

## QUESTIONNAIRE FOR MEMBERS OF THE PUBLIC

**We would like to know what you think about oxygen therapy as a member of the public. We would be grateful if you could complete this document based on your own knowledge** (*Please do not refer to any books, colleagues or on-line information*).

**This questionnaire is anonymous. We will not collect or retain any personal data.**

**Are you: Male or Female**

**Do you have any significant medical problems that could require oxygen therapy?**

**No Yes: Please state which condition(s)**\_\_\_\_\_

**Age group: 16-39 40-49 50-59 60-69 70-79 80 or above**

- 1. Ordinary air contains oxygen, nitrogen and small amounts of other gases. Do you think that the amount of oxygen in the air is.**
  - a. 15%
  - b. 21%
  - c. 25%
  - d. 46%
  - e. 81%
  
- 2. A person who had called an ambulance feels breathless due to an asthma attack but has a normal blood oxygen level. Which of the following statements is most likely to be true.**
  - a. Oxygen may help the asthma attack get better
  - b. Oxygen may improve the person's breathlessness
  - c. Oxygen is not required because the blood oxygen level is normal
  - d. Oxygen therapy is likely to harm this patient
  - e. Not giving oxygen may make the asthma attack worse
  
- 3. A man with chronic obstructive pulmonary disease (COPD) is being treated with long-term oxygen therapy at home. He calls an ambulance because he is more breathlessness than usual. Which of the following statements is most likely to be true?**
  - a. He needs more oxygen because his home oxygen is not enough
  - b. He is unlikely to need any oxygen therapy
  - c. He need carbon dioxide therapy
  - d. He needs carefully controlled oxygen therapy because too much oxygen may harm him
  - e. He will probably need to be put on a ventilator (breathing machine) when he gets to hospital
  
- 4. Some shops and Gymnasiums have "Oxygen bars" offering oxygen to breathe in. Which of these statements best describes your view about this**
  - a. If a little oxygen in the air is good for me, more must be better
  - b. Normal people are likely to be seriously harmed by too much oxygen
  - c. It is not likely to harm healthy people or to do them any good
  - d. It will help breathlessness in the Gym but not in the shops
  - e. People will have improved energy levels after using oxygen

**5. If you had a heart attack, which of the following would you expect the ambulance team to do for you?**

- a. Measure your oxygen level and give oxygen if it is reduced
- b. Give a lot of oxygen in all cases
- c. Give little bit of oxygen in all cases
- d. Give no oxygen because oxygen is not required for heart attacks.
- e. Give nitrous oxide to relieve pain (the gas that is used during childbirth)

**6. If you had a heart attack and were told that there was disagreement amongst scientists as to whether oxygen might help you get better or may possibly make you worse what would be your view?**

- a. I would trust the ambulance crew to use the right dose of oxygen
- b. I would want to be given oxygen as a precaution
- c. I would not want oxygen in case it might harm me
- d. I would want to discuss the various options before making a decision
- e. I have a different view\_\_\_\_\_

**7. If you had a heart attack, how would you feel about taking part in a trial of oxygen therapy for heart attacks?**

- a. I would be keen to take part for the benefit of future patients
- b. I would not want to take part due to the risk of being given bad treatment
- c. I would want the paramedic to give me a detailed explanation before making a decision
- d. I would be happy to take part in the trial and to discuss details later
- e. I have a different view\_\_\_\_\_

**8. Do you believe that oxygen is helpful for most medical emergencies? Yes / No  
Please say why you think this.**

*There are two more questions on the next page.....*

**9. Have you got any concerns that oxygen may be harmful in some medical emergencies?**                      Yes /    No

**Please say why you think this.**

**10. Do you think that it is right to allow researchers to undertake a randomised trial of oxygen therapy in circumstances where a patient is acutely unwell and cannot realistically give informed consent at the time when treatment is needed?**

*(In a randomised trial some patients would be given a high dose of oxygen and others would receive oxygen only if their blood oxygen level was below normal. Allocation to each of these options would be at random in a trial approved by an Ethics committee to try to find out which of these treatments is better and safer for patients)*

**I think it would be right to allow researchers to undertake such a trial.**

**I think it would be wrong to allow researchers to undertake such a trial.**

**My reasons for this are as follows.....**

**In trials involving medical emergencies where the best treatment is not yet known but treatment must be started immediately, some researchers have placed patients in trials to compare the available treatments. This is done on the basis that consent cannot be obtained from a very ill person but the researchers seek to obtain consent at a later date when the patient has recovered. The data is used in the trial report if the patient gives their consent but the researchers destroy the data if the patient does not agree to give consent for their data to be used in the report.**

**My view is as follows:**

**It would be reasonable to do the trial in the emergency situation and obtain consent later.**

**It would not be reasonable to undertake a trial on this basis.**

**My view is different to either of these.....**

## QUESTIONNAIRE FOR PATIENTS WITH COPD

If you have COPD (Chronic Obstructive Pulmonary Disease, also known as chronic bronchitis or emphysema), we would be grateful if you could complete this document based on your own knowledge (*Please do not refer to any books, colleagues or on-line information*).

If you do not have COPD, please do not complete this questionnaire.

This questionnaire is anonymous. We will not collect or retain any personal data.

