



AMERICAN SAFETY & HEALTH INSTITUTE



# BASIC LIFE SUPPORT

skill guide  
Ver. 9.0, 2021



# CONTENTS

<b>BLS Algorithms.....</b>	<b>5</b>
Adult Chains of Survival.....	5
Procedure for Adult Basic Life Support .....	8
Procedure for Pregnant Women in Cardiac Arrest.....	9
Pediatric Chains of Survival .....	9
Procedure for Pediatric Basic Life Support .....	12
Procedure for Opioid-Associated Emergencies (OAE) .....	13

## Adult, Child, and Infant BLS Skill Sheets

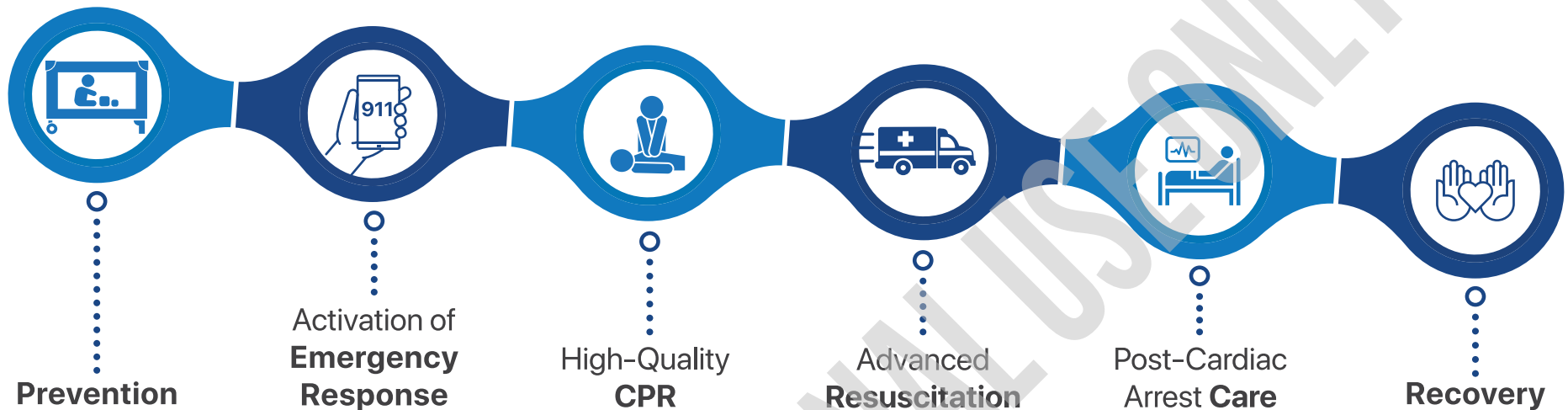
Skill Sheet One – Adult Assessment.....	13
Skill Sheet Two – Adult Chest Compressions .....	14
Skill Sheet Three – Adult Rescue Breaths with CPR Mask.....	15
Skill Sheet Four – Adult Rescue Breaths with Bag-Mask Device, One BLS Provider .....	16
Skill Sheet Five – Adult Automated External Defibrillation, One BLS Provider .....	17
Skill Sheet Six – Adult CPR and AED with CPR Mask, One BLS Provider .....	18
Skill Sheet Seven – Adult CPR with Bag-Mask Device, 2 BLS Providers .....	20
Skill Sheet Eight (Optional) – Adult CPR and AED with Bag-Mask Device, Multiple BLS Providers .....	22
Skill Sheet Nine (Optional) – Adult Suspected Opioid-Associated Emergency (OAE) .....	24
Skill Sheet Ten (Optional) – Child Assessment .....	27
Skill Sheet Eleven – Child CPR with Bag-Mask Device, 2 BLS Providers .....	28
Skill Sheet Twelve (Optional) – Infant Assessment .....	31
Skill Sheet Thirteen – Infant Chest Compressions.....	32
Skill Sheet Fourteen – Infant Rescue Breaths with Bag-Mask Device, One BLS Provider.....	33
Skill Sheet Fifteen – Infant CPR with Bag-Mask Device, 2 BLS Providers .....	34
Skill Sheet Sixteen – Infant Relief of Choking.....	36

