  
10    chest and not two over his shoulder into the neighbor,  
11    right?

12          A.     Yeah.   You want responsible gun owners to --  
13    and/or law enforcement, if that's what's going on in the  
14    shooting, to hit what they're shooting at and not have  
15    rounds flying around.

16          Q.     And control of the firearm assists with being  
17    accurate, right?

18          A.     I believe so.

19          Q.     So you want a gun that fits well, right?

20          A.     Yes.

21          Q.     That's crucial for proper firearm -- safe  
22    firearm use, right?

23          A.     Depending on how your -- what your needs are,  
24    you can get away with certain things that you -- some  
25    people have multiple weapons, and they're all slightly

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1 LCM -- LCMs that are usually used in rifles when you were  
2 giving these numbers?

3 A. For the most part, yeah. That's why I put "some  
4 LCMs." I didn't say all.

5 Q. Fair enough. So how many hundred-round LCMs  
6 have you come across in your career?

7 A. Quite a few coming back from Reno.

8 Q. Yeah.

9 A. There were -- sometimes the people would buy  
10 multiple of those, and they were usually gang members.  
11 They would have ammo that would match. Sometimes we got  
12 guns that matched. Sometimes we got -- they were in the  
13 car. Sometimes we would get guns subsequent with a  
14 search warrant that matched the weapon -- or sorry,  
15 matched the ammo and the magazines they were buying out  
16 of state. So that -- those are some definite scenarios.

17 We've also recovered them during APPS  
18 investigations, and the people were obviously acquiring  
19 them either as parts kits when that was still a thing or  
20 they got them from out of state and smuggled them in.

21 Q. Okay. Moving to paragraph 34 of your report.  
22 You state, "Assault rifles as defined in Penal Code  
23 Section 30515 are often used with rifle rounds that are  
24 associated with increased lethality."

25 Did I quote you accurately?

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1           A.     Yes.

2           Q.     What does "increased lethality" mean?

3           A.     So the United States Military has adopted,  
4 generally, for the most part, two rounds that they're  
5 consistently using in a lot of the weapon system. The  
6 5.56 and the 7.62x51 round, those two calibers are found  
7 in a lot of AR-15, Springfield M1A, which are still used  
8 in the military now.

9                   These rounds were created for mainly military  
10 use, and there's sort of a civilianized version of both  
11 of these rounds which would be the .223 for the 5.56  
12 military round and then the .308 round which is a sort of  
13 civilianized version of the 7.62x51. There are other  
14 cartridges out there, but those are the easiest to...

15          Q.     You're saying that those cartridges have  
16 increased lethality because they're used by the military?

17          A.     Well, the military would not, let's say, use  
18 something that they felt was inadequate to arm their  
19 soldiers with. They go through lots of testing on which  
20 rounds will be accurate. Weapons -- sorry. Not weapons.  
21 But ammunition that will do the job at a certain distance  
22 because certain fire fights happen at certain distances.

23                   So they factor all those things in when they  
24 choose a particular round to issue to the military  
25 members.

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1 Q. Is the job of a soldier necessarily to be lethal  
2 in shooting somebody?

3 A. No. Not necessarily. Sometimes the job is to  
4 wound as many of the enemy as you can because you  
5 actually sometimes tie up more of the opponent's forces.  
6 If it's large-scale military actions, arguably if you can  
7 wound 100, it's better than killing 50.

8 Q. And are you aware that militaries are restricted  
9 on what ammunition they can use by The Hague Convention?

10 A. I was thinking Geneva Convention, but Hague  
11 sounds right.

12 Q. Is it? It could be. Some European convention.

13 A. Correct. My understanding, there are  
14 restrictions on those. But the rounds themselves, I  
15 think one of the general sort of key factors is I believe  
16 they have to be full-metal jackets, and it can't  
17 necessarily be, like, a hollow point, which is okay for  
18 civilian use.

19 Q. It is the Geneva Convention. You just jogged my  
20 memory.

21 A. All right. There you go.

22 Q. You got me. I owe you. Okay.

23 So then can you really say that those cartridges  
24 have increased lethality just because military use them?  
25 Based on what we just went through, that they're not

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1 I definitely don't want to sort of trivialize that.  
2 He -- he set himself up for success. I'll put it that  
3 way. And very little things that he did was going to  
4 hurt his quest for infamy.

5 That's about all I think I have as far as the --  
6 the list of shootings there, Sean.

7 Q. So would it be fair to say, Mr. Graham, that you  
8 would not be able to definitively say that any of the  
9 features in Penal Code Section 30515 that define a rifle  
10 as assault weapon contributed to the number of victims in  
11 any of the shootings that you've identified in  
12 paragraph 40 of your report?

13 A. I would say -- I guess between all these  
14 different shootings, it's too hard for me to generalize  
15 and say if a particular weapon or shooter was aided by a  
16 particular feature on their weapons.

17 Q. Well, let me ask you: Is there any shooting on  
18 that list where you can say definitively that you know or  
19 believe that the features made a difference based on  
20 specific facts? Not just the general, like you said,  
21 with the -- with the Stockton shooting. You know, the  
22 pistol grip potentially could have helped him. Granted,  
23 it could have. It may have, may not have made a  
24 difference.

25 What I'm asking is, can you definitively say in

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1 any of these whether the features made a difference?

2 A. Because I wasn't the overall investigating  
3 officer on any one of these, I have -- I have a hard time  
4 picking out a particular feature that would have aided  
5 the shooter. But, in general, if their weapons did have  
6 one or more of those features, it probably did help them  
7 in some level.

8 The Topete case at the top of page 12, I  
9 testified in that case for the Yolo DA's office, and I  
10 fired the murder weapon at the request of the DA's office  
11 and saw the magazine and whatnot. So that was an  
12 AR-15-style weapon that was used to kill the deputy.

13 Q. Granted, and -- assault weapons were used in  
14 each of these shootings, right?

15 A. Yes.

16 Q. My question is: Is there anything in any of  
17 these cases that you can point to that would definitively  
18 say that had the shooters used Rifle A, that they  
19 wouldn't have inflicted the identical casualty rate?

20 A. I don't know that I can say that either way.  
21 The -- in all these cases, they used assault weapons. I  
22 -- typically, when I hear about a scenario like this  
23 where it's cops getting killed, sometimes there's assault  
24 weapons. Sometimes it's a handgun. Sometimes the  
25 officer was disarmed and killed with his own handgun,

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1     unfortunately. But there are more and more of these  
2     anti-law-enforcement shootings using assault weapons now,  
3     and there are a lot more of these mass shootings which  
4     involve multiple victims that are happening, it appears,  
5     just with a lot greater frequency that are using these  
6     weapons that if they were weapons that were found in  
7     California, we would call them an assault weapon. If  
8     they're in Louisiana or Texas, they don't call them  
9     assault weapons there. They're just weapons in those,  
10    you know, states.

11       Q.    So it's your understanding that there's an  
12    increase in mass shooting incidents?

13       A.    It's a perceived increase on my part.

14       Q.    Okay. You haven't done any research or studies  
15    to confirm whether there is an increase or not?

16       A.    No. I don't have time for that.

17       Q.    I hear you.

18           (Pause on the record.)

19    BY MR. BRADY:

20       Q.    And so would it be fair to say also that you  
21    wouldn't know whether more mass shootings are perpetrated  
22    with non-assault weapons versus assault weapons?

23       A.    My perception is -- I don't know if it's an  
24    equal number, but the ones where there's many  
25    casualties -- I'll say five or more people, let's say --

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1 typically, there's an assault weapon or something we  
2 would call an assault weapon in California -- that's been  
3 involved. There are a few instances where a handgun  
4 maybe with a large-capacity magazine is involved.

5           There was a recent shooting in Thousand Oaks.  
6 That individual had, I believe, one handgun with multiple  
7 large-cap mags, and he shot people there. And I think  
8 the Gabby Giffords shooting, that was a Glock with a  
9 large-capacity magazine. Yeah. During his mag exchange,  
10 that's when the crowd sort of jumped him. Grabbed it.

11           Q.    So mass shooting with non-assault weapons  
12 happen, right?

13           A.    They do.

14           Q.    And it's your perception that more mass  
15 shootings occur with assault weapons than non-assault  
16 weapons, though?

17           A.    I would say that at least that maybe the media  
18 is picking up on it more and publicizing it. Maybe it's  
19 always been happening, but it seems to me that -- because  
20 I pay attention to this stuff, but like I said, I don't  
21 do formal studies. I'm not a researcher on, like, a  
22 scientific level. But in the course of my career, it  
23 seems like it's happening more often, and probably at  
24 least 50/50 if it's an assault weapon or not.

25           Q.    Understood. So moving to page 13 of your

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1 report. The title, "Assault Rifles are Suitable for Law  
2 Enforcement Use."

3 A. Yes.

4 Q. So assault rifles have a legitimate use, then;  
5 is that fair to say?

6 A. So in California, there's been a carve-out in  
7 the Penal Code by the legislature to allow law  
8 enforcement agencies and the sworn members of certain law  
9 enforcement agencies to purchase and register them if --  
10 if they've had to make sort of a personal purchase of  
11 them. Some agencies will just issue the weapons out.  
12 Some agencies don't have the money to do that, so the  
13 individual police officers or deputies can make a  
14 purchase with agency letterhead.

15 Q. But the policy choice to allow that exception  
16 for police officers to acquire assault rifles for duty  
17 use suggests that those rifles have a useful, legitimate  
18 law enforcement purpose; is that fair to say?

19 A. Sure. Yeah.

20 Q. And that is because they are effective for  
21 defending against criminals; is that fair to say?

22 A. Yes.

23 Q. And while, granted, police officers come into  
24 contact with criminals, as an individual, I'd have much  
25 more -- much more common daily rate than would your

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1 normal, everyday citizen. When a citizen does face a  
2 criminal, it is the same criminal as those that law  
3 enforcement face; isn't that fair to say?