Would you regard your COPD as:      Mild                  Moderate                  Severe

Do you use oxygen at home ?                  Yes                  No

Are you: Male or Female      Age group: 50-59    60-69    70-79    80 or above

1. Ordinary air contains oxygen, nitrogen and small amounts of other gases. Do you think that the amount of oxygen in the air is.
  - a. 15%
  - b. 21%
  - c. 25%
  - d. 46%
  - e. 81%
  
2. A person who had called an ambulance feels breathless due to an asthma attack but has a normal blood oxygen level. Which of the following statements is most likely to be true.
  - a. Oxygen may help the asthma attack get better
  - b. Oxygen may improve the person's breathlessness
  - c. Oxygen is not required because the blood oxygen level is normal
  - d. Oxygen therapy is likely to harm this patient
  - e. Not giving oxygen may make the asthma attack worse
  
3. A man with chronic obstructive pulmonary disease (COPD) is being treated with long-term oxygen therapy at home. He calls an ambulance because he is more breathless than usual. Which of the following statements is most likely to be true?
  - a. He needs more oxygen because his home oxygen is not enough
  - b. He is unlikely to need any oxygen therapy
  - c. He need carbon dioxide therapy
  - d. He needs carefully controlled oxygen therapy because too much oxygen may harm him
  - e. He will probably need to be put on a ventilator (breathing machine) when he gets to hospital
  
4. Some shops and Gymnasiums have "Oxygen bars" offering oxygen to breathe in. Which of these statements best describes your view about this
  - a. If a little oxygen in the air is good for me, more must be better
  - b. Normal people are likely to be seriously harmed by too much oxygen
  - c. It is not likely to harm healthy people or to do them any good
  - d. It will help breathlessness in the Gym but not in the shops
  - e. People will have improved energy levels after using oxygen

**5. If you had a heart attack, which of the following would you expect the ambulance team to do for you?**

- a. Measure your oxygen level and give oxygen if it is reduced
- b. Give a lot of oxygen in all cases
- c. Give little bit of oxygen in all cases
- d. Give no oxygen because oxygen is not required for heart attacks.
- e. Give nitrous oxide to relieve pain (the gas that is used during childbirth)

**6. If you had a heart attack and were told that there was disagreement amongst scientists as to whether oxygen might help you get better or may possibly make you worse what would be your view?**

- a. I would trust the ambulance crew to use the right dose of oxygen
- b. I would want to be given oxygen as a precaution
- c. I would not want oxygen in case it might harm me
- d. I would want to discuss the various options before making a decision
- e. I have a different view\_\_\_\_\_

**7. If you had a heart attack, how would you feel about taking part in a trial of oxygen therapy for heart attacks?**

- a. I would be keen to take part for the benefit of future patients
- b. I would not want to take part due to the risk of being given bad treatment
- c. I would want the paramedic to give me a detailed explanation before making a decision
- d. I would be happy to take part in the trial and to discuss details later
- e. I have a different view\_\_\_\_\_

**8. Do you believe that oxygen is helpful for most medical emergencies? Yes / No  
Please say why you think this.**

*There are two more questions on the next page.....*

**9. Have you got any concerns that oxygen may be harmful in some medical emergencies?** Yes / No

**Please say why you think this.**

**10. Do you think that it is right to allow researchers to undertake a randomised trial of oxygen therapy in circumstances where a patient is acutely unwell and cannot realistically give informed consent at the time when treatment is needed?**

*(In a randomised trial some patients would be given a high dose of oxygen and others would receive oxygen only if their blood oxygen level was below normal. Allocation to each of these options would be at random in a trial approved by an Ethics committee to try to find out which of these treatments is better and safer for patients)*

**I think it would be right to allow researchers to undertake such a trial.**

**I think it would be wrong to allow researchers to undertake such a trial.**

**My reasons for this are as follows.....**

**In trials involving medical emergencies where the best treatment is not yet known but treatment must be started immediately, some researchers have placed patients in trials to compare the available treatments. This is done on the basis that consent cannot be obtained from a very ill person but the researchers seek to obtain consent at a later date when the patient has recovered. The data is used in the trial report if the patient gives their consent but the researchers destroy the data if the patient does not agree to give consent for their data to be used in the report.**

**My view is as follows:**

**It would be reasonable to do the trial in the emergency situation and obtain consent later.**

**It would not be reasonable to undertake a trial on this basis.**

**My view is different to either of these.....**

## QUESTIONNAIRE FOR HEALTH CARE PROFESSIONALS

**This questionnaire is anonymous, we will not collect or retain any personal data.**

**Please complete the document based on your present knowledge. Do not refer to any books, colleagues or online information prior to completing the questionnaire.**

**Your role :** Advanced Paramedic Paramedic Student Paramedic EMT2

Nurse Doctor Manager Commissioner Other\_\_\_\_\_

**How many years since you qualified?\_\_\_\_\_ How long in you present post?\_\_\_\_\_**

**Your work location:** NWAS A&E EAU MHDU H2 Resp Ward Other

- 1. Ordinary air contains oxygen, nitrogen and small amounts of other gases. Do you think that the proportion of oxygen in the air is.**
  - a. 15%
  - b. 21%
  - c. 25%
  - d. 46%
  - e. 81%
  
