

# HeartCode PALS at Nationwide Children's Hospital



Tips for Registration, Completion, CE's, and eCards

# What is the HeartCode PALS Course?



- PALS stands for Pediatric Advanced Life Support
- The hybrid HeartCode course is available for new providers AND returning renewals.
- This class consists of an online adaptive-learning course (allow 4-8 hours to complete), followed by an in-person skills session
- The skills session will take 1 hour to complete; assigned time will be emailed 1 week prior to class.

# HeartCode PALS Enrollment:

<https://nationwidechildrens.enrollware.com/schedule>



**NATIONWIDE CHILDREN'S**  
*When your child needs a hospital, everything matters.™*

Home | **Class Schedule**

### Class Schedule

Click on a class below to begin the enrollment process:

- ACLS Provider Course NCH EMPLOYEES ONLY.
- ACLS Renewal Course NCH EMPLOYEES ONLY. Current ACLS card required.
- HeartCode PALS**
- PEARS

### Secure Site

Please be assured that your information is protected and secure. We value your privacy and do not provide customer information to any third parties.

### Contact Us

**Nationwide Children's Hospital**  
700 Children's Drive  
Columbus, OH 43205  
614-355-0669

The HeartCode PALS course is the **SAME** for new providers and renewals

# Choose a course date from the selected options and proceed with registration.

## This is the date you will complete your skills session!

### Class Enrollment

Please complete the following form to reserve your space in this class. You will have an opportunity to review and edit your information after submitting this page.

#### Class Information

Course: HeartCode PALS

Date/Time: Thu 3/25/2021 from 8:00 AM to 11:00 AM

Location: NCH Sim Center

Class Price: \$200.00

Promo Code:  
(if one was supplied)

Accepted

Skills sessions will be broken into 1 hour groups- times/groups will be emailed 1 week prior to class.

#### Student Information

First Name: Erin

Last Name: Adamik

**You will receive an email confirmation of your registration.**

**DO NOT DELETE THIS EMAIL!!**

**Your course link is included in this email!**



Nationwide Children's Hospital Education <Do\_Not\_Reply@enrollware.com>

**Your Training Confirmation and COURSE LINK**

Retention Policy NCH Inbox Retention Policy (3 years)

Flag for follow up. Completed on Friday, July 10, 2020.

Dear Erin Adamik,

Thank you for your registration for the following class:

<b>Class:</b>	HeartCode PALS
<b>Class Date:</b>	Tue 5/5/2020 from 8:00 AM to 11:00 AM
<b>Course Link</b>	<a href="https://elearning.heart.org/course_enrolment?course=22&amp;code=MTg5NTA3NDk=&amp;rand=MTg5NTA3NDk=">https://elearning.heart.org/course_enrolment?course=22&amp;code=MTg5NTA3NDk=&amp;rand=MTg5NTA3NDk=</a>
<b>Receipt:</b>	<a href="#">Click Here</a>

Click on the course link in your Training Confirmation email, or copy and paste the link into Chrome/Edge/Safari/Firefox

# Activate your course and you're ready to go!

Pediatric Advanced Life Support (PALS)

HOME > COURSES > HEARTCODE® PALS ONLINEDETAILS

## HeartCode® PALS Online

### Ready To Go?

HeartCode® PALS Online is a self-directed, comprehensive eLearning program that uses adaptive learning technology to allow learners to acquire and demonstrate Pediatric Advanced Life Support skills using a personalized learning path that adapts in real time to a learner's performance. The program is designed for healthcare professionals who need Pediatric Advanced Life Support training for their clinical duties. HeartCode® PALS Online consists of a cognitive portion that is completed online. A separate psychomotor skills assessment using voice assisted manikins with real-time audio and visual feedback or a skills assessment with an AHA Instructor is required to earn a valid AHA PALS Provider eCard that is valid for two years.

