PALS

# PALS Page References

| Science of Resuscitation | |
|---|---|
| Science Updates | Pg. 9-10 |
| Chain of Survival | Pg. 11 |

| Basic Life Support Pg. 13-26 | |
|---|---|
| Single Rescuer Algorithm | Pg. 14 |
| Multi- Rescuer Algorithm | Pg. 21 |
| Flowchart Summary | Pg. 81 |
| AED for Children and infants | Pg. 24 |

| | |
|---|---|
| CPR Coach | Pg. 31 |
| High Performance Teams/Team Dynamics | Pg. 27-31 and 104-106 |

| Systematic Approach Pg. 37-69 | |
|---|---|
| • Initial Impression and PAT | Pg. 37-40 or Pg. 285 |
| • Evaluate -Identify-Intervene | Pg. 42-43 |
| • Primary Assessment | Pg. 44-63 or Pg. 286 |
| Secondary Assessments | Pg. 64-65 |
| Diagnostic Assessments | Pg. 66-69 |

| Primary Assessment | |
|---|---|
| Retractions | Pg. 48 |
| Respiration | Pg. 46 |
| Heart Rate | Pg. 53 |
| BP | Pg. 58 |
| Glucose | Pg. 63 |

| Management of Respiratory Emergencies Pg. 109-162 | |
|---|---|
| Recognizing Resp Distress/Failure | Pg. 109-122 |
| Summary Flowchart Recognition Based on Primary Assessment and Distress vs. Failure | Pg. 122 |
| Management of Resp Distress/Failure | Pg. 123-163 |
| Management of Respiratory Flowchart | Pg. 141 |

| Shock Pg. 165-226 | |
|---|---|
| Recognition Flowchart | Pg. 188 |
| Management of Shock Flowchart | Pg. 222 |
| General Management of Shock | Pg. 192-198 |
| Fluid Therapy | Pg. 199-201 |
| Glucose Management | Pg. 203-204 |
| Management According to Type of Shock | Pg. 205-219 |

| | |
|---|---|
| IO Access | Pg. 223-235 |

| Bradycardia | |
|---|---|
| Rhythm Examples | Pg. 233-234 |
| Algorithm | Pg. 244 |
| Management of Bradycardia with a Pulse | Pg. 243-248 |

| Tachycardia | |
|---|---|
| Rhythm Examples | Pg. 236, 238-240 |
| Algorithm | Pg. 257 |
| Management of Tachyarrhythmias | Pg. 249 |
| Summary of Interventions | Pg. 256 |

| Cardiac Arrest Pg 71-88 | |
|---|---|
| Overview | Pg. 71-88 |
| Medications | Pg. 86-87 |
| Algorithm | Pg. 89 |

| Post Cardiac Arrest Care Pg. 261-275 | |
|---|---|
| Overview | Pg. 261-276 |
| Respiratory System | Pg. 264 |
| Cardiovascular System | Pg. 267-273 |
| Neurologic System | Pg. 275 |
| Post-Cardiac Arrest Checklist | Pg. 263 |

| Resources | |
|---|---|
| Rhythm Recognition | Pg. 290-293 |

# FT PALS Outline Agenda

## Basic Guide for Conducting a PALS first-time class

Class times will vary based on the number of students approx. 8-10hrs

***Utilize your instructor manual to prompt you for sample discussion questions/topics***

****Do not skip any videos during the FT PALS course*****

**Course Introduction/overview** – Introductions/explain how the class will run for the day. Talk about learning stations, skills testing and written examination.

**Science of Resuscitation** – Show video(pg. 9) to recap and discuss The Chain of Survival

**CPR Coach** – Show Video (refer to page 31)

**Team Dynamics** – Show video (refer to page27) Discuss the importance of high-quality team dynamics, CCF, and CPR Coach role *** defer the practice session until the learning station for Child

**Child High Quality BLS Learning station/testing station** – (page13-30) – Show videos for Child BLS practice. Have the students do the PWW.

***Have students go through a practice skills check using a CPR Coach. Then provide skills testing (individual but can test 2 at a time) for the Child per the skills testing sheet.

**Infant High Quality BLS Learning station/practice station** - (page13-30) – Show videos for Infant BLS practice. Have the students do the PWW.

*** Complete the infant skill checkoff the same way you check off students in BLS

**Infant/Child Choking** – play video and do demonstration/practice with video.

**Overview of Systematic Approach** – (pages 37-40 for PAT, Primary Assessment – 44-63) Video has case discussions built into the video. Please play the video and when it pauses use the instructor manual to ask the questions related to the PAT, then video will recap the Primary assessment. Please recap the videos and use PALS instructor manual for the discussion questions. ***Note the practice of the Primary Assessment also include the PAT*** ****Use The Front Laminated Systematic Approach Handouts to lead your case discussions****

**Secondary Assessment** – (Pages 64-69) Play video after practicing the Primary Assessments. Recap video as needed. Talk about diagnostic testing and lab work that could be ordered. **Use the back of the Laminated Systematic Approach Handout to lead this discussion.**

