

BTS Emergency Oxygen searches 2011 and 2013

Previous searches were done in 2005. These 2011 searches were originally expected to be a straight update so the three Key Question searches used in 2005 were translated for new interfaces and amended only where necessary. Further changes were made by the Group- including the removal of exclusions by age and for pregnancy, and additional search terms in all 3 strategies.

Given the changes made to the strategies the group decided that they wanted to have all results rather than make any attempt to de-duplicate against the 2005 results, so no date limits were applied.

The group decided that they wanted all results together (Key Q1 OR Key Q2 or Key Q3), so the three searches were run together and the results combined where possible.

Previous searches included guideline searches in GuidelineFinder, Guidelines Clearinghouse and TRIP but they do not need guideline searches done for this review.

Endnote library/ search results files and write-up saved at projectfs/CRDInfo/BTS/ Emergency oxygen- ronan o'driscoll - dave fox - 2011

MEDLINE

Database: Ovid MEDLINE(R) <1948 to November Week 1 2011>

Searched via OVID interface 15/11/11

Strategy saved as BTS OXYGEN MEDLINE FINAL
(individual Key Question strategies also saved)

Lines 1 to 98 are Key Question 1, lines 99 to 217 are Key Question 2, and lines 218 to 309 are Key Question 3.

Line 310 combines the results of all three.

1. Anoxia/
2. Hypoxia-Ischemia, Brain/
3. Hypoxia, Brain/ or Hyperoxia/

4. anoxemia/
5. Acidosis, Respiratory/
6. (hypoxia or anoxia).ti,ab.
7. (hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia).ti,ab.
8. Hypercapnia/ or (hypercarbia or hypercapnia).ti,ab.
9. (respiratory adj1 acidosis).ti,ab.
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. Anoxia/mo [Mortality]
12. Hypoxia-Ischemia, Brain/mo [Mortality]
13. Hyperoxia/mo [Mortality]
14. Acidosis, Respiratory/mo [Mortality]
15. Hypoxia, Brain/mo [Mortality]
16. Hypercapnia/mo [Mortality]
17. 11 or 12 or 13 or 14 or 15 or 16
18. Soft Tissue Injuries/
19. (tissue\$ adj1 injur\$).ti,ab.
20. 18 or 19
21. 10 and 20
22. exp Brain Damage, Chronic/
23. ((brain adj1 injur\$) or (brain adj1 damag\$) or brain-damag\$).ti,ab.
24. 22 or 23
25. 10 and 24
26. exp Coma/
27. coma.ti,ab.
28. 26 or 27
29. 10 and 28
30. Stroke/
31. (cva or stroke).ti,ab.
32. (cerebrovascular adj1 accident\$).ti,ab.
33. 30 or 31 or 32
34. 10 and 33
35. exp Myocardial Infarction/
36. (myocard\$ adj1 infarct\$).ti,ab.
37. 35 or 36
38. 10 and 37
39. exp Heart Failure/
40. (heart adj1 failure).ti,ab.
41. 39 or 40
42. 10 and 41
43. exp Pulmonary Disease, Chronic Obstructive/
44. (copd or coad or cobd).ti,ab.
45. (chronic obstruct\$ adj1 (pulmonary or airway\$ or lung\$ or bronchi\$ or airway\$)).ti,ab.
46. 43 or 44 or 45
47. 10 and 46
48. exp Renal Insufficiency/
49. ((renal adj1 failure) or (kidney adj1 failure)).ti,ab.
50. 48 or 49
51. 10 and 50
52. exp Thoracic Injuries/
53. ((thorax adj3 injur\$) or (thoracic adj3 injur\$)).ti,ab.

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54. trauma.ti,ab.
55. 52 or 53 or 54
56. 10 and 55
57. exp pregnancy/
58. (pregnan\$ or childbirth).ti,ab.
59. 10 and 58
60. 17 or 21 or 25 or 29 or 34 or 38 or 42 or 47 or 51 or 56 or 59
61. Long-Term Care/
62. 60 not 61
63. (long adj1 term adj1 oxygen adj1 therapy).ti,ab.
64. (long-term adj1 oxygen adj1 therapy).ti,ab.
65. 63 or 64
66. 62 not 65
67. *Sleep Apnea, Obstructive/
68. 66 not 67
69. randomized controlled trial.pt.
70. exp Randomized Controlled Trial/
71. Random Allocation/
72. Double-Blind Method/
73. Single-Blind Method/
74. clinical trial.pt.
75. exp Clinical Trial/
76. Controlled Clinical Trial/
77. (clin\$ adj1 trial\$).ti,ab.
78. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or mask\$)).ti,ab.
79. placebo\$.ti,ab.
80. Placebos/
81. random\$.ti,ab.
82. exp Evaluation Studies/
83. Follow-Up Studies/
84. exp Research Design/
85. Prospective Studies/
86. (control\$ or prospectiv\$ or volunteer\$).ti,ab.
87. 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 or 85 or 86
88. comment.pt.
89. letter.pt.
90. editorial.pt.
91. 88 or 89 or 90
92. 87 not 91
93. 68 and 92
94. Animals/
95. humans/
96. 94 not (94 and 95)
97. 93 not 96
98. limit 97 to english language
99. Anoxia/
100. Hypoxia-Ischemia, Brain/
101. Hypoxia, Brain/ or Hyperoxia/
102. (hypoxia or anoxia).ti,ab.
103. (hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia).ti,ab.
104. Hypercapnia/ or (hypercarbia or hypercapnia).ti,ab.
105. anoxemia/
106. 99 or 100 or 101 or 102 or 103 or 104 or 105
107. exp Oximetry/
108. abg.ti,ab.
109. (arterial adj1 blood adj1 gas\$).ti,ab.
110. elbg.ti,ab.
111. ((earlobe or ear-lobe or (ear adj1 lobe)) adj1 blood).ti,ab.
112. ews.ti,ab.
113. (early adj1 warning adj1 score\$).ti,ab.
114. (co2 adj1 monitor\$).ti,ab.
115. (carbon adj1 dioxide adj1 monitor\$).ti,ab.
116. 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115
117. 106 and 116
118. Oxygen Inhalation Therapy/
119. ((oxygen or heliox or entonox or "nitrous oxide") adj3 (deliver\$ or therap\$)).ti,ab.
120. Continuous Positive Airway Pressure/
121. ("continuous positive airway pressure" or CPAP).ti,ab.
122. 118 or 119 or 120 or 121
123. breathless\$.ti,ab.
124. exp Pulmonary Disease, Chronic Obstructive/
125. (copd or coad or cobd).ti,ab.
126. (chronic adj3 obstruct\$ adj3 (pulmonary or airway\$ or lung\$ or bronchi\$ or respirator\$)).ti,ab.
127. exp Asthma/
128. asthma\$.ti,ab.
129. exp Pneumonia/
130. pneumonia.ti,ab.
131. Pulmonary Embolism/
132. (pulmonary adj1 embol\$).ti,ab.
133. exp "Wounds and Injuries"/
134. trauma.ti,ab.
135. exp Heart Failure/
136. (heart adj1 failure).ti,ab.
137. exp Myocardial Infarction/
138. (myocard\$ adj1 infarct\$).ti,ab.
139. exp Heart Arrest/
140. ((heart or cardiac) adj1 arrest).ti,ab.
141. exp Angina Pectoris/
142. angina.ti,ab.
143. Cystic Fibrosis/
144. (cystic adj1 fibrosis).ti,ab.
145. exp Muscular Dystrophies/
146. (muscular adj1 dystroph\$).ti,ab.
147. exp Motor Neuron Disease/
148. (motor adj1 neuron\$).ti,ab.
149. Kyphosis/

