

# The Critical Role of Oxygen in Dental Practices with Zev Schulhof, DMD, MD



Zev Schulhof holds a dental degree from the University of Medicine and Dentistry of New Jersey and a medical degree from the Mount Sinai School of Medicine in New York. Dr. Schulhof then completed a General Surgery internship at Mount Sinai Hospital, where his Oral & Maxillofacial surgical training included a Chief Residency at Mount Sinai Hospital. Dr. Schulhof continues to be involved in residency training while maintaining his busy private practice in Teaneck, NJ.

## In what types of situations would you need to administer oxygen to a patient?

Oxygen may be needed in various situations, including:

- In the case of syncope (fainting): A patient may feel lightheaded or faint due to low blood pressure or stress, necessitating oxygen to restore oxygenation
- Respiratory distress: Conditions like asthma, COPD, or allergic reactions can compromise a patient's ability to breathe properly
- Cardiac emergencies: If a patient experiences chest pain or a heart attack, oxygen may be needed to support heart function
- Severe bleeding: Excessive blood loss can lead to decreased oxygen delivery, requiring supplemental oxygen

## How does oxygen help manage medical emergencies in a dental setting?

Oxygen helps manage medical emergencies by:

- Restoring oxygen levels: In emergencies like respiratory distress, syncope, or cardiac arrest, providing oxygen helps ensure that vital organs like the brain and heart continue to receive sufficient oxygen
- Stabilizing the patient: Oxygen can prevent further deterioration of the patient's condition, stabilizing their vital signs until more advanced care can be provided
- Supporting recovery: Administering oxygen during or after procedures helps promote healing and recovery, reducing the risk of complications or further distress

## What are the most common medical emergencies in a dental office where oxygen is required?

The most common emergencies where oxygen is required include:

- Syncope (fainting): Often triggered by anxiety, pain, or the vasovagal response
- Respiratory distress: Caused by conditions such as asthma attacks, allergic reactions, or airway obstruction
- Cardiac events: Chest pain, heart attacks, or arrhythmias can occur, requiring supplemental oxygen
- Hypotension (low blood pressure): Can cause dizziness, fainting, or loss of consciousness, often leading to a need for oxygen to stabilize the patient

## How does oxygen administration impact the outcome of emergencies like syncope, respiratory distress, or cardiac events?

- Syncope: Oxygen helps restore oxygen levels to the brain, aiding in a quicker recovery from fainting episodes by increasing blood oxygenation and promoting consciousness
- Respiratory distress: Oxygen helps open up airways, improving lung function and alleviating symptoms like shortness of breath or wheezing, stabilizing the patient until further treatment is provided
- Cardiac events: In the case of a heart attack or arrhythmia, oxygen administration helps reduce the strain on the heart by ensuring it has the oxygen it needs to function, reducing the risk of further damage

## Are there any risks or contraindications to administering oxygen in an emergency situation?

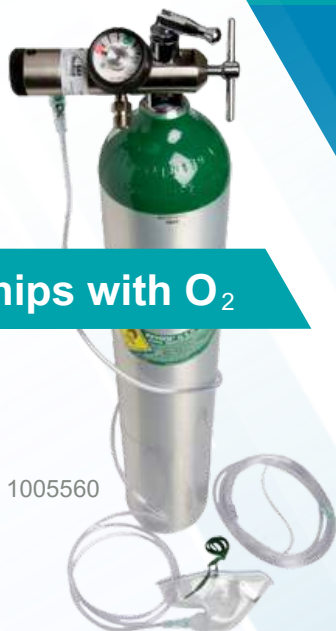
Generally, oxygen is very safe, but there are some potential risks or contraindications to be aware of:

- Hyperoxia: Excessive oxygen levels can cause oxygen toxicity, leading to damage to tissues, particularly in the lungs, over extended periods
- Chronic obstructive pulmonary disease (COPD): In some COPD patients, too much oxygen can suppress their natural drive to breathe, which can worsen respiratory function
- Certain types of trauma: If there is a head injury, administering high-flow oxygen can raise intracranial pressure in some cases, which requires careful monitoring

## How do you ensure that your oxygen supply is always ready for use?

If you do not have a central system, and are using portable tanks, here are some tips for preparedness:

- Regular checks: Frequently inspect the oxygen tanks or systems to ensure they are full and functioning properly
- Proper storage: Store oxygen tanks safely in a designated area, away from heat or flammable materials, and in a way that they are easily accessible during emergencies
- Most important!—Training and preparedness: Ensure that all team members know how to use the oxygen equipment and are trained in emergency protocols



**Ships with O<sub>2</sub>**

1005560

### HealthFirst's Basic Emergency Oxygen System

offers a convenient and reliable solution for delivering emergency oxygen to both adult and pediatric patients. Our oxygen bundle includes: a pre-filled E-Cylinder, a variable regulator, supplemental oxygen masks (for both adult and child patients), an oxygen hose, and a nasal cannula.

This comprehensive set is the ideal choice for your practice's emergency preparedness.

**Visit [healthfirst.com](https://healthfirst.com) for additional product information!**



[healthfirst.com](https://healthfirst.com) | (800) 331-1984