ACTIVATE COURSE

### Quick Facts



Online  
Instructions

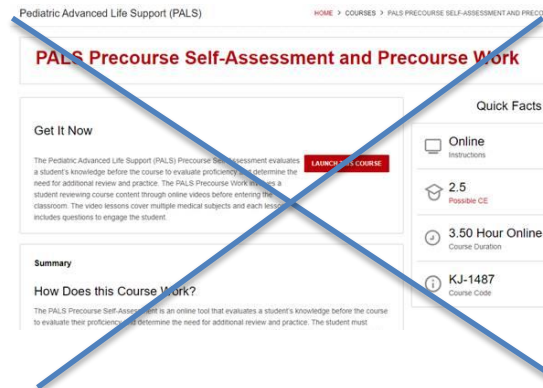


3.75  
Possible CE/CME



5.00 Hour Online Course  
Course Duration

Please note, once a course is activated, it becomes **NONREFUNDABLE**

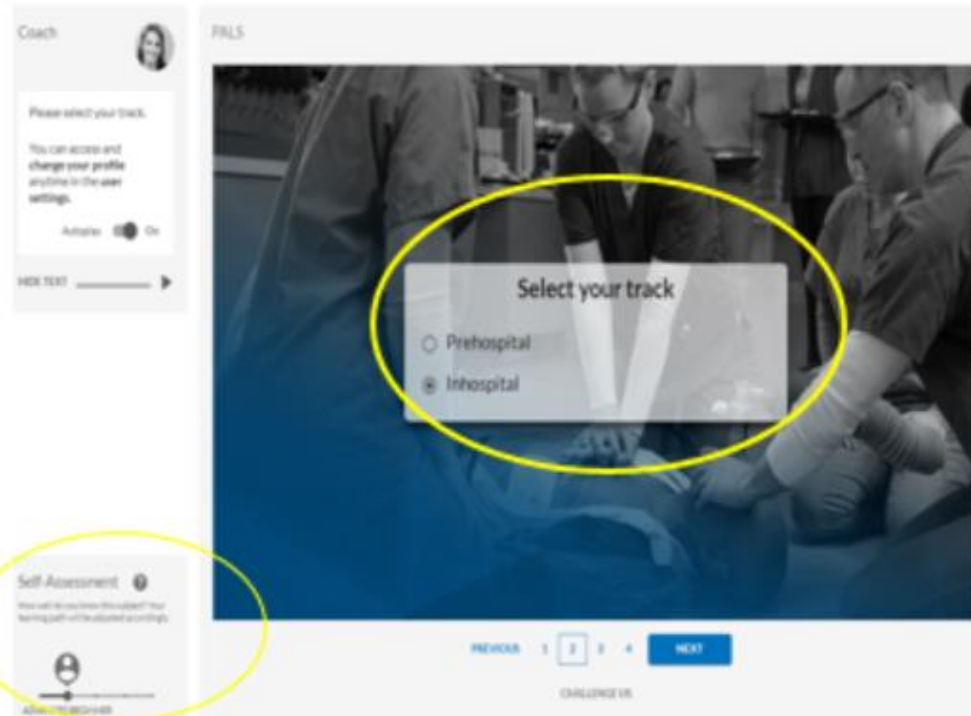


\*Make sure you are completing the **HeartCode PALS** course, **NOT** the PALS Precourse Work!

# An Adaptive e-Learning Experience

(adapts continuously based on performance and self-reported confidence level)

2. Use the self-assessment tool to rate your confidence level in PALS material



1. New option to select your track!

Choose “Prehospital” or “Inhospital” to customize your course

By using the self-assessment tool, you can choose if you are a novice (will explain first before asking questions) up to expert (means you will receive less help, but if you know the material, you will move through the course faster). Regardless of the settings, the course will adjust to your needs.