4 MR. CHANG: Objection. Vague.

5 THE WITNESS: There might be certain scenarios  
6 that a civilian might encounter a person with a weapon or  
7 some other threatening object.

8 An extreme example might be like some kind of a  
9 home invasion whether it be they meant to go to that  
10 house and try to rob them because there's a marijuana  
11 grow in that house or maybe it's a mistaken identity.  
12 They thought that was the marijuana grow's house, but  
13 it's actually next door. Things like that can sort of  
14 happen where there's a group of individuals that try to  
15 take over a house. But for the most part, law  
16 enforcement is in a unique spot with sometimes daily  
17 contact with armed criminals. Some of these armed  
18 criminals have acquired -- through usually illegitimate  
19 methods -- handguns, shotguns, rifles, assault rifles,  
20 etcetera.

21 The average citizen probably is not going to go  
22 through life having a criminal point of weapon at them.  
23 It does happen, but -- excuse me -- law enforcement is  
24 much more likely, in my opinion, to encounter armed  
25 resistance or gunfire.

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1     you can just walk in and buy a traditional AR-15 like the  
2     one in the exhibit earlier when we were dealing with all  
3     the measurements. That's just normal in some states.

4           Q.     But even that the federal law was the reason  
5     people had -- had or did not have certain features was to  
6     comply with the law, right? It wasn't because of  
7     practicality; is that fair to say?

8           A.     Right. It was a compliance thing.

9           Q.     So but for the law, there would be no practical  
10    reason for somebody to remove the features that  
11    California identifies in 30515 from an AR-platform,  
12    rifle, right?

13          A.     Not the average citizen. You might have  
14    somebody that's a -- maybe a shooter and they shoot a  
15    particular weapon in different competitions and perhaps a  
16    weapon would have to be configured a certain way to get  
17    into a certain class, but that would be a really extreme  
18    scenario.

19          Q.     Got it. And the same with fixing a magazine,  
20    right? There would be no practical reason to fix a  
21    magazine on an AR-platform rifle if it came with a  
22    detachable magazine, right?

23          A.     Generally, yeah. That's not a common practice,  
24    I believe, outside of California. Maybe some of the  
25    other states they're restricted.

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1           Q.    As far as rimfire AR-platform rifles, how  
2 prevalent are those, in your experience?

3           A.    I would say -- let's say our department seizes  
4 1,000 ARs in a year. I would say 50 to 100 of those  
5 might be .22 ARs of some kind. The rest would be  
6 centerfire variant. And I'm speaking about full, working  
7 weapons. I'm not talking about lower receivers and  
8 anything -- anything that's not functional.

9           Q.    We'll talk about lower receivers in a second.  
10 But as far as fully operational configured .22 rimfire  
11 rifles, so you're -- in your experience, if what you see  
12 in your line of work is reflective of the broader trend  
13 of AR ownership, you would say that the rimfire variant  
14 of an AR-platform rifle is five-ish, ten-ish percent?

15          A.    Possibly 5 to 10 percent. I -- I've never poked  
16 around and inside the AFS or DROS systems to study up on  
17 that.

18          Q.    Would you be able to determine that from AFS or  
19 at least a better number?

20          A.    I couldn't do it. We might have to ask a  
21 programmer to dive into something like write code. I  
22 don't know that our systems are that capable as they sit  
23 there.

24          Q.    So speaking of lower receivers, those can be  
25 sold bare, stripped, right, just the receiver?

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1 A. Yes.

2 Q. And that is a common practice, right?

3 A. Yes.

4 Q. And they are probably sold by the tens of  
5 thousands in California prior to the latest ban?

6 A. Yeah. That's fair.

7 Q. And would you say the most common configuration  
8 of those lowers is into a -- a semiautomatic centerfire  
9 rifle?

10 A. If they ever get built up, the most common, I  
11 guess, build would be probably semiauto centerfire. Most  
12 likely 5.56 would be the -- if I had to pick one caliber  
13 cartridge, that would probably be the most common.

14 Q. If they ever get built up. Does that mean you  
15 have experience that lots of people don't build them up?

16 A. Yeah. They'll lose interest. They'll go  
17 through life changes. Divorce.

18 Q. Get yelled at by their wife?

19 A. Sometimes. Yeah, that happens.

20 Q. Just saying I heard it happen before.

21 A. Right. Agreed. Agreed.

22 Q. And there are also unfinished lower receivers  
23 called 80 percenters, correct?

24 A. Yeah. Unfinished receivers is a very common  
25 thing in California since about the early part of 2013.

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1           Q.    Yeah.   Sure.   Let's leave the magazine out.  
2           Just the rifle.   If you put that product on it and it  
3           requires that you pop the upper off the lower in order to  
4           pop out the magazine, then you don't have to register  
5           that rifle, right?

6           A.    Correct.

7           Q.    How quick can you change -- how quickly can you  
8           change a magazine with one of those products that require  
9           you to disassemble the action?

10          A.    So there's different versions of it.   There are  
11          some that have a captive magazine in there, so you  
12          actually have to top load.   That's -- that scenario is  
13          going to be much slower to do a reload.   Obviously you  
14          have to put between one -- one and ten rounds in there,  
15          close it back up, put the pin in, charge the handle up,  
16          and then you can fire.

17                There are versions of a fixed mag out there that  
18          the rear take down pin -- they've got almost like a  
19          lobster claw scenario where you just hit these paddles,  
20          the lobster claws will retract, the weapon will hinge up,  
21          and they've even built in sort of like an auto drop  
22          feature into the mag well.   So as soon as that -- it  
23          senses that there's no spring tension right over there  
24          near the mag well, it drops the mag regardless if you  
25          want it to or not.   There's all these little variants

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1       that have sprung up since then.

2               So it could be -- I don't know -- five seconds,  
3       you know, on some of them, and some of them would be much  
4       longer.

5               Q.     Have you shot a rifle with that feature on it?  
6       With the -- with the rear take down pin that allows you  
7       to remove the magazine?

8               A.     One, I think.

9               Q.     Okay. Have you shot an AR-platform rifle with a  
10       bullet button?

11              A.     Yes.

12              Q.     And have you changed magazines on both rifles?

13              A.     Yes.

14              Q.     Can you say which one was faster?

15              A.     Personally, I was slower with the fixed mag  
16       version than I was with the bullet button version, and  
17       I -- when I was experimenting with the various bullet  
18       button tools that were out there, some of them -- those  
19       were even faster than others. So just like in the bullet  
20       button side of things, there are faster variants. And  
21       just like in the fixed magazine conversation, there are  
22       faster versions. And some accessories you can buy will  
23       speed up your reload, and people are coming out with  
24       those now.

25              Q.     How much of a difference between the bullet

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1 button and the rear take down pin for you are we talking  
2 about?

3 A. Three to five seconds, maybe. If I really get  
4 after it and practice, that might be the difference.

5 Q. So three- to five-second difference?

6 A. Possibly. For me with my experience and with  
7 the weapons that I've experimented with.

8 Q. Okay. And is my understanding correct that if  
9 you -- like we discussed earlier, if you simply remove  
10 the upper from the lower and leave it in that state, then  
11 you do not have to register it as an assault weapon as  
12 long as you do not reassemble it?

13 A. That's correct.

14 Q. Are you aware of any notice that owners of  
15 Category 4 assault weapons were given to reregister their  
16 rifles as assault weapons when SB880 passed?

17 MR. CHANG: Objection. Vague as to  
18 "reregister."

19 BY MR. BRADY:

20 Q. Okay. Let me strike reregister. To register.  
21 Let me clarify the -- the law here, right?

22 When people purchase their Category 4 assault  
23 weapons, they were not assault weapons, right?

24 A. Right.

25 Q. And so they were not -- if they were prior to

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1       2014, they did not have to be registered, right?

2           A.     We did not have data in the system on their  
3       ownership, meaning a DROS entry, because we weren't  
4       allowed to keep it.

5           Q.     Okay. So regardless of when somebody bought a  
6       Cat 4 assault weapon during the period that it was  
7       lawful, they did not have to -- they had to go and  
8       register -- take an affirmative step to register it under  
9       SB880 with the California Department of Justice, right?

10          A.     Yes.

11          Q.     And so they had to know -- in order to do that,  
12       they had to know that they had to do that, right?

13          A.     Yes.

14          Q.     Are you aware of any notice that owners of those  
15       rifles were given to go and register their Category 4  
16       assault weapons under SB880?

17          A.     I believe I'll know of some, but I may not know  
18       all that the department took. That was something that  
19       our program site did, which, again, is not my function.

20                I'm aware that the department updated our  
21       website, which amongst all of the Attorney General's web  
22       pages, it gets either the No. 1 or the No. 2 number of  
23       hits annually. Sometimes it's Megan's Law, or it's that,  
24       the firearms page. So that page was updated to reflect  
25       sort of a notice to owners of these weapons. "Hey. Go

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1     there's any training standards here in California or  
2     elsewhere that are similar to what either members of the  
3     military or members of law enforcement have to do to  
4     maintain proficiency with these things.

5           Q.     So is it fair to say that you do not disagree  
6     with Mr. Boone's opinion that AR-platform rifles are good  
7     weapons for self-defense; you take issue that you have to  
8     have a certain level of training for it to be a good home  
9     defense weapon.

10           Is that fair to say?

11           A.     Any weapon would be better off in the hands of a  
12     trained user. Could it be the most appropriate weapon in  
13     some scenarios? Maybe. In all scenarios? Probably not.

14           Q.     Does Mr. Boone opine that it is the best home  
15     defense weapon in all scenarios in his report to your  
16     recollection?