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150. (kyphoscoliosis or kyphosis).ti,ab.
151. Anaphylaxis/
152. (anaphylaxis or anaphylactic).ti,ab.
153. exp Hyperventilation/
154. hyperventilat\$.ti,ab.
155. exp Endoscopy/
156. endoscop\$.ti,ab.
157. Conscious Sedation/
158. "Conscious Sedation".ti,ab.
159. exp Anesthesia, General/
160. (general adj1 (anesthesia or anaesthesia)).ti,ab.
161. ("patient controlled analgesia" or "PCA system\$").ti,ab.
162. (alert adj1 (bracelet\$ or card\$ or necklace\$)).ti,ab.
163. ((medi adj1 alert\$) or medi-alert\$).ti,ab.
164. ((medic adj1 alert\$) or medic-alert\$).ti,ab.
165. ((warning or alert) adj1 (system\$ or device\$)).ti,ab.
166. exp Heart Defects, Congenital/
167. "congenital heart".ti,ab.
168. exp Lung Diseases/
169. "chronic lung".ti,ab.
170. exp Anemia, Sickle Cell/
171. "sickle cell".ti,ab.
172. exp Hypertension, Pulmonary/
173. "pulmonary hypertension".ti,ab.
174. Croup/ or croup.ti,ab.
175. exp Bronchiolitis/ or bronchiolitis.ti,ab.
176. Ductus Arteriosus, Patent/ or "patent ductus arteriosus".ti,ab.
177. exp pregnancy/ or (pregnan\$ or childbirth).ti,ab.
178. 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 or 144 or 145 or 146 or 147 or 148 or 149 or 150 or 151 or 152 or 153 or 154 or 155 or 156 or 157 or 158 or 159 or 160 or 161 or 162 or 163 or 164 or 165 or 166 or 167 or 168 or 169 or 170 or 171 or 172 or 173 or 174 or 175 or 176 or 177
179. 122 and 178
180. (long adj1 term adj1 oxygen adj1 therapy).ti,ab.
181. (long-term adj1 oxygen adj1 therapy).ti,ab.
182. ltot.ti,ab.
183. Hyperbaric Oxygenation/
184. (hyperbaric adj1 oxygen\$).ti,ab.
185. 180 or 181 or 182 or 183 or 184
186. 179 not 185
187. 117 or 186
188. animals/
189. humans/
190. 188 not (188 and 189)
191. 187 not 190
192. randomized controlled trial.pt.
193. exp Randomized Controlled Trial/
194. Random Allocation/
195. Double-Blind Method/
196. Single-Blind Method/
197. clinical trial.pt.
198. exp Clinical Trial/
199. Controlled Clinical Trial/
200. (clin\$ adj1 trial\$).ti,ab.
201. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or mask\$)).ti,ab.
202. placebo\$.ti,ab.
203. Placebos/
204. random\$.ti,ab.
205. exp Evaluation Studies/
206. Follow-Up Studies/
207. exp Research Design/
208. Prospective Studies/
209. (control\$ or prospectiv\$ or volunteer\$).ti,ab.
210. 192 or 193 or 194 or 195 or 196 or 197 or 198 or 199 or 200 or 201 or 202 or 203 or 204 or 205 or 206 or 207 or 208 or 209
211. comment.pt.
212. letter.pt.
213. editorial.pt.
214. 211 or 212 or 213
215. 210 not 214
216. 191 and 215
217. limit 216 to english language
218. ((oxygen or heliox or entonox or "nitrous oxide") adj3 (store\$ or storing or storage)).ti,ab.
219. exp Oxygen/
220. (oxygen or heliox or entonox or "nitrous oxide").ti,ab.
221. 219 or 220
222. exp Ambulances/
223. exp Motor Vehicles/
224. ambulance\$.ti,ab.
225. exp "Transportation of Patients"/
226. (transport\$ adj3 (hospital\$ or intrahospital\$)).ti,ab.
227. (transport\$ adj3 (gp or gps)).ti,ab.
228. (transport\$ adj3 (practice\$ or practitioner\$)).ti,ab.
229. 222 or 223 or 224 or 225 or 226 or 227 or 228
230. 221 and 229
231. (car or cars or automobile\$).ti,ab.
232. 229 or 231
233. ((oxygen or heliox or entonox or "nitric oxide") adj3 (carri\$ or carry or transport\$ or deliver\$ or administ\$)).ti,ab.
234. 232 and 233
235. exp Safety/
236. Equipment Safety/
237. 235 or 236
238. 233 and 237
239. ((oxygen or heliox or entonox or "nitric oxide") adj3

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- (safe or safety)).ti,ab.
240. 218 or 230 or 234 or 238 or 239
241. ((oxygen or heliox or entonox or "nitric oxide") adj3 (prescrib\$ or prescrip\$)).ti,ab.
242. ((oxygen or heliox or entonox or "nitric oxide") adj3 guideline\$).ti,ab.
243. ((oxygen or heliox or entonox or "nitric oxide") adj3 (premask\$ or cannula\$ or humidif\$ or nebuliser\$)).ti,ab.
244. ((oxygen or heliox or entonox or "nitric oxide") adj1 deliver\$ adj1 (system or systems or device\$)).ti,ab.
245. "high flow oxygen".ti,ab.
246. oxclip.ti,ab.
247. oxylator.ti,ab.
248. (venturi adj3 mask\$).ti,ab.
249. oxyarm.ti,ab.
250. capnoxygen.ti,ab.
251. oxymask.ti,ab.
252. vapootherm.ti,ab.
253. nasoral.ti,ab.
254. ((tusk or reservoir) adj1 mask\$).ti,ab.
255. (bag adj1 valve).ti,ab.
256. (nasal adj1 spectacles).ti,ab.
257. 244 or 245 or 246 or 247 or 248 or 249 or 250 or 251 or 252 or 253 or 254 or 255 or 256
258. Oxygen Inhalation Therapy/is [Instrumentation]
259. (mask\$ or helmet\$).ti,ab.
260. exp Masks/
261. cannula\$.ti,ab.
262. humidif\$.ti,ab.
263. 259 or 260 or 261 or 262
264. 258 and 263
265. 240 or 241 or 242 or 243 or 257 or 264
266. Continuous Positive Airway Pressure/
267. cpap.ti,ab.
268. "continuous positive airway pressure".ti,ab.
269. 266 or 267 or 268
270. 221 and 269
271. 265 or 270
272. (alert adj1 (bracelet\$ or card\$ or necklace\$)).ti,ab.
273. ((medi adj1 alert\$) or medi-alert\$).ti,ab.
274. ((medic adj1 alert\$) or medic-alert\$).ti,ab.
275. ((warning or alert) adj1 (system\$ or device\$)).ti,ab.
276. 272 or 273 or 274 or 275
277. hypercapnia.ti,ab.
278. 276 and 277
279. 271 or 278
280. animals/
281. humans/
282. 280 not (280 and 281)
283. 279 not 282
284. randomized controlled trial.pt.
285. exp Randomized Controlled Trial/
286. Random Allocation/
287. Double-Blind Method/
288. Single-Blind Method/
289. clinical trial.pt.
290. exp Clinical Trial/
291. Controlled Clinical Trial/
292. (clin\$ adj1 trial\$).ti,ab.
293. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or mask\$)).ti,ab.
294. placebo\$.ti,ab.
295. Placebos/
296. random\$.ti,ab.
297. exp Evaluation Studies/
298. Follow-Up Studies/
299. exp Research Design/
300. Prospective Studies/
301. (control\$ or prospectiv\$ or volunteer\$).ti,ab.
302. 284 or 285 or 286 or 287 or 288 or 289 or 290 or 291 or 292 or 293 or 294 or 295 or 296 or 297 or 298 or 299 or 300 or 301
303. comment.pt.
304. letter.pt.
305. editorial.pt.
306. 303 or 304 or 305
307. 302 not 306
308. 283 and 307
309. limit 308 to english language
310. 98 or 217 or 309 (**7439 results**)
- Additional search for non-English language publications with English abstracts**
MEDLINE was restricted by language as in the 2005 searches but the Group decided they did want to look at non-English publications as long as they have English abstracts. The above MEDLINE search was repeated 18/11/11 without the non-English language exclusion, and those records were in turn searched for those with English abstracts. The other sources were not restricted by language so only the MEDLINE search was repeated. Strategy as above with addition of:
- 311 97 or 216 or 308 (8488)
312 311 not 310 (1036)
313 english abstract.pt. (1664443)
314 312 and 313 (987)
- Cochrane Library;
Cochrane Database of Systematic Reviews (CDSR)
Database of Abstracts of Reviews of Effects (DARE)
Cochrane Central Register of Controlled Trials (CENTRAL)**
Searched online 15/11/11 <http://onlinelibrary.wiley.com>
Strategies saved as BTS EMERGENCY OXYGEN 2011 KEY Q1, BTS EMERGENCY OXYGEN KEY Q2, BTS EMERGENCY

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OXYGEN KEY Q3

Key Question 1

Sleep apnea exclusion not used in Cochrane as 'focused' MeSH searching not available (only added 6 records total).

