



September 8, 2022

SENT VIA EMAIL

Ms. Mary Ahlers, Chair, National EMS Advisory Council
Mr. Gamunu Wijetunge, Director, Office of EMS, National Highway Traffic Safety Administration
Mr. Ray Mollers, Executive Director, Interstate Commission for EMS Personnel Practice
Mr. Bill Seifarth, Executive Director, National Registry of EMTs
Ms. Dia Gainor, Executive Director, National Association of State EMS Officials
Mr. Stephen Perdziola, Executive Director, National Association of EMS Educators
Dr. George W. Hatch Jr, Executive Director, Commission on Accreditation of EMS Programs
Dr. Michael Levy, President, National Association of EMS Physicians

National EMS Leadership Colleagues,

In 2021 the Colorado Department of Public Health & Environment convened a multidisciplinary panel of subject matter experts to review the use of ketamine as a sedative/chemical restraint by paramedics. The “Ketamine Investigatory Review Panel” was tasked to review available data and provide recommendations to the Department, and the panel’s comprehensive report is available for review on the Department’s [website](#)¹. As you may recall, the impetus for the panel’s work was the tragic circumstances during the summer of 2019 when Elijah McClain, a 23-year old African-American man, was detained by police and paramedics administered ketamine for excited delirium. Mr. McClain went into cardiac arrest during the ambulance transport and died in the hospital a few days later. In 2021, Colorado passed legislation² that prohibits the use of ketamine for excited delirium and removes excited delirium as a valid diagnosis or syndrome.

While the panel’s primary focus was Colorado’s EMS system, many of the panel’s findings and recommendations are relevant to the national EMS system. Indeed, we hope the recommendations made by this panel can be implemented so that the national EMS system may learn from our experiences. Specifically, we want to call your attention to the panel’s findings and recommendations related to behavioral health emergencies and the education of EMS personnel. The gap in EMS personnel education is not the result of poor performing educational programs³, but rather weaknesses in the current EMS education paradigm: national EMS education standards⁴, curriculum, textbooks, clinical rotations, and the blueprint of the national EMS certification examinations.

Aside from injury, behavioral health is the most frequent syndrome encountered by EMS personnel in Colorado. Nationally, behavioral/psychiatric disorders are the fourth most frequent provider impression for adult patients and in the second most common provider impression for pediatric patient encounters⁵. Yet the current EMS education framework offers proportionally limited didactic and clinical training on psychiatric and behavioral health emergencies. The panel identified that in some paramedic programs “behavioral illness content consisted of readings only, with no lectures or skill sessions”, and concluded that “EMS education as a whole is lacking in behavioral health content.” The panel identified several gaps that should be addressed urgently,

¹ Access the report here: <https://cdphe.colorado.gov/ketamine-investigatory-review-panel-report-overview>

² Colorado HB 21-1251. https://leg.colorado.gov/sites/default/files/2021a_1251_signed.pdf

³ Paramedic education programs in Colorado have a >97% 5-year cumulative pass rate on the National EMS Certification examination.

⁴ https://www.ems.gov/pdf/education/National-EMS-Education-Standards-and-Instructional-Guidelines/Paramedic_Instructional_Guidelines.pdf

⁵ Ashish R. Panchal, Madison K. Rivard, Rebecca E. Cash, John P. Corley Jr., Marjorie Jean-Baptiste, Kirsten Chrzan & Mihaiela R. Gugiu (2021) Methods and Implementation of the 2019 EMS Practice Analysis, Prehospital Emergency Care, DOI: 10.1080/10903127.2020.1856985



including verbal de-escalation, interacting with and formal hand-off from law enforcement, explicit and implicit bias, and the appropriate use of chemical restraints (including behavioral health assessments, monitoring, estimating a patient weight for weight-based medications).

