

# PediatricPlus

*CPR, AED, and First Aid for  
Children, Infants, and Adults*

**Instructor  
Guide  
Preview**





## **PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults Instructor Guide, *Version 7.0***

### **Purpose of this Guide**

This MEDIC First Aid *PediatricPlus Version 7.0 Instructor Guide* is solely intended to give information on the presentation and administration of MEDIC First Aid PediatricPlus CPR, AED, and First Aid certified training classes. The information in this book is furnished for that purpose and is subject to change without notice.

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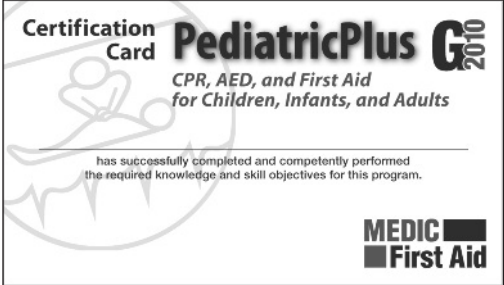
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Preview

# Program Standards

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

<b>PediatricPlus</b>	
<b>Intended Audience</b>	Individuals who desire or are required to be certified in Pediatric First Aid, CPR, and AED.
<b>Instructor Requirement</b>	A current and properly authorized MEDIC First Aid Instructor in good standing.
<b>Participant Prerequisites</b>	None
<b>Required Training Materials</b>	<ul style="list-style-type: none"> <li>■ MEDIC First Aid PediatricPlus Student Pack (one per participant)</li> <li>■ MEDIC First Aid PediatricPlus Instructor Guide (one per Instructor)</li> <li>■ MEDIC First Aid PediatricPlus presentation media (DVD or Blended)</li> </ul>
<b>Course Length</b>	<ul style="list-style-type: none"> <li>■ Varies by class type (initial, refresher) and method (classroom, blended, challenge)</li> <li>■ Initial class, all ages, about 5 hrs (see note)</li> <li>■ Successful completion is based on achievement of the core learning objectives rather than a prescribed instruction time.</li> </ul>
<b>Student-to-Instructor Ratio Skill Session Maximum</b>	12:1 (6:1 recommended)
<b>Certification Requirements</b>	<ul style="list-style-type: none"> <li>■ <b>Skills Evaluation</b> – Students must perform the following skills competently without assistance. Skill performance can be documented individually on the Class Roster/Student Record or by using Performance Evaluations.               <ul style="list-style-type: none"> <li>– Removal of contaminated gloves</li> <li>– External chest compressions (for all age groups)</li> <li>– Rescue breaths using a CPR mask or shield (for all age groups)</li> <li>– Primary assessment for an unresponsive person</li> <li>– CPR as a single provider (for all age groups)</li> <li>– Primary assessment for a responsive person</li> <li>– Control of severe bleeding</li> <li>– Stabilization of a suspected head, neck, or back injury</li> <li>– Stabilization of a swollen, painful, deformed limb</li> </ul> </li> <li>■ <b>Written Evaluation</b> – Required when specified by organizational, local, or state regulation. It is recommended for designated responders with a duty or employer expectation to respond in an emergency and provide first aid care. Successful completion requires a correct score of 70% or better.</li> </ul>
<b>Card Issued</b>	
<b>Certification Period</b>	May not exceed 24 months from class completion date. More frequent reinforcement of skills is recommended.
<b>Notes:</b>	<p><b>California Training Standards for Child Care Providers</b> requires licensed child care providers have <i>no less than eight hours</i> in pediatric first aid and pediatric CPR at least every two years. Other significant regulations apply.</p> <p>See <a href="http://www.emsa/ca.gov/laws/files/dayregs2.pdf">http://www.emsa/ca.gov/laws/files/dayregs2.pdf</a> or contact HSI Customer Service for more information</p>

# Instructor Information

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

## Core Learning Objectives

MEDIC First Aid PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults is an objectives-driven, skills-based training program. To receive certification, students are required to demonstrate the following knowledge and skill objectives to a currently authorized MEDIC First Aid Instructor.

## Knowledge Objectives

Upon completion of this training program, a student will be able to (for all age groups):

1. Explain the priority of personal safety when responding to an emergency situation.
2. Explain the importance of Universal Precautions and using protective barriers.
3. Identify how to activate emergency medical services (EMS) or an occupational emergency action plan.
4. Describe how to recognize and provide first aid treatment for sudden cardiac arrest.
5. Explain how to perform effective chest compressions.
6. Describe how to perform effective rescue breaths using a CPR mask or shield.
7. Describe the steps of a primary assessment for an unresponsive person.
8. Explain how to protect the airway of an unresponsive, breathing victim.
9. Describe the steps of performing CPR as a single provider.
10. Describe the steps for safely and correctly attaching and operating an automated external defibrillator (AED).
11. Describe how to recognize and provide first aid treatment for choking.
12. Describe the steps of a primary assessment for a responsive victim.
13. Describe how to recognize and provide first aid treatment for severe bleeding.
14. Describe how to recognize and provide first aid treatment for shock.
15. Describe how to recognize and provide first aid treatment for a head, neck, or back injury.
16. Describe how to recognize and provide first aid treatment for a swollen, painful, deformed limb.
17. Describe how to recognize and provide first aid treatment for a burn.
18. Describe how to recognize and provide first aid treatment for a person with an altered mental status.

19. Describe how to recognize and provide first aid treatment for stroke.
20. Describe how to recognize and provide first aid treatment for breathing difficulty or shortness of breath.
21. Describe how to recognize and provide first aid treatment for asthma.
22. Describe how to recognize and provide first aid treatment for a severe allergic reaction.
23. Describe how to recognize and provide first aid treatment for pain, severe pressure, or discomfort in the chest.
24. Describe how to recognize and provide first aid treatment for poisoning.
25. Describe how to recognize and provide first aid treatment for heat-related emergencies.
26. Describe how to recognize and provide first aid treatment for cold-related emergencies.
27. Describe how and when to perform an emergency move.

## Skill Objectives

Upon completion of this training program, a student will be able to:

1. Correctly demonstrate the removal of contaminated gloves.
2. Correctly demonstrate external chest compressions.
3. Correctly demonstrate rescue breaths using a CPR mask or shield.
4. Correctly perform a primary assessment for an unresponsive person.
5. Correctly demonstrate CPR as a single provider.
6. Correctly perform a primary assessment for a responsive person.
7. Correctly demonstrate how to control severe bleeding.
8. Correctly demonstrate how to stabilize a suspected head, neck, or back injury.
9. Correctly demonstrate how to stabilize a swollen, painful, deformed limb.