- #1 MeSH descriptor Anoxia, this term only 1061
- #2 MeSH descriptor Hypoxia, Brain, this term only 65
- #3 MeSH descriptor Hyperoxia, this term only 82
- #4 MeSH descriptor Hypoxia-Ischemia, Brain, this term only 87
- #5 MeSH descriptor Acidosis, Respiratory, this term only 42
- #6 (hypoxia or anoxia):ti,ab 1383
- #7 (hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia):ti,ab 1060
- #8 MeSH descriptor Hypercapnia, this term only 273
- #9 (hypercarbia or hypercapnia):ti,ab 468
- #10 (respiratory next acidosis):ti,ab 74
- #11 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10) 3181
- #12 MeSH descriptor Anoxia, this term only with qualifier: MO 15
- #13 MeSH descriptor Hypoxia, Brain, this term only with qualifier: MO 1
- #14 MeSH descriptor Hyperoxia, this term only with qualifier: MO 0
- #15 MeSH descriptor Hypoxia-Ischemia, Brain, this term only with qualifier: MO 16
- #16 MeSH descriptor Acidosis, Respiratory, this term only with qualifier: MO 1
- #17 MeSH descriptor Hypercapnia, this term only with qualifier: MO 2
- #18 (#12 OR #13 OR #14 OR #15 OR #16 OR #17) 34
- #19 MeSH descriptor Soft Tissue Injuries, this term only 60
- #20 (tissue* next injur*):ti,ab 354
- #21 MeSH descriptor Brain Damage, Chronic explode all trees 790
- #22 ((brain next injur*) or (brain next damag*) or brain-damag*):ti,ab 1402
- #23 MeSH descriptor Coma explode all trees 167
- #24 coma:ti,ab 881
- #25 MeSH descriptor Stroke explode all trees 3785
- #26 (cva or stroke):ti,ab 14990
- #27 (cerebrovascular next accident*):ti,ab 233
- #28 MeSH descriptor Myocardial Infarction explode all trees 7636
- #29 (myocard* next infarct*):ti,ab 11618
- #30 MeSH descriptor Heart Failure explode all trees 4619
- #31 (heart next failure):ti,ab 7779
- #32 MeSH descriptor Pulmonary Disease, Chronic

- Obstructive explode all trees 1711
- #33 (copd or coad or cobd):ti,ab 4751
- #34 (chronic obstruct* next (pulmonary or airway* or lung* or bronchi* or airway*)):ti,ab 3746
- #35 MeSH descriptor Renal Insufficiency explode all trees 3771
- #36 ((renal next failure) or (kidney next failure)):ti,ab 2870
- #37 MeSH descriptor Thoracic Injuries explode all trees 160
- #38 ((thorax near/3 injur*) or (thoracic near/3 injur*)):ti,ab 44
- #39 trauma:ti,ab 3977
- #40 MeSH descriptor Pregnancy explode all trees 5519
- #41 (pregnan* or childbirth):ti,ab 13193
- #42 (#19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41) 66688
- #43 (#11 AND #42) 631
- #44 (#18 OR #43) 657
- #45 MeSH descriptor Long-Term Care, this term only 927
- #46 (long next term next oxygen next therapy):ti,ab 87
- #47 (long-term next oxygen next therapy):ti,ab 87
- #48 (#45 OR #46 OR #47) 1011
- #49 (#44 AND NOT #48) 629 **(18 results from CDSR, 9 from DARE and 594 from CENTRAL)**

Key Question 2

- #1 MeSH descriptor Anoxia, this term only 1061
- #2 MeSH descriptor Hypoxia-Ischemia, Brain, this term only 87
- #3 MeSH descriptor Hypoxia, Brain, this term only 65
- #4 MeSH descriptor Hyperoxia, this term only 82
- #5 (hypoxia or anoxia):ti,ab 1383
- #6 (hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia):ti,ab 1060
- #7 MeSH descriptor Hypercapnia, this term only 273
- #8 (hypercarbia or hypercapnia):ti,ab 468
- #9 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8) 3119
- #10 MeSH descriptor Oximetry explode all trees 678
- #11 abg:ti,ab 52
- #12 (arterial next blood next gas*):ti,ab 971
- #13 elbg:ti,ab 0
- #14 ((earlobe or ear-lobe or (ear next lobe)) next blood):ti,ab 6
- #15 ews:ti,ab 12
- #16 (early next warning next score*):ti,ab 0
- #17 (co2 next monitor*):ti,ab 14
- #18 (carbon next dioxide next monitor*):ti,ab 9
- #19 (#10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18) 1666

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- #20 (#9 AND #19) 320
- #21 MeSH descriptor Oxygen Inhalation Therapy, this term only 740
- #22 ((oxygen or heliox or entonox or "nitrous oxide") near/3 (deliver* or therap*)):ti,ab 1402
- #23 MeSH descriptor Continuous Positive Airway Pressure, this term only 431
- #24 ("continuous positive airway pressure" or CPAP):ti,ab 1402
- #25 (#21 OR #22 OR #23 OR #24) 3221
- #26 breathless*:ti,ab 512
- #27 MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees 1711
- #28 (copd or coad or cobd):ti,ab 4751
- #29 (chronic near/3 obstruct* near/3 (pulmonary or airway* or lung* or bronchi* or respirator*)):ti,ab 3853
- #30 MeSH descriptor Asthma explode all trees 8619
- #31 asthma*:ti,ab 18191
- #32 MeSH descriptor Pneumonia explode all trees 2240
- #33 pneumonia:ti,ab 3337
- #34 MeSH descriptor Pulmonary Embolism, this term only 799
- #35 (pulmonary next embol*):ti,ab 1243
- #36 MeSH descriptor Wounds and Injuries explode all trees 12608
- #37 trauma:ti,ab 3977
- #38 MeSH descriptor Heart Failure explode all trees 4619
- #39 (heart next failure):ti,ab 7779
- #40 MeSH descriptor Myocardial Infarction explode all trees 7636
- #41 (myocard* next infarct*):ti,ab 11618
- #42 MeSH descriptor Heart Arrest explode all trees 964
- #43 ((heart or cardiac) next arrest):ti,ab 855
- #44 MeSH descriptor Angina Pectoris explode all trees 4243
- #45 angina:ti,ab 6412
- #46 MeSH descriptor Cystic Fibrosis, this term only 942
- #47 (cystic next fibrosis):ti,ab 2353
- #48 MeSH descriptor Muscular Dystrophies explode all trees 206
- #49 (muscular next dystroph*):ti,ab 219
- #50 MeSH descriptor Motor Neuron Disease explode all trees 315
- #51 (motor next neuron*):ti,ab 166
- #52 MeSH descriptor Kyphosis, this term only 72
- #53 (kyphoscoliosis or kyphosis):ti,ab 115
- #54 MeSH descriptor Anaphylaxis, this term only 141
- #55 (anaphylaxis or anaphylactic):ti,ab 343
- #56 MeSH descriptor Hyperventilation explode all trees 205
- #57 hyperventilat*:ti,ab 560
- #58 MeSH descriptor Endoscopy explode all trees 11693
- #59 endoscop*:ti,ab 8751
- #60 MeSH descriptor Conscious Sedation explode all trees 1002
- #61 "Conscious Sedation":ti,ab 349
- #62 MeSH descriptor Anesthesia, General explode all trees 5082
- #63 (general next (anesthesia or anaesthesia)):ti,ab 5441
- #64 ("patient controlled analgesia" or "PCA system*"):ti,ab 1674
- #65 (alert next (bracelet* or card* or necklace*)):ti,ab 1
- #66 ((medi next alert*) or medi-alert*):ti,ab 0
- #67 ((medic next alert*) or medic-alert*):ti,ab 0
- #68 ((warning or alert) next (system* or device*)):ti,ab 44
- #69 MeSH descriptor Heart Defects, Congenital explode all trees 1233
- #70 "congenital heart":ti,ab 407
- #71 MeSH descriptor Lung Diseases explode all trees 23924
- #72 "chronic lung":ti,ab 579
- #73 MeSH descriptor Anemia, Sickle Cell explode all trees 308
- #74 "sickle cell":ti,ab 673
- #75 MeSH descriptor Hypertension, Pulmonary explode all trees 445
- #76 "pulmonary hypertension":ti,ab 580
- #77 MeSH descriptor Croup, this term only 68
- #78 Croup:ti,ab 115
- #79 MeSH descriptor Bronchiolitis explode all trees 245
- #80 Bronchiolitis:ti,ab 404
- #81 MeSH descriptor Ductus Arteriosus, Patent, this term only 197
- #82 "patent ductus arteriosus":ti,ab 309
- #83 MeSH descriptor Pregnancy explode all trees 5519
- #84 (pregnan* or childbirth):ti,ab 13193
- #85 (#26 OR #27 OR #28 OR (#29 AND r AND #30) OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR (#41 AND r AND #42) OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74 OR #75 OR #76 OR #77 OR #78 OR #79 OR #80 OR #81 OR #82 OR #83 OR #84) 119633
- #86 (#25 AND #85) 1215
- #87 ("long term oxygen therapy"):ti,ab 87
- #88 ("long-term oxygen therapy"):ti,ab 87
- #89 ltot:ti,ab 41
- #90 MeSH descriptor Hyperbaric Oxygenation, this term only 319
- #91 ("hyperbaric oxygen*"):ti,ab 475
- #92 (#87 OR #88 OR #89 OR #90 OR #91) 626
- #93 (#86 AND NOT #92) 1088

