The British Sub-Aqua Club

NDC Diving Incidents Report

2006

Compiled by

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Diving Safety and Incidents Advisor

Published by The British Sub-Aqua Club in the interests of diving safety

Introduction

This booklet contains the 2006 Diving Incidents Report, produced by The British Sub-Aqua Club (BSAC) in the interest of promoting diving safety. It is important to note that it contains details of UK sports diving incidents occurring to divers of all affiliations, plus incidents occurring worldwide involving BSAC members.

Report Format

The majority of statistical information contained within this report is also shown in graphical form. Please note that all statistical information is produced from UK data only and does not include Overseas Incidents unless noted as 'All Incidents'.

The contents of this report are split into an overview of the year, and then the details of nine incident categories plus some historical analyses. The various sections can be found as shown below:-

Within each category the incidents are listed in the order of their occurrence, not necessarily that of Incident Reference. They are laid out in the following form:

MONTH/YEAR OF INCIDENT ***INCIDENT REF.***
Brief Narrative of Incident.....
.....

The nature of many diving incidents is such that there is usually more than one cause or effect. Where this is the case the incident has been classified under the more appropriate cause or effect. For instance an incident involving a fast ascent, causing decompression illness, will be classified under 'Decompression Incidents'.

Brian Cumming,
BSAC Diving Incidents Advisor,
November 2006

Acknowledgements

Data for this report are collected from several different sources. I would like to extend my thanks and appreciation to the following for their assistance in its production and in ensuring its completeness:

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Peter Chennell, Sea Safety Manager,
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Royal National Lifeboat Institution

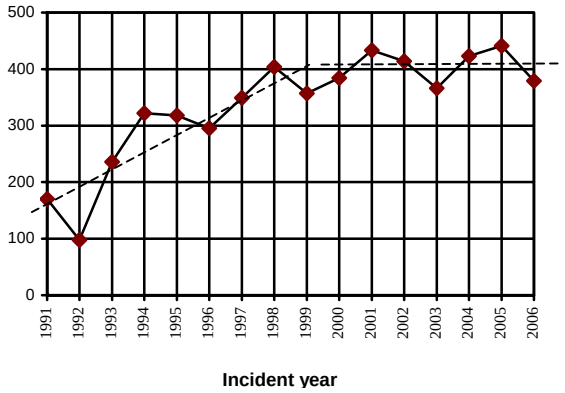
and, in particular, all of those divers and other sources who have taken the trouble to complete Incident Reports and share their learning experience with others.

Finally, to Dr. Yvonne Couch for proof reading this report

Overview

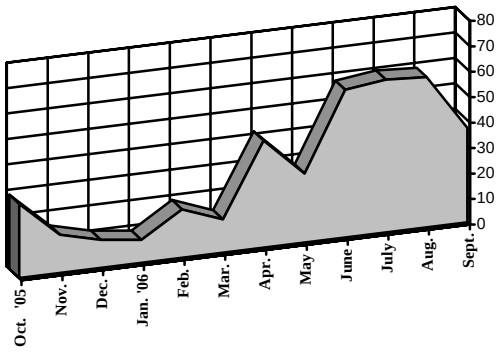
2006 has seen a drop back in the number of incidents reported; a total of 379. The chart below shows the total of UK incidents reported annually over the last 16 years and it can be seen that after a doubling during the 90s, we now seem to be seeing a levelling out from 2000 onwards to a total of 400 incidents per year.

Number of reported incidents



The distribution of reported incidents is shown in the following chart. As can be seen, 65% of these incidents have occurred in the summer period. This is totally consistent with previous years, reflecting the increased number of dives that take place during the warmer weather.
There is a lower than normal number of reported incidents in both March and May. There is no obvious reason for this except that Easter was in the middle of April and divers may have chosen to centre their dives at that time of year around the Easter holiday weekend.

Incidents by month - 2006



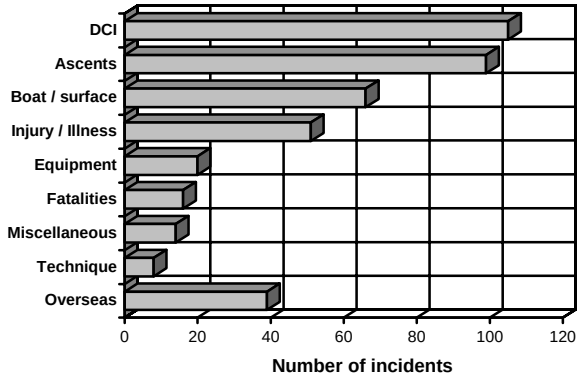
Incidents by category

The incident database categorises all incidents into one of nine major categories, and the following chart shows the distribution of the 2006 incidents into those categories.
The highest number of incidents (105) relate to 'Decompression Illness (DCI)' and this is consistent with previous years.

Ascent related incidents are the next major category with a total of 99 incidents recorded in the group. In previous reports it has been noted that this type of incident is on the increase and this year's number is an all time high.
Typically these incidents involve a rapid ascent, often with missed decompression stops, However, if such an ascent were to have resulted in a DCI then it would have been recorded in the more serious DCI category.

More detail on DCI, Ascent and Boat / Surface incidents can be found later in this overview together with an analysis of the most serious category; Fatalities.

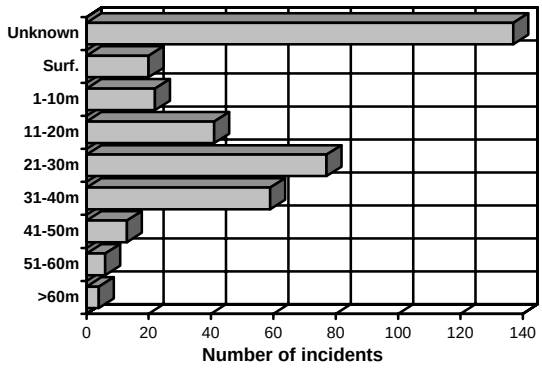
Categorisation of all the year's incidents



Incident depths

The following chart shows the maximum depth of the dives during which incidents took place categorised into depth range groupings.

Maximum depth of dive involving an incident



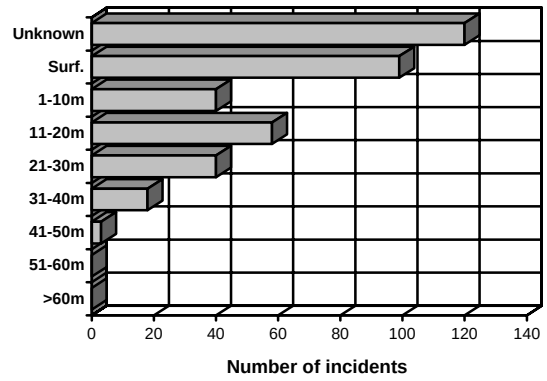
The pattern of depths in the 0m to 50m range is very similar to that normally seen and reflects the amount of diving that takes place in these depth ranges. The number of incidents reported

in the greater than 50m range is 10, which is in line with previous years. One of these incidents was a fatality.

The BSAC advises that no air dive should be deeper than 50m, and that dives to 50m should only be conducted by divers who are appropriately trained and qualified.
The recommended limit for divers trained to Sports Diver standard is 35m and then only when they have received appropriate training for diving at this depth.
The BSAC recommends that mixed gas diving should be to a maximum depth of 80m and then only when the diver holds a recognized qualification to conduct such dives.

The next chart shows the depth at which the incident started.

Depth at which an incident started

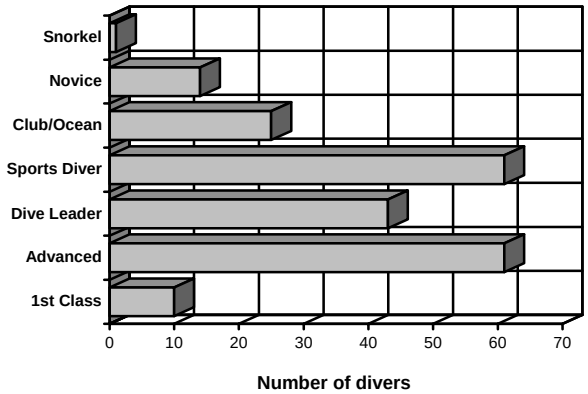


Inevitably the data are biased towards the shallower depths since many incidents happen during the ascent or at the surface. Critical among these are the DCI cases where almost always the casualty is out of the water before any problems are noted. This partially explains the large occurrence of 'Surface' cases as this includes divers with DCI who have left the water. Other surface incidents involve boats and boating incidents.

Diver qualifications

The next two charts show the qualification of those BSAC members who were involved in reported incidents.
The first looks at the diver qualification.

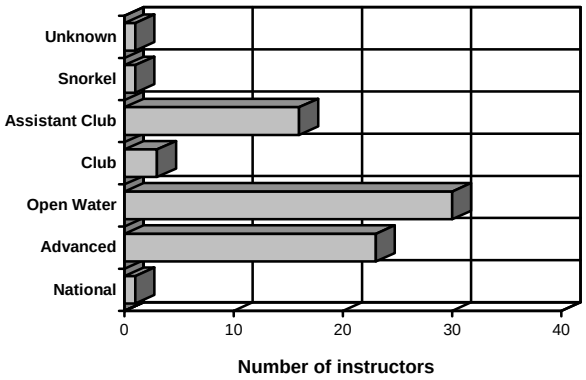
Qualification of the divers involved in incidents



These data are in line with the normal pattern of previous years and to some extent reflect the number of divers in these qualification grades.

The next chart shows an analysis of incident by instructor qualification and again it is consistent with previous years.

Qualification of instructors involved in incidents

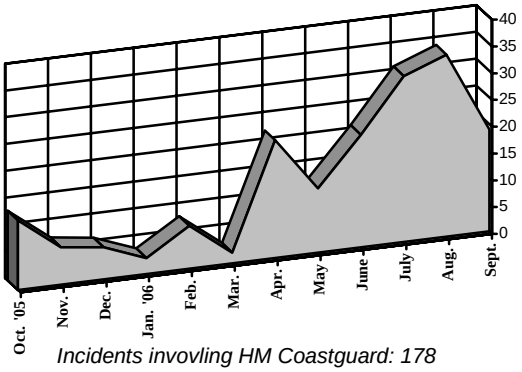


Divers' use of the Emergency Services

Divers' use of the emergency services shows a monthly distribution aligned to the distribution of all incidents, and is clearly correlated with the number of dives that are taking place.

Our demands upon the Coastguard service have dropped dramatically this year with only 178 incidents reported that involved the Coastguard. This number is the lowest in the last 9 years where the average has been 211 Coastguard related incidents per year. Only future years will tell us if this 16% reduction from the average is an anomaly or the beginning of a trend.

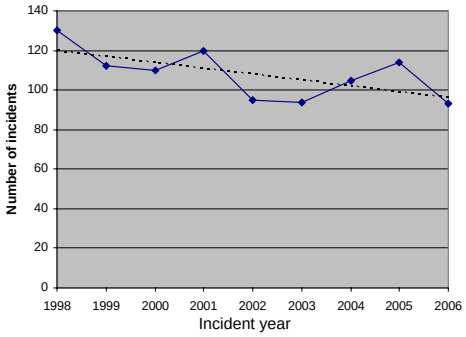
Incidents involving the UK Coastguard agency - Monthly breakdown



Incidents invovling HM Coastguard: 178

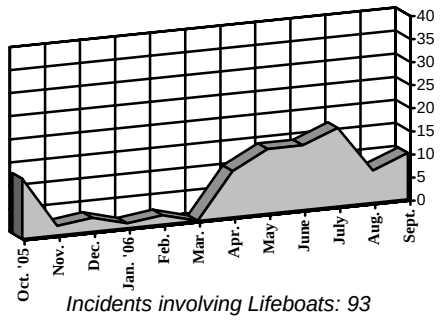
Our call upon the RNLI in the 2006 incident year is down from the previous two years. The following chart shows the RNLI involvement over the last 9 years and it indicates a progressive reduction in divers' calls on the lifeboat service.

Divers' use of RNLI facilities by incident year



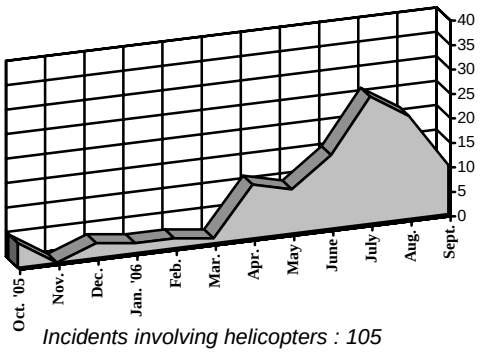
The following chart shows the distribution of the RNLI related incidents throughout this incident year. It is in line with the other monthly based data, except that it does not show the dip in May seen elsewhere.

Divers' use of RNLI facilities by month



Incidents involving Lifeboats: 93

Divers' use of SAR helicopters by month



Incidents involving helicopters : 105

In 2006 105 incidents involved the use of helicopters, and this is significantly lower than the high of 137 recorded in 2005. 105 is the lowest use of helicopters recorded in the last 5 years and seems to be in line with the overall reduction in reported incidents. Helicopters are often tasked to support searches for missing divers and to transport divers with DCI to recompression facilities.

Fatalities

16 fatal incidents occurred in the UK during the 2006 incident year. This is a little below the average of 17.7 fatalities per year over the previous ten years although comparisons of this nature need to be made with caution since a small change can make a big apparent difference to the comparison.
2004 saw 25 fatalities and raised concerns that we might be experiencing the beginnings of a trend of increasing fatalities. At the time the BSAC argued that this unfortunate number was simply the result of natural perturbations of very small numbers in a very large sample, compounded with the timing of the incidents and the timing of our incident year. The 2005 coupled with the 2006 findings indicate that this argument was valid.

4 of the 16 fatalities were BSAC members.

The factors associated with these fatalities can be summarised as follows:-

- One case involved a diver who suffered a heart attack. There is a second case (and may be others) which may also be included in this group when the full facts are made known.
- Three cases involved divers who were, or who became, negatively buoyant and sank. In one case a diver was at the surface, in difficulties, but was unable to remain at the surface and sank before he could be recovered. In two other cases divers were negatively buoyant underwater, in difficulties, and sank.
- Seven cases involved separation.
  In each of these cases the separation was not planned.
  Four cases involved divers who became separated from their buddies and were then found unconscious or semi-conscious at the surface.
  The other three cases involved divers who became separated underwater and failed to surface.
- Four cases involved equipment. In two cases it is likely that a rigorous buddy check would have prevented the problem. Two cases involved regulator problems, one of which was a free flow.
- Two cases involved solo diving. One case involved a rebreather diver. The other case was a cave diver whose absence was noted 24 hours later.
- Two cases involved divers running out of breathing gas.
  One case was compounded by buoyancy problems and the other involved a free flow which prevented a buddy from assisting the casualty.
- Three cases involved rebreathers.
- Three cases involved incidents that were initiated or made more difficult by water currents.
- Three cases involved divers with DCI. Two divers suffered fatal pulmonary embolisms and a third diver suffered a cerebral embolism. Two of these cases involved uncontrolled ascents but one occurred after an apparently normal dive.
- Two cases involved three divers diving together.
- One case involved a depth greater than 50m. This was a diver who dived to 66m and surfaced missing all decompression stops and suffered an embolism.

Often multiple causes were involved in an incident and in eight of these fatal incidents there is insufficient information available to be clear about the exact chain of events and root causes.

As stated above only one of these cases involved a dive to greater than 50m. In previous years I have highlighted the disproportionate number of deaths related to deep diving. Typically there have been 4 to 6 fatalities in this depth range and, as I have pointed out before, this must be out of proportion to the amount of diving that takes place in these depths. 2005 saw two deaths from dives deeper than 50m and this year saw only one; I hope that this trend holds.

Finally there were three reported fatality overseas. One case involved the double fatality of two BSAC members who had been diving to a depth of 80m using rebreathers with trimix. The third case involved BSAC members in the death of a non member, where the casualty was apparently trapped, lost, inside a wreck in a depth of 50m.

Decompression incidents

The BSAC database contains 105 reports of DCI incidents in the 2006 incident year, some of which involved more than one casualty. When these multiple cases are counted the result is 112 cases of DCI.
This number continues the decline in cases of DCI from a peak of 173 individual cases reported in 2002 and returns us to the typical levels reported in the late 90s.

An analysis of the causal factors associated with the cases for 2006 indicates the following major features:-

35 involved diving to deeper than 30m
30 involved rapid ascents
27 involved repeat diving
15 involved missed decompression stops

Some cases involved more than one of these causes.

Whilst cases of DCI may have declined, as reported earlier, cases of abnormal ascent (rapid ascent and/or missed stops) have significantly increased, and it may just be a case of good fortune that these abnormal ascents did not resulted in DCI.

Some of the 'Injury and Illness' incidents are also thought to be DCI related, but they are reported by the RNLI as 'Diver illness' and the cause of the illness is not defined.

Ascent related incidents

In previous years I have highlighted the rise in the number of incidents associated with abnormal ascents. This year's report contains 99 ascent related incidents, the highest number ever recorded and a clear indicator that this is an area that requires a lot more attention from divers.
The following analysis reveals some of the issues:-

Basic nature of the report:-

88	Rapid ascents
32	Missed stops

Clearly some incidents relate to both the above

Causal factors are:-

18	Drysuit or BCD issues
16	Delayed SMB, Mask, Fin problems
12	Free flows
10	Out of air
6	Weight related issues
2	Training

Again some have a combination of the above factors

When all of the above causal factors are excluded 53 incidents (53%) remain where a simple loss of buoyancy control seems to have been the cause. Without any of the above perturbing factors being present divers have simply been unable to correctly control their rate of ascent. Poor training and lack of skill are the only explanations. These are avoidable problems and instructors should make this a priority area for attention.

Many DCI cases have their roots in these problems; they have been recorded under the DCI heading but the causal factors are often the same, so the actual number of abnormal ascents will be significantly higher than shown above.

Boating and surface incidents

'Boating and Surface' incidents are the third largest category. Recent years have seen a very marked decline in the number of these incidents from a maximum of 124 in 1998. The 2006 numbers at 66 continue that trend strongly. The decline in these incidents and the increase in 'Ascent' related incidents has displaced 'Boating and Surface' from its traditional second place.
Divers are to be commended for this reduction, it results from a combination of less lost divers and less engine failures. It is a subject that has received a lot of attention and it is good to see that divers' actions in these areas have had an impact. Incidents in this category often result in calls upon the Coastguard and the RNLI and some of the reduction in our need for support from the emergency services is down to this improvement.

Conclusions

Key conclusions are:-

- Reported incidents are down this year and suggest a levelling off in the number of annually reported incidents at approximately 400 per year
- The number of fatalities is a little below the norm of previous years.
- No new causal factors for fatalities have been identified. Continuous skills practice, rigorous buddy checks and diving within one's current ability limits with a slow progression to new areas are the critical keys to safe diving.
- Incidents associated with abnormal ascents continue to rise dramatically and attention must be given to training in this area and the continuous practice of ascent skills.

As has been stated many times before, most of the incidents reported within this document could have been avoided had those involved followed a few basic principles of safe diving practice. The BSAC publishes a booklet called 'Safe Diving' (latest edition currently being published). This booklet summarises all the key elements of safe diving and is available to all, free of charge, from the BSAC website or through BSAC HQ.

Remember you can never have too much practice and the further you stay away from the limits of your own personal capabilities the more likely you are to continue to enjoy your diving.

Please browse through the details in this report and use them to learn from others' mistakes. They have had the courage and generosity to record their experiences for publication, the least that we can do is to use this information to avoid similar problems.

Finally, if you must have an incident please report it on our Incident Report form, available free from BSAC HQ or via the BSAC website.
As always, your anonymity is assured – great care is taken to preserve the confidentiality of any personal information recorded in BSAC Incident Reports.

Fatalities

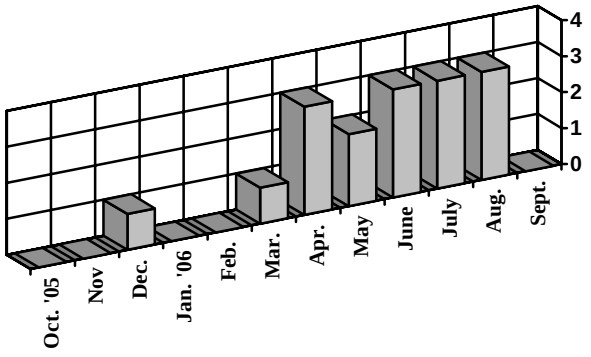
December 2005 06/019

Brixham Coastguard was alerted by a dive support vessel calling 'Mayday' for a missing diver. The diver had completed a dive to 47m. The group deployed a delayed SMB at depth prior to surfacing. The casualty had reached a 6m decompression stop and had deployed his own delayed SMB when he was seen to make a rapid ascent to the surface. Having reached the surface the diver went back to a decompression stop, the buddy remained at the 6m level. The diver descended past his buddy, holding on to the delayed SMB until the line broke; the buddy diver attempted to descend after his buddy and had to change gas to do so. The diver continued descending and was not seen again. A full search for the diver was coordinated by MRCC Brixham with SARIS information provided by MRCC Falmouth, Fowey lifeboat and inshore lifeboats from Looe and Fowey searched together with sixteen other craft with rescue helicopter R-193 from RNAS Culdrose. Shoreline searches were carried out by Mevagissay and St Austell Coastguard teams, the units searched until dark; the diver was not found. Searching continued the next day by members of the dive club; the casualty was not found. FATALITY (the deceased was wearing a new BCD purchased second-hand and had experienced buoyancy problems during the dive). (Coastguard & RNLI reports).

March 2006 06/067

A diver was engaged in alternative air source drills in a maximum depth of 12m. The diver used her buddy's alternative air source and they rose from 12 to 6m. At this point the ascent stopped but the diver did not replace her primary regulator as planned. The buddy tried to place her regulator into her mouth for her but it was not taken. The instructor then brought them to the surface. The diver was recovered into the boat and quickly brought ashore. Resuscitation techniques were applied and the emergency services were alerted. A paramedic arrived and a defibrillator was used. Resuscitation attempts continued. The casualty was taken by ambulance to hospital but failed to recover.

UK Fatalities - Monthly breakdown from October 2005 to September 2006 incl.



April 2006 06/079

Two divers entered the water to conduct a drift dive in a maximum depth of 12m. One of the pair was using a rebreather with air as the diluent, the other diver was using open circuit nitrox 32. Initially the rebreather diver had difficulties leaving the surface. At the bottom he held onto a rock and his buddy had to swim against the current to get to him. As previously agreed, the open circuit diver deployed a delayed SMB. As she deployed the buoy it jammed momentarily and she rose slightly. She watched the buoy ascend and then realised that her buddy was not there. She believed that he had started the drift and she moved with the current for 15 min. She then surfaced, making a 3 min safety stop at 6m. Surface conditions were rough and initially she couldn't see the boat. She was recovered into the boat and reported the separation. The missing rebreather diver was then seen floating on his back at the surface. Two divers entered the water. They found that the diver was unconscious. He was recovered into the boat and oxygen assisted resuscitation techniques were applied. The Coastguard was alerted. He was airlifted to hospital but was declared dead on arrival.

April 2006 06/081

A pair of divers descended a shotline to a wreck. The wreck was on a steeply sloping seabed. They reached the wreck at a depth of 8m and then followed it down to a maximum depth of 50m, exchanging 'OK' signals as they went. They started their ascent, following the wreck back up. They exchanged 'OK' signals at 40m and again at about 30m. The next time the lead diver looked back his buddy was no longer there. There was a current flowing. The lead diver looked around for a minute and then continued his ascent. The missing diver was seen by those in the boat, floating face down in the water at the surface. He was unconscious and did not have his regulator in his mouth. He was recovered into the boat and oxygen enriched resuscitation was applied. The emergency services were alerted and a lifeboat with a doctor on board was tasked to assist. The lead diver ascended as fast as he safely could and was recovered into the boat. The boat set off back to the shore and was met by the lifeboat. Further resuscitation attempts were made, but the casualty was pronounced dead at the scene. The cause of death was found to be drowning.

April 2006 06/080

A rebreather diver conducted a solo dive. Another diver from the same party found him motionless on the seabed. He brought him to the surface and he was recovered into the boat. The Coastguard was alerted and resuscitation techniques were applied. A lifeboat was launched to assist. The boat returned to the shore where the casualty was declared dead.

May 2006 06/088

A diver and an instructor entered the water from the shore. They dived to a maximum depth of 4m. The diver developed a problem at 4m and ascended to the surface. The instructor tried to assist her but she sank again without her mouthpiece in place. The instructor had experienced a free flow and was unable to re-descend as he now had no air. The alarm was raised. The instructor was recovered by into a boat and others found and recovered the missing diver. Resuscitation techniques were applied and the casualty was taken by ambulance to hospital where she was pronounced dead.

May 2006 06/087

A diver who had been using a rebreather in a maximum depth of 24m was found unconscious at the surface. He was recovered into the boat and resuscitation techniques were applied. The Coastguard was alerted and the casualty was airlifted to hospital. He failed to recover.

June 2006 06/103

A diver entered the water and started a descent down a shotline to a wreck. After reaching a depth of 8m he returned to the surface and was seen to be in distress. The boat approached the diver. The diver, who did not have his regulator in his mouth, let go of the buoy and attempted to swim to the boat. After a short distance he sank and did not resurface. The Coastguard was alerted and a search was organised involving three lifeboats, a helicopter and a naval warship. Navy divers searched underwater. The lost diver's body was recovered from the seabed four days later. His drysuit inflation hose was found to have been disconnected. It is thought that the diver had attempted to drop his weightbelt but had undone another buckle in error. The cause of death was drowning.

June 2006 06/114

Four divers were diving on a wreck to a maximum depth of approximately 22m. One of the divers entered the wreck. Another diver then went after him and found him unconscious with his regulator in his mouth. He brought him out and recovered him to the surface. He was lifted into the boat and the emergency services were alerted. The diver was airlifted to hospital where he later died. The diver had a 15l main cylinder and a 3l pony cylinder. After the event the main cylinder was found to be full. A press report of the Coroner's inquest suggests that the casualty had 'mixed up his air supply tanks'. The cause of death was drowning.

BSAC Fatalities against membership 1982-2006 (UK fatalities only)

June 2006 06/117

An instructor and two trainees entered the water to conduct a dive. One of the three missed the shot buoy and was picked up by the boat and returned to the others at the buoy. They exchanged 'OK' signals and descended. They reached the bottom at 14m and swam down to a maximum of 20m. The diver who had initially missed the buoy was first to reach 50 bar. At this point they deployed a delayed SMB and started their ascent. During the ascent, at about 10m, the diver who was low on air started to become buoyant and was pulling them towards the surface. The instructor took him off the line and made himself negatively buoyant in order to control the ascent. The buoyant diver then dumped air and they sank back down to 14m. They started back up and as they passed the third diver the diver who had been buoyant signalled that he was out of air and took the regulator out of his mouth. The instructor gave him his own main regulator and breathed from his alternative air source. They exchanged 'OK' signals. The instructor took hold of the diver and they made a fast but controlled ascent to the surface. At the surface the instructor put some air into his BCD, removed his alternative regulator and started to orally inflate the troubled diver's BCD. The troubled diver was conscious but the regulator was out of his mouth. The instructor put the regulator back into his mouth and shouted at him to keep it there. He put more breaths into the troubled diver's BCD and when he looked back at him the regulator was partly out of his mouth again. He shouted at him but got no response. He laid him back in the water and, with some difficulty, released his weightbelt. The instructor then removed the casualty's mask and gave him two breaths mouth to nose. He gave an emergency signal to the boat and gave two more breaths. The casualty was recovered into the boat and oxygen assisted resuscitation techniques were applied. The third diver made a normal ascent. The Coastguard was alerted and the casualty was airlifted to hospital where he was declared dead. The cause of death was a cerebral gas embolism.