**Management of Respiratory Emergencies** – (Page 109-137) Show video and provide recap, discuss verbiage used during case scenario testing) Note the difference between normal respiratory status, respiratory distress, and respiratory failure – **table on page 122 and please use the Management of Respiratory Flowchart on page 141 to lead your discussion on treatments. Discuss the different type and treatments of respiratory emergencies before the video case discussions.**

**Respiratory Video Case Discussions** – (Pages 123-162) Advance to the video case discussions and have the student participate in the video case discussions starting with the PAT then moving on to the Primary Assessment. Make sure students are engaged and having discussion throughout. – **please use the recognition of shock flowchart on Page 188 and the Management of Shock Flowchart on Page 222 to lead your discussion on treatment. Have student Use the Laminated Systematic Approach Handout.**

**Airway Management Learning Station and Testing Station** – Demonstrate the equipment and have the students practice using the PALS airway equipment. Fill out the Skills check paperwork for Airway management after watching all students perform tasks as outlined.

**Management of Shock Emergencies** – (Pages 165-188) Show video and provide recap, discuss verbiage used during case scenario testing) **Use Recognition of Shock Summary Flowchart on page 188 and the Management of Shock Flowchart on page 222 to lead your discussion. Discuss the different type and treatments of shock before the video case discussions.**

**Shock Video Case Discussions** – (Pages 189-226) Advance to the video case discussions and have the student participate in the video case discussions starting with the PAT then moving on to the Primary Assessment. Make sure students are engaged and having discussion throughout. **Have student Use the Laminated Systematic Approach Handout.**

**IO Learning station and Testing station** – (Pages 223-226) Show video and then do demonstration with IO device. Have the students practice and then perform skills testing utilizing the skills check off sheet.

**Management of Arrythmias** – (Pages 229-235) Show video and provide recap, discuss verbiage used during case scenario testing)

**Arrythmia Video Case Discussion** – (Pages 243-256, and 71-88 for Cardiac Arrest, page 290 for rhythm recognition) Advance to the video case discussions and have the student participate in the video case discussions starting with the PAT then moving on to the Primary Assessment. Make sure students are engaged and having discussion throughout.

**Learning Station and testing station for Electrical Disturbances** - Utilize DART Sim to review all rhythms, talk about Sync. Cardio. Defib, and Pacing. Show the students on the rhythm generator where and how to turn those functions on. Perform skills testing using the Rhythm and electrical disturbances skills check, making sure the students can answer all questions correctly.

**Post Cardiac Arrest Care** – (Pages 261-275) Play video and do recap. Talk about TTM, and recovery phase of the pediatric chain of survival. Please utilize the Post Cardiac Arrest Checklist on ***Page. 263***

**Coping with Death –** Ask students to step out if they are not able to watch this video, show video and recap incorporating how to deliver the news, how to create positive last impression for the family, and how to properly debrief afterwards. ***A lot of instructors chose to show this video earlier in the course, such as just prior to lunch***.

**Practice Case scenario testing** - Can be done in groups of 2-3 students, practice at least one of each type of emergency as a group (Total of 3), make sure everyone participating and all aspects of the case scenario are explored. Utilize the dry erase board. And it is ok for the instructor to intervene and redirect, as necessary. It is especially important to get the students using the AHA verbiage such as "Respiratory Distress caused by a Lower Airway Obstruction like Asthma" Reiterate the E-I-I circular chart that will help them not forget any assessments. **There needs to be a minimum of 3 practice case scenarios [1 Cardiac, 1 Respiratory, and 1 Shock]**(for 3 students max), however, if you feel the students need more practice, give more scenarios. If there are more than 3 students, there will be 6 practice case scenarios.

**Case Scenario testing** - Runs exactly like the practice, in groups of 2-3 students. But the instructor is not to prompt or redirect. The group is running the case scenario. Remember if they are an advanced provider they need to act as the team leader during the scenario. Some students may participate multiple times if needed. Please make sure they are utilizing DART Sim – even if not an arrythmia case – so they can identify the heart rhythm. **Each group is required to complete a total of 2 Final Case Scenarios~ (1) Cardiac Case and (1) either Respiratory or Shock Case.** *Dart Sim should be incorporated into your final case scenarios!

**Written Testing -** After successful completion of all skills testing, explain there is a 50-question written test, can use notes, cards, and books.

**PALS Renewal Outline Agenda**

**Basic Guide for Conducting the PALS Renewal Class**

Class times will vary based on the number of students approx. 6-8 hrs

***Utilize your instructor manual to prompt you for sample discussion questions/topics. The resource ring also has helpful mnemonics!***

**Course Introduction/overview** – Introductions/explain how the class will run for the day. Talk about learning stations, skills testing and written examination.

**Science of Resuscitation** – Show video (discuss the importance of high-quality CPR)

**CPR Coach** – Show Video (refer to page 31)

**Team Dynamics** – Show video (refer to page27) Discuss the importance of high-quality team dynamics, CCF, and CPR Coach role *** defer the practice session until the learning station for Child

**Child High Quality BLS Learning station/testing station** – (page13-30) – No Video for PALS renewal video, just instructor led practice.

