# NHS Lothian Safe Use of Medicines Policy & Procedures – January 2018

## 28.13 Appendix 3 - Guidelines for the safe use of oxygen in the home

These guidelines are intended to supplement practical training and demonstration and for reference. Ensure that you know how to handle, store and operate medical gas equipment while the trainer is present.

### **Storage of cylinders**

- Keep cylinders under cover, preferably inside, and not subjected to extremes of heat or cold.
- Keep areas where cylinders are stored dry, clean and well ventilated.
- Store cylinders in separate areas away from highly flammable liquids and other combustible material and away from sources of heat and ignition.
- Store cylinders so that they do not become dirty or rusty. They must never be repainted, have any markings obscured or any labels removed.

## **Preparation for use**

- Cylinder valves and associated equipment must never be lubricated and must be kept entirely free from oil and grease.
- First, remove the disposable coloured seal fitted to the valve by tearing it. The valve cap may then be removed from the valve outlet but should not be discarded, so that it can be replaced when the cylinder is empty.
- Check the valve for signs of oil or grease. If oil or grease is discovered on the valve, do not use the cylinder but return to your pharmacist as soon as possible.
- Open the valve for a few seconds to blow any grit or foreign matter out of the valve outlet. Hold the jet away from your body during the process.
- Ensure that the connecting face on the regulator bullnose is clean and that the 'O' ring is in good condition.
- Attach the regulator. Only a reasonable amount of force should be used to tighten the regulator to the valve.
- Use the appropriate regulator and follow the regulator operating instructions.
- Slowly, open the cylinder valve fully. Then close the valve one-quarter turn to distinguish between an open and closed valve.

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#### Leaks

- A hissing noise may indicate a leakage of gas.
- Leaks may occur at the connection between the valve and the regulator. Check by closing the cylinder valve. A fall in the reading on the pressure gauge attached to the equipment confirms a leak at this connection. Tighten the connection to the valve or replace the 'O' ring seal to cure the leak. Sealing or jointing compounds should never be used to cure leaks.

Cylinders with damaged or leaking valves or leaks in other parts of the equipment should be labelled and returned to the pharmacist as soon as possible, with a note of the nature of the fault.

### **Use of cylinders**

- Whenever practical, keep cylinders near to an exit so that they can be removed quickly in an emergency such as a fire. However, make sure that they do not block the exit.
- Before use, ensure that the cylinder is placed in a safe position, secured so that it cannot fall over.
- Do not allow smoking or naked lights in the same room as a cylinder in use, or areas where cylinders are stored.
- Only sufficient force should be used to close a cylinder valve. Excessive force will result in damage to the valve.
- Always close the cylinder valve directly after use, and release the pressure in the regulator.
- When the cylinder is empty, close the valve and place the plastic cap over the valve outlet to prevent moisture entering the cylinder.
- Do not keep empty cylinders. Advise your pharmacist to collect them as soon as possible.

#### Procedure in the event of a fire

- As soon as a fire is discovered notify the fire services, warning them of the presence of compressed gas cylinders.
- Keep cylinders that have been involved in a fire apart from other cylinders. Do not use them
  under any circumstances. Inform your pharmacist immediately so that they can be returned
  to the supplier.