



# Safety Notice 19/18

## Oxygen Cylinders with Integrated Valve Regulator

**29 November 2018**

**Distributed to:**

- Chief Executives
- Directors of Clinical Governance
- Regulation and Compliance Unit

**Action required by:**

- Chief Executives
- Directors of Clinical Governance

**We recommend you also inform:**

- Heads of Department
- Directors of Nursing and Midwifery
- Nursing Unit Managers
- Biomedical Engineers

**Expert Reference Group**

Content reviewed by:

- Director Patient Safety
- HealthShare NSW
- Director Clinical Governance

**Clinical Excellence Commission**

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**Review date**

November 2019

### Background

There have been a couple of incidents in NSW relating to the use of oxygen cylinders with an integrated valve regulator (IVR). These cylinders are most commonly used when moving or transferring patients and may cause a potential problem for patients with high oxygen requirements.

The integrated valve regulator combines the cylinder, regulator, flow meter and valve in a single system. In NSW there are three models in use. These are; Air Liquide, Coregas and BOC. The Air Liquide uses a different method of operation to Coregas and BOC Inhalo oxygen cylinders with IVR.



The Coregas and BOC Inhalo cylinders with IVR allow the user to turn on the oxygen flow dial without first turning on or engaging the cylinder. The risk is that the user may believe oxygen is being delivered by turning on the oxygen flow dial, when in fact there is no oxygen flowing if the cylinder has not first been turned on.

### Strategies to ensure oxygen is being delivered as intended

Facilities using or transitioning to the integrated valve system should:

- Ensure there is a robust training and implementation program for the new equipment to all relevant staff groups
- Consider the use of laminated guides at the point of care
- Provide opportunities for staff to familiarise themselves with the equipment in a non-urgent situation

During use of oxygen, clinicians should:

- On commencing oxygen therapy, always check the cylinder valve is open
- Check that there is a flow of oxygen from the outlet prior to applying to the patient
- A Registered Nurse or Medical Officer must always check the correct set up is in place.
- Use an oxygen saturation monitor where appropriate to monitor patient's response to treatment.
- Recheck equipment if the patient is not responding as expected.

NOTE: The initial 'hiss' sound is not an indication of continuous oxygen flow.

### Recommended actions by Local Health Districts/Networks

1. Forward information to appropriate area for action.
2. Identify whether these oxygen cylinders are used in your organisation.
3. Consider whether additional training or information is required in your local areas to reduce the risk of incorrect use of oxygen cylinders.
4. Report to CEC if these cylinders are in use in your organisation.
5. Ensure a system is in place to document actions taken.