# Instructor Information

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

## Program Overview

The MEDIC First Aid *PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults* training program provides training in CPR, AED, and basic first aid emergency skills. The goal of this training is to help students develop the knowledge, skills, and confidence to respond in a medical emergency.

MEDIC First Aid training programs use a proven seeing, hearing, speaking, feeling, and doing approach to make learning easier and more enjoyable. Varied ways of exposing the student to the information helps create better retention. As a result, students develop more confidence in their ability to respond to an actual emergency.

MEDIC First Aid training programs are divided into specific conceptual, skill or sequence segments. Each segment uses some combination of video, print, demonstration, and practice to present information to a student. Segments build on each other, reinforcing the core skills, and then gradually come together to show how those skills can be integrated into the overall care process.

Two vital components of the instructional system are the program video and the small group practices. The required video uses short, scenario-based video pieces to relay essential cognitive information and to give students real-life demonstrations of skill technique and application.

For hands-on practice, students are arranged in small groups and take turns assuming the roles of first aid provider, patient, and coach. This multifaceted approach exposes students to the same information from different perspectives.

Overall, the instructional system fosters more self-discovery on the part of the student. Instructors assume more of a facilitator role during class, spending less time talking or lecturing and spending most of the class time creating and maintaining an effective learning environment for students.

## Flexibility

The program is intended to be flexible in content. It can be customized to meet the teaching styles of the Instructor, the learning needs of the student, and the regulatory needs of an employer.

In the United States, Canada, and most other industrialized countries, workplace safety regulations and occupational licensing requirements may call for specific training content to be covered. Instructors must be familiar with the regulations and licensing requirements of the students they offer training and certification to.

This MEDIC First Aid *PediatricPlus* training program has listed core learning objectives that must be covered in order to issue certification cards. Instructors bear the responsibility of ensuring that each student meets the learning objectives for successful completion.

To meet additional training requirements, the program materials also include supplemental topics and content that can be included to varying degrees at the discretion of the Instructor. Supplemental content is intended for reference, further reading, continuing education, or adapting the class to the specific needs of an employer or student.

A few optional topics have also been included. These topics are not recommended for most students but can be added in very specific circumstances. They are:

- Tourniquets
- Splinting
- Metered-Dose Inhalers
- Nebulizers
- EpiPen® Auto-injectors

## Initial Training

Students are required to meet the knowledge and skill objectives listed in this program to receive an initial certification card. These core learning objectives represent the minimum content a student needs to understand in order to manage a medical emergency.

In addition to this core content, the MEDIC First Aid *PediatricPlus* program materials include supplemental and optional content. Instructors determine the depth to which the core content is covered and which supplemental or optional content to cover in a training class.

Flexibility is desirable; individual students may request specific content, and employers may require specific content to be covered. Occupational regulatory or licensing agencies may also require additional content, hours of instruction, or other practices.

# Instructor Information

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

## Program Segments and Practices

The following table provides an overview of the required segments and practices found within the MEDIC First Aid PediatricPlus training program. Optional segments and practices are noted.

<b>Segments</b>	<b>Demonstration and Practice</b>
<b>First Aid Provider</b>	
First Aid Provider	
Recognizing an Emergency and Deciding to Help	
Personal Safety	
Legal Considerations	Removing Contaminated Gloves
Emergency Medical Services (EMS)	
<b>Sudden Cardiac Arrest</b>	
Respiratory and Circulatory Systems	
Sudden Cardiac Arrest and Early Defibrillation	
Chain of Survival	
<b>Basic CPR Skills</b>	
Chest Compressions	Chest Compressions
Rescue Breaths	Rescue Breaths — CPR Mask and/or Rescue Breaths — CPR Shield
Primary Assessment — Unresponsive Child	Primary Assessment — Unresponsive Child
<b>Basic Life Support Care</b>	
Unresponsive and Breathing — Recovery Position	Unresponsive and Breathing — Recovery Position (optional)
Unresponsive and Not Breathing — CPR	Unresponsive and Not Breathing — CPR
Automated External Defibrillators	
Basic AED Operation	Using an AED (optional)
Troubleshooting and Other Considerations	
<b>Foreign Body Airway Obstruction</b>	
Choking	Choking (optional)
<b>First Aid Assessment</b>	
Primary Assessment — Responsive Child	Primary Assessment — Responsive Child
Secondary Assessment (optional)	Secondary Assessment (optional)
<b>Caring for Serious Injury</b>	
Control of Bleeding	Control of Bleeding
Tourniquets (optional)	Using a Commercial Tourniquet (optional) Using an Improvised Tourniquet (optional)
Internal Bleeding	
Managing Shock	
Head, Neck, or Back Injury	Spinal Motion Restriction
Swollen, Painful, Deformed Limb	Swollen, Painful, Deformed Limb
Splinting (optional)	Using an Improvised Rigid Splint (optional)

Continued on next page 

# Instructor Information

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

<b>Segments</b>	<b>Demonstration and Practice</b>
<b>Minor Injuries</b>	
Minor Injuries	
<b>Burns</b>	
Burns	
Chemical Burns	
Electrical Burns	
<b>Facial Injuries</b>	
Objects in the Eye	
Chemicals in the Eye	
Nosebleeds	
Injured Tooth	
<b>Caring for Sudden Illness</b>	
Warning Signs of Sudden Illness	
Altered Mental Status	
Stroke	
Diabetic Emergencies	
Seizure	
Breathing Difficulty, Shortness of Breath	
Asthma	
Metered-Dose Inhalers (optional)	Using a Metered-Dose Inhaler (optional)
Nebulizers (optional)	Using a Nebulizer (optional)
Severe Allergic Reaction	
EpiPen® Auto-Injectors (optional)	Using an EpiPen® Auto-Injector (optional)
Pain, Severe Pressure, or Discomfort in the Chest	
Severe Abdominal Pain	
<b>Poisoning</b>	
Ingested Poisoning	
Inhaled Poisoning	
<b>Bites and Stings</b>	
Bites and Stings	
Snakebites	
Spider Bites	
Stinging Insects	
Human and Animal Bites	
<b>Environmental Emergencies</b>	
Heat Exhaustion	
Heat Stroke	
Hypothermia	
Frostbite	
<b>Additional Considerations</b>	
Emergency Moves	
Emotional Considerations	

Continued on next page 

# Instructor Information

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

<b>Segments</b>	<b>Demonstration and Practice</b>
<b>Specific First Aid Topics (all optional)</b>	
Amputation	
Impaled Object	
Open Chest Injury	
Open Abdominal Injury	
Pregnancy Complications	
Tick Bites	
Marine Animal Stings	

## Recommended Time to Complete

There are many factors affecting classroom time, including the varying nature of learning, the number of students, the amount and quality of previous training, the amount of equipment available, and the experience level of the Instructor. Because of these factors, a time range is recommended instead of a fixed number of hours.