17           A.     The way I took his report, it was sort of a  
18     blanket approval for -- regardless if they lived in a  
19     homeless encampment or they lived in a cabin on top of a  
20     hill miles from anybody else. It sort of seemed like a  
21     blanket, in a sense, approval from him solely because,  
22     well, FBI uses it, so everybody else should be able to  
23     use it for the same purposes. But there's a lot of  
24     different reasons an AR-15 might be used by law  
25     enforcement or the military than the average citizen as

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1 we discussed earlier. The average citizen is not going  
2 to encounter armed criminals as often as law enforcement  
3 does day-to-day.

4 Q. So if I'm hearing you right, an AR-platform  
5 rifle can be good for home defense but is not necessarily  
6 in all situations?

7 A. Right. Absent appropriate training or absent --  
8 if you're at the ATM getting money out, it's probably  
9 inappropriate to have an AR-15 around yourself. If  
10 you're -- if you have a concealed weapons permit and you  
11 have a handgun, that's probably the most appropriate  
12 weapon for that specific type of self-defense.

13 If you're living in a rural environment and you  
14 might have large animals, you might find a rifle of some  
15 use. That's potentially more appropriate for that  
16 setting. If you're in an apartment building or close  
17 proximity to other houses and you shoot and let some  
18 rounds off and they get -- either go through the person,  
19 they can continue on and hurt neighbors, etcetera.

20 Q. I am putting in front of you Exhibit 13 which  
21 has been previously marked as such, and it is a series of  
22 slides prepared by the ATF.

23 Have you seen this document before?

24 A. I don't believe so.

25 Q. So in responding to Mr. Boone's report, which he

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1       referenced this ATF report in, you did not look at the  
2       report that he relied on?

3               MR. CHANG:  Objection.  Mischaracterizes the  
4       facts.  That's not what he relied on.  That's not what  
5       Mr. Boone relied on.

6               MR. BRADY:  The ATF document is not what  
7       Mr. Boone relied on?

8               MR. CHANG:  The test that Mr. Graham is  
9       referring to -- and I'm assuming you're talking about  
10      paragraph 7 of Mr. Graham's rebuttal report -- Mr. Boone  
11      did not rely on that particular set of slides for the  
12      portion of the -- of Mr. Boone's report that Mr. Graham  
13      was rebutting in paragraph 7.  If you want to provide  
14      Mr. Graham a copy of Mr. Boone's report, you may get more  
15      specific answers.

16      BY MR. BRADY:

17              Q.     Okay.  So in paragraph 6 of your rebuttal  
18      report, you object to Mr. Boone's opinion that handgun  
19      rounds underperform regardless of circumstance; is that  
20      right?

21              A.     Yes.

22              Q.     And what is your issue with that?  With his  
23      opinion on it?

24              MR. CHANG:  Go ahead.  If you need to see a copy  
25      of Mr. Boone's report --

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1 reduced? Let's say in another hypothetical, two  
2 shooters, one with Rifle A, one with Rifle B, and they're  
3 both asked to shoot as quickly as they can at a specific  
4 target. Would the shooter holding Rifle B with the  
5 pistol grip be more or less likely to be accurate than  
6 the shooter holding Rifle A?

7 MR. BRADY: Objection. I'm going to make an  
8 objection to all this line of questioning on the record,  
9 Peter, because I've been trying to drop hints that this  
10 line of questioning is inappropriate, but you didn't want  
11 to take me up on it. We're not here to redepose Mr.  
12 Graham. He has provided answers to virtually all of  
13 these questions. You may not have liked the answers.  
14 You're welcome to take those answers in briefing from his  
15 deposition transcript and explain whether he -- what he  
16 said was or was not how you interpret it. But to  
17 redepose Mr. Graham is simply not appropriate.

18 MR. CHANG: You may answer.

19 THE WITNESS: I'm going to -- can she read the  
20 question back? With all that, I lost track.

21 MR. CHANG: Yes.

22 (Whereupon the record was read back.)

23 MR. BRADY: Objection. Incomplete hypothetical.  
24 Calls for speculation. Vague. Confusing.

25 THE WITNESS: So I can say that I'm likely going

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1 to be more -- more accurate with Rifle B. The average  
2 shooter -- I don't know the answer to every shooter out  
3 there in the world, but I believe I would be more  
4 accurate with this Rifle B because it's most closely in  
5 characteristics to my duty weapon. Duty long gun.

6 BY MR. CHANG:

7 Q. Okay. You were previously asked whether you can  
8 definitively say -- and this was within the context of  
9 discussing paragraph 40 -- the incidents you listed in  
10 paragraph 40.

11 You were previously asked whether you can  
12 definitively say whether the shootings listed in  
13 paragraph 40, whether the fact that -- whether you can  
14 definitively say that the fact they used an AR-15 type of  
15 weapon did not contribute to the -- the -- the outcome of  
16 those shootings.

17 In your expert opinion, is it more likely than  
18 not that the fact that these shooters used an AR-15 type  
19 of weapons with, you know -- with the features, if they  
20 used the features -- in your expert opinion, is it more  
21 likely than not that the fact that they used those  
22 assault rifles contributed to the -- the lethality or the  
23 damage that was done by those shooters?

24 MR. BRADY: Objection. Incomplete hypothetical.  
25 Calls for speculation. Vague. Confusing.

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1           THE WITNESS: Assuming these weapons had a  
2       pistol grip and one or more of the other features or just  
3       a different feature, the pistol grip, in my experience,  
4       aids me in being more accurate, quicker to reload,  
5       etcetera. I would think these shooters would have the  
6       same benefit from a pistol grip if there was a reloading  
7       that happened during their particular shootings. Those  
8       reloads probably happened slightly faster than a weapon  
9       without a pistol grip.

10           MR. CHANG: Okay. Thank you, Mr. Graham.  
11       That's all I have.

12           COURT REPORTER: Counsel, would you like a  
13       transcript?

14           MR. BRADY: Yes, please.

15           MR. CHANG: Yes.

16           (Deposition concluded at 5:57 p.m.)

17                       --oOo--

18

19

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25

1 I, the undersigned, a Certified Shorthand  
2 Reporter of the State of California do hereby certify:  
3 That the foregoing proceedings were taken before me at  
4 the time and place herein set forth; that any witnesses  
5 in the foregoing proceedings, prior to testifying, were  
6 duly sworn; that a verbatim record of the proceedings was  
7 made by me using machine shorthand which was thereafter  
8 transcribed under my direction; that the foregoing  
9 transcript is an accurate transcription thereof.

10 I further certify I am neither financially  
11 interested in the action nor a relative or employee of  
12 any attorney or any of the parties.

13 IN WITNESS WHEREOF, I have this date subscribed  
14 my name.

15  
16 Dated: January 11, 2019

17  
18  
19 

KAITLYN B. HOUSTON

20 CSR No. 14170  
21  
22  
23  
24  
25

# **Exhibit 11**

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

STEVEN RUPP; et al.,

Plaintiff,

vs.

XAVIER BECERRA, in his  
official capacity as Attorney  
General of the State of  
California et al.,

Defendants.

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) No. 8:17-cv-00746-JLS-JDE

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DEPOSITION OF MICHAEL MERSEREAU

Long Beach, California

Tuesday, December 4, 2018

Volume I

Reported by:

KATY BONNETT

CSR No. 13315

Job No. 3135706

PAGES 1 - 142

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IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

\_\_\_\_\_  
STEVEN RUPP; et al.,

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California et al.,

Defendants.  
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) No. 8:17-cv-00746-JLS-JDE

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Deposition of MICHAEL MERSEREAU, Volume I, taken  
on behalf of Plaintiff, at 180 East Ocean Boulevard,  
Suite 200, Long Beach, California, beginning at 1:12  
p.m. and ending at 6:05 p.m. on Tuesday,  
December 4, 2018, before KATY BONNETT, Certified  
Shorthand Reporter No. 13315.

1 APPEARANCES:

2  
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15 DEPARTMENT OF JUSTICE

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INDEX

WITNESS

EXAMINATION

MICHAEL MERSEREAU

Volume I

BY MR. BRADY

5

BY MR. CHANG

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## EXHIBITS

NUMBER	DESCRIPTION	PAGE
Exhibit 1	Expert Report and Declaration of Detective Michael Mersereau	7
Exhibit 2	California Penal Code Section 30510	18
Exhibit 3	ATF Data Analysis of 233 Caliber Ammunition	100

1 Long Beach, California, Tuesday, December 4, 2018

2 1:12 p.m.

3  
4 MICHAEL MERSEREAU,  
5 having been administered an oath, was examined and  
6 testified as follows:

7  
8 EXAMINATION

9 BY MR. BRADY:

10 Q Good morning. Can you state your full name for  
11 the record, please.

12 A Michael Mersereau. That's M-e-r-s-e-r-e-a-u.

13 Q And, Mr. Mersereau, you are here today for your  
14 deposition in the matter of Rupp, R-u-p-p, versus  
15 Becerra; is that correct?

16 A Yes.

17 Q And you are here as a designated expert witness  
18 on behalf of the California Attorney General's Office in  
19 this matter; is that correct?

20 A Yes.

21 Q Have you ever had your deposition taken before?

22 A Yes.

23 Q How many times?

24 A Maybe three, four.

25 Q How long ago was the last time you had your

Page 6

1           A    That's one way to view it, yes.

2           Q    The reason I'm asking you about this is, I simply  
3   want to clarify whether you are including the SKS with a  
4   detachable magazine in your description of assault  
5   rifles in your report.

6           A    To the extent that I'm only discussing Cat 3  
7   rifles by generic feature, and to the extent that, as I  
8   said, all the other named rifles, in fact, have  
9   features, yes.

10          Q    So would it be fair to say you're limiting your  
11   analysis here to Cat 3 rifles and Cat 1 rifles, those on  
12   -- listed out on Penal Code Section 30510, that have the  
13   features of Cat 3 rifles; is that fair to say?

14          A    I think what I'm -- the point I'm trying to make  
15   is that all those Cat 1 and Cat 2 rifles with the  
16   exception of SKS are, in fact, also Category 3 rifles.

