

Learn:TM Rhythm Pediatric

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDRENSM

American Heart
Association



Learn and Live

Improving pediatric rhythm recognition through eLearning

ECG recognition is a key skill required to be successful in determining a patient's condition and knowing which algorithm to apply.

To introduce healthcare providers to normal pediatric rhythms and help prepare them to recognize basic cardiac arrhythmias in clinical practice, the American Heart Association has created *Learn: Rhythm Pediatric*. This online, self directed course allows healthcare providers to gain proficiency in ECG rhythm recognition in an effort to provide better patient treatment and save more lives.

Learn:TM
Rhythm Peds

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDRENSM

American Heart Association
Learn and Live

Learn: Rhythm Peds
Electrode Placement

Electrode Placement

Self-Assessments

Standard Monitoring Lead II
White-to-right
Red-to-ribs
Black-to-left shoulder

optimal image of cardiac rhythm. The black electrode is the ground electrode and is often placed under the left clavicle.

The popular memory aid "**white-to-right, red-to-ribs, and black-to-left shoulder**" can help you recall where to place the 3 electrodes.

The image recorded with this electrode placement is the standard monitoring lead II. This lead records the inferior surface of the heart and usually displays clearly all deflections of sinus rhythm:

Navigation icons: back, play, forward

ISBN: 978-0-87493-918-7 Product: 80-1474

Who benefits from this product?

This course is designed for healthcare professionals needing basic pediatric rhythm recognition skills, telemetry staff, neonatal and pediatric ICU personnel, ambulatory care personnel, and those preparing for PALS. This course will also meet the needs of nurses and emergency medical services professionals seeking to obtain continuing education credits.

Learn:TM
Rhythm Peds

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDRENSM

American Heart Association
Learn and Live

Learn: Rhythm Peds
Core Cardiac Arrest Rhythms

Core Cardiac Arrest Rhythms

Ventricular Arrhythmias

Nonshockable Arrest Rhythms

Core Cardiac Arrest Rhythms

Core cardiac arrest rhythms are arrhythmias you need to recognize because they are associated with sudden cardiac arrest and conditions requiring immediate CPR or other intervention.

Management of these rhythms is reviewed in the PALS Pulseless Arrest Algorithm.

Cardiac arrest rhythms are classified as shockable or nonshockable.

A shockable rhythm is a rhythm for which a

Navigation icons: back, play, forward

Learn:TM
Rhythm Peds

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDRENSM

American Heart Association
Learn and Live

Learn: Rhythm Peds
Electrode Placement

Electrode Placement

Self-Assessments

Standard Monitoring Lead II

For ease of application, the electrode connectors are color-coded, and the colors vary, depending on the number of electrodes used.

When placing the electrodes, leave enough space to attach defibrillation pads if necessary.

Most rhythm recorders have 3 connectors that are color-coded red, white, and black. Some monitors use additional electrodes. The red or positive electrode and the white or negative electrode make up a lead and

Navigation icons: back, play, forward

Learn: Rhythm Pediatric Features

- Includes four sections:
 - Basic rhythm understanding
 - Relationship between ECG strip and heart impulses
 - Common pediatric arrhythmias
 - Identifying and distinguishing various pediatric arrhythmias
- Audio, animation and interactive activities
- Self-assessment sections
- Includes course exam
- Continuing education accreditation available

Learn: Rhythm PEDS
Reading the ECG

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

American Heart Association
Learn and Live

Learn: Rhythm PEDS
Reading the ECG

Estimating Heart Rate

Self-Assessments

300 / 4 = 75
The rate is 75 per minute

If you can count 4 heavy boxes, the heart rate is 300/4 or 75 per minute.

Note: If the second R wave falls on a heavy line, count this line as well.

Now you can easily estimate the heart rate. In normal sinus rhythm, the heart rate is 60 to 180 per minute, and you will find about 2 to 5 heavy boxes from R to R.

If you find less than 2 heavy boxes, the rate is greater than 150 per minute, and you

Learn: Rhythm Pediatric Benefits

- Self-paced learning, accessible 24/7
- Alternative to classroom-based training
- Improves decision-making skills in distinguishing specific cardiac rhythms and arrhythmias
- Improves quality of pediatric patient care
- Access to course for 12 months from license activation, allowing for student refresher option
- No skills session required

Learn: Rhythm PEDS
Pediatric Rhythms

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

American Heart Association
Learn and Live

Learn: Rhythm PEDS
Pediatric Rhythms

Introduction

Supraventricular Tachyarrhythmias

AV Blocks

Supraventricular Tachycardia

- Arises suddenly in the atria or in the AV node
- Can be an irritable focus that repeats or sustains itself by reentry
- Sinus tachycardia is excluded
- The atrial rate is rapid, with a rate of more than 180 per minute
- The most common form in children is AV reciprocating tachycardia
- A common form is AV nodal reentry

The impulse can enter one pathway and then be conducted back up another pathway resulting in a reentry circuit. The atrial rate is more than 180 per minute.

Because the arrhythmia arises in the atria or AV node, the QRS complex is usually narrow in a supraventricular arrhythmia.

Continuing Education Credits Available

Continuing Education Accreditation — Nurses

This program (090702-TX-IS) has been approved by an ENA for 2.5 contact hours (clinical)

This continuing nursing education activity was approved by the Emergency Nurses Association, an accredited approver of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Continuing Education Accreditation — Emergency Medical Services

This continuing education activity is approved by the American Heart Association, an organization accredited by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS), for 2.0 Advanced CEHs, activity number 09-AMHA-F3-0072.

For more information on eLearning or to purchase your keys for a course, go to