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Attorneys for Plaintiffs

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

**DECLARATION OF SEAN A.
BRADY IN SUPPORT OF
PLAINTIFFS' MOTION TO
EXCLUDE THE TESTIMONY OF
DEFENDANT'S EXPERT
WITNESS CHRISTOPHER B.
COLWELL, M.D. UNDER
FEDERAL RULE OF EVIDENCE
702**

Hearing Date: July 5, 2019
Hearing Time: 10:30 a.m.
Judge: Josephine L. Staton
Courtroom: 10A

DECLARATION OF SEAN A. BRADY

I, Sean A. Brady, am an attorney at the law firm Michel & Associates, P.C., attorneys of record for Plaintiffs in this action. I am licensed to practice law before the United States Court for the Central District of California. I have personal knowledge of the facts set forth herein and, if called and sworn as a witness, I could and would testify competently to the truth of the matters set forth herein.

1. On October 25, 2018, Defendant served Plaintiffs with the Expert Report of Christopher B. Colwell, M.D. A true and correct copy of Dr. Colwell's expert report, is attached hereto as **Exhibit 1**.

2. On December 20, 2018, I deposed Defendant's expert witness, Christopher B. Colwell, M.D. Attached hereto as **Exhibit 2** is a true and correct copy of excerpts from the deposition transcript of Christopher B. Colwell, M.D.

I declare under penalty of perjury that the foregoing is true and correct.
Executed within the United States on May 28, 2019.

/s/ Sean A. Brady

Sean A. Brady
Declarant

EXHIBIT 1

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.

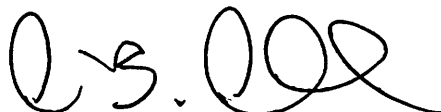
My first-hand experience treating victims of gunshot wounds includes being the physician at the scene of the Columbine High School shooting on April 20, 1999, in which a TEC-DC 9 pistol and a Hi-Point 995 rifle were used, and as an Emergency Department physician treating victims of the Aurora Theater 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



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 21st, 2016

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

2016 Financial Vitality Pillar Award
For largest increase in charges and revenue while
maintaining same cost
June 9th, 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
20th, 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**, McVane 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. McVane 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, McVane 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, McVane 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, McVane 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, McVane KE, Caruso EH, Johnston JB, Gaither JB, Shupp AM, Marquez KD, Haukoos JS, **Colwell CB**. Comparison of Droperidol and Haloperidol for use by paramedics: Assessment of safety and effectiveness. *Prehosp Emerg Care* 2014;18(3):375-80
 34. Nassel AF, Root ED, Haukoos JS, McVane 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**, McVane 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; 2nd 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 Management 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; 3rd 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; 3rd 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; 4th 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; 4th 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; 4th 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; 3rd Edition, 2007: 550-551
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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 7th Edition, 2009:1933-1941
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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
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40. Soriya G, **Colwell CB**: *Emergency Medical Services* In: Moore EE (ed): Encyclopedia of Intensive Care Medicine Springer, 1st Edition, 2010

41. Mull A, **Colwell CB**: *Prehospital Care* In: Moore EE (ed): Encyclopedia of Intensive Care Medicine Springer, 1st Edition, 2010
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Letters to the Editor

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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; 21st Annual Rocky Mountain Conference on Emergency Medicine and Nursing, Jan. 30th, 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 25th 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 30th, 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 11th, 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 12th, 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 12th, 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 12th, 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.** 13th Annual Western Regional Society for Academic Emergency Medicine Meeting, Sonoma, CA, 2010 (Oral).

15. Soriya G, McVaney 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 25th 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 26th, 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 17th, 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 18th, 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
26th Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado, July 1999
5. Geriatric Trauma
26th 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 26th, 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
27th 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?
30th Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado, August 2003
 34. Hypothermia
30th 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 6th, 2004
 40. Blood Substitutes in the Field
Clinical Conference on Pre-Hospital Emergency Care, 2004
Orlando, Florida, July 10th, 2004
 41. Management of Potential C-spine Injuries: Clearance and Beyond.
31st Annual Rocky Mountain Trauma and Emergency Medicine Conference
Copper Mtn, Colorado. July 18th, 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
12th 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 5th, 2004
 44. Cadaver Anatomy Lab: Dissection and Procedure Review on a Human Cadaver. Preconference workshop, 2004 Colorado State EMS Conference
Keystone, Colorado. November 5th, 2004
 45. Prehospital Management of Trauma
32nd Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 14th, 2005
 46. Difficult Airway Lecture/Lab
32nd Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 15th, 2005
 47. Bleeding Disorders
32nd Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 15th, 2005
 48. Travel-Related Infectious Disease
ACEP Scientific Assembly 2005
September 28th, Washington D.C.
 49. The Hot Joint
ACEP Scientific Assembly 2005
September 29th, Washington D.C.
 50. Mass Casualty and Disaster Management
Trauma and Critical Care Conference
San Juan Regional Medical Center, Farmington, New Mexico
February 18th, 2006
 51. Dialysis Related Emergencies
33rd Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 14th, 2006
 52. Show Me Where it Hurts: Pain Management in the Field
33rd Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 15th, 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 3rd, 2006, Keystone, Colorado
57. High-Altitude Illness
2006 Colorado State EMS Conference
November 3rd, 2006. Keystone, Colorado
58. Drugs of Abuse
34th Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 20th, 2007
59. Environmental Emergencies
34th Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 22th, 2007
60. Ultrasound Use in the Acutely Traumatized Patient
Instuctor, Ultrasound Workshop
34th Annual Rocky Mountain Trauma and Emergency Medicine Conference
Breckenridge, Colorado. June 22th, 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 8th-11th, 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 24th, 2008
Keystone, Colorado
66. Initial Evaluation of the Trauma Patient
Colorado Society of Osteopathic Medicine: The Medical “Home
Improvements” Course. February 24th, 2008
Keystone, Colorado
67. Geriatric Trauma
35th Annual Rocky Mountain Trauma and Emergency Medicine Conference
June 25th, 2008
Breckenridge, CO
68. What's Hot, What's Not: Hypo to Hyperthermia and All Things in Between
ACEP Scientific Assembly 2008, October 28th
Chicago, IL
69. Triage Out Debate: Efficient or Unethical?
ACEP Scientific Assembly 2008, October 28th
Chicago, IL
70. Update in EMS Literature: What's Hot and What's Not
ACEP Scientific Assembly 2008, October 29th