- 2. A person who had called an ambulance feels breathless due to an asthma attack but has a normal blood oxygen level (measured by a finger oximeter probe). Which of the following statements is most likely to be true.**
  - a. Oxygen may improve the patient's clinical outcome
  - b. Oxygen will improve the patient's breathlessness
  - c. Oxygen is not required because the blood oxygen level is normal
  - d. Oxygen therapy is likely to harm this patient
  - e. Failure to give oxygen would place the patient at risk
  
- 3. A man with chronic obstructive pulmonary disease (COPD) is on long-term oxygen therapy at home. He calls an ambulance due to worsening breathlessness. Which of the following statements is most likely to be true?**
  - a. He needs high concentration oxygen because his home oxygen is not enough
  - b. He is unlikely to need any oxygen therapy
  - c. He need carbon dioxide therapy
  - d. He needs controlled oxygen therapy; high dose oxygen may harm him
  - e. He will probably need to be put on a ventilator when he gets to hospital
  
- 4. Some shops and Gymnasiums have "Oxygen bars" offering oxygen to inhale. Which of these statements best describes your view about this**
  - a. If a little oxygen in the air is good for me, more must be better
  - b. Normal people are likely to be seriously harmed by excess oxygen
  - c. It is not likely to harm healthy people or to do them any good
  - d. It will relieve breathlessness in the Gym but not in the shops
  - e. People will have improved energy levels after using oxygen

- 5. If you are treating a patient with a heart attack, which of the following actions is recommended in JRCALC and BTS Guidance? (Joint Royal Colleges Ambulance Liaison Committee Oxygen guidance 2009 and British Thoracic Society Guideline 2008)**
- Measure oxygen saturation level and give oxygen if the saturation is low
  - Give 100% oxygen in all cases
  - Give low dose oxygen in all cases
  - Give no oxygen because oxygen is not required for heart attacks.
  - Give nitrous oxide to relieve pain (the gas that is used during childbirth)
- 6. The correct target saturation range for most patients with exacerbated COPD is**
- 85-88%
  - 88-92%
  - 88-94%
  - 94-98%
  - Over 98%
- 7. The correct target saturation range for most other patients is**
- 88-92%
  - 90-94%
  - 94-98%
  - 96-98%
  - 98-100%
- 8. If a patient with COPD suffers major trauma, the recommended management is as follows (please choose only one answer)**
- Maintain target range of 88-92% throughout
  - Maintain target range of 94-98% throughout
  - Keep saturation below 90%
  - Start with Reservoir Mask. Aim for target of 94-98% once stabilised whilst awaiting results of urgent blood gas analysis.
  - Treat with Reservoir Mask until transferred to the Intensive Care Team.
- 9. You are treating a breathless patient with terminal lung cancer. The oxygen saturation on air is 94%. Which of the following statements is true? (Please choose only one answer)**
- High concentration oxygen therapy will relieve breathlessness
  - For breathless palliative care patients with oxygen saturation of 93% or higher, oxygen therapy was no better than air in a large controlled clinical trial
  - Oxygen therapy will prolong survival
  - Avoid morphine because it will have no effect on breathlessness
  - An oxygen-driven nebuliser is required urgently

**10. In which of the following situations should you give the highest available oxygen concentration, even if the oximeter reading is 100% (please choose only one answer)**

- a. Paracetamol poisoning
- b. Carbon Monoxide poisoning
- c. Paraquat poisoning
- d. Belomycin lung injury
- e. Opiate toxicity with coma (For example; Heroin or morphine overdose)

**11. Which of the following patients need a target range of 88-92%?**

- |  |          |
|--|----------|
| a. Morbid obesity  | Yes / No |
| b. Asthma  | Yes / No |
| c. Severe kypohscoliosis   | Yes / No |
| d. Idiopathic Pulmonary Fibrosis (Fibrosing Alveolitis)                        | Yes / No |
| e. Chronic neuro-muscular disorder ( <i>with respiratory muscle weakness</i> ) | Yes / No |
| f. Pneumonia   | Yes / No |
| g. Myocardial Infarction   | Yes / No |
| h. Major Head Injury   | Yes / No |
| i. Severe Cystic Fibrosis  | Yes / No |
| j. Sickle Cell Crisis  | Yes / No |

**12. If you had a heart attack and if you were told that there was disagreement amongst scientists as to whether oxygen might be beneficial or even harmful in this situation, which of the following best expresses your views?**

- a. I would trust the paramedic to use the right dose of oxygen
- b. I would want to be given high dose oxygen as a precaution
- c. I would not want oxygen in case it might harm me
- d. I would want to discuss the various options before making a decision
- e. I have a different view \_\_\_\_\_

**13. If you had a heart attack, how would you feel about taking part in a trial of oxygen therapy. Which of these statements best reflects your personal view?**

- a. I would be keen to take part for the benefit of future patients
- b. I would not want to take part due to the risk of being given bad treatment
- c. I would want the paramedic to give me a detailed explanation before making a decision
- d. I would be happy to take part in the trial and to discuss details later
- e. I have a different view \_\_\_\_\_

**14. Do you believe that oxygen is beneficial for most medical emergencies? Yes / No  
Please say why you think this.**

**15. Have you got any concerns that oxygen therapy may be harmful in some medical emergencies? Yes / No**

**Please say why you think this.**

**16. Do you think that it is right to allow researchers to undertake a randomised trial of oxygen therapy in circumstances where a patient is acutely unwell and cannot realistically give informed consent at the time when treatment is needed?**

