CPR - Layperson vs. Professional Rescuer (Healthcare Provider)

There are two levels of CPR certification: "Layperson" and "Professional Rescuer (Healthcare Provider)"

This information is intended for volunteers taking "Healthcare Provider" level CPR. There are two categories of audiences in a professional level CPR class. There are medical professionals (usually working in a medical facility) and there are volunteers who will be away from a medical facility. The following table will illustrate the differences in application of these techniques. Remember that employed providers should always follow the medical protocols of their business/employer. The next update to CPR protocols is anticipated in 2015.

For street situations a professionally trained CPR responder will probably use protocols that are a blend of professional/layperson techniques since they are not in a medical facility with advanced medical equipment. Also, understanding what all CPR responders are taught will help you work through a mixed responder situation.

CPR SKILL	LAYPERSON CPR	VOLUNTEERS USING PROFESSIONAL CPR IN THE FIELD	MEDICAL PROFESSIONALS
CPR Rate	30:2 for adult, child, infant	Use Layperson Rates and Protocols	15:2 for children and infants with 2-person CPR
Oxygen Flow Rates	Not Taught	Remember "above 6 and you're sick" rule for cannulas	Know the specific flow rates for all delivery devices
Oxygen Flow Rate Techniques	Not Taught	Start high, and reduce only as far as the bag stays inflated (field technique to extend oxygen availability)	Use the designated flow rates for all delivery devices used
Bag-Valve-Mask	Not Taught	Use the adult size, squeeze until chest rises	Know different sizes of BVM and know fractions to squeeze for adult, child, infant
Check for pulse	Not Taught	Take pulse if appropriate	Yes
Rescue breathing	Not Taught	Optional if situation appropriate, otherwise full CPR (breaths and compressions)	Yes if there is heartbeat (interval: 5-6 seconds adult, 3-5 seconds child, 3 seconds infant)
Bradycardia in infant - pulse less than 60 per minutes and symptoms of poor perfusion	Not Taught	No generally used in the field setting	Medical Facility: CPR at 15:2 with oxygen and medical organization protocols
Call First/Call Fast Rule	Not Taught	Yes	Yes

Adult difficulty breathing - less than 10 per minute	Not Taught	Optional in a field setting, start rescue breathing, check pulse every 2 minutes	Rescue breathing with medical organization protocols, check pulse every 2 minutes or via heart monitor
Airway Adjuncts	Not Taught	NPA/OPA airways used if situation appropriate	NPA/OPA usually not used in medical facility in lieu of more advanced airway options
Continuous CPR with Ventilation	Not Taught	Not generally used in a field setting	Yes in a medical facility per protocols
Pulse Locations	Carotid or Brachial (for infant)	Carotid, Radial, or Brachial (for infant)	Use all locations
Suction Techniques	Not Taught	Expedient techniques	Medical suction devices
Oxygen Use	Not Taught	Yes if signs of poor perfusions or PO2 less than 95-92%	Yes in a medical facility per protocols
Hypothermia	No changes	Check pulse for 30-45 seconds with no CPR if any rate of pulse detected	Medical organization protocols for hypothermia
AED with Hypothermia	No changes	Turn off AED after first shock until arrival at medical facility	Medical organization protocols for hypothermia
Cardiac Arrest from Trauma	Not Taught	CPR (and AED if available and injuries permit)	Medical organization protocols for field or facility settings

Agency Variations - What Everyone Should Know

Variations between agencies for CPR protocols are a significant issue for volunteers since the 2010 changes were released. Most of the national agencies have aligned with the CPR techniques above, based on the American Heart Association Emergency Cardiac Care document (ECC) and recommendations. However, there are some certification agencies that have not aligned with the other agencies. These differences will cause difficulties when responders from different agencies are working on the same victim. Understanding these variations will allow you to work more smoothly with others if these differences arise during the emergency. So, a few agencies teach that:

- Layperson CPR is sometimes taught with hands-only (compressions only) as the only option...biased towards adult, heart attack, in rapid response area. Responders with this training sometimes incorrectly conclude that breaths are no longer used in any situation and will also tell others not to use rescue breathing.
- Compressions-Airway-Breathing (CAB) for the layperson may have the variation of checking for breathing with the head-tilt/chin-lift "Look-Listen- Feel". If the victim is not breathing do not check pulse and proceed to compressions first, then breaths.
- > Some lifeguard training (near-drowning victim) teaches to check for breathing with Look-Listen-Feel and simultaneously check the carotid pulse with the other hand. If the victim is not breathing, but beating, protocols are to do rescue breathing only, at the layperson level!

We anticipate all the certification agencies address these issues in the future through alignment of their protocols. For now, do as you are trained. Prompt compressions, usually with breaths and quick AED deployment are your priority.