## Adult, Child, and Infant BLS Scenario Sheets

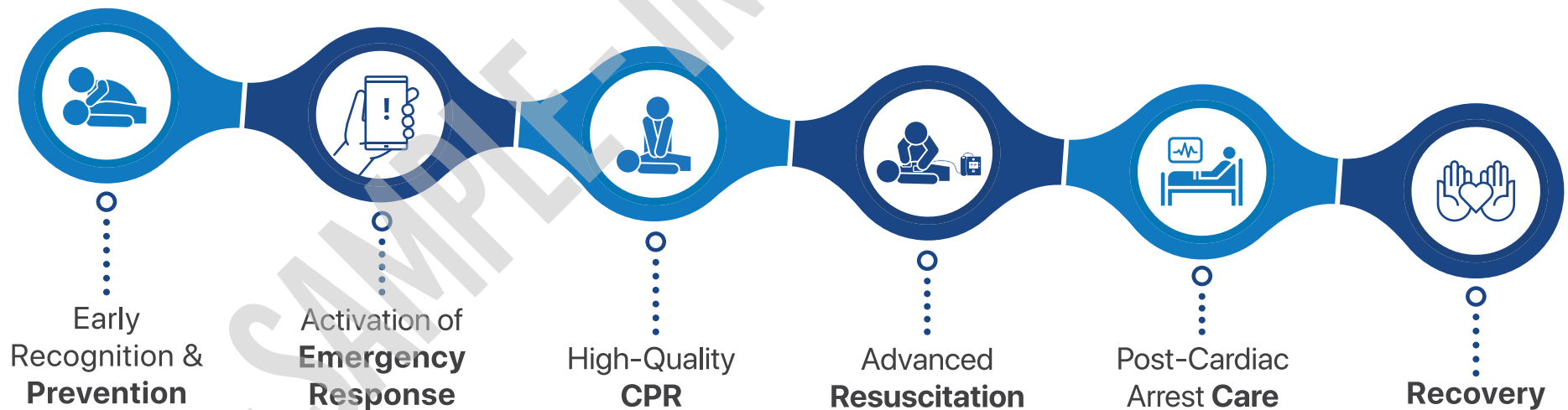
Scenario Sheet One – Adult BLS .....	39
Scenario Sheet Two – Adult BLS .....	40
Scenario Sheet Three – Adult BLS.....	41
Scenario Sheet Four – Adult BLS .....	42
Scenario Sheet Five – Adult BLS .....	43
Scenario Sheet Six – Adult BLS.....	44
Scenario Sheet Seven – Adult BLS.....	46
Scenario Sheet Eight (Optional) – Adult BLS .....	48
Scenario Sheet Nine (Optional) – Adult BLS .....	50
Scenario Sheet Ten (Optional) – Child BLS.....	51
Scenario Sheet Eleven – Child BLS .....	52
Scenario Sheet Twelve (Optional) – Infant BLS.....	54
Scenario Sheet Thirteen – Infant BLS.....	55
Scenario Sheet Fourteen – Infant BLS.....	56
Scenario Sheet Fifteen – Infant BLS .....	57
Scenario Sheet Sixteen – Infant BLS .....	58

Please note: The scenarios and treatment sequences depicted in this program are fictitious dramatizations. Consequently, they represent an imperfect simulation of reality. To clearly demonstrate skills, BLS providers may not always be shown wearing appropriate PPE.

## PEDIATRIC OUT-OF-HOSPITAL CHAIN OF SURVIVAL



## PEDIATRIC IN-HOSPITAL CHAIN OF SURVIVAL



# ADULT ASSESSMENT

## one ASSESS SCENE SAFETY

- Pause and make sure the scene is safe for you and the victim.
- Take standard precautions with appropriate PPE.