17          Q    I believe --

18          A    And as I pointed out, the SKS is the exception to  
19   that pattern.

20          Q    Correct. So all I'm trying to determine is  
21   whether that -- so you're not considering the SKS with a  
22   detachable magazine in your analysis here; is that  
23   correct?

24          A    To the extent that I'm focused on 30515 as  
25   opposed to 30510, yes.

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1           Q    Okay.  So it's your -- is it fair to say that  
2           your general premise is that a semiautomatic centerfire  
3           rifle with the features, is a bigger threat to public  
4           safety than a rifle without the -- the semiautomatic  
5           centerfire rifle without features; is that your basic  
6           premise?

7           A    Yes.

8           Q    And so an SKS rifle with a detachable magazine,  
9           does not have those features; is that correct?

10          A    That's correct.

11          Q    So is it your opinion that a Cat 3 rifle with the  
12          features poses a more serious threat to public safety  
13          than does an SKS rifle with a detachable magazine that  
14          does not have the features?

15          A    Both Cat 1, Cat 2 and Cat 3 with the features  
16          poses more of a threat than a semiautomatic rifle with a  
17          non-fixed magazine does.

18          Q    And why is that?

19          A    It's the degree of control that the -- the pistol  
20          grips and the thumbhole stock provide to the shooter,  
21          allowing them to fire more rounds more rapidly with  
22          greater accuracy than your garden variety rifle.

23          Q    So then is it your opinion that the operator of a  
24          firearm having more control over the firearm is a bad  
25          thing?

Page 32

1           A    The -- it's a very bad thing if it's in the hands  
2           of somebody who wants to use it in a unlawful way, as we  
3           see with all the mass shootings that involve AR15s.

4           Q    What about in the hands of a good guy, is control  
5           a good thing or bad thing?

6                   MR. CHANG:  Objection.  Vague and ambiguous as to  
7           good guy.

8           BY MR. BRADY:

9           Q    A cop?

10          A    Police officers are not allowed to carry patrol  
11          rifles without extensive training and constant  
12          retraining in the use of those weapons platforms.  It's  
13          highly unlikely that a civilian is going to have that  
14          degree of training, and is going to continuously renew  
15          their training on that platform.  And thus, when you  
16          place a -- a rifle that -- that fires a round that's  
17          particularly devastating and allows them to do it with  
18          great rapidity, it definitely makes the public less safe  
19          and police officers less safe.

20          Q    I understand that's your position.

21          A    Yeah.

22          Q    But that wasn't the question I asked.  I was  
23          asking about whether control of a firearm is a good  
24          thing or bad thing, regardless of what the firearm is.  
25          Isn't it a good thing for somebody to have control over

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1 a firearm that they are using?

2 MR. CHANG: Objection. Vague and ambiguous.

3 Are we still talking about the cop or someone  
4 else?

5 BY MR. BRADY:

6 Q Is there any reason that a person who is properly  
7 using a firearm should have less control over that  
8 firearm, is there any benefit?

9 A I think --

10 MR. CHANG: Objection. Vague and ambiguous.

11 THE WITNESS: Control is a good thing, but it all  
12 comes down to how that firearm is being used. In some  
13 instances that control just leads to more death and  
14 destruction.

15 BY MR. BRADY:

16 Q But when you choose a firearm for your own use,  
17 you would choose one that you control well; is that --  
18 would that be fair to say?

19 A Yes.

20 Q Would you ever choose a firearm that you felt did  
21 not fit you well?

22 A I'd choose a firearm specifically as a tool for  
23 circumstances that I believe I may encounter.

24 Q Have you ever encountered circumstances where you  
25 had to use your firearm, discharge your firearm?

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1 A Yes.

2 Q How many times?

3 A Once.

4 Q When was that?

5 A In 2014.

6 Q Can you describe the circumstances?

7 A I was attacked off duty by a gun-welding gang  
8 member, and I discharged my handgun twice at the  
9 individual, knocking him down to the ground and causing  
10 him to drop his weapon.

11 Q I assume you had a pistol?

12 A I did.

13 Q A semiautomatic pistol?

14 A Yes.

15 Q Does that semiautomatic pistol shoot at a  
16 different rate than an assault rifle?

17 A I've never studied that.

18 Q Fair enough. But, generally, does a -- not  
19 counting for nanoseconds or splitting hairs with slow  
20 motion cameras, but generally, is it fair to say that a  
21 semiautomatic firearm can be fired at the same rate as  
22 any other semiautomatic firearm?

23 A For any given shooter and whatever their skill  
24 levels are, I imagine they're pretty comparable.

25 Q Can you recall how quickly you discharged two

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1 measured it.

2 Q Okay. Would it -- would it alleviate your  
3 concerns about the concealability of an AR15 with a  
4 adjustable stock, if it could not be shortened less than  
5 30 inches?

6 A That's nice.

7 Q Via the adjustable stock?

8 A Any shortening -- the ability to an individual to  
9 shortened the length of any long gun, makes it more  
10 concealable. And concealability is a concern.

11 Q Are you --

12 A So I wouldn't say that even if it was not down to  
13 26, I wouldn't still be concerned.

14 Q Are you aware of any instances where a criminal  
15 concealed an AR15 with an adjustable stock in order to  
16 gain entry to where they committed their crime?

17 A I don't recall any instances.

18 Q If it is the case, and remember this is a  
19 hypothetical, I'm not suggesting that this is the case.  
20 But if it were the case that an adjustable stock  
21 generally only changes the length of the rifle 3 to 4  
22 inches, and the rifle remains in the 30-ish inch range,  
23 is that going to be a significant difference in its  
24 concealability, 3 to 4 inches?

25 MR. CHANG: I'm going to object. Lacks

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1 foundation, incomplete hypothetical.

2 MR. BRADY: Good objection.

3 THE WITNESS: To me, yes, that would be  
4 significant. Any reduction in the length increases the  
5 concealability. I have arrested gang members with  
6 28-inch or longer shotguns stuffed down their pants and  
7 concealed with a jacket. So, yeah, any shortening of a  
8 gun makes it more concealable, and concealability is a  
9 concern.

10 BY MR. BRADY:

11 Q It's a concern in the abstract, though, right?  
12 Because you're not aware of any specific instances where  
13 somebody used the shortening of an AR via a telescoping  
14 stock to conceal it and gain entry; is that correct?

15 A Well, as you said, this is a hypothetical, and  
16 I've already stated I don't recollect an instance that I  
17 know of where somebody took a collapsable stock gun and  
18 concealed it.

19 Q Wouldn't a guitar case serve the same purpose  
20 as -- in order to conceal an AR15 of any length?

21 MR. CHANG: Same objection. Incomplete  
22 hypothetical.

23 THE WITNESS: I think there's a difference in  
24 terms of accessibility of a firearm to the individual.  
25 If it's concealed under your jacket or down your pants,

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1       you have more rapid access to the firearm than you would  
2       having to put down a -- the case, unsnap it and pull it  
3       out.

4       BY MR. BRADY:

5           Q     But with an adjustable stock, they're going to  
6       have to manipulate -- take time to manipulate the stock  
7       to put it in the ideal position, right?

8           MR. CHANG:  Objection.  Incomplete, assumes facts  
9       not in evidence.

10       BY MR. BRADY:

11           Q     Well, let me ask you this.  Your concern is  
12       that -- correct me if I'm wrong -- the bad guy shortens  
13       the stock as much as possible to make it as concealable  
14       as possible to gain entry undetected, then deploy that  
15       firearm, put it in the length of stock that the  
16       person -- the bad guy wants it to be at.  Is that what  
17       your concern is generally?

18           A     Well, you're making an assumption that the  
19       optimum length for that particular shooter, that the  
20       stock isn't already in that position, and that that  
21       position is shorter than full extension of the stock.

22                   And I'm not saying that there -- it's the only  
23       way to conceal a firearm.  To me, that doesn't matter.  
24       It is a way to shorten the length, and thus make it more  
25       concealable.

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1           Q    On what do you base your statement that mass  
2 shooters don't have deliberate targets?

3           A    I'm not saying they don't have deliberate  
4 targets. I'm saying that in a number of shootings,  
5 Vegas being the most recent example of that, is that he  
6 didn't need -- he equipped his AR15s with bump stocks,  
7 which mimic the rate of fire of some machine guns, which  
8 allowed him to put many more rounds down range in a  
9 given amount of time. But he wouldn't have been  
10 concerned about accuracy, because what he was firing at  
11 was a huge mass of people, not at individual targets.

12          Q    So then the features in that situation made no  
13 different in the Vegas shooting; is that correct?

14          A    Well, if he had put a bump stock on a Mini-14 and  
15 tried to do that, there's degrees of control. And he  
16 might have been shooting at the sky as the burst of  
17 gunfire raised the barrel of his gun upwards, which is  
18 typical of machine guns and rapid fire.

19               And if he had it equipped -- you know, unless he  
20 had it -- equipped his firearms, and I don't know that  
21 he did, but with a hybrid muzzle rate flash suppressor,  
22 which would have been an attempt to regain and retain  
23 some control over that weapon. But in his case, he  
24 didn't need accuracy. He just needed to hit the broad  
25 side of a barn, essentially.

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1           Q    And so it's your opinion that the features played  
2           a role in that case, because he was able to just keep  
3           the muzzle down on the crowd?

4           A    He was able to control the firearm better than  
5           without the pistol grip, and thus keep his targets in --  
6           aligned with his firearm.

7           Q    You don't think that he could have inflicted the  
8           same amount of harm without a pistol grip? Is that your  
9           opinion?

10          A    Yes.

11          Q    And that's solely based on that he was able to  
12          keep the firearm more controlled?

13          A    Yeah. His -- his greater control of the firearm  
14          through the use of features --

15          Q    Was that --

16          A    -- typically the -- the pistol grip.

17          Q    Was that in any of the reports that you read  
18          about the shooting that you indicated in your report?