- Scene Safety and Assessment
- Compression: 1 and 2 rescuer
- Breaths with Pocket mask/BVM
- AED for Children
- Utilize a CPR Coach during practices
- Practice for skills testing
- Actual Skills testing

**Infant High Quality BLS Learning station/practice station** - (page13-30) – No Video for PALS renewal video, just instructor led practice.

- Scene Safety and Assessment
- Compression: 1 and 2 rescuer
- Breaths with Pocket mask/BVM
- Utilize a CPR Coach during practices
- Practice for skills testing
- Actual Skills testing

**Infant/Child Choking** – No video – instructor led demonstration and practice

**Overview of Systematic Approach** – (pages 37-40 for PAT, Primary Assessment – 44-63) For PALS renewal – Discuss The Initial Assessment and Primary Assessment in Full Detail. Use the menu option to navigate to the video case discussions. Have the students engage and interact going through the primary assessments. Consider playing the Primary Assessment Video if you have inexperienced students. ****Use The Front Laminated Systematic Approach Handouts to lead your case discussions****

**Secondary Assessment** – (Pages 64-69) Discuss Secondary Assessment. Talk about diagnostic testing and lab work that could be ordered. Use the back of the Laminated Systematic Approach Handout to lead this discussion.

**Management of Respiratory Emergencies** – (Page 109-137) No video - Discuss verbiage used during case scenario testing. Use the **Recognition of Respiratory Summary Flowchart on page 122 and the Management of Respiratory Emergencies Flowchart on page 141** Talk about the 4 different types of respiratory emergencies outlined in provider manual. **If you are a new instructor, or have inexperienced students, strongly consider showing the entire Respiratory Video**

**Respiratory Video Case Discussions** – (Pages 123-162) Advance to the video case discussions from the menu options and have the student participate in the video case discussions starting with the PAT then moving on to the Primary Assessment. Make sure students are engaged and have discussions throughout. **Use the Laminated Systematic Approach**

**Airway Management Learning Station and Testing Station** – Demonstrate the equipment and have the students practice using the PALS airway equipment. Fill out the Skills check paperwork for Airway management after watching all students perform tasks as outlined.

**Management of Shock Emergencies** – (Pages 165-188) No video - Discuss verbiage used during case scenario testing, discuss the 4 different types of Shock emergencies outlined in the provider manual. Use **Recognition of Shock Summary Flowchart on page 188 and the Management of Shock Flowchart on page 222 If you are a new instructor, or have inexperienced students, you can show the entire Shock Video.**

**Shock Video Case Discussions** – (Pages 189-226) Advance to the video case discussions from the main menu and have the student participate in the video case discussions starting with the PAT then moving on to the Primary Assessment. Make sure students are engaged and have discussions throughout. **Use the Laminated Systematic Approach**

**IO Learning station and Testing station** – (Pages 223-226) Show video and then do demonstration with IO device. Have the students practice and then perform skills testing utilizing the skills check off sheet to lead this checkoff.

**Management of Arrythmias** – (Pages 229-235) No Video - Discuss the different types of arrythmias that may occur and their treatments. **If you are a new instructor, or have inexperienced students, consider showing the entire Shock Video. Use your algorithm pages for Bradycardia, Tachycardia, and Cardiac Arrest. Discuss stable/unstable, medications, electricity.**

**Arrythmia Video Case Discussion** – (Pages 243-256, and 71-88 for Cardiac Arrest, page 290 for rhythm recognition) Advance to the video case discussions from the main menu and have the student participate in the video case discussions starting with the PAT then moving on to the Primary Assessment. Make sure students are engaged and have discussions throughout. **Use the Laminated Systematic Approach**

**Learning Station and testing station for Electrical Disturbances** - Utilize DART Sim to review all rhythms, talk about Sync. Cardio. Defib, and Pacing. Show the students on the rhythm generator where and how to turn those functions on. Perform skills testing using the Rhythm and electrical disturbances skills check, making sure the students can answer all questions correctly.

**Post Cardiac Arrest Care** – (Pages 261-275) Play video and do recap. Talk about TTM, and recovery phase of the pediatric chain of survival.

**Practice Case scenario testing** - Can be done in groups of 2-3 students, practice at least one of each type of emergency as a group (Total of 3), make sure everyone participating and all aspects of the case scenario are explored. Utilize the dry erase board. And it is ok for the instructor to intervene and redirect, as necessary. It is especially important to get the students using the AHA verbiage such as "Respiratory Distress caused by a Lower Airway Obstruction like Asthma" Reiterate the E-I-I circular chart that will help them not forget any assessments. **There needs to be a minimum of 3 practice case scenarios [1 Cardiac, 1 Respiratory, and 1 Shock]**(for 3 students max), however, if you feel the students need more practice, give more scenarios. If there are more than 3 students, there will be 6 practice case scenarios.

**Case Scenario testing** - Runs exactly like the practice, in groups of 2-3 students. But the instructor is not to prompt or redirect. The group is running the case scenario. Remember if they are an advanced provider they need to act as the team leader during the scenario. Some students may participate multiple times if needed. Please make sure they are utilizing DART Sim – even if not an arrythmia case – so they can identify the heart rhythm. **Each group is required to complete a total of 2 Final Case Scenarios~ (1) Cardiac Case and (1) either Respiratory or Shock Case.** *Dart Sim should be incorporated into your final case scenarios!

