| Nature of risk | Severity / Likelihood | Steps to avoid | Improvement |
| --- | --- | --- | --- |
| Combustability | H | No smoking in vicinity of cylinders  Cylinders turned off between uses to ensure no accidental leaks  No other electrical appliances / outlets within 5 feet of cylinder or patient delivery outlet |  |
| Transport | H | Warning labels present on vehicle to alert emergency services  Clear labelling on transport bag |  |
| Appropriate use | H | Only use when clinically necessary and safe to do so medically  Ensure cylinders are in good order and in date  Regular servicing / replacement of cylinder  All delivery systems sterile and in date  Avoid all grease based materials coming in contact with cylinders or apparatus |  |
| Storage | H | Store safely in licked area to avoid inappropriate use or theft  Store in dry well ventilated area | Remove from car when not in use and store in a better ventilated area |



**Risk assessment**

17th November 2022

Date of review 17th November 2024

Carried out by Dr Rob Endicott

**Oxygen policy and Risk Assessment**

November 2022

**This policy applies to all UKSedation sedationists who carry emergency oxygen cylinders.**

This document is designed to assist practitioners in the safe storage, transport and use of emergency oxygen.

UKSedation is a group of dental sedationists who visit multiple practices delivering intravenous sedation to patients.

Some of the group carry oxygen cylinders.

The oxygen cylinders carried are for supplemental use only, they are not the primary source of Oxygen in the practice. They are designed to aid improving oxygen saturation levels immediately without disrupting the day to day operation of the dental practice. However if oxygen is required, the practices will provide their own oxygen supply.

At each booking, the practice needs to sign to say they have a full oxygen cylinder already in the practice, as per CQC guidelines. A booking will not be carried out if it is found that emergency oxygen is not available.

It is the responsibility of each practice to ensure an adequate oxygen provision in the practice. It is the responsibility of the sedationist to ensure that the oxygen supply they carry is:

In date

Within the green band of use before each surgery

Are free of defects and damage as per regular visual inspection

Regularly serviced as per manufacturers instructions

Carried safely in a car with the appropriate warnings easily visible to emergency services

All nasal and full mouth airway devices and delivery systems are sterile and in date

That they know where the practices own emergency oxygen resides

The cylinder must be able to deliver full flow oxygen at 15l/min for 30 mins

It is not common practice to administer supplemental oxygen at all times to a sedated patient, only when the patient is in a state of moderate conscious sedation or accidentally into deep sedation and the oxygen saturation rates are not recovering using verbal encouragement to breath and light touch.

All uses of supplemental or emergency oxygen must be clearly recorded in the clinical records.

Oxygen must be used by personnel trained in its use.

The maximum dose of oxygen through a nasal cannula is 5l/min

The minimum dose of oxygen through a Hudson mask is 5l/min

The dose through a non rebreathe mask is 15l/min

When on oxygen, pulse oximetry must be carried out.

In patients with chronic carbon dioxide retention, oxygen administration may cause further increases in carbon dioxide levels, respiratory acidosis and decreased conscious level.   
This may occur in patients with COPD, neuromuscular disorders, morbid obesity or musculoskeletal disorders.

Oxygen should be stored in an area designated as no smoking.

Electrical appliances should be kept at least five feet away from the source of oxygen.

Avoid oil, grease, alcohol gel or yellow soft paraffin coming into contact with oxygen and apparatus.

Store unused oxygen cylinders in a dry well ventilated place.

**Date of review of policy November 2024**