- 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 8th, 2008
Denver, CO
 74. Lessons Learned from the DNC
The EMS State of the Sciences Conference: A Gathering of Eagles 2009
February 20th, 2009
Dallas, TX
 75. Nightmare EMS Communications
The EMS State of the Sciences Conference: A Gathering of Eagles 2009
February 21st, 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 5th, 2009
 79. EMS Update, 2009
Grand Rounds, Beth Israel/Deaconess Department of Emergency Medicine
May 6th, 2009
 80. EMS Update – Panel Discussion
36th Annual Trauma and Emergency Medicine Conference
June 18th 2009, Breckenridge, CO
 81. Trauma in Pregnancy
36th Annual Trauma and Emergency Medicine Conference
June 19th 2009, Breckenridge, CO
 82. Cadaver Lab: Anatomical Dissection
2009 Colorado State EMS Conference
November 5th, Keystone, Colorado
 83. Trauma in Pregnancy
2009 Colorado State EMS Conference
November 6th, Keystone, Colorado
 84. Update in EMS Literature: What's Hot and What's Not
2009 Colorado State EMS Conference

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

- Durango, Colorado
97. Cadaver Dissection Lab
Colorado State EMS Conference 2010
November 4th, 2010
Keystone, Colorado
98. Accidental Hyper And Hypothermia And All Things In Between
Colorado State EMS Conference 2010
November 5th, 2010
Keystone, Colorado
99. Biophone Calls: The Good, The Bad, And The Ugly
Colorado State EMS Conference 2010
November 5th, 2010
Keystone, Colorado
100. Geocoding Cardiac Arrest in Denver
ECCU 2010 (Emergency Cardiac Care Update)
December 8th, 2010
San Diego, California
101. Management of the Agitated Patient
ECCU 2010 (Emergency Cardiac Care Update)
December 9th, 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 26th, 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 26th, 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 4th)
San Diego, California
105. CPR, Defibrillation, and Drugs: What is the right VF mix?
EMS Regional Conference: Resuscitation Excellence
May 15th, 2011
New York, New York
106. We Don't Need No Stinking Breaths! Compressions Only Pre-Arrival Instructions.
EMS Regional Conference: Resuscitation Excellence
May 15th, 2011
New York, New York
107. Moderator – Panel Discussion: Optimizing Colorado's Trauma System
38th Annual Rocky Mountain Trauma and Emergency Medicine Conference
June 22nd, 2011
Breckenridge, Colorado

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

118. Rural Trauma
1st Annual Trauma Symposium
March 15th, 2012
Burlington, Colorado
119. Trauma in Pregnancy
2012 NE Colorado EMS Symposium
April 21st, 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 10th, 2012
Saginaw, Michigan
121. Mass Casualty and Disaster Management
Invited Lecture – Convent Health Care/Synergy Medical Center
April 21st, 2012
Saginaw, Michigan
122. Trauma in Pregnancy
39th Annual Rocky Mountain Trauma and Emergency Medicine Conference
June 29th, 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 12th, 2012
Orlando, Florida
124. Withdrawing Support: Managing Alcohol Withdrawal in the Field
Emergency Cardiac Care Update (ECCU) 2012
Pre-conference Workshop
September 12th, 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 13th, 2012
Orlando, Florida
126. Two Carbon Fragmentations: A Prehospital Protocol for Ethanol Withdrawal.
2012 ACEP Advanced EMS Practitioners' Forum and Workshop
October 7th, 2012
Denver, Colorado
127. How to Break the Ache: 2012 Approaches to Prehospital Pain Control
2012 ACEP Advanced EMS Practitioners' Forum and Workshop
October 7th, 2012
Denver, Colorado

128. I'd Scan That! Effective Diagnostic Trauma Imaging
ACEP Scientific Assembly
October 9th, 2012
Denver, Colorado
129. Evidence-Based Minor Trauma Management
ACEP Scientific Assembly
October 9th, 2012
Denver, Colorado
130. Trauma Talk: The Latest and the Greatest Trauma Literature
ACEP Scientific Assembly
October 10th, 2012
Denver, Colorado
131. The Combative, Uncooperative, Arrested, and Threatening Trauma Patient: A Legal, Ethical, and Medical Minefield
ACEP Scientific Assembly
October 10th, 2012
Denver, Colorado
132. MCI Medical Response: Are We Prepared?
Denver Health Critical Care Conference
October 12th, 2012
Denver, Colorado
133. The Colorado Shootings: Lessons Learned from Mass Casualty Events
Grand Rounds – Beth Israel/Deaconess Medical Center
November 7th, 2012
Boston, Massachusetts
134. The Colorado Shootings: Lessons Learned from Mass Casualty Events
Keynote Speaker: Hillsborough County Medical Association
November 13th, 2012
Tampa Bay, Florida
135. The Colorado Shootings: Lessons Learned on Disaster Management and Mass Casualty Events
Grand Rounds: Scripps Memorial Hospital
December 11th, 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 22nd, 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 22nd, 2013
Dallas, Texas
138. ED Operations 101: Follow the Money
Council of Emergency Medicine Residency Directors (CORD)
Academic Assembly 2013
March 7th, 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 17th, 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 17th, 2013
Las Vegas, Nevada
141. Trauma Surgeons Emergency Physicians and Trauma Care
Trauma, Critical Care, and Acute Care Surgery 2013
March 20th, 2013
Las Vegas, Nevada
142. Mass Casualty and Disaster Management – The Colorado Shootings
Visiting Professorship/Grand Rounds
Southern Illinois University School of Medicine
April 18th, 2013
Springfield, Illinois
143. Mass Casualty and Disaster Management – The Colorado Shootings
Sangamon County Medical Society
April 18th, 2013
Springfield, Illinois
144. Lessons Learned from the Colorado Shootings
12th Annual Trauma Symposium
Mississippi Coastal Trauma Region
May 1st, 2013
Biloxi, Mississippi
145. Mass Casualty and Disaster Management – The Colorado Shootings
Grand Rounds – Indiana University Hospital-Methodist
May 10th, 2013
Indianapolis, Indiana
146. Prehospital Panel
Moderator
40th Annual Rocky Mountain Trauma & Emergency Medicine Conference
June 27th, 2013
Breckenridge, Colorado
147. Environmental Emergencies
40th Annual Rocky Mountain Trauma & Emergency Medicine Conference
June 28th, 2013
Breckenridge, Colorado
148. Lessons Learned from the Colorado Shootings