- *PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults* — 5–6 hours

Allow for additional time when adding optional training components such as Optional Topics, Talk-through Scenarios, or Performance Evaluations.

## Skills Practice

Students taking a MEDIC First Aid PediatricPlus training class must get enough hands-on skill practice to be able to demonstrate competent performance in the skill objectives. Competent performance is required to receive a certification card. An adequate portion of class time should be dedicated to developing competent skills. Small Group Practices are located throughout the MEDIC First Aid PediatricPlus training program for this purpose. Instructors can extend or include additional practice sessions as needed or desired.

### Conducting Small Group Practices

MEDIC First Aid training programs utilize a proven seeing, hearing, speaking, feeling, and doing approach to skills practice. To maximize student participation and the retention of skills, always consider the following when conducting Small Group Practices:

- Small Group Practices are student exercises designed to help students learn a particular skill or emergency sequence. These hands-on practice sessions are essential to each student's understanding and retention of the material in the program.

- Students are arranged in pairs or small groups depending on the skill or sequence being practiced. Instructors are encouraged to create as small a group as possible.
- During the practice session, students will rotate through the roles of coach, provider, and ill or injured person.
- Students will play the role of the ill or injured person unless a manikin is required due to the physical nature of the skills.
- Coaches are responsible for helping the provider remember and perform the skills indicated. Coaches will refer to the corresponding Student Guide page during the practice. Only coaches will use this page. Others in the groups will observe the performance.
- Based on the Student Guide, the coach will provide corrective feedback on the provider's performance.
- Instructors will roam through groups looking for inadequate performance. Positive coaching and gentle correction can be used to improve skills.
- It is important for Instructors to refrain from overcontrolling the instructional process. This will maximize the use of student self-discovery to increase understanding and retention.

## Integration

The MEDIC First Aid PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults training program may be integrated with other MEDIC First Aid programs where necessary or desired.

Other programs that can be integrated include the MEDIC First Aid Bloodborne Pathogens in the Workplace and Oxygen First Aid for Emergencies programs.



# Instructor Information

PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

## Renewal

Students returning before the end of their certification period can renew their certification in a training class using Talk-through Scenarios that focus on achieving the listed core skills objectives through scenario-based skills practice and evaluation. As the training progresses, instructors need to constantly evaluate the level of cognitive understanding within the group being trained and review core knowledge objectives as needed.

Renewal training is typically shorter than initial training. However, the amount of reduced time is dependent on the level to which the group still understands the cognitive information within the program. Frequent refreshers during the certification period can help improve this.

Renewal training can also be accomplished by repeating an initial training class.

## Challenging the Program

Experienced students can challenge the MEDIC First Aid PediatricPlus training program using performance evaluations. Participants must arrive prepared for skill testing and must perform competently without assistance on all performance evaluations. A warm-up or skills review session may be conducted before the challenge, but must be clearly separated from the challenge itself. Students who cannot perform competently without assistance have not successfully completed the challenge. If unsuccessful, students still seeking certification must attend and complete a training class.

## Online Blended Training

Blended training combines the convenience of online learning with a shortened practical skills session in order to meet both knowledge and skill objectives.

The online learning platform used for MEDIC First Aid blended training classes is MEDIC University. This specially designed, web-based learning system allows for a variety of sensory interactions to provide users with a low-stress, easy-to-use, and convenient way to learn cognitive information.

It is important to note that students must successfully complete both the online and skills portions of blended training. Completion of the online portion alone will not result in certification.

The entire administrative process for blended training is done through Training Center Manager. A Training Center purchases blended training credits, which include a student seat in an online class and a Student Guide.

Training Centers schedule classes and add students. Students are notified by email of enrollment in the online class. Student progress can be monitored online.

To successfully complete the online class, students complete all of the lessons. Check marks will indicate which lessons have been completed. When all of the lessons are finished, the student will have the capability of printing a completion certificate for the online portion. If a class exam is included in the class, a student will have to achieve a passing score in order to complete the online class.

Skill practice and evaluation is done face-to-face in a classroom setting. Instructors must conduct and document student skill performance for the core skill objectives listed for the class being taught. Skill practice is accomplished using the same approaches available for non-blended classroom training. Sessions can be conducted for groups or for individuals. Individuals can also challenge the skills session in order to receive certification.

## Video Guided Practice

Having students practice CPR skills along with a video demonstration has been shown to be an effective means of acquiring CPR skills. A video guided practice is included with the MEDIC First Aid PediatricPlus Program Video for child, infant, and adult CPR.

Instructors have a choice to use this option when practicing CPR skills. Regardless of the method used to practice, Instructors must still evaluate for the competent performance of skills to issue a certification card. Video guided practice can be used either in the classroom or within the online blended class for this program.

To use video guided practice in a classroom, make sure each student has an appropriate CPR manikin and, if used in practice, a barrier device for giving rescue breaths. Arrange students in a manner that allows for clear viewing of the video presentation.

Each age group (child, infant, and adult) has a guided practice video that progresses through CPR skill learning. First, students will learn how to perform external chest compressions and then rescue breaths. Next, they will learn the steps of primary assessment for an unresponsive person, and then they will put everything together to practice performing the entire sequence of CPR.

Roam through the class and watch for the competent performance of skills. Replay segments of the video if additional practice is required for that segment. Record competent skill performance on the student record.

# Instructor Information

## PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

Video guided practice is also included in the online blended version of this program. Students will first go through the cognitive information regarding CPR and then go through the video guided practice segments. Students using the online class must have access to an appropriate CPR manikin and, if used, a barrier device for giving rescue breaths.

Students must also have the ability to practice on the floor with clear viewing of the computer monitor they are using. Instructor evaluation for reasonable performance can be done at a separately scheduled face-to-face session or can be accomplished through remote skills evaluation.