July 2006 06/131

Two instructors and three trainees were engaged in a deep diving training programme. An instructor and one of the trainees descended a shotline together. At about 18m the trainee indicated that he had a problem with his regulator. The instructor gave the trainee his own primary regulator and they started to ascend. The instructor used his alternative air source. He realised that they were coming up too fast and took actions to control their buoyancy. They then started to sink back down. The trainee became unresponsive. The instructor tried to slow their descent by inflating his BCD. Whilst doing so he lost contact with the trainee. The instructor made a rapid ascent to the surface and the trainee sank down to the other three divers. These other divers brought him to the surface. The casualty was recovered from the water and the emergency services were called. The casualty was airlifted to hospital where he was declared dead. He had been using nitrox 33. The other four divers were placed on oxygen as they had all made fast ascents. Within 30 min of surfacing three of the divers developed 'pins and needles' and all four were airlifted to a recompression chamber for treatment.

July 2006 06/153

Two divers conducted a dive to 25m for 33 min with a 3 min stop at 6m. 4 hours 10 min later they dived to a maximum depth of 17m. Towards the end of the dive one of the pair deployed a delayed SMB and they made a normal ascent, with a 1 min safety stop at 6m. At the surface the diver with the SMB gave an 'OK' signal and made himself buoyant. At this point he lost consciousness and rolled face down in the water. His buddy righted him and started giving him rescue breaths. The emergency services were alerted and two divers from another boat entered the water to help. The casualty was recovered into the boat and resuscitation techniques were applied. The boat returned to the shore where they were met by paramedics. A doctor arrived and the casualty was declared dead at the scene. The other divers from the party were recovered by the assisting boat. Later it was determined that the diver had suffered a pulmonary embolism.

July 2006 06/453

Two divers conducted a dive on a wreck to a maximum depth of 66m. After 31 min they made an ascent to 50m. At this point one of the pair appeared to develop a problem. He then deployed a delayed SMB and commenced a rapid ascent to the surface. His buddy tried to assist during part of the ascent then re-descended, from an intermediate depth, to complete his stops. The diver who made the rapid ascent arrived at the surface missing 90 min of decompression stops. He was recovered into the boat and the Coastguard was alerted. The diver was suffering from chest pains accompanied by shallow breathing. He was airlifted to hospital but pronounced dead at the landing site. The diver had been using trimix. The cause of death was a pulmonary embolism.

August 2006 06/165

A diver conducted a dive to a maximum depth of 18m. During his ascent he was conducting a safety stop at 5m when he became unresponsive and stopped breathing. He was recovered into the boat and resuscitation techniques were applied. The Coastguard was alerted and the casualty was airlifted to hospital where he was pronounced dead on arrival.

August 2006 06/177

The alarm was raised when it was realised that a solo cave diver's car had been left in a car park for over 24 hours. A cave rescue team attended and the diver's body was located about 17m into a flooded passageway. It was found that the casualty had suffered a heart attack.

August 2006 06/166

Four divers were wading across a causeway to conduct a shore dive. Strong currents swept them off their feet and they were washed off the causeway into deeper water. One of the group was able to regain his footing. The three others were swept away. The Coastguard was alerted and a search involving two helicopters and three lifeboats was initiated. Two of the divers were quickly recovered but the fourth was not found for an hour. She was found about 200m out to sea. She was taken to hospital but died later.

Decompression Incidents

October 2005 06/296

Dive support vessel contacted Portland Coastguard reporting having a diver aboard suffering from suspected DCI following a 25m dive on nitrox for 5 min only, the diver suffered a blackout at depth, however managed to reach the surface when the alarm was raised. Coastguard rescue helicopter R-WB airlifted the casualty to the HLS where it was met by Poole Coastguard a diving doctor and ambulance, the diver was transferred to chamber for treatment. (Coastguard report).

October 2005 06/008

A diver surfaced from a 36 min dive to 47m and reported that he had missed decompression stops. He had a tingling sensation all over his body and joint pains. The Coastguard was alerted. He was transferred to a lifeboat and then airlifted to a recompression facility for treatment.

October 2005 06/303

Portland Coastguard received a call from the skipper of a dive support vessel reporting having dispatched by car a diver suffering from suspected DCI following a dive to 40.4m, a medi-link call was connected, the chamber staff were paged and the diver was given treatment. Note the skipper paged the chamber direct, not completing message, confusion as to who is coordinating the rescue! (Coastguard report).

October 2005 06/256

A diver conducted a 20 min dive to 20m. The diver then experienced a tingling back pain. The diver was placed on oxygen and airlifted to a recompression facility for treatment.

October 2005 06/012

A diver conducted a 26 min dive to a maximum depth of 31m including a 3 min safety stop at 6m. 4 hours 29 min later he dived to a maximum depth of 25m for 34 min with a 3 min safety stop at 6m. 48 min after the second dive he noted a sensation of 'pins and needles' in his right leg. He was placed on oxygen and the Coastguard was alerted. He was taken by lifeboat and ambulance to a recompression facility. The symptoms had resolved before the lifeboat arrived. The casualty was given recompression treatment. Five days after the dive the symptoms reappeared after a day at work. Medical advice was sought and after a period of rest, the symptoms resolved.

November 2005 06/308

Shetland Coastguard was requested by dive vessel for assistance for a diver suffering from suspected DCI. The vessel was met by an ambulance and the diver transported to recompression chamber for treatment. (Coastguard report).

November 2005 06/215

Two divers conducted a dive to a planned depth of 20m. They descended to 13m and then followed the bottom down. They inadvertently went to down to 24m. One of the pair was heavy and struggled with his buoyancy control. He put air into his BCD. His buddy tried to help and, not realising that the diver had put air into his BCD, also put some air into the diver's drysuit. They started to ascend. During the ascent they became separated. The now buoyant diver made a faster than normal ascent to the surface. His dive duration was 7 min. At the surface they regrouped and swam to the shore. 1 hour 44 min later they made a second dive to 13m for 22 min, without event. The following day the diver who had made the buoyant ascent awoke with severe back pain. He attended hospital and was referred to a recompression facility for treatment for DCI.

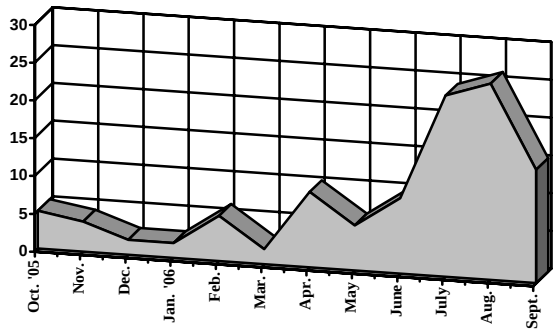
November 2005 06/030

Clyde Coastguard was made aware of a diving vessel with a diver aboard suffering from suspected DCI, the casualty was medi-
linked with a diving doctor and advised to be evacuated to a chamber for treatment, Tobermoray and Oban lifeboats were launched together with Oban Coastguard and an ambulance to take the casualty to hospital. (Coastguard & RNLI reports).

November 2005 06/311

Clyde Coastguard received a call from a group of divers reporting having a diver suffering from suspected DCI. The divers were medi-linked to a diving doctor who recommended the casualty be taken to hospital for examination. (Coastguard report).

Decompression incidents by month



December 2005 06/066

A solo diver using a rebreather with trimix made a dive to a maximum depth of 50m. Just before he started his ascent he lost his weightbelt. He clipped his reel to the wreck and used this line to control his ascent. He was able to complete all his stops up to and including his 9m stop. At this point he had to release the reel and he made a rapid ascent to the surface. Once on the boat he noticed some pain and the emergency services were alerted. He was airlifted to a recompression facility for treatment. All his symptoms were resolved.

December 2005 06/313

Solent Coastguard was alerted by a diving vessel of a diver who had made a rapid ascent following a dive to 46m, the diver had lost his weightbelt and made an ascent up to 9m up a line. The line stopped and the diver let go, making a final rapid ascent to the surface. The diver began showing signs of DCI and was airlifted to QAH for treatment by Coastguard helicopter R-IJ, where it was met by Portsmouth Coastguard for onward transportation to hospital. (Coastguard report).

December 2005 06/036

A diver conducted a dive to a maximum depth of 44m. The total duration was 27 min. He was unable to make a stop at 6m due to the buoyancy of his new drysuit and he made a rapid ascent from 6m to the surface. After a surface interval of 1 hour 37 min he dived to a maximum depth of 24m. He commenced his ascent after 22 min and made a 3 min stop at 6m. He was using nitrox 29 but air-based decompression. At the end of the following day he noticed a slight but persistent deep ache in his left elbow. He sought medical advice; it was thought to be a strain. The following day the symptoms remained and he contacted a recompression facility. They advised him to take Ibuprofen and stated that they would contact him for progress. After a further consultation he went to the recompression facility and received two sessions of recompression therapy which resolved his symptoms.

January 2006 06/317

Stornoway Coastguard received a 999 call requesting assistance for a diver suffering from suspected DCI, the diver was airlifted to recompression chamber by Coastguard rescue helicopter R-MU, the helicopter landing site was prepared by Kyle Coastguard. (Coastguard report).

January 2006 06/042

Two divers entered the water from the shore to conduct training drills. They followed a gentle slope down to 9m. They conducted mask, regulator and alternative air source drills and made three assisted ascents from 9 to 6m. After a dive time of 30 min they started to swim back to the shore. 3 min later, one of the divers indicated a problem with his hip, which made it difficult for him to fin. The other diver towed him to the shore and onto some rocks. The diver with the hip problem had difficulty removing his fins. He was not communicating nor responding normally. Others helped to move the diver and he, briefly, fell unconscious. The diver was placed on oxygen and the emergency services were alerted. The diver complained of visual disturbances, was cold and had a sore hip. An ambulance attended. Because of access difficulties the diver was airlifted to a recompression facility. He responded well to the treatment and made a full recovery.

February 2006 06/050

A diver conducted two dives with a 2 hour 30 min surface interval. The following day he dived to 34m for 36 min with a 4 min stop at 6m. Following this dive he developed a pain in his shoulder. He dismissed this pain as he suffered from arthritis in that shoulder. The pain subsided and, after a surface interval of 2 hours, he dived to 27m for 32 min with no stops. 5 min after this dive he experienced the shoulder pain once more. The pain was severe but was again dismissed as arthritis or a trapped nerve. The following evening, after a day spent decorating his house, the pain was still noticeable and there was some numbness in his right arm. He contacted a recompression facility for advice. He attended a recompression facility and received two sessions of treatment after which he was discharged.

February 2006 06/322

Clyde Coastguard received a 999 call from a diver suffering from DCI, on advice from the doctor the diver was taken by car from Seil Island to Dunstaffnage chamber for treatment, Oban Coastguard rescue team met the casualty at Oban and escorted them to the chamber. (Coastguard report).

February 2006 06/051

Two divers entered the water to conduct a wreck dive. Upon entry, the pony regulator of one of the divers free flowed. The cylinder was switched off. They descended the shotline and at the bottom of the line the cylinder was turned back on; its contents were down to 20 bar. They completed the dive, to a maximum depth of 28m, and deployed a delayed SMB to make their ascent. At about 12m the diver who had had the free flow lost control of his buoyancy and made a rapid ascent to 4m. At the start of the rapid ascent his computer indicated that he needed to complete a 2 min stop at 3m. He re-descended to 10m and rejoined his buddy. They completed a normal ascent. About 15 min after surfacing the diver who had made the rapid ascent reported an ache in his shoulder. He was placed on oxygen and his symptoms resolved. Once ashore they sought medical advice and the diver went to a recompression facility. He was recompressed and his symptoms were fully resolved. It was thought that the diver was underweighted, especially noting his empty pony cylinder.

February 2006 06/056

A diver conducted a 39 min dive to 35m, with a 2 min stop at 20m, a 2 min stop at 9m and a 5 min stop at 6m. After this dive he noticed 'pins and needles' in his left leg and a slight numbness in his lower back, torso, ribcage and left hand. He was placed on oxygen. His symptoms persisted. Medical advice was sought. The diver was taken into an ambulance but refused to be taken to hospital. The casualty was given recompression treatment the following day for a spinal DCI. He received two further treatments over the next two days.

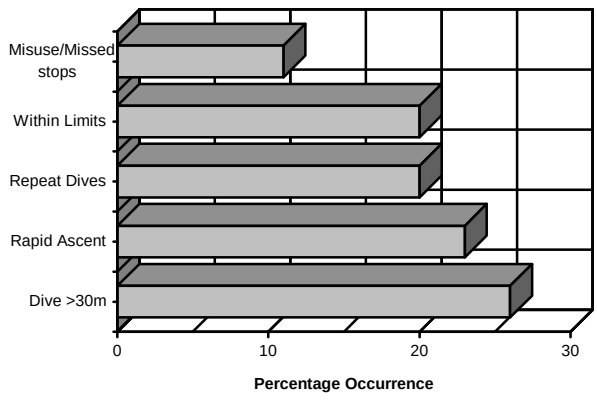
February 2006 06/323

Clyde Coastguard received a call from dive vessel reporting having a diver aboard suffering from suspected DCI. Following a medi-link call the diver was transferred to recompression chamber for treatment. (Coastguard report).

February 2006 06/058

Two divers descended to 36m. The BCD direct feed of one of the divers jammed in the open position and he made a very rapid ascent to the surface. His buddy went with him. Others offered assistance but the divers stated that they were alright. Three days later one of the divers was given recompression treatment for a cerebral DCI. It was anticipated that he would need further recompression treatment and make a full recovery.

Percentage analysis of factors involved in cases of DCI



March 2006 06/261

A diver made a rapid ascent from 18m, lost consciousness and then recovered at the surface. The diver then experienced chest pain and produced bloodstained sputum. The diver was placed on oxygen and airlifted to a recompression facility for treatment.

March 2006 06/326

Shetland Coastguard received a call from dive boat reporting having a diver aboard suffering from suspected DCI, the casualty was met by a waiting ambulance for transportation to the chamber for treatment. (Coastguard report).

April 2006 06/076

Two divers conducted a dive to a maximum depth of 17m. After about 20 min they returned to a 6m ledge where they planned to complete a 3 min safety stop. After 2 min one of the pair started to hyperventilate and panic. Her buddy brought her to the surface. At the surface she continued to hyperventilate and was very distressed. She was placed on oxygen and the emergency services were alerted. She was taken by ambulance to hospital. She complained of chest pains. Later that day she was taken to a recompression facility for treatment. She was discharged the following day.

April 2006 06/086

Two divers were involved in an instructor training course. They had completed skills training at a depth of 10m. 4 hours later one of the divers became ill. He was placed on oxygen but his condition deteriorated. Medical advice was sought and the diver was taken to hospital. He deteriorated further and was taken to a recompression facility for treatment. It transpired that he had conducted two dives to 38m, with decompression stops, three days earlier and had experienced flu-like symptoms from that point. It is believed that he was suffering DCI after the 38m dives and that the 10m dive aggravated the problem.

April 2006 06/104

A diver commenced a dive to a wreck at a maximum depth of 29m. He was wearing a new undersuit and felt more buoyant than normal during the descent. He struggled to maintain neutral buoyancy on the wreck and his breathing rate increased. After about 16 min he decided to abort the dive. His buddy deployed a delayed SMB and they began their ascent. He struggled to control his ascent rate and this increased his breathing rate further. He managed a brief stop at 6m. His total dive time was 21 min. Once in the boat he complained of a headache. He was placed on oxygen and the Coastguard was alerted. The boat returned to shore and the diver was taken by helicopter to a recompression facility. He received three sessions of treatment over the next two days. He may have a check for a PFO.

April 2006 06/095

Three divers conducted a dive to a wreck in a maximum depth of 27m. It was planned that one of the divers would practice the use of a delayed SMB at the end of the dive. When this diver reached 70 bar she deployed the SMB. She had difficulty doing so and used a lot of air. At 18m she was down to 38 bar. She tried to reach for her pony regulator but could not find it. She indicated to one of her buddies and in doing so knocked her mask which filled with water. Her buddy gave her his octopus regulator but she failed to clear it and took on water when she tried to breathe. Her buddy tried to reel in the SMB and drifted away while doing so; this pulled the regulator from her mouth. The third diver saw what was happening, found the distressed diver's pony regulator and gave it to her, again she didn't purge it and took on more water. She began to choke. She lost control of her buoyancy and came to the surface with one of her buddies, missing 7 min of decompression stops. They were recovered into the boat and placed on oxygen. The Coastguard was alerted. Once ashore they were taken to a recompression facility. The distressed diver was diagnosed with mild DCI and was treated. The other diver required no treatment.

April 2006 06/097

Three divers were engaged in a dive to a maximum depth of 30m. Towards the end of this dive one of the three became separated from the others at a depth of about 15m. They all surfaced and regrouped. Their dive duration was 34 min. It is thought that the computer of the diver who had become separated was indicating a rapid ascent alarm, but other divers were not aware of this. After a surface interval of 1 hour 30 min they dived to 21m for 42 min. The following day the diver who had become separated on the first dive was taken to a recompression facility with suspected DCI.

April 2006 06/098

Two divers descended a shotline to a maximum depth of 43m. When one of the pair's computers indicated that 6 min of stops was required they swam up to 20m. They stayed at this level for a while. They conducted an air check; one had 110 bar and the other 100 bar. They then swam through a tunnel. Visibility fell to 1m. They then started to return to the exit point; however, the dive leader took the wrong direction. They ascended from 10m to 6m against an underwater wall. The other diver then showed the dive leader that he only had 40 bar left in his main cylinder. He then lost control of his buoyancy and rose to the surface, missing stops. The dive leader kept an eye on him but stayed between 6m and 3m and completed 1 min of decompression. The buoyant diver had missed a 2 min decompression stop and a 3 min safety stop. He was placed on oxygen and given fluids. Later that day he began to experience symptoms of DCI. The following morning he sought medical advice and went to a recompression facility where he received treatment. His symptoms were resolved.

April 2006 06/337

Falmouth Coastguard received a call from diving vessel reporting having a diver aboard suffering from facial tingling, a medi-link call was established the doctor recommending evacuation to recompression chamber, RN rescue helicopter R-193 was tasked to transport the casualty to the chamber. (Coastguard report).

April 2006 06/338

Portland Coastguard received a call from a dive boat reporting having a diver aboard suffering from suspected DCI, the vessel had contacted the chamber direct and subsequently called Portland Coastguard for assistance, the casualty was airlifted by Coastguard helicopter R-WB. (Coastguard report).

April 2006 06/100

Two divers descended a shotline to a wreck. They settled on top of the wreck at a depth of 24m. The underwater visibility was low. After 22 min they began to deploy a delayed SMB. There was a current flowing over the wreck and the diver found it difficult to deploy the buoy. The divers' computers indicated a requirement for several minutes of decompression stops. One diver held the reel, the other inflated the buoy. As the buoy ascended the reel jammed and the diver holding it was pulled upwards. The other diver went with him, took hold of a torch that was hanging from him and tried to slow the ascent. He was unable to halt the ascent and, at about 9m, he let go of the buoyant diver who was carried to the surface. The other diver attempted to fin downwards but, inverted, he was unable to dump air from his suit. He rose from 8m to the surface in 30 sec. Both divers were recovered from the water and placed on oxygen. One of the divers' computers indicated that he had

missed 2 min of decompression stops. Within 5 min he experienced a tingling sensation in his right and then both legs. The Coastguard was alerted and the divers were airlifted to a recompression facility. Both divers were recompressed and all symptoms were resolved. The diver who made the buoyant ascent had been using a drysuit for only the second time in open water.

April 2006 06/091

Portland Coastguard received a call from a dive boat reporting having a diver aboard suffering from suspected DCI, the casualty was med-linked with a diving doctor who recommended immediate evacuation to a recompression chamber. Portland Coastguard tasked Coastguard rescue helicopter R.WB to recover the casualty, the helicopter was met by Poole Coastguard, ambulance and a doctor for transportation, the casualty had a skin DCI and loss of power to arms. (Coastguard report).

May 2006 06/246

A diver conducted a series of three dives. Then, after a surface interval of nearly 24 hours, he dived to a maximum depth of 28m for 30 min with a 1 min stop at 6m. During the ascent, at about 10m, he felt a pain in his ear; he thought that this was a reversed ear problem and descended a couple of metres and then ascended more slowly. Back on the boat he felt fine and he drove the boat back to the shore which took 45 min. Once ashore he began to feel dizzy and within 5 min he could not stand. He was given oxygen and the emergency services were called. He was taken by ambulance and lifeboat to a recompression facility where he received a series of seven treatments over a four day period.

May 2006 06/137

A group of divers were engaged in an advanced diving course. At 20m one of the students lost control of his drysuit buoyancy. The instructor signalled the other divers to ascend. At 14m one of the others put air into her BCD and also lost buoyancy control. Both divers made rapid ascents to the surface. Their dive duration was 16 min. They were placed on oxygen and medical advice was sought by phone. The divers were taken, on oxygen, to a recompression facility. The diver who had made the rapid ascent from 20m was given recompression treatment for symptoms of DCI; the other diver did not require treatment.

May 2006 06/108

A diver conducted a dive to 9m for a duration of 20 min. Later that day she dived to 13m for a total of 31 min. The following day she dived to 14m for 25 min including a 5 min stop at 6m. About 1 hour later she dived to 15m for a total of 24 min. During the ascent a jammed reel of her delayed SMB jerked her arm. Shortly afterwards she felt a sharp pain in her left shoulder. She did not think that the incident with the reel could have caused this pain. Once in the boat she was placed on oxygen. She was taken to a recompression facility and, although no symptoms of DCI were found, she was recompressed. This resolved her symptoms.

May 2006 06/115

The emergency services were alerted after a diver surfaced from 37m missing decompression stops. The dive boat headed for shore and was met en route by a lifeboat. He was given oxygen and on arrival ashore he was transferred to a recompression facility by helicopter. (Media report).

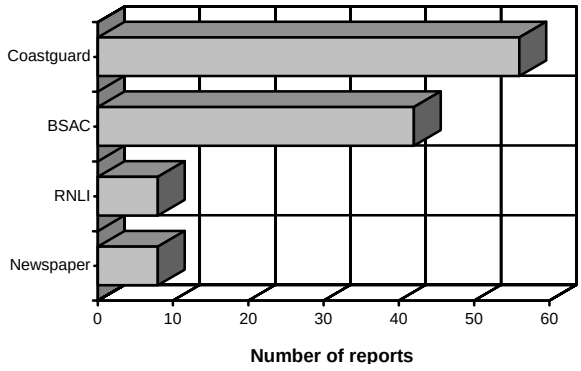
May 2006 06/138

A diver entered the water from a boat intending to dive to the upper part of a wreck to a maximum depth of 18m. He descended, with his buddy, in low underwater visibility and they arrived on the wreck at a depth of 25m. When his air reached 50 bar he alerted his buddy. The buddy deployed a delayed SMB and they started their ascent. At 13m the diver ran out of air. He was unable to find his pony regulator or his buddy's octopus regulator and he made a rapid ascent to the surface. His dive duration was 19 min. His buddy made a normal ascent and they were recovered into their boat. The diver who had made the rapid ascent did not dive the following day. The day after that he dived to a maximum depth of 10m. The following day he drove home. He felt very tired, his joints ached and he felt very nauseous. The day after that the symptoms were still present and he sought medical advice. He went to a recompression chamber and received one session of treatment.

May 2006 06/109

A diver conducted a dive to a maximum depth of 18m. She experienced problems with her drysuit dump valve. She became separated from her buddy and made a fast ascent to the surface. Once in the boat she complained of dizziness and she was placed on oxygen. Other divers were recovered from the water and the boat headed back to shore. The diver then complained of a tingling in her left hand. The Coastguard was alerted and a lifeboat was launched. The oxygen ran out and the diver was placed on nitrox 36. The lifeboat escorted the boat to the shore and the diver was moved into an ambulance and placed back on oxygen. She was taken to a recompression facility.

Decompression data source analysis



June 2006 06/139

Two divers entered the water to dive to a wreck at a maximum depth of 37m. One of the pair was using a rebreather. They descended a lobster pot line. It was a long line and they found it tangled in their shotline. The rebreather diver switched his set point to 1.3 once he was below 20m. On the wreck they began to explore. The rebreather diver found a valve and attached his lifting bag to it. He turned to ask his buddy to inflate the bag but the buddy had gone. He filled the bag from his back-up regulator and allowed it to surface. He continued the dive and found his buddy who was in the process of lifting the shot weight. They ascended a lobster pot line. The rebreather diver was slower than his buddy and he was last up the line. At 20m he noticed that the line was moving down towards him, pulled

down as the supporting buoy was too small. He let go of the line and started to deployed a delayed SMB. However the reel jammed. While trying to free the reel he noticed that he didn't have sufficient air in the rebreather to allow him to take a full breath. He ascended without enough air to breathe. He attempted to add air manually but this did not work. He continued to ascend hoping that the air in the rebreather would expand sufficiently to allow a full breath. He was carried buoyantly to the surface missing decompression stops. His dive duration was 45 min. He shouted for help and was recovered into the boat. He was placed on oxygen and the Coastguard was alerted. His buddy was recovered some minutes later. The rebreather diver drifted in and out of consciousness. He was airlifted to a recompression facility where he received two sessions of recompression treatment for DCI.

June 2006 06/129

A diver conducted a 24 min dive to 24m with a 5 min stop at 5m. 6 hours later she noticed a mottled, itchy red rash on both her forearms. She sought medical advice by phone and sent a phone photo of the rash. She went to a recompression facility. She had a reduction in sensation below her left knee and her fingers and forearms were tingling. She was diagnosed with a spinal DCI. She received recompression treatment and a further treatment the following day because of incomplete resolution of symptoms. This diver had suffered a DCI nineteen months earlier and had been diagnosed with and treated for a PFO. (Report 05/027 relates).

June 2006 06/121

Two divers conducted a dive to a maximum depth of 29m and made a normal ascent to 6m. At the 6m stop one of the divers' drysuit inflator stopped working and he used his BCD to maintain his buoyancy. The other diver noticed that he was starting to sink so he held on to him and used his drysuit buoyancy to hold them both. At that point the other diver's inflator failed too; coming out of the suit completely. This diver managed to hold them both using his BCD. During this time they surfaced briefly then re-descended to complete their stops at a depth of 5m. Their dive duration was 45 min including 10 min of decompression stops. The following day one of the divers developed a headache and a 'slight woolly feeling' down one side. He sought medical advice and received three sessions of recompression therapy. His symptoms resolved. The other diver was asymptomatic but also received one session of recompression treatment.