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

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

- Denver, Colorado
170. Wound Management: How Do you Manage Cuts and Burns
American College of Emergency Physicians (ACEP) Advanced Practice
Provider Academy
April 15th, 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 15th, 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 28th, 2014
Houston, TX
 173. Myths in Trauma Care
13th Annual MS Coastal Trauma Symposium
May 14th, 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 25th, 2014

Denver, CO

179. Myths in Pediatric Emergency Care
41st Annual Rocky Mountain Trauma and Emergency Medicine Conference
July 9th, 2014
Breckenridge, CO
180. The Combative, Uncooperative, Intoxicated Patient: An Ethical, Moral and Legal Dilemma
41st Annual Rocky Mountain Trauma and Emergency Medicine Conference
July 11th, 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 23rd, 2014
Colorado Springs, CO
182. Rural Trauma Care
Great Plains Trauma Conference
September 18th, 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 26th, 2014
Chicago, Illinois
184. No Small Lie: Debunking Myths in Pediatric EMS Care
Advanced EMS Practitioner's Forum and Workshop
ACEP 2014
October 26th, 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 27th, 2014
Chicago, Illinois
186. Cruising the Literature: The Most Influential EMS Articles of 2014
American College of Emergency Physicians (ACEP) Scientific Assembly
2014
October 28th, 2014
Chicago, Illinois
187. Tales from the Rig: EMS Medical Director Words of Wisdom
American College of Emergency Physicians (ACEP) Scientific Assembly
2014
October 28th, 2014
Chicago, Illinois

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

- EMS State of the Science: A Gathering of Eagles XVII
February 20th, 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 21st, 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 21st, 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 30th, 2015
Denver, CO
203. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings
North Trauma Care Region 2015 Trauma Symposium
May 8th, 2015
Tupelo, MS
204. Management of Excited Delirium in the Era of Legalized Marijuana
Vanderbilt Residency in Emergency Medicine
May 19th, 2015
Nashville, TN
205. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings
Grand Rounds Presentation, Vanderbilt University School of Medicine
May 19th, 2015
Nashville, TN
206. Active Shooter – Prehospital Forum (Moderator)
42nd Annual Rocky Mountain Trauma and Emergency Medicine Conference
June 19th, 2015
Vail, Colorado
207. Imagine a World without Backboards
42nd Annual Rocky Mountain Trauma and Emergency Medicine Conference
June 20th, 2015
Vail, Colorado
208. Mass Casualty and Disaster Management: Lessons Learned from the Colorado Shootings
Ohio EMS Lecture Series – Keynote address
August 20th, 2015

Akron, Ohio

209. Myths in Pediatric Care
Grand Rounds, Deaconess Regional Trauma Center
EMS Trauma Symposium
September 9th, 2015
Evansville, Indiana
210. Plasma Administration in the Field: The COMBAT Trial
World Trauma Symposium
September 16th, 2015
Las Vegas, Nevada
211. The Combative, Uncooperative, Intoxicated Trauma Patient: A Medical, Legal, and Ethical Nightmare!
EMS World
September 17th, 2015
Las Vegas, Nevada
212. The Medical Impact of Marijuana Legalization
EMS World
September 17th, 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 25th, 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 25th, 2015
Boston, Massachusetts
215. Trauma STAT! Don't Miss the Visual Cue
ACEP Scientific Assembly 2015
October 28th, 2015
Boston, Massachusetts
216. The Combative, Uncooperative Trauma Patient
ACEP Scientific Assembly 2015
October 28th, 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 9th, 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 9th, 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 25th, 2016
Baltimore, Maryland
220. Chemical Suicides
EMS Today (JEMS Conference and Exposition)
February 25th, 2016
Baltimore, Maryland
221. Lightning Rounds: Ask the Eagles
EMS Today (JEMS Conference and Exposition)
February 26th, 2016
Baltimore, Maryland
222. Deliriously Yours: 2016 Approaches to Managing the Toxic Patients
First There First Care Regional EMS Conference
May 26th, 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 26th, 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 26th, 2016
Broward County, Florida
225. Trauma in Pregnancy
43rd Annual Rocky Mountain Trauma and Emergency Medicine Conference
June 18th, 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 6th, 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 15th, 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 15th, 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 15th, 2016
Las Vegas, Nevada
- 230. Beyond the MVC: Burned, Blasted, and Bolted Trauma Victims
2016 ACEP Scientific Assembly
October 16th, 2016
Las Vegas, Nevada
- 231. Fast Facts: Let’s Chat About Trauma
2016 ACEP Scientific Assembly
October 16th, 2016
Las Vegas, Nevada
- 232. The Combative, Uncooperative, Trauma Patient
2016 ACEP Scientific Assembly
October 16th, 2016
Las Vegas, Nevada
- 233. Managing the Malicious Mayhem from Mentally Ill Menaces: The Evolving Roles of EMS in Active Shooter Incidents
41st Annual Alaska EMS Symposium
November 4th, 2016
Anchorage, Alaska
- 234. Grass Roots Experience with Swedish Fish: A Token Presentation on Marijuana Legalization
41st Annual Alaska EMS Symposium
November 4th, 2016
Anchorage, Alaska
- 235. Promoting Post-Traumatic Provider Protection: Dealing with Depression, Anxiety, and Stress in EMS
41st Annual Alaska EMS Symposium
November 4th, 2016
Anchorage, Alaska
- 236. Minding Your P’s and Q’s: What are the Actual Cardiac Effects of Sedation Practices?