## HOW TO ASSESS FOR HYPOVOLEMIC SHOCK

Hypovolemic shock refers to a clinical state of reduced intravascular volume. The most common type of shock in pediatric patients can be caused by extravascular fluid loss such as diarrhea or dehydration as well as intravascular volume losses such as hemorrhage. The physiology of hypovolemic shock is characterized by decreased preload leading to reduced stroke volume and low cardiac output. Tachycardia, increased SVR, and increased cardiac contractility are the main compensatory mechanisms.

Preload	↓
Contractility	Initially normal or ↑
Afterload	↑

I KNEW

GOT IT NOW

THINK I GOT IT

I DON'T GET IT

CHALLENGE US ?

As you move through the course, you will respond to each topic with how comfortable you are with the material



## 2-PERSON BAG-MASK VENTILATION TECHNIQUE

If 2 healthcare providers are available to perform bag-mask ventilation, one provider uses both hands to open the airway and keep the mask sealed to the child's face and the other provider squeezes the bag.

Both providers should ensure that chest rise is visible. Be careful to avoid delivering too large a tidal volume, which may result in excessive ventilation.



I KNEW

GOT IT NOW

THINK I GOT IT

I DON'T GET IT



Rather than a final test, you will be given questions throughout the course

What can happen if the oropharyngeal airway is too large?

CHOOSE THE CORRECT ANSWER

☒ It can block the airway.

☐ It can push the tongue to the back of the throat.

☐ It will open the airway.

☐ It may cause vomiting.

I KNOW IT THINK I KNOW IT NOT SURE NO IDEA

Under what circumstance should you use an oropharyngeal airway?

CHOOSE THE CORRECT ANSWER

☐ The child may be conscious

☐ The child may be semiconscious

☒ The child must be unconscious

☐ The child should have a gag reflex

I KNOW IT THINK I KNOW IT NOT SURE NO IDEA

When answering, you will also rate your confidence in your knowledge

No physical PALS manual? No Problem! The updated PALS Provider manual is available by clicking the links above your Coach.

A separate page in your browser will be opened when you select the Provider manual, so you can flip between the manual and the course!

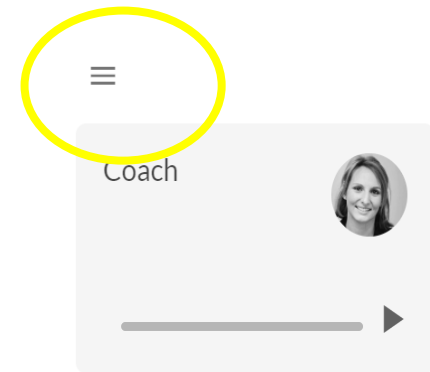


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- P5 Part 5: Recognizing and Managi...

## Pediatric Advanced Life Support Provider Manual

Conditions such as fever, infection, injury, respiratory distress, and pain may contribute to shock by increasing tissue demand for O<sub>2</sub> and nutrients. Whether due to inadequate supply, increased demand, or a combination of both, *O<sub>2</sub> and nutrient delivery to the tissues is inadequate relative to metabolic needs*. Inadequate tissue perfusion can lead to tissue hypoxia, anaerobic metabolism, accumulating lactic acid and CO<sub>2</sub>, irreversible cell damage, and, ultimately, organ damage. Death may then result rapidly from cardiovascular collapse or more slowly from multiorgan failure.



### Critical Concepts: Goal for Treating Shock

When treating shock, the goal is to improve systemic perfusion and O<sub>2</sub> delivery to help prevent end-organ injury and stop the progression to cardiopulmonary failure and cardiac arrest.

## Pathophysiology of Shock

The major function of the cardiopulmonary system is to deliver O<sub>2</sub> to body tissues and remove metabolic by-products of cellular metabolism (primarily CO<sub>2</sub>). When O<sub>2</sub> delivery cannot adequately meet tissue demand, cells use anaerobic metabolism to produce energy, but this generates lactic acid as a by-product. Anaerobic metabolism can only maintain limited cell function. Unless O<sub>2</sub> delivery is restored, organ dysfunction or failure will result.