June 2006 06/136

A diver, using air, conducted a dive to a maximum depth of 30m for a duration of 46 min including a 1 min stop at 9m and a 10 min stop at 6m. Two hours later he started to prepare for a second dive when he noticed an itchiness on his left shoulder. He discovered a 70mm diameter red rash on his shoulder with two blue weals across it. Another member of the group commented that she had had a similar marking two days earlier and had sought medical advice by phone. The diver with the newly developed rash did not make the second dive that day; he relaxed and drank a lot of water. 3 hours later the rash had gone. No other symptoms were experienced. Dehydration was thought to have been a contributory factor.

June 2006 06/140

A diver and his buddy conducted a dive to a maximum depth of 35m. They both deployed delayed SMBs to make their ascent. The subject diver's dive duration was 54 min including 15 min of decompression at 3m. 90 min he dived again, on the same site but with a different buddy, to a maximum depth of 36m. He started his ascent when he had 5 min of no-stop time left. He made a very slow ascent and had a total dive duration of 25 min. Shortly after getting back into the boat he felt an 'excruciating' pain in his right shoulder. He was placed on oxygen and given fluids. The Coastguard was alerted and the boat made its way back to the shore. They were met by the Coastguard and an ambulance. The diver's condition had improved and he was taken by ambulance to hospital where tests were conducted. He was diagnosed with a minor DCI which rehydration and oxygen resolved. The diver had been using nitrox 26. The diver reports that he had taken water during the day but had also had half a glass of wine some time prior to the first dive.

June 2006 06/346

Portland Coastguard were alerted by a dive vessel alongside in port of a diver aboard suffering from suspected DCI following a dive to 29m, the diver had experienced saw tooth diving profile during the dive due to current and buoyancy problems. The casualty was transported to recompression chamber by ambulance for treatment. (Coastguard report).

June 2006 06/347

Falmouth Coastguard received a call from dive boat reporting a diver with suspected DCI following a rapid ascent from 27m due to inability to vent drysuit. The vessel was met in harbour by Penzance Coastguard, an air ambulance airlifted the casualty to DDRC in Plymouth for treatment. (Coastguard report).

June 2006 06/271

A diver conducted a 25 min dive to 34m with a 4 min stop at 6m and a 9 min stop at 3m. 4 hours later he dived to 13m for 40 min with a 1 min stop at 3m. The following day he conducted a wreck dive to a maximum depth of 35m. The plan was to start their ascent after 20 min and make decompression stops at 6m and 3m. After 10 min they rose to the upper parts of the wreck and headed towards the shotline at a depth of 24m. However, they missed the line and continued back down to 34m. Having overrun their plan they deployed a delayed SMB and made their ascent including a 3 min stop at 9m, a 4 min stop at 6m and a 9 min stop at 3m. Their total dive duration was 41 min. At the 3m stop one of the pair experienced problems with remaining at the stop due to the buoyancy of his drysuit / undersuit. The diver had been trying a new drysuit / undersuit combination. 3 hours later, this diver complained of itching on his chest. He was placed on oxygen and given fluids. After 10 min he felt better. Once ashore he sought medical advice and was referred to a recompression facility where he received a precautionary treatment. He experienced no further problems but refrained from diving on following days.

June 2006 06/145

A diver entered the water with an instructor to conduct his first dive to a depth of 33m. They descended a shotline to the seabed. They then attached a distance line and swam around the shot weight. Back at the shot weight the instructor demonstrated attaching a delayed SMB to the weight to assist its recovery. When the trainee had a 1 min stop showing on his computer they made their ascent. During the ascent they stopped at 22m and 10m to conduct buoyancy checks. They stopped at 6m to allow their computers to clear. As a training drill the trainee then switched to his pony regulator and they made a further 3 min stop. They then switched back to their main regulators and ascended to the surface, taking 1 min to do so. The trainee was using nitrox 26 with his computer set to air. The instructor was using air. On their way back to the shore the trainee diver began to feel dizzy and he developed a headache. His condition became worse and he felt a pain in his chest. He was placed on oxygen. The emergency services were alerted. He was given water which caused him to vomit. He developed

a tingling in his fingers and a numbness behind his left ear. He was airlifted to a recompression facility and received ten sessions of recompression treatment. He was to be tested for a possible PFO.

June 2006 06/349

Portland Coastguard were alerted by a diving vessel reporting a diver aboard suffering from suspected DCI. The vessel was met by Wyke Coastguard and an ambulance, the casualty was taken to Dorchester hospital for treatment. (Coastguard report).

July 2006 06/148

A diver completed a 29 min dive to a maximum depth of 22m including a 3 min stop at 6m. 1 hour later he began to feel unwell. He was given water but his condition did not improve. He was placed on oxygen. His condition deteriorated and medical advice was sought. He was airlifted to a recompression facility and received two sessions of treatment for DCI. He made a full recovery.

July 2006 06/353

Milford Haven Coastguard were alerted by a diving vessel of a diver aboard suffering from suspected DCI, the diver was vomiting and complained of symptoms of loss of feeling in extremities. RAF rescue 169 airlifted the casualty and buddy diver from Littlehaven lifeboat, the casualty and buddy were flown to DDRC Plymouth for treatment. (Coastguard & RNLI reports).

July 2006 06/149

A diver completed a diver training course. The following day he conducted a series of three dives; the first two to 6m and the last to 24m. Early the following day he attended a recompression facility and received three sessions of treatment for DCI. All symptoms were resolved.

July 2006 06/352

Solent Coastguard were alerted by Portland Coastguard, of a diver aboard suffering from suspected DCI following a dive to 40m. The casualty was recovered by Lymington RNLI lifeboat and met by Hampshire ambulance service for transportation to recompression chamber. (Coastguard & RNLI reports).

July 2006 06/199

A diver conducted a 49 min dive to a maximum depth of 48m on air. The dive duration included a 3 min stop at 9m and a 15 min stop at 6m. 1 hour 47 min later she dived, on air, to 32m for 27 min including a 4 min stop at 6m. Within 15 min of surfacing she felt a burning sensation in her left shoulder and she had a discolouration of the skin and swelling in that area. She was placed on oxygen and taken, by ambulance, to a recompression facility. She was diagnosed with a lymphatic DCI and given recompression treatment. The day before she had had a stomach upset and had become dehydrated, despite drinking fluids.

July 2006 06/354

Portland Coastguard received a call from a diving vessel reporting having a diver aboard suffering from suspected DCI following a dive to 58m. Coastguard rescue helicopter R-WB was tasked to recover the diver and airlift to recompression chamber, the helicopter was met by Poole Coastguard a doctor and ambulance. (Coastguard report).

July 2006 06/155

A pair of divers entered the water planning to dive to 50m. They descended down an underwater wall and then followed the seabed down to reach their maximum depth. Both divers suffered nitrogen narcosis and became disorientated. They decided to ascend in open water, away from the wall. At 30m one of the divers deployed a delayed SMB. While doing so he lost control of his buoyancy. He had 30 bar remaining in his twin-set. The diver made a rapid buoyant ascent to the surface from 25m. His dive duration was 27 min and he had reached a maximum depth of 57m. The other diver completed the required decompression. The buoyant diver was recovered into the boat. He was placed first on nitrox 53 and then oxygen. The Coastguard was alerted and the diver and his buddy were airlifted to a recompression facility. The diver who had made the rapid ascent displayed some weakness in his left wrist; the other diver showed no symptoms. Both were recompressed and released the following day.

July 2006 06/163

A diver conducted a 36 min dive to 29m with a 3 min stop at 6m. 3 hours later he dived to 26m for 41 min. About 75 min after the second dive he noticed that he had a rash. Later he became unwell; he felt feverish and the rash was still present. He was placed on oxygen and taken to hospital. DCI was diagnosed and he was transferred to a recompression facility for treatment. He was reported to be dehydrated on arrival.

July 2006 06/151

The Coastguard was alerted after three divers made a rapid ascent from 25m. One of the divers was reported to be coughing up blood. All three were airlifted to a recompression facility for treatment.

July 2006 06/356

Portland Coastguard were alerted by diving vessel of a diver aboard suffering from suspected DCI following a dive to 64m. The diver complained of blurred vision, sickness and a skin rash on shoulder and stomach. The casualty was airlifted to recompression chamber for treatment, the helicopter was met by Poole Coastguard and an ambulance for transfer to the chamber. (Coastguard report).

July 2006 06/357

Falmouth Coastguard received a call from diving vessel reporting a diver aboard suffering vomiting and in a confused state, rescue helicopter R-193 was tasked to airlift the casualty to DDRC Plymouth for treatment. (Coastguard report).

July 2006 06/360

Falmouth Coastguard received a call from diving vessel reporting having a diver aboard suffering from dizziness, vomiting and lethargy following dive to 77m for 104 min, 17min bottom time. The casualty was airlifted to DDRC by rescue helicopter R-169. (Coastguard report).

July 2006 06/359

Portland Coastguard received a call from a diving party reporting having completed a dive 5 hours before to 55m for 30min, the casualty reported symptoms of numbness and aches, the casualty reported to the chamber for treatment. (Coastguard report).

July 2006 06/361

Solent Coastguard were alerted by a diving vessel of a diver suffering from tightness in the chest and disorientation following

a dive to 32m, the casualty was airlifted to QAH for treatment by R-IJ, Portsmouth Coastguard prepared the HLS. (Coastguard report).

July 2006 06/220

Two divers descended a shotline to a depth of 31m. During the descent one of them became tangled with the line and his buddy helped to free him; this caused him some anxiety. When this diver reached 90 bar he alerted his buddy. The buddy deployed a delayed SMB which took 2 min. As they started their ascent the diver who was low on air was now down to 50 bar. At 25m the diver signalled that he had 30 bar. He had a pony cylinder with nitrox 50. His buddy signalled that they should ascend to 17m and that he should then switch to his pony cylinder. The diver was unable to access his pony regulator and his buddy helped him; the regulator was presented upside down due to the way it was rigged. This diver then made a rapid ascent to 9m, regained control and re-descended to join his buddy at 13m. They then ascended normally with a 3 min safety stop at 6m and left the water. The following morning the diver who had made the rapid ascent had altered sensation in his wrists and a small rash on his right wrist. Medical advice was sought and the diver reported to a recompression facility for treatment. His symptoms were resolved.

July 2006 06/363

Yarmouth Coastguard received a call from a diving vessel reporting having a diver aboard suffering from suspected DCI following a dive to 25m, the casualty was medi-linked to a diving doctor for medical advice, the advice was to airlift the casualty to a recompression chamber for treatment. R-125 recovered the diver, Gorlestone Coastguard prepared the HLS. (Coastguard report).

July 2006 06/365

Portland Coastguard received a 'Pan Pan' alert from a diving vessel reporting a diver suffering from suspected DCI, a buddy pair had completed a dive to 29m when on ascent one diver lost buoyancy control and started to ascend in an uncontrolled manner, this was corrected by the buddy diver only for the least experienced diver to vent all his air from the BCD and descend to 26m, at this time the more experienced diver inflated the buddy's BCD and both made an uncontrolled ascent to the surface. Both divers were airlifted by R-WB to a recompression chamber for treatment, both divers were treated, the more experienced diver requiring extensive treatment for a spinal DCI, the helicopter was met by Poole Coastguard at the HLS. (Coastguard report).

July 2006 06/191

Two trainees and an instructor entered the water to conduct a drysuit familiarisation dive. They entered the water and the instructor signalled them to descend. They reached the bottom at 6m then followed it down to 12m; exchanging 'OK' signals as they went. Visibility at 12m was low. One of the trainees experienced suit squeeze and she put some air into the suit. The air migrated to her boots and she began an inverted ascent. She managed to right herself and stopped the ascent. The other trainee went with her. They became separated from the instructor. The trainees decide to surface. The diver who had been inverted put some air into her suit to start her ascent but she became buoyant and made a fast ascent to the surface. She ascended from 10m to the surface in about 6 sec. Her buddy followed her. They exchanged 'OK' signals at the surface and then began a descent to try to rejoin the instructor. They met him at about 5m and all three surfaced together. Once out of the water the diver who had made the rapid ascent was placed on oxygen. She was then told by others at the site that she would be able to dive again. Her computer had 'locked out'. After a surface interval of 2 hours 30 min she dived to 14m for 21 min. Later she experienced symptoms of DCI and received recompression treatment.

July 2006 06/287

A diver conducted a dive to a maximum depth of 28m for 57 min including a 1 min stop at 11m and a 13 min stop at 6m. 2 hours later he conducted a drift dive to a maximum depth of 20m. The duration of the second dive was 37 min with a 1 min stop at 6m and a 2 min stop at 4m. Once back in the boat the diver noticed a pain in his left shoulder. After 5 to 10 min the pain increased. He was placed on nitrox 50 and then oxygen. The pain reduced. The Coastguard was alerted and the diver was airlifted to a recompression facility where he was treated for DCI.

August 2006 06/174

A diver completed a series of two dives per day over a three day period. On day one the dives were 31m for 57 min with a 12 min stop at 6m then, after a 3 hour 31 min surface interval, to 35m for 66 min with 38 min stop at 6m. Day two was 16m for 39 min with a very rapid ascent from 13m at the end of the dive followed by a surface interval of 2 hours 22 min, then a dive to 26m for 66 min including a 20 min stop at 6m. The final day's diving was to 34m for 57 min including a 19 min stop at 6m then, after a 3 hour 7 min surface interval, to 34m for 63 min with a 29 min stop at 6m. One hour after the last dive the diver experienced soreness in her left breast and a mottling of her right shoulder blade. She was placed on oxygen. After 11 min the symptoms had reduced slightly. She sought medical advice and was given fluids and placed back on oxygen. She was taken to a recompression facility, treated for DCI and discharged later that day. She was advised to seek a PFO test.

August 2006 06/370

Falmouth Coastguard were alerted by a diving vessel of a diver aboard suffering from suspected DCI following a dive to 24m for 39min, a medi-link call was established the doctor recommending immediate evacuation. Falmouth Coastguard scrambled rescue helicopter R-193 to airlift the casualty and buddy diver to DDRC Plymouth, Falmouth Coastguard team collected details from the dive vessel on return to port. (Coastguard report).

August 2006 06/273

Two divers entered the water and dived to the seabed at a depth of 15m. They then followed the seabed down to a depth of 24m. With 3 min of no stop time remaining they started a slow ascent. They deployed a delayed SMB and conducted a 1 min safety stop at 3m. Their dive duration was 37 min. About 30 min later one of the pair began to feel unwell and had a balance problem. The diver was placed on oxygen and the Coastguard was alerted. 8 min after the initial complaint the diver's condition deteriorated; he began to shake uncontrollably, he started to vomit, his eyes rolled and he was unable to focus. Medical advice was sought and the diver and his buddy were airlifted to a recompression facility. The diver was diagnosed with a vestibular DCI and he received a series of eleven sessions of recompression therapy. He was reported to have made a good recovery and was advised to take a PFO test.

August 2006 06/371

Portland Coastguard were informed by a diving vessel of a diver aboard suffering from suspected DCI following a dive on trimix to 51m, the vessel had returned to port when the diver's symptoms had developed. The casualty was transported by ambulance to recompression chamber for treatment. (Coastguard report).

August 2006 06/176

Two divers conducted a dive to a maximum depth of 20m. After 20 min they ascended to a shelf at a depth of 12m so that one of the pair could practice mask clearing before their final ascent. The diver's first two attempts to clear went well but on his third attempt the mask seal rode over his hood and would not seal. The buddy attempted to help but the diver became distressed and pulled his mask off. He signalled that he wanted to ascend. The buddy tried to replace his mask but he pulled it off again. Both divers made a rapid ascent to the surface. At the surface both divers were recovered into their boat. A few minutes later the distressed diver reported that he felt a little sick and that he had an ache in his left elbow. The diver was laid down and given oxygen and water. The seal was removed from a new oxygen cylinder but it was found to be empty. The diver was given nitrox. The diver was airlifted to a recompression facility. During the flight the diver was placed on oxygen and the pain in his elbow resolved. The diver was given a single session of recompression treatment.

August 2006 06/178

A pair of divers conducted a dive to a maximum depth of 38m. After 15 min one of the divers deployed a delayed SMB. They ascended to 21m and made a 2 min stop. They then ascended to 9m. At this point one of the pair became buoyant, she attempted to vent her BCD and her buddy attempted to slow the ascent. The buoyant diver became inverted and the pair was carried to the surface. The buoyant diver's computer indicated that she had missed 7 min of decompression stops. The divers were placed on oxygen. They attended a recompression facility. The diver who had been buoyant was treated for DCI. It was later found that this diver's BCD inflator valve was leaking air into the jacket. It is thought that this fault developed as the divers approached 9m.

August 2006 06/223

A diver conducted a 25 min dive to a depth of 26m with a 3 min stop at 6m. 2 hours later he dived again, to a maximum depth of 21m. The dive involved lots of finning and one of the pair consumed his air quite quickly. When he reached 70 bar he indicated that he wanted to ascend. However, the other diver continued the dive. When the diver who was low on air reached 50 bar he again indicated that they should ascend and started to deploy his delayed SMB; the other diver assisted him. In his haste to deploy his SMB the diver forgot to dump air from his drysuit and was pulled upwards by the SMB. He moved to dump air but developed cramp in his leg. This delayed him dumping air and he was carried from 16m to 5m in about 10 seconds. He then spent 3 min surfacing from 5m. Back on the boat he was placed on oxygen and examined for symptoms; none were found. Two days later he started to suffer from dizziness, headaches, numbness in his left hand and an aching right hand. He was taken to a recompression facility and received treatment for DCI.

August 2006 06/376

Two divers made a rapid ascent from 20 m, as they were unfamiliar with the wreck they missed the shotline, now over time they deployed the delayed SMB which caused them to rise rapidly, attempting to dump air the rise was too rapid, arriving on the surface with nausea headache and tingling, Portland Coastguard were contacted who scrambled Coastguard rescue helicopter R-WB to airlift the divers to recompression chamber for treatment, the helicopter was met by Poole Coastguard on arrival at the HLS. (Coastguard report).

August 2006 06/378

Whilst on ascent a diver made a rapid ascent to the surface due to buoyancy problems, the diver was coughing blood and was flown direct to casualty hospital by Coastguard rescue helicopter R-WB, the diver was then flown to recompression chamber for further treatment. (Coastguard report).

August 2006 06/205

A diver conducted a 30 min dive to 47m with a 5 min stop at 6m and a 7 min stop at 3m. 3 hours later he dived to 40m for 30 min with a 3 min stop at 6m. 10 min after surfacing he developed severe stomach cramp. An ambulance was called. He took an indigestion tablet and fluids. 5 min later his leg 'collapsed'. He was placed on oxygen and taken by ambulance to hospital. From there he was airlifted to a recompression facility for treatment.

August 2006 06/381

Dive vessel reported having a diver aboard suffering from suspected DCI following a dive to 42m, Yarmouth Coastguard linked the duty diving doctor to the vessel, the vessel was met by an ambulance on arrival at shore. (Coastguard report).

August 2006 06/380

Portland Coastguard were alerted by a diving vessel of a diver aboard suffering from suspected DCI following a two dive day, first dive 40m for 40min second dive 2 hours 30 min later to 24m for 40min using nitrox 36, conducted a precautionary stop of 3min at 6m. Rescue helicopter R-WB airlifted the casualty to recompression chamber for treatment, casualty symptoms, pain in chest, 'pins and needles', both divers were airlifted, the helicopter was met by Poole Coastguard and an ambulance on arrival at the HLS. (Coastguard report).

August 2006 06/193

A diver made a rapid ascent from a dive to 40m missing over 20 min of decompression. The emergency services were alerted and the diver was placed on oxygen. He was then airlifted to a recompression facility for treatment. (Media report).

August 2006 06/382

Dive vessel reported having a diver aboard suffering from suspected DCI following a dive to 38m for 23min. The casualty was airlifted to hospital by rescue helicopter R 177, Portaferry Coastguard made ready the HLS. (Coastguard report).

August 2006 06/208

Portland Coastguard were alerted by a diving vessel that a diver aboard had missed stops following a rapid ascent from a 31m dive; the bottom time had been 47min. One of three divers lost buoyancy control and although attempting to re-descend could not get down, the divers were recovered and complained of tingling. The casualty was airlifted to recompression chamber for treatment by Coastguard rescue helicopter R-WB. The helicopter was met by Poole Coastguard and an ambulance at the HLS. Note the diver had purchased a set of wings and had little experience with them, lack of weight made it impossible to remain at the decompression stop. (Coastguard report).

August 2006 06/386

Clyde Coastguard coordinated the recovery of a diver from an island to the mainland for treatment suffering from DCI. (Coastguard report).

August 2006 06/251

A diver conducted a 30 min dive to 30m with a 1 min safety stop at 3m. 2 hours 22 min later he dived to 33m for 45 min with a 1 min stop at 6m and a 34 min stop at 3m. During these dives he experienced problems with his dive computer and in reading it.

He believes that decompression stops were missed. He was placed on oxygen and taken by ambulance to a recompression facility for treatment. He was released from hospital 24 hours later.

August 2006 06/388

Yarmouth Coastguard were alerted by a diving vessel, of a diver aboard another vessel suffering from suspected DCI, the casualty was airlifted by rescue helicopter R Anglia One, the helo was met by Coastguard teams from Mundsey, Happisburg and Winterton attended, the casualty was taken by ambulance to the hospital. (Coastguard report).

August 2006 06/387

Portland Coastguard were alerted to two divers missing decompression stops following a dive to 27m, this was the second dive of the day and in reverse profile, the divers ascended and attempted to deploy their delayed SMB. Whilst this was being done the divers fell back to the seabed, the divers completed stops according to the computer and on surfacing began feeling ill. The divers were airlifted to recompression chamber by R-WB, being met by Poole Coastguard and ambulance. (Coastguard report).

August 2006 06/392

Portland Coastguard received a call from a diving vessel reporting having two divers aboard suffering from suspected DCI, the divers were airlifted by R-WB to the HLS where it was met by Poole Coastguard and an ambulance for transportation to a recompression chamber. (Coastguard report).

August 2006 06/252

A diver conducted a series of seven dives over a four day period. Her last dive was to 32m and this was the deepest. Her previous dive had been 19 hours 29 min earlier. She dived with a buddy to a wreck. There was a 1 knot current flowing. At the end of the dive they ascended the shotline, closely followed by another pair of divers. At a depth of 10m they found a third pair of divers on the shotline and they also found that the shot buoy had been pulled down to 10m, by the action of the current. The diver deployed a delayed SMB and they left the shotline, the second pair of divers came with them. They sank back to 15m before making a normal ascent with a 3 min stop at 6m. The SMB then became entangled with the third pair of divers and they abandoned it, making their final ascent without it. After the dive, the diver had a painful left shoulder and tingling and numbness in two fingers of her left hand. This diver had suffered from a stiff left shoulder for two years. She sought diving medical advice and they did not propose any treatment. Six days later she attended a recompression facility and received two sessions of treatment. She was left with some residual numbness which improved with physiotherapy. It was uncertain if this was a case of DCI.

August 2006 06/228

A diver conducted a series of six dives over a three day period. On the fourth day she dived to 31m for 41 min with a 1 min stop at 15m, a 2 min stop at 9m and a 6 min stop at 6m. 3 hours 35 min later she dived to 18m for 33 min with a 3 min stop at 6m. After surfacing she noticed some pain in her left arm. An hour later the pain continued and she noticed a rash on her left arm. She sought medical assistance and was placed on oxygen. The pain had subsided a little by this time and, after 20 min on oxygen, the rash disappeared. She was then transferred to a recompression facility for treatment, after which she was symptom-free. She was advised to take a PFO test.

August 2006 06/393

Portland Coastguard were alerted by a diving vessel of a diver aboard suffering from suspected DCI, the vessel was in harbour, Portland Coastguard requested the ambulance to meet the vessel and transport the casualty direct to recompression chamber for treatment. (Coastguard report).

September 2006 06/230

A diver collapsed after a dive to 30m. He was transported to a recompression facility and received a series of nine treatments. (Media report).

September 2006 06/394

Liverpool Coastguard were alerted to a diver suffering from suspected DCI, the casualty was taken to hospital via a land ambulance. (Coastguard report).

September 2006 06/275

A diver conducted a series of dives over a three day period. His maximum depth was 42m and he used both air and nitrox. He then took two days without dives. On the next day he dived to 36m for a total of 62 min with the following stops; 2 min at 15m, 3 min at 12m, 4 min at 9m, 6 min at 6m and 9 min at 3m. His dive gas was nitrox 22. 3 hours later he conducted a drift dive to 15m using nitrox 33. His dive duration was 60 min including a safety stop. 20 hours 30 min later he boarded a plane for a short flight. On arrival at the destination airport he felt unwell with nausea, dizziness, numbness in his right arm, tingling in his face and right arm and hand, weakness in his right hand and pain in his right arm and elbow. He sought advice from a recompression facility and was recommended to make his way to them. He was taken by ambulance, on oxygen, to the recompression facility where he received a series of three sessions of treatment for a neurological DCI.

September 2006 06/232

Two divers conducted a 50 min dive to 45m with a 8 min stop at 3m. 3 hours 58 min later they dived to 33m for 50 min with a 13 min stop at 3m. Both dives included stops that were longer than required by their computers. Once back on the boat, one of the pair reported that he had twisted his right hip. This diver had a history of slight arthritic pain in this joint. 5 min later he reported that the pain was spreading down his right thigh. He lay down and was placed on oxygen. His right thigh then developed numbness and tingling. The Coastguard was alerted and the boat returned to the shore. The diver was given fluids. He was then airlifted to a recompression facility where he received treatment for DCI.

September 2006 06/276

A diver conducted a 41 min dive to a maximum depth of 23m with a 3 min safety stop at 5m. 15 min after surfacing she developed what she thought was indigestion. It quickly developed into numbness and tingling in the legs, severe abdominal pain and then loss of mobility in her legs. She was placed on oxygen and the Coastguard was alerted. Once ashore she was taken by ambulance to a helicopter and airlifted to a recompression facility. She received a series of treatments for DCI over a four day period and made an almost complete recovery.

September 2006 06/212

A diver was on a deep diving training course. He reached a maximum depth of 24m. At this depth he felt a tightness across his stomach and he began to cough. He panicked and ascended from 24m to the surface in about 30 sec. His dive duration was 23 min. He was placed on oxygen and seemed to recover. He then developed shoulder pain and shock. The

emergency services were alerted and medical advice sought. He was airlifted to a recompression facility for treatment.

