

REFERENCES

- Callahan M: Quantifying the scanty science of prehospital emergency care. *Ann Emerg Med* 30: 785, 1997. [PMID: 9398774]
- Custalow CB, Gravitz CS: Emergency medical vehicle collisions and potential for preventive intervention. *Prehosp Emerg Care* 8: 175, 2004. [PMID: 15060853]
- SafeAmbulances.org. (Safe Ambulances homepage). Accessed May 31, 2018.
- Van Cott CC: Emergency medical communication in North Carolina: past, present, and future challenges. *N C Med J* 68: 279, 2007. [PMID: 17694851]
- https://www.ntia.doc.gov/files/ntia/publications/fact_sheet_process-9-19-13.pdf (National Telecommunications and Information Administration: The Process for Working with FirstNet.) Accessed May 31, 2018.
- <https://homelandprepnews.com/countermeasures/18680-firstnet-looks-ahead-selecting-private-partner-build-first-public-safety-communications-network/> (Rozens T: FirstNet looks ahead to selecting private partner to build first public safety communications network. Homeland Preparedness News.) Accessed May 31, 2018.
- Landman AB, Lee CH, Sasson C, Van Gelder CM, Curry LA: Prehospital electronic patient care report systems: early experiences from emergency medical services agency leaders. *PLoS One* 7: e32692, 2012. [PMID: 22403698]
- Kerner T, Schmidbauer W, Tietz M, et al: Use of checklists improves the quality and safety of prehospital emergency care. *Eur J Emerg Med* 24: 114, 2017. [PMID: 26287802]
- Janke AT, Overbeek DL, Kocher KE, Levy PD: Exploring the Potential of predictive analytics and big data in emergency care. *Ann Emerg Med* 67: 227, 2016. [PMID: 26215667]
- Chen C, Kan T, Li S, et al: Use and implementation of standard operating procedures and checklists in prehospital emergency medicine: a literature review. *Am J Emerg Med* 34: 2432, 2016. [PMID: 27742522]
- Stigi K, Baer A, Duchin JS, Lofy K: Evaluation of electronic ambulatory care data for influenza-like illness surveillance, Washington State. *J Public Health Manag Pract* 20: 580, 2014. [PMID: 24157597]
- American College of Emergency Physicians: Emergency care electronic data collection and exchange. Policy statement. *Ann Emerg Med* 64: 561, 2014. [PMID: 25669706]
- Krzanicki DA, Porter KM: Personal protective equipment provision in prehospital care: a national survey. *Emerg Med J* 26: 892, 2009. [PMID: 19934142]
- Horton DK, Orr M, Tsongas T, Leiker R, Kapil V: Secondary contamination of medical personnel, equipment, and facilities resulting from hazardous materials events, 2003-2006. *Disaster Med Public Health Prep* 2: 104, 2008. [PMID: 18525373]
- Eckstein M, Cowen AR: Scene safety in the face of automatic weapons fire: A new dilemma for EMS? *Prehosp Emerg Care* 2: 117, 2009. [PMID: 9709330]
- Nichol G, et al: Defibrillation for ventricular fibrillation: a shocking update. *J Am Coll Cardiol* 70: 1496, 2017. [PMID: 28911514]
- Mosesso VN Jr, Newman MM, Ornato JP, et al: Law enforcement agency defibrillation (LEA-D): proceedings of the National Center for Early Defibrillation Police AED Issues Forum. *Prehosp Emerg Care* 6: 273, 2002. [PMID: 12109568]
- Valenzuela TD, Roe DJ, Nichol G, Clark LL, Spaite DW, Hardman RG: Outcomes of rapid defibrillation by security officers after cardiac arrest in casinos. *N Engl J Med* 343: 1206, 2000. [PMID: 11071670]
- Caffrey SL, Willoughby PJ, Pepe PE, Becker LB: Public use of automated external defibrillators. *N Engl J Med* 347: 1242, 2002. [PMID: 12393821]
- Silfvast T, Paakkonen H, Gorski J: The effect of seeing the rhythm display on performance of cardiopulmonary resuscitation. *Resuscitation* 55: 25, 2002. [PMID: 12297350]
- Maes F, Marchandise S, Boileau L, et al: Evaluation of a new semiautomated external defibrillator technology: a live cases video recording study. *Emerg Med J* 32: 481, 2015. [PMID: 25082717]