19          A    Yes.

20          Q    It mentioned the pistol grip playing a role in  
21          that shooting?

22          A    I'm don't -- I'm not saying it mentioned it. I'm  
23          aware, I've seen photographs from the scene, and his  
24          weapons were equipped with pistol grips.

25          Q    That wasn't my question, though. My question was

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1 did the report reference whether the pistol grip made a  
2 difference in the amount of victims he was able to make.

3 A I think I just said no, it didn't. This is my  
4 opinion having seen the photographs that show that his  
5 weapons were equipped with pistol grips, that that would  
6 have afforded him -- based on my experience with pistol  
7 grip weapons -- to better control his weapon when he was  
8 in this extremely rapid fire simulation of a machine gun  
9 scenario.

10 Q So if he had a machine gun, let's say a  
11 featureless machine gun, a Mini-14, fully automatic, he  
12 would not have been able to sustain the amount of injury  
13 that he did? Is that your opinion?

14 A I believe that it would have been less, because  
15 he would have lacked as much control over that firearm.

16 Q Have you ever shot a machine gun that did not  
17 have a pistol grip?

18 A I don't think so, no.

19 Q So you don't have any personal experience with  
20 how a featureless machine gun would operate? Is that  
21 fair to say?

22 A That's fair to say. It's -- but I would also say  
23 that I have experience with featureless semiautomatic  
24 rifles as well as semiautomatic and fully automatic  
25 rifles that have pistol grips. And I know what a fully

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1 auto AK47 does. It wants to climb to the sky. And it's  
2 that pistol grip, primarily, that allows you to stay on  
3 target.

4 The military doesn't equip its soldiers with  
5 featureless rifles. There's a reason that they have  
6 pistol grips on their rifles. There's a reason the  
7 police department, even if they use the Mini-14, they --  
8 which some agencies do, they equip those with  
9 alternative stocks that have pistol grips on them. And  
10 it's all about being -- the controllability of the  
11 firearm.

12 And the police and the military are all about  
13 being effective with those firearms in putting down the  
14 threat. And they wouldn't bother with pistol grips if  
15 that didn't enhance their ability to stop the threat.

16 Q So if we were to concede that a pistol grip makes  
17 a firearm more controllable, do you have any -- have you  
18 formed any opinions to what extent the pistol grip  
19 enhanced controllability?

20 A You mean have I quantified it?

21 Q Yes. So in other words, obviously, there's no  
22 metric to say, yeah, it's 3 inches' different. But my  
23 question is, even assuming that a pistol grip does make  
24 a rifle more controllable, does it make that big of a  
25 difference such that the Vegas shooter would not have

1       been able to do exactly what he did without a pistol  
2       grip?

3           A     As I said, I believe the pistol grip allowed him  
4       to inflict more damage on that crowd. I can't quantify  
5       it. And, again, it's going to depend on the shooter and  
6       the scenario to what degree it's going to make a  
7       difference.

8           Q     All right. So we're still talking about pistol  
9       grips and how they increase -- whether they mechanically  
10      increase the rate of fire, whether they affect a rifle's  
11      capacity for firepower. Does a pistol grip affect a  
12      rifle's capacity for firepower?

13          A     I don't know what you mean by that statement,  
14      "capacity."

15          Q     What if I told you that the California Penal Code  
16      uses the term "capacity" for firepower, would you  
17      recognize that term?

18          A     Again, I don't know what you mean by capacity.

19          Q     So you've never seen the term "capacity" for  
20      firepower?

21          A     I wouldn't say that.

22          Q     Have you seen the term "capacity" for firepower?

23          A     I may have. I don't recall.

24          Q     But you don't have any understanding for what  
25      that term means as you sit here today?

1           A    I don't know what you mean.

2           Q    I mean as used in the California Penal Code --

3           A    Well --

4           Q    -- and the Assault Weapon Control Act.

5           A    I think it's referring to the ability of the --  
6   of the shooter to do more damage with the firearm than  
7   if it weren't similarly configured.

8           Q    That's your interpretation of capacity for  
9   firepower, ability to do more damage?

10          A    Yes.

11          Q    And so with that understanding in mind, do you  
12   think a rifle -- a pistol grip affects a rifle's  
13   capacity for firepower?

14          A    Absolutely.

15          Q    Okay. And that is because, as you've indicated,  
16   it gives the shooter more contro,is that correct, and  
17   makes them more accurate?

18          A    It allows them to fire more rapidly accurately.

19          Q    Got it. Does a pistol grip affect a rifle's  
20   ammunition capacity?

21          A    No.

22          Q    Okay. Let's go back to -- okay. Going back to  
23   your report about your role at the LAPD Gun Unit, in  
24   paragraph 3 you indicate, "I have seized or participated  
25   in the seizure of hundreds of assault rifles." Is that

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1           A     Well, the context of these tables is the  
2     assertion that we have a lot of gun violence in the city  
3     of Los Angeles, and we have a lot of firearms in the  
4     city of Los Angeles, including assault weapons and  
5     machine guns. Those seem to be the relevant issues,  
6     assault weapons in particular, to your lawsuit.

7           And in demonstrating -- trying to demonstrate  
8     that some numbers of assault weapons and machine guns,  
9     that it seemed logical to accumulate those statistics as  
10    well, simply to make the point that -- that gun violence  
11    is a problem in the -- in the city, and assault weapons  
12    and machine guns are a problem in the city.

13          Q     Okay. But the reason I'm asking is it says that  
14    you provided these statistics about assault weapons and  
15    machine guns because these guns typically use  
16    large-capacity magazines.

17          A     Because the detachable or non-fixed magazine is  
18    part of the equation in terms of lethality of these  
19    firearms. It's not the sole -- and I can anticipate  
20    that you're going to point out a Mini-14 can accept a  
21    large-capacity magazine. That's absolutely true. All  
22    these features and characteristics that we're discussing  
23    today have to be taken as a whole, not -- not piecemeal.  
24    And that's what I base my opinions about the lethality  
25    of these weapons on.

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1           Q    You don't think that the ammunition a rifle uses  
2           is -- is more relevant to its lethality than the  
3           features?

4           MR. CHANG:  Objection.  Argumentative.

5           THE WITNESS:  I think that if you want to open up  
6           that can of worms, so are -- semiautomatic firearms, in  
7           general, are more lethal and have more lethality than a  
8           revolver.  A rifle round has more lethality than a  
9           handgun.  I would rather be shot with a 9-millimeter  
10          than with a 223.

11         BY MR. BRADY:

12          Q    Why is that?

13          A    Because my understanding, based on my research,  
14          is that the 223 is a particular -- is meant for the sole  
15          purpose -- was invented, was designed by the military  
16          for the sole purpose of killing human beings.

17               And it -- studies have shown that -- that 223,  
18          556, 762, that they do extensive damage compared to --  
19          much more extensive damage and life-threatening injuries  
20          as opposed to a handgun round, the velocities, the  
21          masses, the bullets, et cetera.

22               And I'm not a ballistics expert, but I think that  
23          research would support that -- that rifle ammunition is  
24          more lethal given -- given a -- where the shot placement  
25          is, than a handgun round.

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1           Q   Coming out of a rifle or just generally? So  
2           if -- is -- would it be fair to say that a round coming  
3           out of a rifle is going to be at a higher velocity than  
4           a round coming out of a handgun, generally?

5           A   Generally speaking, yes.

6           Q   So it's not really unique to the 223 or the 762,  
7           that that have -- that they're being fired at high  
8           velocity, right?

9           A   I don't -- I'm sorry, I don't --

10           MR. CHANG: Go ahead. I'm just going to say --  
11           I'm just making an objection here. This is beyond the  
12           scope of his report, and he said he's not an expert on  
13           ballistics. If you want to pursue the line of  
14           questioning, you can go ahead, but I think at some point  
15           we should take it-- take it back.

16           MR. BRADY: Noted.

17           Q   So, for example, you said you looked at studies,  
18           but you have no ballistics background, as you previously  
19           testified to, correct?

20           A   Correct.

21           Q   So you were just reading the study, just as if  
22           somebody else who was familiar with firearms would read  
23           the study, right?

24           A   Yes. Anybody who was curious, including your own  
25           ballistics expert's report.

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1           Q    We'll get to that in a minute.  And were those  
2           studies specifically looking at 223 and 556 rounds,  
3           specifically about, you know, depicting those rounds, or  
4           were they comparing them to various rifle rounds?

5           A    I think they were mostly focused on the round  
6           itself.

7           Q    Okay.  So there was no comparison of lethality of  
8           different rifle cartridges?  Is that fair to say?

9           A    No.  And I'm not making a distinction between  
10          rifle rounds.  I'm making a distinction between rifle  
11          rounds and handgun rounds.

12          Q    Got it.

13          A    And, of course, there's a lot of variabilities  
14          that go into making that assessment, including shot  
15          placement.  But I think it's a general consensus that a  
16          rifle round would deliver a greater kinetic energy to  
17          its target than a handgun round.  And I know that my  
18          vest will not stop a 223.  It will not stop a 762 x 39.  
19          It will stop a 9-millimeter or a 45, typical handgun  
20          rounds.

21          Q    Does a pistol grip have any impact on the  
22          velocity at which the round comes out of the rifle?

23          A    No.

24          Q    Does a flash suppressor have any impact on the  
25          velocity at which the round comes out of the rifle?

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1 would present a greater threat to public safety. But  
2 that's a hypothetical. That's not what we're dealing  
3 with here.

4 BY MR. BRADY:

5 Q Agreed. I'm just trying to figure out a way to  
6 isolate which -- which item, with respect to firearms,  
7 is more problematic as far as lethality. Is it the  
8 magazine capacity, or is it the controllability and  
9 accuracy of the rifle? And I think, correct me if I'm  
10 wrong, my understanding of your opinion is that the  
11 increased amount of ammunition would be the bigger  
12 problem. Is that fair to say?

