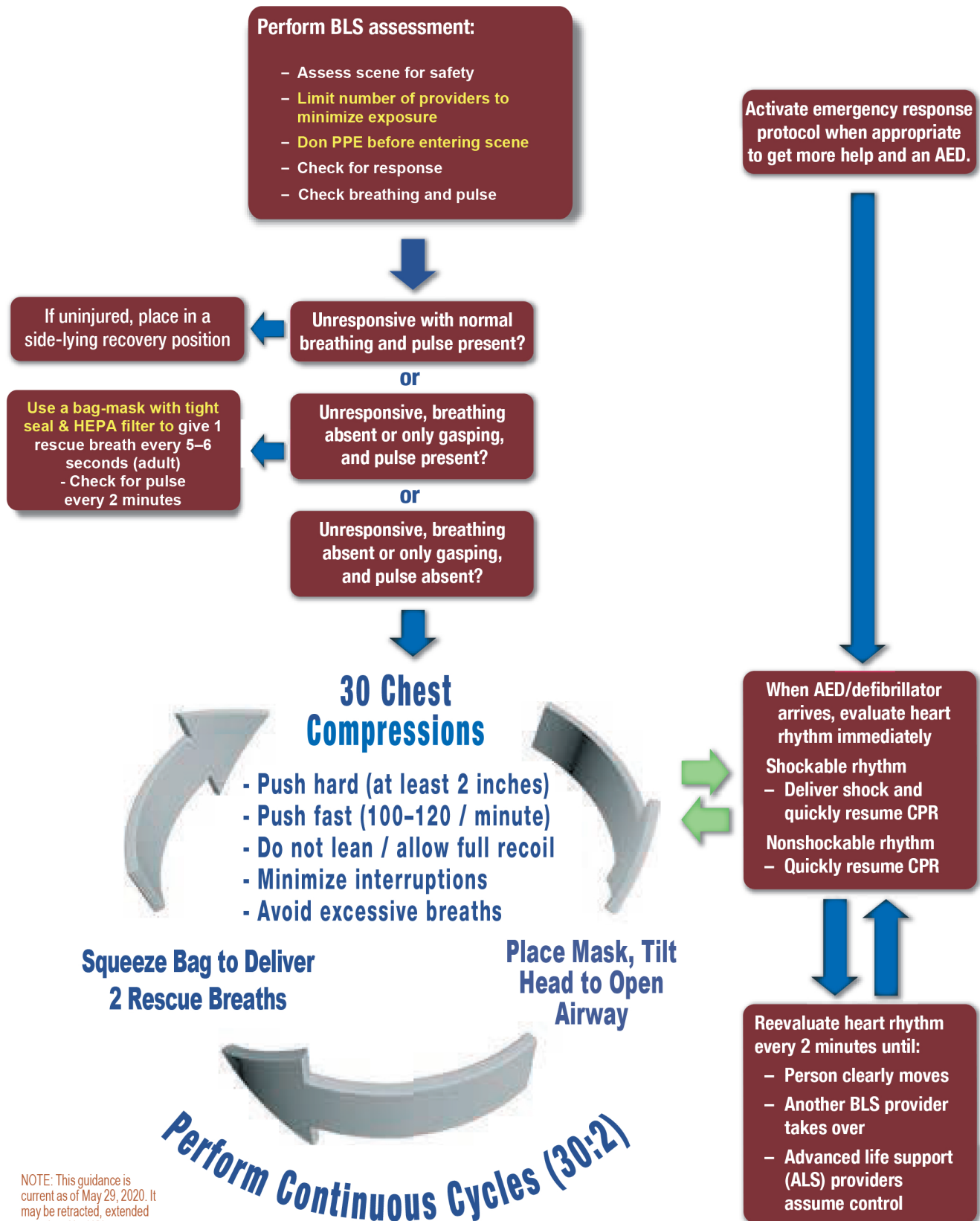


# Adult BLS Algorithm

Known or Suspected Coronavirus (COVID-19) Patient <sup>1,2</sup>

BLS CARE



NOTE: This guidance is current as of May 29, 2020. It may be retracted, extended or updated by HSI as conditions warrant.

- Edelson et al.: Interim Guidance for Life Support for COVID-19 *Circulation*. 2020 Apr 9. doi: 10.1161/CIRCULATIONAHA.120.047463.
- Information for Healthcare Professionals about Coronavirus (COVID-19) U.S. Department of Health & Human Services. Available: <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html> [Retrieved 5/28/2020]
- Alternatively and subject to local or organizational physician-directed practice protocols, use continuous compressions with passive oxygenation and a nonbreathing face mask covered by a surgical mask.

## Frequently Asked Questions

### HSI Adult BLS Algorithm for a Known or Suspected Coronavirus (COVID-19) Patient

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#### 1. Why is this algorithm necessary?

Providing basic life support (BLS) involves aerosol generating procedures (AGPs), including chest compressions and rescue breaths. During these procedures, viral particles can remain suspended in the air and be inhaled by healthcare providers and nearby others, increasing their risk of infection. Existing CPR guidelines did not deal with BLS for a patient known or suspected to be infected with COVID-19.

#### 2. What are the changes in this algorithm based on?

The changes are based on guidance issued by the American Heart Association®, Inc., in collaboration with the American Academy of Pediatrics, American Association for Respiratory Care, American College of Emergency Physicians®, The Society of Critical Care Anesthesiologists, and American Society of Anesthesiologists™, the American Association of Critical Care Nurses, National EMS Physicians<sup>1</sup> and information for healthcare professionals about coronavirus healthcare infection prevention from the Centers for Disease Control and Prevention (CDC)<sup>2</sup>.

#### 3. What are the changes recommended in this algorithm from what HSI has previously published?

The main changes reinforce minimizing exposure to AGPs by: limiting the number of rescuers to only those essential to provide care; donning personal protective equipment before entering the scene; and using a self-inflating bag-mask device with a tight seal and high-efficiency particulate air (HEPA) filter (when available) instead of using a CPR mask.

#### 4. Why is a HEPA filter recommended and how is it used?

A HEPA filter is a type of mechanical air filter, typically found in portable room air purifiers. HEPA filters can trap airborne particles the size of the virus that causes COVID-19. A HEPA filter for a bag-mask device is an accessory attachment that fits between the valve and mask of the bag-mask device - in the path of the patients exhaled gas.

#### 5. How available are HEPA filters for a bag-mask device?

Much like personal protective equipment (PPE), the current demand for HEPA filters for bag-mask devices exceeds supply. Additionally, a HEPA filter for a bag-mask device may require medical director authorization prior to use. Check your health or EMS system standards and protocols. Availability may vary considerably.

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<sup>1</sup> Edelson et al.: Interim Guidance for Life Support for COVID-19 *Circulation*. 2020 Apr 9. doi: 10.1161/CIRCULATIONAHA.120.047463. [Retrieved 5/29/20]

<sup>2</sup> Information for Healthcare Professionals about Coronavirus (COVID-19) U.S. Department of Health & Human Services. Available: <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html> [Retrieved 5/29/2020]