- Higgins SL, Herre JM, Epstein AE, et al: A comparison of biphasic and monophasic shocks for external defibrillation. Physio-Control Biphasic Investigators. *Prehosp Emerg Care* 4: 305, 2000. [PMID: 11045408]
- Provo TA, Frascone RJ: 12-Lead electrocardiograms during basic life support care. *Prehosp Emerg Care* 8: 212, 2004. [PMID: 15060859]
- Brunetti ND, Dellegrottaglie G, Lopriore C, et al: Prehospital telemedicine electrocardiogram triage for a regional public emergency medical service: is it worth it? A preliminary cost analysis. *Clin Cardiol* 37: 140, 2014. [PMID: 24452666]
- Verbeek PR, Ryan D, Turner L, Craig AM: Serial prehospital 12-lead electrocardiograms increase identification of ST-segment elevation myocardial infarction. *Prehosp Emerg Care* 16: 109, 2012. [PMID: 21954895]
- Daudelin DH, Sayah AJ, Kwong M, et al: Improving use of prehospital 12-lead ECG for early identification and treatment of acute coronary syndrome and ST-elevation myocardial infarction. *Circulation* 3: 316, 2010. [PMID: 20484201]
- Welsh RC: Computer-assisted paramedic electrocardiogram interpretation with remote physician over-read: the future of prehospital STEMI care? *Can J Cardiol* 28: 408, 2012. [PMID: 22652090]
- de Champlain F, Boothroyd LJ, Vadeboncoeur A, et al: Computerized interpretation of the prehospital electrocardiogram: predictive value for ST segment elevation myocardial infarction and impact on on-scene time. *CJEM* 16: 94, 2014. [PMID: 24626114]
- Pilbery R, Teare MD, Goodacre S, Morris F: The Recognition of STEMI by Paramedics and the Effect of Computer Interpretation (RESPECT): a randomised crossover feasibility study. *Emerg Med J* 32: 471, 2016. [PMID: 26864325]
- Eckstein M, Cooper E, Nguyen T, Pratt FD: Impact of paramedic transport with prehospital 12-lead electrocardiography on door-to-balloon times for patients with ST-segment elevation myocardial infarction. *Prehosp Emerg Care* 13: 203, 2009. [PMID: 19291558]
- Diercks DB, Kontos MC, Chen AY, et al: Utilization and impact of pre-hospital electrocardiograms for patients with acute ST-segment elevation myocardial infarction: data from the NCDR (National Cardiovascular Data Registry) ACTION (Acute Coronary Treatment and Intervention Outcomes Network) Registry. *J Am Coll Cardiol* 53: 161, 2009. [PMID: 19130984]
- Cheskes S, Turner L, Foggett R, et al: Paramedic contact to balloon in less than 90 minutes: a successful strategy for ST-segment elevation myocardial infarction bypass to primary percutaneous coronary intervention in a Canadian emergency medical system. *Prehosp Emerg Care* 15: 490, 2011. [PMID: 21830918]
- Ducas RA, Labos C, Allen D, et al: Association of pre-hospital ECG administration with clinical outcomes in ST-segment myocardial infarction: a systematic review and meta-analysis. *Can J Cardiol* 32: 1531, 2016. [PMID: 27707525]
- Jabre P, Penaloza A, Pinero D, et al: Effect of bag-mask ventilation vs endotracheal intubation during cardiopulmonary resuscitation on neurological outcome after out-of-hospital cardiorespiratory arrest: a randomized clinical trial. *JAMA* 319: 779, 2018. [PMID: 29486039]
- Ostermayer DG, Gausche-Hill M: Supraglottic airways: the history and current state of prehospital airway adjuncts. *Prehosp Emerg Care* 18: 106, 2014. [PMID: 24028649]
- Park MJ, Kwon W, Kim K, et al: Prehospital supraglottic airway was associated with good neurological outcome in cardiac arrest victims especially those who received prolonged cardiopulmonary resuscitation. *Acad Emerg Med* 24: 1464, 2017. [PMID: 28898484]
- Gruber C, Nabecker S, Wohlfarth P, et al: Evaluation of airway management associated hands-off time during cardiopulmonary resuscitation: a randomised manikin follow-up study. *Scand J Trauma Resusc Emerg Med* 21: 10, 2013. [PMID: 23433462]
- Youngquist S, Gausche-Hill M, Burbulys D: Alternative airway devices for use in children requiring prehospital airway management: update and case discussion. *Pediatr Emerg Care* 23: 250, 2007. [PMID: 17438442]