**Written Testing -** After successful completion of all skills testing, explain there is a 50-question written test, can use notes, cards, and books.

Pediatric Advanced Life Support

# Child CPR and AED Skills Testing Checklist

American Heart Association.

American Academy of Pediatrics
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Student Name _____ Date of Test _____

Hospital Scenario: "You are working in a hospital or clinic, and you see a child who has suddenly collapsed in the hallway. You check that the scene is safe and then approach the patient. Demonstrate what you would do next."

Prehospital Scenario: "You arrive on the scene for a child who is not breathing. No bystander CPR has been provided. You approach the scene and ensure that it is safe. Demonstrate what you would do next."

**Assessment and Activation**

☐ Checks responsiveness ☐ Shouts for help/Activates emergency response system/Sends for AED
☐ Checks breathing ☐ Checks pulse

*Once student shouts for help, instructor says, "Here's the barrier device. I am going to get the AED."*

**Cycle 1 of CPR (30:2)** ***CPR feedback devices preferred for accuracy***

**Child Compressions**

☐ Performs high-quality compressions*:
- Hand placement on lower half of sternum
- 30 compressions in no less than 15 and no more than 18 seconds
- Compresses at least one third the depth of the chest, about 2 inches (5 cm)
- Complete recoil after each compression

**Child Breaths**

☐ Gives 2 breaths with a barrier device:
- Each breath given over 1 second
- Visible chest rise with each breath
- Resumes compressions in less than 10 seconds

**Cycle 2 of CPR (repeats steps in Cycle 1)** ***Only check box if step is successfully performed***

☐ Compressions ☐ Breaths ☐ Resumes compressions in less than 10 seconds

*Rescuer 2 says, "Here is the AED. I'll take over compressions, and you use the AED."*

**AED (follows prompts of AED)**

☐ Powers on AED ☐ Correctly attaches pads ☐ Clears for analysis ☐ Clears to safely deliver a shock
☐ Safely delivers a shock

**Resumes Compressions**

☐ Ensures compressions are resumed immediately after shock delivery
- Student directs instructor to resume compressions or
- Student resumes compressions

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

| **Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: | ☐ **PASS** | ☐ **NR** |
|---|---|---|

Instructor Initials _____ Instructor Number _____ Date _____

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# Infant CPR Skills Testing Checklist (1 of 2)

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Student Name _____ Date of Test _____

Hospital Scenario: "You are working in a hospital or clinic when a woman runs through the door, carrying an infant. She shouts, 'Help me! My baby's not breathing.' You have gloves and a pocket mask. You send your coworker to activate the emergency response system and to get the emergency equipment."

Prehospital Scenario: "You arrive on the scene for an infant who is not breathing. No bystander CPR has been provided. You approach the scene and ensure that it is safe. Demonstrate what you would do next."

**Assessment and Activation**

- ☐ Checks responsiveness
- ☐ Shouts for help/Activates emergency response system
- ☐ Checks breathing
- ☐ Checks pulse

*Once student shouts for help, instructor says, "Here's the barrier device."*

**Cycle 1 of CPR (30:2)** ***CPR feedback devices preferred for accuracy***

**Infant Compressions**

☐ Performs high-quality compressions*:

- Placement of 2 fingers or 2 thumbs in the center of the chest, just below the nipple line
- 30 compressions in no less than 15 and no more than 18 seconds
- Compresses at least one third the depth of the chest, about 1½ inches (4 cm)
- Complete recoil after each compression

**Infant Breaths**

☐ Gives 2 breaths with a barrier device:

- Each breath given over 1 second
- Visible chest rise with each breath
- Resumes compressions in less than 10 seconds

**Cycle 2 of CPR (repeats steps in Cycle 1)** ***Only check box if step is successfully performed***

☐ Compressions ☐ Breaths ☐ Resumes compressions in less than 10 seconds

*Rescuer 2 arrives with bag-mask device and begins ventilation while Rescuer 1 continues compressions with 2 thumb–encircling hands technique.*

**Cycle 3 of CPR**

**Rescuer 1: Infant Compressions**

☐ Performs high-quality compressions*:

- 15 compressions with 2 thumb–encircling hands technique
- 15 compressions in no less than 7 and no more than 9 seconds
- Compress at least one third the depth of the chest, about 1½ inches (4 cm)
- Complete recoil after each compression

**Rescuer 2: Infant Breaths**

*This rescuer is not evaluated.*

*(continued)*

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# Infant CPR Skills Testing Checklist (2 of 2)

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Student Name _____ Date of Test _____

*(continued)*

**Cycle 4 of CPR**

**Rescuer 2: Infant Compressions**

*This rescuer is not evaluated.*

**Rescuer 1: Infant Breaths**

☐ Gives 2 breaths with a bag-mask device:

- Each breath given over 1 second
- Visible chest rise with each breath
- Resumes compressions in less than 10 seconds