13 A I think the two biggest threats to public safety  
14 are semiauto combined with detachable magazines,  
15 particularly large-capacity magazines.

16 Q But the assault weapon law doesn't account for --  
17 it doesn't restrict that combination, correct?

18 A I understand that. But you're opening up the can  
19 of worms of public safety, and I think any reasonable  
20 discussion has to look at the semiautomatic function as  
21 well.

22 Like I said before, it's a combination of factors  
23 that make assault weapons more lethal, more dangerous to  
24 public safety. And you can't separate the semiautomatic  
25 from the detachable magazine as well as the features

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1       that provide the shooter with greater control.

2           Q     Correct me if I'm wrong, but what I hear you  
3     saying is that semiautomatic center-fire rifles with  
4     detachable magazines are problematic in and of  
5     themselves, despite the features.

6           A     Yes.

7           Q     And the features are just simply icing on the  
8     cake as far as making them that much more lethal?

9           MR. CHANG:   Objection.

10          BY MR. BRADY:

11          Q     Is that you're -- is that, generally, what you're  
12     saying?

13          MR. CHANG:   Mischaracterizes the expert's  
14     testimony.

15          MR. BRADY:   I'm asking what his testimony is.

16          THE WITNESS:  No.  It's not icing on the cake.  
17     It's very significant.  If you take a semiautomatic  
18     rifle capable of accepting a detachable magazine, and  
19     you add those features, it makes it even more lethal for  
20     all the reasons that we've been discussing for the last  
21     several hours.

22          MR. BRADY:   Does anybody need a break?

23          MR. CHANG:   I could use a good break.

24          MR. BRADY:   Yeah.  Let's go off the record a  
25     second.

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1 (Recess.)

2 MR. BRADY: Back on the record.

3 Q In your report on page 10, you state that -- at  
4 line 9, "The purpose of deploying a rifle as opposed to  
5 a handgun should be based on the fact that the target is  
6 beyond the reasonable effective range of a handgun."  
7 Did I accurately quote you?

8 A I'll check the context of that.

9 Q Well, is there any context in which that  
10 statement would not be accurate or would not reflect  
11 your opinion?

12 A No. It's just that the context was that I was  
13 talking about how the LAPD deploys a rifle. I should  
14 have put that paragraph or that sentence before my  
15 statement about the purpose.

16 Q Then let's talk about that before we get into the  
17 purpose. How do you know how the LAPD deploys these  
18 rifles if you yourself do not carry one and haven't had  
19 the training to carry one?

20 A Because the department issues special orders  
21 describing the appropriate circumstances in which rifles  
22 should be deployed, how they should be carried in the  
23 car, et cetera, et cetera.

24 Q And do you know --

25 A Those are -- those are disseminated among

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1 everybody, not just the rifle cadre.

2 Q And you reviewed those?

3 A Yes.

4 Q And you can recall that some of the instances in  
5 which deploying a rifle is appropriate?

6 A Yes.

7 Q And can you name some of those?

8 A Again, I think I've listed them here, that  
9 basically a -- the police department doesn't view rifles  
10 as self-defense weapons. Firearms that are used by our  
11 agency are tools to address certain circumstances.  
12 That's why you don't see officers walking around with  
13 AR15s slung over their shoulders when they're writing a  
14 traffic ticket.

15 Our handguns are defensive weapons. They're  
16 meant for that sudden unexpected circumstance in which  
17 lethal force is necessary to address the threat.  
18 Rifles, I would characterize, and I don't know that the  
19 department would use this terminology, but they're more  
20 of a offensive weapon in the sense that you generally  
21 deploy them when you're -- you know you're going to a  
22 possible gunfight.

23 Q Does that -- is it fair to say, then --

24 MR. CHANG: Objection. He was still -- could you  
25 let him finish.

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1 BY MR. BRADY:

2 Q I didn't realize. If you wanted to add to that,  
3 go ahead.

4 A I've lost the original question at this point.

5 Q Okay. So I believe you ended the sentence --  
6 before I rudely interrupted, according to counsel, you  
7 were saying that when they know -- when officers know  
8 they're going into a potential gunfight, that they opt  
9 for the rifle rather than the pistol. Is that -- does  
10 that accurately reflect your testimony?

11 A Oh, up to that point. What I was going to  
12 continue saying is that the rifle is deployed in  
13 circumstances where the suspect is believed to have a  
14 position of advantage. Usually meaning the high ground,  
15 say a second-story window, or is it a barricaded armored  
16 position where handgun rounds won't penetrate, or  
17 individuals wearing a ballistic vest which will stop  
18 handgun rounds, but will not stop rifle rounds.

19 Q So if none of those situations is present, is it  
20 your testimony that an officer will not deploy a rifle  
21 unless those conditions are present?

22 A Typically, no.

23 Q So do officers ever bring rifles with them when  
24 executing search warrants?

25 A We always do, but not every officer. We deploy

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1       one or two, depending on the circumstances. The people  
2       that we deal with, we often find them possessing  
3       ballistic vests, where, by definition, because we're the  
4       gun unit, we know that they possess firearms.

5               Again, we're on the offense. We're going to  
6       find, hunt down and deal with the suspect. That's not  
7       something civilians are supposed to be doing. They  
8       don't have the same need for the rifle that police  
9       officers do.

10       Q     Well, are police officers subject to the same  
11       laws for justified use of force as civilians?

12       A     Generally speaking, I would say yes.

13       Q     So when you say on the offensive, you mean that  
14       they go towards a potential fight affirmatively, but  
15       they're not going to go use force in a way that would  
16       not be legal self-defense, is that accurate, or defense  
17       of another, defense of life?

18               MR. CHANG: Objection. Lacks foundation, vague  
19       and ambiguous.

20               THE WITNESS: The rifle is used for self-defense  
21       in the same sense that a soldier on a battlefield is  
22       using his rifle for self-defense. But it's not  
23       equivalent to the scenarios that civilians typically  
24       find themselves in or in scenarios that would be legally  
25       defensible for them. They can't go out and hunt people

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1 down.

2 BY MR. BRADY:

3 Q And police officers can?

4 A Yes.

5 Q Police officers can do clandestine raids and  
6 shoot people who are unarmed like military soldiers  
7 would?

8 A No. That's not what I said.

9 Q I can have your testimony read back.

10 A We are tasked with pursuing suspects, engaging  
11 suspects. By law the penal code authorizes us to do it  
12 and the citizenry expects us to do that. Nobody is  
13 authorized to run around -- any non-police officer is  
14 authorized to run around the streets of Los Angeles or  
15 California or wherever, and hunt down people that they  
16 think need to be dealt with, and -- and apply lethal  
17 force to those people.

18 Defense in a civilian context is about the threat  
19 coming to you. The use of a rifle by a police officer  
20 is in the context of the police officer going to deal  
21 with the threat.

22 Q Understood. But -- and that's generally speaking  
23 because -- are you familiar with the Southernland  
24 Springs incident where the gentleman, Mr. Willeford,  
25 engaged the shooter after he shot at the church in

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1 Southernland Springs, Texas?

2 A I'm only concerned about California.

3 Q Okay. But --

4 A I'm only addressing California.

5 Q Okay. Fair enough. But -- so civilians can go  
6 on the so-called offensive in defense of life, can they  
7 not?

8 A Certainly.

9 Q Okay. And when either an officer or a civilian  
10 decides to go on the offensive, as you put it, they are  
11 still limited in discharging that firearm to the rules  
12 of lawful use of force, which requires that they have  
13 a -- that there be a threat to their life or the threat  
14 of others, correct?

15 A That's correct.

16 Q And that standard is the same for civilians and  
17 law enforcement officers, correct?

18 A Yes.

19 Q So while a police officer may be more likely to  
20 be put in that position, once put in that position, the  
21 two are fairly identical with respect to self-defense  
22 needs. Is that fair to say?

23 A No.

24 Q Why not?

25 A As I explained, we aren't put in that position

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1 conducted, it's outside the scope of this expert's  
2 report.

3 THE WITNESS: I will say that what led me to that  
4 assumption is that I'm not completely unfamiliar with  
5 the issues of overpenetration. And the debate that I've  
6 seen generally talks about rifle versus handgun. So I  
7 may have erroneously leaped to the conclusion that  
8 9-millimeter, 40 caliber Smith & Wesson, which are  
9 calibers that our department uses, was comparing the  
10 relative overpenetration issues of handguns of those  
11 calibers versus a rifle and 223.

12 Because, I mean, I think it's commonly  
13 misunderstood, you know, that -- the effective issue of  
14 overpenetration between handguns and rifles. But maybe  
15 they're debating whether those calibers shot out of a  
16 rifle are less or more than the 223 out of the rifle.

17 BY MR. BRADY:

18 Q Okay. Just to be clear, I didn't make any  
19 representations one way or the other. I was asking you  
20 how you understood it.

21 A Right.

22 Q And your understanding was that the 9-millimeter  
23 and the 40 Smith & Wesson were handguns, and the 223s  
24 were rifles, correct?

25 A That's correct. And like I also said, I'm not a

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1 ballistics expert. I read this with great interest, but  
2 I don't have the background to really --

3 Q The basis for -- okay. The basis for showing you  
4 this report was your testimony that you weren't aware of  
5 an agency choosing a rifle as the weapon of choice to  
6 enter a home; is that correct?

7 MR. CHANG: Objection. Lacks foundation,  
8 misstates witness's testimony.

9 THE WITNESS: Well, there's absolutely nothing in  
10 this report that's tells you what they were considering,  
11 other than a choice of rounds and a choice of rifle.

12 BY MR. BRADY:

13 Q And they found that a 223 round is less likely to  
14 penetrate a common barrier than is a round coming out  
15 of -- a 9-millimeter 40 Smith & Wesson round coming out  
16 of a handgun; is that correct?

