



20 Common Questions About Emergency Oxygen

1. Why is emergency medical oxygen so important during a medical emergency?

Life-threatening medical emergencies are usually accompanied by low tissue oxygen levels (not enough oxygen supply to tissue and organs). 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. After AIRWAY, supplemental oxygen is the most important first step in treatment.

2. Who should receive emergency medical oxygen?

Any victim of potentially life-threatening illness or injury – without exception.

3. How is emergency medical 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.

4. When should emergency oxygen be started?

Emergency oxygen should be started IMMEDIATELY AFTER a clear and open AIRWAY is established. However, if there is a delay in retrieving the oxygen unit and CPR is required, conventional mouth-to-mouth (or mouth-to-barrier device) rescue breathing should be performed until the oxygen unit is available. Use of an automated external defibrillator (AED) obviously takes priority over oxygen (and should be administered as soon as possible), however, oxygen may greatly enhance the effectiveness of defibrillation.

5. Can oxygen ever be harmful in a medical emergency?

Oxygen is NEVER harmful during a medical emergency. It always enhances the likelihood of a better outcome for the victim. The potential harmful effects of oxygen occur after prolonged use (more than 5 hours). New research (started in the 1980s) and publications find that oxygen DOES NOT suppress respiratory drive, and is important to ALL victims of sudden life-threatening illness or injury.

6. Will emergency oxygen substitute for rescue breathing?

NO! In the non-breathing victim, application of oxygen without rescue breathing will not benefit the victim. It must be coupled with rescue breathing via a CPR mask (as the TX02 is configured).

7. Is oxygen still needed after the arrest victim revives from CPR?

YES! Oxygen should be continued until the EMS arrives. Maintaining oxygen on the revived victim may prevent relapse into cardio respiratory arrest.

8. Is oxygen still needed after the victim who is breathing improves or “recovers”?

YES! Oxygen should be continued until the EMS arrives. Maintaining oxygen on the improved or “recovered” victim may prevent relapse into cardio respiratory arrest.

9. Will emergency 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 (A = Airway), oxygen should be applied to aid in recovery.

10. 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 and see?

If it is unclear whether or not the victim is breathing, start rescue breathing (preferably with emergency oxygen). By responding in this manner, you will not harm the person if he/she is breathing. However, do not put an oxygen mask on and “wait and see” if they are breathing, if breathing too little, or not moving any air (agonal) they may deteriorate to full arrest.

11. If the victim has not had a respiratory or cardiac arrest but appears to have difficulty breathing, should I apply emergency 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.

12. If the victim cannot tolerate the oxygen mask on his/her face what should I do?

Hold the mask adjacent to the face. Much of the oxygen will still get into the victim’s mouth and nose.

13. Does emergency oxygen require a doctor’s prescription?

NO. Oxygen is a drug when it is given in concentrations beyond what is ambient air and when used for medical treatment. The Food and Drug Administration (FDA), the regulating government agency for oxygen, requires a prescription for medical oxygen, but has EXEMPTED this requirement for emergency applications since 1972. Since September of 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 and resuscitation. For all other medical applications, CAUTION: Federal law prohibits dispensing without a prescription.”

In order to be considered as an over-the-counter (OTC) device, i.e. “non-prescription”, the oxygen device must provide a minimum flow rate of 6 liters per minute for a minimum of time of fifteen minutes.

14. Who can provide emergency oxygen?

Anyone properly instructed in its use (as stated in the above FDA labeling requirement). FDA, FAA, OSHA and other concerned agencies DO NOT determine what constitutes proper training. Providers should be familiar with the manufacturer’s directions and instruction materials.

15. What are the legal requirements for maintaining an emergency oxygen unit?

Federal regulations (under the DOT) regarding refillable oxygen cylinders require hydrostatic testing of the cylinder every five (5) years, but only if and when the cylinder is refilled. This is accomplished by the refilling agency. Unless you are a certified refilling site, you should NOT refill your own cylinders. Disposable cylinders do not have this requirement, but MUST NOT be refilled under any circumstance.

16. Isn't oxygen dangerous? Can't it catch fire and explode?

Oxygen does not "catch fire" or explode! It supports and accelerates combustion. Oxygen is perfectly safe when handled and used properly.

17. How much oxygen should I have on-hand?

A good rule of thumb is to determine what the average EMS response time is to your facility and have enough to last twice as long as the response time. In most circumstances a ½ hour to 1 hour supply is sufficient.

18. Does OSHA have any specific regulations regarding emergency oxygen?

NO. It must be stored and handled in compliance with all compressed gases. There are no special instructions or record keeping required.

19. What about the OSHA Blood borne 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) become contaminated with blood or other potentially infectious materials, and dispose of or clean as required.

20. If I am not sure whether to give emergency oxygen, what should I do?

GIVE IT! It is far better to over use it than to under use it and miss the opportunity to improve the victim's condition. REMEMBER, it is not harmful and may save a life!

Key Points from the American Heart Association's Emergency Cardiac Care Guidelines 2000 Relating to Emergency Oxygen:

- Deletion of warning to use lower flow rates for COPD. "Short-term therapy with 100% oxygen is beneficial and not toxic."
- Emphasis on the "Expanded Scope of ECC" to intervene in disorders that may deteriorate to cardiac arrest so as to avoid the need for resuscitation.
- The use of smaller tidal volumes during rescue ventilation (if supplemental oxygen is coupled) to minimize GI ventilation and consequent regurgitation.
- The continued emphasis on the use of supplemental oxygen for cardiopulmonary emergencies during basic life support (BLS).

Ref: American Heart Association's Emergency Cardiac Care Guidelines 2000