September 2006 06/244

A diver using a rebreather with air diluent conducted a 62 min dive to 27m with no decompression stops. 2 hours 20 min later he dived to 16m for 39 min with no decompression stops. The following day, after a 19 hour 9 min surface interval he dived to 33m. The dive duration was 60 min including a 1 min stop at 20m, a 2 min stop at 14m and a 4 min stop at 6m. During the ascent from this dive he experienced problems with his delayed SMB reel and thus made a slower than normal ascent. At 12m his rebreather automatically changed its set point from 1.3 pO2 to 0.7 pO2 and he was not able to reset it. He completed all required stops. About 30 min after the dive he noticed that his shoulder was itching. His condition worsened and mottling of the skin was noticed. He was placed on oxygen. The Coastguard was alerted and the boat was met by an ambulance when it arrived back at the shore. He was taken to a recompression facility for treatment. He was discharged later that day.

September 2006 06/401

Portland Coastguard coordinated the evacuation of a diver from a diving vessel complaining of tingling and ache in the chest, R-WB airlifted the casualty transferring the casualty to a waiting ambulance, the HLS was prepared by Poole Coastguard. (Coastguard report).

September 2006 06/234

A diver conducted a 40 min dive to a maximum depth of 26m. She made a 3 min safety stop at 5m. Within 1 min of leaving the water she felt light-headed, disorientated, weak, fatigued and almost unable to stand. She was assisted to remove her kit. She had a tingling in both hands from tight drysuit wrist seats which was normal for her. She also had a numbness in her right hand which was not normal. She was placed on oxygen. The skipper was unable to contact the Coastguard by radio. The boat returned to the harbour. An ambulance was called by phone. No signs of DCI were found. She was kept on oxygen for 75 min. She drove home and attended her local hospital the following day where she was given more oxygen. The next day she saw her doctor, but no action was defined. The following day she sought advice from a recompression facility and received a session of treatment. She experienced no further symptoms other than extreme tiredness.

September 2006 06/403

Portland Coastguard coordinated the evacuation of a diver suffering from suspected DCI, R-WB airlifted the casualty which was met by an ambulance, doctor and Poole Coastguard. (Coastguard report).

September 2006 06/214

A diver suffering symptoms of DCI was airlifted to a recompression facility. (Media report).

September 2006 06/237

A diver suffering from DCI was taken by lifeboat to a recompression facility. (Media report).

September 2006 06/236

A diver suffering from DCI was taken by lifeboat to a recompression facility. (Media report).

September 2006 06/407

A trimix diver began experiencing visual disturbances and a tightness in the chest following a dive to 54m, the diver was ashore and was referred to a recompression chamber by the duty diving doctor at INM. The diver received seven hours treatment for a suspected DCI. (Coastguard report).

September 2006 06/254

A diver conducted a 31 min dive to a depth of 24m. 2 hours 45 min later he dived to 20m for 36 min. 90 min later, whilst helping to unload the boat, the diver felt dizzy. He felt better when laying down but dizzy once again when he sat up. He was placed on oxygen and the emergency services were alerted. He was taken by ambulance to hospital and advice was sought from a recompression facility. 2 hours later he had not improved and he was taken to the recompression facility where he received a series of treatments over a five day period.

Injury / Illness

October 2005 06/006

A trainee diver complained of feeling unwell after a 30 min dive to a depth of 6m. During the dive he had had buoyancy problems but no other issues. It was thought that the diver was tired, having had an early start and other training in the morning. He took a day's rest before continuing his training. (Linked to 06/007).

October 2005 06/007

A trainee diver completed a 23 min dive to a maximum depth of 22m. 2 hours 30 min later he dived again. 10 min into the dive he was descending a shotline at a depth of 7m when he appeared to lose consciousness. The instructor took hold of him and brought him to the surface. He was recovered into a boat and he started to respond. He was placed on oxygen. Medical advice was sought and the diver was taken by ambulance to hospital. No problems were found. The diver reported that he became unwell while he was trying to clear his ears. He was discharged the following day. (Linked to 06/006).

October 2005 06/043

Two divers dived to a maximum depth of 20m. One of the pair made a fast ascent from 20m to the surface, missing safety stops. His dive duration was 30 min. About 35 min later he started to feel dizzy and had blurred vision. He was placed on oxygen for 30 min and recovered. No further action was reported.

October 2005 06/009

A diver conducted a 32 min dive to a depth of 9m. 1 hour later he dived to 6m for 14 min. During the ascent from this dive he became dizzy and felt as if he was spinning. He felt a sharp pain in his chest. At the surface the dizziness stopped. He gave a distress signal and was towed to the shore. He was placed on oxygen. Medical advice was sought and a reversed ear was finally diagnosed.

December 2005 06/034

A trainee diver and an instructor entered the water and commenced a gradual descent. The trainee experienced problems clearing his ears and they ascended a little. He cleared his ears and they descended to a maximum depth of 6m. During the dive the trainee experienced some buoyancy problems and they ascended a couple of times during the dive. After the dive blood was seen coming from the trainee's nose and then from his left ear. He sought medical advice and a suspected perforated eardrum was diagnosed. He stated that he felt no real pain during the dive but he also stated that he had had intermittent, long term ear problems that he had not declared on his self assessment form.

December 2005 06/032

During a boat handling course an RHIB was involved in man-overboard drills. As the boat turned sharply it hit rough water and a trainee in the bows was thrown into the water and struck by the propeller. He received deep cuts to his left foot and up to his knee. He was taken by ambulance to hospital for treatment. It was found that he had also sustained broken bones in his right foot. It is thought that his neoprene drysuit helped to protect him from more severe injuries.

January 2006 06/039

At a diving club pool night an individual was engaged in swimming lengths of the pool. After about 30 lengths he was observed to stop swimming and just hung in the water. The swimmer behind him noticed and tapped him on the shoulder. There was no response and quickly realising that there was a problem she rolled him over and called for assistance. Others helped to remove him from the water. Resuscitation techniques were applied including a defibrillator. The casualty was taken to hospital and was reported to have been making a good recovery. This person had a history of heart problems.

January 2006 06/041

An instructor and two trainees entered the water to conduct controlled buoyant lift training. One trainee acted as the casualty for the first period of training. They rested, out of the water, for about 20 min and then began a second session. The other trainee acted as the casualty and lifted her buddy from 6m to the surface. At the surface she let go of her buddy and descended feet first to the bottom. The instructor followed her and found her slumped on the bottom, unconscious, with her regulator in her mouth and breathing. He lifted her to the surface with a controlled buoyant lift. At the surface she regained consciousness and the instructor and the other student towed her to the shore. No further actions were reported.

January 2006 06/040

A diver was loading diving cylinders into a metal storage cage. He put one cylinder in and as he was lifting the second one in the lid fell and hit him on the head. He sustained one major and several minor lacerations to his scalp. He went to the local A&E department for treatment.

February 2006 06/059

A group of five divers were diving on a wreck in a depth of 34m. One of the group noticed one of the others in difficulties near the shotline. She was inverted and apparently not breathing. This diver righted her, replaced her regulator and brought her to the surface, occasionally purging the regulator as he did so. At the surface he summoned assistance. They were recovered into the boat. The casualty's buddy had surfaced by this time. The emergency services were alerted and resuscitation techniques were applied. After about 5 min the casualty started to revive. She was placed on oxygen. The casualty, her buddy and the rescuer were airlifted to recompression facility where treatment was given. She made a full recovery. It was later found that she had become entangled in netting and fishing line which was on the wreck.

April 2006 06/216

Two divers conducted a dive to a maximum depth of 21m. During the dive one of the pair indicated that he was cold and wanted to ascend. They ascended a shotline, making a 3 min safety stop at 6m. They swam to the shore and left the water. Once out of the water the diver who had complained of feeling cold stumbled, collapsed onto the ground and started to fit. He then stopped breathing. His jaw was locked shut so his buddy administered rescue breaths via his nose. The casualty took a few breaths and then stopped breathing again. His jaw had now relaxed and rescue breathing via the mouth was applied. Another person assisted and gave CPR. The emergency services responded and a defibrillator was used. The casualty was airlifted to hospital where he began a recovery.

April 2006 06/094

A diver completed one dive and in the afternoon was engaged in training drills from the shore. He was asked to move a buoyed shotline. With his buddy he swam on the surface to the buoy. He swam on his back. He became breathless and took his regulator out. On two occasions water broke over his head causing him to 'cough and splutter'. At the buoy they descended to the seabed at 6m and completed an uneventful dive. The following day he developed a cough. The next day he had flu-like symptoms. The day after that he felt unwell, he was short of breath, he struggled to climb stairs, he was coughing up froth, had hot and cold flushes and was shivering. The next day he went to his doctor and was treated for pulmonary oedema. Ten days later he was fully recovered.

April 2006 06/328

Ambulance control reported to Milford Haven Coastguard they had an ambulance en route to Dale jetty, where a diver had been taken by a dive boat. The ambulance control were not sure as to where the incident had happened but reported the casualty, 40 years old, to have ingested water and was now not very well. Dale CRT was called and found diver, had not actually dived but was on the surface preparing to dive when he felt unwell and tried to vomit. He was taken from the water immediately by the boat skipper and taken to shore with oxygen being administered. Ambulance crews assessed the casualty ashore and took him to the A and E department at Withybush hospital Haverfordwest. (Coastguard report).

April 2006 06/331

Dive vessel reported to Forth Coastguard having a diver aboard suffering from headaches after a 15m dive. The vessel returned to shore where it was met by a waiting ambulance, and Eyemouth Coastguard, the casualty was taken to the lifeboat station suffering from hypothermia, the casualty was treated on scene and released. (Coastguard report).

April 2006 06/245

A diver completed a 24 min dive to 25m with a 3 min safety stop at 6m. At 1m she started coughing. Whilst waiting to re-board the boat she continued coughing and had some difficulty breathing. She was helped back into the boat and to dekit. She continued to cough and produced blood stained sputum. She began to show signs of shock and was placed on oxygen. The Coastguard was alerted and the diver was airlifted to hospital. She was diagnosed with a pulmonary oedema. She was discharged the following day and made a full recovery.

April 2006 06/333

Holyhead Coastguard received a call of divers in difficulty close to rocks. Trearddur Bay lifeboat and inshore lifeboat proceeded recovering the divers, one of them required medical attention, the lifeboat returned to shore where it was met by Rhoscolyn Coastguard and an ambulance. (Coastguard & RNLI reports).

April 2006 06/335

Stornoway Coastguard received a call from a dive boat reporting having a diver aboard who had suffered a head injury, the vessel was met by Kyle Coastguard and an ambulance for transportation to hospital. (Coastguard report).

April 2006 06/416

Lifeboat launched to assist injured diver. (RNLI report).

May 2006 06/417

Lifeboat launched to help diver with illness. (RNLI report).

May 2006 06/101

An instructor and a trainee descended to a depth of 4m. At this point the trainee indicated that she wanted to ascend and she inflated her BCD. The instructor took control and they made a slow ascent to the surface. At the surface the trainee was distressed and the instructor towed her ashore. Once out of the water the trainee began to vomit frothy blood. The trainee was taken to hospital. She was found to be suffering from acute pulmonary oedema. It was found that she had a pre-existing heart condition that she was unaware of, and this may have been exacerbated by the cold water. She made a full recovery.

May 2006 06/419

Lifeboat launched to help diver with illness. (RNLI report).

May 2006 06/187

Three instructors and their trainees were engaged in a snorkel dive session. One instructor and three trainees swam to a buoy which was marking an underwater object and prepared to conduct some surface dives. The dive marshal of the group swam over and joined them. The dive marshal conducted the first dive. She dived down to the underwater object at a depth of 5m. She turned to come up but the rope of the buoy line caught on her fin strap and she could not surface. She signalled to the divers on the surface. The instructor swam down and helped her to the surface; on the way up the diver who had been caught in the rope lost consciousness. About 0.5m from the surface the rope pulled tight and held the unconscious diver below the surface. The instructor surfaced and two of the trainees held the unconscious diver's arm while the instructor dived again to try to free the rope. The third trainee swam for help. They managed to cut the rope and brought the casualty to the surface. She had been unconscious for between 1 and 2 min. At the surface they gave her rescue breaths and towed her to the shore. Once ashore she was given further rescue breaths and she started to breathe by herself. The emergency services were alerted. The diver was wrapped in blankets and placed on oxygen. She was airlifted to hospital and spent two days in an intensive care unit.

June 2006 06/248

An instructor and a trainee conducted training drills from a boat while two other trainees waited in the boat for their dive. One of the trainees had complained of feeling seasick while the first pair kitted and, while they were diving, he became unresponsive. He was placed in the recovery position and the boat returned to the shore. Once ashore the emergency services were alerted and the casualty was given oxygen. He was taken by ambulance to a playing field and then airlifted to hospital. It was discovered that his collapse was due to low blood sugar, dehydration, seasickness and anxiety. He was discharged later the same day.

June 2006 06/217

Two divers conducted a dive to a maximum depth of 28m. The current was stronger than expected. They drifted for the first half of the dive and then turned around to make their way back. Finning against the current caused their breathing rate to rise. One of the pair wedged himself between two rocks and deployed a delayed SMB. The other diver finned hard to get to his buddy and to stay with him. He started to become breathless and felt that he could not fill his lungs sufficiently. He started to develop tunnel vision and his head began to 'fizz'. He got to his buddy, they started to ascend and his symptoms cleared once they started to drift with the current again. They left the water. The diver's breathlessness continued on land and during his next dive. He later sought medical advice and he was diagnosed as possibly mildly asthmatic and he was advised to take more exercise.

June 2006 06/120

A group of divers completed two sets of dives and were returning to shore in an RHIB. The RHIB was on the plane. One of the divers reached for his hat, the boat hit a wave, and he slipped and fell onto the cylinder rack and the cylinders. He complained of difficulty breathing. He was moved into a comfortable position and given oxygen. The Coastguard was alerted and the group was met by an ambulance when they reached the shore. The casualty was taken to hospital and treated for a broken rib.

June 2006 06/342

Brixham Coastguard was alerted to a diver suffering from seasickness with symptoms of vomiting and hyperventilating with loss of feeling and tingling arms. The diver was transferred to DDRC Plymouth for observation and treatment. (Coastguard & RNLI reports).

June 2006 06/348

Portland Coastguard received a call from a diving vessel reporting an injury to a diver as he was entering the water from the vessel. Coastguard helicopter airlifted the casualty to Dorchester hospital landing site, where it was met by Wyke Coastguard and Dorset ambulance. (Coastguard report).

June 2006 06/197

Two RHIBs were on passage to an island for a training exercise. One of the boats, with three people on board, was travelling at about 25 knots when it hit a trough in the water. The people were thrown into the air and one landed heavily. He complained of a pain in his lower back. Once at the island one of the boats was moored and the injured passenger was laid down in this boat. The other divers went off to complete their emergency training exercise. This exercise involved a helicopter with a doctor on board. On completion of the exercise the doctor examined the injured person and he was airlifted back to the mainland. The injured person attended a hospital and diagnosed with a muscle injury.

June 2006 06/160

Two divers entered the water to dive to a maximum depth of 10m. One of the pair had abandoned an earlier dive due to anxiety, the dive leader had done a deep dive earlier in the day. During the dive the anxious diver gave an unclear signal to the dive leader who did not understand. The dive continued then the anxious diver signalled that he wanted to ascend and then immediately moved to the surface. The dive leader conducted a normal ascent including a 3 min stop at 5m because of her earlier deep dive. She kept an eye on the other diver who she could see on the surface above her. Once on the surface she found that the anxious diver was in difficulty because of an asthma attack. Both divers were recovered into the boat. They attempted to provide the asthma sufferer with oxygen but the dive group's oxygen cylinder was found to be empty and the boat's oxygen mask did not have an exhaust valve so the diver was not able to use it. The diver was not carrying his asthma medication. An ambulance met the group when the boat arrived back on shore. The diver was taken to hospital. It was later found that the troubled diver had been trying to signal that a seal was biting his fins and that this occurrence had caused him to have an asthma attack underwater, leading to his rapid ascent.

July 2006 06/351

Brixham Coastguard were alerted by a diving vessel by a 'Pan Pan' alert of a diver aboard suffering from cold sweats, coughing and vomiting following a 77m dive. The casualty was airlifted by RN rescue helicopter R-193 to DDRC Plymouth. (Coastguard report).

July 2006 06/150

The Coastguard was alerted when a diver surfaced unconscious. The casualty was placed on oxygen. A helicopter and a lifeboat were tasked to assist. The casualty and his buddy were airlifted to hospital. The casualty was conscious on arrival at hospital and was reported to be making a full recovery. The lifeboat escorted the dive boat back to the shore. (Coastguard & RNLI reports).

July 2006 06/158

A pair of divers conducted a wreck dive to a maximum depth of 22m. Towards the end of the dive they were unable to find the shotline and one of the pair prepared to deploy a delayed SMB. While he did so his buddy moved into a prone position seemingly looking at the wreck. The diver then realised that the prone diver was unconscious. He had his regulator still held in his mouth. The buddy immediately inflated the unconscious diver's drysuit and they both rose rapidly to the surface. At the surface the unconscious diver was recovered into the boat. During the recovery the SMB line became tangled in the boat's propeller and this had to be removed. Once aboard the boat the casualty recovered consciousness and he and his buddy were placed on oxygen. The Coastguard was alerted and a lifeboat was tasked to take the divers to a recompression facility. Both divers were given recompression treatment and released a day later. The diver who had fallen unconscious remembers having problems with buoyancy in his drysuit boots towards the end of the dive and having to hold onto the wreck to try to manage the problem, but nothing after that until he was being lifted back into the boat.

July 2006 06/355

Portland Coastguard were alerted to a diver who had been assisted to the surface by his two companions following a dive to 34m on nitrox 30, the diver has complained of a feeling of confusion at depth, there were symptoms of tingling in his arms and a feeling of general illness, the diving doctor recommended an airlift to recompression chamber for observation and possible treatment. One buddy accompanied the casualty to the chamber, no further treatment given. (Coastguard report).

July 2006 06/190

Two divers conducted a 20 min dive to a maximum depth of 6m. Upon surfacing one of the pair was disorientated and was sick. She was placed on oxygen. She was sick again. She was given advice on how to seek further medical support and she went home.

July 2006 06/180

A diver dived to 8m for 21 min. 1 hour 59 min later he dived to 6m. During this dive he became unwell and the dive was aborted. His dive time was 18 min. At the surface the diver recovered quickly. It is thought that the cause was impure air in his cylinder.

July 2006 06/364

Portland Coastguard received a call from a diving vessel reporting a diver aboard feeling unwell following a normal ascent from a 30m dive, the casualty complained of suffering from headaches post dive, this one was particularly severe, Portland Coastguard connected the dive vessel with a diving doctor for medical advice, the advice was to return to shore and seek medical advice at a later date. (Coastguard report).

July 2006 06/369

Milford Haven Coastguard received a call from a diving vessel reporting having a diver aboard who had swallowed a large quantity of water whilst on descent, the diver immediately

ascended and was recovered into the diving vessel, the vessel returned to shore and was met by an ambulance paramedic and later discharged, Fishguard Coastguard also attended this incident. (Coastguard report).

July 2006 06/182

A diver was engaged in a deep diving course. She dived to 21m for 29 min with a 3 min stop at 5m. Then she dived to 28m for 22 min with a 3 min stop at 5m. The following day she dived to 34m for 22 min. Immediately after this third dive the diver was sick. No other symptoms were experienced and no further actions were reported.

August 2006 06/175

A diver completed a 30 min dive to a maximum depth of 22m. On surfacing he felt exhausted and had a headache. He was laid down and given oxygen. The Coastguard was alerted and the casualty was given water and some food, as he complained of feeling hungry. Once the boat reached the shore the casualty was taken by ambulance to hospital. After some food and rest he made a full recovery and was discharged from hospital later that day.

August 2006 06/224

A diver banged her head prior to a dive. She dived with her buddy to 48m for 44 min with a 13 min stop at 6m. During the ascent, at a depth of 15m, she developed a headache. The headache continued after the dive and she did not take part in a planned second dive. At the end of the day the headache persisted and she sought advice from a recompression facility. They advised her to go onto oxygen and attend the facility. She did as suggested but tests revealed no symptoms of DCI.

August 2006 06/373

Shetland Coastguard was requested to have an ambulance standing by for a diver who had surfaced with a severe headache. (Coastguard report).

August 2006 06/184

A diver was engaged in a training course. He conducted a 25 min dive to a maximum depth of 12m then, after a 1 hour 30 min interval, he dived to a maximum depth of 6m. He practiced ascending using an alternative air source. At the surface he lost consciousness and stopped breathing. He was recovered from the water and oxygen assisted resuscitation techniques were applied. After 4 min he recovered consciousness. An ambulance attended but the casualty refused to go to hospital. He saw his doctor later that day. The casualty reported that he was taking medication for high blood pressure but he had not declared any health problems in his medical form and had not told the dive school.

August 2006 06/439

Two lifeboats launched to help diver with illness. (RNLI report).

August 2006 06/206

A diver conducted a 27 min dive to 32m with a 2 min stop at 6m. 5 hours later she dived to 32m for 33 min with a 3 min stop at 6m and a 1 min stop at 3m. At the end of this dive she climbed the ladder onto the boat and then collapsed on to the deck. She was breathless, incoherent and unable to stand. Her diving equipment was removed. Her lips and fingertips showed signs of cyanosis. She was moved into the cabin and placed on oxygen. After 10 min the cyanosis diminished and she became coherent and responsive. She remained on oxygen for a further 20 min by which time she was fully recovered. She did not make any further dives and planned to seek further medical advice.

August 2006 06/226

Two divers entered the water and started their descent down a shotline. An RHIB from another party ran over the top of the divers and one of them was struck on the leg by the propeller. The divers surfaced and were recovered into the boat that had hit them. The boat's engine had been in neutral at the time of the impact and the diver only suffered bruising. After a rest they completed the dive.

August 2006 06/446

A number of divers were using a buoy line connected to a wreck to make their ascent. There was a slight swell and the buoy line was moving up and down. One of the divers who was holding on to this line suffered a dislocated shoulder. He was helped back to the boat and dekitted in the water. Whilst in the water the diver was able to relocate his shoulder. The condition was as a result of an old injury; it had become dislocated on a number of earlier occasions and he had learned how to resolve the condition himself. He suffered no subsequent ill effects.

August 2006 06/390

Milford Haven Coastguard was alerted to a diver who had a suspected broken ankle following a fall on the slipway, Dale Coastguard attended the scene, the casualty was airlifted by air ambulance to hospital. (Coastguard report).

September 2006 06/395

Portland Coastguard were alerted to a diver aboard a dive vessel unconscious on the surface with CPR being administered, Portland Coastguard scrambled R-WB to airlift the casualty to hospital, and then on to recompression chamber, both HLS sites were made ready by Poole and Wyke Coastguard teams. (Coastguard report).

September 2006 06/210

A diver was preparing to enter the water when he slipped on rocks and broke his leg. The emergency services were alerted and the diver was taken by lifeboat to a beach and from there he was airlifted to hospital for treatment. (Media report).

September 2006 06/399

Solent Coastguard received a call from a diving vessel reporting having a diver aboard experiencing problems, the casualty was connected via a medi-link call to a diving doctor, the advice was to steam into port and be met by an ambulance and Hillhead Coastguard. (Coastguard report).

September 2006 06/405

Portland Coastguard, connected the dive vessel with a diving doctor for medical advice concerning a diver suffering from seasickness, the advice was to monitor the diver, no signs of DCI developed, no further action taken. (Coastguard report).

Boating & Surface Incidents

October 2005 06/297

Clyde Coastguard were alerted by a 999 call to four divers being swept offshore following a shore dive, Tobermory & Oban lifeboat, RAF rescue helicopter R-177 and Lochalain Coastguard were tasked to search for the missing divers, three made shore unaided the remaining one was picked up by the lifeboat, no medical assistance was required. (Coastguard & RNLI reports).

October 2005 06/408

Lifeboat launched to assist dive boat with engine problems. Craft escorted in. (RNLI report).

October 2005 06/298

Humber Coastguard received a call from dive support vessel reporting having a missing diver, Tynemouth and Sunderland lifeboats were launched together with South Shields volunteer life brigade and RAF rescue helicopter R-131, the diver subsequently surfaced safe and well. The dive plan gave a loose surface time of 25 to 30 min, the diver was reported overdue after 40min, the diver surfacing 5 min later. 15 to 20 min outside plan! (Coastguard report).

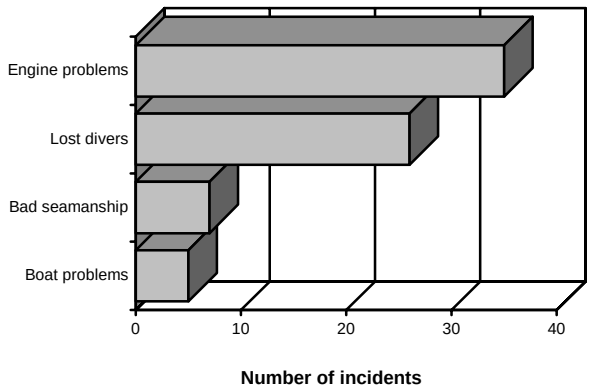
October 2005 06/299

Clyde Coastguard received a call reporting a diving vessel having broken down with two divers stranded on an island, Clyde Coastguard instigated broadcast action on behalf of the stricken vessel, tasking Tighnabruaich inshore lifeboat, Inverary & Kames Coastguard teams. All divers were recovered. (Coastguard report).

October 2005 06/409

Lifeboat assisted in the search for missing diver(s). Others coped. (RNLI report).

Analysis of boating & surface incidents



October 2005 06/301

Portland Coastguard received a call from a dive vessel with 12 divers aboard reporting having engine problems, Weymouth lifeboat was launched assisting the vessel back to shore. (Coastguard & RNLI reports).

October 2005 06/302

Dive RHIB contacted Brixham Coastguard reporting having engine failure with divers in the water, other dive vessels attended the scene recovering the divers and towing the stricken vessel back to shore, the vessel managed to restart its engine and return under own power to shore where they were met by Plymouth Coastguard. (Coastguard report).

October 2005 06/304

Clyde Coastguard tasked Arran Coastguard and RNLI lifeboat from Arran to assist a diver in difficulties, the diver made shore after 3 hours in the water and was taken to hospital. (Coastguard & RNLI reports).

October 2005 06/306

A member of the public reported a diver in possible difficulties, Torbay lifeboat launched, on arrival one diver was located, a minute later the other was located, the divers became separated 35 min into a 45min dive. No medical treatment required divers returned to shore. (Coastguard & RNLI reports).

October 2005 06/413

Lifeboat launched to assist dive boat with engine problems. Others coped. (RNLI report).

October 2005 06/307

Dive RHIB with 7 pob was towed into port by another vessel. (Coastguard report).

November 2005 06/310

Dive RHIB reported to Milford Haven Coastguard having broken down with 5 pob, Anglesey lifeboat was launched and towed the vessel safely to shore. (Coastguard report).

November 2005 06/451

A dive boat was returning from a dive site in rough sea conditions. Dusk was approaching and there was heavy rain. One diver stood at the back of the boat. Without warning he was thrown into the sea and the boat continued without him. He saw two buoys nearby and swam to them. He tied the buoys together, manually inflated his drysuit, then inflated an SMB that he had with him. He had an EPIRB but decided to wait a while before activating it. His absence from the boat was noticed and the boat back tracked using its GPS to search for him. It was now dark and the boat used a searchlight. Reflective strips on the diver's arms were spotted in the light beam and he was safely recovered. He later discovered that the EPIRB had been damaged during his fall into the sea.

