Oxygen safety in hospitals: information for nurses, midwives and Allied Health Professionals (AHPs)

In September 2009, the National Patient Safety Agency (NPSA) issued a Rapid Response Report (RRR) to all hospital settings with actions to improve oxygen safety. Full details are available from www.nrls.npsa.nhs.uk/alerts.

Why did the NPSA do this?
Oxygen is one of the most common medicines used in hospital settings and should always be prescribed – except in emergencies, where oxygen should be given first and documented later. Oxygen can save lives by preventing severe hypoxaemia. However, there is a potential for serious harm and even death if it is not administered and managed appropriately. Common safety concerns from the review of incidents, local investigations and other sources are:

<table>
<thead>
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<th>Prescribing</th>
<th>failure to or wrongly prescribed</th>
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<tbody>
<tr>
<td>Monitoring</td>
<td>patients not monitored, abnormal oxygen saturation levels not acted upon</td>
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<tr>
<td>Administration</td>
<td>confusion of oxygen with medical compressed air, incorrect flow rates, inadvertent disconnection of supply</td>
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<tr>
<td>Equipment</td>
<td>empty cylinders, faulty and missing equipment</td>
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What is the NPSA asking your organisation to do?
The NPSA has asked your organisation to:
- minimise the use of oxygen cylinders on wards;
- ensure reliable and adequate supplies of oxygen cylinders in transfer and emergency situations;
- assess the risks of confusing oxygen and medical compressed air;
- ensure that oxygen is prescribed and pulse oximetry is available;
- ensure a multidisciplinary group has responsibility for the safe use of oxygen in your hospital.

For staff administering oxygen: What can YOU do?
Because of the risks from poor oxygen management, staff should ask:
- Am I aware of the patient’s diagnosis and target saturation?
- Does the flow rate need adjusting to achieve that patient’s target saturation?
- Am I familiar with the equipment to do this, and have I checked they are in working order (e.g. face mask/nasal cannulae)?
- Have I recorded the oximetry results (saturation levels)?
- Is the tube connected to the right outlet ie oxygen not air?

When using cylinders:
- Have I checked the amount of oxygen in a cylinder before using it?
- Have I calculated how long the oxygen in the cylinder will last?
- Do I make sure empty or near-empty cylinders are replaced immediately?

If something has gone wrong, have I reported this as an incident?

Further information at: www.nrls.npsa.nhs.uk/alerts
Full clinical guidelines at: www.brit-thoracic.org.uk