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#94 (#20 OR #93) 1369 **(52 results from CDSR, 18 from DARE and 1278 from CENTRAL)**

Key Question 3

#1 ((oxygen or heliox or entonox or "nitrous oxide") near/3 (store* or storing or storage)):ti,ab 10
#2 MeSH descriptor Oxygen explode all trees 3890
#3 (oxygen or heliox or entonox or "nitrous oxide"):ti,ab 15794
#4 (#2 OR #3) 17281
#5 MeSH descriptor Ambulances explode all trees 99
#6 MeSH descriptor Motor Vehicles explode all trees 164
#7 ambulance*:ti,ab 218
#8 MeSH descriptor Transportation of Patients explode all trees 170
#9 (transport* near/3 (hospital* or intrahospital*)):ti,ab 53
#10 (transport* near/3 (gp or gps)):ti,ab 10
#11 (transport* near/3 (practice* or practitioner*)):ti,ab 4
#12 (#5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11) 453
#13 (#4 AND #12) 32
#14 (car or cars or automobile*):ti,ab 555
#15 (#13 OR #14) 587
#16 ((oxygen or heliox or entonox or "nitric oxide") near/3 (carri* or carry or transport* or deliver* or administ*)):ti,ab 1162
#17 (#15 AND #16) 6
#18 MeSH descriptor Safety explode all trees 2924
#19 MeSH descriptor Equipment Safety explode all trees 285
#20 (#18 OR #19) 3202
#21 (#16 AND #20) 7
#22 ((oxygen or heliox or entonox or "nitric oxide") near/3 (safe or safety)):ti,ab 35
#23 (#1 OR #13 OR #17 OR #21 OR #22) 83
#24 ((oxygen or heliox or entonox or "nitric oxide") near/3 (prescrib* or prescrip*)):ti,ab 29
#25 ((oxygen or heliox or entonox or "nitric oxide") near/3 guideline*):ti,ab 3
#26 ((oxygen or heliox or entonox or "nitric oxide") near/3 (premask* or cannula* or humidif* or nebuliser*)):ti,ab 72
#27 ((oxygen or heliox or entonox or "nitric oxide") next deliver* next (system or systems or device*)):ti,ab 39
#28 "high flow oxygen":ti,ab 24
#29 oxclip:ti,ab 1
#30 oxylator:ti,ab 4
#31 (venturi near/3 mask*):ti,ab 24
#32 oxyarm:ti,ab 3
#33 capnoxygen:ti,ab 0

#34 oxymask:ti,ab 1
#35 vapootherm:ti,ab 10
#36 nasoral:ti,ab 8
#37 ((tusk or reservoir) next mask*):ti,ab 2
#38 (bag next valve):ti,ab 53
#39 (nasal next spectacles):ti,ab 1
#40 (#27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39) 155
#41 MeSH descriptor Oxygen Inhalation Therapy, this term only with qualifier: IS 87
#42 (mask* or helmet*):ti,ab 8615
#43 MeSH descriptor Masks explode all trees 986
#44 cannula*:ti,ab 1338
#45 humidif*:ti,ab 335
#46 (#42 OR #43 OR #44 OR #45) 10303
#47 (#41 AND #46) 55
#48 (#23 OR #24 OR #25 OR #26 OR #40 OR #47) 336
#49 MeSH descriptor Continuous Positive Airway Pressure, this term only 431
#50 cpap:ti,ab 1048
#51 "continuous positive airway pressure":ti,ab 968
#52 (#49 OR #50 OR #51) 1457
#53 (#3 AND #52) 298
#54 (#48 OR #53) 620
#55 (alert next (bracelet* or card* or necklace*)):ti,ab 1
#56 ((medi next alert*) or medi-alert*):ti,ab 0
#57 ((medic next alert*) or medic-alert*):ti,ab 0
#58 ((warning or alert) next (system* or device*)):ti,ab 44
#59 (#55 OR #56 OR #57 OR #58) 45
#60 hypercapnia:ti,ab 406
#61 (#59 AND #60) 0
#62 (#54 OR #61) 620 **(33 results from CDSR, 2 from DARE and 584 from CENTRAL)**

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Total Results

Source	Results	Results after deduplication	Custom 4 field
MEDLINE	7439	7213	MEDLINE
MEDLINE non-English language	987	966	MEDLINE non-English language
Cochrane Database of Systematic Reviews	103	21	CDSR
Database of Abstracts of Reviews of Effects	29	10	DARE
Cochrane Central Register of Controlled Trials	2456	210	CENTRAL
	11014	8420	

All results saved to compressed endnote library bts emergency oxygen 2011.enlx and emailed 18/11/11.

Group considering whether Embase searches are required but they can be deduped against 8420 results and sent later.

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Update Searches August 2013

All searches were re-run with no changes, and all additional new records identified sent to group.