*(In a randomised trial some patients would be given a high dose of oxygen and others would receive oxygen only if their blood oxygen level was below normal. Allocation to each of these options would be at random in a trial approved by an Ethics committee to try to find out which of these treatments is better and safer for patients)*

**I think it would be right to allow researchers to undertake such a trial.**

**I think it would be wrong to allow researchers to undertake such a trial.**

**My reasons for this are as follows.....**

**In trials involving medical emergencies where the best treatment is not yet known but treatment must be started immediately, some researchers have placed patients in trials to compare the available treatments. This is done on the basis that consent cannot be obtained from a very ill person but the researchers seek to obtain consent at a later date when the patient has recovered. The data is used in the trial report if the patient gives their consent but the researchers destroy the data if the patient does not agree to give consent for their data to be used in the report.**

**My view is as follows:**

**It would be reasonable to do the trial in the emergency situation and obtain consent later.**

**It would not be reasonable to undertake a trial on this basis.**

**My view is different to either of these.....**

*The remaining questions are for NWAS teams, Doctors and Nurse who treat COPD patients personally. If you do not treat COPD patients personally, you have now completed the questionnaire.*

**17. Have you had any specific training in oxygen use? Yes No**

**If so, please provide details**

**Have you seen the 2008 BTS Emergency oxygen Guideline (or a summary)? Yes No**

**Have you seen the 2009 JRCALC oxygen guidance? Yes No**

**Have you seen any local oxygen guidance with target ranges? Yes No**

**18. When you treat patients with acute exacerbations of COPD, do you have access to the following equipment?**

<b>Simple Face Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Non Re-breathe Reservoir Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Simple face mask (MC Mask)</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Nasal Cannulae</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>24% Venturi Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>28% Venturi Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Oxygen driven Nebuliser</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Compressor to run Nebulisers on air</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Finger oximeter</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>

**19. Do you think you have had adequate training in oxygen use Yes No**

**20. Have you any suggestions for how emergency oxygen therapy could be improved?**

**Your suggestons:**

## MAHSC Oxygen Study Results (updated 9-1-2014)

**249 questionnaires which were completed**

*151 (61%) were completed on paper including all COPD patients and public responses.*

*98 questionnaires (39% of all questionnaires) were completed online by 5 nurses, 8 managers, 21 doctors and 64 members of ambulance crews.*

**49 subjects completed the telephone questionnaire**

**13 subjects took part in focus group discussions.**

**Questionnaire Responses to individual questions:**

**1. Ordinary air contains oxygen, nitrogen and small amounts of other gases.  
Do you think that the amount of oxygen in the air is.**

- a. 15%
- b. 21%**
- c. 25%
- d. 46%
- e. 81%

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	15%	3	1	0	5	0	0
<b>b</b>	<b>21%</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>56</b>	<b>18</b>	<b>19</b>
c	25%	12	18	0	2	0	0
d	46%	23	21	0	1	0	0
e	81%	14	10	1	1	1	0
Blank		3	3	0	3	3	3
Total		65	62	10	68	22	22
<b>Percent</b>							
a	15%	5	2	0	7	0	0
<b>b</b>	<b>21%</b>	<b>15</b>	<b>15</b>	<b>90</b>	<b>82</b>	<b>82</b>	<b>86</b>
c	25%	18	29	0	4	0	0
d	46%	35	34	0	3	0	0
e	81%	22	16	10	3	5	0
Blank		5	5	0	4	14	14

2. A person who had called an ambulance feels breathless due to an asthma attack but has a normal blood oxygen level. Which of the following statements is most likely to be true.

- a. Oxygen may help the asthma attack get better
- b. Oxygen may improve the person's breathlessness
- c. Oxygen is not required because the blood oxygen level is normal**
- d. Oxygen therapy is likely to harm this patient
- e. Not giving oxygen may make the asthma attack worse

**HCP version:**

A person who had called an ambulance feels breathless due to an asthma attack but has a normal blood oxygen level (measured by a finger oximeter probe).

Which of the following statements is most likely to be true.

- a. Oxygen may improve the patient's clinical outcome
- b. Oxygen will improve the patient's breathlessness
- c. Oxygen is not required because the blood oxygen level is normal
- d. Oxygen therapy is likely to harm this patient
- e. Failure to give oxygen would place the patient at risk

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	Helps asthma	10	12	6	15	5	7
b	Helps SOB	28	20	2	2	1	0
<b>c</b>	<b>Not required</b>	<b>14</b>	<b>19</b>	<b>2</b>	<b>38</b>	<b>12</b>	<b>10</b>
d	Harm patient	2	4	0	2	1	0
e	Not..worse	9	5	0	7	0	2
Blank		2	2	0	4	3	3
Total		65	62	10	68	22	22
<b>Percent</b>							
a	Helps asthma	15	19	60	22	23	32
b	Helps SOB	43	32	20	3	5	0
<b>c</b>	<b>Not required</b>	<b>22</b>	<b>31</b>	<b>20</b>	<b>56</b>	<b>55</b>	<b>45</b>
d	Harm patient	3	6	0	3	5	0
e	Not..worse	14	8	0	10	0	9
Blank		3	3	0	6	14	14

3. A man with chronic obstructive pulmonary disease (COPD) is being treated with long-term oxygen therapy at home. He calls an ambulance because he is more breathless than usual. Which of the following statements is most likely to be true?