### Critical Concepts: Central Venous O<sub>2</sub> Saturation (ScvO<sub>2</sub>) and Cardiac Output

In healthy children with normal metabolic demand, the arterial blood contains more O<sub>2</sub> than the tissues need. If demand increases and/or O<sub>2</sub> delivery decreases, the tissues will extract a greater percent of the O<sub>2</sub> delivered. This results in reduced O<sub>2</sub> saturation in the venous blood returning to the heart. The ScvO<sub>2</sub>, therefore, can be used to assess the balance between O<sub>2</sub> delivery and demand. If metabolic demand and O<sub>2</sub> content are unchanged, a decreased ScvO<sub>2</sub> indicates a fall in cardiac output and, therefore, a fall in O<sub>2</sub> delivered to the tissues. In addition, greater extraction of O<sub>2</sub> occurs as the result of reduced delivery.

## Components of Tissue Oxygen Delivery

Adequate tissue O<sub>2</sub> delivery (Figure 39) depends on

After completing the main course content, you will encounter scenarios and answer a series of related questions.

- ✓ Upper airway obstruction, lower airway obstruction, disordered control of breathing, hypovolemic shock, septic shock, obstructive shock, bradycardia, tachycardia with a pulse, megacode



#### Introduction

You are part of a rapid response team that is called for a 6-month-old infant who was admitted after having seizures, which resolved spontaneously, but now has a slow respiratory rate with minimal chest rise and does not react to his mother's voice or to noises in the environment.

CHALLENGE US

NEXT

The patient's vital signs are HR 146/min, BP 88/56 mm Hg, RR 12/min, SpO<sub>2</sub> 80% on room air, and temperature 39.7°C (103.5°F). While attempting to ventilate the patient, you notice that initially there is no chest rise and there is poor air entry bilaterally.

What should be the initial steps to improve ventilation?



CHOOSE THE CORRECT ANSWER

Change the bag-mask device to a nonrebreathing mask

Initiate nebulizer treatment

Call for physician to intubate the patient

Reposition and reopen the airway, attempt to lift the jaw, verify mask size, and ensure a tight face mask seal

I KNOW IT

THINK I KNOW IT

NOT SURE

NO IDEA



TIP!

Read the scenario introductions carefully. They contain pertinent vital signs and background information. Click too fast, and the following questions may be difficult to answer

Your score is **75%**

You will need to attempt completing the steps of the **Management of Upper Airway Obstruction** one more time.

Select **NEXT** to retry the questions you missed.

[Provider Manual](#)

CHALLENGE US

NEXT

You must receive a score of 100% on each scenario to progress.

No stress! You will be directed to retry the missed questions until you've completed the scenario.



1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

Your score is **100%**

Congratulations! You successfully completed steps of the **Management of Upper Airway Obstruction**.

Select **NEXT** to continue with the program.

If you wish to review the questions, click on the question numbers above.

CHALLENGE US

NEXT

## Certificates and eCards



COURSE NAME	COMPLETION DATE	COMPLETION CERTIFICATES	CME/CE CERTIFICATES	ECARD
HeartCode ® PALS Online	12/06/2020			No ecard

Completion Certificates and CME/CE credits can be claimed at [elearning.heart.org](https://elearning.heart.org)

## Claim CME/CE Credit

(\*)Required field

- Select CME/CE \*
- ☐ AMA PRA Category 1 - 3.75 ( Physicians Only )
  - ☐ AMA PRA Category 1 (Physicians Assistants) - 3.75 ( Physicians Assistants Only )
  - ☒ ANCC - 4.75 ( Nurses Only )
  - ☐ ACPE - 3.75 ( Pharmacists Only )
  - ☐ CAPCE - 5.25 ( EMS Providers Only )
  - ☐ AARC - 4.5 ( Respiratory Therapists Only )

Credits to be claimed \*  ( 4.75 )





# Certificate

Erin Adamik

has successfully completed

**HeartCode® PALS Online Portion**

Hands-on skills practice and testing, either conducted by an authorized AHA PALS instructor or using a voice-assisted manikin system, is required to receive a PALS Provider course completion card.