17 A Well --

18 MR. CHANG: Objection. Lacks foundation.

19 THE WITNESS: Again -- again, I don't know if  
20 they're talking about a handgun or a rifle.

21 BY MR. BRADY:

22 Q Okay.

23 A Either way it looks like 55-grain 223, which is,  
24 I believe, what our department uses, it's less likely to  
25 penetrate beyond wall 7 than some of the other calibers.

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1       Whether they are fired out of a rifle or a handgun, I  
2       don't know.

3           Q     So getting back to -- now that we have context, I  
4       believe, and if not, we'll develop context -- the  
5       original statement that I asked you about in your  
6       report, on page 10, line 9, "The purpose of deploying a  
7       rifle as opposed to a handgun should be based on the  
8       fact that the target is beyond the reasonable effective  
9       range of a handgun." Did I accurately quote you?

10          A     Yes. And, by and large, that's true, because  
11       there's downsides to long guns in confined spaces. The  
12       barrel precedes the -- the individual carrying that  
13       rifle, and it runs the risk of a suspect reaching out  
14       and grabbing that barrel.

15                It also, in my opinion, requires you to expose  
16       yourself at a greater angle, and in -- in confined  
17       spaces it can be difficult to shoulder that weapon. You  
18       run more -- more risk of being obstructed with items.

19                I've seen officers have to, basically, sling  
20       their rifle or their shotgun and draw their pistol,  
21       because the confines were getting in the way of  
22       maneuvering with that long gun.

23          Q     Okay. I understand all that, but -- and I  
24       understand that that might be a caveat to your  
25       statement, but your statement doesn't mention anything

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1     about the things you just mentioned. It says, simply,  
2     that deploying a rifle as opposed to a handgun should be  
3     based on the fact that the target is beyond the  
4     reasonable effective range of a handgun.

5         A     That is not -- that's out of context. You're not  
6     reading the additional information. I might -- I might  
7     not have articulated it clearly, but there are a number  
8     of conditions.

9         Q     Okay. Well, let's focus on --

10        A     And -- and an important one is the body armor  
11     issue. If you go into a location, it would be nice to  
12     have a rifle -- and we usually never deploy more than  
13     one inside a structure -- to defeat that body armor, or  
14     to defeat that person that's up in the rafters, or to  
15     defeat that person that's behind an armored barricade.

16        Q     It would be nice. I believe that. So does  
17     deploying a rifle have to do -- does the decision on  
18     whether to deploy a rifle have to do with the range at  
19     which you're engaging the bad guy?

20        A     In some circumstances, it does.

21        Q     Okay. So -- so -- and I'm not trying to put  
22     words in your mouth. So you would qualify your sentence  
23     here about that you should deploy a rifle as opposed to  
24     handgun only when the target is beyond the reasonable  
25     effective range of a handgun?

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1           A    What I should have said was a -- one of the  
2           purposes or a purpose, and then other considerations,  
3           which is what I went on to say.

4           Q    So are there legitimate uses for a rifle within  
5           effective handgun range?

6           A    Yes.

7           Q    Okay. What is effective handgun range, by the  
8           way? What would you say effective handgun range is?

9           A    I think if you get beyond 100 feet, you're  
10          starting to get beyond most shooters' ability to hit  
11          their target.

12          Q    And a rifle would not suffer from that same loss  
13          of accuracy after 100 feet?

14          A    No.

15          Q    So --

16          A    Particularly given that rifles are typically  
17          equipped with optics. Handguns are not.

18          Q    So a rifle is generally more accurate than a  
19          handgun?

20               MR. CHANG: Objection. Mischaracterizes the  
21          witness's testimony.

22               THE WITNESS: It depends on the shooter's  
23          abilities, but also, it depends on the physical  
24          circumstances. If you're at 150, 200 feet, you would  
25          probably want a rifle to deal with the threat, a rifle

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1 equipped with optics. But if you're a few feet away  
2 from the suspect, a rifle will work fine if you've  
3 managed to maneuver your yourself in a position where  
4 you can react quickly. But a handgun will do the same  
5 job, unless the person is wearing body armor.

6 BY MR. BRADY:

7 Q And your testimony is you have seen more  
8 criminals wearing body armor recently; is that true?

9 A Not wearing it, in possession of it. We  
10 typically hit our locations in the early, early hours.  
11 We do that for a reason. We do it to catch the suspects  
12 asleep, catch -- it makes them less likely to be able to  
13 think clearly, to armor up, to grab their rifle or  
14 whatever and take us on. I mean, I think anybody can  
15 relate to that if they've been woken up in the middle of  
16 the night by some sort of intrusion, pounding on your  
17 door, whatever.

18 Q You say there's no -- on page 9, paragraph 23 of  
19 your report you say there's no evidence that assault  
20 rifles are commonly used for self-defense. Do you see  
21 that?

22 A Yes.

23 Q Is that your opinion today?

24 A Yes.

25 Q What do you mean by used?

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1           A    First of all, one has to define what one means by  
2   self-defense.

3           Q    What do you mean by self-defense in this  
4   sentence?

5           A    As I -- as I said later on in that, I'm talking  
6   about civilians. I'm talking about legally sanctioned  
7   self-defense, which typically requires the threat to be  
8   immediate and proximate to the individual, as well as  
9   circumstances that would justify lethal force versus  
10   some other form of force. And that's not the typical  
11   self-defense circumstances that -- that civilians  
12   experience.

13                So my objection is with the word "commonly." I  
14   don't think it's commonly -- I don't think it's  
15   commonly -- it's not unheard of, but it's not common.  
16   Common is the use of handguns and shotguns.

17           Q    I just want to get clarification on the word  
18   "used" in that sentence. What do you mean by assault  
19   rifles? There's no evidence that assault rifles are  
20   commonly used for self-defense?

21           A    Meaning that they're brandished or that they're  
22   fired, whether at the suspect or as a warning shot or  
23   whatever.

24           Q    Okay. And you're saying that -- do you have any  
25   evidence that they are not common? Let me restate that.

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1           Do you have any evidence that assault rifles are  
2           not commonly used for self-defense in the way that you  
3           just defined or used?

4           A     In the way that I define self-defense?

5           Q     In the way you just defined "used."

6           A     I've done research, and I can't find any study  
7           that provides a scientific study that shows that they  
8           are commonly used. Basically, proponents of that idea  
9           are forced to rely on anecdote, not some sort of  
10          methodology, scientific investigation of that  
11          phenomenon.

12          Q     Have you found -- have you found any scientific  
13          methodical study that shows that they are not commonly  
14          used?

15          A     No.

16          Q     That assault rifles are not commonly used for  
17          self-defense?

18          A     That would be proving the negative, of course,  
19          which you can't do. But the other aspect of it is I've  
20          been doing this for over 23 years. I hear of instances.  
21          I also read newspapers, news reports, police reports. I  
22          talk to other officers. I talk to a whole slew of  
23          people, and I am convinced that rifles are seldom used  
24          in the circumstances of self-defense as I've described  
25          them. It's a common -- most common is a handgun

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1 followed by shotguns. Just like I can say with  
2 confidence that 50-caliber rifles are not used commonly  
3 in -- in self-defense scenarios faced by civilians,  
4 typically faced by civilians.

5 Q And you based your opinion on the uncommon use of  
6 assault rifles for self-defense on the anecdotes that  
7 you just mentioned. Anything else, anything other than  
8 the anecdotes?

9 A Again, the lack of studies showing it, supporting  
10 it, and my own personal exposure to reports of  
11 self-defense using handguns.

12 Q Does self- -- sorry. Do self-defense reports  
13 usually talk about what type of firearm the victim  
14 possessed?

15 A Some of them do, yes.

16 Q Is that -- is that often? Is that -- is that  
17 usually the case, that the type of firearm that the  
18 person defending themselves used is indicated in the  
19 report?

20 A I think it is. I think that many of those  
21 reports quote the victim, and the victim states, I  
22 grabbed my shotgun, I grabbed my handgun. I don't  
23 remember ever seeing one -- a report, directly, that I  
24 grabbed my assault rifle, I grabbed my AR15. I have  
25 seen them anecdotally reported secondhand by other

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1 parties, but not very many.

2 Q How many self-defense reports have you evaluated  
3 in that manner?

4 A Again, I don't know. I couldn't even guess, and  
5 I wouldn't want to guess.

6 Q I'm asking you --

7 A But like I said, I've been more aware maybe  
8 than -- and interested in that than your average citizen  
9 because of the -- my line of work. And I've -- most of  
10 this stuff is -- it's not coming out of scientific  
11 studies. Again, it's coming out of articles, news  
12 articles, TV reports and that sort of stuff that I've  
13 encountered over the course of years.

14 And I firmly believe that my opinion here is  
15 accurate, that without being able to say what percentage  
16 handguns are used, what percentage of shotguns are used,  
17 what percentage of -- of AR15 or assault rifles are  
18 used, it is not common. There's no supporting evidence  
19 to support that statement that it's common.

20 Q Is criminal use of assault rifles common?

21 A It's getting more common.

22 Q On what do you base that?

23 A The increase in the use of assault weapons in  
24 mass shootings.

25 Q How do you -- how do you know that there's been

Page 114

1 an increase in the use of assault weapons in mass  
2 shootings?

3 A Again, it's readily available information out  
4 there if you're interested in it.

5 Q Can you name a report or recall anything that you  
6 read that suggested that?

7 A Not specifically.

8 Q Are you --

9 A But -- but I can tell you that -- that the  
10 Stoneman Douglas shooting was with an AR15. The Sandy  
11 Hook was with an AR15. The -- I believe the recent  
12 shootings in the temple were with a AR15. The Pulse  
13 nightclub mass shooting was with an AR15-type rifle.