December 2005 06/314

Stornoway Coastguard received a call from a vessel reporting seeing a red flare and smoke, broadcast action was undertaken, Mallaig lifeboat was launched recovering a dive vessel having suffered engine failure, the stricken vessel was towed to shore by the lifeboat. (Coastguard report).

December 2005 06/315

Stornoway Coastguard were alerted by dive support vessel of a missing diver, the diver had gone over the side to recover fishing gear, the diver surfaced safe and well prior to search

units arriving on scene. (Coastguard report).

January 2006 06/063

Two RHIBs were returning from a dive site in rough conditions. During the trip one of the outboard engine mountings broke. The cox stopped the boat and signalled for assistance from the other boat. They decided to tighten the remaining bolt and to continue. Shortly afterward in rough waves the engine swung up clear of the water, twisted and fell back. It was now facing in another direction and this caused the boat to turn very quickly. The cox fell from the boat and the kill switch, although attached to him, did not work. The boat ran over the cox at high speed and his right leg was hit by the propeller. His midriff area was then dragged into the propeller, with his drysuit tangled in it. The engine stalled. The other person in the boat tried to lift the engine but could not because the cox was attached to it, underwater. The cox struggled to get to the stern of the boat to breathe. His suit became untangled and he was able to escape and get back in the boat. His only injury was some bruising. His drysuit and undersuit were shredded in the stomach area.

February 2006 06/318

Stornoway Coastguard received a call on channel 16 reporting engine failure from a diving vessel with 5 pob, the vessel was towed to shore by Kyle inshore lifeboat, Kyle Coastguard attended to collect details. (Coastguard report).

March 2006 06/082

Two pairs of divers dived onto a wreck. They entered the water 15 min apart. The first pair finished their dive and ascended the shotline. They were recovered into the boat and the boat was allowed to drift while the cox and another diver prepared for their dive. During this time the second pair ascended the shot and found that the boat was not in sight. They hung onto the shot buoy in worsening sea conditions. One of the pair dumped his weightbelt to gain buoyancy. They attempted to hail passing yachts. Eventually their boat returned and they were safely recovered.

April 2006 06/414

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

April 2006 06/078

A dive vessel with 7 persons on board made a 'Mayday' call on VHF Channel 16, reporting an engine fire whilst diving the wreck of the M2 5 miles NW of Portland Bill. Although the fire was believed to have been extinguished, a nearby vessel GOOSE evacuated the divers and Weymouth RNLI all weather lifeboat launched and towed the TOP GUN safely into Weymouth harbour to be met by Wyke Coastguards and a fire appliance. (Coastguard report).

April 2006 06/450

A speedboat with divers on board capsized throwing the divers into the water. Two other dive boats assisted, recovering the divers from the water. One of the divers' drysuits was unzipped. A lifeboat attended and towed the capsized boat back to the shore. No subsequent ill effects were reported. (Media report).

April 2006 06/105

A diver entered the water from an RHIB to conduct a solo drift dive. 5 min later a pair of divers enter the water with a similar dive plan. They all planned to deploy a delayed SMB to make their ascent. The boat moved in the direction of the expected current, however, the current was actually flowing in the opposite direction. The pair and the single diver surfaced to find the boat missing. The boat was unable to locate the divers and the Coastguard was alerted. A lifeboat and a helicopter were tasked to search. The solo diver swam to a nearby island and climbed to the highest point. She was seen by the boat party and she and the pair were safely recovered into their boat. The Coastguard was informed and the search was called off.

April 2006 06/415

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

May 2006 06/339

Stornoway Coastguard received a call from a dive boat reporting a diver missing, rescue helicopter R-177 Mallaig and Tobermory lifeboats were tasked, recovering the divers who were unharmed. (Coastguard & RNLI reports).

May 2006 06/418

Two lifeboats launched to assist dive boat with fouled propeller. (RNLI report).

May 2006 06/269

Two divers conducted a 30 min dive to a maximum depth of 12m. When they surfaced their boat crew did not see them and they were carried away by a current. 50 min after they had dived those in the boat realised that they were overdue; a thunderflash was used and the boat searched for the divers. After a further 15 min the boat party contacted the Coastguard by mobile phone as the boat's radio did not appear to work. The Coastguard tasked two lifeboats and a helicopter to search, and alerted other shipping. The divers were spotted by and recovered into a fishing boat 2 hours after they first entered the water. They were transferred into a lifeboat and then taken by ambulance to hospital. One of the divers was wearing a semi-drysuit and was treated for hypothermia. The other diver was wearing a drysuit. Both were released from hospital later that day.

May 2006 06/341

Portland Coastguard received a 999 call from a diving vessel reporting having broken down with divers still in the water, Weymouth lifeboat was launched and rescue helicopter R-WB, the diver was recovered by another vessel, the parent vessel was escorted to harbour by the lifeboat. (Coastguard & RNLI reports).

May 2006 06/112

The Coastguard was alerted that two divers were overdue from a dive. The divers had been missing for over 70 min before the alarm was raised. A search was initiated involving a helicopter, a police launch, two lifeboats and other craft. A yacht reported hearing the divers shouting. The divers were safely recovered from the water 5 miles from their expected exit point.

May 2006 06/270

Two divers conducted a 32 min wreck dive to a maximum depth of 25m. When they returned to the anchor they discovered that the anchor line had parted from the anchor. They deployed a delayed SMB and made their ascent. In the boat the cox had realised partway through the dive that the boat was drifting. He recovered the anchor line and made his way back to the wreck. The wind had taken the boat in one direction and the current had carried the divers in the opposite direction. 7 min after the divers were due to have surfaced the cox made a 'Mayday' call. When the divers surfaced they deployed flags and after a further 30 min one of the pair set off his EPIRB. A search was conducted involving a naval vessel, a lifeboat, a helicopter and

a fishing vessel. The divers were safely recovered.

May 2006 06/420
Three lifeboats assisted in the search for missing diver(s). (RNLI report).

May 2006 06/196
A dive boat was stationed close to a wreck with two pairs of divers in the water. The first pair surfaced and the boat approached to recover the divers. As the boat neared the divers the engine cut out and could not be restarted. The divers swam to the boat and the anchor was dropped to prevent the boat from drifting away. The engine was examined but no obvious fault was found. The Coastguard was alerted and passed on a message to the boat's shore party who were able to launch another boat to assist. The second boat arrived and towed the disabled boat back to the harbour. Another dive boat assisted by carrying some of the divers back.

June 2006 06/422
Lifeboat assisted in the search for missing diver(s). (RNLI report).

June 2006 06/423
Two lifeboats launched to assist dive boat with engine problems. (RNLI report).

June 2006 06/425
Two lifeboats launched to search for missing diver(s). Others coped. (RNLI report).

June 2006 06/426
Three lifeboats launched to search for missing divers. Two people landed. (RNLI report).

June 2006 06/427
Lifeboat launched to assist dive boat with steering problems. (RNLI report).

June 2006 06/428
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

June 2006 06/429
Lifeboat launched to search for missing divers. Others coped. (RNLI report).

June 2006 06/154
Two divers had surfaced from a dive and were being recovered into an RHIB. The first diver got into the boat and the second diver held on waiting for him to move out of the way. The cox then put the boat into gear and started to drive off. The diver in the water was dragged to the rear of the boat and felt a sharp pain in his legs as the propeller passed by. Others in the boat shouted a warning and the cox stopped the boat. The diver was recovered into the boat. It transpired that the pain that he felt was cramp and that he had not been injured.

June 2006 06/445
An RHIB was returning from a wreck dive in calm conditions. The engine started to make an unusual sound and was stopped. The engine and fuel system were checked and nothing untoward was found. The engine was restarted and again it made the unusual sound. The party was only 1.5 miles from their destination so they decided to continue at low speed. The noise got worse and the engine started shaking. It was stopped again and inspection revealed that con-rods had come through both sides of the engine block. The boat was anchored. Two other dive boats came by and were hailed. One of these boats towed the disabled boat back to the harbour.

June 2006 06/430
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

June 2006 06/161
Two divers completed a dive to a maximum depth of 36m. One of the pair deployed a delayed SMB to make the ascent. There was a current and the divers drifted with it. When the divers were at a depth of about 26m their boat ran over the SMB and it became entangled in the propeller. The diver felt the reel being pulled and, thinking that it may have become tangled in a buoy, abandoned it. The other diver then deployed his SMB and they made a normal ascent including planned stops. They were safely recovered into the boat. The first buoy and reel had been damaged by contact with the propeller and another diver had to enter the water to free it.

July 2006 06/432
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

July 2006 06/433
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

July 2006 06/434
Lifeboat launched to assist dive boat with engine problems and missing diver(s). (RNLI report).

July 2006 06/219
Two divers prepared to enter the water. Their RHIB dropped them close to a shot buoy. One diver had to swim around the back of the boat to get to the buoy. The current carried him away from the buoy. The current and a heavy swell prevented him from getting to the buoy. He stopped trying and looked to signal to the boat but it was not in sight. His buddy had reached the buoy and dived without him. The diver was not found for over 15 min, when those in the boat spotted him, by chance, as they made their way back to the buoy having recovered other divers. He was safely recovered into the boat.

July 2006 06/362
Milford Haven Coastguard were alerted by a member of the public of a diver waving for assistance from an orange dinghy, St Govern's Coastguard rescue helicopter R-169 and Tenby lifeboat were tasked to investigate the report. R-169 located the diver and guided the lifeboat to recover him, the diver was missing and was recovered to the shore, no medical treatment was required. (Coastguard report).

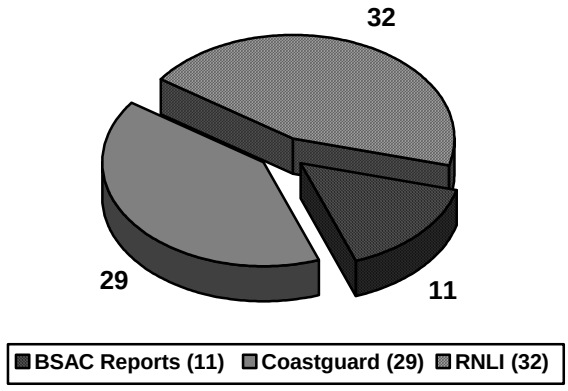
July 2006 06/173
A group on a dive boat heard a 'Mayday' call from a nearby fishing vessel that was taking on water. The dive boat moved towards the distressed vessel and stood by to assist. A helicopter then arrived and delivered a pump to the vessel. A

lifeboat also arrived and escorted the fishing vessel safely back to shore. (Media report).

July 2006 06/172

The Coastguard was alerted when a diver was lost by his boat. A lifeboat and a helicopter were tasked to search. The diver was found at the surface by the helicopter and recovered by the lifeboat. He was too close to the cliffs for a helicopter lift. (Media report).

Boating & surface incident report source analysis



July 2006 06/437

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

July 2006 06/438

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

July 2006 06/366

Portland Coastguard received a 999 call from a vessel reporting two divers overdue, both wearing black wetsuits. Portland Coastguard tasked R-WB, Weymouth lifeboat and inshore lifeboat with Portland Coastguard team to search the coastline, the divers were located by the rescue helicopter and transferred to a sailing yacht for return to parent vessel. (Coastguard & RNLI reports).

August 2006 06/375

Dive vessel reported having broken down with two divers in the water. Coastguard rescue helicopter R-WB was scrambled to assist, they located the missing divers and stood by until they were safely aboard the parent vessel, the vessel then managed to restart one of her engines and make her own way back to port. (Coastguard report).

August 2006 06/203

Two divers entered the water to conduct a drift dive over a wreck site. The skipper of the boat asked them to enter the water negatively buoyant so that they could descend quickly and not miss the site. The last pair entered the water and spent a few seconds at the surface dumping the last of the air from their drysuits. The boat, which was a twin hull design, was close to the divers when it was put in gear and the divers were carried towards the propellers. One of the divers' fins was caught in one of the propellers and it was cut and torn from his foot. The other diver also had a fin cut and damaged but it stayed on his foot. Others on the boat shouted a warning and the propellers were stopped. The divers were recovered into the boat; neither was found to be injured.

August 2006 06/377

Diving vessel with 9 persons aboard suffered engine failure, Weymouth lifeboat were tasked by Portland Coastguard, the lifeboat towed the stricken vessel to shore. It was later discovered the fault to be gearbox failure. (Coastguard & RNLI reports).

August 2006 06/192

Three divers were conducting a shore dive. One of the three indicated to his buddies that he was going to surface but that they should continue their dive. When he surfaced the weather conditions had deteriorated and the tide swept him out to sea. When the pair of divers surfaced they realised that the third diver was missing. The Coastguard was alerted and a search was initiated involving three lifeboats and a helicopter. By the time the search started night had fallen and the weather conditions were poor, with strong winds and rain. The missing diver eventually swam ashore 4 hours later about 3 miles away from his entry point. He sought help at a local house and contacted the emergency services. He was recovered by an ambulance.

August 2006 06/384

Portland Coastguard were alerted to a broken down dive vessel by a mobile telephone call from a shore contact. The RHIB had broken down with divers in the water. Weymouth lifeboats were launched and some of the dive party got back to their parent vessel. The RHIB restarted its engines and recovered its divers, being escorted back to shore by the lifeboat. (Coastguard report).

August 2006 06/440

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

August 2006 06/389

Milford Haven Coastguard were assisted by a member of the public to direct a dive vessel to two drifting divers, the divers were recovered and returned to shore, no medical attention was required. (Coastguard report).

September 2006 06/441

Lifeboat assisted in the search for missing diver(s). Others coped. (RNLI report).

September 2006 06/396

Falmouth Coastguard received a call from a diving vessel to report he had broken down, on closer examination it was found that someone had removed the vessel's alternator causing the engine to overheat, Falmouth tasked Falmouth lifeboat to tow the stricken vessel to port. The vessel was met by Falmouth Coastguard rescue team and the Police to collect details, the skipper expressed his concern had he had divers in the water this could have proved very dangerous. (Coastguard report).

September 2006 06/397

Two divers had been waving for assistance following a shore dive, they could not reach the shore, Solent Coastguard were alerted by a member of the public, tasking Newhaven lifeboat

and Coastguard team to assist, two local vessels recovered the divers and returned them to shore. (Coastguard report).

September 2006 06/398

Solent Coastguard were alerted to a diving vessel broken down and taking water with divers in the water. Bembridge lifeboat and rescue helicopter R-IJ were tasked to attend the vessel. The lifeboat recovered the divers and towed the vessel into port. (Coastguard report).

September 2006 06/400

Portland Coastguard received a call from a broken down dive vessel with divers still in the water, the vessel was assisted by another dive boat recovering the divers. The parent vessel restarted their engines for the journey home. (Coastguard report).

September 2006 06/404

Solent Coastguard received a call from a diving vessel broken down with divers still in the water, Littlehampton lifeboat was launched and with another private vessel recovered the divers, the lifeboat assisting the vessel to shore. (Coastguard report).

September 2006 06/235

An observer on a boat handling course was manoeuvring an RHIB in a harbour. He was reversing the boat from one pontoon to another. The boat swung towards a moored boat and the cox over-reacted, accelerated and hit the back of the moored boat. The collision punctured the front section of the RHIB and damaged a propeller on an emergency outboard engine mounted on the back of the moored boat. No injuries were sustained.

Ascents

October 2005 06/255

A diver made a rapid ascent from 7m and was placed on oxygen. No subsequent ill effects were reported.

October 2005 06/045

Two divers conducted a dive to a maximum depth of 36m. During the ascent, at a depth of 8m, one of the pair lost control of his buoyancy and made a rapid ascent to the surface missing all his decompression stops. He had been using nitrox 26 and had switched to nitrox 50 for his stops. He was placed on oxygen for 25 min and monitored. No adverse effects were reported.

October 2005 06/044

Two divers commenced a dive to a maximum depth of 20m. At this depth one of the pair was unable to breathe easily and made a rapid ascent to the surface. His buddy tried to slow the ascent. His dive duration was 4 min. Once out of the water he was placed on oxygen. He reported a slight ache in his forearms. Medical advice was sought and he was monitored. No subsequent ill effects were reported.

October 2005 06/013

Two divers conducted a wreck dive to a maximum depth of 35m. When their computers indicated the approach of the end of no-stop time they moved to the top of the wreck. They then deployed a delayed SMB and started their ascent. They conducted a 3 min stop at 6m until their computers cleared. At this point one of the pair experienced a problem with a tangled SMB line and, whilst trying to sort this out, made a faster than normal ascent to the surface. Once in the boat it was found that their computers showed missed decompression. They were monitored for signs of DCI but none were observed.

October 2005 06/010

An instructor and a trainee commenced a dive to practice the use of alternative air sources. At the start of the dive the student had 180 bar in a 12l cylinder and the instructor had 150 bar in a 15l cylinder. They descended to a platform at a depth of 6m and conducted buoyancy and air checks. The instructor gave a demonstration. The trainee then gave air to the instructor and led an ascent to the surface. They re-descended for further practice. The instructor demonstrated again. The trainee then gave the 'out of air' signal and spat out his mouthpiece. He took the instructor's octopus regulator and they started their ascent. At 3m the trainee spat out the regulator and 'shut down in panic'. They made a rapid ascent to the surface. At the surface the instructor swam with the casualty to a buoy for support. Another instructor went to assist and they were recovered into a boat. The trainee was placed on oxygen and quickly recovered. No subsequent ill effects were experienced. Post dive checks revealed that the trainee's cylinder was empty.

October 2005 06/305

Clyde Coastguard were made aware of two divers on board a diving vessel having made a rapid ascent following a dive to 34m, the dive vessel was requested to make for port where it was met by an ambulance and taken to Cumbrae chamber for treatment, the vessel was met by Cumbrae Coastguard. (Coastguard & RNLI reports).

October 2005 06/014

An instructor and a trainee conducted a shore dive to a maximum depth of 15m. The outward leg was uneventful. They then turned and swam on a reciprocal bearing. At one point they stopped to allow other divers to pass in front of them. The other divers' fins cause a lowering of the visibility and the instructor took hold of the trainee to lead him through. Once the visibility was clear again an air check was conducted. The trainee had 70 bar remaining. At this point the trainee panicked and rushed towards the surface. The instructor caught up with him and dumped air from his BCD, even so the ascent was rapid from 6m to the surface. At the surface the trainee got cramp and panicked again. The instructor towed the trainee to the shore and he was placed on oxygen. 15 min later the trainee reported that he was coughing up blood. Medical advice was sought and the trainee was taken to hospital. No problems were found.

November 2005 06/025

Two divers conducted a dive to a maximum depth of 28m. One of the pair prepared a delayed SMB to make their ascent. He had to untangle the line from the winding knob of the reel. He used the purge on his auto-air to inflate the buoy. After releasing the buoy he lost control of his buoyancy and started to ascend. He threw the reel away from his body but was unable to prevent himself from being carried to the surface. At the surface he signalled for the boat to collect him. He was placed on oxygen and the Coastguard was alerted. He was taken to hospital where tests were made and further oxygen was administered. He showed no signs of DCI and he was released later that day. He thinks that the SMB line may have been caught on him in some way.

November 2005 06/016

A pair of divers descended a shotline. One of the pair was carrying a fixed SMB and the line of the SMB became tangled in the shotline. The diver abandoned the SMB. In low underwater visibility he could not make his buddy understand that he no longer had the SMB. They dived to a maximum depth of 24m. As they surfaced the buddy realised that they no longer had the SMB and deployed a delayed SMB. She left the SMB clipped to her during deployment. The reel jammed and the diver was dragged to the surface from 10m. Her buddy made a normal ascent. The computer of the diver who had made the rapid ascent had shown no requirement for stops at 10m but it showed an emergency state at the surface. She was placed on oxygen and medical advice was sought. Medical examination revealed no adverse effects and no further action was needed.

November 2005 06/017

A pair of divers entered the water to conduct the use of alternative air source and mask clearing drills. They first dived to a maximum depth of 15m then they found a flat area at 6m and commenced training using alternative air sources. One diver passed his octopus regulator to his buddy, but when it was passed back he failed to secure it in its intended position. This diver then took his buddy's regulator and breathed from this for a while. When he reverted to his own regulator he cleared it by purging it and this caused a free flow. He reached for his own octopus regulator but could not find it because it was not in its normal position. He breathed from his free flowing regulator and ascended rapidly to the surface. His buddy remained at 6m. The diver could not return to his buddy because he now had insufficient air. He signalled distress and the boat approached. The buddy heard the boat and surfaced. Both were safely recovered from the water. Their total dive duration

was 16 min.

November 2005 06/027

A diver conducted a series of three dives. The first to 15m for 25 min. The second after a surface interval of 2 hours 20 min to 15m for 37 min and the third after a surface interval of 2 hours to 8m. During this third dive her feet came out of the boots of her drysuit. She put some air into her suit but it went into her empty boots and she started a feet-first buoyant ascent. Her buddy tried to slow her down and helped her to the surface. The buddy then went back down to look after some trainees. The other divers then surfaced and helped the buoyant diver ashore. Later that evening she found a rash on her wrist, hand and leg. She had aching joints and felt dizzy and ill. She sought medical advice and went to her local hospital A&E. She was advised that DCI was unlikely and spent the night on oxygen. The following morning her symptoms had resolved.

November 2005 06/028

Two divers started a dive. During the descent, at a depth of 2m, a fin of one of the divers came loose and they surfaced to refit it. They re-descended and, at 6m, the diver who had had the loose fin lost control of his buoyancy and rose to the surface. They went down again. After 13 min they were at 14m, then they started to drift up, with the diver who had had the earlier problems 2m above the other. The lower diver swam up to his buddy and attempted to dump air; they didn't succeed and both divers made a rapid ascent to the surface. At the surface the troubled diver had a nose bleed; his buddy towed him to the shore and summoned assistance. Once ashore he felt faint and nauseous. He was placed on oxygen. After 10 min he had recovered.

November 2005 06/309

Falmouth Coastguard was contacted by a diving vessel reporting having a diver aboard having made a rapid ascent from 15m due to losing his dive gear, the diver was placed on oxygen as a precaution and monitored, no further action taken. (Coastguard report).

November 2005 06/257

A diver made a rapid ascent from 12m having experienced multiple free flows. At the surface the diver was shocked and breathless. The diver was placed on oxygen. No subsequent ill effects were reported.

November 2005 06/312

Falmouth Coastguard received a call from a diver who had missed decompression stops some 2 hours 30 min earlier, the diver was medi-linked to a diving specialist doctor at QAH, the diver had made a 39m dive for 40min missing 25 min of stops, the diver explained he had surfaced for another cylinder then went to 3m to decompress, losing his weightbelt, he then ascended. The diver was suffering from a bleeding ear so called the Coastguard as a precaution, the diver was recommended to attend an A&E for 6 hours oxygen delivery, the diver was taken by private car to hospital 10 miles away. (Coastguard report).

December 2005 06/031

Three divers dived down a shotline to a depth of 14m and then followed a drop-off down to 35m. After about 5 min they found themselves in a downwards current. They ascended gradually to the top of the drop-off in a depth of 22m. They pulled themselves along the bottom, against a current, to a depth of 19m. Their dive duration was 17 min and they decided to ascend. One of the three deployed a delayed SMB. The diver with the SMB signalled for the others to let go of the bottom and ascend with him on the line. He let go and took the hand of one of the divers and placed it around the line. This diver then let go of his line and took hold of the pillar valve of the diver with the SMB. The diver had become buoyant, the diver with the SMB was unable to get to him to help and he dumped air to try to slow the ascent. They were carried to the surface missing decompression stops. Their dive duration was 19 min. The third diver surfaced 2 min later. Once back in the boat the buoyant diver was placed on oxygen and the Coastguard was alerted. The diver was taken to hospital but no subsequent ill effects were reported.

December 2005 06/035

Three divers conducted a dive to a maximum depth of 36m. With 6 min of decompression stops indicated on his computer one of the three deployed a delayed SMB and began an ascent. At this point one of his weights fell out of its pouch and despite finning downwards to slow his ascent he was carried rapidly to the surface. He gave the emergency signal and was recovered into the boat. He was placed on oxygen and given fluids. Over 12 min later the other two divers surfaced and the boat returned to shore. Once ashore medical advice was sought. The diver was kept on oxygen and monitored for problems. None were found and no further action was reported.

December 2005 06/037

Two divers entered the water to dive to 40m in a quarry. One of the pair was wearing new thermal trousers under his neoprene drysuit. On entering the water this diver was unable to descend due to excessive buoyancy. He added 2 kg to his weightbelt. He was still too buoyant and 'in frustration' added a further 4 kg. He was now overweight and sank quickly. He finned down a slope to 30m. He put a lot of air into his BCD to maintain neutral buoyancy. He went over an underwater cliff edge and started to descend in visibility of about 1m. His poor buoyancy control caused him to hit the side of the cliff and this released a cloud of silt that reduced the visibility to nothing. He lost his buddy and had difficulty reading his computer, which he put down to narcosis. His buddy took his hand and made an 'ascend' signal. They started to fin up, but with no visual reference and lots of air in his BCD he started a rapid ascent. He dumped all the air from his BCD and stopped at 9m. He then started to sink rapidly again. His BCD would not inflate. He then realised that he was still pressing the dump control. He put air into his BCD and stopped his descent at about 23m. He then decided that he needed to be at the surface and made a buoyant ascent. At the surface he spat out his regulator and vomited. His total dive duration was 16 min. He slowly finned ashore. His buddy made a normal ascent. The buoyant diver was placed on oxygen for 10 min. He developed no symptoms of DCI. He was left with the feeling that his ears were blocked. Four weeks later he still had deafness in his right ear which his doctor suggested was due to a blocked eustachian tube.

January 2006 06/038

A diver conducted a dive to a depth of 18m for 38 min with a 3 min stop at 3m. 30 min later he dived again with a different buddy. They dived to a depth of 34m on a wreck. During the dive the diver became anxious that his decompression requirement was mounting and he deployed a delayed SMB. His buddy swam towards the bow where the shotline was situated but the diver thought the shot was at the stern. At this point his dive duration was 25 min and he had 30 min of stops showing on his computer. He had 80 bar in his cylinder. He began his ascent but lost control of his buoyancy and was carried to the surface, missing all stops. He was recovered into the boat and placed on oxygen. The party included a diving doctor and a recompression technician who monitored his condition. No symptoms of DCI were noted and no further action was taken.

January 2006 06/316

Clyde Coastguard coordinated the recovery of two divers from a diving vessel, the divers had made a rapid ascent from 34m, both divers were transferred to Largs lifeboat for passage to shore and onward transportation by ambulance to recompression chamber. (Coastguard & RNLI reports).

January 2006 06/047

Two divers dived to a maximum depth of 36m. During the ascent one of the pair lost control of his buoyancy and made a rapid, feet first, ascent to the surface. His dive duration was 17 min. He was placed on oxygen. No subsequent ill effects were reported.