- 41st Annual Alaska EMS Symposium
November 4th, 2016
Anchorage, Alaska
237. It's No Small Matter: Implementing a Simpler System for Treating Children
41st Annual Alaska EMS Symposium
November 4th, 2016
Anchorage, Alaska
238. Calling a Code Alert on our Mental Health: Suicide in EMS
2017 NAEMSP Annual Meeting and Scientific Assembly
January 26th, 2017
New Orleans, Louisiana
239. Child Abuse
2017 Iowa Emergency Medical Services Association Pediatric Conference
February 25th, 2017
Des Moines, Iowa
240. Apparent Life-Threatening Events
2017 Iowa Emergency Medical Services Association Pediatric Conference
February 25th, 2017
Des Moines, Iowa
241. Impact of Marijuana Legalization
2017 Iowa Emergency Medical Services Association Pediatric Conference
February 25th, 2017
Des Moines, Iowa
242. Myths in Pediatric Care
2017 Iowa Emergency Medical Services Association Pediatric Conference
February 25th, 2017
Des Moines, Iowa
243. Traumatic Shock
UCSF High Risk Emergency Medicine Conference
April 9th, 2017
Maui, Hawaii
244. Penetrating Abdominal Trauma
UCSF High Risk Emergency Medicine Conference
April 9th, 2017
Maui, Hawaii
245. The Combative, Intoxicated Trauma Patient: A Medical, Legal, and Ethical Conundrum!
UCSF High Risk Emergency Medicine Conference
April 9th, 2017
Maui, Hawaii
246. Geriatric Trauma
UCSF High Risk Emergency Medicine Conference
April 9th, 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 26th, 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 26th, 2017
San Francisco, California
249. Managing the Crashing, Combative Trauma Patient
High Risk Emergency Medicine San Francisco
June 1st, 2017
San Francisco, California
250. Imaging in Trauma
High Risk Emergency Medicine San Francisco
June 1st, 2017
San Francisco, California
251. Safe Sedation in the Era of Legalized Marijuana
National EMS Safety Summit
August 21st, 2017
Denver, Colorado
252. Safety in EMS – Panel Discussion
National EMS Safety Summit
August 22nd, 2017
Denver, Colorado
253. Lessons Learned from Active Shooter Scenarios
6th Annual Medical-Legal Forum
Mile High Regional Medical and Trauma Advisory Council
September 28th, 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 4th, 2017
San Francisco, California
255. Trauma STAT! Don't Miss This Visual Cue!
American College of Emergency Physicians (ACEP) Scientific Assembly
October 31st, 2017
Washington D.C.
256. FAST FACTS: Let's Chat About Adult Trauma
American College of Emergency Physicians (ACEP) Scientific Assembly
October 31st, 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 5th, 2017
New Orleans, Louisiana
259. De-MS in EMS: Fentanyl versus Morphine for Chest Pain Management
Emergency Cardiovascular Care Update (ECCU) 2017
December 5th, 2017
New Orleans, Louisiana
260. Toxic Remarks: Case Studies of Cardiac Effects of Drugs of Abuse
Emergency Cardiovascular Care Update (ECCU) 2017
December 6th, 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 10th, 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 2nd, 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 3rd, 2018
Dallas, Texas
264. A Grass Roots Experience: The Medical Implications of Marijuana Legalization in Colorado
ZSFG Medicine Grand Rounds
March 27th, 2018
San Francisco, California
265. Pitfalls in the Trauma Airway
UCSF High Risk Emergency Medicine Hawaii
April 9th, 2018
Maui, Hawaii
266. Challenging Trauma Case Panel
Moderator
UCSF High Risk Emergency Medicine
April 11th, 2018
Maui, Hawaii

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

San Diego, California

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

American College of Emergency Physicians (ACEP) National Scientific Assembly 2018

October 2nd, 2018

San Diego, California

278. ED Thoracotomy: When, Who, and How

American College of Emergency Physicians (ACEP) National Scientific Assembly 2018

October 3rd, 2018

San Diego, California

279. Clear as Mud: C-Spine Clearance 2018

American College of Emergency Physicians (ACEP) National Scientific Assembly 2018

October 3rd, 2018

San Diego, California

Certifications

- NRP, 2009
- ATLS, 2003
 - ATLS Instructor
 - November 18th, 2016
 - July 23rd, 2017
 - June 25th, 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 22nd, 2018
- Skinned Knees to Broken Heads: Tracking Scooter Injuries – The New York Times – August 3rd, 2018
- Interview – NBC – Scooter injuries – August 8th, 2018
- Interview – San Francisco Chronicle – Scooter Injuries – August 11th, 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 2

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

STEVEN RUPP, et al., :
Plaintiffs, :
v. : 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 CHRISTOPHER B. COLWELL, M.D.

CORRECTED TRANSCRIPT

DATE: Thursday, December 20, 2018

TIME: 11:04 a.m.

LOCATION:

Department of Justice
Office of the Attorney General
455 Golden Gate Avenue, Suite 11000
San Francisco, CA 94102

REPORTED BY:

Erik Parker, Notary Public

JOB No. 3135720

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1 muscles, bones, soft tissue and vital organs." Did I
2 quote you accurately?

3 A Yes.

4 Q Is that your opinion as you sit here today?

5 A Yes.

6 Q What do you mean by assault rifles in that
7 sentence?

8 A So my definition of assault rifle would be
9 one that is designed for more rapid fire or combat.
10 And when I think of assault rifles, from my
11 perspective, I think of more specific weapons, and
12 specifically, AR-15, AK-47, or a TEC-DC9.

13 Q Okay. So when you use the term assault
14 rifle, you are not necessarily considering the
15 definition of assault weapon under California law?

16 A True. I'm aware of the definition of an
17 assault weapon under California law when I prepared
18 this, but have thought about assault weapons not
19 specifically related to just that law.

20 Q So, would it be fair to say that your
21 definition of assault rifle could be different than
22 what is contemplated by California's assault weapon
23 definition?

24 A I wouldn't think necessarily different, but
25 it wouldn't be exactly the same, if that makes sense.

1 types of ammunition for that as well.

2 Q Okay. Do you know whether they use
3 centerfire ammunition?

4 A It's my understanding they do. If you told
5 me I was wrong, I couldn't argue with you, but yes,
6 that is my understanding.

7 Q And is your understanding, when you use the
8 term, "assault rifle," are you talking about firearms
9 that only use centerfire ammunition?

10 A I don't -- I don't think of it as -- in that
11 way. Again, I think of it more in terms of the
12 specific weapons and as they are designed for rapid
13 fire and -- in a combat situation.

14 Q Okay. Going back to the statement on page
15 three of your report, you state that, "Assault rifles
16 cause far greater damage to the muscles, bones, soft
17 tissue and vital organs." How does the rapid fire --
18 excuse me -- definition apply to causing the greater
19 damage?

20 MR. ECHEVERRIA: Objection. Vague.

21 DR. COLWELL: It's more in terms of the
22 numbers of injuries when we talk about the rapid-fire
23 aspect of it and, again, this is based on my
24 experience, that injuries that occur from these
25 weapons are more likely to be more extensive and

1 was chambered in?