For greater success, it is recommended the hands-on skills session be conducted shortly after completing the online portion. Please take this certificate with you to your hands-on skills session.

This certificate does not constitute successful completion of the full Pediatric Advanced Life Support Course.

IMPACT000CFZ  
Certificate Number

12/06/2020 00:34:59  
Date Completed

AHA/ASA/ANCC © 2020. All rights reserved. No part may be reproduced.

12/06/2020 12:30:39

## Stations include:

## EZ-IO/ Push-Pull/ Shock

## Cardiac/Zoll

# 520 Butterfly Gardens Drive (NCH Conference Center)

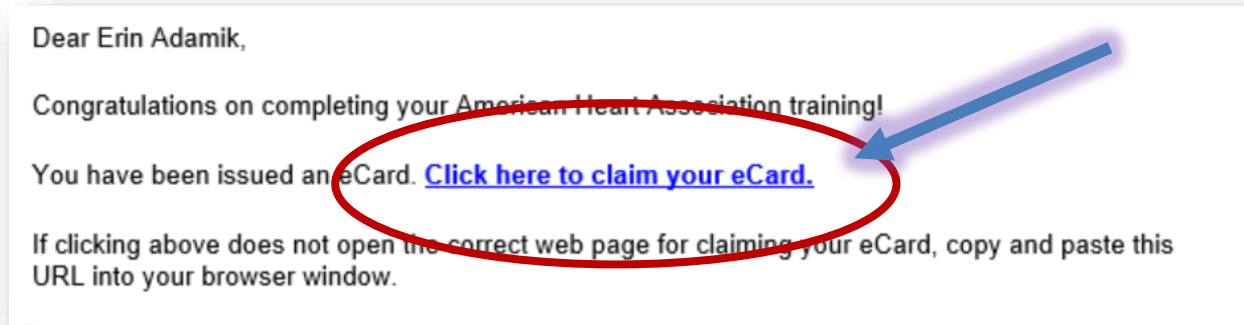


Non-Employees should park in the **Silver** parking garage (\$2/exit)



# Where's My eCard?

1. You will receive an email from [ecards@heart.org](mailto:ecards@heart.org) with the subject "Claim your AHA eCard". Open the email and claim your ecard



2. Complete your class survey

## Rate your AHA Class

Please answer the questions below to claim to your AHA eCard.

1. I would recommend HeartCode as a program that helped me learn.  
☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree
2. I am confident in my ability to perform resuscitation skills/techniques when needed.  
☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree
3. I received feedback that improved my hands-on skills.  
☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

# Frequently Asked Questions and Troubleshooting:

- ✓ **I need to reschedule my skills check-off.** Do not re-register as this will create a duplicate fee. Email [CPRCommunications@nationwidechildrens.org](mailto:CPRCommunications@nationwidechildrens.org) and we can manually move your course.
- ✓ **I'm having trouble with my online course.** Check your web browser: PALS works best with Chrome, Edge, Safari, or Firefox should also work. **NO Internet Explorer!** With further questions, reach out to the AHA, 1-888-242-8883
- ✓ **Where do I claim continuing education?** Log into [elearning.heart.org](http://elearning.heart.org), under your name select “classes”. Find your class and click the pencil under “CME/CE Credits”
- ✓ **I can't find my Course Completion Certificate.** Log into [elearning.heart.org](http://elearning.heart.org), under your name select “classes”. Find your course and make sure you have completed the survey. After the survey, you can select the certificate.

# Contact Us!

## NCH Simulation & Outreach Team

614-355-0669

[CPRCommunications@nationwidechildrens.org](mailto:CPRCommunications@nationwidechildrens.org)

