1.) Why is first aid oxygen so important during a medical emergency?  
Low tissue oxygen levels (not enough oxygen to tissues and organs) usually accompany life-threatening medical emergencies. If this progresses, the brain will begin to die first, with other organs following. Additionally, low oxygen levels to the heart may lead to cardiac arrest. This is by far the most common cause of cardiac arrest in children (e.g. drowning, asthma).

2.) Who should receive first aid oxygen?  
ANY victim of a suspected serious to life-threatening illness or injury – without exception. Examples include; difficulty breathing, altered consciousness, chest pain, major trauma, etc. etc. EMS provides oxygen for almost everything serious they respond to!

3.) When should first aid oxygen be started?  
Oxygen should be started IMMEDIATELY AFTER a clear & open AIRWAY is established. However, if there is a delay retrieving the oxygen unit and CPR is required, conventional mouth-to-mouth (or mouth-to-barrier) rescue breathing should be performed until the oxygen unit is available. (see Q/A 11 for chest compression-only CPR)

4.) Will providing oxygen substitute for rescue breathing?  
NO! In the non-breathing victim, application of oxygen without rescue breathing will not benefit the victim (exception: see Q/A 11, chest compression-only CPR). It must be coupled to the rescue breathing via a CPR mask.

5.) Is oxygen still indicated after the arrest victim revives from CPR?/AED?  
YES! Oxygen should be continued until the EMS arrives. Maintaining oxygen on the revived victim may prevent relapse into cardio-respiratory arrest.

6.) Should oxygen still be provided after the victim who is breathing improves or “recovers”?  
Yes, Oxygen should be continued until the EMS arrives. Maintaining oxygen on the apparently improved or recovered victim may prevent lapse into cardio-respiratory arrest.

7.) Will emergency first aid oxygen substitute for the Heimlich maneuver?  
No. The airway must be cleared of the obstructing food or object. Oxygen alone will not help the victim. Once the obstruction is cleared (or partially cleared) (A=AIRWAY), oxygen should be applied until the victim “recovers” or EMS arrives.

8.) If I am not sure whether the victim is breathing, should I perform rescue breathing or should I put the oxygen mask on the victim and wait & see what happens?  
If it is unclear whether the victim is breathing, start rescue breathing (preferably enriched with emergency oxygen). By responding in this manner, you will not harm the person if they are breathing. Do not just put the oxygen mask on and “wait & see”. If they are not breathing or breathing is inadequate, they may deteriorate to full arrest without rescue breathing.

9.) If the victim appears to have difficulty breathing, should I apply emergency first aid oxygen?  
YES. If the victim has labored breathing, applying emergency oxygen is one of the most important responses you can make to potentially prevent an arrest.

10.) If the victim can’t tolerate the oxygen mask on their face, what should I do?  
Hold the mask just adjacent to the face. Most of the oxygen will still get into the victim’s mouth & nose.

11.) With chest compression-only CPR can oxygen help?  
YES. Providing oxygen to the face of the victim may increase the oxygen concentration of the victim’s recoil inhalations between compressions & any agonal (gasp) inhalations that occur. However, do not delay chest compressions (or rescue breaths if also providing) if the oxygen unit is not immediately available. Employ it when brought by another person to the scene.

12.) If I am not sure whether to give first aid oxygen, what should I do?  
GIVE IT! It is far better to over-use it than to under-use it & miss an opportunity. Remember, it is not harmful & may save a life &/or a brain!

13.) How is emergency first aid oxygen employed?  
For the victim who is breathing, emergency oxygen via a mask increases the oxygen concentration of the inhaled air. For the victim who requires rescue breathing, emergency oxygen fed into a CPR mask enriches the oxygen concentration of the breath being blown into the victim by the rescuer. In either case, the amount of oxygen available to the victim is greatly increased.

