

Core and optional content:

# AOTrauma Seminar—Special Pediatric Trauma Conditions

Approved by the AOTrauma Education Commission July 2014  
(Last update: 27.04.2017)

This document defines and documents the core/optional content to qualify as an AOTrauma Seminar—Special Pediatric Trauma Conditions. These are designed to be globally applicable and adaptable to regional differences, depending on different needs and logistical considerations without impacting the essential content to be covered.

## Introduction

The AOTrauma Course—Managing Pediatric Musculoskeletal Injuries and the two optional AOTrauma Seminars—Special Pediatric Trauma Conditions and Pediatric Orthopedic Conditions are modular face-to-face educational events that constitute part of the overall AOTrauma Pediatrics curriculum, complemented by expert modules/seminars and further modalities—self-directed learning opportunities, resources, webinars, videos, etc.

## Developed by the AOTrauma Pediatrics Education Taskforce

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### Link to AOTrauma Pediatrics Curriculum website

<https://aotrauma.aofoundation.org/Structure/education/educational-programs/pediatrics>

### Link to AOTrauma Pediatrics Faculty Support Package

<https://aotrauma.aofoundation.org/Structure/faculty-center/Pages/faculty-center.aspx> (login required)

## Competency-based curriculum

The development of this course followed a backward planning process leading to a competency-based curriculum (12 competencies and associated objectives)—please refer to the Competency Booklet PDF.

This course may be approved to carry the AO Competency-Based Curriculum stamp. See separate document for criteria and more information.



## Chairperson Guide

Also check the Chairperson Guide in the Faculty Support Package for the course goal, overall learning objectives, target participants, faculty preparation, logistics, and much more about the specifics of this course.

## Course modules

### **ALL AOTrauma Pediatrics educational events/activities (eg, course)**

Opening session

Closing session

### **AOTrauma Course—Managing Pediatric Musculoskeletal Injuries**

Topic/Module 1 Fundamentals of managing pediatric fractures

Topic/Module 2 Assessment and planning

Topic/Module 3 Decision making

Topic/Module 4 Lower limb—femoral fractures

Topic/Module 5 Lower limb—knee injuries

Topic/Module 6 Lower limb—tibial, fibula, and ankle injuries

Topic/Module 7 Entire lower limb

Topic/Module 8 Upper limb—shoulder and humerus

Topic/Module 9 Upper limb—supracondylar fractures

Topic/Module 10 Upper limb—other elbow injuries

Topic/Module 11 Upper limb—forearm and wrist fractures

Topic/Module 12 Entire upper limb

For the AOTrauma Seminars content, please refer to the separate documents:

### **AOTrauma Seminar—Special Pediatric Trauma Conditions**

Topic/Module 13 Managing the child and family

Topic/Module 14 Management of bone and joint infection in children

Topic/Module 15 Serious musculoskeletal injuries in children

### **AOTrauma Seminar—Pediatric Orthopedic Conditions**

Topic/Module 16 Slipped capital femoral epiphysis

Topic/Module 17 Deformity management

Topic/Module 18 Pathological bone (non-oncological aspects)

**In the core/optional content listing the core (mandatory) content is displayed in orange whereas optional content is displayed in gray.**

Timing for practical exercises is based on experience.

Timing for small group discussions reflects minimal suggested time.

## Core/optional content—all AOTrauma Pediatrics educational events (eg, course)

<b>Opening session</b>	Proposed timing:	Core/optional
Introduction to course <ul style="list-style-type: none"> <li>• Course objectives</li> <li>• Logistical information including remarks about educational methods/formats, expectations</li> </ul>	10'	C
<b>Closing session</b>	Proposed timing:	Core/optional
Panel discussion— <b>Closing session with all faculty</b> <ul style="list-style-type: none"> <li>• Participant-generated Q and A to be collected on paper during day OR offer reflection time before last break to generate questions in informal groups, moderator collects and bundles questions</li> </ul>	30'	C
Lecture— <b>Summary of whole course learning and closure</b> <ul style="list-style-type: none"> <li>• Can include attainment of course objectives and take-home messages, acknowledgments, regional/local outlook, evaluations</li> </ul>	10'	C