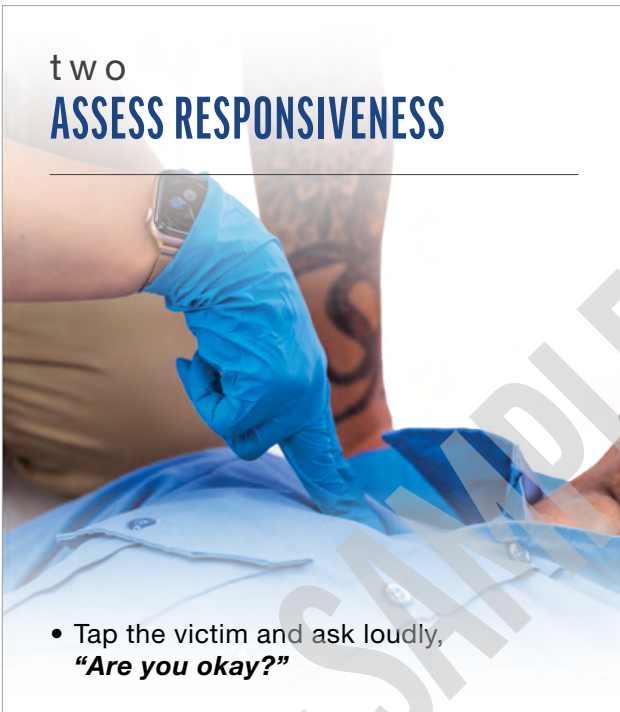
## four ASSESS BREATHING AND PULSE

- Take no longer than 10 seconds to simultaneously assess breathing and pulse.
- Look at the patient's chest and face for signs of normal breathing.
- At the same time, check the carotid pulse. Place two or three fingers in the groove on the patient's neck, between the trachea and the muscles at the side of the neck.
- Then, take action based the presence or absence of normal breathing and pulse.



## two ASSESS RESPONSIVENESS

- Tap the victim and ask loudly, **"Are you okay?"**



## three ACTIVATE EMS AND/OR EAP

- If unresponsive, call 911 to activate EMS using a mobile device and/or activate your EAP.
- Get an AED and emergency response equipment (or send someone else to).



# ADULT RESCUE BREATHS WITH BAG-MASK DEVICE, ONE BLS PROVIDER

## one POSITION YOURSELF



- Position yourself above the patient's head.

## two POSITION MASK

- Place the mask flat on the patient's face, covering the nose and mouth, with the top of the mask over the bridge of the nose.
- Use your thumb and index finger of one hand in a C position to press the edges of the mask to the face.
- Use your remaining fingers in an E position under the bony ridge of the jaw.



## three OPEN THE AIRWAY

- Tilt the head and lift the jaw up into the mask to open the airway.



## four DELIVER BREATH

- Give a rescue breath by squeezing the bag. Deliver each breath over 1 second in length while watching for chest rise.
- Stop ventilating as soon as you see chest rise.



# INFANT CPR WITH BAG-MASK DEVICE, 2 BLS PROVIDERS

**Note:** This is a 2 BLS Provider skill practice for coordinating compressions, ventilations, and switching roles. Take standard precautions. The scene is safe. The patient is uninjured and unresponsive. EMS and/or EAP is activated. The patient is not breathing and no brachial pulse is felt. Another BLS Provider is bringing an AED.

one

## PROVIDER 1: DELIVER HIGH-QUALITY COMPRESSIONS

two

## PROVIDER 2: DELIVER EFFECTIVE BREATHS



- Position yourself. Use the 2-Thumb Encircling-Hands Technique.
- Compress fast, at a rate of 100-120 times per minute.
- Compress the chest approximately 1 ½ inches (4 cm).
- Allow complete chest recoil at the top of each compression. Do not lean on the chest between compressions.
- Perform 15 compressions. Count out loud.