Cochrane Library;

Cochrane Database of Systematic Reviews (CDSR)

Database of Abstracts of Reviews of Effects (DARE)

Cochrane Central Register of Controlled Trials

(CENTRAL)

Searched online 02/08/13 <http://onlinelibrary.wiley.com>

Strategies saved as BTS EMERGENCY OXYGEN 2011 KEY Q1, BTS EMERGENCY OXYGEN KEY Q2, BTS EMERGENCY OXYGEN KEY Q3

Key Question 1

- #1 MeSH descriptor: [Anoxia] this term only 1095
- #2 MeSH descriptor: [Hypoxia, Brain] this term only 70
- #3 MeSH descriptor: [Hyperoxia] this term only 85
- #4 MeSH descriptor: [Hypoxia-Ischemia, Brain] this term only 106
- #5 MeSH descriptor: [Acidosis, Respiratory] this term only 42
- #6 (hypoxia or anoxia):ti,ab 1463
- #7 (hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia):ti,ab 1115
- #8 MeSH descriptor: [Hypercapnia] this term only 285
- #9 (hypercarbia or hypercapnia):ti,ab 484
- #10 (respiratory next acidosis):ti,ab 77
- #11 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 3361
- #12 MeSH descriptor: [Anoxia] this term only and with qualifiers: [Mortality - MO] 16
- #13 MeSH descriptor: [Hypoxia, Brain] this term only and with qualifiers: [Mortality - MO] 1
- #14 MeSH descriptor: [Hyperoxia] this term only and with qualifiers: [Mortality - MO] 0
- #15 MeSH descriptor: [Hypoxia-Ischemia, Brain] this term only and with qualifiers: [Mortality - MO] 22
- #16 MeSH descriptor: [Acidosis, Respiratory] this term only and with qualifiers: [Mortality - MO] 1
- #17 MeSH descriptor: [Hypercapnia] this term only and with qualifiers: [Mortality - MO] 2
- #18 #12 or #13 or #14 or #15 or #16 or #17 41
- #19 MeSH descriptor: [Soft Tissue Injuries] this term only 68
- #20 (tissue* next injur*):ti,ab 422
- #21 MeSH descriptor: [Brain Damage, Chronic] explode all trees 877

- #22 ((brain next injur*) or (brain next damag*) or brain-damag*):ti,ab 1593
- #23 MeSH descriptor: [Coma] explode all trees 184
- #24 coma:ti,ab 932
- #25 MeSH descriptor: [Stroke] explode all trees 4488
- #26 (cva or stroke):ti,ab 16417
- #27 (cerebrovascular next accident*):ti,ab 244
- #28 MeSH descriptor: [Myocardial Infarction] explode all trees 8168
- #29 (myocard* next infarct*):ti,ab 12358
- #30 MeSH descriptor: [Heart Failure] explode all trees 5089
- #31 (heart next failure):ti,ab 8467
- #32 MeSH descriptor: [Pulmonary Disease, Chronic Obstructive] explode all trees 2026
- #33 (copd or coad or cobd):ti,ab 5492
- #34 (chronic obstruct* next (pulmonary or airway* or lung* or bronchi* or airway*)):ti,ab 4311
- #35 MeSH descriptor: [Renal Insufficiency] explode all trees 4257
- #36 ((renal next failure) or (kidney next failure)):ti,ab 2964
- #37 MeSH descriptor: [Thoracic Injuries] explode all trees 183
- #38 ((thorax near/3 injur*) or (thoracic near/3 injur*)):ti,ab 60
- #39 trauma:ti,ab 4377
- #40 MeSH descriptor: [Pregnancy] explode all trees 5361
- #41 (pregnan* or childbirth):ti,ab 14143
- #42 #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 72568
- #43 #11 and #42 669
- #44 #18 or #43 699
- #45 MeSH descriptor: [Long-Term Care] this term only 1005
- #46 (long next term next oxygen next therapy):ti,ab 91
- #47 (long-term next oxygen next therapy):ti,ab 91
- #48 #45 or #46 or #47 1093
- #49 #44 and not #48 671 **(21 results from CDSR, 12 from DARE and 630 from CENTRAL)**

Key Question 2

- #1 MeSH descriptor: [Anoxia] this term only 1095
- #2 MeSH descriptor: [Hypoxia-Ischemia, Brain] this term only 106

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#3	MeSH descriptor: [Hypoxia, Brain] this term only	70	#42	MeSH descriptor: [Heart Arrest] explode all trees	1075
#4	MeSH descriptor: [Hyperoxia] this term only	85	#43	((heart or cardiac) next arrest):ti,ab	942
#5	(hypoxia or anoxia):ti,ab	1463	#44	MeSH descriptor: [Angina Pectoris] explode all trees	4534
#6	(hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia):ti,ab	1115	#45	angina:ti,ab	6592
#7	MeSH descriptor: [Hypercapnia] this term only	285	#46	MeSH descriptor: [Cystic Fibrosis] this term only	1013
#8	(hypercarbia or hypercapnia):ti,ab	484	#47	(cystic next fibrosis):ti,ab	2545
#9	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8	3298	#48	MeSH descriptor: [Muscular Dystrophies] explode all trees	217
#10	MeSH descriptor: [Oximetry] explode all trees	714	#49	(muscular next dystroph*):ti,ab	230
#11	abg:ti,ab	55	#50	MeSH descriptor: [Motor Neuron Disease] explode all trees	337
#12	(arterial next blood next gas*):ti,ab	1003	#51	(motor next neuron*):ti,ab	181
#13	elbg:ti,ab	0	#52	MeSH descriptor: [Kyphosis] this term only	82
#14	((earlobe or ear-lobe or (ear next lobe)) next blood):ti,ab	7	#53	(kyphoscoliosis or kyphosis):ti,ab	129
#15	ews:ti,ab	11	#54	MeSH descriptor: [Anaphylaxis] this term only	152
#16	(early next warning next score*):ti,ab	0	#55	(anaphylaxis or anaphylactic):ti,ab	367
#17	(co2 next monitor*):ti,ab	15	#56	MeSH descriptor: [Hyperventilation] explode all trees	211
#18	(carbon next dioxide next monitor*):ti,ab	9	#57	hyperventilat*:ti,ab	571
#19	#10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18	1737	#58	MeSH descriptor: [Endoscopy] explode all trees	12983
#20	#9 and #19	338	#59	endoscop*:ti,ab	9302
#21	MeSH descriptor: [Oxygen Inhalation Therapy] this term only	778	#60	MeSH descriptor: [Conscious Sedation] explode all trees	1062
#22	((oxygen or heliox or entonox or "nitrous oxide") near/3 (deliver* or therap*)):ti,ab	1515	#61	"Conscious Sedation":ti,ab	366
#23	MeSH descriptor: [Continuous Positive Airway Pressure] this term only	525	#62	MeSH descriptor: [Anesthesia, General] explode all trees	5263
#24	("continuous positive airway pressure" or CPAP):ti,ab	1663	#63	(general next (anesthesia or anaesthesia)):ti,ab	5758
#25	#21 or #22 or #23 or #24	3630	#64	("patient controlled analgesia" or "PCA system*"):ti,ab	1751
#26	breathless*:ti,ab	551	#65	(alert next (bracelet* or card* or necklace*)):ti,ab	1
#27	MeSH descriptor: [Pulmonary Disease, Chronic Obstructive] explode all trees	2026	#66	((medi next alert*) or medi-alert*):ti,ab	0
#28	(copd or coad or cobd):ti,ab	5492	#67	((medic next alert*) or medic-alert*):ti,ab	0
#29	(chronic near/3 obstruct* near/3 (pulmonary or airway* or lung* or bronchi* or respirator*)):ti,ab	4427	#68	((warning or alert) next (system* or device*)):ti,ab	45
#30	MeSH descriptor: [Asthma] explode all trees	8969	#69	MeSH descriptor: [Heart Defects, Congenital] explode all trees	1347
#31	asthma*:ti,ab	19171	#70	"congenital heart":ti,ab	462
#32	MeSH descriptor: [Pneumonia] explode all trees	2440	#71	MeSH descriptor: [Lung Diseases] explode all trees	25771
#33	pneumonia:ti,ab	3604	#72	"chronic lung":ti,ab	622
#34	MeSH descriptor: [Pulmonary Embolism] this term only	867	#73	MeSH descriptor: [Anemia, Sickle Cell] explode all trees	358
#35	(pulmonary next embol*):ti,ab	1325	#74	"sickle cell":ti,ab	741
#36	MeSH descriptor: [Wounds and Injuries] explode all trees	14008	#75	MeSH descriptor: [Hypertension, Pulmonary] explode all trees	512
#37	trauma:ti,ab	4377	#76	"pulmonary hypertension":ti,ab	639
#38	MeSH descriptor: [Heart Failure] explode all trees	5089	#77	MeSH descriptor: [Croup] this term only	69
#39	(heart next failure):ti,ab	8467	#78	Croup:ti,ab	119
#40	MeSH descriptor: [Myocardial Infarction] explode all trees	8168	#79	MeSH descriptor: [Bronchiolitis] explode all trees	267
#41	(myocard* next infarct*):ti,ab	12358			