14 And these are -- these are -- the use of assault  
15 rifles, the AR15s, is clearly accelerating. It's  
16 clearly become the weapon of choice for mass shooters,  
17 not that other weapons aren't used in some of the mass  
18 shootings.

19 The guy in Texas that shot up the church, killed  
20 20-some people, I mean, it just goes on and on. And I'm  
21 also aware of studies that show that the use of assault  
22 weapons to murder police officers is on the rise. It  
23 has been increasing over the last eight to ten years.

24 Q Are you aware of any reports that refute those  
25 or -- let me strike that.

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1           Are you aware of any reports taking the opposite  
2       view or taking issue with those reports that you cite  
3       to?

4           A     That an AR15 wasn't used, a Bushmaster --

5           Q     No.

6           A     -- an X15 wasn't used to murder those children in  
7       Sandy Hook?

8           Q     No, that's not what I asked. Your statement was  
9       that the use of assault rifles in these crimes is on the  
10      rise, and you referenced reports to support your  
11      assertion to that point.

12           My question is have you read any reports that say  
13      otherwise, that say that those are wrong, or do you  
14      think that that is the undisputed view of things?

15           A     I can't say that I've read reports that dispute  
16      it. I've read opinions that dispute everything I'm  
17      testifying to today.

18           Q     What -- what have you read?

19           A     That this pump is commonly used. I see that  
20      repeated, mostly by gun advocacy groups, including the  
21      NRA, saying that they're commonly used. So it's not  
22      surprising to see that terminology in the plaintiff's  
23      briefs, but I can't find support for that view.

24           Q     Did you look for it?

25           A     Yes.

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1           Q    Did you read any of the other experts' reports,  
2           other of plaintiff's expert reports, other than  
3           Mr. Boone's?

4           A    No.

5           Q    Okay. But your statement that the use of assault  
6           rifles in crime is on the rise is based on your  
7           assumption that the reports you've read are accurate?  
8           Is that fair to say?

9           A    Yes.

10          Q    You haven't done any personal studies or  
11          investigations to get to the bottom of it yourself? Is  
12          that fair to say?

13          A    No. Other than --

14          Q    It is fair to say?

15          A    Yes.

16          Q    Okay.

17          A    Other than researching it on the Internet, I'm  
18          not in a position to conduct studies, scientific  
19          studies. I am in a position to read news reports, to  
20          read firsthand accounts on the Internet.

21          Q    So then is it fair to say that you have no  
22          personal knowledge about whether assault-rifle crime is  
23          on the increase or decrease?

24          A    I think --

25               MR. CHANG: Objection. Vague and ambiguous.

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1           THE WITNESS: As I've stated, I consider that to  
2 be personal knowledge.

3 BY MR. BRADY:

4           Q But you're relying on the knowledge of others?

5           A I would be relying on the knowledge of others who  
6 had done a scientific report, and including your  
7 expert -- ballistics expert here, I'm relying on his  
8 analysis. That's -- you know, to me, that's personal  
9 knowledge, having read this report. It makes it my  
10 personal knowledge. The fact that I didn't do the  
11 research, irrelevant.

12          Q That would be your opinion too?

13          A Yeah.

14          Q But do you have personal knowledge about crimes  
15 involving assault rifles that LAPD is tasked with?

16          A I'm sorry, I don't understand.

17          Q Okay. Let me -- let me -- do you have any  
18 personal knowledge about how common the use of assault  
19 rifles in crime is with respect to crimes falling under  
20 the jurisdiction of the LAPD?

21          A I seize assault weapons all the time, and they're  
22 in substantial numbers, and those are criminal  
23 possessions of assault weapons.

24          Q Agreed. Can we segregate mere possession as a  
25 different sort of crime than the use of an assault

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1           Q    So without knowing how many rounds he fired, how  
2           do you know that he needed the increased ability to put  
3           lots of rounds down range and on target?

4           A    I never said he needed them. I said it provided  
5           him with the capacity.

6           Q    But if he didn't need that, then it might not  
7           have made a difference in the overall deadliness of the  
8           shooting. Is that fair to say?

9           A    No.

10           MR. CHANG: Objection. Argumentative.

11           THE WITNESS: No. I don't understand the value  
12           of talking about whether he needed them or not. He did  
13           what he did with the rifle that he came with. And,  
14           again, the logical conclusion is that that rifle  
15           enhanced his capability to deliver more rounds down  
16           range with more accuracy than had he been using a  
17           different firearm.

18           BY MR. BRADY:

19           Q    Or it can be that he intended to shoot certain  
20           victims at close range, chose these victims and chose an  
21           AR15 because of its, quote, cool factor, as you  
22           previously indicated, and it didn't matter what rifle he  
23           had, he was going to shoot the same amount of people.  
24           Isn't that a possibility?

25           MR. CHANG: Objection. Lacks foundation.

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1 THE WITNESS: Yeah. Now, you're completely  
2 asking me to speculate on your scenario, and I'm not  
3 willing to do that.

4 BY MR. BRADY:

5 Q Well, you've been willing to speculate as to  
6 whether your general premise about the effectiveness of  
7 assault weapons from mass shooters made a difference in  
8 the shooting despite knowing the details, so I thought  
9 you would play along with a hypothetical that I posed,  
10 but --

11 MR. CHANG: Objection. Argumentative.

12 THE WITNESS: And, again, I don't consider my  
13 opinions --

14 MR. CHANG: There's no question, no pending  
15 question.

16 THE WITNESS: Okay.

17 BY MR. BRADY:

18 Q Do you know the details of the shooting at LAX in  
19 paragraph 17, other than what's stated in the -- the  
20 report?

21 A No.

22 Q Do you know the details of the San Bernardino  
23 County shooting indicated in paragraph 18, other than  
24 what's provided in the report?

25 A No.

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1 Q All right.

2 Let's take a five-minute break. I'm going to see  
3 if I can get my questions lined up so we can wrap it up.

4 Go off the record.

5 (Recess.)

6 (Mr. Cubeiro left the proceedings.)

7 MR. BRADY: Matt is leaving. He has a class.

8 All right. Back on the record.

9 Q On page 10 of your report, the last paragraph,  
10 you state that "I do not believe, based on my training  
11 and experience, that there are frequent occasions when a  
12 member of the public would face threat by an armed  
13 suspect wearing body armor or concealed behind a barrier  
14 that would defeat handgun ammunition. Absent these  
15 factors, a handgun, shotgun or nonlethal options should  
16 suffice in dealing with the vast majority of self-  
17 defence scenarios where force is legally justified."  
18 Did I accurately quote you?

19 A Yes.

20 Q In your opinion, would a handgun, shotgun or  
21 nonlethal option be sufficient in dealing with the vast  
22 majority of scenarios that law enforcement officers  
23 face?

24 A Yes.

25 Q Do you have any personal knowledge about how many

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1 officer-involved shootings LAPD has in a given year,  
2 where the officer shoots, hopefully?

3 A I did, but I couldn't recall it today.

4 Q So you wouldn't be able to estimate whether it's  
5 dozens, scores, single digits, by the hundreds? I don't  
6 want you to guess, so if you don't know.

7 A I would be guessing.

8 Q Okay. Are you familiar with an LAPD officer ever  
9 discharging an assault rifle in the line of duty?

10 A I know it's happened. I couldn't tell you the  
11 incidents.

12 Q Would it be fair to say that it's relatively  
13 rare?

14 A Yeah.

15 Q Okay. How did you become a witness, an expert  
16 witness in this matter?

17 A I was contacted by the Department of Justice,  
18 Peter Chang -- or, actually, he contacted the department  
19 and the department knows me as an expert on these  
20 subjects, and they reached out to me and asked if I  
21 would be willing to work with Peter Chang on this.

22 Q So are you working on behalf of the LAPD in this  
23 matter or are you working on your own?

24 A I'm being paid by the department, so I guess, in  
25 some respects, I'm here as a employee of the LAPD.

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1 Q Was that voluntary for you to take on this task  
2 as an expert witness in this case, or were you ordered  
3 to by the LAPD?

4           A     It's volunteer. I could have refused.

5 MR. BRADY: All right. I think we are finished.

6 MR. CHANG: I do you have some matters on  
7 redirect.

8 MR. BRADY: Unless - oh, unless Peter wants  
9 to --

10 Mr. Chang, feel free.

11 MR. CHANG: Okay.

12 EXAMINATION

13 BY MR. CHANG:

14 Q So Detective Mersereau, earlier you said that  
15 you're not a ballistics expert. But you also stated  
16 that you -- you know that your vest, your department-  
17 issue vest, would stop a 9-millimeter round but not a  
18 223 rifle round. How do you know that?

19           A     Well, first and foremost, I know it because it  
20     says it right on the vest.  And we wear a vest that's  
21     pretty standard for most police departments.  In fact,  
22     it won't stop any rifle rounds.

23 Q Okay. Do you know one way or the other if it's  
24 LAPD's standard practice, if they receive someone  
25 calling in a home break-in, whether it's LAPD's practice

1 I, the undersigned, a Certified Shorthand  
2 Reporter of the State of California, do hereby certify:

3 That the foregoing proceedings were taken  
4 before me at the time and place herein set forth; that  
5 any witnesses in the foregoing proceedings, prior to  
6 testifying, were administered an oath; that a record of  
7 the proceedings was made by me using machine shorthand  
8 which was thereafter transcribed under my direction;  
9 that the foregoing transcript is a true record of the  
10 testimony given.

Further, that if the foregoing pertains to the  
11 original transcript of a deposition in a Federal Case,  
12 before completion of the proceedings, review of the  
13 transcript [ ] was [ ] was not requested.

14 I further certify I am neither financially  
15 interested in the action nor a relative or employee  
16 of any attorney or any party to this action.

17 IN WITNESS WHEREOF, I have this date subscribed  
18 my name.

19 Dated: December 19, 2018  
20  
21

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23

24 KATY BONNETT

25 CSR No. 13315