2 A No.

3 Q Do you know how long the barrel was on that
4 rifle?

5 A No.

6 Q Are we talking about a single incident of a
7 hunting rifle, or were there multiple?

8 A There were multiple over years. I haven't
9 had an incident where there was a hunting rifle and
10 multiple injuries from that.

11 Q Are injuries from what you described as,
12 "hunting rifles," usually accidents?

13 A In general, yes.

14 Q Have you ever seen an injury from a, what you
15 describe as a "hunting rifle," where the shooting, to
16 your knowledge, was intentional?

17 A Yes.

18 Q Remind me not to go hunting with that guy.

19 A As a side note, I wouldn't ever go hunting
20 with your father-in-law.

21 Q Good.

22 A Based on experience.

23 Q I appreciate the advice. I was already well-
24 aware of that one. So when you've seen these wounds
25 from what you describe as "hunting rifles," it is your

1 experience that those wounds were not as significant,
2 or not as serious as the wounds from what you
3 described as "assault rifles?"

4 A Some of them were. They were much less
5 likely to be multiple and so damage, from my
6 perspective, comes from the combination of the impact
7 of that particular bullet and the number of bullets
8 that impact. And so, when I think of greater damage
9 by assault weapons, it's a combination of the impact
10 velocity and the number of wounds. So it's true that
11 a hunting rifle, from my experience, can cause
12 significant damage; I have not experienced the same
13 degree of damage, in general, from a hunting rifle or
14 non-assault weapons as with assault weapons.

15 Q Even for an individual wound?

16 A So there have been individual wounds that
17 have been devastating, yes.

18 Q Worse than an assault rifle?

19 A I wouldn't say worse, but as bad.

20 Q And in coming to your opinion on the -- that
21 assault rifles produce worse wounds than non-assault
22 weapons, are you operating under the assumption that
23 non-assault weapon rifles are incapable of firing at
24 the same rate as an assault rifle?

25 A No. I'm not operating on that assumption.

1 A The police officer told me.

2 Q What did he -- how did -- what did he tell
3 you to let you know that?

4 A He told me the weapon and I asked what type
5 of weapon that is, and he said, "It's a semi-
6 automatic, non-," -- I walked away from that
7 discussion very clear that it was not an assault
8 weapon. And, at the time, this was in Colorado, we
9 worked very closely with police and talked about
10 assault weapons, primarily in terms of an AR-15 or an
11 AK-47. So I don't remember that -- enough of the
12 specifics of that conversation to say, "was it just a
13 rifle that was not an AR-15 or an AK-47," but I do
14 have a memory of a discussion with that law
15 enforcement officer and he said, "Yes, this was semi-
16 automatic and it was not assault."

17 Q And he said it was a rifle?

18 A Yes.

19 Q And you don't recall what cartridge it was
20 chambered in?

21 A I don't.

22 Q And do you recall whether the wounds from
23 that rifle were worse, not as bad or the same as the
24 wounds that you see from assault rifles?

25 MR. ECHEVERRIA: Objection. Compound.

1 DR. COLWELL: It was a single wound. This
2 particular one wasn't as bad. It had hit his upper
3 leg and had missed the bone. I have seen bad wounds
4 from non-assault weapons.

5 BY MR. BRADY:

6 Q When you say non-assault weapons, are you
7 talking about handguns, shotguns and rifles, or are
8 you just talking about non-assault weapon rifles?

9 A All of them; handguns, shotguns and rifles.

10 Q So, when you're comparing assault rifles to
11 non-assault weapons, the non-assault weapon category,
12 it includes handguns?

13 A Yes. I could take them out, but I didn't.
14 I'm just thinking in general terms. Yes.

15 Q Okay. Would it -- and is it your
16 understanding that a wound from a rifle is generally
17 going to be worse than a wound from a handgun?

18 A Generally, yes.

19 Q So a non-assault weapon rifle is generally
20 going to cause a worse wound than a handgun; is that
21 fair to say?

22 A Again, thinking in terms of worse wounds
23 being both the wound itself and the numbers of those
24 wounds, yes. Any weapon can cause a bad injury. My
25 experience is that the assault weapons cause more bad

1 the numbers of wounds where it hits. All those things
2 come into play. So I think the answer to your
3 question would be no, on that caveat, that I think the
4 bullet, the weapon, the speed, all would impact,
5 potentially, the wound itself.

6 BY MR. BRADY:

7 Q So is it your understanding that a non-
8 assault weapon rifle can have the same -- shoot the
9 same caliber round as an assault weapon?

10 A I believe it can, yes.

11 Q And an assault weapon is semi-automatic,
12 correct?

13 A To my definition it would include automatic
14 also, but knowing that automatic are generally not
15 what we're talking about, yes. I would say that --
16 what we've talked about are semi-automatic.

17 Q Well, let me ask you this. If you include
18 automatic, are some of the victims that you refer to
19 in your report as "having more and worse wounds," were
20 they people who were shot by fully automatic guns too?

21 A Not that I know of.

22 Q Okay. So, when -- how did you learn that a
23 particular victim is shot with, say an AK-47?

24 A Usually, it is through law enforcement.
25 Occasionally, it's been the media.

1 been more -- more extensive wounds. So I would guess
2 that Rifle B would be more likely to cause more
3 frequent and more extensive wounds, but I don't know
4 that.

5 Q So, if I were to tell you that Rifle A and
6 Rifle B shoot identical ammunition at the identical
7 muzzle velocity, at the identical rate of fire, and
8 the only difference between them is the stock, as you
9 previously indicated, the grip, the way you hold the
10 firearm, and the muzzle device on the end, which
11 appears to be what's -- California refers to as a
12 flash suppressor -- if those were the only differences
13 between Rifle A and Rifle B what, in your opinion,
14 would you say makes Rifle B more likely to create more
15 wounds?

16 A I have shot these weapons, but I am not a
17 weapons expert. What I understand is that if I wanted
18 to shoot many bullets more quickly, the pistol-style
19 with the retractable shoulder lends itself to that
20 possibility. Not being a design expert, if you were
21 to tell me that's not true, I couldn't argue with you.
22 It seems to me that this would lend itself to getting
23 more bullets out more quickly. I only see the other
24 end of it, the wound part of it, and associate where I
25 can with what weapons were used. And they never bring

1 department as a result of those, yes.