As recognized in a national joint position statement⁶ from the National Association of State EMS Officials (NASEMSO), National EMS Management Association (NEMSMA), National Association of Emergency Medical Technicians (NAEMT), and the American Paramedic Association (APA), emergency medical services (EMS) personnel frequently care for agitated, combative, or violent patients who require clinical treatment and monitoring. When these encounters occur, patients, the public, and all emergency responders are at risk for injury.

Colorado recognizes the importance of national standards for EMS education, the value of national certification, and the mobility of the national EMS workforce. Although Colorado has 19,715 licensed EMS personnel⁷, over 300,000 EMS personnel currently have a privilege to practice in Colorado via the EMS Compact⁸, and over 467,000 EMS personnel with a current National EMS Certification⁹ are eligible for a Colorado EMS license¹⁰. Therefore, the only mechanism to address the educational disparities identified by the panel is to make nationwide changes to EMS education.

On behalf of the State of Colorado, to ensure Colorado's EMS workforce and the national EMS workforce are trained and prepared to safely manage behavioral health emergencies, we are requesting your partnership in addressing the following gaps in the curriculum and framework for paramedic education:

- **Behavioral Health:** Expand educational content for behavioral health emergencies to include enhanced awareness of mental health syndromes and mental health assessment, identification of imminent harm to self or others, and techniques to enhance patient and provider safety, de-escalation techniques, and safe restraint (physical and chemical).
- **Bias:** Add content on recognizing bias. Content on implicit bias is non-existent in the National Education Standards, and "bias" is only mentioned three times, none of which is related to patients. Unrecognized implicit bias leads to consequences that may be mediated by the Paramedics' ability to recognize bias in the health care setting.
- **Chemical Restraint:** Paramedics should be trained to engage in verbal de-escalation and/or physical restraint prior to utilizing chemical restraint. Paramedics should have all necessary resuscitative equipment and medications present at the patient-side; gather available information from police and bystanders while receiving the hand-off from law enforcement; complete a gross neurological assessment, as practicable, prior to administering a chemical restraint.
- **Clinical Education:** Expanded objectives and expectations during operating room rotations beyond airway management to include focused training on the administration of sedatives and the techniques of clinically monitoring a patient after administration of sedatives.
- **Law Enforcement Interaction:** Address the distinctions between the roles of EMS and law enforcement in the prehospital setting; the hand-off process from law enforcement to the paramedic should be made clear during training; emphasize that the authority to make all medical decisions at the scene lies with paramedics and not law enforcement.
- **Medication Administration:** Checklists should be incorporated into training and practice that contain the appropriate dosing, monitoring and resuscitation.

⁶ <https://www.tandfonline.com/doi/full/10.1080/10903127.2021.1917736>

⁷ <https://drive.google.com/drive/folders/1BJAmuQx1yjtPj0m-IS3obtYZVnWEPRTG>

⁸ <https://emscompact.gov/>

⁹ <https://nremt.org/maps>

¹⁰ Colorado issues certifications and licenses for EMS personnel. Licenses are issued for personnel with a bachelor's degree; for the purposes of this correspondence licensure nomenclature is used to encompass both licenses and certification.



- **Pharmacology:** Increased emphasis on anticipation and mitigation of complications for selected medications (e.g., sedatives, anti-psychotics, opiates, dissociatives). Emphasis should be placed on structured physiological monitoring immediately following administration.
- **Verbal De-Escalation:** Paramedics should be trained in verbal de-escalation tactics, to include practical skills for calming individuals who are angry or upset.

Our office is committed to protecting the public and advancing the Emergency Medical Services profession and system - in Colorado and nationally - by advocating for and implementing meaningful changes. Although we have shared the report's findings with our Colorado EMS providers and education programs, the EMS workforce is mobile and therefore a national approach is required. We are requesting urgent action to address these findings, while collaborating on long-term modifications to the education standards, and the national EMS certification examination standards. Please let us know how we can partner with you to accomplish these goals.

Respectfully,

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Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia,
Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland,
Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New
Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma,
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