## Remote Skills Practice and Evaluation

Students can practice and be evaluated on their skills remotely through the use of internet video technology. Both the Instructor and the student will need an appropriate computer and computer video camera that are hooked up to the internet. Adequate internet bandwidth is essential to make sure accurate timing can be measured.

Skills evaluation can be recorded or can be done live. A competent performance of skills is required for acceptance.

If the skills evaluation is recorded and is not acceptable, the Instructor must have a live (phone or online) conversation with the student to remediate skill performance. If the skills evaluation is live, remediation can be done immediately. In either case, the student must be allowed some additional practice time before being evaluated again.

## Program Materials

### *Instructor Guide*

The MEDIC First Aid *PediatricPlus Instructor Guide* provides organized instructional guidance on how to conduct a training class. It is integrated with the Student Guide and Program Video.

Information regarding the details of the training program and how to prepare for a class are provided in the front of the guide. The majority of the guide follows a topic-by-topic approach to training that provides required Instructor activities and small-group practices. Instructions on completing the required class administration are also included.

### *Student Guide*

The MEDIC First Aid Student Guide contains the content and skill references a student needs to meet the core learning objectives. Students must have access to skill training reference materials during the class. The Student Guide provides a convenient way to provide this information. It is required to provide each student a personal

printed copy of the Student Guide to take home or access to a digital version they can download online.

### *Program Video*

The MEDIC First Aid *PediatricPlus Program Video* is a scenario-based presentation that provides a visual learning tool to accomplish the learning objectives. It is available on DVD and is also streamed online as a component of the online blended class.

Using the DVD, Instructors can play the entire video or select individual topics as desired. Supplemental segments on Specific First Aid Topics, Optional Topics, and Video guided practices are also included.

### *Talk-through Scenarios*

Talk-through Scenarios allow students to practice making realistic decisions in a simulated setting. This alternative small-group practice approach is suited for more experienced students or as supplemental practice to initial training.

Talk-through Scenarios can be found online in the document section of Training Center Manager or your Instructor Portal.

### *Class Roster/Student Record*

The Class Roster/Student Record is the primary paperwork for documenting the completion of a MEDIC First Aid PediatricPlus training class. It can be found online in the document section of Training Center Manager or your Instructor Portal.

A Class Roster is required for every training class. Completely and accurately fill out the class information. Have students legibly fill out personal information.

A Student Record is required when Performance Evaluations are not used to document competent skills. Using the Class Roster/Student Record, check off students who are performing competently without assistance as the class progresses through skills practice.

If a Written Exam is used, document each student's successful completion on the Class Roster/Student Record.

When finished with a training class, sign and return the completed Class Roster/Student Record to the Training Center responsible for the class.

### *Performance Evaluations*

The competent performance of the listed skill objectives without assistance is required for certification. Performance evaluation is required when individual skill performance is not documented on the Student Record or when specified by organizational, local, or state requirement.

Performance Evaluations can be found online in the document section of Training Center Manager or your Instructor Portal.

# Instructor Information

## PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

When finished, score students as outstanding (competent), adequate (competent), or inadequate (not competent) on each Performance Evaluation. Inadequate (not competent) scores require remediation and re-evaluation. Depending on logistics, this may require individually checking off skills using the Student Record or completing another class.

Students who have not had skills checked off on the Student Record or have been scored incompetent on the Performance Evaluations have not successfully completed the class.

Sign and return all Performance Evaluations to the Training Center responsible for the class.

When conducting Performance Evaluations:

- Students must perform and not verbalize skills.
- Students do not have to perform skills perfectly, just reasonably to achieve the desired outcome.
- Evaluate consistently between students.
- Avoid excessive communication.
- Do not coach students.

### **Written Exams**

Written evaluation may be necessary when specified by organizational, local, or state requirement. It is recommended for designated responders with a duty or employer expectation to respond in an emergency and provide first aid care.

Written Exams for this class can be found online in the document section of Training Center Manager or your Instructor Portal.

Successful completion of a Written Exam requires a correct score of 70% or better. Document the successful completion of the written exam (when used), on the Class Roster/Student Record. When conducting written evaluation, take precautions to prevent cheating and allow adequate time to complete the exam.

### **Rate Your Program Class Evaluation**

Encouraging students to provide feedback and then using that feedback to improve instruction is an essential aspect of any quality educational effort. All students are required to fill out the Rate Your Program class evaluation in order to get a certification card.

Tear-out Rate Your Program class evaluations are found in the back of each Student Guide. They can also be found online in the document section of Training Center Manager or your Instructor Portal.

The evaluation allows students the opportunity to comment on the program materials and on the Instructor's presentation style and effectiveness.

Collect and return the completed Rate Your Program class evaluations to the Training Center responsible for the class.

## Class Requirements

The following requirements are necessary to help ensure all students and Instructors experience a safe, enjoyable, and satisfying MEDIC First Aid PediatricPlus training class.

### **Administration**

- Instructors must teach in accordance with the most recent administrative policies and procedures as described in the Training Center Administrative Manual (TCAM).
- An Instructor must be authorized to teach the MEDIC First Aid PediatricPlus training program in order to issue certification cards.
- There are no minimum age requirements for participation in a MEDIC First Aid PediatricPlus class. However, regardless of age, students must be able to competently perform the required skill objectives to receive a certification card.
- The maximum allowed ratio is 12 students to 1 Instructor. A ratio of 6 students per Instructor is recommended.
- The student-to-Instructor ratio for lecture and discussion may be exceeded when organizational realities make small class size unachievable. However, additional MEDIC First Aid-authorized Instructors must be available to maintain the student-to-Instructor ratio for skill practice and evaluation.
- Instructors must provide access to the most current MEDIC First Aid training materials to students for use during and after the course. This is especially important in skill practice sessions. Appropriate training materials include video segments, print handbooks and skill sheets, talk-through scenarios, and projected or mobile computer-based MEDIC First Aid training materials. Each course participant must also be provided a print or digital version of the Student Guide.
- As part of an initial training class, Instructors must conduct all required segments and practices as outlined in this MEDIC First Aid Instructor Guide.
- As part of an initial training class, Instructors must show all required Program Video segments as outlined in this MEDIC First Aid PediatricPlus Instructor Guide. The online blended training class may be used as an alternative approach. Use of these training tools is highly recommended for renewal training.

