

# OXYGEN SURVEY

## **PART 1 - DEMOGRAPHICS**

Question 1. In which country do you currently practise? [multi choice]

NZ

Australia

Other

Question 2. How many years since you obtained FANZCA fellowship? [multi choice]

<5 years

5-10 years

11-20 years

> 20 years

Question 3. What is your sex? [multi-choice]

Female

Male

Question 4. Which hospital and work type best describes where you spend the greatest number of hours? If your time is divided equally between locations please select all relevant options. [Tick box]

Clinical work in a rural setting

Clinical work in a secondary public hospital

Clinical work in a tertiary public hospital

Clinical work in private hospitals

Non-clinical anaesthesia

Other [text box]

## **PART 2 - PRACTICE PATTERNS**

Question 5. Which of the following statements best describes your approach to intraoperative oxygen administration in an elective surgical case during the maintenance phase of general anaesthesia, for a patient with no specific clinical indication for either high or low FiO<sub>2</sub>? [Multi choice]

- I aim to maximise oxygen administration
- I titrate inspired oxygen to achieve a level of SpO<sub>2</sub> that I feel is safe
- I aim to minimise oxygen administration
- I am inconsistent with my delivery of inspired oxygen
- Unsure

Question 6. What amount of inspired oxygen would you usually administer during the maintenance phase of anaesthesia in a patient where the SpO<sub>2</sub> is stable and in your judgement is not sufficiently low that you need to give more oxygen than you usually would? (Enter a value for FiO<sub>2</sub> between 0.21 - 1.0)

- Free text value 0.21 -1.0 accepted]

Question 7 What lower limit of SpO<sub>2</sub> would you consider to be acceptable (the lowest SpO<sub>2</sub> value that you would not increase FiO<sub>2</sub> if sustained > 60 seconds) during the maintenance phase of general anaesthesia in an elective case?

[Free text 80 to 100% accepted]

Question 8. Which of the following statements best describes your approach to oxygen prescription in the post-anaesthesia recovery unit following an elective surgical case under general anaesthesia for a patient with no specific clinical indication for either high or low FiO<sub>2</sub>? [Multi choice]

- I aim to maximise oxygen administration
- I ask for titrated oxygen to achieve a level of SpO<sub>2</sub> that I feel is safe
- I aim to minimise oxygen administration
- I am inconsistent with my prescription of inspired oxygen
- I am unsure
- 

Question 9. What amount of inspired oxygen would you usually prescribe for the post anaesthesia recovery unit in a patient where the SpO<sub>2</sub> is stable and in your judgement is not sufficiently low that you need to give more oxygen than you usually would?

1. Room air/no supplemental oxygen
2. 1-3 L/min oxygen via nasal cannula
3. 1-2 L/min oxygen via Hudson mask
4. 3-4 L/min oxygen via Hudson mask
5. 5-6 L/min oxygen via Hudson mask
6. > 6 L/min oxygen via Hudson mask
7. I do not have a 'routine' approach to administration of postoperative supplemental oxygen
8. Other [Free text]

Question 10. What lower limit of SpO<sub>2</sub> would you consider to be acceptable (the lowest SpO<sub>2</sub> value that you would not increase supplemental oxygen if sustained for > 60 seconds) for an elective patient in the post anaesthesia recovery unit?

- [Free text 80 to 100 % accepted]

Question 11. Which of the following statements best describes your approach to oxygen prescription on the ward following an elective surgical case under general anaesthesia, for a patient with no specific clinical indication for either high or low FiO<sub>2</sub>? [Multi choice]

- I aim to maximise postoperative oxygen administration
- I prescribe titrated oxygen to achieve a level of SpO<sub>2</sub> that I feel is safe
- I aim to minimise postoperative oxygen administration
- I let the ward staff decide how much oxygen they will administer
- Unsure

Question 12. What amount of inspired oxygen would you usually prescribe **for the ward** in a patient where the SpO<sub>2</sub> is stable and in your judgement is not sufficiently low that you need to give more oxygen than you usually would?