- Use an infant-sized bag-mask device.
- Tilt the head and lift the jaw up into the mask to open the airway.
- Maintain a neutral “sniffing” position.
- Open the airway and give 2 rescue breaths. Deliver each breath over 1 second in length while watching for chest rise.
- Stop ventilating as soon as you see chest rise.

# INFANT RELIEF OF CHOKING

## one POSITION PATIENT



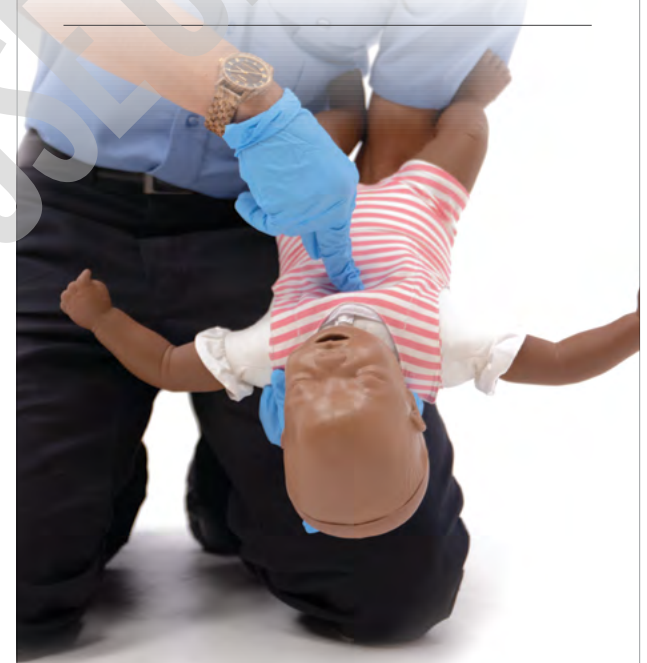
- Kneel or sit with the infant in your lap.
- Hold the infant facedown over your forearm with legs straddled and with the head lower than the chest. Support the head by holding the jaw.
- Rest your forearm on your lap or thigh to support the infant.

## two DELIVER BACK SLAPS



- Using the heel of the other hand, give up to 5 back slaps between the shoulder blades.
- Give each back slap forcefully with the intent of dislodging and expelling the object.
- Sandwich the patient between your forearms and turn the infant over, using the palm of one hand to support the face and the palm of the other hand to support the back of the head.

## three DELIVER THRUSTS



- Place 2 fingertips on the breastbone just below the nipple line and give up to 5 chest thrusts.
- Give each chest thrust forcefully with the intent of dislodging and expelling the object.
- Repeat the sequence of back slaps and chest thrusts until the object is expelled and the infant can breathe or becomes unresponsive.

# SCENARIO SHEET ONE

[Fill in the blank to adjust to your occupational setting: fire rescue, EMS, public safety, lifeguarding, dental practice, hospital, clinic, etc..]

**Out-of-Hospital Setting:** You are a lone BLS provider responding to a call from [\_ex. dispatch\_] for a person passed out. Upon arrival at the scene, you see an anxious person kneeling next to a motionless adult slumped against the [\_ex. wall\_]. “He, uh, I think - he overdosed.” Demonstrate what actions you would take next.

**In-Hospital/Clinic Setting:** You are [\_ex. updating patient records\_] when you hear a shout for help from [\_ex. the hallway\_]. Responding to the anxious voice, you find a person kneeling next to a motionless adult slumped against the [\_ex. wall in the patient toilet\_]. “She, uh, I think - she overdosed.” Demonstrate what actions you would take next.