2 Q Okay. So you've testified previously that
3 you don't really have a -- an expert background in
4 firearms, right?

5 A That's correct.

6 Q So you wouldn't really be able to say, other
7 than -- you have no expert opinion on whether Rifle A
8 or Rifle B is more capable of putting rounds on target
9 quickly; is that fair to say?

10 A That is fair.

11 Q Okay. So setting that aside, and let's just
12 assume that these two rifles are capable of putting
13 rounds on target, and that equal -- in an equal
14 manner, if they shoot the same ammunition at the same
15 speed, and they're both hitting their target, do you
16 have an opinion on whether on a -- whether there would
17 be any difference in the wounds between these two
18 rifles?

19 MR. ECHEVERRIA: Objection. Incomplete,
20 hypothetical.

21 DR. COLWELL: So I don't have an opinion as
22 to what those wounds would look like, because,
23 obviously, it depends on the manufacturers that we've
24 talked about. If you wanted me to render an opinion
25 on that, I would show these weapons to people that I

1 know that have combat experience and/or are trained in
2 that and say, "Which of these could get more bullets
3 off more quickly in that scenario?" That is what
4 would worry me most. But, of course, that's not the
5 area that I'm an expert on.

6 BY MR. BRADY:

7 Q Precisely, and that's why I tried to limit
8 it. So I'm asking you if these two rifles hit their
9 targets, will there be a difference in the wounds that
10 result?

11 MR. ECHEVERRIA: Objection. Incomplete,
12 hypothetical.

13 DR. COLWELL: I don't know that. If you were
14 to tell me that there was an ability of one of these
15 weapons to get off more in a shorter period of time,
16 then I would change that opinion. I don't know enough
17 about just looking at the weapons to say that about
18 these weapons.

19 BY MR. BRADY:

20 Q Exactly, which is why I'm trying to just
21 focus in on -- I understand your premise that more
22 rounds getting off is -- could potentially result in
23 more wounds, and getting shot more times is bad,
24 right?

25 A Yes.

1 Q I think we can all agree that you don't want
2 to get shot once; you definitely don't want to get
3 shot two or three times, right?

4 A Yes.

5 Q Okay. So, because you're not a -- what we
6 would call a "gun person," right?

7 A Yes.

8 Q I'm trying to focus in on your expertise,
9 which is the wounding side, right?

10 A Yes.

11 Q So do you have any reason to believe that a
12 wound resulting from Rifle A would be any different
13 than a wound resulting from Rifle B?

14 A I don't have any reason believe that a single
15 wound from either of these weapons would necessarily
16 be different, no.

17 Q Okay. So other than being informed by police
18 officers or reading news accounts of what firearm is
19 used in a shooting, would you be able to tell just by
20 looking at a wound what type of firearm was used?

21 MR. ECHEVERRIA: Objection. Vague.

22 DR. COLWELL: The other way I sometimes get
23 information is, actually, either victims or
24 perpetrators will tell me, but if you just showed me a
25 wound and said, "What weapon created this wound," by

1 itself, I would be guessing. I don't -- I couldn't
2 tell you for fact.

3 BY MR. BRADY:

4 Q Would you be able to tell whether it was a
5 rifle or a handgun?

6 A I could guess and I feel like I would have a
7 chance of being right, however, I would not be able to
8 tell you, definitively, "this is a rifle wound. This
9 is a handgun wound."

10 Q So going to page five of your report, in the
11 final or, I'm sorry, in the first sentence of the
12 final paragraph --

13 DR. COLWELL: Did you want to put the sticker
14 on this? Just for this --

15 MR. BRADY: I can, yeah. I wrote on there so
16 I could recall, but --

17 DR. COLWELL: I'm assuming I'm returning
18 these to you afterwards, or?

19 MR. BRADY: No, you're giving them to --

20 DR. COLWELL: Oh, okay.

21 MR. BRADY: -- well, actually, that's a good
22 question.

23 MR. ECHEVERRIA: That is a very good
24 question.

25 DR. COLWELL: That's why I wanted to be sure

1 report; the first sentence of the last paragraph. You
2 state that, "Assault rifles, especially when equipped
3 with large capacity magazines, can fire more shots
4 faster causing more injuries per victim and, thus,
5 more complications."

6 A Yes.

7 Q On what do you base your statement there?

8 A On the wounds that I have seen in the
9 emergency department associated with the weapons as
10 communicated to me, generally, by law enforcement.

11 Q So you can tell, based on those wounds, that
12 an assault rifle can fire more shots faster?

13 MR. ECHEVERRIA: Objection. Mischaracterized
14 his testimony.

15 DR. COLWELL: No. The number and extent of
16 injuries have tended to be greater with the assault
17 weapons.

18 BY MR. BRADY:

19 Q Okay. But I don't want to put words in your
20 mouth. I'm just reading you my interpretation of your
21 report. You're free to correct me, but it seems to me
22 that you're saying, "Assault rifles, especially, when
23 equipped with large capacity magazines, can fire more
24 shots faster." How do you know that they can fire
25 more shots faster? On what do you base that?

1 officers would take us to the police -- Denver Police
2 shooting range up in Idaho Springs, once a year. And
3 I was able to go on that five or six times and they
4 would give us a discussion of the weapons and talk
5 about each one and then have us fire each one. And
6 so, yes, that does sound familiar, I just don't recall
7 enough to say, "Did I associate that with that
8 particular weapon," or not.

9 Q And did they indicate whether the AR-15 could
10 fire more shots faster than the non-assault weapon
11 rifle?

12 A That was my sense of having shot it. They
13 did not indicate that, no.

14 Q So you're just basing that statement on your
15 personal experience?

16 A Yes, including in that experience my seeing
17 these patients in the emergency department.

18 Q But, again, you can't tell how fast shots
19 were fired just by looking at wounds, right?

20 A No. I think that's fair. I associate what
21 I've seen and the extent of the damage with what
22 weapons they have said were used.

23 Q When you say in that sentence, "causing more
24 injuries per victim and, thus, more complications,"
25 are you saying causing more injuries than a non-

1 assault weapon would?

2 A In general, yes.

3 Q But you can't say whether an assault rifle --
4 you cannot confirm with any certainty, whether an
5 assault rifle would shoot more shots faster than Rifle
6 A; is that fair to say?