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#80 Bronchiolitis:ti,ab 437
 #81 MeSH descriptor: [Ductus Arteriosus, Patent] this term only 205
 #82 "patent ductus arteriosus":ti,ab 351
 #83 MeSH descriptor: [Pregnancy] explode all trees 5361
 #84 (pregnan* or childbirth):ti,ab 14143
 #85 #26 or #27 or #28 or #29 r #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 r #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81 or #82 or #83 or #84 129106
 #86 #25 and #85 1297
 #87 ("long term oxygen therapy"):ti,ab 91
 #88 ("long-term oxygen therapy"):ti,ab 91
 #89 ltot:ti,ab 44
 #90 MeSH descriptor: [Hyperbaric Oxygenation] this term only 346
 #91 ("hyperbaric oxygen*"):ti,ab 607
 #92 #87 or #88 or #89 or #90 or #91 744
 #93 #86 and not #92 1162
 #94 #20 or #93 1459 **(59 results from CDSR, 25 from DARE and 1351 from CENTRAL)**

Key question 3

#1 ((oxygen or heliox or entonox or "nitrous oxide") near/3 (store* or storing or storage)):ti,ab 11
 #2 MeSH descriptor: [Oxygen] explode all trees 4079
 #3 (oxygen or heliox or entonox or "nitrous oxide"):ti,ab 16594
 #4 #2 or #3 18168
 #5 MeSH descriptor: [Ambulances] explode all trees 113
 #6 MeSH descriptor: [Motor Vehicles] explode all trees 185
 #7 ambulance*:ti,ab 238
 #8 MeSH descriptor: [Transportation of Patients] explode all trees 187
 #9 (transport* near/3 (hospital* or intrahospital*)):ti,ab 58
 #10 (transport* near/3 (gp or gps)):ti,ab 11
 #11 (transport* near/3 (practice* or practitioner*)):ti,ab 5
 #12 #5 or #6 or #7 or #8 or #9 or #10 or #11 502
 #13 #4 and #12 36
 #14 (car or cars or automobile*):ti,ab 590
 #15 #13 or #14 626
 #16 ((oxygen or heliox or entonox or "nitric oxide") near/3 (carri* or carry or transport* or deliver* or administ*)):ti,ab 1249
 #17 #15 and #16 6
 #18 MeSH descriptor: [Safety] explode all trees 3101

#19 MeSH descriptor: [Equipment Safety] explode all trees 305
 #20 #18 or #19 3394
 #21 #16 and #20 8
 #22 ((oxygen or heliox or entonox or "nitric oxide") near/3 (safe or safety)):ti,ab 38
 #23 #1 or #13 or #17 or #21 or #22 91
 #24 ((oxygen or heliox or entonox or "nitric oxide") near/3 (prescrib* or prescrip*)):ti,ab 30
 #25 ((oxygen or heliox or entonox or "nitric oxide") near/3 guideline*):ti,ab 3
 #26 ((oxygen or heliox or entonox or "nitric oxide") near/3 (premask* or cannula* or humidif* or nebuliser*)):ti,ab 81
 #27 ((oxygen or heliox or entonox or "nitric oxide") next deliver* next (system or systems or device*)):ti,ab 39
 #28 "high flow oxygen":ti,ab 29
 #29 oxclip:ti,ab 1
 #30 oxylator:ti,ab 4
 #31 (venturi near/3 mask*):ti,ab 27
 #32 oxyarm:ti,ab 3
 #33 capnoxygen:ti,ab 0
 #34 oxymask:ti,ab 2
 #35 vapoherm:ti,ab 12
 #36 nasoral:ti,ab 8
 #37 ((tusk or reservoir) next mask*):ti,ab 3
 #38 (bag next valve):ti,ab 58
 #39 (nasal next spectacles):ti,ab 1
 #40 #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 170
 #41 MeSH descriptor: [Oxygen Inhalation Therapy] this term only and with qualifiers: [Instrumentation - IS] 88
 #42 (mask* or helmet*):ti,ab 9238
 #43 MeSH descriptor: [Masks] explode all trees 1047
 #44 cannula*:ti,ab 1431
 #45 humidif*:ti,ab 359
 #46 #42 or #43 or #44 or #45 11040
 #47 #41 and #46 56
 #48 #23 or #24 or #25 or #26 or #40 or #47 364
 #49 MeSH descriptor: [Continuous Positive Airway Pressure] this term only 525
 #50 cpap:ti,ab 1231
 #51 "continuous positive airway pressure":ti,ab 1141
 #52 #49 or #50 or #51 1737
 #53 #3 and #52 326
 #54 #48 or #53 674
 #55 (alert next (bracelet* or card* or necklace*)):ti,ab 1
 #56 ((medi next alert*) or medi-alert*):ti,ab 0
 #57 ((medic next alert*) or medic-alert*):ti,ab 0
 #58 ((warning or alert) next (system* or device*)):ti,ab 45
 #59 #55 or #56 or #57 or #58 46
 #60 hypercapnia:ti,ab 421
 #61 #59 and #60 0

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#62 #54 or #61 674 (36 results from CDSR,
2 from DARE and 635 from CENTRAL)

MEDLINE

Database: Ovid MEDLINE(R) <1946 to July Week 4 2013>
Searched via OVID interface 02/08/13
Strategy saved as BTS OXYGEN MEDLINE FINAL
(individual Key Question strategies also saved)
Lines 1 to 98 are Key Question 1, lines 99 to 217 are Key
Question 2, and lines 218 to 309 are Key Question 3.
Line 310 combines the results of all three. Lines 311-314
are the additional search for non-English language
publications with English language abstracts.

Search Strategy:

1 Anoxia/ (52714)
2 Hypoxia-Ischemia, Brain/ (3741)
3 Hypoxia, Brain/ or Hyperoxia/ (9186)
4 anoxemia/ (52714)
5 Acidosis, Respiratory/ (2298)
6 (hypoxia or anoxia).ti,ab. (79441)
7 (hypoxaemia or hypoxemia or anoxaemia or
anoxemia or hyperoxia or hyperoxaemia).ti,ab. (19734)
8 Hypercapnia/ or (hypercarbia or hypercapnia).ti,ab.
(12008)
9 (respiratory adj1 acidosis).ti,ab. (1705)
10 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 (128510)
11 Anoxia/mo [Mortality] (421)
12 Hypoxia-Ischemia, Brain/mo [Mortality] (156)
13 Hyperoxia/mo [Mortality] (51)
14 Acidosis, Respiratory/mo [Mortality] (20)
15 Hypoxia, Brain/mo [Mortality] (105)
16 Hypercapnia/mo [Mortality] (50)
17 11 or 12 or 13 or 14 or 15 or 16 (780)
18 Soft Tissue Injuries/ (3245)
19 (tissue\$ adj1 injur\$).ti,ab. (16011)
20 18 or 19 (18569)
21 10 and 20 (484)
22 exp Brain Damage, Chronic/ (30943)
23 ((brain adj1 injur\$) or (brain adj1 damag\$) or brain-
damag\$).ti,ab. (49156)
24 22 or 23 (74950)
25 10 and 24 (4919)
26 exp Coma/ (17649)
27 coma.ti,ab. (22087)
28 26 or 27 (34214)
29 10 and 28 (1327)
30 Stroke/ (56347)
31 (cva or stroke).ti,ab. (132839)
32 (cerebrovascular adj1 accident\$).ti,ab. (4767)
33 30 or 31 or 32 (145557)
34 10 and 33 (2599)
35 exp Myocardial Infarction/ (145900)
36 (myocard\$ adj1 infarct\$).ti,ab. (139180)
37 35 or 36 (189774)
38 10 and 37 (1781)
39 exp Heart Failure/ (86484)
40 (heart adj1 failure).ti,ab. (100789)
41 39 or 40 (131171)
42 10 and 41 (1912)
43 exp Pulmonary Disease, Chronic Obstructive/
(23637)