- a. He needs more oxygen because his home oxygen is not enough
- b. He is unlikely to need any oxygen therapy
- c. He need carbon dioxide therapy
- d. He needs carefully controlled oxygen therapy because too much oxygen may harm him**
- e. He will probably need to be put on a ventilator (breathing machine) when he gets to hospital

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	Needs more	13	8	0	1	0	0
b	Unlikely to	2	3	0	1	0	0
c	Needs CO2	1	3	0	0	0	0
<b>d</b>	<b>Controlled O2</b>	<b>26</b>	<b>25</b>	<b>10</b>	<b>60</b>	<b>19</b>	<b>18</b>
e	Ventilator	21	19	0	2	0	1
Blank		2	4	0	4	3	3
Total		65	62	10	68	22	22
<b>Percent</b>							
a	Needs more	20	13	0	1	0	0
b	Unlikely to	3	5	0	1	0	0
c	Needs CO2	2	5	0	0	0	0
<b>d</b>	<b>Controlled O2</b>	<b>40</b>	<b>40</b>	<b>100</b>	<b>88</b>	<b>86</b>	<b>82</b>
e	Ventilator	32	31	0	3	0	5
Blank		3	6	0	6	14	14

4. Some shops and Gymnasiums have “Oxygen bars” offering oxygen to breathe in. Which of these statements best describes your view about this
- If a little oxygen in the air is good for me, more must be better
  - Normal people are likely to be seriously harmed by too much oxygen
  - It is not likely to harm healthy people or to do them any good**
  - It will help breathlessness in the Gym but not in the shops
  - People will have improved energy levels after using oxygen

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	More better	12	9	0	1	0	0
b	Serious harm	14	24	0	6	3	2
<b>c</b>	<b>No harm etc</b>	<b>19</b>	<b>14</b>	<b>10</b>	<b>54</b>	<b>16</b>	<b>18</b>
d	Helps in Gym	6	4	0	1	0	0
e	Energy level	14	8	0	3	0	0
Blank		0	3	0	3	3	2
Total		65	62	10	68	22	22
<b>Percent</b>							
a	More better	18	15	0	1	0	0
b	Serious harm	22	39	0	9	14	9
<b>c</b>	<b>No harm etc</b>	<b>29</b>	<b>23</b>	<b>100</b>	<b>79</b>	<b>73</b>	<b>82</b>
d	Helps in Gym	9	6	0	1	0	0
e	Energy level	22	13	0	4	0	0
Blank		0	5	0	4	14	9

5. **If you had a heart attack, which of the following would you expect the ambulance team to do for you?**
- Measure your oxygen level and give oxygen if it is reduced**
  - Give a lot of oxygen in all cases
  - Give little bit of oxygen in all cases
  - Give no oxygen because oxygen is not required for heart attacks.
  - Give nitrous oxide to relieve pain (the gas that is used during childbirth)

**HCP version:**

**If you are treating a patient with a heart attack, which of the following actions is recommended in JRCALC and BTS Guidance? (Joint Royal Colleges Ambulance Liaison Committee Oxygen guidance 2009 and British Thoracic Society Guideline 2008)**

- Measure oxygen saturation level and give oxygen if the saturation is low
- Give 100% oxygen in all cases
- Give low dose oxygen in all cases
- Give no oxygen because oxygen is not required for heart attacks.
- Give nitrous oxide to relieve pain (the gas that is used during childbirth)

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
<b>a</b>	<b>O2 if reduced</b>	<b>37</b>	<b>19</b>	<b>7</b>	<b>45</b>	<b>19</b>	<b>16</b>
<b>b</b>	Lot of O2	7	4	1	12	0	2
<b>c</b>	Little O2	10	18	1	1	0	1
<b>d</b>	No O2	4	7	0	3	0	0
<b>e</b>	Give NO2	3	11	0	0	0	0
Blank		4	3	1	7	3	3
<b>Total</b>		<b>65</b>	<b>62</b>	<b>10</b>	<b>68</b>	<b>22</b>	<b>22</b>
<b>Percent</b>							
<b>a</b>	<b>O2 if reduced</b>	<b>57</b>	<b>31</b>	<b>70</b>	<b>66</b>	<b>86</b>	<b>73</b>
<b>b</b>	Lot of O2	11	6	10	18	0	9
<b>c</b>	Little O2	15	29	10	3	0	5
<b>d</b>	No O2	6	11	0	4	0	0
<b>e</b>	Give NO2	5	18	0	0	0	0
Blank		6	5	10	10	14	14

Question 6 (Listed as question 12 on HCP questionnaire because the factual questions were kept together as questions 1-10)

**6. If you had a heart attack and were told that there was disagreement amongst scientists as to whether oxygen might help you get better or may possibly make you worse what would be your view?**

- a. I would trust the ambulance crew to use the right dose of oxygen
- b. I would want to be given oxygen as a precaution
- c. I would not want oxygen in case it might harm me
- d. I would want to discuss the various options before making a decision
- e. I have a different view\_\_\_\_\_

