



# British Thoracic Society Emergency Oxygen Audit 2012 (national audit period 15 August – 1 November 2012)

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The British Thoracic Society (BTS) Guideline for Emergency Oxygen Use in Adult Patients <sup>(1)</sup>, the first national (or international) guideline on this topic, aimed at simplifying oxygen delivery and enhancing the management of acutely ill patients, was published in October 2008.

The Guideline was prepared by a multidisciplinary working group and published with the endorsement of 22 professional institutions, across emergency medicine, intensive care, physiotherapy, primary care, anaesthetics and the ambulance service.

The Guideline’s key recommendations include:

- Oxygen therapy should be adjusted to achieve target saturations rather than giving a fixed dose to all patients with the same disease.
- Oxygen will require a prescription in all situations except for the immediate management of critical illness.

The fifth audit of emergency oxygen use in UK hospitals took place in August – November 2012.

The 2008 baseline audit provided data from 99 hospitals, involving 14,830 patients in 712 wards. The 2009 audit gave data from 47 hospitals, involving 7,113 patients in 300 wards. The 2010 audit obtained data from 90 hospitals, involving 22,017 from 1026 wards. The 2011 audit collected data from 156 hospitals, involving 41,009 patients in 1919 wards.

In 2012, 145 hospitals submitted data on 38,094 patients in 1733 wards.

**Table 1: A summary of the main elements of the audits over the past 5 years**

Year	2008	2009	2010	2011	2012
Hospitals	99	47	90	156	145
Wards	712	300	1,026	1919	1733
Patients	14,830	7,113	22,017	41,009	38,094
Percent on oxygen	17.5%	18.4%	15.5%	13.7%	14.0%

In 2008, 32% of patients who were using oxygen had some sort of written order for oxygen use. In 2012, this figure had risen to 52% of patients.

**Table 2: A summary of oxygen use over the past 5 audits**

Year	2008	2009	2010	2011	2012
Percent On oxygen	17.5%	18.4%	15.5%	13.7%	14%
Target Range	10%	40%	41%	43%	46%
No Written Order	68%	31%	44%	52%	48%
Percent of all hospital patients on oxygen with no written order	11.9%	5.7%	6.8%	7.1%	6.7%

The national audits from 2008 to 2012 have shown that oxygen prescribing has improved since the publication of the BTS Emergency Oxygen Guideline in October 2008 but many patients were still being given oxygen with no prescription in late 2012 and there is some evidence that clinical staff may not always respond appropriately to patients with high or low oxygen saturation levels.

The 2013 National Emergency Oxygen Audit takes in August – November 2013 and further details are available on the BTS audit system at:

<https://audits.brit-thoracic.org.uk/>