# Instructor Information

## PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

- During a class, Instructors must provide informal evaluation and prompt feedback to students about their skill performance. This will allow students to evaluate their skills and correct deficiencies.
  - An Instructor must verify that each student has met the required knowledge and skill objectives before issuing a certification card. The Instructor must include their registry number and Training Center ID on the card to validate it.
  - Each student must fill out and return to the Instructor the Rate Your Program class evaluation. Completed evaluations must be returned to the Training Center responsible for the class.
  - Instructors must complete a Class Roster/Student Record and return it to the Training Center that is responsible for the class.
- CPR mask, shield, or both (disposable mouthpieces are okay)
  - Pair of disposable barrier gloves
  - Dressings and bandages
- Optional Student Materials
    - Commercial tourniquets (6:1 maximum student-to-device ratio; 3:1 recommended)
    - Materials for improvised tourniquets
    - Materials for splinting
    - Training inhalers (6:1 maximum student-to-device ratio; 3:1 recommended)
    - Training nebulizers (6:1 maximum student-to-device ratio; 3:1 recommended)
    - EpiPen® trainers (6:1 maximum student-to-device ratio; 3:1 recommended)

### Equipment

- Required Equipment
  - Visual presentation equipment (television, monitor, projector)
  - Adult CPR training manikins (6:1 maximum student-to-manikin ratio; 2:1 recommended)
  - Child CPR training manikins (6:1 maximum student-to-manikin ratio; 2:1 recommended)
  - Infant CPR training manikins (6:1 maximum student-to-manikin ratio; 2:1 recommended)
- Optional Equipment
  - AED training devices and training pads (6:1 maximum student-to-device ratio; 2:1 recommended)

### Materials

- Required Instructional Materials
  - MEDIC First Aid PediatricPlus Instructor Guide (printed or digital)
  - MEDIC First Aid PediatricPlus Program Video
  - MEDIC First Aid PediatricPlus Class Roster/Student Record
- Optional Instructional Materials
  - MEDIC First Aid PediatricPlus Talk-through Scenarios
  - MEDIC First Aid PediatricPlus Performance Evaluations
  - MEDIC First Aid PediatricPlus Written Exam
- Required Student Materials (for each student)
  - MEDIC First Aid PediatricPlus Student Guide (printed or digital)
  - MEDIC First Aid PediatricPlus Certification Card

### Health and Safety

- Screen students for health or physical conditions that require modifications of skill practice.
- Follow the manufacturer recommendations for the decontamination of manikins before, during, and after training.
- When using disposable gloves in skills practice, Instructors must take necessary steps to be aware of students with latex allergies and provide suitable, non-latex barrier products for their use in class.
- Caution students to avoid awkward or extreme postures of the body.
- Caution students to avoid certain skills during student-on-student practice, including chest compressions, rescue breaths, and abdominal or chest thrusts. These skills are not appropriate for student-on-student practice and must be performed on training manikins designed for that purpose.
- Students must be informed to use proper lifting and moving techniques during a student-on-student practice in which a simulated ill or injured person is moved. Students should not participate in these practices if they have a history of back problems.

### Classroom

- Classes need to be conducted in a safe and comfortable environment conducive to learning.
- A carpeted floor is preferred. However, blankets or mats may be used for practice sessions.
- Comfortable seating is important and a table or work area is quite useful.



# Instructor Information

## PediatricPlus CPR, AED, and First Aid for Children, Infants, and Adults

- A monitor stand can help ensure the monitor is easily visible to all students.
- An erasable white board, blackboard, or easel and paper can be very helpful.

### *Classroom Safety*

- All Instructors must ensure a physically safe learning environment for their students.
- Make sure there are no obvious hazards in the classroom, such as extension cords that can be tripped over.
- In addition, Instructors should be aware of the location of the nearest phone, first aid kit, AED, fire alarm pull station, and fire extinguisher.
- Instructors should have an emergency response plan in case of serious injury or illness, including evacuation routes from the classroom.
- Students should be discouraged from smoking, eating, or engaging in disruptive or inappropriate behavior.

Preview

# The First Aid Provider

## The First Aid Provider

### Overview

The outcome of many medical emergencies can be improved by early care from a trained bystander.

### Instructor Activity

- **Video** (*segment duration 2:14*)
  - Introduce and show video segment.
  - Ask for and briefly answer any questions.
- **Student Guide**
  - To review “**The First Aid Provider**” refer to pages 1–4 of the *Student Guide*.

*Emphasize Key Points as needed*

### Key Points

1. Unintentional injury is the leading cause of death in the United States for children from 1 to 9 years of age. On average, 33 children die each day in the U.S. from traumatic injuries, and more than nine million children are seen in emergency departments for injuries each year.
2. Once an injury or sudden illness has occurred, effective first aid could make the difference between a rapid or prolonged recovery, a temporary or permanent disability, and even life or death.
3. According to the American Academy of Pediatrics, pediatric first aid is the immediate care given to a suddenly ill or injured child until the responsibility for the medical condition, and effort to prevent it from becoming worse, can be taken over by a medical professional, parent, or legal guardian. It does not take the place of proper medical treatment.
4. First aid for pediatric emergencies with a child-specific approach is more beneficial than a standardized adult-focused approach. When describing treatment guidelines for children:
  - Someone younger than 1 year of age is referred to as an infant.
  - Someone between 1 year and the onset of puberty is referred to as a child. The onset of puberty can be indicated by breast development in females and the presence of armpit hair in males.
  - Anyone at or beyond puberty is considered an adult.
5. First aid does not require making complex decisions or having in-depth medical knowledge. It is easy to learn, remember, and perform.
6. A first aid provider is someone trained in the delivery of initial emergency procedures, using limited equipment to perform a primary assessment, and administering initial treatment until Emergency Medical Services, or EMS, personnel arrive.
7. The essential responsibilities of a first aid provider are:
  - Recognizing a medical emergency,
  - Making the decision to help,
  - Identifying hazards and ensuring personal safety,
  - Activating the EMS system, and
  - Providing supportive, basic first aid care.
8. This program has been designed to give a provider specific information on how to manage an ill or injured child and the differences required in order to care for infants and adults. The goal of this training is to help a provider gain the knowledge, skills, and confidence necessary to manage a medical emergency until more advanced help is available.

