Top tips on care and handling of oxygen cylinders and their regulators

- Staff should be fully trained in the use of oxygen cylinders, the attachment of regulators if required, and aware of all the related risks such as fire and manual handling.

- Carry out full checks on oxygen cylinders and their regulators prior to each use and ensure that they contain enough oxygen for the required therapy. In patient transfers ensure there is sufficient oxygen for the whole journey, allowing for changes in oxygen requirements and delays such as faulty lifts or heavy traffic.

- Check the cylinder labels to make sure the oxygen is within its use-by date and any regulators attached are suitable for the cylinder pressure and have been serviced regularly.

- Ensure hands are clean before handling oxygen cylinders due to the risk of combustion from oils and grease. In particular, make sure that hands are adequately dried after the use of alcohol gels.

- Make sure that the oxygen cylinder outlet and oxygen regulator inlet are clean before attaching a regulator. Always open the cylinder slowly and check for leaks. Close cylinder valves when not in use and before returning the cylinder to the supplier.

- Handle oxygen cylinders with care. If the cylinder is dropped or knocked in use it must be checked before further use; cylinders with integral valves should be returned to the supplier; separate regulators should be sent to the service department for inspection.

- Have spare cylinders available, ensure they are full and have an opening key if required.

- Ensure oxygen cylinders are securely attached to beds, trolleys or walls when in use. Modern light-weight oxygen cylinders can be damaged by sharp objects such as securing screws.

- Store oxygen cylinders in a secure area that is well ventilated, clean and dry. This area must be free from any sources of ignition such as patients/staff smoking or machinery.

- If using a bull-nose regulator, double-check you are attaching it to an oxygen cylinder as they can be mistakenly fitted onto cylinders of medical air and other gases.

- Carry out magnetic testing of all oxygen cylinders, and their attachments, before taking them into an MRI environment.

- Report defective oxygen cylinders to the Defective Medicines Reporting Centre (DMRC) and defective detachable regulators to the Adverse Incident Centre (AIC), both at the MHRA (www.mhra.gov.uk).