7 MR. ECHEVERRIA: Objection. Vague.

8 DR. COLWELL: With certainty? No.

9 BY MR. BRADY:

10 Q The second part of that sentence, there's an
11 "and," and you say, "many of the most devastating
12 injuries I have managed in my over 25 years of
13 experience treating gunshot wound victims." So, I
14 guess, what is the modifier of that in the first
15 sentence? It would be "causing," right? So, let's
16 use the word, "causing many of the most devastating
17 injuries I have managed in my over 25 years of
18 experience treating gunshot wound victims." Is that a
19 fair characterization?

20 A Yes.

21 Q So when you say "many," were there some
22 others that were more devastating?

23 A I wouldn't say more, but as devastating, yes.

24 Q And do you recall what firearms caused those
25 wounds?

1 MR. ECHEVERRIA: Objection. Vague.

2 DR. COLWELL: There have been equally
3 devastating injuries caused by both assault and non-
4 assault, and unknown weapons. In other words, I don't
5 pretend to know always which type of weapon was used,
6 and so, there were times a devastating injury occurred
7 and I don't know whether it was assault or non-
8 assault.

9 BY MR. BRADY:

10 Q For what percentage of the gunshot wounds
11 that you've treated would you say you know what
12 firearm was used?

13 A I'd say about 30 to 40 percent. It's not
14 quite half, but it's a fair number of them. We do
15 have discussions with law enforcement on a lot of
16 these cases.

17 Q So going back to page four of your report,
18 the last sentence of the paragraph in the middle of
19 the page state, "These weapons cause significantly
20 more damage and have resulted in higher morbidity and
21 mortality than other weapons." Is that right?

22 A Yes.

23 Q And that's your opinion as you sit here
24 today?

25 A Yes.

1 grip," right?

2 A Yes.

3 Q Okay. So going to your statement, "these
4 weapons cause significantly more damage," on page four
5 of your report, can you -- do you have any opinion on
6 whether a pistol grip has an impact on the damage that
7 a bullet causes upon impacting a human?

8 MR. ECHEVERRIA: Objection. Vague.

9 DR. COLWELL: So not to that specific
10 question, no.

11 BY MR. BRADY:

12 Q What about a thumbhole stock? Does that
13 alter the damage that a round coming out of the rifle
14 causes to the tissue upon impact?

15 MR. ECHEVERRIA: Objection. Vague.

16 DR. COLWELL: I'm sorry. I'm not even sure
17 what a thumbhole stock is.

18 MR. BRADY: Okay.

19 DR. COLWELL: The pistol grip, I am told by
20 law enforcement officers that are trained in combat,
21 does create a situation that's easier for multiple
22 rounds to get off very quickly. So my opinion based
23 on that would be that it would allow for more bullets
24 coming from a similar weapon, but that wouldn't be
25 based on my own experience in combat, which I have

1 none.

2 MR. BRADY: Got it.

3 BY MR. BRADY:

4 Q So the same question for a folding or
5 telescoping stock. Would the stock have any impact
6 on, or have any effect on how a projectile impacts
7 tissue?

8 MR. ECHEVERRIA: Objection. Vague.

9 DR. COLWELL: It's my understanding, like,
10 that's what that second picture was in the exhibit
11 that you showed me.

12 MR. BRADY: In Rifle B.

13 DR. COLWELL: Yes.

14 MR. BRADY: Yes.

15 DR. COLWELL: That that's a folding stock?

16 MR. BRADY: Correct.

17 DR. COLWELL: And, again, by the same
18 sources, I'm told that makes for an easier time to use
19 the weapon more quickly, but I don't have personal
20 experience with that.

21 BY MR. BRADY:

22 Q If that's not the case, if the stock does not
23 impact the rate of fire, then would you say it
24 causes -- it can cause more damage?

25 MR. ECHEVERRIA: Objection. Vague and

1 incomplete; hypothetical.

2 DR. COLWELL: The stock -- no. I wouldn't
3 presume to say the stock itself causes more damage.

4 BY MR. BRADY:

5 Q So the stock is not relevant to the wound
6 that results from being the -- the -- being discharged
7 from the rifle, right?

8 A Only to the extent that if it were to make
9 the weapon easier to fire more rapidly than -- no, I
10 don't equate a stock with a wound.

11 Q Okay. Okay. Yeah, you know, and again,
12 just -- I understand that you are operating under the
13 premise -- under the assumption that some of these
14 features will aid the shooter in getting more rounds
15 off and being more accurate, but as we've already
16 established, you are not a gun expert, correct?

17 A Correct.

18 Q So I want to focus in on your expertise,
19 which is likely undeniable that you are a doctor who
20 sees and treats wounds, so I want to know if you have
21 an opinion on whether a pistol grip has a direct
22 effect on the wound that results. And so, does a
23 pistol grip have a direct impact on the wound
24 resulting from that rifle being fired?

25 DR. COLWELL: Not that I've --

1 MR. ECHEVERRIA: Objection. Vague.

2 DR. COLWELL: Sorry. Not that I specifically
3 know of, no.

4 BY MR. BRADY:

5 Q Okay. Does a thumbhole stock have a direct
6 effect on the wound that results from a round fired
7 out of a rifle?

8 MR. ECHEVERRIA: Objection. Vague.

9 DR. COLWELL: Given that I don't know what
10 that is, I would say I don't know.

11 BY MR. BRADY:

12 Q Does a folding or telescoping stock effect
13 the wound that results from a projectile coming out of
14 a rifle with such a stock?

15 MR. ECHEVERRIA: Objection. Vague.

16 DR. COLWELL: As we've discussed, I don't
17 know that.

18 BY MR. BRADY:

19 Q Do you know what a flash suppressor is?

20 A I have a vague understanding that the idea
21 behind it is to prevent a flash, thereby allowing a
22 more-focused next shot. Forgive my layman's terms on
23 that.

24 Q So do you have any reason to believe that a
25 flash suppressor would affect the wound that results

1 from a round coming out of a rifle with a flash
2 suppressor?

3 MR. ECHEVERRIA: Objection. Vague.

4 DR. COLWELL: Other than as we've discussed,
5 if it allows the shooter to shoot more frequently,
6 then I would think so, but no; anything specific to
7 that impacting the -- directly, the wound, I have no
8 opinion on that.

9 BY MR. BRADY:

10 Q And would a forward pistol grip effect the
11 wound that results from a projectile coming out of a
12 rifle with such a grip?