- Gausche M, Lewis RJ, Stratton SJ, et al: Effect of out-of-hospital pediatric endotracheal intubation on survival and neurological outcome: a controlled clinical trial. *JAMA* 283: 783, 2000. [PMID: 10683858]
- Ohashi-Fukuda N, Fukuda T, Doi K, Morimura N: Effect of prehospital advanced airway management for pediatric out-of-hospital cardiac arrest. *Resuscitation* 114: 66, 2017. [PMID: 28267617]
- Sayre MR, Sakles JC, Mistler AF, et al: Field trial of endotracheal intubation by basic EMTs. *Ann Emerg Med* 31: 228, 1998. [PMID: 9472816]
- Wang HE, Balasubramani GK, Cook LJ, Lave JR, Yealy DM: Out-of-hospital endotracheal intubation experience and patient outcomes. *Ann Emerg Med* 55: 527, 2010. [PMID: 20138400]
- Warner KJ, Carlom D, Cooke CR, et al: Paramedic training for proficient prehospital endotracheal intubation. *Prehosp Emerg Care* 14: 103, 2010. [PMID: 19947874]
- Wang HE, O'Connor RE, Domeier RM: Prehospital rapid-sequence intubation. *Prehosp Emerg Care* 5: 40, 2001. [PMID: 11194068]
- Ochs M, Davis D, Hoyt D, et al: Paramedic-performed rapid sequence intubation of patients with severe head injuries. *Ann Emerg Med* 40: 159, 2002. [PMID: 12140494]
- Katz SH, Falk JL: Misplaced endotracheal tubes by paramedics in an urban emergency medical services system. *Ann Emerg Med* 37: 32, 2001. [PMID: 11145768]
- Daily JC, Wang HE: Noninvasive positive pressure ventilation: resource document for the National Association of EMS Physicians position statement. *Prehosp Emerg Care* 15: 432, 2011. [PMID: 21612390]
- Bossers SM, Schwarte LA, Loer SA, et al: Experience in prehospital endotracheal intubation significantly influences mortality of patients with severe traumatic brain injury: a systematic review and meta-analysis. *PLoS One* 10: e0141034, 2015. [PMID: 26496440]
- Wesley K: The 'basic' skill of CPAP. Adding CPAP to the EMT-B scope of practice. *JEMS* 32: S21, 2007. [PMID: 17982790]
- Hubble MW, Richards ME, Wilfong DA: Estimates of cost-effectiveness of prehospital continuous positive airway pressure in the management of acute pulmonary edema. *Prehosp Emerg Care* 12: 277, 2008. [PMID: 18584492]
- Bledsoe BE, Anderson E, Hodnick R, et al: Low-fractional oxygen concentration continuous positive airway pressure is effective in the prehospital setting. *Prehosp Emerg Care* 16: 217, 2012. [PMID: 22191942]
- Dib JE, Matin SA, Luckert A: Prehospital use of continuous positive airway pressure for acute severe congestive heart failure. *J Emerg Med* 42: 553, 2012. [PMID: 21911283]
- Pandor A, Thokala P, Goodacre S, et al: Pre-hospital non-invasive ventilation for acute respiratory failure: a systematic review and cost-effectiveness evaluation. *Health Technol Assess* 19: 1, 2015. [PMID: 26102313]
- Frascone RJ, Jensen JP, Kaye K, Salzman JG: Consecutive field trials using two different intraosseous devices. *Prehosp Emerg Care* 11: 164, 2007. [PMID: 17454802]
- Bickell WH, Wall MJ Jr, Pepe PE, et al: Immediate versus delayed fluid resuscitation for hypotensive patients with penetrating torso injuries. *N Engl J Med* 331: 1105, 1994. [PMID: 7935634]
- Lewis P, Wright C: Saving the critically injured trauma patient: a retrospective analysis of 1000 uses of intraosseous access. *Emerg Med J* 32: 463, 2015. [PMID: 24981009]
- Myers LA, Arteaga GM, Kolb LJ, et al: Prehospital peripheral intravenous vascular access success rates in children. *Prehosp Emerg Care* 17: 425, 2013. [PMID: 23952007]
- Wampler D, Schwartz D, Shumaker J, et al: Paramedics successfully perform humeral EZ-IO intraosseous access in adult out-of-hospital cardiac arrest patients. *Am J Emerg Med* 30: 1095, 2012. [PMID: 22030185]

2 SECTION 1: Prehospital Care

59. O'Connor RE: Intraosseous vascular access in the out-of-hospital setting: Position Statement of the National Association of EMS Physicians. *Prehosp Emerg Care* 11: 62, 2007.
