

# PALS Systematic Approach Summary

## Initial Impression

Your first quick (in a few seconds) "from the doorway" observation

|   |  |
|---|--|
| <b>Appearance</b>   | Including level of consciousness (eg, unresponsive, irritable, alert and ability to interact)                      |
| <b>Breathing</b>  | Increased work of breathing, absent or decreased respiratory effort, or abnormal sounds heard without auscultation |
| <b>Circulation (color)</b>  | Abnormal skin color, such as cyanosis, pallor, or mottling   |
| <i>The purpose is to quickly identify a life-threatening problem.</i> |  |

### Is the child unresponsive with no breathing or only gasping?

#### If YES:

- Shout for help.
- Activate emergency response as appropriate for setting.
- Check for a pulse.
- Begin lifesaving interventions as needed.

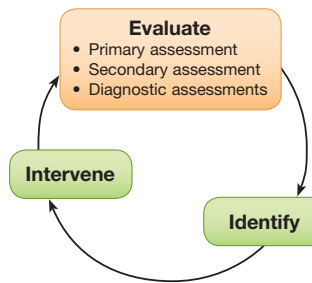
#### If NO:

- Continue the evaluate-identify-intervene sequence.

Use the **evaluate-identify-intervene** sequence when caring for a seriously ill or injured child.

- Evaluate the child to gather information about the child's condition or status.
- Identify any problem by type and severity.
- Intervene with appropriate actions to treat the problem.

Then repeat the sequence; this process is ongoing.



**If at any time you identify a life-threatening problem, immediately begin appropriate interventions. Activate emergency response as indicated in your practice setting.**

## Evaluate

"Evaluate" consists of the primary assessment (ABCDE), secondary assessment, and diagnostic tests.

### Primary Assessment

A rapid, hands-on ABCDE approach to evaluate respiratory, cardiac, and neurologic function; this step includes assessment of vital signs and pulse oximetry

#### Airway

|       |              |                  |
|-------|--------------|------------------|
| Clear | Maintainable | Not maintainable |
|-------|--------------|------------------|

#### Breathing

| Respiratory Rate and Pattern                 | Respiratory Effort  | Chest Expansion and Air Movement                       | Abnormal Lung and Airway Sounds  | Oxygen Saturation by Pulse Oximetry                 |
|--|---|--|--|---|
| Normal<br>Irregular<br>Fast<br>Slow<br>Apnea | Normal<br>Increased <ul style="list-style-type: none"> <li>• Nasal flaring</li> <li>• Retractions</li> <li>• Head bobbing</li> <li>• Seesaw respirations</li> </ul> Inadequate <ul style="list-style-type: none"> <li>• Apnea</li> <li>• Weak cry or cough</li> </ul> | Normal<br>Decreased<br>Unequal<br>Prolonged expiration | Stridor<br>Snoring<br>Barking cough<br>Hoarseness<br>Grunting<br>Gurgling<br>Wheezing<br>Crackles<br>Unequal | Normal oxygen saturation (≥94%)<br>Hypoxemia (<94%) |

#### Circulation

| Heart Rate and Rhythm                              | Pulses                                     |   | Capillary Refill Time                     | Skin Color and Temperature                               | Blood Pressure        |
|--|--|---|---|--|-----------------------|
| Normal<br>Fast (tachycardia)<br>Slow (bradycardia) | <b>Central</b><br>Normal<br>Weak<br>Absent | <b>Peripheral</b><br>Normal<br>Weak<br>Absent | Normal: ≤2 seconds<br>Delayed: >2 seconds | Pallor<br>Mottling<br>Cyanosis<br>Warm skin<br>Cool skin | Normal<br>Hypotensive |

#### Disability

| AVPU Pediatric Response Scale |                           |                          |                      | Pupil Size Reaction to Light |          | Blood Glucose |     |
|-------------------------------|---------------------------|--------------------------|----------------------|------------------------------|----------|---------------|-----|
| <b>A</b> lert                 | Responds to <b>V</b> oice | Responds to <b>P</b> ain | <b>U</b> nresponsive | Normal                       | Abnormal | Normal        | Low |