## Supplemental Key Points

1. **Children and Emergencies** — Organizations with staff members trained in pediatric first aid, including pediatric CPR, and a facility designed to ensure the safety of children reduce the potential for the death or injury of a child. Wherever children are commonly found, it is appropriate to have an adult trained to assess for and provide initial treatment for common pediatric injuries, illnesses, and life-threatening emergencies.
2. **Age-Related Behaviors** — Behavior at each stage of development also carries increased risk. An infant may turn over unexpectedly and fall if left unattended on a changing table, couch, or other high surface. At three to six months of age infants begin putting things in their mouths. Their underdeveloped sense of taste and inability to recognize danger increases the risk of poisoning and choking. As infants learn to move, they can encounter new and unexpected hazards. Toddlers love to independently walk, run, and explore. They can get into problems quickly, without warning. The risk of injury increases as children learn to use new things such as bicycles, scooters, skates, and skateboards. Curiosity can lead to the risk of burns from matches, lighters, wood stoves, and ovens.
3. **Disruption to Routine** — Certain circumstances or disruptions in a child's routine can increase risk of a medical emergency. These can include traveling; a move to a new home; a busy holiday; when the child is hungry or thirsty; when someone other than the normal caregiver is taking care of the child; when the child is left unattended; when another family member is ill, or the caregiver is tired or stressed.
4. **Communication** — Another special consideration when providing first aid care for children is that communicating with a child is more difficult. Using child-friendly communication techniques can help a provider more effectively provide care. These include:
  - Approaching the child slowly to keep from increasing his anxiety;
  - Kneeling or sitting at the child's level and maintaining a calm, confident tone while speaking to him;
  - Telling the child your name and asking for his, and then using his name during the course of your care;
  - Looking and talking to the child and involving him in making decisions; and
  - Enlisting the aid of a parent or caregiver to help communicate with and comfort the child.
5. **Child Abuse** — Child abuse is any act that endangers or impairs a child's physical or emotional health and development. It may be physical violence, emotional injury, sexual abuse, or consistent neglect. In the United States, a national child abuse hotline has been established. The phone number is 1-800-4ACHILD. For additional information visit online at [www.childhelp.org](http://www.childhelp.org).
6. **Parental Notification** — Whenever a child is seriously ill or injured, a parent or guardian should be contacted as soon as possible. However, this should never delay calling EMS. Call EMS immediately any time you recognize an emergency exists or you believe a child needs professional medical attention.

Reassure the parent or guardian that a staff member will remain with the child until the parent or guardian assumes responsibility.

## The First Aid Provider



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- Recognizing a medical emergency,
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- Providing supportive, basic first aid care.

This program has been designed to give you specific information on how to manage an ill or injured child and the differences required in order to care for infants and adults. The goal of this training is to help you gain the knowledge, skills, and confidence necessary to manage a medical emergency until more advanced help is available.



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### Disruption to Routine

Certain circumstances or disruptions in a child's routine can increase risk of a medical emergency. These can include traveling; a move to a new home; a busy holiday; when the child is hungry or thirsty; when someone other than the normal caregiver is taking care of the child; when the child is left unattended; when another family member is ill, or the caregiver is tired or stressed.

# Respiratory and Circulatory Systems

## Sudden Cardiac Arrest

### Overview

Understanding more about the human body and the systems that support it can help a first aid provider remember the essential steps and rationale for providing care.

### Instructor Activity

- **Video** (*segment duration 1:29*)
  - Introduce and show video segment.
  - Ask for and briefly answer any questions.
- **Student Guide**
  - To review “**Respiratory and Circulatory Systems**” refer to page 17 of the *Student Guide*.

*Emphasize Key Points as needed*

### Key Points

1. Because the human body cannot store oxygen, it must continually supply tissues and cells with oxygen through the combined actions of the respiratory and circulatory systems.
2. The respiratory system includes the lungs, and the “airway,” the passage from the mouth and nose to the lungs. Expansion of the chest during breathing causes suction, which pulls outside air containing oxygen through the airway and into the lungs. Relaxation of the chest increases the pressure within the chest and forces air to be exhaled from the lungs.
3. The circulatory system includes the heart and a body-wide network of blood vessels. Electrical impulses stimulate mechanical contractions of the heart to create pressure that pushes blood throughout the body. Blood vessels in the lungs absorb oxygen from inhaled air. The oxygen-rich blood goes to the heart, then out to the rest of the body.
4. Large vessels called arteries carry oxygenated blood away from the heart. Arteries branch down into very small vessels that allow oxygen to be absorbed directly into body cells so it can be used for energy production. Veins return oxygen-poor blood back to the heart and lungs where the cycle repeats.

## Respiratory and Circulatory Systems



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The circulatory system includes the heart and a body-wide network of blood vessels. Electrical impulses stimulate mechanical contractions of the heart to create pressure that pushes blood throughout the body. Blood vessels in the lungs absorb oxygen from inhaled air. The oxygen-rich blood goes to the heart, then out to the rest of the body.

Large vessels called arteries carry oxygenated blood away from the heart. Arteries branch down into very small vessels that allow oxygen to be absorbed directly into body cells so it can be used for energy production. Veins return oxygen-poor blood back to the heart and lungs where the cycle repeats.

# Chest Compressions

## Basic CPR Skills

### Overview

Effective chest compressions are a vital part of high-quality CPR.

### Instructor Activity

- **Video** (*segment duration 4:19*)
  - Introduce and show video segment.
  - Ask for and briefly answer any questions.
- **Student Guide**
  - To review “**Chest Compressions**” refer to pages 24–25 of the *Student Guide*.
- **Demonstration**
  - Perform Real-time Demonstration of “**Chest Compressions.**”
  - Ask for and briefly answer any questions. If necessary, demonstrate again with explanation.
- **Small Group Practice**
  - Conduct the practice session on page 53.

*Emphasize Key Points as needed*

### Key Points

1. If the heart stops, it is possible to restore at least some blood flow through the circulatory system by way of external chest compressions. The most effective chest compressions occur with the rhythmic application of downward pressure on the center of the chest.
2. External compressions increase pressure inside the chest and directly compress the heart, forcing blood to move from the heart to the brain and other organs.
3. Always compress fast and deep when performing compressions. Without losing contact, allow the chest to fully rebound at the top of each compression.
4. Blood pressure and flow is created and maintained with well-performed compressions. If compressions stop, blood pressure is quickly lost and has to be built up again. Minimize any interruptions when doing compressions.
5. When compressing properly, a provider may hear and feel changes in the chest wall. This is normal. Forceful external chest compression is critical if the person is to survive.