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

| **Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: | ☐ **PASS** | ☐ **NR** |
|---|---|---|

Instructor Initials _____ Instructor Number _____ Date _____

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# PALS Systematic Approach

1. Initial Impression (PAT)- what you see from the door
   a. Appearance- LOC
   b. Breathing- ↑ work of breathing, ↓ respiratory effort, abnormal breath sound, retractions
   c. Circulation- color such as cyanosis, pallor, mottling

**Place the patient on the Monitor/Vitals**

2. Primary Assessment- a rapid, hands on ABCDE approach to evaluate resp, cardiac, neuro function (includes vital signs)
   a. Airway- is the airway clear and maintainable
   b. Breathing- RR/pattern, retractions, respiratory effort chest expansion, abnormal airway or lung sounds, O2 sats ≥94%
   c. Circulation- HR, and rhythm, BP, central/peripheral pulses, cap refill (nml ≤2 seconds), skin temp
   d. Disability- AVPU (alert, resp. to voice, resp. to pain, unresponsive), pupil size, LOC, GLUCOSE
   e. Exposure- temp, weight, head to toe assessment-rash, trauma, abnormal markings, or medical devices/lines)

Consider using the VOMIT mnemonic: Vitals, Oxygen, Monitor/ECG, Consider IV access (with labs if needed), Treatment

**Evaluate- Identify-Intervene (EII)** Reassess after any intervention**

3. Secondary Assessment- a focused medical history (SAMPLE), a focused physical exam, diagnostic tests, and the H's & T's

S- Signs and Symptoms

A- Allergies

M- Medications

P- Past Medical History

L- Last Meal

E- Events Surrounding

| Post ROSC |
| --- |
| "VARMINT" |
| V- Vitals |
| A- AVUP |
| R- Resp Effort (SP02 > 94%) |
| M- Monitor- 12 lead ECG |
| I- IVx2, ideally arterial BP, fluids |
| N- Neuro- CT/MRI and EGG |
| T- Treatment (H's&T's) and TTM |

***H's & T's:***

| | |
| --- | --- |
| Hypovolemia | Tension Pneumothorax |
| Hypoxia | Tamponade (cardiac) |
| Hydrogen ion (acidosis) | Toxins |
| Hypoglycemia | Thrombosis, pulmonary |
| Hypo-/Hyperkalemia | Thrombosis, coronary |
| Hypothermia | **Consider Other Causes** |

| |
| --- |
| Are test results back? |
| What additional interventions or testing is needed for this patient? |
| What are your differential diagnoses? |
| *Examples: Lower Airway Obstruction- Asthma- Respiratory Failure |
| Compensated Distributive Shock- Sepsis with Respiratory Distress |

*Do we need to seek expert consultation?

Where does the patient need to go: ER, OR, ICU, Floor, or Home?

# H's and T's

| Condition | EKG | History & Physical | Recommended Treatment |
|---|---|---|---|
| Hypovolemia | Narrow Complex/Rapid Rate | Fluid Loss Possible, Flat Neck Veins | Volume SPB >90 Ideally For Adult |
| Hypoxia | Slow Rate | Cyanosis, ABG, Airway Problems | Oxygen and Ventilation<br>Airway Management |
| Hydrogen Ion Acidosis | Smaller Amplitude QRS Complex | Diabetes, Renal Failure,<br>Bicarb- Responsive Pre-Existing Acidosis | Hyperventilation<br>Sodium Bicarb |
| Hyperkalemia<br><br>>6 life threatening | Wide Complex QRS<br>Peaked T Waves | Renal Failure, Dialysis, Medications | Sodium Bicarb<br>Glucose/Insulin<br>Calcium Chloride<br>Kayexalate, Albuterol, Dialysis |
| Hypokalemia<br><br>< 2.5 life threatening | Flattened T Waves<br>Prominent U Waves<br>Prolonged QT | Abnormal Use of Potassium<br>Diuretic Use | Potassium Infusion<br>Magnesium If in Cardiac Arrest |
| Hypothermia | J or Osborne Waves | Exposure to Cold, Central Body Temp of <95° F or <35°C | Gradual Rewarming |
| Hypoglycemia (PALS) | Lengthening of QT Intervals | Confusion or drowsiness, seizures, loss of consciousness, cold and clammy | IV containing dextrose or glucagon |
| Toxins | Various Effects<br>Arrythmia (Brady or Tachy)<br>Prolonged Q-T, VT, Asystole | Known Ingestion, Empty Bottles at Scene, Evidence of Drug Use, Abnormal Pupils, Neuro Exam | Drug Screens, Airway Mang, Gastric Lavage, Activated Charcoal, Antidotes |
| Tamponade (Cardiac) | Narrow Complex/Rapid Rate | Narrowing Pulse Pressures, Muffled Heart Sounds, Neck Vein Distention, DX With Echo | Pericardiocentesis |
| Tension Pneumothorax | Narrow Complex, Slow rate (hypoxia) | Neck Vein Distention, Tracheal Deviation, Unequal Breath Sounds, Difficult to Ventilate, if possible obtain a chest X-ray | Needle Decompression<br>Thoracotomy/Chest Tube |
| Thrombosis (Coronary) | Abnormal 12-lead, Q Waves, ST Segment Changes, T wave Inversions | ACS Symptoms, Cardiac Markers, 12-lead, Hypokalemia, Neck Vein Distention (inferior-wall MI) | MONA, Fibrinolytics, Cath Lab (PCI door to balloon <90mins), Coronary Bypass |
| Thrombosis (Pulmonary) | Narrow Complex/Rapid Rate | No Pulse with CPR (saddle), Distended Neck Veins, Positive Test For DVT or PE | Surgical Embolectomy, Fibrinolytics |