## Optional content: AOTrauma Seminar—Special Pediatric Trauma Conditions

### Topic/Module 13: Managing the child and family

<ul style="list-style-type: none"> <li>• Identify and apply age-related distress-relieving and pain management strategies</li> <li>• Recognize compartment syndrome</li> <li>• Assess the influence of behavior in relation to pain, treatment, rehabilitation, follow-up, and compliance</li> <li>• Describe the signs of nonaccidental injury—recognize at-risk groups, eg, prewalking age/disabled</li> <li>• Ensure consideration of nonaccidental injury in the differential diagnosis</li> </ul>	Proposed timing:	Core/optional
13.1 Plenary session— <b>Warm-up cases</b>	10'	O
13.2 Lecture— <b>The therapeutic aspects of pain management in children</b>	10'	O
13.3 Lecture— <b>Signs of nonaccidental injury</b>	10'	O
13.4 Lecture— <b>Management of compartment syndrome</b>	10'	O
13.5 Focused small group discussions <b>Managing the child/family</b> based on images or trigger videos <ul style="list-style-type: none"> <li>• Relationships doctor–child, doctor–family, child–family</li> <li>• Assessment of pain and distress relief</li> <li>• Don't miss nonaccidental injury and save lives (include multidisciplinary approach and social and legal obligations)</li> </ul>	45'	O
13.6 Lecture— <b>Summary of module</b> including attainment of objectives and take-home messages	10'	O
13.7 Plenary session— <b>Reevaluation of warm-up cases</b>	10'	O

## Topic/Module 14: Management of bone and joint infection in children

	Proposed timing:	Core/ optional
<ul style="list-style-type: none"> <li>Recognize that septic arthritis is an emergency</li> <li>Manage septic arthritis and acute, sub-acute, and chronic osteomyelitis</li> <li>Manage postoperative infections</li> </ul>		
14.1 Plenary session— <b>Warm-up cases</b>	10'	O
14.2 Focused small group discussions— <b>Infection</b>	40'	O
<ul style="list-style-type: none"> <li>Septic arthritis—emergency management</li> <li>Acute osteomyelitis—at what point is surgery required?</li> <li>How does osteomyelitis affect growth? Focus on infection eradication/recurrence prevention</li> <li>Neonatal septic arthritis and osteomyelitis</li> <li>Postoperative infection—implant removal or not?</li> </ul>		
14.3 Lecture— <b>Algorithm for management of chronic osteomyelitis</b>	20'	O
14.4 Lecture— <b>Summary of module</b> including attainment of objectives and take-home messages	10'	O
14.5 Plenary session— <b>Reevaluation of warm-up cases</b>	10'	O

## Topic/Module 15: Serious musculoskeletal injuries in children

	Proposed timing:	Core/ optional
<ul style="list-style-type: none"> <li>Explain how timing and treatment of open fractures differs in children</li> <li>Explain the differences in fracture management (open and closed) in pediatric polytrauma</li> <li>Recognize and react to spinal trauma (skeletal aspects) in children &gt;10</li> <li>Realize the potential for long-term adverse effects of pelvic and acetabular injuries in children &gt;10</li> </ul>		
15.1 Plenary session— <b>Warm-up cases</b>	10'	O
15.2 Focused small group discussions— <b>Open fractures and skeletal aspects of polytrauma in children</b>	40'	O
15.3 Focused small group discussions— <b>Spinal trauma, pelvis and acetabular fractures, hip dislocations</b>	40'	O
15.4 Lecture— <b>Summary of module</b> including attainment of objectives and take-home messages	10'	O
15.5 Plenary session— <b>Reevaluation of warm-up cases</b>	10'	O