February 2006 06/321

Dive boat reported two divers had carried out a rapid ascent in the Sound of Mull, medical advice was obtained, the doctor recommending the divers be taken back to Dunstaffnage, the divers were met by ambulance and Oban Coastguard for transportation to hospital. (Coastguard report).

February 2006 06/319

The vessel ALIKAIE reported bringing in a diver who had experienced a rapid ascent from 30m. No diving sickness symptoms observed. An ambulance was requested to meet the ALIKAIE at St Abbs harbour, where the casualty was embarked and transported to hospital for assessment. EYEMOUTH Coastguard in attendance. SAR operations terminated at 1131 UTC. (Coastguard report).

February 2006 06/055

Two divers were at their maximum depth of 21m when one of their regulators began to free flow. The diver made a faster than normal ascent, and vomited on the way up. Once out of the water he was placed on oxygen. No subsequent ill effects were experienced.

February 2006 06/258

A diver experienced a regulator free flow and made a rapid ascent from 20m. The dive duration was 10 min. The diver was placed on oxygen for 20 min and experienced no subsequent ill effects.

February 2006 06/057

Two divers were at a maximum depth of 20m when one of them lost control of his buoyancy and made a rapid ascent to the surface. He then sank down again. He then surfaced with his buddy using the buddy's alternative air source. Both were placed on oxygen but no further actions were required.

February 2006 06/325

Diver medical. A link call was established between a dive boat and the dive doctor at Aberdeen to receive advice on a diver on board who had made a rapid ascent from a dive. The doctor confirmed that recompression was required and the diver was delivered to the Millport hyperbaric facility by the dive boat. (Coastguard report).

March 2006 06/259

A diver got into difficulties, panicked and made a rapid ascent from 18m. The dive duration was 8 min. The diver ingested water during the ascent. The diver was placed on oxygen for 30 min. No subsequent ill effects were reported.

March 2006 06/072

Three divers conducted a dive to a maximum depth of 30m. One of the divers was using a drysuit for the third time and she had changed the thermal undersuit. This diver experienced buoyancy control problems at 30m. She became separated from the other divers and made a rapid, uncontrolled, ascent to the surface. Her dive duration was 10 min. She was placed on oxygen. No subsequent ill effects were experienced.

March 2006 06/073

Two divers dived to 32m. At this point the regulator of one of the divers began to free flow. He used his buddy's pony regulator and they made an ascent. They lost buoyancy control at about 20m and made a faster than normal ascent to the surface. Both were placed on oxygen. No subsequent ill effects were experienced.

March 2006 06/074

A diver made a 28 min dive to 20m with a 1 min stop at 3m. 1 hour 52 min later he dived again. He entered the water with two others. They did a buoyancy check at 3m and then descended to 5m. The diver then had buoyancy problems and descended to 10m, the others followed. He then descended to 19m and again the others followed. They then started to ascend. During the ascent one of the other two drifted away from the group and the third diver went to bring him back. During this time the diver who had had the buoyancy problems made a rapid ascent to the surface. The other divers surfaced safely and they all met up on the surface. The diver who had made the rapid ascent was placed on oxygen and medical advice was sought. After 30 min the oxygen therapy was stopped and no further action was required.

March 2006 06/260

A diver made a rapid ascent after experiencing a regulator free flow at a depth of 18m. The diver was placed on oxygen for 20 min and no subsequent ill effects were reported.

March 2006 06/075

A diver dived to 21m on a training course. 2 hours 34 min later he dived again with two others. During this dive he lost control of his buoyancy and started to rise. The instructor managed to slow the ascent but then they started to sink. They sank to 20m then made a faster than normal ascent to the surface. All divers were placed on oxygen. No subsequent ill effects were experienced.

April 2006 06/077

Three divers conducted three dives in a day. Their second dive was to 22m for 22 min. On the third dive one of the three's regulators began to free flow. He used one of his buddies' octopus regulator and they made a rapid ascent to the surface. The third diver made a normal ascent. The diver with the free flow was distressed at the surface. He and his buddy were placed on oxygen for 30 min. No further action was reported.

April 2006 06/084

Three divers conducted a dive to a maximum depth of 22m. At 20m one of the divers' regulators began to free flow. He switched to his pony regulator and one of his buddies turned his main cylinder off. The buddy did not turn the cylinder back on again as the diver expected. The buddy signalled that he should ascend and deployed a delayed SMB which he gave to the diver with the free flow. The diver with the free flow ascended and the other two continued their dive. The lone diver made a fast ascent to the surface missing a safety stop. At the surface the water was choppy and he tried to orally inflate his BCD. While doing so he inhaled water. He shouted for help and he was recovered from the water. He was placed

on oxygen for 30 min. No subsequent ill effects were experienced.

April 2006 06/327

Shetland Coastguard received a call from dive boat reporting having a diver aboard having made a rapid ascent, the diver was transferred to hospital for observation. (Coastguard report).

April 2006 06/263

A diver made a rapid ascent after experiencing a regulator free flow at a depth of 18m. The diver was placed on oxygen. No subsequent ill effects were reported.

April 2006 06/329

Dive vessel called Shetland Coastguard reporting having a diver aboard having made a rapid ascent from 25m, the vessel was met by an ambulance and the diver transferred to Hospital. (Coastguard report).

April 2006 06/267

Two divers entered the water and commenced a dive on a wreck to a maximum depth of 37m. Once on the wreck the octopus regulator of one of the divers began to free flow. Neither he nor his buddy could stop it. The mass of bubbles in the water made it very difficult for him to see. He reached for his pony regulator and started to breathe from it. He made a rapid ascent to the surface, missing planned safety stops. His buddy followed at a more normal rate. At the surface the diver with the free flow was out of air. He swam to the boat. Both divers were safely recovered. The diver who had made the rapid ascent was placed on oxygen and taken to a recompression facility.

April 2006 06/096

Two divers conducted their second dive of the day. They reached a maximum depth of 18m and deployed a delayed SMB to make their ascent after 20 min. The diver who deployed the SMB then used his drysuit direct feed to adjust his buoyancy. The valve jammed and this caused him to make a rapid ascent from 15m to the surface. His buddy went with him, trying to slow the ascent. They were recovered into the boat and the buoyant diver was placed on oxygen. The other divers were recalled and the boat returned to shore. The divers were monitored, but no symptoms were experienced and no further action was taken.

April 2006 06/334

Portland Coastguard received a distress call from a diving vessel, reporting having a diver aboard who had missed decompression stops following a rapid ascent from 15m. Coastguard rescue helicopter R-WB airlifted the casualty to a recompression chamber where the aircraft was met by Poole Coastguard and a waiting ambulance. (Coastguard report).

April 2006 06/134

A pair of divers conducted a dive to a maximum depth of 35m. At a depth of 17m, one of the pair lost control of her buoyancy and made a fast ascent to the surface. During the ascent one of her feet came out of her drysuit boot. She was recovered from the water and placed on oxygen. Her dive duration was 24 min. No subsequent ill effects were reported.

May 2006 06/340

Falmouth Coastguard were alerted by a dive boat of a diver making a rapid ascent from 40m, the diver was administered oxygen, Newquay lifeboat attended the vessel, the diver developed no symptoms, no further treatment was required. (Coastguard & RNLI report).

May 2006 06/125

Two divers descended a shotline to a depth of 35m. At the bottom visibility was very low. After 12 min one of the pair indicated that he wanted to ascend. This diver then began to deploy a delayed SMB, however he had a problem with a clip and was not able to do so. The other diver then deployed his delayed SMB. He inflated the buoy with exhaust air from his regulator. The reel appeared to run freely. The diver then realised that he was ascending rapidly. He was unable to release the reel and was carried directly to the surface. He was recovered into the boat and placed on oxygen. His buddy made a normal ascent. The diver subsequently sought medical advice and was given precautionary recompression treatment. The dark conditions prevented the diver from realising that he was being dragged upwards early enough. The reel had been clipped to his BCD and the line had become jammed between two moulded components of the reel.

May 2006 06/135

A pair of divers conducted a dive to a maximum depth of 35m. After a while they ascended to a shelf at 22m. They then became disorientated, lost buoyancy control and made a fast ascent to the surface. Their dive duration was 20 min. They were placed on oxygen. No subsequent ill effects were reported.

May 2006 06/118

Two divers conducted a dive to a maximum depth of 23m. During their ascent, at a depth of 20m, one of the pair breathed water through her regulator. She started a fast ascent. Her buddy managed to slow the ascent at 6m. The ascent to the surface from 6m was rapid. They gave the emergency signal at the surface and she was towed ashore. She was given oxygen and examined for symptoms of DCI. The troubled diver complained of feeling sick. Medical advice was sought. The troubled diver developed stomach cramps and was put back on oxygen and taken by ambulance to hospital. 40 min after surfacing the buddy developed a tightness in his thighs and calves and he was placed on oxygen. A few minutes later his symptoms resolved. He too was taken by ambulance to hospital.

May 2006 06/119

Two divers conducted a wreck dive to a maximum depth of 28m. They were unable to find the shotline to ascend so they settled on the bottom and deployed a delayed SMB. One of the divers became agitated that they were incurring decompression stop requirements. The agitated diver reeled in the line and they ascended. The other diver's computer indicated that they needed to complete a 1 min stop at 10m plus a 10 min stop at 3m. During the 10m stop the agitated diver did not engage the ratchet on the reel and they started to descend. The agitated diver then signalled that he was out of air. The other diver gave him his pony regulator. The agitated diver took two breaths but the regulator was not properly in his mouth and he spat it out and made rapidly for the surface from a depth of 16m. The other diver surfaced alone making a 10 min stop at 3m. The agitated diver was recovered into the boat and the boat then started a search for the second diver, not realising that he was conducting stops. The Coastguard was alerted and a lifeboat was launched to assist. When the second diver surfaced he was some way from the boat and it was a while before he was spotted and recovered. When the second diver surfaced it was realised that the first diver had missed stops. He was given oxygen and monitored for signs of DCI. No symptoms

developed.

June 2006 06/126

Two divers conducted a dive to 27m for 35 min with a 3 min stop at 6m. 5 hours later they dived to 31m. They deployed a delayed SMB and started their ascent. At 10m one of the pair lost control of his buoyancy and made an uncontrolled ascent to the surface, missing 7 min of stops. He was recovered into the boat and placed on oxygen. His buddy was concerned for his safety and he surfaced a little later having missed 2 min of stops. He too was placed on oxygen. Both were monitored for signs of DCI. No symptoms developed and no further action was taken.

June 2006 06/189

A pair of divers prepared to make a dive to a depth of 34m. One of the pair found that her cylinder had somehow lost air and was at 70 bar. She used another cylinder. Her normal cylinder was 10l and the replacement was 12l so she removed some of her weight. They descended to the wreck and, after 25 min, they deployed a delayed SMB to make their ascent. The diver who had swapped cylinders was too buoyant and she was carried rapidly to the surface, missing decompression stops. Her buddy went with her. Their dive duration was 29 min. They were placed on oxygen. No symptoms were reported but the divers did seek hospital advice.

June 2006 06/128

Two divers descended a shotline to a wreck in a maximum depth of 18m. At the bottom one of the pair put some air into her BCD to achieve neutral buoyancy. The inflator valve jammed and she became buoyant. She alerted her buddy and attempted to dump air. Her buddy held on to her and slowed the ascent. The diver disconnected the direct feed hose but was unable to prevent a buoyant ascent to the surface. Both their computers indicated a fast ascent warning. Neither suffered any subsequent ill effects.

June 2006 06/343

Solent Coastguard were alerted by a dive boat of a diver having made a rapid ascent from 25m following difficulty deploying a delayed SMB, following medical advice the diver was airlifted to recompression chamber for treatment by Coastguard rescue helicopter. (Coastguard report).

June 2006 06/345

Liverpool Coastguard were alerted to a diver having made a rapid ascent from 19m in Coniston water, a medi-link call was established with a diving doctor to pass medical advice, Liverpool Coastguard requested Helimed 63 and Cambrian ambulance service to attend. The casualty was airlifted to hospital for treatment, the helicopter was met by Hoylake Coastguard on landing. (Coastguard report).

June 2006 06/344

Portland Coastguard were alerted by diving vessel of a diver aboard having made a rapid ascent from 25m following a dive to 43m. The diver was airlifted by R-WB to Poole hospital where they were met by Poole Coastguard and a waiting ambulance for onward transportation to recompression chamber. (Coastguard report).

June 2006 06/265

A diver made a rapid ascent from 24 m. The diver was placed on oxygen for 20 min and no subsequent ill effects were reported.

June 2006 06/122

Four divers conducted a dive to a maximum depth of 46m. Three of the divers were using rebreathers with trimix and the fourth was on open circuit air with nitrox 50 for decompression. During their ascent they made a 2 min stop at 27m, a 2 min stop at 18m and a 2 min stop at 9m. They were at 6m with 2 min of stops remaining when they were caught in a down current and quickly carried down to 30m. The rebreather divers all experienced high oxygen partial pressures and they bailed out onto open circuit. Three of the group then re-ascended to 6m where they deployed a delayed SMB and conducted a further precautionary stop. One of the rebreather divers had been swept deeper than the others and had not been able to equalise his ears quickly enough. This diver ascended directly to the surface missing 2 min of decompression. He was recovered into the boat and placed on oxygen. Blood was seen to be coming from his right ear. The Coastguard was alerted. The three other divers were recovered; their total dive time was 40 min. The boat returned to the shore. The diver who had missed stops was then airlifted to a recompression facility where he was given precautionary recompression treatment. He did not develop any signs of DCI but was diagnosed with a ruptured eardrum.

June 2006 06/123

Two divers descended to a maximum depth of 35m down the face of a reef. They then ascended to 25m. At this point one of the pair lost control of his buoyancy and made a feet first ascent directly to the surface. His buddy followed at a normal rate and surfaced about 12 min later. The buoyant diver was recovered into the boat and placed on oxygen. The Coastguard was informed. There were no subsequent ill effects and no further actions were reported. The buoyant diver was using a drysuit but did not have ankle weights. His total dive duration was 12 min.

June 2006 06/141

A diver was ascending from a dive. At 16m he noticed that he was ascending too fast, he raised his hand to dump air from his drysuit cuff dump but no air was released. He rose rapidly to the surface. No subsequent ill effects were reported.

June 2006 06/144

A pair of divers conducted a dive to a wreck. They took 5 min to descend to the deck of the wreck in a depth of 26m. They briefly dived to the seabed, at a depth of 32m, to place the shot weight for easy recovery. After 42 min they deployed a delayed SMB to make their ascent. They took 8 min to ascend from 26m to the surface, making a 2 min stop at 10m and a 3 min stop at 5m. Upon surfacing, one of the divers' computers sounded a warning and indicated that a 9 min stop at 9m had been missed. He was placed on oxygen. No subsequent symptoms were reported. The diver believes that he must have mis-read the computer during his ascent.

June 2006 06/143

Two divers completed a dive to a maximum depth of 25m. Towards the end of the dive the dive leader deployed a delayed SMB from the top of the wreck at a depth of 22m. They took 9 min to ascent to 6m. They stopped at 6m for 1 min. The other diver's computer showed that he needed to stop at 4m for 1 min. However, at 4m he lost control of his buoyancy and ascended directly to the surface. He was recovered into the boat and placed on oxygen. He developed no symptoms and no further action was taken.

June 2006 06/142

A diver was at 35m engaged in a deep diving course. Her

regulator began to free flow and she made a fast ascent to the surface. At the surface she was briefly unconscious. She was recovered from the water and placed on oxygen. She was taken by ambulance to hospital from where she was discharged later that day.

June 2006 06/286

A diver conducted a dive to a maximum depth of 30m. He was using nitrox 36. His ascent from 16m to 11m was too quick and he went back down to 15m. His ascent back to 10m was normal then he ascended to the surface in 2 min, missing 3 min of stops on his computer which was set for air. Back in the boat he was placed on oxygen and the Coastguard was alerted. Medical advice was sought. No symptoms developed and no further action was taken. It was later found that the function of the diver's drysuit cuff dump was impaired by his undersuit.

June 2006 06/146

A diver was engaged in a deep dive as a part of a training course. At a depth of 32m she took the regulator out of her mouth and rushed for the surface, pulling herself up a line. Her total dive time was 3 min. At the surface she was helped by other divers. Once out of the water she was placed on oxygen. She made a quick recovery.

June 2006 06/130

Portland Coastguard were alerted by a diving vessel of a diver aboard who had made a rapid ascent from 45m feet first!! The casualty was airlifted to Poole by CG R-WB where it was met by Poole Coastguard and an ambulance. The vessel was met by Lyme Regis Coastguard on arrival in harbour. Partly caused by lack of dive fitness and familiarity with kit on a deep dive with no work up dives. (Coastguard Report).

June 2006 06/350

Brixham Coastguard were alerted by a diving vessel of two missing divers, the divers made a rapid ascent from 36m having become separated at depth, the divers were recovered by parent boat and returned to shore, where they were met by an ambulance, the divers were transferred to an air ambulance for transportation to DDRC Plymouth. (Coastguard report).

June 2006 06/162

Two divers conducted a 27 min dive to 37m including a 6 min stop at 6m. 2 hours 30 min they dived again. Their second dive was a drift dive to a maximum depth of 18m. As they descended one of the pair felt his weightbelt was loose. He tightened it and they began the drift. The other diver held a reel connected to an SMB. The reel had a lanyard connected to it and the diver who had had the weightbelt problem held onto this lanyard. 10 min into the dive the weightbelt fell away from the diver and he started to ascend. He was unable to grab the belt and he pulled himself down with the lanyard. This pulled the other diver upwards. The other diver was able to make himself negatively buoyant and to turn the buoyant diver into a vertical position. They sank back down to the seabed. They then made an ascent to the surface together. The ascent was slightly faster than normal. Both divers were placed on oxygen as a precaution. Neither suffered any subsequent ill effect and no further action was needed.

June 2006 06/147

A trainee diver and his buddy dived to a maximum depth of 21m. During the dive the trainee experienced difficulties with his regulator. He signalled that he wanted to ascend. During the ascent he lost control of his buoyancy and made a fast ascent to the surface. His dive duration was 12 min. He arrived at the surface alone and was recovered by others into a boat. Once in the boat he started to recover. He was placed on oxygen and appeared to make a full recovery. The mouthpiece of his primary regulator was perished and this may have allowed water to enter as he breathed in.

July 2006 06/156

Three divers conducted a dive to a maximum depth of 26m. One of the three was diving with a manifolded twin cylinder system that was relatively new to him. The system had two separate regulators and he normally dived with the manifold open. On this occasion the manifold valve was left closed in error and the diver was not aware of this. As the dive progressed the diver noticed that his two contents gauges read differently; one was falling and the other was constant. He assumed that the gauge was stuck. He noticed that his low gauge had reached 50 bar but did not alert the others. He subsequently believes that he was suffering nitrogen narcosis. After a dive time of 35 min this diver suddenly ran out of air. He signalled 'out of air' and attempted to get to one of his buddies' octopus regulator. He was unable to release it from its clip. He then grabbed the buddy's pony regulator which was on a cord around the buddy's neck and he breathed from this. He struggled to keep this regulator in his mouth because of the way it was secured to the buddy. The troubled diver could have used his own second regulator but, at the time, he did not think of this. The two divers began to ascend but then sank back down to the bottom. The third diver then took hold of both of them and brought them to the surface. They made a rapid ascent missing decompression stops. The first two divers needed assistance to get back into the boat. The diver whose pony cylinder was being used was coughing blood. He was placed on oxygen. The Coastguard was alerted and all three were airlifted to a recompression facility. They all received recompression treatment and were released later that day. No symptoms of DCI were experienced by any of the divers. The diver who was coughing blood was found to have cut his inner lip by biting too hard on his mouthpiece.

July 2006 06/157

A pair of divers conducted a wreck dive. They descended a shotline and arrived on the wreck at a depth of 21m. They swam to the stern of the wreck at a depth of 27m and then headed back to find the shotline. Visibility was poor and they were not able to locate the shotline. The dive leader's computer indicated 2 min of no stop time left. They moved higher on the wreck and the computer indicated 6 min no stop time. They were still unable to locate the shotline and they deployed a delayed SMB to make their ascent. The dive leader's computer now showed that a 2 min stop was required. The computer was relatively new to him and he mistakenly thought that the stop was 6m, when it was actually 3m. They stopped for 2 min at 6m but because of the stop depth error the computer still showed a 2 min stop requirement. The dive leader now had 25 bar remaining and his buddy had 15 bar. They could hear the boat engine near them and the dive leader did not want to try to make a stop at 3m so they surfaced. Their dive duration was 34 min. The dive leader's computer went into an error state. The divers were recovered from the water and placed on oxygen. A lifeboat was already on its way to the boat because of another incident that had happened concurrently. The divers were taken to a recompression facility. Neither showed signs of DCI and no treatment was required. (Incident 06/158 relates).

July 2006 06/443

A diver made a rapid ascent from 9m. The diver was placed on oxygen and suffered no subsequent ill effects.

July 2006 06/266

A diver made a rapid ascent from 18m. The diver inhaled some

water during the ascent. The diver was placed on oxygen and no subsequent ill effects were reported.

July 2006 06/168

Three divers entered the water to conduct a wreck dive to a maximum depth of 27m. After a few minutes one of the three surfaced in distress. His dive duration was 9 min. He was recovered into the boat and placed on oxygen. He stated that his regulator had flooded and this had led to him aborting the dive and making a rapid ascent. He was transferred to the shore. No symptoms developed and no further action was reported. The boat was in a party of two that had travelled from the mainland to a group of islands. The additional boat journeys made led to the use of the boat's reserve fuel earlier than planned. They set out to return to the mainland but the sea conditions worsened, fuel consumption increased and they realised that they would run out of fuel. They sought shelter in a safe anchorage off one of the islands and contacted a local commercial dive boat by radio. This vessel towed the two boats safely to the mainland.

July 2006 06/358

Brixham Coastguard were alerted by a diving vessel of a diver having made a rapid ascent from 18m following a dive to 30m. (Coastguard report).

July 2006 06/179

Two divers dived to a depth of 22m. At this point one of the pair experienced a problem with air in his drysuit boots and he made a rapid ascent to the surface. His dive duration was 14m. No subsequent ill effects were experienced.

July 2006 06/169

Two divers were taken to a recompression facility for treatment after surfacing too quickly. (Media report).

July 2006 06/181

A pair of divers dived to a maximum depth of 13m. One of the pair lost control of her buoyancy and made a rapid ascent to the surface. Both divers then made several ascents and descents before aborting the dive. Their dive duration was 13 min. No subsequent ill effects were reported.

July 2006 06/250

Two divers conducted a wreck dive to a maximum depth of 29m. There was a current flowing and when they were dropped into the water one of them missed the shot buoy. This diver was towed back to the shot buoy while the other diver descended alone. They conducted separate dives on the wreck. One of the pair was intent on completing a task on the wreck and did not monitor his air. When his buddy signalled that is was time to ascend he stayed on to complete his task, extending the dive plan. They then had to swim against the current to get back to the shotline. As they began to ascend the shotline one of the pair had 11 min of decompression requirements and the other had 8 min. At 6m the diver with the lower decompression requirement gave his buddy the 'out of air signal'; the buddy had 100 bar remaining. The buddy's octopus regulator, which had been working when checked before the dive, was found not to be working. They began to share the buddy's main regulator. The diver who was out of air then let go of the shotline which created a pull on the regulator hose. Both began to panic and they made a rapid ascent to the surface. They were recovered into the boat and placed on oxygen. The Coastguard was alerted and the boat returned to the shore. An ambulance arrived and the divers were then airlifted to a recompression facility.

July 2006 06/221

Two divers conducted a dive to a maximum depth of 29m. After about 32 min one of the divers was down to 75 bar and they agreed to ascend. The diver with 75 bar deployed a delayed SMB and they started their ascent. The diver reeled in the line but, at a depth of 13m, he became aware that he was spinning round in the water. He thought that the line was snagged somewhere behind his head. Whilst trying to resolve this problem he made a rapid buoyant ascent to the surface over the following 30 seconds. His buddy conducted a normal ascent. Both were recovered from the water. Once ashore the diver who had made the rapid ascent developed a headache and complained of chest and back pain. The diver was placed on oxygen and medical advice was sought. After a further 1 hour the symptoms resolved and no further action was taken.

July 2006 06/272

Two divers conducted a wreck dive to a maximum depth of 35m. One was using nitrox and the other was using air. When the air diver had 5 min of stops showing they deployed a delayed SMB and started their ascent. The air diver followed the SMB line and the nitrox diver held the reel and wound in the line. The nitrox diver indicated that they should speed their ascent, to avoid further decompression penalties. At about 8m the air diver's computer malfunctioned and cleared all decompression requirements. She continued directly to the surface without conducting any stops. Once back in the boat she explained that her computer had cleared and that she thought that her buddy had signalled that they needed to surface quickly because of a problem. She was placed on oxygen and given fluids. Advice was sought from a recompression facility and the Coastguard was alerted. The diver was airlifted to the recompression facility and although she had no symptoms of DCI she was given a precautionary treatment.

July 2006 06/367

Falmouth Coastguard were alerted by a diving vessel of a diver having made a rapid ascent from 12m suffering bleeding from the ears, a medi-link call was made to the INM recommending treatment. Rescue helicopter R-193 was tasked to recover the diver and buddy and airlift for treatment to the DDRC in Plymouth. The dive vessel was met by Mevagissey Coastguard to obtain details. (Coastguard report).

August 2006 06/372

Solent Coastguard were alerted by a diving vessel of a diver having made a rapid ascent from 33m, the casualty was airlifted to decompression chamber for treatment by rescue helicopter R-IJ, Hillhead Coastguard team responded to establish the helicopter landing site (HLS). (Coastguard report).

August 2006 06/278

Two divers conducted a dive to a maximum depth of 32m. At the end of the dive they attached a reel to a piece of wreckage and deployed a delayed SMB. One of the divers held the buoy open while the other filled it. As the bag ascended it dragged the diver who was holding it open upwards. She was carried to the surface. She released the clip attaching the line to the buoy and it sank back to the diver holding the reel. This diver made a normal ascent reeling in the slack line. During his ascent he met another diver and completed his stops with that diver, using his buoy. The diver who had made the rapid ascent was placed on oxygen. It was not known how the SMB caused the diver to be dragged upwards. She suffered no subsequent ill effects.

August 2006 06/274

Two divers dived to a maximum depth of 37m. One of the divers was using a pony cylinder and had not reduced her weight accordingly and was thus heavy underwater. She became tired during the dive and, during the ascent, she made an unintended sudden descent from 25 to 33m when she released air from her BCD. Her buddy assisted her to re-ascend. They made a rapid ascent to the surface, missing a decompression stop due to low air. The diver was exhausted at the surface and she was assisted from the water. She was placed on oxygen and the Coastguard was alerted. Once ashore she was taken by ambulance to hospital for tests. She developed no symptoms of DCI and was discharged 3 hours later.