13 MR. ECHEVERRIA: Objection. Vague.

14 DR. COLWELL: Am I correct in saying a
15 forward pistol grip is a pistol grip that's more
16 forward?

17 MR. BRADY: I think that's a safe assumption,
18 yes.

19 DR. COLWELL: Then same as the pistol grip,
20 yes.

21 BY MR. BRADY:

22 Q So none of the features that we went over,
23 that are listed in California Penal Code, Section
24 30510, as marked as Exhibit 21 --

25 MR. ECHEVERRIA: 30515, Counsel.

1 his 9-millimeter Carbine rifle 96 times." Do you see
2 that?

3 A On this? Yes. Yes, here.

4 Q So both firearms used 9-millimeter
5 ammunition; is that your understanding?

6 A As what it says here, yes.

7 Q If you look down at the box on the bottom of
8 page two, the box is divided into shotgun rounds and
9 9-millimeter rounds, correct?

10 A Yes.

11 Q So based on this document from the Jefferson
12 County Sheriff's Department, there was only shotgun
13 rounds or 9-millimeter rounds fired at Columbine; is
14 that fair to say?

15 A Based on this report, yes.

16 Q Okay. And you treated victims who were shot
17 at Columbine?

18 A Yes.

19 Q Okay. And could you say whether they were
20 shot by the rifle or the shotgun, or -- I'm sorry, the
21 rifle or the handgun?

22 A No.

23 Q Okay. Did you notice any victims who had
24 particularly worse wounds? And not just based on
25 location; obviously, if you get shot in the heart or

1 right in the neck, it's going to be, you know, worse
2 than if you get shot in the calf muscle, right? But
3 as far as noticeable differences in wounds caused by
4 the projectile, did you notice any difference in
5 victims?

6 MR. ECHEVERRIA: Objection. Vague.

7 DR. COLWELL: At Columbine?

8 MR. BRADY: Yes.

9 DR. COLWELL: No. Also know that I saw the
10 wounds on the dead as well.

11 MR. BRADY: Okay.

12 DR. COLWELL: But the answer to your question
13 is no.

14 BY MR. BRADY:

15 Q On the deceased, did you notice any
16 difference in the wounds on them either?

17 MR. ECHEVERRIA: Objection. Vague.

18 DR. COLWELL: They were obviously different
19 wounds --

20 MR. BRADY: Mortal wounds, right?

21 DR. COLWELL: - and locations, but in terms
22 of specific, that's a -- from this weapon and this is
23 from a different weapon, no.

24 BY MR. BRADY:

25 Q Going back to your report, page four, same

1 paragraph, you were also an emergency department
2 physician treating victims of the Aurora Theater
3 shooting as well, right?

4 A Correct.

5 Q Again, tough job. We all thank you for doing
6 that.

7 A Thank you.

8 Q In that case, an AR-15 was used, correct?

9 A Yes.

10 Q Are you aware of whether any other firearms
11 were used in that shooting?

12 A As I understand it, there were other firearms
13 used.

14 MR. BRADY: Mark as Exhibit 104 a New York
15 Times article.

16 (Whereupon, Exhibit 104 was marked for
17 identification.)

18 BY MR. BRADY:

19 Q Could you read the title of the article out
20 loud for us, please?

21 A "Aurora Gunman's Arsenal: Shotgun, Semi-
22 Automatic Rifle and, at the End, a Pistol."

23 Q So based on the title, it sounds like he
24 had -- the shooter at Aurora had at least three
25 firearms, right? A shotgun, a semi-automatic rifle,

1 and a pistol?

2 A And that was my understanding from law
3 enforcement as well.

4 Q Okay. And when you were treating victims of
5 this shooting, the Aurora shooting, do you know with
6 which firearm they were -- the victims you were
7 treating were shot?

8 A Definitively, no.

9 Q Okay. If you look at page two, at the top of
10 the document, it says, "Many other details about the
11 rampage also remain unclear, like, whether the gunman
12 used soft-point or full metal jacket ammunition." Do
13 you have any sense on whether the shooter used any
14 particular type of ammunition?

15 MR. ECHEVERRIA: Objection. Vague.

16 DR. COLWELL: Other than to know that some
17 bullets went directly through and others did not, and
18 I know that's more associated -- the purpose of a full
19 metal jacket, but did I associate a specific wound
20 with a specific bullet, no.

21 BY MR. BRADY:

22 Q Can you tell what type of projectile is used
23 by looking at the wound; if it's a full metal jacket
24 versus a hollow point?

25 MR. ECHEVERRIA: Objection. Vague.

1 when a shotgun is used very close the damage is
2 dramatically more.

3 Q Dr. Colwell, do you have any published papers
4 on treating bullet wounds?

5 A I know you have my list of publication and we
6 have talked about treating bullet wounds in some of
7 those talks. I have not done a randomized, controlled
8 trial on bullet wounds, no.

9 Q Okay. And have you done any studies on -- or
10 strike that. Have you -- have any of those papers
11 discussing wounds, discuss assault weapon -- wounds
12 caused by assault weapons, specifically?

13 A I don't recall any specific discussion on
14 assault weapons, other than that they would be
15 incorporated in wound management, in general.

16 Q Are you aware of any peer-reviewed study on
17 the subject of wounds caused by assault weapons?

18 A I'm not aware of one, no.

19 Q Are you familiar with the name, Martin
20 Fackler [ph]?

21 A No.

22 MR. BRADY: I believe that concludes my
23 questioning. Mr. Echeverria, if you have any
24 questions?

25 MR. ECHEVERRIA: I do have a few.

CERTIFICATE OF SERVICE
IN THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

Case Name: *Rupp, et al. v. Becerra*
Case No.: 8:17-cv-00746-JLS-JDE

IT IS HEREBY CERTIFIED THAT:

I, the undersigned, am a citizen of the United States and am at least eighteen years of age. My business address is 180 East Ocean Boulevard, Suite 200, Long Beach, California 90802.

I am not a party to the above-entitled action. I have caused service of:

**DECLARATION OF SEAN A. BRADY IN SUPPORT OF PLAINTIFFS'
MOTION TO EXCLUDE THE TESTIMONY OF DEFENDANT'S EXPERT
WITNESS CHRISTOPHER B. COLWELL, M.D. UNDER FEDERAL RULE
OF EVIDENCE 702**

on the following party by electronically filing the foregoing with the Clerk of the District Court using its ECF System, which electronically notifies them.

Xavier Becerra
Attorney General of California
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San Francisco, CA 94102

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

Executed May 28, 2019.

/s/ Laura Palmerin
Laura Palmerin