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Blood pressure and flow is created and maintained with well-performed compressions. If compressions stop, blood pressure is quickly lost and has to be built up again. Minimize any interruptions when doing compressions.

When compressing properly, you may hear and feel changes in the chest wall. This is normal. Forceful external chest compression is critical if the person is to survive.



## Chest Compressions

### Skill Sheet 2



#### Child

- Place heel of one hand on lower half of breastbone.
- Push hard, straight down at least  $\frac{1}{3}$  the diameter of the chest, or about 2 inches. Allow chest to fully rebound.
- Without interruption, push fast at a rate of at least 100 times per minute. Keep up the force.
- Compressions can be tiring. If desired, use two hands, as with adults.



#### Infant

- Place tips of two fingers on the breastbone just below the nipple line.
- Push hard, straight down at least  $\frac{1}{3}$  the diameter of the chest, or about  $1\frac{1}{2}$  inches.
- Without interruption, push fast at a rate of at least 100 times per minute.



#### Adult

- Place heel of one hand on center of chest. Place heel of second hand on top of first.
- Push hard, straight down at least 2 inches. Lift hands and allow chest to fully rebound.
- Without interruption, push fast at a rate of at least 100 times per minute.

# Small Group Practice

## Chest Compressions

### Overview

Small Group Practices are student exercises designed to help students learn a particular skill or emergency sequence. These hands-on practice sessions are essential to a student's understanding and retention of the material in the program.

### Instructor Activity

#### ■ Small Group Practice

- Conduct a practice session emphasizing the skill of “**Chest Compressions.**”
- Coaches will talk providers through “**Chest Compressions**” using *Student Guide* page 25.

#### ■ Video Guided Practice

- Instructors can elect to use a video guided instructional technique for this practice. The *Program Video* contains specific segments for this approach.

*Emphasize Key Points as needed*

### Key Points

1. Students are arranged in pairs or small groups depending on the skill or sequence to practice.
2. Instructors are encouraged to create as small a group as possible. Individual training programs will state the minimum and maximum allowed size for each group.
3. During the practice session, students should rotate through the roles of coach, provider, and ill or injured person. This seeing, hearing, speaking, feeling, doing approach maximizes sensory input and learning.
4. A Coach for each group is responsible for controlling the practice session. Each student should play the role of the Coach during the practice.
5. Providers are prompted through the practice steps by their Coaches. Each student should play the role of the Provider during the practice.
6. Unless a manikin is required, a student from each group will play the role of the ill or injured person. Each student should play the role of the ill or injured person during the practice.
7. Coaches will refer to a Student Guide page or student handout for the practice. Only Coaches should use this guide or handout.
8. Based on the Student Guide or handout, Coaches need to provide corrective feedback on the Providers' performances.
9. Instructors should roam through groups looking for inadequate performance and use positive coaching and gentle correction to improve students' skill performances.
10. It is important for Instructors to maximize the students' use of self-discovery to increase understanding and retention.

# Unresponsive and Breathing

## Basic Life Support Care

### Overview

When primary assessment indicates a person is unresponsive and breathing normally, a provider can supply essential help by maintaining an open and clear airway.

### Instructor Activity

- **Video** (*segment duration 2:59*)
  - Introduce and show video segment.
  - Ask for and briefly answer any questions.
- **Student Guide**
  - To review “**Unresponsive and Breathing**” refer to pages 33–34 of the *Student Guide*.
- **Demonstration**
  - Perform Real-time Demonstration of “**Unresponsive and Breathing – Recovery Position**”
  - Ask for and briefly answer any questions. If necessary, demonstrate again with explanation.
- **Small Group Practice**
  - Conduct the practice session on page 71.

*Emphasize Key Points as needed*

### Key Points

1. Even if a child is breathing normally, a lack of responsiveness is still considered to be a life-threatening condition that requires immediate care.
2. There are a variety of things that can result in unresponsiveness. Regardless of the cause, the greatest treatment concern is the ability of the child to maintain a clear and open airway.
3. Positioning an uninjured, unresponsive child in the recovery position can help maintain and protect the airway. This position uses gravity to drain fluids from the mouth and keep the tongue from blocking the airway.
4. If an unresponsive child has been seriously injured, a provider should not move him unless the provider is alone and needs to leave to get help.
5. Frequently assess the breathing of anyone placed in a recovery position. The condition can quickly become worse and require additional care.

## Unresponsive and Breathing



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There are a variety of things that can result in unresponsiveness. Regardless of the cause, the greatest treatment concern is the ability of the child to maintain a clear and open airway.

Positioning an uninjured, unresponsive child in the recovery position can help maintain and protect the airway. This position uses gravity to drain fluids from the mouth and keep the tongue from blocking the airway.

If an unresponsive child has been seriously injured, do not move him unless you are alone and need to leave to get help.

Frequently assess the breathing of anyone placed in a recovery position. The condition can quickly become worse and require additional care.

## Unresponsive and Breathing — Recovery Position

Skill Sheet 6



### Assess Child

- If safe, tap or squeeze shoulder. Ask loudly, “Are you okay?”

**No response!**

- Have someone alert EMS and get an AED.
- Look quickly at face and chest for normal breathing.

**Normal breathing present!**



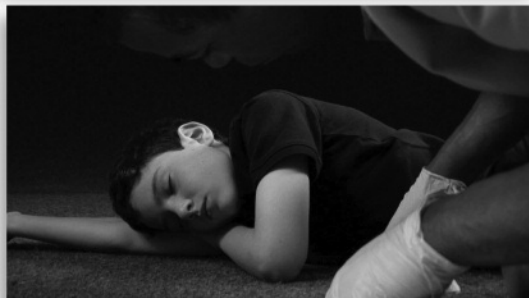
### Prepare

- Extend arm nearest to you up alongside head.
- Bring far arm across chest and place back of hand against cheek.
- Grasp far leg just above knee and pull it up so foot is flat on ground.



### Roll

- Grasp shoulder and hip and roll child toward you. Roll in a single motion, keeping head, shoulders, and torso from twisting.
- Roll far enough for face to be angled forward.
- Position elbow and knee to stabilize head and body.



### Suspected Injury

- If child has been seriously injured, do not move unless fluids are collecting in airway, or you are alone and need to leave to get help.
- During roll, make sure head ends up resting on extended arm and head, neck, and torso are inline.



# Small Group Practice

## Unresponsive and Breathing — Recovery Position

### Overview

Small Group Practices are student exercises designed to help students learn a particular skill or emergency sequence. These hands-on practice sessions are essential to a student's understanding and retention of the material in the program.