# Airway Management
# Skills Station Competency Checklist

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Student Name _____ Date of Test _____

| *Critical Performance Steps* | Check if done correctly |
|---|---|
| Verbalizes difference between high-flow and low-flow $O_2$ delivery systems<br>• High flow: $O_2$ flow exceeds patient inspiratory flow, preventing entrainment of room air if system is tight-fitting; delivers nearly 1.00 $FIO_2$, eg, nonrebreathing mask with reservoir, high-flow nasal cannula<br>• Low flow (≤10 L/min): patient inspiratory flow exceeds $O_2$ flow, allowing entrainment of room air; delivers 0.22 to 0.60 $FIO_2$, eg, standard nasal cannula, simple $O_2$ mask | |
| Verbalizes maximum nasal cannula flow rate for standard nasal cannula (4 L/min) | |
| Opens airway by using head tilt–chin lift maneuver while keeping mouth open (jaw thrust for trauma victim) | |
| Verbalizes different indications for OPA and NPA<br>• OPA only for unconscious victim without a gag reflex<br>• NPA for conscious or semiconscious victim | |
| Selects correctly sized airway by measuring<br>• OPA from corner of mouth to angle of mandible | |
| Inserts OPA correctly | |
| Verbalizes assessment for adequate breathing after insertion of OPA | |
| Suctions with OPA in place; states suctioning not to exceed 10 seconds | |
| Selects correct mask size for ventilation | |
| Assembles bag-mask device, opens airway, and creates seal by using E-C clamp technique | |
| With bag-mask device, gives 1 breath every 2 to 3 seconds for 30 seconds. Gives each breath in approximately 1 second; each breath should cause chest rise | |
| Endotracheal Intubation<br>• States equipment needed for endotracheal (ET) tube intubation procedure<br>• Demonstrates technique to confirm proper ET tube placement by physical exam and by using an exhaled $CO_2$ device<br>• Secures ET tube<br>• Suctions with ET tube in place | |
| **The following steps are optional. They are demonstrated and evaluated only when the student's scope of practice involves ET intubation.** | |
| Endotracheal Intubation<br>• Prepares equipment for ET intubation<br>• Inserts ET tube correctly | |

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

**Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: ☐ **PASS** ☐ **NR**

Instructor Initials _____ Instructor Number _____ Date _____

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# Vascular Access Skills Station Competency Checklist

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Student Name _____ Date of Test _____

| ***Critical Performance Steps*** | **Check if done correctly** |
|---|---|
| Verbalizes indications for IO insertion | |
| Verbalizes sites for IO insertion (anterior tibia, distal femur, medial malleolus, anterior-superior iliac spine) | |
| Verbalizes contraindications for IO placement<br>• Fracture in extremity<br>• Previous insertion attempt in the same bone<br>• Infection overlying bone | |
| Inserts IO catheter safely | |
| Verbalizes how to confirm IO catheter is in correct position; verbalizes how to secure IO catheter | |
| Attaches IV line to IO catheter; demonstrates giving IO fluid bolus by using 3-way stopcock and syringe | |
| Shows how to determine correct drug doses by using a color-coded length-based tape or other resource | |
| **The following is optional:** | |
| Verbalizes correct procedure for establishing IV access | |

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

| **Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: | ☐ **PASS** | ☐ **NR** |
|---|---|---|

Instructor Initials _____ Instructor Number _____ Date _____

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# Rhythm Disturbances/ Electrical Therapy Skills Station Competency Checklist

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Student Name _____ Date of Test _____

| *Critical Performance Steps* | Check if done correctly |
|---|---|
| Applies 3 ECG leads correctly (or local equipment if >3 leads are used)<br>• Negative (white) lead: to right shoulder<br>• Positive (red) lead: to left lower ribs<br>• Ground (black, green, brown) lead: to left shoulder | |
| Demonstrates correct operation of monitor<br>• Turns monitor on<br>• Adjusts device to manual mode (not AED mode) to display rhythm in standard limb leads (I, II, III) or paddles/electrode pads | |
| Verbalizes correct electrical therapy for appropriate core rhythms<br>• Synchronized cardioversion for unstable SVT, VT with pulses<br>• Defibrillation for pulseless VT, VF | |
| Selects correct paddle/electrode pad for infant or child; places paddles/electrode pads in correct position | |
| Demonstrates correct and safe synchronized cardioversion<br>• Places device in synchronized mode<br>• Selects appropriate energy (0.5 to 1 J/kg for initial shock)<br>• Charges, clears, delivers current | |
| Demonstrates correct and safe manual defibrillation<br>• Places device in unsynchronized mode<br>• Selects energy (2 to 4 J/kg for initial shock)<br>• Charges, clears, delivers current | |

