

What's New in the 3rd Edition ITLS Pediatric Manual



The third edition of the ITLS Pediatric textbook, *Pediatric Trauma Life Support for Prehospital Care Providers*, has been updated and refined to reflect the most current and effective approaches to the care of the pediatric trauma patient. The text also has been revised to conform to the newest American Heart Association (AHA) guidelines for artificial ventilation and CPR, and International Liaison Committee on Resuscitation (ILCOR) recommendations.

Changes to the text's structure and layout are noticeable, as the manual has been redesigned with reader-friendliness and ease of navigation in mind. As introduced in the 6th edition ITLS provider manual, the text's "Pearls" feature has been repositioned so that it consistently appears in the margins beside relevant text. The textbook now features updated full-color photographs and illustrations throughout the text. Illustrations have been redrawn to include more detail, and new flow sheets and diagrams are also included. The 3rd edition also includes expanded and updated lists of Suggested Readings for each topic.

Important chapter-by-chapter changes are listed below.

- In Chapter 1, the topic of Injury Prevention has been expanded, now including common mechanisms of injury for each age group as related to their growth and development, plus specific preventative measures for each age group.
- Chapter 2 takes a more comprehensive examination of pediatric assessment procedures, mirroring the steps of ITLS patient assessment for adult trauma patients as outlined in the 6th edition ITLS provider manual and modifying them for children. The description of the ITLS patient assessment has been revised so that it now consistently addresses it as a three-step plan composed of the ITLS Primary Survey, the ITLS Secondary Survey, and the ITLS Ongoing Exam. The patient assessment algorithm has been updated to reflect that change.
- Also in Chapter 2, the term standard precautions is introduced as a replacement for body substance isolation (BSI). This change is reflected throughout the text.
- Chapter 3 reflects the new description of the ITLS patient assessment plan. A section outlining the Ground Rules for Teaching and Evaluation of Patient Assessment has been included.
- Chapter 4 recommends the use of capnography to confirm placement of the endotracheal tube. The chapter also references the increasing use of blind insertion airway devices (BIADs) available for the pediatric population, such as the KING LT-D™, Combitube™, and laryngeal mask airway (LMA).





- Also in Chapter 4, the Anatomy and Physiology of the pediatric airway have been better illustrated to clearly demonstrate the ways in which the anatomy differs from that of adults. An illustration of edema has been redrawn to actual size with accurate dimensions for adults and children.
- In Chapter 5, more detailed illustrations show the anatomy of the pediatric thoracic and abdominal cavities as well as provide accurate visual demonstrations of thoracic trauma conditions such as tension pneumothorax and massive hemothorax. Descriptions and management of the six life-threatening conditions identified during the ITLS Primary Survey have been expanded, and the use of capnography to monitor the patient's CO₂ level is integrated.
- Chapter 6 standardizes the format for airway management and thoracic trauma skills, outlining indications, contraindications, equipment, and step-by-step procedures for each skill.
- Chapters 7 and 8 reference the newer technology used for intraosseous (IO) access, such as commercially available IO drills.
- In Chapter 9, a more comprehensive description of how to perform the Abdominal Examination portion of the ITLS Secondary Survey is included. This section highlights seat belt syndrome and handlebar injuries as two common traumatic abdominal injuries.
- Chapter 9 also discusses the conservative approach to managing blunt abdominal trauma, based on recent pediatric literature. Ultrasound technology, specifically the FAST exam, has been included as an additional tool used in the emergency department for diagnosis.
- Chapter 10 has been updated to reflect the new second edition Brain Trauma Foundation guidelines.
- Also in Chapter 10, the Anatomy section includes better illustrations of the components of the brain and the integration of its layers. Illustrations of intracranial injuries such as hematoma have been added.
- Chapter 12 expands the list of situations in which spinal motion restriction should be initiated for pediatric patients. Updated photos and information about equipment and commercial devices available to restrict spinal motion in children have been added.
- In Chapter 13, specific fractures typically seen in children are illustrated. Control of bleeding from amputation is also discussed.
- Chapter 14 expands the text's scope on burn depth and extent of injury with updated illustrations. It also references the use of hydroxocobalamin for suspected cyanide toxicity.
- Chapter 15 integrates internationally accepted definitions from ILCOR and updates patient assessment and management procedures to include capnography.





- In Chapter 16, the term trauma arrest is replaced with traumatic cardiopulmonary arrest. A flowsheet of the potential causes is included, categorizing the causes according to the ABCs.
- Chapter 17 has been reinforced with current statistics on child abuse in the United States and emphasizes the vital role of prehospital care providers in recognizing and reporting abuse.
- Chapter 18 acknowledges the stress, grief, guilt and/or helplessness prehospital care providers may experience after the death of a child and recommends critical incident stress debriefing.
- Chapter 19 has been completely rewritten and expanded with a neonatal resuscitation guide that adheres to the neonatal resuscitation inverted pyramid. Current recommendations developed by ILCOR and adopted by the European Resuscitation Council (ERC) and the AHA are discussed.
- In Chapter 19, the management of meconium aspiration in neonates has been changed to reflect the ILCOR and AHA guidelines that no longer advocate intrapartum suctioning of the infant before delivery of the shoulders. The infant should be fully delivered before beginning any assessment of the meconium-stained neonate.
- Chapter 19 also presents a new set of questions that should form the initial assessment of a newly born infant and expands the topic of managing a neonate with an abnormal assessment. Endotracheal intubation and capnography for infants are covered in-depth, and illustrations demonstrate two different techniques for performing chest compressions.
- Chapter 20 introduces the terms technology-assisted child (TAC) and children with special health care needs (CSHCN) in a vastly expanded chapter that focuses on specialized equipment for CSHCN.
- Chapter 20 also introduces the DOPE mnemonic (Displacement; Obstruction; Pulmonary problems, pneumothorax or other complications; and Equipment failure) to remind providers to evaluate CSHCN with an emphasis on their equipment.
- Appendix A has been updated to include a table of the suggested criteria for transfer to a pediatric trauma center
- Appendix B has been revised with a clear Incident Command Structure flowsheet and explanation, as well as new sections on communications considerations, pediatric consent issues, equipment considerations, and transportation decision making.
- Appendix B also recommends the use of the JumpSTART Pediatric MCI triage Algorithm and includes the flowsheet to visualize it.