August 2006 06/279

Two divers conducted four dives over a three day period to depths of about 40m. After a 22 hour surface interval they made a fifth dive. They descended a shotline to a wreck in a maximum depth of 42m. One of the pair felt too heavy and added air to her drysuit but it escaped through the dump valve. She then added some air to her BCD. The diver then noticed that she was light and kept having to dump air from her BCD. She realised that the inflator to her BCD was continually leaking air into the bag. She disconnected the inflator and they deployed a delayed SMB. She showed her buddy that she had disconnected the hose and he mis-understood and tried to reconnect it for her, which she prevented. The reel of the SMB jammed and dragged them both upwards. The buddy was holding the reel and also the buoyant diver. They managed to stop at 20m at which point the buoyant diver was having difficulties with staying down. Not wishing to drag her buddy up she let go of him and was carried to the surface. The buddy followed at a slower rate. The buoyant diver had missed 24 min of decompression stops; the buddy had missed stops too. Both were recovered into the boat and placed on oxygen. The Coastguard was alerted and the divers were airlifted to a recompression facility where they received precautionary treatment.

August 2006 06/374

Shetland Coastguard was requested to have an ambulance standing by for a diver who had surfaced missing decompression stops. (Coastguard report).

August 2006 06/183

Three divers dived to a maximum depth of 32m. At this point one of the three panicked and made a rapid ascent to the surface. One of the other divers went with her and the third made a normal ascent. Their dive duration was 6 min. The divers who had made the rapid ascent were placed on oxygen. Neither diver suffered any ill effects and no further action was taken.

August 2006 06/202

Two divers descended a shotline to conduct a wreck dive to a maximum depth of 30m. The shotline was not on the wreck and they attached a distance line and moved in the direction of the wreck. The line ran out and they left the reel and continued on. They did not find the wreck and returned to the reel. At this point one of the pair had only 80 bar remaining in his 12l cylinder. This diver signalled that he wanted to ascend. At 24m the diver's contents gauge was in the red area and he switched to his 3l pony cylinder. He was starting to panic and his breathing rate rose. He soon used the air in his pony cylinder and took the alternative air source of his buddy. The buddy was using twin 12l cylinders. The divers had ascended and descended a number of times during the air switching process. They stopped for about 2 min at 6m and then surfaced. They were recovered into the boat. The diver who had donated air complained of a headache. Both were placed on oxygen for 10 min and given fluids. Medical advice was sought and the divers were monitored for further problems. None occurred and no further action was taken.

August 2006 06/379

A party of three divers dived on a wreck to 30m, the plan was to ascend at 100bar, however the party could not find the shotline so had to ascend up the delayed SMB line, two of the divers ran very low on air, the third shared with one of the divers, during the ascent at least one diver made a rapid ascent. As a precaution all three divers were airlifted by Coastguard rescue helicopter R-WB to recompression chamber, the helicopter was met at the HLS by Poole Coastguard team and an ambulance. (Coastguard report).

August 2006 06/383

Diver made a rapid ascent from 21m, Dover Coastguard made a medi-link call as a precaution, no symptoms were present, no further medical attention required. (Coastguard report).

August 2006 06/385

Clyde Coastguard received a call from a dive vessel reporting having two divers aboard having missed decompression stops following a dive to 34m, a medi-link call was established and the divers were met by Oban Coastguard team and a waiting ambulance for transportation to chamber for treatment. (Coastguard & RNLI reports).

August 2006 06/227

Two divers conducted a dive to a maximum depth of 30m. They planned a 3 min stop at 6m. During this stop one of the pair lost control of his buoyancy and rose quickly to the surface. His dive duration was 30 min. He was recovered into the boat and placed on oxygen. The other diver completed the stops and surfaced normally. The diver who had missed the stops was kept on oxygen for 90 min, no symptoms of DCI occurred and no further action was taken. The dive had been planned as a no-stop dive but the divers did incur stops and this caused them concern during the ascent and is thought to have precipitated the buoyant ascent.

August 2006 06/447

Two divers conducted a wreck dive to a maximum depth of 33m. With a 6 min decompression stop requirement showing on their computers they deployed delayed SMBs to make their ascent. One of the divers was initially pulled up by the ascending buoy but he then seemingly started to ascend normally. His buddy turned to observe two other members of his team and when he turned back the diver had gone. The diver had made an uncontrolled ascent to the surface in 1 min, missing about 4 min decompression. The buddy made a normal ascent. The buoyant diver arrived at the surface tangled in his buoy line. He re-descended to 8m for 1 min but the tangled line pulled him to the surface. He was placed on oxygen and medical advice was sought by phone. The diver was monitored but no symptoms developed and no further action was taken.

August 2006 06/229

A diver dived to 36m for 39 min with a 3 min stop at 6m. Nearly 24 hours later she dived to 30m for 35 min with a 3 min stop at 6m. 5 hours 16 min later she dived to a maximum depth of 30m. During the descent she noticed that one of her BCD straps was twisted and the right shoulder dump cord was twisted into the strap but still working. Some time into the dive she signalled to her two buddies that she was unhappy and

wanted to ascend. She started to rise. She tried to dump air from her BCD but nothing happened. She attempted to dump air from her suit. She rose from 23m to the surface in 90 seconds. Her dive duration was 20 min. She was using nitrox 28. Once out of the water she drank water and breathed nitrox 40. No symptoms were noted and no further action was taken.

September 2006 06/231

An instructor entered the water with a trainee and another diver. As they descended to a platform in a depth of 6m they became slightly separated, with one diver descending slowly because of previous ear clearing problems. The instructor then saw the trainee sinking face upwards attempting to refit a fin that had come off. He signalled the other diver to stay at the surface and followed after the trainee. He reached her at a depth of 10m. The trainee appeared to have regained control but then she overinflated her BCD and made a rapid ascent to the surface. The instructor followed. At the surface he assisted the buoyant diver out of the water. No subsequent ill effects were reported.

September 2006 06/209

Two divers, using nitrox, descended to a maximum depth of 33m over a 12 min period. One of the pair experienced problems with his mask. They made their way back up, following a sloping contour. At 20m the diver with mask problems started to become buoyant. He picked up some rocks to help him retain control and, with the help of his buddy, they continued their ascent to a depth of about 9m. At this point the rocks were dropped and the diver made a rapid buoyant ascent to the surface. His buddy followed at a slower rate. The computer of the diver who had made the fast ascent indicated an ascent warning and he was placed on oxygen for 20 min. The buddy's computer was clear. No subsequent ill effects were reported.

September 2006 06/213

Two divers were diving at a depth of 22m. The fins of one of the divers came off and his buddy helped to refit them. They then started a fast ascent. They managed to make a 1 min stop at 4m. Their dive duration was 21 min. A little later the diver whose fins had come off became concerned and sought assistance. He was placed on oxygen and made a recovery. No subsequent ill effects were reported.

September 2006 06/211

Two divers were diving to a maximum depth of 20m. One of the pair became disorientated, lost control of his buoyancy and made a rapid ascent to the surface. His dive duration was 10 min. He was placed on oxygen. No subsequent ill effects were reported.

September 2006 06/402

Following a rapid ascent Portland Coastguard connected the vessel with a diving doctor, the doctor recommended the diver be kept under observation, no symptom developed. (Coastguard report).

September 2006 06/448

A diver made a rapid ascent from a wreck dive to a maximum depth of 32m missing decompression stops. He thought that a new combination of drysuit and undersuit may have been the root cause of the problem.

September 2006 06/442

Two divers planned a descent to a maximum depth of 50m. One of the pair was over-weighted and he descended quickly. He put air into both his BCD and his suit to regain neutral buoyancy. His buddy followed. They reached the bottom at 20m, exchanged 'OK' signals and set off down an underwater rock face. At about 27m the buddy indicated that he had a problem with his regulator which was free flowing. The other diver turned his cylinder off and on a number of times but this did not resolve the problem. The cylinder emptied of air. The other diver gave him one of his alternative air sources. The donor diver wanted to deploy a delayed SMB to aid their ascent but the diver who was out of air started to ascend. The donor diver was concerned about his need to dump air from both his suit and BCD but he over dumped and they sank back down from 17m to 22m. The donor diver's computer indicated that they should make a 3 min safety stop, but the diver who was out of air took them both to the surface. No subsequent ill effects were experienced. The donor diver reported that he had failed to correctly adjust his weighting for the use of a twin cylinder system in fresh water. He found that he was 3kg over-weighted.

Technique

October 2005 06/132

Two divers conducted a series of dives together. One of the divers normally used two dive computers but dived with just one because the other had a flat battery. The other diver used a computer that she had recently bought second-hand. On the third day of a five day trip both computers indicated that decompression stops were required. They stopped at 6m for about 5 min; the second-hand computer cleared first and then the other. Once back on the boat the second-hand computer sounded an alarm and locked itself. The following day they dived to 35m. On ascent both computers indicated a 2 min stop at 9m followed by a 18 min stop at 6m. At this point the second-hand computer indicated that a further 17 min was required whilst the other diver's computer had cleared. They had previously concluded that the second-hand computer must be faulty and the two divers decided to ascend. The second-hand computer was checked and no fault was found. Two weeks later they conducted a dive consisting of 30 min at 20m and 15 min at 7m. 1 hour 30 min later they dived to 20m for 56 min. Towards the end of this dive the second-hand computer indicated that 20 min of stops were required whilst the other diver's computer had 2 min of no-stop time left. Again it was assumed that the second-hand computer was at fault. Subsequent to the dive the divers consulted diving tables and realised that the second-hand computer had been correct and that the other diver's computer must have been wrong. Examination of this computer then revealed that it had been set to nitrox 38. The divers had been using air. It is thought that the setting had been changed by the computer being left wet, in a bag, and on a moving boat. It was suggested that the boat's movement may have caused the appropriate wet terminals of the computer to have been contacted thus resetting it incorrectly.

November 2005 06/046

Three divers commenced a night dive in a quarry. Some time into the dive two of the group saw the third diver sinking rapidly and they lost contact with him. They surfaced and raised the alarm. Surface and underwater searches were conducted. The third diver surfaced safely about 25 min later having joined up with another pair of divers who were unknown to him. He realised his mistake when he became separated a second time. No ill effects were experienced.

March 2006 06/071

A diver was on a rebreather training course at a depth of 20m. He inhaled water and began to panic. The instructor gave the trainee his alternative air source and they made a rapid ascent to the surface. Their dive duration was 20 min. Both were placed on oxygen. No subsequent ill effects were experienced.

April 2006 06/085

Two divers were engaged in a training course. They completed one dive and 50 min later started another. They were on a wreck at a depth of 15m when the regulator of one of the divers started to free flow. The instructor offered his alternative air source but the diver spat it out. The instructor then offered his main regulator; taking the octopus regulator himself. Again the diver refused. While this was happening they dropped over the side of the wreck and sank to 22m. The instructor brought the diver to the surface. They made a faster than normal ascent. At the surface the diver who had had the free flow fell unconscious. He was recovered from the water and first aid and oxygen was given. The diver recovered. He was taken by ambulance to hospital from where he was discharged later that day.

June 2006 06/188

A diver planned a dive to 35m to extend her depth experience. She had previously dived to 31m. During her pre-dive checks she found that her pony regulator was leaking air slightly. She agreed with her buddy that she would dive with it switched off and that the buddy would turn it on again if it was required. At the bottom, they found themselves in a current and the diver became concerned that she could not keep up with the dive leader. Her breathing rate increased. She managed to calm herself down but was concerned that if she did need her pony cylinder she could not turn it on on her own. The dive leader stopped and came back to her and they exchanged 'OK' signals. The dive leader signalled that she wanted an air check. The troubled diver was unable to find her gauge, which had become unclipped. The dive leader thought that they were both suffering the effects of narcosis and signalled that they should ascend. The dive leader took hold of the troubled diver and used a controlled buoyant lift to help her up to 20m. At this depth the troubled diver found her contents gauge and realised that she had enough air to complete the dive; this allowed her to become more calm. The dive leader deployed a delayed SMB and they made a normal ascent including safety stops. Their dive duration was 38 min. No subsequent ill effects were reported.

June 2006 06/249

Three divers dived on a wreck at a depth of 13m. Towards the end of the dive one of the three deployed a delayed SMB and they drifted off the wreck. The diver with the reel then lost control of his buoyancy and rose to 7m before he was able to regain control. He remained at that depth and completed decompression stops before surfacing. One of the other divers attempted to stop his ascent but was unable to do so. The other divers remained on the bottom, deployed another delayed SMB and then made a normal ascent. No subsequent ill effects were experienced.

July 2006 06/164

A diver was testing a rebreather in a swimming pool after a mouthpiece replacement. Within 2 min underwater his breathing became laboured. He switched to open circuit and then back to closed circuit. He conducted a diluent flush. All seemed correct but then he became breathless again within 1 min. He switched to open circuit and swam into the deep end of the pool. He switched back to closed loop again and very quickly went back to the same problem. He stated that he felt as if he was "breathing through a straw". He switched back to open circuit and left the pool. Shortly afterwards he developed a bad headache. He subsequently discovered that the scrubber cartridge was empty. He had forgotten to re-fill it again after its last use.

August 2006 06/185

A pair of divers conducted a wreck dive to a maximum depth of 46m. They used twin 12l cylinders containing nitrox 26 and carried nitrox 70 for their decompression. The sea state was rough and underwater visibility was low. They descended a shotline to the wreck. The lead diver attempted to turn on his main torch at 25m but it had failed. He used a back up torch and the other diver took the lead. They swam above the seabed at a depth of 45m towards the bows of the wreck. Visibility was about 3m but the light level was very low, with only items in the torch beams visible. They swam down the side of the wreck, about 2 to 3m away from it. 11 min into the dive they realised that the side of the wreck could no longer be seen. They assumed that they had swum away from the wreck and they turned towards it and swam on. What they did not realise at the time was that

they had been swimming past a very large hole in the wreck and had turned and were now swimming into the wreck itself. They found a wall and followed it. 13 min into the dive they came to a junction with two other walls, and found themselves trapped in an enclosed space, unable to ascend or back out. The divers became panicked. One of them accidentally kicked and dislodged the mask of the other and they became separated. One of the pair saw a hatchway below him and swam down. He found the seabed and moved forwards until he could see clear water above him. He waited outside the wreck for his buddy. When his buddy did not appear he deployed a delayed SMB and tied it off on the wreck. He then tied another reel to the wreck and made his way back inside to see if he could find his buddy. After a while he realised that he was not going to find him and made his way back out. He then made his way to the surface completing 24 min of stops on the way. His total dive time was 66 min. The other diver took longer to escape from the wreck and he surfaced missing 14 min of stops; he was placed on oxygen. The emergency services were alerted and the diver who had missed stops was given precautionary recompression treatment.

Equipment

February 2006 06/133

An instructor and two trainees conducted a dive to a maximum depth of 20m. Towards the end of the dive the instructor demonstrated how to inflate a delayed SMB using his octopus regulator. The regulator started to free flow. The instructor made a controlled ascent to the surface with the trainees.

February 2006 06/061

Two divers were engaged in a nitrox training course. They completed a 32 min dive to a maximum depth of 14m with practice decompression stops; 5 min at 9m and 5 min at 6m. 54 min later they dived to a maximum depth of 14m. During this dive the alternative air source regulator of one of the pair started to free flow when he used it to inflate a delayed SMB mid-water. The other diver gave him his alternative air source and turned the free flowing cylinder off then on again. The free flow continued. The diver with the free flow switched to his own pony regulator and they completed the dive as planned including practice stops as before. The water temperature was 4.5 deg C.

February 2006 06/062

Two divers were engaged in a training course. 15 min into their dive, at a depth of 12m one of the pair experienced a free flow of his octopus regulator whilst using it to inflate a delayed SMB. The other diver gave him his alternative air source and then turned the free flowing cylinder off then on again. The free flow stopped. The diver reverted to his own main regulator and the dive continued without further incident.

February 2006 06/060

Three divers were at a depth of 10m engaged in a training exercise. One of the three used his octopus regulator to inflate his delayed SMB; this regulator began to free flow. One of the other divers gave him his alternative air source and the third diver turned the free flowing cylinder off. The diver with the free flow then switched to his own pony regulator. The divers then ascended. At the surface the cylinder was turned back on to allow the diver to inflate his BCD. The regulator free flowed again so the cylinder was switched off as soon as the BCD was inflated. All divers left the water safely. Their dive duration was 25 min.

March 2006 06/070

Two divers conducted a dive to a maximum depth of 19m. At 18m the regulator of one of the divers started to free flow. He was using twin cylinders with two regulators. He was unable to reach the isolation valve. He surfaced breathing from the free flowing regulator. He was placed on oxygen for 30 min. No subsequent ill effects were experienced.

March 2006 06/167

A trainee and an instructor entered the water to participate in a training dive using a lifting bag. They descended to a maximum depth of 22m. At 20m the instructor attached the lifting bag to a shot weight and demonstrated how to fill it with his octopus regulator. He deflated the bag and the trainee filled it with her octopus regulator. The trainee's regulator began to free flow. The trainee took the instructor's alternative air source and the instructor turned the cylinder off. When he turned it back on again the regulator continued to free flow. He turned the cylinder off again and they made an ascent to the surface with the trainee using the instructor's alternative air source. They made a safe ascent including a short safety stop.

April 2006 06/238

Two divers descended a shotline to the seabed at a depth of 15m. At this point one of the pair pressed the button of his drysuit inflation valve. The valve fell out in his hand. The diver disconnected the feed hose and they aborted the dive. The drysuit was brand new and a circlip was found to have come off.

April 2006 06/268

Two pairs of divers entered the water to dive together to a maximum depth of 36m. As they approached their target depth the regulator of one of the divers began to free flow. His buddy gave him his pony regulator. The diver with the free flow began to suffer from a mask flooding problem. The four divers began their ascent. At 15m the free flow stopped but the diver continued to experience mask flooding. His buddy gave him his octopus regulator but he was unable to clear it. After two attempts he cleared the regulator. At 10m he switched back to his main regulator and they made a normal ascent with two safety stops. Once out of the water the diver was treated for shock.

April 2006 06/099

Two divers conducted a wreck dive to a maximum depth of 34m. They explored the wreck for a while then one of the divers indicated to the other that he had lost his weightbelt. They were unable to find the missing weightbelt in the poor conditions on the wreck. The other diver deployed a delayed SMB and then dumped air from his BCD and drysuit. The diver without the weightbelt held on to him and they started to wind themselves up the SMB line. They made a 2 min stop at 15m and a 2 min stop at 12m. They dumped further air and made a 3 min stop at 9m. The diver without the weightbelt was now quite buoyant and pulling upwards on the back of the other diver. They managed to complete a 5 min stop at 6m and a 4 min stop at 3m by which time both of their computers had cleared. Both were safely recovered from the water and no subsequent ill effects were experienced.

May 2006 06/107

Three divers conducted a wreck dive to a maximum depth of 30m. They descended a heavily weighted shotline. During the ascent up this shotline the weightbelt of one of the divers fell off. One of the other divers saw this and took hold of the diver and the shotline. The diver did not realise that his weightbelt had gone. They ascended slowly. At 6m the buoyant diver began to rise to the surface despite the efforts of his buddies. The buoyant diver's computer showed no decompression requirements. The other two required 2 min at 3m. They had not broken the surface and descended to 3m to conduct their stops while keeping watch on the buoyant diver on the shot buoy. All were safely recovered from the water and no subsequent ill effects were reported.

May 2006 06/159

An instructor and two trainees entered the water and descended to a depth of 21m. They checked and adjusted their buoyancy and then set off finning into a current. One of the trainees noticed that it was becoming harder for him to breathe. He took his buddy's octopus regulator and signalled that he wanted to ascend. The instructor gave the trainee his alternative air source and all three ascended safely to the

surface. It was found that the regulator had malfunctioned.

June 2006 06/127

Two divers commenced a wreck dive to a maximum depth of 29m. 12 min into the dive one of the pair heard a loud 'crack'. His buddy signalled that the diver had a problem with one of his hoses and that he was losing air. The diver looked at his contents gauge and saw that this was decreasing rapidly. They started their ascent. At 15m the diver's air supply was exhausted and he took his buddy's octopus regulator. They continued their ascent, making a 5 min safety stop at 4m. They were safely recovered into the boat. It was subsequently found that the diver's octopus hose had split.

June 2006 06/277

A diver breathing air used one cylinder of a twin cylinder system and had that cylinder refilled. His next dive was to a depth of 59m. While descending the shotline he noticed that the air in the refilled cylinder was 'not very nice'. He switched to the other cylinder and the air was normal. During his ascent from the dive he switched back to the refilled cylinder and again noticed that the air had a bad taste. He took the cylinder back to the shop where it was refilled; a problem was found with the compressor filter and the shop owner paid for the diver to have his cylinders cleaned.

June 2006 06/200

Two divers were conducting a wreck dive at a maximum depth of 19m. During the dive, the weightbelt of one of the pair fell off. His buddy saw this happen and grabbed both diver and weightbelt. He was then able to help the diver to refit the belt. The dive continued without further incident.

June 2006 06/201

An instructor and two trainees descended a shotline to dive on a wreck. They reached the wreck at 7m, adjusted their equipment, and continued down to a depth of 19m. At this point one of the trainees lost her weightbelt and began to make a buoyant ascent. The instructor took hold of the trainee and made himself negatively buoyant. They then made their way along the wreck back to the shotline. They made a controlled ascent up the shotline. The second trainee followed. The divers were safely recovered into their boat. No subsequent ill effects were reported.

July 2006 06/171

A diver left two cylinders to be refilled at an air station. He asked for nitrox 28 and labelled the cylinders accordingly. The following day he conducted a gas analysis on both cylinder and found that both contained air. He reported the problem to the air station.

August 2006 06/204

Two divers entered the water from a boat to conduct a wreck dive. They exchanged 'OK' signals then there was a loud bang and mass of bubbles was seen to be escaping from behind one of the divers. The other diver turned off the cylinder from which the air was escaping. He reported that a high pressure hose had failed adjacent to the ferrule that attached it to the first stage. Both divers were recovered into the boat. The failed equipment was replaced and the divers completed their dive without further incident.

August 2006 06/225

Two divers conducted a dive to a maximum depth of 30m. Some time into the dive, one of the pair, who was using a rebreather, noticed a leak in his neoprene drysuit. The leak got worse and the legs of the drysuit began to fill with water. The divers decided to abort the dive and began to ascend the shotline. The leak was in the neck seal and air was lost from the suit. This made it difficult for the diver to ascend, and the condition was made worse by the inertia of the water in the suit. At the surface the diver's BCD was fully inflated and he ditched his weightbelt to enable him to stay at the surface. The divers were both safely recovered from the water and no subsequent ill effects were experienced.

September 2006 06/233

A diver on an instructor course entered the water from a hardboat using a backward roll entry. As she did so her delayed SMB and reel, which were attached to her via a D ring on her BCD, caught on a cleat on the boat. The D ring was torn from her BCD and the SMB and reel remained in the boat; the student felt under pressure to continue the dive without this equipment. The student and her instructor descended a shotline to a wreck; the underwater visibility was 1 to 2m. The student led the dive and descended to the stern of the wreck. As she did so the visibility dropped to 0.5m and when she turned around she could no longer see the instructor. She looked around for him and lost sight of the wreck. Her depth was 35m. She made an ascent to the surface, concerned that she had no SMB in an area busy with boats. The instructor deployed a delayed SMB and made his ascent. The boat headed towards the SMB. The dive manager on the boat spotted the unmarked diver directly in the boat's path; he advised the skipper and both divers were safely recovered.

September 2006 06/294

A diver was about to enter the water when another member of the party noticed that her BCD had a fault. The BCD had a fitting for an emergency cylinder and this fitting was found to have sheared off; she was not using the emergency cylinder. A similar problem had occurred previously on another BCD and was thought to be due to the fitting catching on something as the BCD and cylinder were lifted back into the boat.

Miscellaneous

October 2005 06/412
Lifeboat launched to assist diver. False alarm. (RNLI report).

February 2006 06/320
Clyde Coastguard responded to a 999 call reporting a diver drifting out to sea, a 'Mayday' broadcast was made to request assistance for the diver, rescue helicopter R 177 was tasked together with Coastguard team and a lifeboat, the diver was collecting razor shell and was not drifting. FAWGI. (Coastguard & RNLI reports).

April 2006 06/330
Forth Coastguard received a 999 call of two divers in difficulty, as the first informant was reporting the problem another dive vessel appeared on scene and recovered the divers, the skipper reported both were fine and did not require medical attention. (Coastguard report).

April 2006 06/332
A dive boat informed Solent Coastguard, they had a diver on oxygen, the casualty had been on a 28m dive for 19min when he panicked, Solent Coastguard established a medi-link call to a diving doctor. The casualty was met by Portsmouth Coastguard and a waiting ambulance. (Coastguard report).

April 2006 06/336
Solent Coastguard received a call from diving vessel reporting having a diver aboard having experienced problems following a wreck dive, the vessel steamed into port, the casualty was given oxygen and monitored. (Coastguard report).

June 2006 06/424
Lifeboat launched to assist diver. (RNLI report).

June 2006 06/431
Lifeboat launched to assist diver. False alarm. (RNLI report).

July 2006 06/435
Lifeboat launched to assist diver. False alarm. (RNLI report).

July 2006 06/436
Lifeboat launched to assist diver. False alarm. (RNLI report).

July 2006 06/170
Two divers who were diving in a depth of about 27m became entangled in mono-filament netting which was caught on a reef. They had to cut their way out and were forced to abandon parts of their equipment. (Media report).

July 2006 06/368
Portland Coastguard were alerted by a fishing vessel they had recovered an SMB with only a reel attached, Portland Coastguard responded by tasking R-WB Coastguard helicopter, Weymouth lifeboat and Portland Bill Coastguard to conduct a search. An alert was broadcast on channel 16 for any vessels missing a diver or divers, a dive vessel responded reporting having lost a marker buoy earlier that day, the vessel was thanked for responding but asked in future to call in if this type of equipment was lost. (Coastguard & RNLI reports).

August 2006 06/391
Milford Haven Coastguard received a report of two divers adrift, broadcast action was commenced, a dive vessel contacted the Coastguard to report they were from their vessel and were conducting a survey. FAWGI. (Coastguard report).

September 2006 06/444
An extensive search was organised for a solo diver who was reported missing. The diver was found alive in the sea 58 hours later and recovered by a passing vessel. He claimed to have been knocked unconscious by a passing boat but it was later revealed that he had not been in the sea for most of the intervening time and had lied about the circumstances of the incident. (Media reports).

September 2006 06/406
Solent Coastguard rescued 4 divers in difficulty off Newhaven breakwater, Newhaven lifeboat recovered one diver the others reached shore unaided, there was a language barrier as the divers were Polish living in London, Newhaven Coastguard attended the scene. (Coastguard report).