1. Room air/no supplemental oxygen
2. 1-3 L/min oxygen via nasal cannula
3. 1-2 L/min oxygen via Hudson mask

4. 3-4 L/min oxygen via Hudson mask
5. 5-6 L/min oxygen via Hudson mask
6. > 6 L/min oxygen via Hudson mask
7. I do not have a 'routine' approach to administration of postoperative supplemental oxygen on the ward
8. Other [Free text]

### **ATTITUDES ABOUT SUPPLEMENTAL O2 AND CURRENT GUIDELINES**

Question 13. Do you believe there are any specific indications for hyperoxia (PaO<sub>2</sub> > 100 mmHg) under general anaesthesia?  
[YES/NO/UNSURE – multi choice]

If [YES]

Question 14. Please indicate all of the things that you consider indications for hyperoxia during the maintenance phase of general anaesthesia [Tick box].

Anaemia; clinically significant bleeding; history of ischaemic heart disease; evidence of current myocardial ischaemia; significant carotid stenosis; history of cerebrovascular disease; peripheral vascular disease; raised intracranial pressure; neurosurgery; spinal surgery; transplant surgery; bowel surgery; orthopaedic surgery with implanted metalware; major vascular surgery with aortic cross clamping; nonspecific "high-risk" state; other, please specify [TEXT BOX]

Question 15. Do you believe that the routine use of high FiO<sub>2</sub> (≥0.8) during the maintenance phase of general anaesthesia confers any benefit to patients with no specific clinical indication for high or low oxygen? [Multi choice YES/NO]

If [Yes]

Question 16. In your view, what are the benefits of high intraoperative FiO<sub>2</sub>?  
[Tick box – can select multiple]

Reduced cardiovascular complications  
 Reduced neurocognitive complications  
 Reduced pulmonary complications  
 Reduced surgical site and/or other hospital acquired infection  
 Reduced mortality  
 Increased margin of safety in the event of an intraoperative crisis  
 Other - please specify [TEXT BOX]

Question 17. Do you believe there are any risks of high inspired FiO<sub>2</sub> ≥80% during the maintenance phase of general anaesthesia in patients with no specific clinical indication for high or low oxygen? [YES/NO multi choice]

If [Yes]

Question 18. In your view, what are the risks of high intraoperative FiO<sub>2</sub>?  
[Text box – can select multiple]

Increased cardiovascular complications  
 Increased neurocognitive complications  
 Increased pulmonary complications  
 Increased surgical site and/or other hospital acquired infection  
 Increased mortality

As yet unquantified or potential risks  
Other - please specify [TEXT BOX]

Question 19. In a patient with no requirement for supplemental oxygen (normal SpO<sub>2</sub> on room air FiO<sub>2</sub> 0.21), what is the maximum intraoperative FiO<sub>2</sub> you believe to be not associated with increased risk of complications in a prolonged (>2 hours) elective case?

Free text value 0.21 -1.0 accepted]

Question 20. Would you be willing to participate in a clinical trial that randomly assigned ASA 3 or 4 patients undergoing elective surgery to liberal intraoperative oxygen therapy (FiO<sub>2</sub>  $\geq$  0.8) versus standard oxygen therapy (FiO<sub>2</sub> administered at clinicians discretion) if patients with specific clinical indications for either high or low FiO<sub>2</sub> were excluded?

[multi choice YES/NO/UNSURE/OTHER – FREETEXT]

Question 21. Would you be willing to participate in a clinical trial that randomly assigned ASA 3 or 4 patients undergoing elective surgery to conservative intraoperative oxygen therapy (aiming to down-titrate FiO<sub>2</sub> to 0.21 where possible) versus standard oxygen therapy (FiO<sub>2</sub> administered at clinicians discretion) if patients with specific clinical indications for either high or low FiO<sub>2</sub> were excluded?) [multi choice YES/NO/UNSURE/OTHER - FREETEXT]

If, [YES]

Question 22. What would you regard as the lowest acceptable SpO<sub>2</sub> in patients allocated to the conservative arm. (choose the SpO<sub>2</sub> level at which you would no longer be willing to routinely decrease the FiO<sub>2</sub> in intraoperatively)

[Free text 80 to 100 accepted]

Question 23. Would you be willing to participate in a clinical trial that randomly assigned ASA 3 or 4 patients undergoing elective surgery to liberal intraoperative oxygen therapy (FiO<sub>2</sub>  $\geq$  0.8) versus conservative intraoperative oxygen therapy (aiming to down-titrate FiO<sub>2</sub> to 0.21 where possible) if patients with specific clinical indications for either high or low FiO<sub>2</sub> were excluded?

[multi choice YES/NO/UNSURE/OTHER – FREETEXT]