#### Exposure

| Temperature |      |     | Skin               |                               |
|-------------|------|-----|--------------------|-------------------------------|
| Normal      | High | Low | Rash (eg, purpura) | Trauma (eg, injury, bleeding) |

|                             |  |
|-----------------------------|--|
| <b>Secondary Assessment</b> | A focused medical history (SAMPLE) and a focused physical exam |
|-----------------------------|--|

|                         |  |
|-------------------------|--|
| <b>Diagnostic Tests</b> | Laboratory, radiographic, and other advanced tests that help to identify the child's physiologic condition and diagnosis |
|-------------------------|--|

## Identify

Identify the child's problem as respiratory, circulatory, or both. Determine the type and severity of the problem(s). The table below lists common clinical signs that typically correlate with a specific type of problem and its severity.

| Type                  | Severity  |
|-----------------------|---|
| <b>Respiratory</b>    | <ul style="list-style-type: none"> <li>Respiratory distress</li> <li>Respiratory failure</li> </ul> |
| <b>Circulatory</b>    | <ul style="list-style-type: none"> <li>Compensated shock</li> <li>Hypotensive shock</li> </ul>      |
| <b>Cardiac Arrest</b> |   |

## Respiratory

| Signs   | Type of Problem                        | Severity  |
|---|--|---|
| <ul style="list-style-type: none"> <li>Increased respiratory rate and effort (eg, retractions, nasal flaring)</li> <li>Decreased air movement</li> <li>Stridor (typically inspiratory)</li> <li>Barking cough</li> <li>Snoring or gurgling</li> <li>Hoarseness</li> </ul> | <b>Upper airway obstruction</b>        | <b>Respiratory distress</b> <ul style="list-style-type: none"> <li>Some abnormal signs but no signs of respiratory failure</li> </ul> <b>Respiratory failure</b><br><i>One or more of the following:</i> <ul style="list-style-type: none"> <li>Very rapid or inadequate respiratory rate</li> <li>Significant or inadequate respiratory effort</li> <li>Low oxygen saturation despite high-flow oxygen</li> <li>Bradycardia (ominous)</li> <li>Cyanosis</li> <li>Decreased level of consciousness</li> </ul> |
| <ul style="list-style-type: none"> <li>Increased respiratory rate and effort (eg, retractions, nasal flaring)</li> <li>Decreased air movement</li> <li>Prolonged expiration</li> <li>Wheezing</li> </ul>  | <b>Lower airway obstruction</b>        |   |
| <ul style="list-style-type: none"> <li>Increased respiratory rate and effort</li> <li>Decreased air movement</li> <li>Grunting</li> <li>Crackles</li> </ul>   | <b>Lung tissue disease</b>             |   |
| <ul style="list-style-type: none"> <li>Irregular respiratory pattern</li> <li>Inadequate or irregular respiratory depth and effort</li> <li>Normal or decreased air movement</li> <li>Signs of upper airway obstruction (see above)</li> </ul>                            | <b>Disordered control of breathing</b> |   |

## Circulatory

| <ul style="list-style-type: none"> <li>Tachycardia</li> <li>Weak peripheral pulses</li> <li>Delayed capillary refill time</li> <li>Changes in skin color (pallor, mottling, cyanosis)</li> </ul>  | <ul style="list-style-type: none"> <li>Cool skin</li> <li>Changes in level of consciousness</li> <li>Decreased urine output</li> </ul> | <b>Signs of poor perfusion</b>   |
|---|--|--|
| Signs   | Type of Problem  | Severity   |
| <ul style="list-style-type: none"> <li>Signs of poor perfusion (see above)</li> </ul>   | <b>Hypovolemic shock</b><br><b>Obstructive shock</b>   | <b>Compensated shock</b> <ul style="list-style-type: none"> <li>Signs of poor perfusion and <i>normal</i> blood pressure</li> </ul> <b>Hypotensive shock</b> <ul style="list-style-type: none"> <li>Signs of poor perfusion and <i>low</i> blood pressure</li> </ul> |
| <ul style="list-style-type: none"> <li>Possible signs of poor perfusion (see above) <i>or</i></li> <li>Warm, flushed skin with brisk capillary refill (warm shock)</li> <li>Peripheral pulses may be bounding</li> <li>Possible crackles</li> <li>Possible petechial or purpuric rash (septic shock)</li> </ul> | <b>Distributive shock</b>  |  |
| <ul style="list-style-type: none"> <li>Signs of poor perfusion (see above)</li> <li>Signs of heart failure</li> </ul>   | <b>Cardiogenic shock</b>   |  |

## Intervene

On the basis of your identification of the problem, intervene with appropriate actions. Your actions will be determined by your scope of practice and local protocol.