**HCP version:**

**If you had a heart attack and if you were told that there was disagreement amongst scientists as to whether oxygen might be beneficial or even harmful in this situation, which of the following best expresses your views?**

- a. I would trust the paramedic to use the right dose of oxygen
- b. I would want to be given high dose oxygen as a precaution
- c. I would not want oxygen in case it might harm me
- d. I would want to discuss the various options before making a decision
- e. I have a different view\_\_\_\_\_

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	Trust crew	50	39	3	33	3	4
b	Want O2	2	9	2	10	1	4
c	No O2	2	1	0	2	2	0
d	Discuss first	8	10	2	19	7	11
e	Other	0	0	2	1	2	0
Blank		3	3	1	3	7	3
Total		65	62	10	68	22	22
<b>Percent</b>							
a	Trust crew	77	63	30	48	14	18
b	Want O2	3	15	20	15	5	18
c	No O2	3	2	0	3	9	0
d	Discuss first	12	16	20	28	32	50
e	Other view	0	0	20	1	9	0
Blank		5	5	10	4	32	14

**7. If you had a heart attack, how would you feel about taking part in a trial of oxygen therapy for heart attacks?**

- a. I would be keen to take part for the benefit of future patients
- b. I would not want to take part due to the risk of being given bad treatment
- c. I would want the paramedic to give me a detailed explanation before making a decision
- d. I would be happy to take part in the trial and to discuss details later
- e. I have a different view\_\_\_\_\_

		<b>PUBLIC n=65</b>	<b>COPD PATIENTS n = 62</b>	<b>MANAGERS n = 10</b>	<b>NWAS n = 68</b>	<b>NURSES n = 22</b>	<b>DOCTORS n = 22</b>
a	Keen on trial	24	18	1	19	2	6
b	Not keen	12	8	2	7	2	2
c	Explain++	17	25	2	27	7	7
d	Discuss later	5	4	3	5	3	2
e	Other view	2	3	1	5	1	2
Blank		5	4	1	5	7	3
<b>Total</b>		<b>65</b>	<b>62</b>	<b>10</b>	<b>68</b>	<b>22</b>	<b>22</b>
<b>Percent</b>							
a	Keen on trial	37	29	10	28	9	27
b	Not keen	18	13	20	10	9	9
c	Explain++	26	40	20	40	32	32
d	Discuss later	8	6	30	7	14	9
e	Other view	3	5	10	7	5	9
Blank		8	6	10	7	32	14

Question 8 / HCP question 14

**8. Do you believe that oxygen is helpful for most medical emergencies? Yes / No**  
**Please say why you think this.**

**HCP version:**

**Do you believe that oxygen is beneficial for most medical emergencies? Yes / No**  
**Please say why you think this.**

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
	O2 helpful	44	49	2	28	4	8
	Not helpful	13	8	1	34	12	10
	Blank	8	5	7	6	6	4
	Total	65	62	10	68	22	22
<b>Percent</b>							
	O2 helpful	68	79	20	41	18	36
	Not helpful	20	13	10	50	55	45
	Blank	12	8	70	9	27	18

Question 9 / HCP question 15

**9. Have you got any concerns that oxygen may be harmful in some medical emergencies?**      **Yes / No**

**Please say why you think this.**

		<b>PUBLIC n=65</b>	<b>COPD PATIENTS n = 62</b>	<b>MANAGERS n = 10</b>	<b>NWAS n = 68</b>	<b>NURSES n = 22</b>	<b>DOCTORS n = 22</b>
	Concerns	16	22	10	50	14	12
	No Concerns	40	35	0	11	1	6
<b>Blank</b>		9	5	0	7	7	4
<b>Total</b>		65	62	10	68	22	22
<b>Percent</b>							
	Concerns	25	35	100	73	64	55
	No Concerns	61	56	0	16	5	27
	<b>Blank</b>	14	8	0	10	32	18

Question 10a / HCP question 16a

**10. Do you think that it is right to allow researchers to undertake a randomised trial of oxygen therapy in circumstances where a patient is acutely unwell and cannot realistically give informed consent at the time when treatment is needed?**

*(In a randomised trial some patients would be given a high dose of oxygen and others would receive oxygen only if their blood oxygen level was below normal. Allocation to each of these options would be at random in a trial approved by an Ethics committee to try to find out which of these treatments is better and safer for patients)*

**I think it would be right to allow researchers to undertake such a trial.**

**I think it would be wrong to allow researchers to undertake such a trial.**

**My reasons for this are as follows.....**

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
	Trial OK	28	28	7	41	11	15
	Trial not OK	28	30	2	19	4	4
	Blank	9	4	1	8	7	3
	<b>Total</b>	65	62	10	68	22	22
<b>Percent</b>							
	Trial OK	43	45	70	60	50	68
	Trial not OK	43	48	20	28	18	18
	Blank	14	5	10	12	32	14

**In trials involving medical emergencies where the best treatment is not yet known but treatment must be started immediately, some researchers have placed patients in trials to compare the available treatments. This is done on the basis that consent cannot be obtained from a very ill person but the researchers seek to obtain consent at a later date when the patient has recovered. The data is used in the trial report if the patient gives their consent but the researchers destroy the data if the patient does not agree to give consent for their data to be used in the report.**