14.) Can first aid oxygen ever be harmful during a medical emergency?  
Oxygen provided at the flow-rate and endurance of a Lif-O-Gen unit is NEVER harmful during a medical emergency. It increases the likelihood of a better outcome for the victim. The potential harmful effects of oxygen occur at higher flow rates or after prolonged use (more than 5 hours). Pulse oximetry is not necessary to administer Lif-O-Gen. The medical literature & publications now state that oxygen DOES NOT suppress respiratory drive (in COPD), and is important to almost all victims of sudden life-threatening illness or injury.
15.) Does emergency oxygen require a doctor’s prescription?
NO. Oxygen is a drug when given in concentrations beyond what is in ambient air (20.8%) & when used for medical treatment. The Food & Drug Administration (FDA), the regulating government agency for medical oxygen, requires a prescription, but has EXEMPTED this requirement for emergency applications IF the user has had training in its use. Since September 1996 the FDA requires all medical oxygen sold in the U.S. to bear the following statement on the label: “For emergency use only when administered by properly trained personnel for oxygen deficiency & resuscitation. For all other medical applications, Rx Only”. In order to be considered an over-the-counter (OTC) device, i.e. “non-prescription” device, the oxygen delivery system must be capable of providing a minimum flow rate of 6 liters per minute for a minimum of 15 minutes. This OTC status refers to the empty unit only, i.e. the device, & not the oxygen. With regard to a unit filled with oxygen, the supplier of a filled unit or an oxygen refiller may ask the recipient for evidence of training within the past 24 months per compliance with the exemption, as above.

16.) Who can provide emergency first aid oxygen?
Anyone properly trained in its use (as stated in the above FDA labeling requirement). FDA, OSHA, & other concerned agencies do not define what constitutes proper training. FDA has advised that providers should be familiar with the manufacturer’s directions & instructional materials & be trained on the specific device to be used.

17.) What are the legal requirements for maintaining a first aid oxygen unit?
Federal regulations (under the DOT) regarding refillable oxygen cylinders require hydrostatic pressure testing (or equivalent) of the cylinder every five (5) years, but only if & when the cylinder is refilled. This is accomplished by the refilling agency. For the owner/user there is no requirement or reason to pull a unit from service for this unless there has been an incident of cylinder abuse. Additionally, periodic (5 yr) confirmation of the regulator flow parameters is recommended & can be done at the time of a forthcoming fill. Again, there is no requirement to remove the unit from service for this.

18.) Is oxygen dangerous? Can’t it catch fire and explode?
Oxygen does not “catch fire” or explode. It supports and accelerates existing combustion. In the Lif-O-Gen Automated unit it is contained and compressed in a high pressure cylinder with safety features built-in. It is perfectly safe when properly handled & used for life saving.

19.) How much oxygen should I have on-hand?
The legal minimum is 15 minutes but a good rule of thumb is to determine what the average EMS response time to your facility is, and have enough to last twice as long as the response time. In most circumstances a 30 to 45 minute supply is sufficient.

20.) Does OSHA have any specific regulations regarding first aid oxygen units?
No. It must be stored and handled in compliance with all compressed gases. There are no special instructions or record keeping required by OSHA. The FDA however, has recommended compliance with an observation & function checklist for each unit to help ensure dependability.

21.) What about the OSHA Bloodborne Pathogen policy (CFR Title 29. part 1910.1030)?
Although it is not specifically a part of the standard, it is important to follow the standard should your unit or its components (i.e., CPR mask, tubing) become contaminated with blood or other potentially infectious materials, & dispose of and replace as required.

22.) With Lif-O-Gen is it necessary to remove the (flowing) oxygen mask from the victim’s face prior to an AED shock?
No. With the mask flowing on the victim’s face, oxygen concentration in the surrounding area is down to ambient (20.8%) at 3 inches distance from the mask. There is no excess oxygen in the area of AED electrodes to increase fire risk.

23.) Can you get a shock by touching the Lif-O-Gen unit or tubing with mask on Victim’s face during an AED shock?
No. Per testing, the mask & tubing are not conductive at the energy outputs of any AED.

24.) Is first aid oxygen administration covered under the Good Samaritan laws? Other liability coverage?
Yes, when the Good Samaritan law applies, it is covered as a component of first aid. Additionally, the manufacturer Allied Healthcare Products provides INDEMNITY for the facility that provides & the responders that administer Lif-O-Gen Automated First Aid Oxygen.

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