BLS PROCEDURE	BLS PROVIDER ACTION (PERFORMANCE CRITERIA)	PROMPTER
<b>Assess Scene Safety</b>	<ul style="list-style-type: none"> <li>▶ Pause and make sure the scene is safe for you and the victim.</li> <li>▶ Take standard precautions with appropriate PPE.</li> </ul>	<i>“Scene is safe.”</i>
<b>Assess Responsiveness</b>	<ul style="list-style-type: none"> <li>▶ Tap the victim and ask loudly, “Are you okay?”</li> </ul>	<i>“Patient is unresponsive.”</i>
<b>Activate EMS and/or EAP</b>	<ul style="list-style-type: none"> <li>▶ Activate EMS or your EAP.</li> <li>▶ Get an AED and emergency response equipment (or send some else to).</li> </ul>	<i>“Activated.”</i>  <i>“Other BLS providers are a few minutes away with an AED and emergency response equipment.”</i>
<b>Assess Breathing and Pulse</b>	<ul style="list-style-type: none"> <li>▶ Look at the patient’s chest and face for signs of normal breathing.</li> <li>▶ At the same time, check the carotid pulse. Place two or three fingers in the groove on the patient’s neck, between the trachea and the muscles at the side of the neck.</li> <li>▶ Take no longer than 10 seconds to simultaneously assess breathing and pulse.</li> </ul>	<i>“Patient is making a snore-like gurgling noise. Carotid pulse is definitely felt.”</i>
<b>END SCENARIO. WHAT WENT RIGHT? WHAT NEEDED IMPROVEMENT?</b>		

# SCENARIO SHEET EIGHT / OPTIONAL

[Fill in the blank to adjust to your occupational setting: fire rescue, EMS, public safety, lifeguarding, dental practice, hospital, clinic, etc.]

**Out-of-Hospital Setting:** You and another BLS provider have responded to a call from [ex. the 911 Call Center] for a cardiac arrest. Upon arrival at the scene, you see bystanders performing poor quality CPR on a 16-year-old. The scene is safe. You have taken standard precautions. The patient is unresponsive. You have activated EMS and/or your EAP by [ex. using a mobile device]. Two other providers are a few minutes away with an AED. The patient is not breathing. No carotid pulse is felt. You have an adult bag-mask device in your emergency response equipment. Demonstrate what actions you would take next.

**In-Hospital/Clinic Setting:** You and another BLS provider have responded to a shout for help from the [ex. lobby]. As you approach the scene, you see an anxious [ex. maintenance technician] kneeling next to a motionless adult. “She just suddenly slumped over and slid off the chair. She’s breathing, I think.” The scene is safe. You have taken standard precautions. The patient is unresponsive. You have activated EMS and/or your EAP by [ex. telling the technician to call 911]. Other providers are a few minutes away with an AED. The patient is taking very weak, irregular breaths and making snorting sounds. No carotid pulse is felt. You have an adult bag-mask device in your emergency response equipment. Demonstrate what actions you would take next.

BLS PROCEDURE	BLS PROVIDER ACTION (PERFORMANCE CRITERIA)	PROMPTER
<b>Provider 1: Deliver High-Quality Compressions</b>	<ul style="list-style-type: none"> <li>▶ Position yourself and your hands.</li> <li>▶ Compress fast, at a rate of 100-120 times per minute.</li> <li>▶ Compress hard, at least 2 inches (5 cm).</li> <li>▶ Allow complete chest recoil at the top of each compression.</li> <li>▶ Do not lean on the chest between compressions.</li> <li>▶ Perform 30 compressions. Count out loud.</li> </ul>	<b><i>“Deliver high-quality compressions.”</i></b>
<b>Provider 2: Deliver Effective Breaths</b>	<ul style="list-style-type: none"> <li>▶ Use a bag-mask device.</li> <li>▶ Open the airway and give 2 rescue breaths.</li> <li>▶ Deliver each breath over 1 second in length while watching for chest rise.</li> <li>▶ Stop ventilating as soon as you see chest rise.</li> </ul>	<b><i>“Deliver effective breaths.”</i></b>
<b>Provider 1:</b>	<ul style="list-style-type: none"> <li>▶ Immediately resume high-quality chest compressions.</li> <li>▶ Count out loud.</li> </ul>	<b><i>“Immediately resume compressions.”</i></b>
<b>Provider 2:</b>	<ul style="list-style-type: none"> <li>▶ Encourage the compressor to perform high-quality compressions; fast, hard, and with complete recoil.</li> </ul>	<b><i>“Encourage the compressor.”</i></b>

# SCENARIO SHEET FIFTEEN

[Fill in the blank to adjust to your occupational setting: fire rescue, EMS, public safety, lifeguarding, dental practice, hospital, clinic, etc..]