**My view is as follows:**

**It would be reasonable to do the trial in the emergency situation and obtain consent later.**

**It would not be reasonable to undertake a trial on this basis.**

**My view is different to either of these.....**

		<b>PUBLIC</b> n=65	<b>COPD</b> <b>PATIENTS</b> n = 62	<b>MANAGERS</b> n = 10	<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
	Reasonable	36	35	4	39	11	16
	Not OK	16	22	3	13	1	2
	Other view	0	0	2	5	3	1
Blank		13	5	1	11	7	3
Total		65	62	10	68	22	22
<b>Percent</b>							
	Reasonable	55	56	40	57	50	73
	Not OK	25	35	30	19	5	9
	Other view	0	0	20	7	14	5
	Blank	20	8	10	16	32	14

HCP Question 6

**11. The correct target saturation range for most patients with exacerbated COPD is**

- a. 85-88%
- b. 88-92%**
- c. 88-94%
- d. 94-98%
- e. Over 98%

		NWAS	NURSES	DOCTORS
		n = 68	n = 22	n = 22
a	85-88%	3	0	0
<b>b</b>	<b>88-92%</b>	<b>47</b>	<b>12</b>	<b>16</b>
c	88-94%	12	6	3
d	94-98%	1	0	0
e	98-100%	0	0	0
Blank		5	4	3
Total		68	22	22
<b>Percent</b>				
a	85-88%	4	0	0
<b>b</b>	<b>88-92%</b>	<b>69</b>	<b>55</b>	<b>73</b>
c	88-94%	18	27	14
d	94-98%	1	0	0
e	98-100%	0	0	0
Blank		7	18	14

HCP Question 7

**12. The correct target saturation range for most other patients is**

- a. 88-92%
- b. 90-94%
- c. 94-98%**
- d. 96-98%
- e. 98-100%

		NWAS n = 68	NURSES n = 22	DOCTORS n = 22
a	88-92%	1	0	0
b	90-94%	3	0	0
<b>c</b>	<b>94-98%</b>	<b>50</b>	<b>18</b>	<b>16</b>
d	96-98%	5	0	2
e	98-100%	4	0	1
Blank		5	4	3
Total		68	22	22
Percent				
a	88-92%	1	0	0
b	90-94%	4	0	0
<b>c</b>	<b>94-98%</b>	<b>73</b>	<b>82</b>	<b>73</b>
d	96-98%	7	0	9
e	98-100%	6	0	5
Blank		7	18	14

HCP Question 8

- 13. If a patient with COPD suffers major trauma, the recommended management is as follows (please choose only one answer)**
- a. Maintain target range of 88-92% throughout
  - b. Maintain target range of 94-98% throughout
  - c. Keep saturation below 90%
  - d. Start with Reservoir Mask. Aim for target of 94-98% once stabilised whilst awaiting results of urgent blood gas analysis.**
  - e. Treat with Reservoir Mask until transferred to the Intensive Care Team.

		NWAS n = 68	NURSES n = 22	DOCTORS n = 22
a	88-92%	26	7	8
b	94-98%	9	1	1
c	Below 90%	1	0	0
<b>d</b>	<b>Guideline Rx</b>	<b>22</b>	<b>10</b>	<b>8</b>
e	RM → ICU	4	0	2
Blank		6	4	3
<b>Percent</b>				
a	88-92%	38	32	36
b	94-98%	13	5	5
c	Below 90%	1	0	0
<b>d</b>	<b>Guideline Rx</b>	<b>32</b>	<b>45</b>	<b>36</b>
e	RM → ICU	6	0	9
Blank		9	18	14

HCP Question 9

**14 You are treating a breathless patient with terminal lung cancer. The oxygen saturation on air is 94%. Which of the following statements is true?**

**(Please choose only one answer)**

- a. High concentration oxygen therapy will relieve breathlessness
- b. For breathless palliative care patients with oxygen saturation of 93% or higher, oxygen therapy was no better than air in a large controlled clinical trial**
- c. Oxygen therapy will prolong survival
- d. Avoid morphine because it will have no effect on breathlessness
- e. An oxygen-driven nebuliser is required urgently

		<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	O2 helps SOB	4	3	2
<b>b</b>	<b>No benefit</b>	<b>53</b>	<b>15</b>	<b>16</b>
c	Survival up	0	0	0
d	Avoid morph	1	0	0
e	O2 nebuliser	3	0	0
Blank		7	4	4
Total		68	22	22
Percent				
a	O2 helps SOB	6	14	9
<b>b</b>	<b>No benefit</b>	<b>78</b>	<b>68</b>	<b>73</b>
c	Survival up	0	0	0
d	Avoid morph	1	0	0
e	O2 nebuliser	4	0	0
Blank		10	18	18

HCP Question 10

**15. In which of the following situations should you give the highest available oxygen concentration, even if the oximeter reading is 100% (please choose only one answer)**

- a. Paracetamol poisoning
- b. Carbon Monoxide poisoning**
- c. Paraquat poisoning
- d. Bleomycin lung injury
- e. Opiate toxicity with coma (For example; Heroin or morphine overdose)