### Instructor Activity

#### ■ Small Group Practice

- Conduct a practice session emphasizing the skill of **“Unresponsive and Breathing – Recovery Position.”**
- Coaches will talk providers through **“Unresponsive and Breathing – Recovery Position”** using *Student Guide* page 34.

*Emphasize Key Points as needed*

### Key Points

1. Students are arranged in pairs or small groups depending on the skill or sequence to practice.
2. Instructors are encouraged to create as small a group as possible. Individual training programs will state the minimum and maximum allowed size for each group.
3. During the practice session, students should rotate through the roles of coach, provider, and ill or injured person. This seeing, hearing, speaking, feeling, doing approach maximizes sensory input and learning.
4. A Coach for each group is responsible for controlling the practice session. Each student should play the role of the Coach during the practice.
5. Providers are prompted through the practice steps by their Coaches. Each student should play the role of the Provider during the practice.
6. Unless a manikin is required, a student from each group will play the role of the ill or injured person. Each student should play the role of the ill or injured person during the practice.
7. Coaches will refer to a Student Guide page or student handout for the practice. Only Coaches should use this guide or handout.
8. Based on the Student Guide or handout, Coaches need to provide corrective feedback on the Providers' performances.
9. Instructors should roam through groups looking for inadequate performance and use positive coaching and gentle correction to improve students' skill performances.
10. It is important for Instructors to maximize the students' use of self-discovery to increase understanding and retention.

# Warning Signs of Sudden Illness

Caring for Sudden Illness

## Overview

Early recognition of serious signs for sudden illness can minimize or prevent more serious complications.

## Instructor Activity

- **Video** (*segment duration 1:04*)
  - Introduce and show video segment.
  - Ask for and briefly answer any questions.
- **Student Guide**
  - To review “**Warning Signs of Sudden Illness**” refer to pages 81–82 of the *Student Guide*.

*Emphasize Key Points as needed*

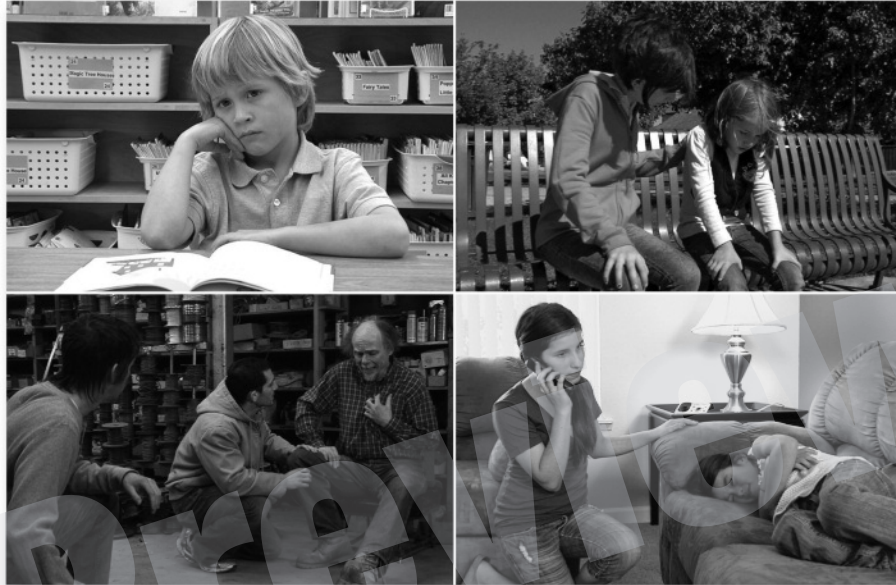
## Key Points

1. Medical conditions and illnesses can suddenly trigger an unexpected medical emergency. In general, suspect a serious illness when, without warning, a child suddenly appears weak, ill, or in severe pain.
  2. In many cases, the human body displays warning signs to alert us to serious illness. A sudden onset of fever, headache, and stiff neck or a blood-red or purple rash can indicate the possibility of severe infection.
  3. Other common warning signs of serious illness include:
    - Altered mental status
    - Breathing difficulty or shortness of breath
    - Pain, severe pressure, or discomfort in the chest, and
    - Severe abdominal pain
  4. Early recognition and reaction to these warning signs can minimize the underlying problem and improve the overall outcome.
- **Vomiting** — The biggest concern with vomiting is the protection of the airway. Other concerns include multiple episodes within 24 hours; association with a fever, stiff neck, or head injury; a green or bloody appearance; and association with a decreased volume of urine.
  - **Diarrhea** — Concerns with diarrhea include difficulty in sanitation, blood or mucus in stool, abnormal color (very black or very pale), association with a decreased volume of urine, fever and jaundice, or a yellow coloring to skin or eyes.
2. **Meningitis/Sepsis** — Meningitis can occur as a result of an infection of the fluid surrounding the brain and spinal cord. The infected fluid causes inflammation of the protective membranes around the brain and spinal cord. Common signs include a sudden onset of fever, headache, vomiting, and stiff neck. Sepsis is caused by a body’s response to infection which results in widespread tissue inflammation. Common signs include fever, nausea, vomiting, and blood -red or purple skin rash.

## Supplemental Key Points

1. Other Illness Considerations
  - **Temperature Taking** — Body temperature elevation is a normal part of a body’s defense against infection. Temperature can be measured in the mouth, rectum, armpit, or ear.
  - **Fever Guidelines** — Fevers to note in children older than 4 months include 101°F orally, 102°F rectally, 100°F in armpit, and 101°F in ear. Get immediate medical attention when a child under 4-months-old has an elevated temperature of 101°F rectally or 100°F in the armpit. Any fever in an infant under 2-months-old should get medical attention within an hour.
3. Young children do not fight infections as well as older children and adults and can quickly end up with a serious medical condition. When infection is suspected, early recognition and professional medical care is essential.

## Warning Signs of Sudden Illness



**M**edical conditions and illnesses can suddenly trigger an unexpected medical emergency. In general, suspect a serious illness when, without warning, a child suddenly appears weak, ill, or in severe pain.

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- Altered mental status
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### Meningitis/Sepsis

Meningitis can occur as a result of an infection of the fluid surrounding the brain and spinal cord. The infected fluid causes inflammation of the protective membranes around the brain and spinal cord. Common signs include a sudden onset of fever, headache, vomiting, and stiff neck.

Preview



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