Overseas Incidents

Fatalities

November 2005 06/018

Two pairs of divers planned a dive to a maximum depth of 80m using rebreathers with trimix 14/50. At 80m the pairs separated. After about 15 min one pair came back to the shotline to start their ascent. They saw the other pair moving back towards the line. The first pair started their ascent and they noted bubbles coming up from below them, indicating that the other pair was ascending too. At their first stop they deployed a delayed SMB and drifted under this to complete their ascent. Once at the surface they saw the SMB of the other pair. The other divers did not surface and after a long wait the SMB was pulled up. They found a reel with 50m of line but no divers. An extensive surface search was conducted but the divers were not found. The two divers' bodies were later recovered from a depth of 63m.

February 2006 06/064

Three divers dived on a wreck in a maximum depth of 50m. After 27 min they started their ascent completing the following stops; 3 min at 12m, 7 min at 9m, 5 min at 6m and 3 min at 3m. After a surface interval of 2 hours 26 min they dived again. One diver entered the water before the others and descended to the shotline to the wreck. They planned to meet on the wreck. They agreed that they would not enter the wreck. When the other two reached the wreck they could not see the third diver. They swam around the wreck and found his stage cylinder outside an entrance to the engine room. One of the divers looked inside but could not see anyone. They continued their dive and on their return the cylinder was still there. They looked again for the third diver but found nothing. The divers returned to the shotline and one of them ascended while the other returned to look for the third diver. He entered the wreck and called out through his mouthpiece. He heard a reply from the third diver. He realised that the diver was on the lower level of the wreck without his reel. Visibility inside the wreck was poor due to disturbed silt. The searching diver was now low on air and made his way to the shotline to make his ascent. During the ascent a cloud of bubbles was seen to rise from the wreck and a partially inflated delayed SMB rose up towards them. After they surfaced a search was conducted down current but nothing was found. It is thought that the missing diver was trapped inside the wreck.

Decompression Illness

November 2005 06/026

A diver conducted a dive to a maximum depth of 97m using trimix 12/52. He started his ascent after a dive time of 13 min and decompressed using nitrox 32 and 50 and then pure oxygen. Once back in the boat he noticed small aches in the middle muscles of his arms. He breathed oxygen for 15 min. After about 40 min he noticed visual disturbances. He was placed on oxygen. He started to vomit. The emergency services were alerted and the boat returned to shore. He lost consciousness on arrival at the shore. He was taken to a recompression facility by ambulance and required resuscitation on two occasions during the transfer. He received recompression treatment and a further two sessions a day for the next week. He was left with damage to his sense of balance. Tests showed that he had a PFO; this had not been found during a previous test.

March 2006 06/093

A group of divers were briefed for a dive on a reef. They were warned that towards the end of the dive they might encounter a current and if they did so a signal would be given. They would then swim against the current for about 50m to go round the end of the reef and then they would be collected by their boat. The dive progressed and the dive leader signalled one of the divers to move nearer to the reef wall. He mis-understood the signal and thought that a strong current was imminent. He finned hard and quickly moved ahead of the group, descending as he did so. The dive leader passed the rest of the group to another dive leader and went after the disappearing diver. At 27m the diver ran out of air. The dive leader caught up with him and gave him her octopus regulator. She used a controlled buoyant lift to bring him to 10m. At this point she was unable to vent the diver's BCD fully and they rose to the surface without completing any stops. Once back in the boat both were placed on oxygen for 30 min. They went to a recompression facility and the dive leader received a series of treatments for a skin DCI.

May 2006 06/102

A diver conducted a dive to 44m with a 2 min stop at 24m, a 2 min stop at 14m and a 4 min stop at 5m. 1 hour later she dived to 42m for a total time of 29 min including a 2 min stop at 24m, a 2 min stop at 13m and a 6 min stop at 5m. Decompression was conducted using nitrox 50. During the second dive she failed to notice her computer's requirement to make a stop at 14m. The computer then required her to switch to tables, which she did. 30 min after the second dive she noticed a feeling of heat and intense itching in her left shoulder. The feeling spread round her right shoulder and down the front of her chest. At first she thought that this was an allergic reaction to her undersuit. Soon the itching became an intense pain that ran from under her right arm across her chest to her right breast. The skin showed a dark blue mottling and swelling. She was placed on oxygen and taken ashore. Medical advice was sought and the diver went to hospital. A lymphatic DCI was diagnosed. She was placed on a saline drip. Her symptoms were resolving and she was taken off oxygen. The following day she was left with a slight tenderness in the area that had been affected. Dehydration was thought to have been a factor.

June 2006 06/239

A diver conducted a 36 min dive to 35m with a 3 min stop at 6m. 5 hours later he dived to 30m for 31 min with a 3 min safety stop at 6m. During this stop he started to cough. Back on the boat he cough up some blood but the coughing stopped after 5 min and he thought no more of it. The following day he dived to 36m. On ascent he deployed a delayed SMB at 14m and continued his ascent. At 7m he began to experience breathing difficulties. He started a safety stop at 6m but after 2 min he began to cough uncontrollably. He signalled to his buddy that he was having difficulties and they ascended to the surface. Once back in the boat he continued to cough and there was blood in the mucus. He was placed on oxygen and the party returned to the shore. After an hour the coughing stopped. Advice was sought from a recompression facility. The diver went to a hospital for a chest X-ray and other tests; nothing abnormal was found. The diver had suffered a recent accidental blow to his chest. The subject was advised to refrain from diving pending further expert medical opinion.

July 2006 06/218

A diver conducted a series of fifteen dives over a six day period. No dive was deeper than 29m and safety stops were conducted at the end of each dive. 1 hour 30 min after the last dive she felt dizzy and had a migraine aura. 30 min later she found a slight mottling on both her upper arms. The symptoms resolved. She had had a severe skin DCI three years earlier and had tested negative for a PFO. As a result of this second incident she was tested again and again nothing was found. She was advised to dive using nitrox and to take a day's break in the middle of future dive series.

July 2006 06/152

A diver with symptoms of DCI attended a hospital. He had a sharp pain in his right shoulder, pain in his right elbow and muscular weakness of his right hand. He was transferred to a recompression facility for treatment.

September 2006 06/253

A diver conducted a dive to a depth of 32m for 40 min with a 3 min safety stop. The average depth during this dive was 17m. After 2 hours 30 min the diver dived to 31m for 43 min with a safety stop at the end. Again the average depth was 17m. 1 hour later the diver complained of dizziness. The diver was diagnosed with a vestibular DCI. She also had signs of a skin DCI on her torso. She was placed on oxygen and airlifted to a recompression facility where she was treated.

Illness / Injury

October 2005 06/011

Two divers entered the water after a full briefing. They descended against a wall. At 3m one of the pair indicated a problem with his ears and ascended 1m. He then descended to the seabed in a depth of 6m at which point he experienced a pain in his forehead. They ascended to the surface. Once back in the boat he reported sinus and ear pain. Medical advice was sought and anti-inflammatory drugs and a nasal spray were prescribed for ear and sinus barotrauma.

October 2005 06/186

Five pairs of divers conducted a night dive from the shore in a bay. After about 40 min four pairs had returned but the fifth pair could not be seen in the bay. The divers on the shore spotted the lights of the missing divers outside the bay. The shore party crossed some salt pans to get closer to the fifth pair. These divers were making their way slowly back to the bay in rough water. The shore party suggested that they exit the water outside of the bay, across some rocks. The first diver approached the rocks. The water surged and members of the shore party grabbed him, however, two of the shore party were swept into the sea. One of the shore party who was swept in was not wearing a diving suit. As he was recovered from the water his legs were scraped across some sharp rocks and his shoulder was dislocated. The other shore party member and the other diver were then recovered from the water. The injured person was helped back to the party's vehicles. The emergency services were alerted and the injured person was taken to hospital for treatment and released later that night. The injured person had suffered a dislocated shoulder on previous occasions.

November 2005 06/029

Whilst underwater a diver picked up an old bottle that he found on the seabed. The bottle shattered and he received a cut to the base of his left thumb. He made a normal ascent with his buddy. They were recovered into their boat and first aid was given. The diver was taken to hospital and several stitches were required. A tendon had been cut requiring micro-surgery to resolve.

November 2005 06/033

A trainee diver entered the water with an instructor and started a descent. At about 3m he indicated a problem with his ears. They ascended a little and the student was then able to proceed down to a maximum depth of 9m. Upon surfacing he was found to have suffered a nose bleed. Three days later he conducted a similar dive. He experienced no problems during this dive but after the dive it was found that he had had a second significant nose bleed. He sought medical advice.

December 2005 06/048

A diver conducted a dive to a maximum depth of 31m. About 10 min into the dive, at a depth of about 20m, he began to feel anxious and experienced breathing difficulties. As the dive progressed his condition worsened. After a further 5 min he signalled to the rest of the group that he was going to ascend. His condition became worse as he ascended. At the surface he gave the emergency signal and got back into a boat. He was placed in the recovery position, on oxygen. He was transferred back to his own boat, still on oxygen. When the group leader returned, about 30 min after the casualty had surfaced, he alerted the emergency services. He was taken by boat to a medical centre where he was treated for pulmonary oedema of immersion. He was referred to a cardiologist.

January 2006 06/092

A diver conducted a series of two dives per day for four days. Prior to the dive trip she had been feeling tired and run down but her GP confirmed that she was fit to dive. On the fifth day she dived on a shallow reef. Towards the end of the dive she inadvertently descended to 17m. She quickly noticed and made her way back up to 10m. She then ascended, making a 3 min safety stop at 6m. Her ascent from 6m was a little fast. Her dive duration was 50 min. 10 min after leaving the water she noticed 'pins and needles'. She was not concerned as she often got this feeling in her hands and feet, last thing at night, when she was tired. The symptoms persisted and, once ashore, she sought medical advice. No symptoms of DCI were found and she was placed on oxygen for 2 hours. She was given a vitamin B injection and rehydration salts. The following day the symptoms were still present. A diagnosis of peripheral neuritis was made. She had a final check-up the next day and it was confirmed that she was fit to fly home. On arrival home she felt tired and unwell and she took the next week off work. Her symptoms worsened. She felt more tired and nauseous. Twelve days after returning she felt 'spaced out' and had a tightness across her head. She contacted a recompression facility and received four sessions of recompression treatment. It was suggested that she be tested for a PFO prior to diving again. It was suggested that antidepressant medication and Sudafed that the diver had taken before the dive together with the nicotine patch that she had been wearing may have been contributing factors. Although unclear, the final diagnosis excluded DCI.

March 2006 06/068

A diver was finning over a wreck in a depth of 17m. She was wearing pool fins. Her right foot struck part of the wreck and she received a cut to her foot. Medical attention was required.

March 2006 06/069

A group of divers planned a dive on a wreck to a maximum depth of 35m. One pair started their descent but at 27m one of

the pair, who was using a rebreather with air as the diluent, experienced problems breathing. He signalled to his buddy then deployed a delayed SMB and they started an ascent. At 14m he handed the reel to his buddy. At 9m he switched to his baleout system. At 6m he lost control of his buoyancy and rose to the surface. His buddy followed. At the surface he was distressed and breathless. He was recovered into his boat. He stated that he thought that he was suffering from carbon dioxide poisoning. He was placed on oxygen. The emergency services were alerted and the other divers were recalled. The casualty was taken ashore and then by ambulance to hospital. He was released later that day. No fault was found with his rebreather. It was suggested that the hoses of his rebreather may have been trapped, twisted or collapsed, thus causing an increase in breathing resistance.

April 2006 06/124

Three divers dived to a depth of 15m. At this point the dive leader saw that the face mask of one of the other divers was forced very tightly onto her face causing her eyes and lids to bulge. He indicated to her to equalise the mask but she did not do so. The dive leader brought her to the surface using a controlled buoyant lift. When they reached the surface they swam towards the shore. Once in standing depth they stopped and discussed the problem. The third diver had not surfaced so the dive leader returned to find this diver still on the bottom. They resurfaced. All three regrouped and then conducted an uneventful dive. The diver who had had mask squeeze suffered from facial bruising and red eyes.

May 2006 06/106

Two divers descended an anchor line to a wreck. The water was very calm and as they descended one of the pair released her hold on the line and drifted down. At 20m she encountered a current that carried her away from the line and downwards. She tried to swim against the current but quickly became out of breath. Her buddy went after her. They reached a deep part of the wreck at 40m and were able to regain control. Due to her struggle to regain control and the rapid descent the diver who had been swept away from the line was unable to clear her ears and she suffered a ruptured eardrum. They aborted the dive and made a safe ascent to the surface. Oxygen was given as a precaution.

May 2006 06/288

A trainee diver conducted a 45 min dive to a maximum depth of 6m. 2 hours 30 min later he dived again. He had difficulty clearing his ears on the descent. Once back on the boat blood was found in his mask. 30 min later he complained of problems with his ear. It was later found that he had suffered a perforated eardrum.

June 2006 06/198

A diver conducted a series of dives from a 'live-aboard' dive boat. She then flew home. On arrival home she was lethargic and dizzy. She sought medical advice and was referred to an 'Ear, Nose and Throat' department at hospital. No problems were found but she was given two sessions of precautionary recompression treatment.

August 2006 06/207

A diver had just completed a 48 min dive to 30m with a 5 min stop at 6m. At the end of the dive she climbed a ladder back into the boat. Someone removed one of her fins. At this point the skipper moved the boat and the diver lost her balance and fell backwards. She fell onto a metal water tank and injured her right arm in the triceps region. She suffered bruising and skin discolouration and was in pain for the next 24 hours. She continued to dive.

August 2006 06/289

A group of six divers entered the water from a boat. A surface marker buoy was thrown from the boat towards the group and a gust of wind caught it and carried it into them. One of the divers was struck by the reel. Someone from the boat entered the water and helped the injured diver. All the divers were recovered into the boat. The injured diver had a 5cm cut above his right eye. He was given first aid treatment. Once ashore he attended hospital where the injury was treated with three stitches.

September 2006 06/242

A group of eight divers conducted a dive to a planned depth of 30m. During the dive two of the group decided to go down to 50m. At this depth one of the pair started to behave irrationally, digging in the sand and tapping her head. Her buddy took hold of her and brought her up. At 40m she started to improve. She then started to panic and her buddy had a problem controlling the ascent. At the surface they were recovered into a boat and brought ashore. Their dive duration was 20m and they had missed decompression stops. The distressed diver was placed on oxygen. The emergency services were alerted and she was taken to hospital where she remained for two days. Her problem was a result of nitrogen narcosis. No subsequent ill effects were experienced.

September 2006 06/290

A group of divers were getting out of a boat. As one of the divers stepped out of the boat into shallow water a large wave lifted the boat. The boat caught the bottom of the diver's cylinder and lifted it up causing the pillar valve to strike the back of the diver's head. He took his cylinder off and was assisted out of the water. He was treated for a minor cut to his head. No subsequent ill effects were reported.

September 2006 06/292

An instructor working with two trainees on controlled buoyant lift skills made two ascents from 5m. He then dived to 18m for a total dive time of 42 min. 1 hour 30 min later he dived again to 18m for 39 min. 4 hours after this dive he noticed a stiffening and pain in his right shoulder. He thought that the cause was a muscular strain and took pain killers. 2 hours later the pain continued and the diver was placed on oxygen and medical advice was sought. He attended a recompression facility and received treatment. The pain did not resolve and it was concluded that it was not DCI. He was given further pain killers.

Boating and Surface

October 2005 06/015

One fuel tank of a petrol engined RHIB was filled with diesel fuel in error. The engine cut out when the fuel tanks were changed over. Others recovered the boat and divers safely to the shore.

January 2006 06/054

A dive boat arrived at a wreck site and commenced trying to locate the wreck. A dive guide entered the water and was towed backwards and forwards to find the site. Another boat eventually located the site. The guide then made two dives to 30m to secure a bow line and a stern line to the wreck. The divers made their first dive down the stern line and returned the same way. They dived to a maximum depth of 30m for 43 min with a 5 min stop at 6m. 1 hour 30 min later they dived down the bow line. On arrival at the wreck they noticed that the bow

line was being cut by abrasion against the side of the wreck. On returning to the bow line to ascend they found that it was not there. They moved against a current to the stern line. Two pairs ascended the line. One pair completed their stops but one of the divers stayed with the second pair in case they needed additional air for their stops. With about 2 min decompression left the line went slack and started falling down towards them. They started towards the surface. As they approached the surface they saw a boat coming towards them. One of the three swam down and to one side. The second diver was struck by the boat and pushed under the bow. The third dive took hold of her and fended them off of the boat. They were recovered into their boat without further incident.

September 2006 06/293

A dive boat was in transit between dive sites in rough sea conditions. Two divers were on deck when a large wave swept one of them overboard. She was able to swim back to the boat and was assisted back onboard.

September 2006 06/295

A group of divers were diving from a boat that was secured to a wreck. At the end of the dive they were carrying out safety stops on a line secured to the stern of the boat. When they had finished their stops they swam at a depth of 3m to one of two ladders which were secured to the stern platform of the boat. One diver was on the ladder and two others were swimming towards it when the captain started the engine and put the boat in gear. The prop wash knocked the diver off the ladder and carried the other two violently away from the boat and underneath another boat about 30m away. The divers were recovered by tenders to the dive boat. They later learned that the bow line had parted and the captain had manoeuvred his boat to avoid a possible collision with the other boat. No injuries were reported.

Ascents

January 2006 06/049

Two divers entered the water to conduct a shore dive. They dived to a maximum depth of 21m. After 20 min they started their ascent. At 8m one of the divers, who was using a drysuit, lost control of his buoyancy and made a rapid ascent to the surface; his buddy surfaced normally. He was placed on oxygen for 20 min and given water to drink. Medical advice was sought. The casualty was monitored for symptoms of DCI; none were found and no further action was taken.

Technique

October 2005 06/024

Two divers conducted a dive to a maximum depth of 27m. One of the pair was using nitrox 35, the other was using air. Both had computers and they agreed to follow the air diver's computer and limit their decompression to a maximum of 10 min. During the dive the nitrox diver checked the air diver's computer, but it was quite small and he did not understand it. They started their ascent after 39 min and ascended to 6m and made a 5 min stop. The nitrox diver had had no decompression requirement, he signalled to the air diver asking if they could ascend and the air diver indicated that they could. They completed the dive. Unknown to others at the time, the air diver's computer had registered missed stops and moved into error mode. When they planned their second dive the air diver said that his computer had no planning mode and the tables would not allow a sensible second dive. They therefore planned to make the second dive using the air diver's computer and limit decompression to a maximum of 10 min. After a surface interval of 1 hour 48 min they dived to 28m. After about 30 min the nitrox diver thought that they should be approaching the need for a 10 min stop on the air diver's computer and he looked at it. It made no sense to him. They swam on and the diver realised that he had been trying to read it up-side-down. He read it again and realised that it was in an error state. He asked the air diver if this was 'OK' and got a 'problem' signal. They ascended the boat's anchor line making a 2 min stop at 9m and a 10 min stop at 6m. The nitrox diver was now at 50 bar and they ascended to the surface. Afterwards the air diver stated that his computer had been in an error state after the first dive. He was placed on oxygen for 45 min and monitored for DCI. No symptoms were seen and no further action was taken.

July 2006 06/240

Two divers swam in a cross current, following a guide rope, at a depth of 14m. During the swim the two became separated and surfaced separately. Their dive duration was 35 min. No subsequent ill effects were experienced.

September 2006 06/243

Two divers descended an anchor line to a wreck in a maximum depth of 20m. As planned, they swam along the wreck to an entry point. Underwater visibility was poor. One diver entered the wreck but shortly afterwards lost contact with her buddy. She looked around for him and then made a normal ascent. Her buddy surfaced some time later having looked for her for 2 min and then completing a 3 min safety stop.

September 2006 06/291

An instructor and a trainee descended a shotline. The trainee had problems clearing her ears and the descent was halted for 30 seconds. They reached a depth of 19m. After 15 min the trainee felt her weightbelt slipping down and she became very agitated. The instructor decided to abort the dive and used a controlled buoyant lift to bring them both to the surface. The ascent took over 1 min and the instructor's computer did not show any missed stops. However the computer did show that part of the ascent had been rapid. Both instructor and trainee were placed on oxygen and given water. The boat returned to shore and the divers went to hospital for a check up. No symptoms were found. The trainee's outer ear was found to show bruising and she was advised to refrain from diving for one week.

Equipment

April 2006 06/194

Two divers conducted a night wreck dive to a maximum depth of 9m. 16 min into the dive, one of the pair turned his pressure gauge around to check his air. The gauge blew off the end of the hose, and out of the rubber housing. The diver's buddy heard the noise and passed him his alternative air source. The divers surfaced, signalled 'OK' to their cover boat and swam to the shore. No subsequent ill effects were reported.

April 2006 06/195

Two divers entered the water for a night dive, and started their descent down the chain of a buoy. One of the pair noticed water entering his mask but felt that he could solve the problem. The problem continued and he stopped just short of the bottom to try to resolve the problem. He unclipped his torch to use this

to attract his buddy's attention. He dropped the torch, but was able to recover it. Once on the bottom his buddy tried to assist him, but could see no problem with the mask. The troubled diver felt as if he was spinning round and became concerned that he might pass out. He grabbed hold of his buddy. The buddy assisted him to the surface. They were recovered into their boat. The diver had ingested some water and was sick in the boat and again once back on shore. He was monitored for subsequent problems but none occurred. It was later found that the seal around the lens of the mask was faulty.

August 2006 06/241

A pair of divers dived on a wreck to a maximum depth of 35m. One diver was using nitrox 30 and the other was using air. They planned to ascend slowly up the wreck structure, never incurring more than 10 min decompression on their computers. 20 min into the dive, at a depth of 28m, they discovered that one of their dive computers was flashing and not giving decompression information. They decided to abort the dive and spent 5 min trying to find the shotline. They were unable to do so and they deployed a delayed SMB and started their ascent. At 6m the failed computer appeared to be working again and it indicated no decompression requirements. They conducted a 3 min safety stop and left the water without incident. After the dive it was found that the computer had been incorrectly set for use with nitrox 48 for that dive and the preceding 29 dives.

Miscellaneous

July 2006 06/449

A number of live-aboard dive boats were moored up together. During the night divers from one of the boats poured hot chilli sauce into a number of divers' regulators on one of the other boats. The sauce was found the following morning prior to any diving and attempts were made to clean it out. Some of the regulators subsequently required new mouthpieces. The divers expressed concerns about the effects that this would have had if the sauce were to have been inhaled at depth.

INCIDENT REPORTS

If you would like to add to, correct or place a different interpretation upon any of the incidents in this report please put your comments in writing and send them to the following address:

The Incidents Advisor,
The British Sub-Aqua Club,
Telford's Quay,
South Pier Road,
Ellesmere Port,
Cheshire,
CH65 4FL.

For new incidents please complete a BSAC incident report form and send it to BSAC HQ at the address shown above.

All personal details are treated as confidential.

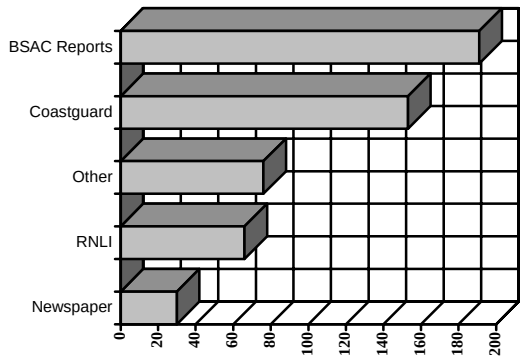
Incident Report Forms can be obtained free of charge by phoning BSAC HQ on ***0151 350 6200***
or from the BSAC Internet website.

Numerical & Statistical Analyses

Statistical Summary of Incidents

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Incidents Reported	385	351	315	397	452	397	439	465	453	409	498	499	437
Incidents Analysed	385	351	315	370	431	382	417	458	432	392	445	474	418
UK Incidents	322	318	295	349	404	357	384	433	414	366	423	441	379
Overseas Incidents	9	33	20	21	27	25	33	25	18	26	22	33	39
Unknown Locations	54	0	0	0	0	0	1	0	0	0	0	0	0
UK Incident - BSAC Members	164	157	136	101	135	128	113	122	149	162	154	160	148
UK Incident - Non-BSAC Members	8	20	4	29	52	47	52	94	55	74	72	65	50
UK Incident - Membership Unknown	213	178	175	219	217	182	219	217	211	130	197	216	181

UK Incident Report Source Analysis



Total Reports: 515
Total Incidents: 379

History of UK Diving Fatalities

		Number of Fatalities	
Year	**Membership**	**BSAC**	**Non-BSAC**
1965	6,813	3	-
1966	**7,979**	**1**	**4**
1967	8,350	1	6
1968	**9,241**	**2**	**1**
1969	11,299	2	8
1970	**13,721**	**4**	**4**
1971	14,898	0	4
1972	**17,041**	**10**	**31**
1973	19,332	9	20
1974	**22,150**	**3**	**11**
1975	23,204	2	-
1976	**25,310**	**4**	**-**
1977	25,342	3	-
1978	**27,510**	**8**	**4**
1979	30,579	5	8
1980	**24,900**	**6**	**7**
1981	27,834	5	7
1982	**29,590**	**6**	**3**
1983	32,177	7	2
1984	**32,950**	**8**	**5**
1985	34,861	8	6
1986	**34,210**	**6**	**9**
1987	34,500	6	2
1988	**32,960**	**10**	**6**
1989	34,422	4	8
1990	**36,434**	**3**	**6**
1991	43,475	8	9
1992	**45,626**	**9**	**8**
1993	50,722	3	6
1994	**50,505**	**6**	**6**
1995	52,364	9	9
1996	**48,920**	**7**	**9**
1997	48,412	4	12
1998	**46,712**	**6**	**16**
1999	46,682	8	9
2000	**41,692**	**6**	**11**
2001	41,272	9	13
2002	**39,960**	**4**	**10**
2003	38,340	5	6
2004	**37,153**	**6**	**19**
2005	37,185	5	12
2006	**35,422**	**4**	**12**

LIST OF ABBREVIATIONS USED IN THIS AND PREVIOUS INCIDENT REPORTS

A&E	Accident and emergency department at hospital
ARI	Aberdeen Royal Infirmary (Scotland, UK)
AV	Artificial ventilation
AWLB	All weather lifeboat
BCD	Buoyancy compensation device (e.g. stab jacket)
CAGE	Cerebral arterial gas embolism
CG	Coastguard
CPR	Cardiopulmonary resuscitation
DCI	Decompression illness
DDRC	Diving Diseases Research Centre (Plymouth, UK)
ECG	Electrocardiogram
EPIRB	Emergency position indicating radiobeacon
FAWGI	False alarm with good intent
GPS	Global positioning system
Helo	Helicopter
HLS	Helicopter landing site
HMCG	Her Majesty's Coastguard
ILB	Inshore lifeboat
INM	Institute of Naval Medicine
IV	Intravenous
LB	Lifeboat
m	Metre
min	Minute(s)
MRSC	Marine rescue sub centre
PFO	Patent foramen ovale
POB	Persons on board
QAH	Queen Alexandra Hospital (Portsmouth, UK)
RAF	Royal Air Force
RHIB	Rigid hull inflatable boat
RN	Royal Navy
RNLI	Royal National Lifeboat Institution
ROV	Remotely operated vehicle
SAR	Search and rescue
SMB	Surface marker buoy
999	UK emergency phone number