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

| **Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: | ☐ **PASS** | ☐ **NR** |
|---|---|---|

Instructor Initials _____ Instructor Number _____ Date _____

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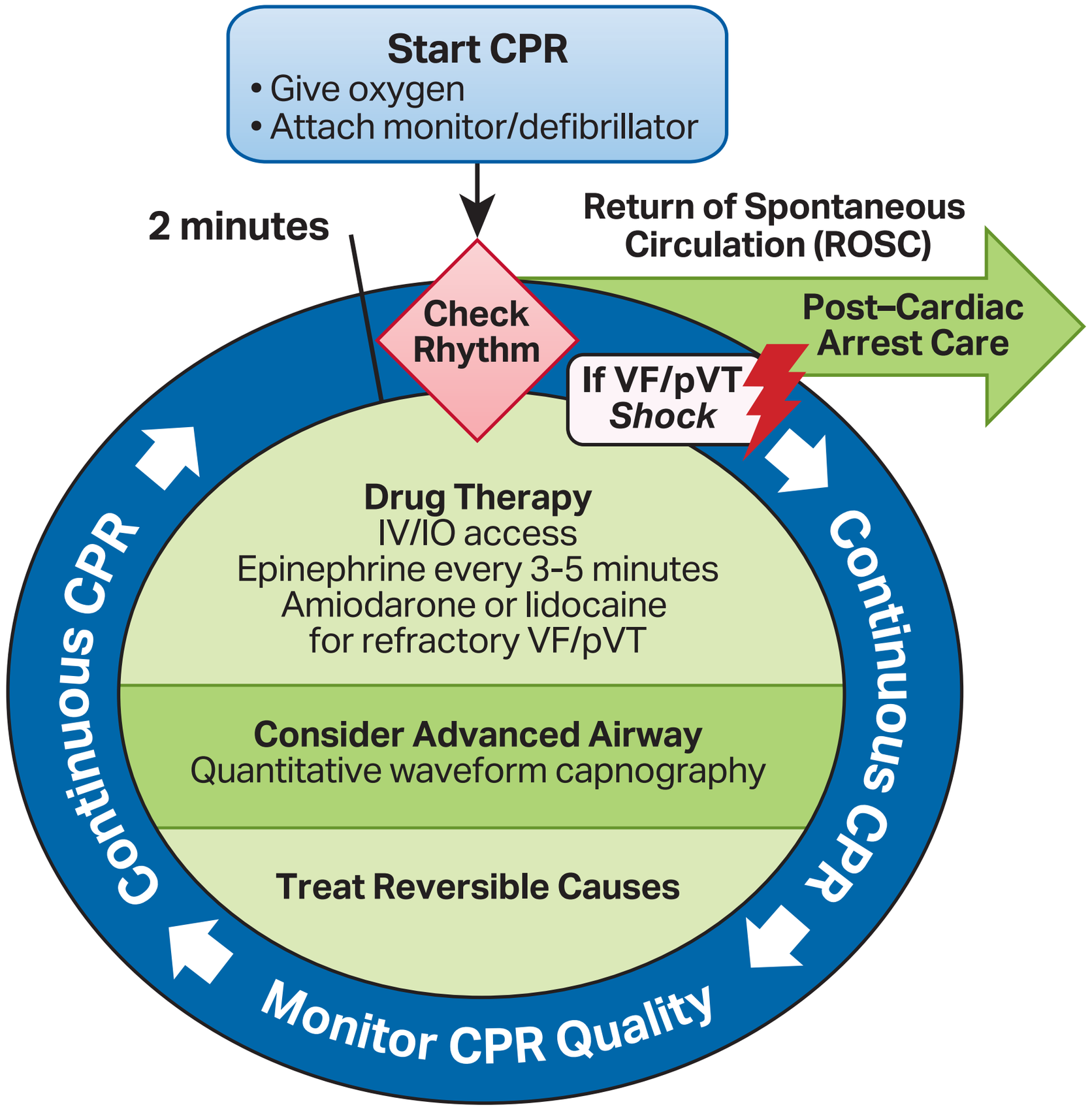
| RHYTHM: | BRADY | NARROW TACHY (SVT) | WIDE TACHY (VT) |
|---|---|---|---|
| **SIMPLE/ SUPPORTIVE** | **V**-ITALS **O**-XYGEN | **M**-ONITOR (EKG) **I**-V | **T**-REAT/TRANSFER |
| | HR<60<br>w/ poor perfusion - Start CPR | VAGAL | EXPERT CONSULTATION:<br>Any intervention<br>can make this worse |
| **DRUGS** | EPINEPHRINE - 0.01mg/kg | ADENOSINE 0.1mg/kg (rapid) | ANTI-ARRHYTHMIC<br><br>Most commonly:<br><br>AMIODARONE 5mg/kg<br>Over 20-60 min |
| | Vagal Respone or AV Block<br><br>ATROPINE - 0.02mg/kg<br>(0.1-0.5 mg per dose)<br>(2 dose max) | ADENOSINE 0.2mg/kg (rapid) | |
| **ELECTRICTIY** | TRANSCUTANEOUS PACING<br>(TVP/PACEMAKER?) | SYNCHRONIZED CARDIOVERSION<br><br>1st Dose: 0.5-1 J/kg | 2nd Dose: 2 J/kg |