60. Fowler R, Gallagher JV, Isaacs SM, et al: The role of intraosseous vascular access in the out-of-hospital environment (resource document to NAEMSP position statement). *Prehosp Emerg Care* 11: 63, 2007. [PMID: 17169880]
61. Chin EJ, Chan CH, Mortazavi R, et al: A pilot study examining the viability of a Prehospital Assessment with UltraSound for Emergencies (PAUSE) protocol. *J Emerg Med* 44: 142, 2013. [PMID: 22595631]
62. Reed MJ, Gibson L, Dewar A, et al: Introduction of paramedic led Echo in Life Support into the pre-hospital environment: the PUCA study. *Resuscitation* 112: 65, 2017. [PMID: 27638418]
63. O'Dochartaigh D, Douma M, MacKenzie M: Five-year retrospective review of physician and non-physician performed ultrasound in a Canadian Critical Care Helicopter Emergency Medical Service. *Prehosp Emerg Care* 21: 24, 2017. [PMID: 27436374]
64. Bhat SR, Johnson DA, Pierog JE, et al: Prehospital evaluation of effusion, pneumothorax, and standstill (PEEPS): point-of-care ultrasound in emergency medical services. *West J Emerg Med* 16: 503, 2015. [PMID: 26265961]
65. Clemency BM, Bart JA, Malhotra A, et al: Patients immobilized with a long spine board rarely have unstable thoracolumbar injuries. *Prehosp Emerg Care* 20: 266, 2016. [PMID: 27002350]
66. Hankins DG, Rivera-Rivera EJ, Ornato JP, et al: Spinal immobilization in the field: clinical clearance criteria and implementation. *Prehosp Emerg Care* 5: 88, 2001. [PMID: 11194076]
67. Tatum JM, Melo N, Ko A, et al: Validation of a field spinal motion restriction protocol in a level I trauma center. *J Surg Res* 211: 223, 2017. [PMID: 28501121]
68. Bucher J, Dos Santos F, Frazier D, et al: Rapid extrication versus the Kendrick Extrication Device (KED): comparison of techniques used after motor vehicle collisions. *West J Emerg Med* 16: 453, 2015. [PMID: 25987929]
69. White CCT, Domeier RM, Millin MG, et al: EMS spinal precautions and the use of the long backboard: resource document to the position statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma. *Prehosp Emerg Care* 18: 306, 2014. [PMID: 24559236]
70. Kreinest M, Gliwitzky B, Schüler S, et al: Development of a new Emergency Medicine Spinal Immobilization Protocol for trauma patients and a test of applicability by German emergency care providers. *Scand J Trauma Resusc Emerg Med* 24: 71, 2016. [PMID: 27180045]
71. Swartz EE, Boden BP, Courson RW, et al: National Athletic Trainers' Association Position Statement: acute management of the cervical spine-injured athlete. *J Athl Train* 44: 306, 2009. [PMID: 19478836]
72. Swartz EE, Hernandez AE, Decoster LC, et al: Prehospital emergency removal of football helmets using two techniques. *Prehosp Emerg Care* 15: 166, 2011. [PMID: 21294629]
73. Swartz EE, Mihalik JP, Beltz NM, et al: Face mask removal is safer than helmet removal for emergent airway access in American football. *Spine J* 14: 996, 2014. [PMID: 24216399]
74. Swartz EE, Mihalik JP, Decoster LC, et al: Emergent access to the airway and chest in american football players. *J Athl Train* 50: 681, 2015. [PMID: 25974380]
75. Lee C, Porter K: The prehospital management of pelvic fractures. *Emerg Med J* 24: 130, 2007. [PMID: 17251627]
76. Sadewasser J, Potter A, Ellis D: Defining a standard medication kit for prehospital and retrieval physicians: a comprehensive review. *Emerg Med J* 27: 62, 2010. [PMID: 20029017]
77. Hayward MD, Regan L, Glasheen J, et al: Review of therapeutic agents employed by an Australian aeromedical prehospital and retrieval service. *Emerg Med Australas* 28: 329, 2016. [PMID: 27250671]