

## 5.6.4 OXYGEN SOURCES

Medical oxygen is supplied as a compressed gas in seamless metal cylinders. There are two common types of cylinder used in the ski patrol context:

- Black C style cylinder;
- BOC Inhalo cylinder.

Each is described below.

Medical grade oxygen in aviation or mining industries may also use a green cylinder. Any other colour cylinder or **an unidentified cylinder must not be used**.

### 5.6.4.1 Conventional Medical Oxygen

The conventional medical grade Oxygen cylinder is coloured black with white shoulders. Medical Oxygen cylinders are available in various sizes but have a standard outlet valve which will only accept an oxygen regulator.

The most convenient cylinder for ski patrolling is size 'C', which holds 440 litres when filled to 13.5 megapascals (MPa). To find out how long the supply will last, divide the volume of gas by the flow rate; e.g. at a rate of 5 litres per minute, there are 88 minutes of oxygen available in a full cylinder, and at 14 L/min about 30 minutes of supply is available.



Figure 77 'C' size Oxygen cylinder and regulator

The pressure in the cylinder is too high for medical use so a pressure regulator is fitted to reduce the outflow pressure. Most regulators have a flow meter which enables different flow rates of oxygen to be delivered.



#### 5.6.4.2 BOC Inhalo Cylinder

The BOC Inhalo cylinder is a lightweight aluminium cylinder with Kevlar encasement. The cylinder comes complete with integral open/close valve, regulator for therapy and suction, therapy flow control, and contents gauge.

The Inhalo cylinder is white, with "Oxygen" printed in large type down the side.

The Inhalo cylinder holds 630 litres. At a rate of 5 litres per minute, there are 126 minutes of oxygen available in a full cylinder, and at 14 L/min about 45 minutes of supply is available.



**Figure 78 Inhalo Oxygen cylinder and integral regulator**