44 (copd or coad or cobd).ti,ab. (24421)
45 (chronic obstruct\$ adj1 (pulmonary or airway\$ or
lung\$ or bronchi\$ or airway\$)).ti,ab. (30681)
46 43 or 44 or 45 (42333)
47 10 and 46 (2614)
48 exp Renal Insufficiency/ (122138)
49 ((renal adj1 failure) or (kidney adj1 failure)).ti,ab.
(74609)
50 48 or 49 (151875)
51 10 and 50 (1198)
52 exp Thoracic Injuries/ (21126)
53 ((thorax adj3 injur\$) or (thoracic adj3 injur\$)).ti,ab.
(3385)
54 trauma.ti,ab. (140851)
55 52 or 53 or 54 (157455)
56 10 and 55 (2277)
57 exp pregnancy/ (708711)
58 (pregnan\$ or childbirth).ti,ab. (355168)
59 10 and 58 (3120)
60 17 or 21 or 25 or 29 or 34 or 38 or 42 or 47 or 51 or
56 or 59 (20252)
61 Long-Term Care/ (21596)
62 60 not 61 (20183)
63 (long adj1 term adj1 oxygen adj1 therapy).ti,ab.
(800)
64 (long-term adj1 oxygen adj1 therapy).ti,ab. (800)
65 63 or 64 (800)
66 62 not 65 (20000)
67 *Sleep Apnea, Obstructive/ (9513)
68 66 not 67 (19833)
69 randomized controlled trial.pt. (379719)
70 exp Randomized Controlled Trial/ (379719)
71 Random Allocation/ (80574)
72 Double-Blind Method/ (128781)
73 Single-Blind Method/ (18982)
74 clinical trial.pt. (498469)
75 exp Clinical Trial/ (776339)
76 Controlled Clinical Trial/ (88660)
77 (clin\$ adj1 trial\$).ti,ab. (204292)
78 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or
mask\$)).ti,ab. (126803)
79 placebo\$.ti,ab. (154563)
80 Placebos/ (33259)
81 random\$.ti,ab. (655695)
82 exp Evaluation Studies/ (198842)
83 Follow-Up Studies/ (490169)
84 exp Research Design/ (340675)
85 Prospective Studies/ (364500)
86 (control\$ or prospectiv\$ or volunteer\$).ti,ab.
(2848408)
87 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or
78 or 79 or 80 or 81 or 82 or 83 or 84 or 85 or 86
(4229785)
88 comment.pt. (523323)
89 letter.pt. (793637)
90 editorial.pt. (329419)
91 88 or 89 or 90 (1222570)
92 87 not 91 (4150313)
93 68 and 92 (6662)
94 Animals/ (5415245)
95 humans/ (13440489)

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- 96 94 not (94 and 95) (3912617)
97 93 not 96 (4394)
98 limit 97 to english language (3840)
99 Anoxia/ (52714)
100 Hypoxia-Ischemia, Brain/ (3741)
101 Hypoxia, Brain/ or Hyperoxia/ (9186)
102 (hypoxia or anoxia).ti,ab. (79441)
103 (hypoxaemia or hypoxemia or anoxaemia or anoxemia or hyperoxia or hyperoxaemia).ti,ab. (19734)
104 Hypercapnia/ or (hypercarbia or hypercapnia).ti,ab. (12008)
105 anoxemia/ (52714)
106 99 or 100 or 101 or 102 or 103 or 104 or 105 (126269)
107 exp Oximetry/ (11655)
108 abg.ti,ab. (839)
109 (arterial adj1 blood adj1 gas\$.ti,ab. (7924)
110 elbg.ti,ab. (1)
111 ((earlobe or ear-lobe or (ear adj1 lobe)) adj1 blood).ti,ab. (48)
112 ews.ti,ab. (1196)
113 (early adj1 warning adj1 score\$.ti,ab. (157)
114 (co2 adj1 monitor\$.ti,ab. (202)
115 (carbon adj1 dioxide adj1 monitor\$.ti,ab. (215)
116 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 (21313)
117 106 and 116 (3967)
118 Oxygen Inhalation Therapy/ (11502)
119 ((oxygen or heliox or entonox or "nitrous oxide") adj3 (deliver\$ or therap\$)).ti,ab. (15249)
120 Continuous Positive Airway Pressure/ (3881)
121 ("continuous positive airway pressure" or CPAP).ti,ab. (7126)
122 118 or 119 or 120 or 121 (31436)
123 breathless\$.ti,ab. (3155)
124 exp Pulmonary Disease, Chronic Obstructive/ (23637)
125 (copd or coad or cobd).ti,ab. (24421)
126 (chronic adj3 obstruct\$ adj3 (pulmonary or airway\$ or lung\$ or bronchi\$ or respirator\$)).ti,ab. (31912)
127 exp Asthma/ (108051)
128 asthma\$.ti,ab. (117167)
129 exp Pneumonia/ (74199)
130 pneumonia.ti,ab. (75745)
131 Pulmonary Embolism/ (30718)
132 (pulmonary adj1 embol\$.ti,ab. (24804)
133 exp "Wounds and Injuries"/ (683172)
134 trauma.ti,ab. (140851)
135 exp Heart Failure/ (86484)
136 (heart adj1 failure).ti,ab. (100789)
137 exp Myocardial Infarction/ (145900)
138 (myocard\$ adj1 infarct\$.ti,ab. (139180)
139 exp Heart Arrest/ (33128)
140 ((heart or cardiac) adj1 arrest).ti,ab. (18876)
141 exp Angina Pectoris/ (45684)
142 angina.ti,ab. (42543)
143 Cystic Fibrosis/ (28834)
144 (cystic adj1 fibrosis).ti,ab. (32267)
145 exp Muscular Dystrophies/ (21527)
146 (muscular adj1 dystroph\$.ti,ab. (17335)
147 exp Motor Neuron Disease/ (19473)
148 (motor adj1 neuron\$.ti,ab. (18126)
149 Kyphosis/ (4717)
150 (kyphoscoliosis or kyphosis).ti,ab. (5524)
151 Anaphylaxis/ (16300)
152 (anaphylaxis or anaphylactic).ti,ab. (16307)
153 exp Hyperventilation/ (5839)
154 hyperventilat\$.ti,ab. (7225)
155 exp Endoscopy/ (252737)
156 endoscop\$.ti,ab. (128229)
157 Conscious Sedation/ (6708)
158 "Conscious Sedation".ti,ab. (1827)
159 exp Anesthesia, General/ (48694)
160 (general adj1 (anesthesia or anaesthesia)).ti,ab. (33396)
161 ("patient controlled analgesia" or "PCA system\$").ti,ab. (3003)
162 (alert adj1 (bracelet\$ or card\$ or necklace\$)).ti,ab. (60)
163 ((medi adj1 alert\$) or medi-alert\$.ti,ab. (2)
164 ((medic adj1 alert\$) or medic-alert\$.ti,ab. (68)
165 ((warning or alert) adj1 (system\$ or device\$)).ti,ab. (1770)
166 exp Heart Defects, Congenital/ (117771)
167 "congenital heart".ti,ab. (23275)
168 exp Lung Diseases/ (701346)
169 "chronic lung".ti,ab. (6479)
170 exp Anemia, Sickle Cell/ (17873)
171 "sickle cell".ti,ab. (16520)
172 exp Hypertension, Pulmonary/ (25975)
173 "pulmonary hypertension".ti,ab. (23832)
174 Croup/ or croup.ti,ab. (1415)
175 exp Bronchiolitis/ or bronchiolitis.ti,ab. (9678)
176 Ductus Arteriosus, Patent/ or "patent ductus arteriosus".ti,ab. (9352)
177 exp pregnancy/ or (pregnan\$ or childbirth).ti,ab. (769861)
178 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 or 144 or 145 or 146 or 147 or 148 or 149 or 150 or 151 or 152 or 153 or 154 or 155 or 156 or 157 or 158 or 159 or 160 or 161 or 162 or 163 or 164 or 165 or 166 or 167 or 168 or 169 or 170 or 171 or 172 or 173 or 174 or 175 or 176 or 177 (3079510)
179 122 and 178 (14218)
180 (long adj1 term adj1 oxygen adj1 therapy).ti,ab. (800)
181 (long-term adj1 oxygen adj1 therapy).ti,ab. (800)
182 ltot.ti,ab. (316)
183 Hyperbaric Oxygenation/ (9997)
184 (hyperbaric adj1 oxygen\$.ti,ab. (7251)
185 180 or 181 or 182 or 183 or 184 (11891)
186 179 not 185 (12448)
187 117 or 186 (16146)
188 animals/ (5415245)
189 humans/ (13440489)
190 188 not (188 and 189) (3912617)
191 187 not 190 (14514)
192 randomized controlled trial.pt. (379719)
193 exp Randomized Controlled Trial/ (379719)