**STABLE**

**V**

**UNSTABLE**

**CASH:** **C** - HEST PAIN, **A** - LTERED MENTAL STATUS, **S** - OB/SHOCK, **H** - YPOTENSION/HF




## Medications:

**Epinephrine:**
0.01 mg/kg
q 3-5 minutes
(every other cycle)

**Amiodarone**
5mg/kg
(up to 3 doses)

or

**Lidocaine**
1mg/kg loading dose
(follow with drip)

## ETCO2:

Normal 35-45 mmHg
CPR: >10mmHg
Spike = ROSC?

## @1:45:

1. Pre-charge Defibrillator
2. Check pulse w/ CPR
3. Prepare to switch compressors

## @2:00:

1. Stop CPR/Analyze/Shock?
2. Resume CPR
3. Push Med
4. Prep Next Med (closed loop)

## ROSC

**V - ITALS**
(O2: 94-99%, BP>5%

**A - IRWAY**

**R - ESPONSIVENESS**

**M - ONITOR** (EKG)

**I - V** x2, LABS

**N - EURO**
(CT, MRI, EEG)

**T - TM / TRANSFER**
(5 days normothermia
or 2/3 @32-34 C)
(OR/ICU)

# PALS Case Scenario Testing Checklist
# Cardiac Case Scenario
# Supraventricular Tachycardia

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Student Name _____ Date of Test _____

| *Critical Performance Steps* | Check if done correctly |
|---|---|
| **Team Leader** | |
| Assigns team member roles | |
| Uses effective communication throughout | |
| **Patient Management** | |
| Directs assessment of airway, breathing, circulation, disability, and exposure, including vital signs | |
| Directs application of cardiac monitor and pulse oximetry | |
| Directs administration of supplemental oxygen | |
| Identifies narrow-complex tachycardia (ie, SVT with adequate perfusion) and verbalizes how to distinguish between ST and SVT | |
| *If the student does not verbalize the above, prompt the student with the following question: "How do you distinguish between ST and SVT?"* | |
| Directs performance of appropriate vagal maneuvers | |
| Directs establishment of IV or IO access | |
| Directs preparation and administration of appropriate doses (first and, if needed, second) of adenosine | |
| States the rationale for the strong recommendation for expert consultation before providing synchronized cardioversion if the stable child with SVT fails to respond to vagal maneuvers and adenosine | |
| Directs or describes appropriate indications for and safe delivery of attempted cardioversion at 0.5 to 1 J/kg (subsequent doses increased by 0.5 to 1 J/kg, not to exceed 2 J/kg) | |
| Performs reassessment of patient in response to treatment | |
| **Case Conclusion/Debriefing** | |
| Discusses indications and appropriate energy doses for synchronized cardioversion | |
| *If the student does not verbalize the above, prompt the student with the following question: "What are the indications and appropriate energy doses for synchronized cardioversion?"* | |

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

| **Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: | ☐ **PASS** | ☐ **NR** |
|---|---|---|

Instructor Initials _____ Instructor Number _____ Date _____

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# PALS Case Scenario Testing Checklist
# Shock Case Scenario
# Hypovolemic Shock

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Student Name _____ Date of Test _____

| *Critical Performance Steps* | Check if done correctly |
|---|---|
| **Team Leader** | |
| Assigns team member roles | |
| Uses effective communication throughout | |
| **Patient Management** | |
| Directs assessment of airway, breathing, circulation, disability, and exposure, including vital signs | |
| Directs administration of 100% oxygen | |
| Directs application of cardiac monitor and pulse oximetry | |
| Identifies signs and symptoms of hypovolemic shock | |
| Categorizes as compensated or hypotensive shock | |
| Directs establishment of IV or IO access | |
| Directs rapid administration of a 20 mL/kg fluid bolus of isotonic crystalloid; repeats as needed to treat signs of shock | |
| Reassesses patient during and after each fluid bolus. Stops fluid bolus if signs of heart failure (worsening respiratory distress, development of hepatomegaly or rales/crackles) develop | |
| Directs reassessment of patient in response to each treatment | |
| **Case Conclusion/Debriefing** | |
| States therapeutic end points during shock management | |
| *If the student does not verbalize the above, prompt the student with the following question: "What are the therapeutic end points during shock management?"* | |

**STOP TEST**

**Instructor Notes**

- Place a check in the box next to each step the student completes successfully.
- If the student does not complete all steps successfully (as indicated by at least 1 blank check box), the student must receive remediation. Make a note here of which skills require remediation (refer to instructor manual for information about remediation).

| **Test Results** Check **PASS** or **NR** to indicate pass or needs remediation: | ☐ **PASS** | ☐ **NR** |
|---|---|---|

Instructor Initials _____ Instructor Number _____ Date _____

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