**Out-of-Hospital Setting:** You and another BLS provider are responding to a call from [ex. emergency medical dispatch]. For a baby who stopped breathing. Upon arrival on the scene, you find a strangely calm adult holding a limp 4-month-old infant. “He’s not breathing.” The scene is safe. You have taken standard precautions. The patient is unresponsive. You activate EMS and/or your EAP by [ex. using a mobile device]. Other providers are a few minutes away with an AED. The infant is not breathing. A weak brachial pulse at approximately 30 beats per minute is felt. The skin is mottled. You have an infant-sized bag-mask device in your emergency response equipment. Demonstrate what actions you would take next.

**In-Hospital/Clinic Setting:** You and another BLS provider have responded to a shout for help from [ex. the main parking garage]. As you approach, you see a strangely calm adult holding a limp 4-month-old infant. “He’s not breathing.” You activate EMS and/or your EAP by [ex. pressing the button on the nearby emergency help point]. Other providers are a few minutes away with an AED. The infant is not breathing. A weak brachial pulse at approximately 30 beats per minute is felt. The skin is mottled. You have an infant-sized bag-mask device in your emergency response equipment. Demonstrate what actions you would take next.

BLS PROCEDURE	BLS PROVIDER ACTION (PERFORMANCE CRITERIA)	PROMPTER
<b>Provider 1: Deliver High-Quality Compressions</b>	<ul style="list-style-type: none"> <li>▶ Position yourself. Use the 2-Thumb Encircling-Hands Technique.</li> <li>▶ Compress fast, at a rate of 100-120 times per minute.</li> <li>▶ Compress the chest approximately 1 ½ inches (4 cm).</li> <li>▶ Allow complete chest recoil at the top of each compression. Do not lean on the chest between compressions.</li> <li>▶ Perform 15 compressions. Count out loud.</li> </ul>	<b>“Deliver high-quality compressions.”</b>
<b>Provider 2: Deliver Effective Breaths</b>	<ul style="list-style-type: none"> <li>▶ Use an infant-sized bag-mask device.</li> <li>▶ Tilt the head and lift the jaw up into the mask to open the airway.</li> <li>▶ Maintain a neutral “sniffing” position.</li> <li>▶ Open the airway and give 2 rescue breaths.</li> <li>▶ Deliver each breath over 1 second in length while watching for chest rise.</li> </ul>	<b>“Deliver effective breaths.”</b>
<b>Provider 1:</b>	<ul style="list-style-type: none"> <li>▶ Immediately resume high-quality chest compressions.</li> <li>▶ Count out loud.</li> </ul>	<b>“Immediately resume compressions.”</b>
<b>Provider 2:</b>	<ul style="list-style-type: none"> <li>▶ Encourage the compressor to perform high-quality compressions: fast, hard, and with complete recoil.</li> </ul>	<b>“Encourage the compressor.”</b>
<b>Provider 1 &amp; 2:</b>	<ul style="list-style-type: none"> <li>▶ Repeat CPR cycles of 15 compressions and 2 breaths for two minutes.</li> <li>▶ Switch positions.</li> <li>▶ Try to minimize interruptions to compressions to less than 10 seconds.</li> </ul>	<b>“Repeat CPR cycles for two minutes.”</b> <b>“Switch positions. Minimize interruptions.”</b>

END SCENARIO. WHAT WENT RIGHT? WHAT NEEDED IMPROVEMENT?

**Health & Safety Institute**  
1450 Westec Drive  
Eugene, OR 97402 USA  
800-447-3177

[hsi.com/brands](http://hsi.com/brands)

isbn: 978-1-945991-36-3

**AMERICAN SAFETY & HEALTH INSTITUTE**  **EMS SAFETY**

 **Health & Safety Institute™**