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- 194 Random Allocation/ (80574)
195 Double-Blind Method/ (128781)
196 Single-Blind Method/ (18982)
197 clinical trial.pt. (498469)
198 exp Clinical Trial/ (776339)
199 Controlled Clinical Trial/ (88660)
200 (clin\$ adj1 trial\$).ti,ab. (204292)
201 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or mask\$)).ti,ab. (126803)
202 placebo\$.ti,ab. (154563)
203 Placebos/ (33259)
204 random\$.ti,ab. (655695)
205 exp Evaluation Studies/ (198842)
206 Follow-Up Studies/ (490169)
207 exp Research Design/ (340675)
208 Prospective Studies/ (364500)
209 (control\$ or prospectiv\$ or volunteer\$).ti,ab. (2848408)
210 192 or 193 or 194 or 195 or 196 or 197 or 198 or 199 or 200 or 201 or 202 or 203 or 204 or 205 or 206 or 207 or 208 or 209 (4229785)
211 comment.pt. (523323)
212 letter.pt. (793637)
213 editorial.pt. (329419)
214 211 or 212 or 213 (1222570)
215 210 not 214 (4150313)
216 191 and 215 (4902)
217 limit 216 to english language (4288)
218 ((oxygen or heliox or entonox or "nitrous oxide") adj3 (store\$ or storing or storage)).ti,ab. (549)
219 exp Oxygen/ (147472)
220 (oxygen or heliox or entonox or "nitrous oxide").ti,ab. (294154)
221 219 or 220 (369883)
222 exp Ambulances/ (6582)
223 exp Motor Vehicles/ (14748)
224 ambulance\$.ti,ab. (6214)
225 exp "Transportation of Patients"/ (13226)
226 (transport\$ adj3 (hospital\$ or intrahospital\$)).ti,ab. (1429)
227 (transport\$ adj3 (gp or gps)).ti,ab. (789)
228 (transport\$ adj3 (practice\$ or practitioner\$)).ti,ab. (127)
229 222 or 223 or 224 or 225 or 226 or 227 or 228 (27669)
230 221 and 229 (625)
231 (car or cars or automobile\$).ti,ab. (19519)
232 229 or 231 (44421)
233 ((oxygen or heliox or entonox or "nitric oxide") adj3 (carri\$ or carry or transport\$ or deliver\$ or administ\$)).ti,ab. (16924)
234 232 and 233 (109)
235 exp Safety/ (52093)
236 Equipment Safety/ (9018)
237 235 or 236 (60433)
238 233 and 237 (90)
239 ((oxygen or heliox or entonox or "nitric oxide") adj3 (safe or safety)).ti,ab. (197)
240 218 or 230 or 234 or 238 or 239 (1454)
241 ((oxygen or heliox or entonox or "nitric oxide") adj3 (prescrib\$ or prescrip\$)).ti,ab. (258)
242 ((oxygen or heliox or entonox or "nitric oxide") adj3 guideline\$).ti,ab. (75)
243 ((oxygen or heliox or entonox or "nitric oxide") adj3 (premask\$ or cannula\$ or humidif\$ or nebuliser\$)).ti,ab. (385)
244 ((oxygen or heliox or entonox or "nitric oxide") adj1 deliver\$ adj1 (system or systems or device\$)).ti,ab. (215)
245 "high flow oxygen".ti,ab. (125)
246 oxclip.ti,ab. (1)
247 oxylator.ti,ab. (9)
248 (venturi adj3 mask\$).ti,ab. (86)
249 oxyarm.ti,ab. (11)
250 capnoxygen.ti,ab. (2)
251 oxymask.ti,ab. (2)
252 vapotherm.ti,ab. (16)
253 nasal.ti,ab. (8)
254 ((tusk or reservoir) adj1 mask\$).ti,ab. (10)
255 (bag adj1 valve).ti,ab. (309)
256 (nasal adj1 spectacles).ti,ab. (1)
257 244 or 245 or 246 or 247 or 248 or 249 or 250 or 251 or 252 or 253 or 254 or 255 or 256 (757)
258 Oxygen Inhalation Therapy/is [Instrumentation] (1281)
259 (mask\$ or helmet\$).ti,ab. (53277)
260 exp Masks/ (7464)
261 cannula\$.ti,ab. (32209)
262 humidif\$.ti,ab. (2967)
263 259 or 260 or 261 or 262 (90226)
264 258 and 263 (396)
265 240 or 241 or 242 or 243 or 257 or 264 (3031)
266 Continuous Positive Airway Pressure/ (3881)
267 cpap.ti,ab. (4844)
268 "continuous positive airway pressure".ti,ab. (5535)
269 266 or 267 or 268 (8362)
270 221 and 269 (1800)
271 265 or 270 (4759)
272 (alert adj1 (bracelet\$ or card\$ or necklace\$)).ti,ab. (60)
273 ((medi adj1 alert\$) or medi-alert\$).ti,ab. (2)
274 ((medic adj1 alert\$) or medic-alert\$).ti,ab. (68)
275 ((warning or alert) adj1 (system\$ or device\$)).ti,ab. (1770)
276 272 or 273 or 274 or 275 (1879)
277 hypercapnia.ti,ab. (7999)
278 276 and 277 (3)
279 271 or 278 (4760)
280 animals/ (5415245)
281 humans/ (13440489)
282 280 not (280 and 281) (3912617)
283 279 not 282 (4329)
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290 exp Clinical Trial/ (776339)
291 Controlled Clinical Trial/ (88660)
292 (clin\$ adj1 trial\$).ti,ab. (204292)

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- 293 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or mask\$)).ti,ab. (126803)
 294 placebo\$.ti,ab. (154563)
 295 Placebos/ (33259)
 296 random\$.ti,ab. (655695)
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 298 Follow-Up Studies/ (490169)
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 308 283 and 307 (1920)
 309 limit 308 to english language (1740)
 310 98 or 217 or 309 (8713)
 311 97 or 216 or 308 (9919)
 312 311 not 310 (1206)
 313 english abstract.pt. (1680948)
 314 312 and 313 (1154)
 315 310 or 314 (9867)

Total results of update searches

Results were de-duplicated against each other and against previously found results. Results saved to compressed Endnote library emergency oxygen august 2013 update final.enx and emailed 06/08/13.

Source	Results	Results after deduplication	Custom 4 field
Cochrane Database of Systematic Reviews	116	33	CDSR update 02/08/13
Database of Abstracts of Reviews of Effects	39	11	DARE update 02/08/13
Cochrane Central Register of Controlled Trials	2616	120	CENTRAL update 02/08/13
MEDLINE	9867	877	MEDLINE update 02/08/13
		1041	