		<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
a	Paracetamol	0	0	0
<b>b</b>	<b>Carbon mono</b>	<b>50</b>	<b>16</b>	<b>18</b>
c	Paraquat	0	1	0
d	Bleomycin	2	0	0
e	Opiate tox	9	1	1
Blank		7	4	3
<b>Total</b>		<b>68</b>	<b>22</b>	<b>22</b>
<b>Percent</b>				
a	Paracetamol	0	0	0
<b>b</b>	<b>Carbon mono</b>	<b>73</b>	<b>73</b>	<b>82</b>
c	Paraquat	0	5	0
d	Bleomycin	3	0	0
e	Opiate tox	13	5	5
Blank		10	18	14

**16. Which of the following patients need a target range of 88-92%?**

- a. **Morbid obesity** Yes / No
- b. Asthma Yes / No
- c. **Severe kypohscoliosis** Yes / No
- d. Idiopathic Pulmonary Fibrosis (Fibrosing Alveolitis) Yes / No
- e. **Chronic neuro-muscular disorder** (with respiratory muscle weakness) Yes / No
- f. Pneumonia Yes / No
- g. Myocardial Infarction Yes / No
- h. Major Head Injury Yes / No
- i. **Severe Cystic Fibrosis** Yes / No
- j. Sickle Cell Crisis Yes / No

			NWAS n = 68	NURSES n = 22	DOCTORS n = 22
a	Morb obesity		13/30	All blank	All blank
b	Asthma		15/35	7/7	6/6
c	Kyphoscolios		17/30	4/4	2/2
d	IPF		30/36	4/4	4/4
e	Neuro-musc		39/51	8/8	9/9
f	Pneumonia		14/33	4/4	10/10
g	MI		3/28	3/3	2/2
h	Head injury		3/29	2/2	All blank
i	CF		18/28	1/1	2/2
j	Sickle Cell		16/38	5/5	9/9
Responses			338/680	38/220	44/220
% with Responses			59%	17%	20%

Shaded rows are correct (target range 88-92%), clear rows should have 94-98% target range

There were too few responders to allow any firm conclusions to be drawn

**Correct responses were as follows:**

Ambulance crew 206/338 correct. 61% of actual responses; 30% of potential responses

Nurses 13/38 correct. 34% of actual responses; 6% of potential responses

Doctors 13/44 correct. 29% of actual responses; 6% of potential responses

**Overall correct response rates:**

232/420 actual responses correct. 55% of actual responses; 21% of 1120 potential responses

HCP Question 17

**17. Have you had any specific training in oxygen use?    Yes    No**

**If so, please provide details**

**Have you seen the 2008 BTS Emergency oxygen Guideline (or a summary)?    Yes    No**

**Have you seen the 2009 JRCALC oxygen guidance?    Yes    No**

**Have you seen any local oxygen guidance with target ranges?    Yes    No**

			<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
Training	Yes		34/47	15/15	9
	No		13/47	0	8
BTS			32/44	13/15	12/16
JRCALC			24/42	11/15	10/17
Local			36/43	13/15	13/17
<b>Percent (Only including those who answered each question)</b>					
<b>Training</b>	<b>Yes</b>		<b>72</b>	<b>100</b>	<b>53</b>
	No		28	0	47
BTS			73	87	75
JRCALC			57	73	59
Local			84	83	76

HCP Question 18

**18. When you treat patients with acute exacerbations of COPD, do you have access to the following equipment.**

<b>Simple face mask (MC Mask)</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Non Re-breathe Reservoir Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Nasal Cannulae</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>24% Venturi Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>28% Venturi Mask</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Oxygen driven Nebuliser</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Compressor to run Nebulisers on air</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>
<b>Finger oximeter</b>	<b>Always</b>	<b>Usually</b>	<b>Sometimes</b>	<b>Never</b>

Always/Usually/Sometimes/Never

			<b>NWAS n = 68</b>	<b>NURSES n = 22</b>	<b>DOCTORS n = 22</b>
a	Simple Mask		33/5/1/2	15/0/0/0	14/1/1/0
b	Reservoir		42/3/1/0	15/0/0/0	14/1/1/1
c	NC		23/6/12/5	5/1/4/4	9/3/1/3
d	V24		17/2/9/14	3/1/3/7	6/3/4/2
e	V28		20/6/9/9	5/3/2/5	6/2/5/3
f	O2 nebuliser		40/3/2/1	15/0/0/0	13/2/1/1
g	Compressor		13/2/4/26	0/0/1/13	4/2/2/8
h	Oximeter		42/4/0/0	14/0/1/0	13/4/0/0
<b>Percent of responders with each device always or usually available</b>					
a	Simple Mask		92	100	93
b	Reservoir		98	100	88
c	NC		63	42	75
d	V24		45	28	60
e	V28		59	53	49
f	O2 nebuliser		94	100	88
g	Compressor		33	0	37
h	Oximeter		100	93	100

HCP Question 19

**19. Do you think you have had adequate training in oxygen use**    **Yes**    **No**

			<b>NWAS</b> n = 68	<b>NURSES</b> n = 22	<b>DOCTORS</b> n = 22
<b>Adequate</b>	Yes		<b>26</b>	<b>9</b>	<b>11</b>
training	No		17	6	6
Blank			25	7	5
Total			68	22	22
<b>Percent of responders who reported adequate training</b>					
<b>Adequate</b>	Yes		<b>60</b>	<b>60</b>	<b>65</b>
training	No		40	40	35
Total					

**20. Have you any suggestions for how emergency oxygen therapy could be improved?**

**Your suggestions:**